

## Annex 1. BACKGROUND BIODIVERSITY REPORT

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## General Information

### Preamble

Taking into consideration various levels of the influence of the proposed road, the following key objectives have been designed for the survey:

- To have the full pattern of species composition and abundance in the area of the influence of the project;
- To detect the key biodiversity features, namely the species of national or international concern;
- Identification of use of the various habitats by different species and determination the level of importance of the specific habitats in the life of birds;
- Identification of the main parts of the proposed road, which can be critical for the migratory terrestrial animals; and
- Filed inputs for the Critical Habitat Assessment.

The site surveys were undertaken over a year, for four seasons (16-17 days per season), in 2021 and 2022. They included camera-trapping in nine key locations. The surveys covered the variety of ecological cycles (such as nesting/breeding seasons, wintering seasons, and seasonal migrations) of different target species.

### Summary information: experts, field visits, and routes

#### Ornithology and Lepidopterology

**Expert in charge: Karen Aghababyan**, PhD in Zoology, over 100 publications on Ornithology and Lepidopterology.

Dates of field visit:

1. 2–5 Apr 2021
2. 17–20 Jun 2021
3. 30 Jul – 31 Aug 2021
4. 4–7 Nov 2021
5. 11–14 Feb 2022
6. 8–11 Apr 2022
7. 27–30 Apr 2022

**Table 1. Routes**

Code of Route	Length	Coordinates (start – end)	Season	Core Habitat
RT 011	1 km	39.510, 46.100; 39.50, 46.11	Breeding, Migration, Wintering	Mountain steppe
RT 012	2 km	39.48, 46.135; 39.47, 46.13	Breeding, Migration, Wintering	Riparian scrubs and woodlands
RT 013	1 km	39.396, 46.13; 39.388, 46.13	Breeding, Migration, Wintering	Mountain steppe
RT 014	2 km	39.352, 46.128; 39.335, 46.122	Breeding, Migration	Subalpine meadows with rocks & scree
RT 015	1 km	39.304, 46.111; 39.295, 46.109	Breeding	Subalpine meadows
RT 016	1 km	39.276, 46.111; 39.269, 46.112	Breeding, Migration, Wintering	Deciduous woodland
RT 017	1 km	39.259, 46.121; 39.255, 46.130	Breeding	Deciduous woodland
RT 018	1 km	39.237, 46.142; 39.229, 46.140	Breeding, Migration, Wintering	Juniper woodland
RT 019	1 km	39.219, 46.166; 39.219, 46.176	Breeding, Migration, Wintering	Deciduous woodland
RT 020	1 km	39.224, 46.197; 39.225, 46.207	Breeding	Juniper woodland
RT 021	1 km	39.217, 46.209; 39.216, 46.219	Breeding	Deciduous woodland
RT 022	1 km	39.181, 46.230; 39.185, 46.222	Breeding	Deciduous woodland
RT 001	1 km	39.508, 46.099; 39.504, 46.109	Migration, Wintering	Mountain steppe
RT 002	2 km	39.482, 46.134; 39.467, 46.136	Migration, Wintering	Riparian scrubs and woodlands
RT 003	1 km	39.397, 46.132; 39.389, 46.132	Migration, Wintering	Mountain steppe

RT 004	2 km	39.352, 46.129; 39.337, 46.124	Migration	Subalpine meadows with rocks & screes
RT 006	1 km	39.278, 46.111; 39.272, 46.117	Breeding, Migration, Wintering	Deciduous woodland
RT 008	1 km	39.237, 46.143; 39.229, 46.141	Breeding, Migration, Wintering	Juniper woodland
RT 009	1 km	39.221, 46.167; 39.222, 46.177	Breeding, Migration, Wintering	Deciduous woodland

### Mammalogy

**Expert in charge: Astghik Ghazaryan**, PhD in Zoology, over 30 publications on Mammalogy.

Dates of field visit:

1. 1 - 4 Apr 2021
2. 17–20 Jun 2021
3. 30 Jul – 31 Aug 2021
4. 4–7 Nov 2021
5. 03-05 Dec 2021
6. 24-27 Dec 2021
7. 04-07 Feb 2022
8. 04-07 March 2022
9. 8–11 Apr 2022
10. 27–30 Apr 2022

1. Small mammals live traps were installed in localities shown in the below table.

**Table 2. Coordinates of live traps for small mammals**

Code of Route	Section	First trap coordinates	Last trap coordinates	Season	Core Habitat
<b>SMP 1</b>	Sisian-Shenatagh	39.5110368 46.094877	39.509901 46.096868	Breeding, Wintering	Mountain steppe
<b>SMP 2</b>	Sisian-Shenatagh	39.494405 46.121079	39.43399 46.122712	Breeding, Wintering	River valley, Mountain steppe
<b>SMP 4</b>	Sisian-Shenatagh	39.470876 46.137460	39.471075 46.134350	Breeding, Wintering	River valley
<b>SMP 6</b>	Kirts-Kajaran	39.284746 46.109434	39.281012 46.10988	Breeding, Wintering	River valley, Mountain steppe
<b>SMP 8</b>	Kirts-Kajaran	39.24359 46.141520	39.243245 46.414799	Breeding, Wintering	River valley, Mountain steppe
<b>SMP 9</b>	Kirts-Kajaran	39.22448 46.149159	39.224810 46.148066	Breeding, Wintering	River valley, Mountain steppe
<b>SMP 11</b>	Kirts-Kajaran	39.221977 46.205642	39.221824 46.207059	Breeding, Wintering	River valley, Mountain steppe
<b>SMP 12</b>	Kirts-Kajaran	39.213632 46.240162	39.21390 46.239131	Breeding, Wintering	Mountain steppe

2. Observation points for mammals are shown in the below table.

**Table 3. Observation points for mammals**

Observation points	Latitude	Longitude
Observation point1	39.47037	46.13716
Observation point 2	39.222008	46.20637
Observation point 3	39.283918	46.10843

3. GPS coordinates of installed camera traps are shown in the below table.

**Table 4. GPS coordinates of installed camera traps**

Camera trap number	Latitude	Longitude
0001	39.25652	46.13150
0002	39.22848	46.20391
0003	39.22379	46.20410

0004	39.22153	46.18251
0005	39.22304	46.17448
0006	39.25714	46.13257
0007	39.25695	46.13250
0008	39.26931	46.12.082
0009	39.27613	46.11104
0010	39.29742	46.11538

4. Manual Detector installed to the stick and put in the car were recorded all bats along the road. Automate passive detectors were installed in two main points.

**Table 5. GPS coordinates of automate passive detectors**

Automate detector name	Latitude	Longitude
Bat logger C	3947037	4613716
SM4 Bat	39.222008	4620637

### *Ichthyology and Batrachology*

**Expert in charge: Samvel Pipoyan**, Doctor of Science, Professor, over 180 publications on Ichthyology and Batrachology.

#### 1. Amphibia

Dates of visit:

- 17–20 Jun 2021
- 30 Jul – 02 Aug 2021
- 27–30 Nov 2021
- 08–11 Apr 2022
- 07–11 May 2022

**Table 6. Routes**

Code of Route	Length	Coordinates (start – end)	Season	Core Habitat
AST 001	1 km	39.508, 46.100; 39.502, 46.103	Breeding, Activity, Wintering	Mountain steppe
AST 002	2 km	39.487, 46.132; 39.470, 46.138	Breeding, Activity, Wintering	Riparian scrubs and woodlands
AST 003	1 km	39.378, 46.131; 39.371, 46.126	Breeding, Activity, Wintering	Mountain steppe
AST 004	1 km	39.276, 46.111; 39.269, 46.118	Breeding, Activity, Wintering	Deciduous woodland
AST 005	1 km	39.236, 46.142; 39.227, 46.141	Breeding, Activity, Wintering	Juniper woodland
AST 006	1 km	39.221, 46.201; 39.220, 46.212	Breeding, Activity, Wintering	Juniper woodland

#### 2. Fishes

Dates of visit:

- 17–20 Jun 2021
- 30 Jul – 02 Aug 2021
- 27–30 Nov 2021
- 08–11 Apr 2022
- 07–11 May 2022

**Table 7. Routes**

Code of Route	Length	Coordinate	Season	Altitude
Point 1	80 m	39.497, 46.112	Activity, Breeding	1421 m
Point 2	100 m	39.483, 46.138	Activity, Breeding	1385 m
Point 3	100 m	39.483, 46.133	Activity, Breeding	1360 m
Point 4	100 m	39.476070, 46.	Activity, Breeding	1345 m
Point 5	100 m	39.473, 46.131	Activity, Breeding	1350 m

Code of Route	Length	Coordinate	Season	Altitude
Point 6	100 m	39.471, 46.135	Activity, Breeding	1340 m
Point 7	80 m	39.444, 46.134	Activity, Breeding	1480 m
Point 8	80 m	39.406, 46.131	Activity, Breeding	1651 m
Point 9	50 m	39.374, 46.131	Activity, Breeding	1837 m
Point 10	40 m	39.281, 46.109	Activity, Breeding	1974 m
Point 11	100 m	39.269, 46.118	Activity, Breeding	1933 m
Point 12	100 m	39.261, 46.123	Activity, Breeding	1911 m
Point 13	100 m	39.246, 46.140	Activity, Breeding	1886 m
Point 14	80 m	39.236, 46.142	Activity, Breeding	1665 m
Point 15	100 m	39.229, 46.139	Activity, Breeding	1587 m
Point 16	100 m	39.225, 46.144	Activity, Breeding	1583 m
Point 17	80 m	39.223, 46.157	Activity, Breeding	1530 m
Point 18	100 m	39.222, 46.180	Activity, Breeding	1458 m
Point 19	80 m	39.222, 46.197	Activity, Breeding	1429 m
Point 22	100 m	39.221, 46.201	Activity, Breeding	1406 m
Point 21	100 m	39.221, 46.207	Activity, Breeding	1400 m
Point 22	100m	39.208, 46.244	Activity, Breeding	1293 m

### Botany and Palaeobotany

**Expert in charge:** Ivan Gabrielyan, Dr of Biology, over 150 publications on Botany and Palaeobotany.

Dates of visit:

1. 4-5 Apr 2021
2. 30 Apr – 1 May 2021
3. 1–2 Jun 2021
4. 17–20 Jun 2021
5. 1-3 August 2021
6. 17-19 Apr 2022
7. 6-8 May 2022
8. 13-14 June 2022

**Table 8. Routes**

Code of Route	Length	Coordinates (start – end)	Season	Core Habitat
EAAA 001	Noravan	N39°32'14"; E46°05'41", N39°30'92"; E46°05'45"	Flowering, mature vegetative part	Mountain steppe
EAAA 002	Vaghatin-Vorotan	N39°29'53"; E46°06'59", N39°30'58"; E46°05'91"	Flowering, mature vegetative part	Riparian scrubs and woodlands
EAAA 003	Vorotan-Shamb	N39°28'11"; E46°08'33"	Flowering, mature vegetative part	Mountain steppe, riparian scrubs and woodlands
EAAA 004	Lor-Shenatagh	N39°24'21"; E46°07'51", N39°22'21"; E46°08'09"	Flowering, mature vegetative part	Mountain steppe, riparian scrubs and woodlands
EAAA 005	Shenatagh-Kitsk	N39°22'14"; E46°08'17", N39°22'04"; E46°08'24"	Flowering, mature vegetative part	Subalpine meadows with rocks and scree, Meadows
EAAA 006	Kitsk-Karut	N39°18'43"; E46°07'77"	Flowering, mature vegetative part	Meadows
EAAA 007	Karut	N39°15'52"; E46°07'48"	Flowering, mature vegetative part	Meadows, mountain steppe
EAAA 008-011	Karut-Astghaberd- Geghi	N39°15'12"; E46°08'16"	Flowering, mature vegetative part	Meadows, mountain steppe, riparian scrubs and woodlands

Code of Route	Length	Coordinates (start – end)	Season	Core Habitat
EAAA 012	Geghi	N39°14'05"; E46°08'53"	Flowering, mature vegetative part	Mountain steppe, riparian scrubs and woodlands
EAAA 013	Geghi-Geghavank	N39°13.23'; E46°11.73', N39°14.04'; E46°08.53'	Flowering, mature vegetative part	Mountain steppe, Riparian scrubs and woodlands
EAAA 014-015	Geghavank-Kapan Kajaran Road	N39°10.89'; E46°14.15', N39°13.33'; E46°12.77'	Flowering, mature vegetative part	Scrubs and woodlands

## Zoology

**Expert in charge: Levon Aghasyan**, PhD in Zoology, 24 scientific publications.

Dates

1. 17 -20 June 2021
2. 30 Jul - 2 Aug 2021
3. 4-7 November 2021

**Table 9. Routes**

Code of Route	Length	Coordinates (start – end)	Season	Core Habitat
RT 011	1 km	39.510, 46.100; 39.50, 46.11	Activity : migration, breeding, wintering	Mountain steppe
RT 012	2 km	39.48, 46.135; 39.47, 46.13	Activity : migration, breeding, wintering	Riparian scrubs and woodlands
RT 013	1 km	39.396, 46.13; 39.388, 46.13	Activity : migration, breeding, wintering	Mountain steppe
RT 014	2 km	39.352, 46.128; 39.335, 46.122	Activity : migration, breeding, wintering	Subalpine meadows with rocks & screes
RT 015	1 km	39.304, 46.111; 39.295, 46.109	Activity : migration, breeding, wintering	Subalpine meadows
RT 016	1 km	39.276, 46.111; 39.269, 46.112	Activity : migration, breeding, wintering	Deciduous woodland
RT 017	1 km	39.259, 46.121; 39.255, 46.130	Activity : migration, breeding, wintering	Deciduous woodland
RT 018	1 km	39.237, 46.142; 39.229, 46.140	Activity : migration, breeding, wintering	Juniper woodland
RT 019	1 km	39.219, 46.166; 39.219, 46.176	Activity : migration, breeding, wintering	Deciduous woodland
RT 020	1 km	39.224, 46.197; 39.225, 46.207	Activity : migration, breeding, wintering	Juniper woodland
RT 021	1 km	39.217, 46.209; 39.216, 46.219	Activity : migration, breeding, wintering	Deciduous woodland
RT 022	1 km	39.181, 46.230; 39.185, 46.222	Activity : migration, breeding, wintering	Deciduous woodland

## Meteorological conditions:

Predominantly the dates for the expeditions have been selected in accordance with the weather forecast, in order to secure optimal weather conditions (lack of rain, strong fog, and strong wind). However, sometimes in the mountains, the local unpredicted rains took place, which was usually slightly elongating the expedition, as in such cases, we were just waiting for the end of the rain.

## Birds

### Protocols

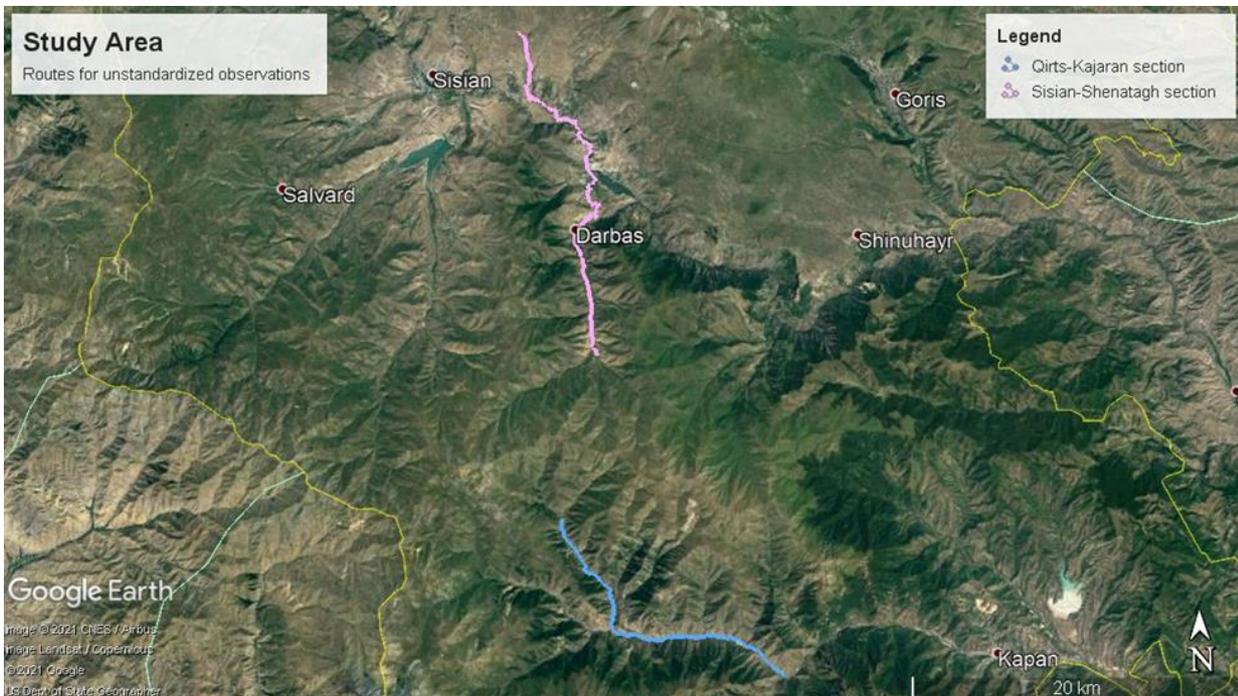
**Investigation area:**

The previously collected data suggests that there are three categories of priority species, that can be expected in the study area:

1. Variety of passerines and allies, which are uniformly distributed and for which the stratified and random sampling can be applied;
2. Raptors that have broad foraging range, and for which searching for the nests, and observation of the hunting/searching behaviour can be applied;
3. Lekking species, like Caucasian Grouse or Corn Crake, for which the search for the lekking sites and night counts can be applied.

Taking that into consideration, we define the study area within the 500 m buffer zone at each side of the proposed road, as the road can have various types of the influence: physical footprint, effluents, and emissions. Therefore, the following areas are proposed for being investigated:

1. The entire road itself (see Figure 1) with the main surveying area of 200 meters from each side.
2. All type of the habitat within the 500 m buffer zone from proposed road have been surveyed additionally. They include: mountain steppe, subalpine meadows, juniper woodland, deciduous woodland, riparian scrubs and woodland. Based on the given natural habitats the following 15 preliminary ecologically appropriate areas of analysis (preliminary EAAAs) have been identified (see Figures 2-4) and the sampling areas have been set up (see Figure 5).



**Figure 1. The main road, where the unstandardized data collection has been implemented**

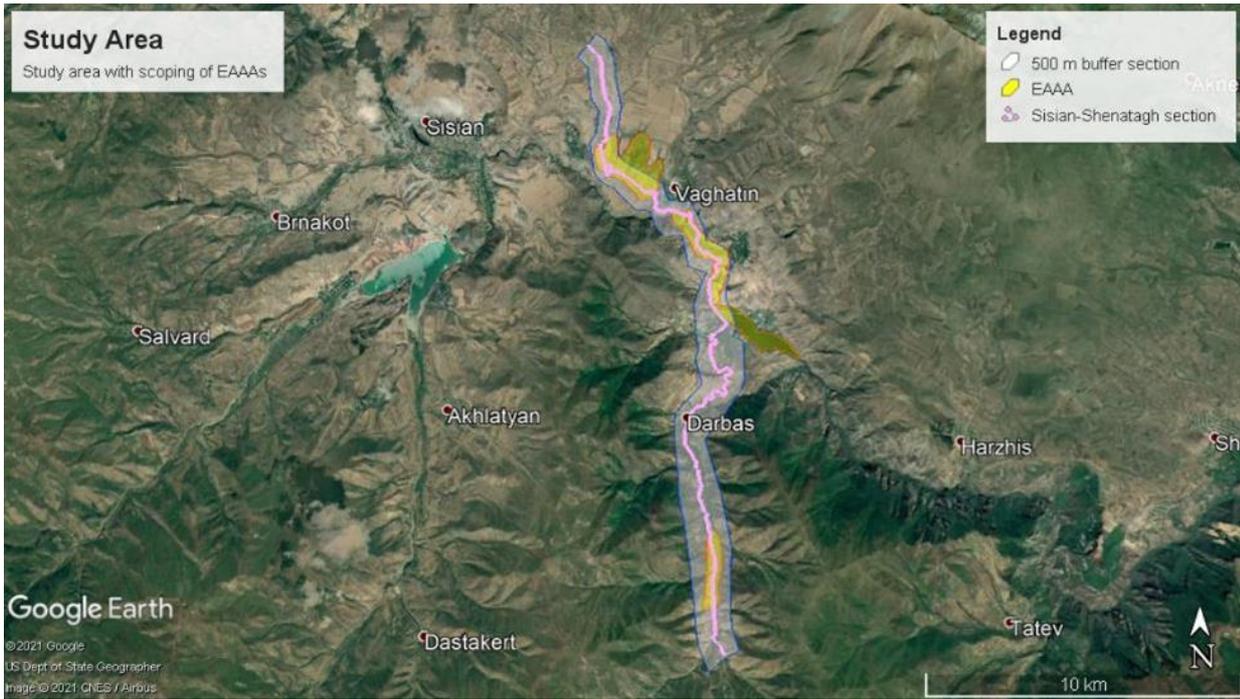


Figure 2. The preliminary EAAAs of the section Sisian-Shenatagh

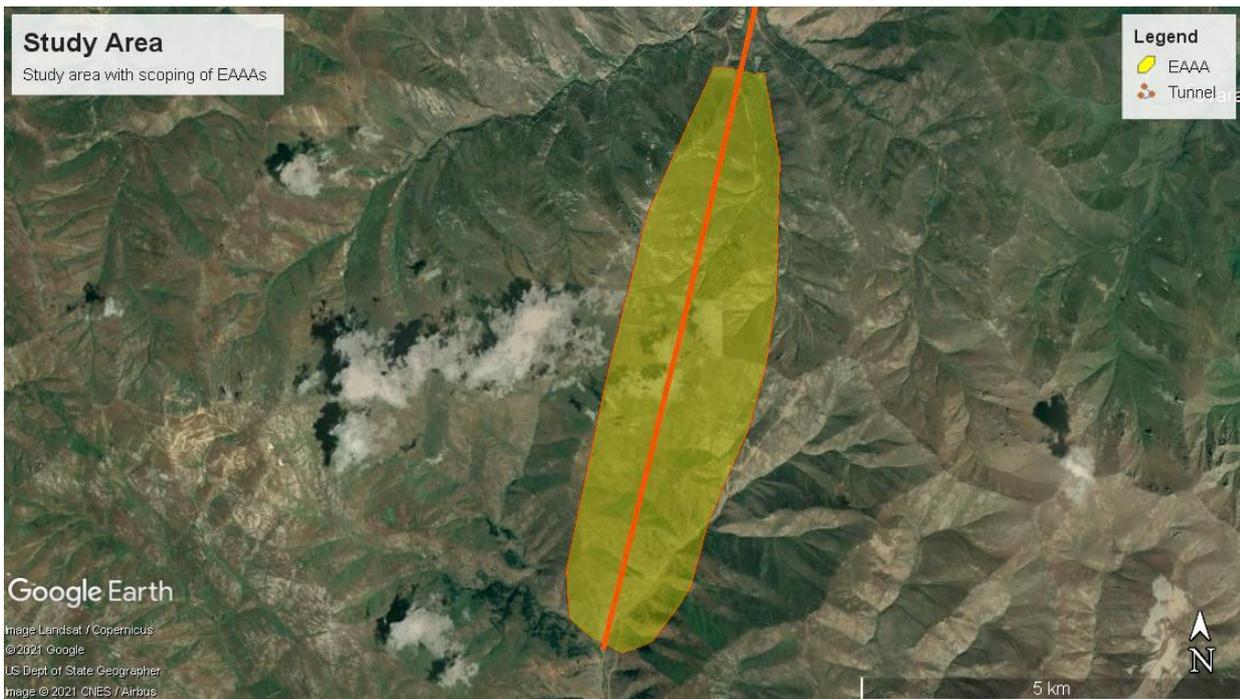


Figure 3. The preliminary EAAAs of the tunnel section

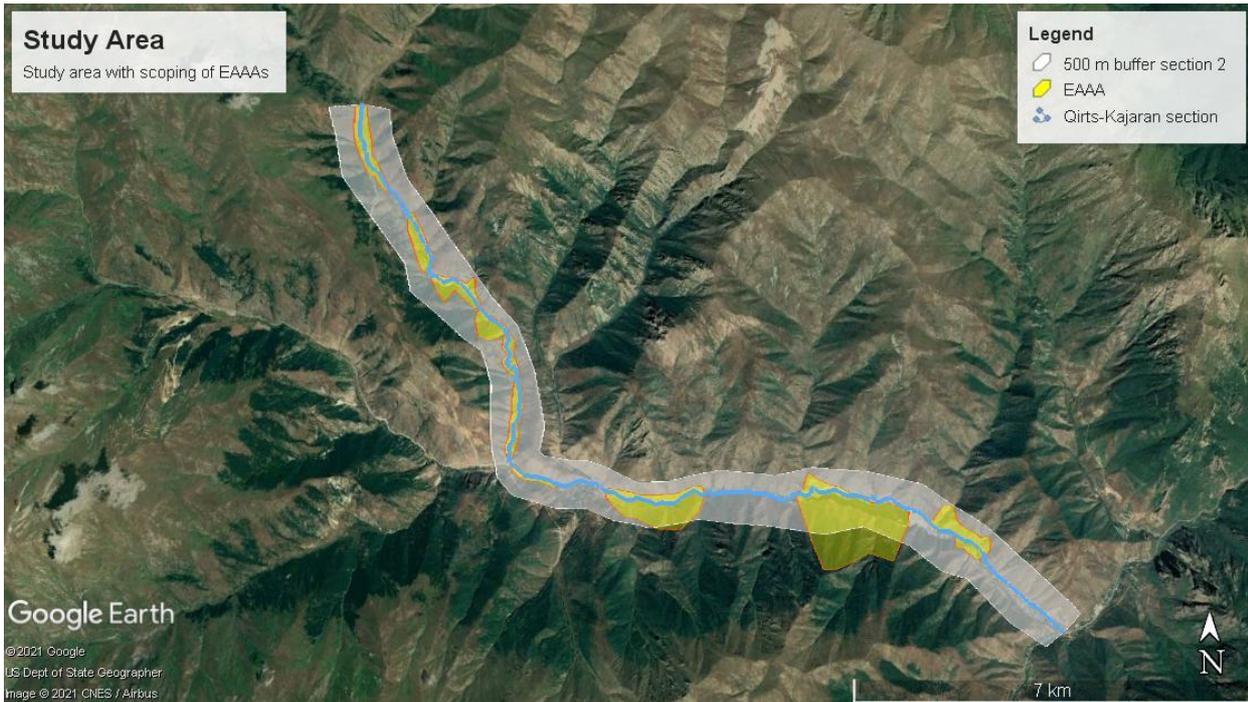


Figure 4. The preliminary EAAAs of the section Kirts-Kajaran

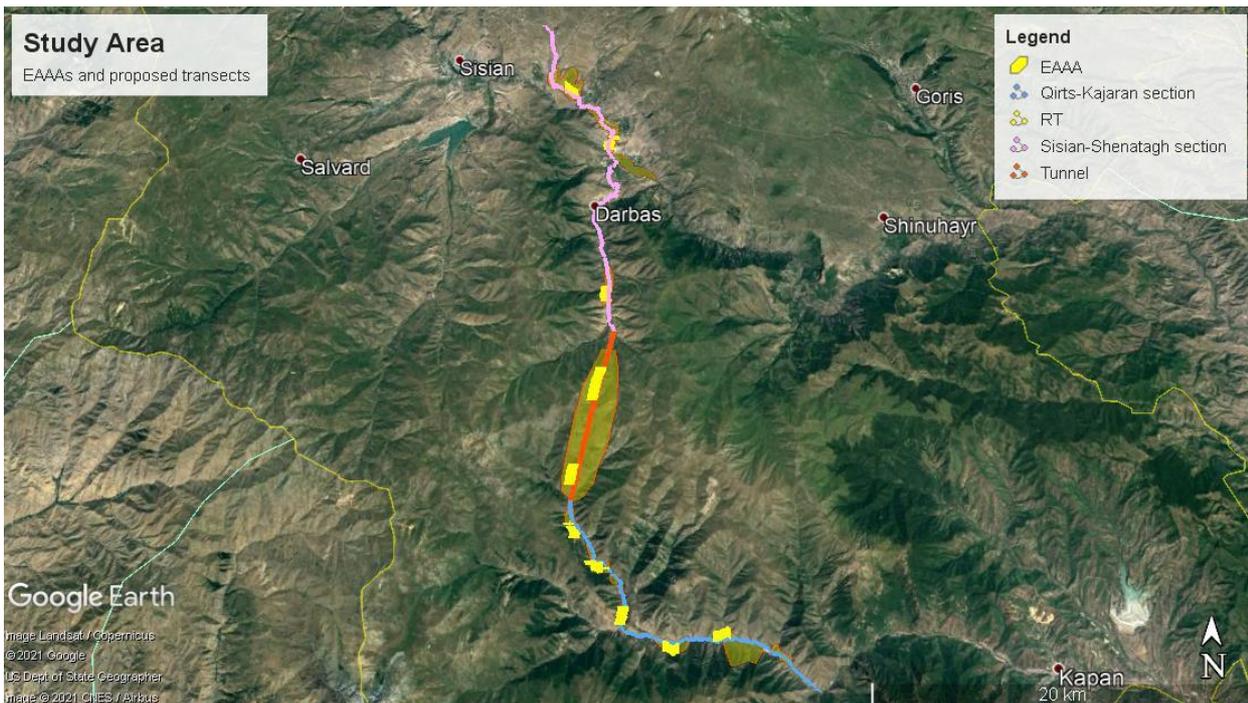


Figure 5. The preliminary EAAAs and the survey sites

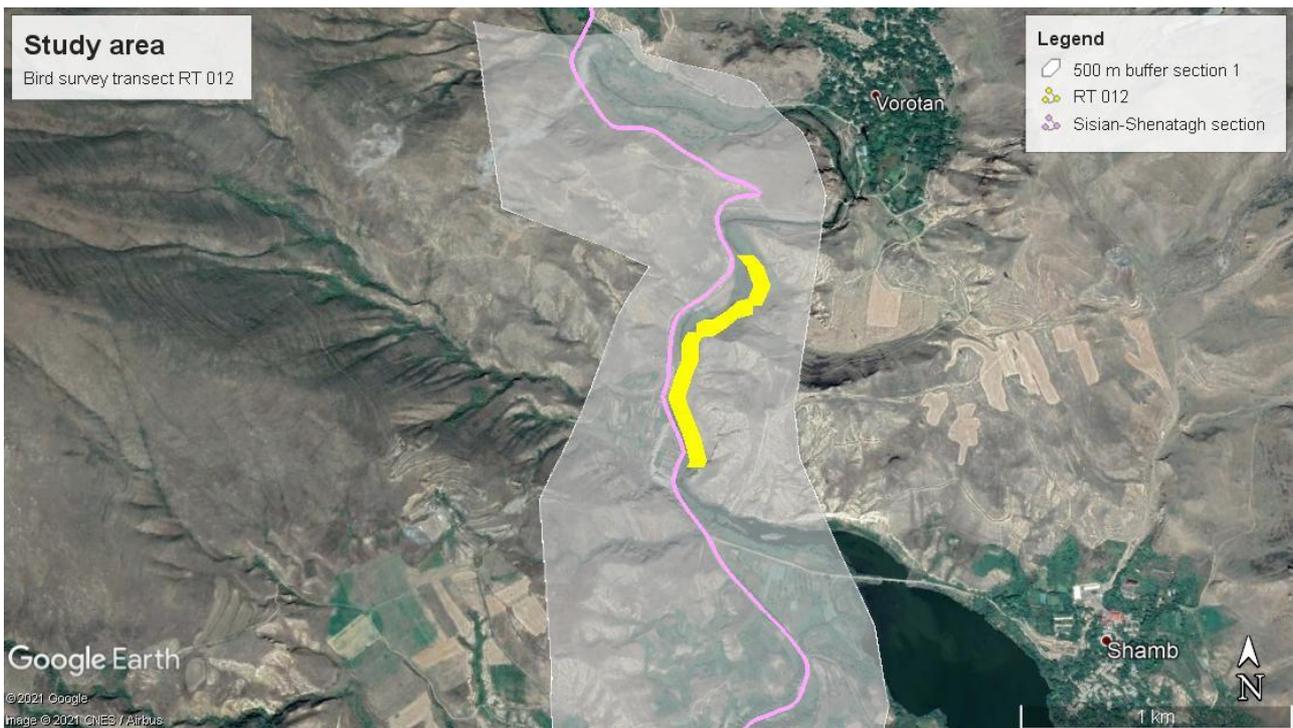
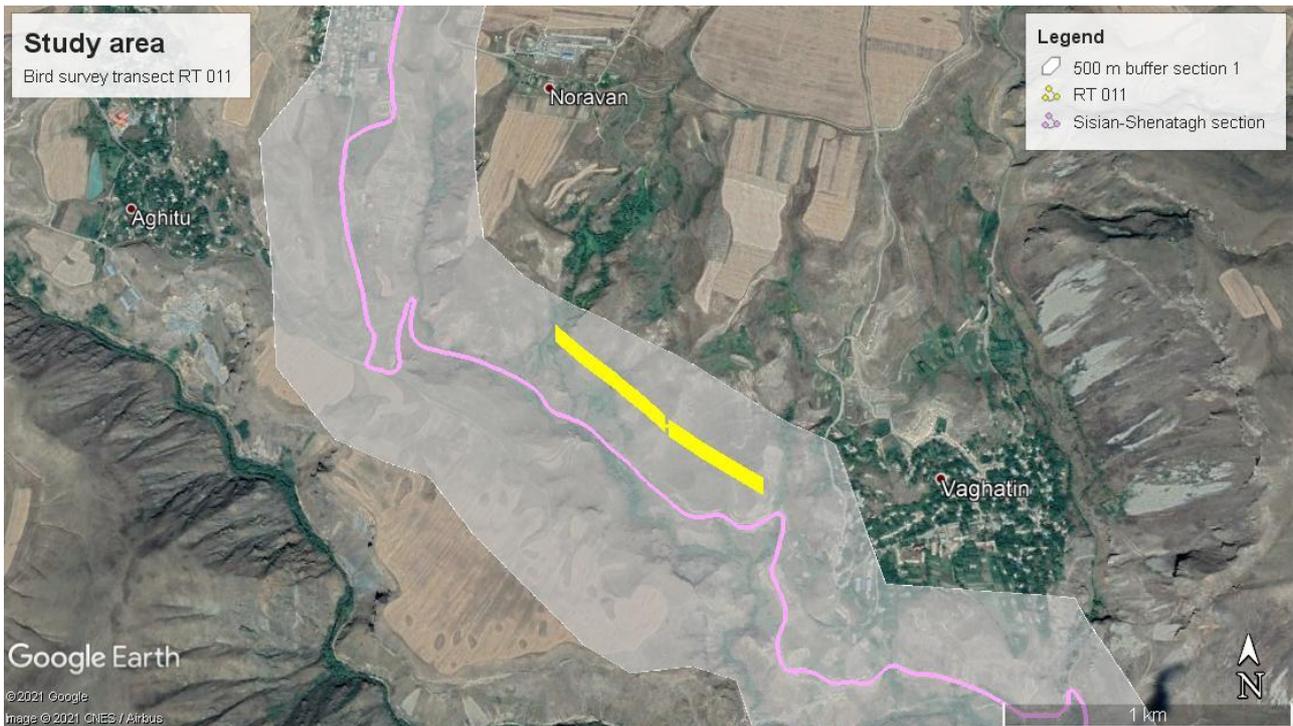
**Survey methods**

The data on bird species diversity and relative abundance have been obtained from two different types of observation: 1. Unstandardized observations, which include also nest search and search for leks and 2. standardized counts (data, collected according to standard methodology). Both data may be used to create species distribution maps, and data collected with the second method may be used for estimation of species' density and numbers.

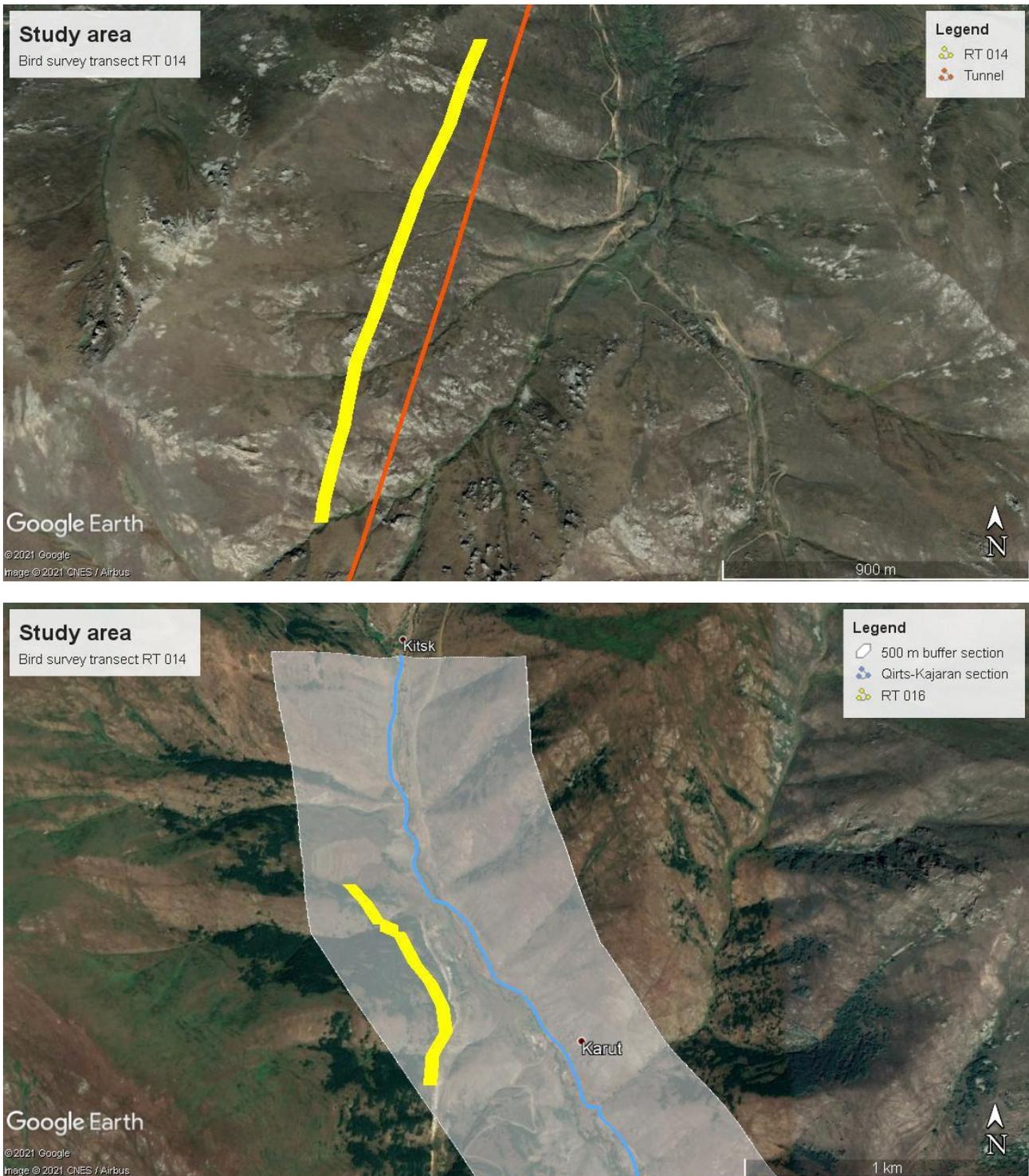
1. Unstandardized observations have been conducted during driving, walking and resting along the main proposed road (see Figure 1). Basically, these observations contain the following data requirements: precise identification of species, observation date, GPS coordinates of the

location, name of nearest locality (human settlement, mountain, historical site, etc.), breeding code, name of observer and his contacts, as well as record of the birds' behaviour in regards to their use of habitats (feeding, displaying, nesting or just being present). Every other comment can be useful (time, observation duration, etc.).

2. The unstandardized observations have been collected also from various other sources, including the platforms: Observation.Org, eBird, and iNaturalist; literature sources, including older publications, which have collated the previous records like Adamian & Klem (1997, 1999); as well as the local representatives of BirdLife International – Armenian Society for the Protection of Birds.
3. Standardized counts (counts conducted within certain time period) are implemented during fixed period of time of 1 or 2 hours on fixed routes (= transects; see Figure 6 and Figure 7). We have selected the transect count opposite to the point counts recommended by Herzog et al. (2016), mainly because the 1-2 km long transects have higher rate of species determination in the semi-open and open landscapes with low density of the birds, and to make it comparable with the previously collected data. The routes are selected to cover the wildest parts of all the typical habitats within the project area (based on current typology), so called core habitats, being located out of the main road but within 500 meters buffer from the proposed road – typically, the central line of the routes have been located at 200-300 meters from the proposed road. Within the standardized data we will use also the data collected previously by Armenian Bird Census – TSE NGO (currently BirdLinks Armenia NGO).



**Figure 6. Examples of the transects in mountain steppes and riparian scrubs and woodlands**



**Figure 7. Examples of the transects in subalpine meadows and deciduous woodlands**

Since the majority of the study area is an open or semi-open type of the landscape, each of the transect routes have been laid within a typical habitat, usually along the existing ground road, or in specific parts (e.g., above the Tunnel area) just parallel to the major slope. Each of the routes have been walked in a slow motion, and the birds have been recorded visually and acoustically at a distance of 200 meters from each side of the central line of the route. Thus, the birds have been recorded predominantly within a band of 400 m. Routes vary in the length from 1 to 2 km (see Table 10) totalling with the length in 12 km.

Table 10. Major characters of the routes

Code of Route	Length	Section	Season	Core Habitat
RT 011	1 km	Sisian-Shenatagh	Breeding, Migration, Wintering	Mountain steppe
RT 012	2 km	Sisian-Shenatagh	Breeding, Migration, Wintering	Riparian scrubs and woodlands
RT 013	1 km	Sisian-Shenatagh	Breeding, Migration, Wintering	Mountain steppe
RT 014	2 km	Tunnel	Breeding, Migration	Subalpine meadows with rocks & screes
RT 015	1 km	Tunnel	Breeding	Subalpine meadows
RT 016	1 km	Kirts-Kajaran	Breeding, Migration, Wintering	Deciduous woodland
RT 017	1 km	Kirts-Kajaran	Breeding	Deciduous woodland
RT 018	1 km	Kirts-Kajaran	Breeding, Migration, Wintering	Juniper woodland
RT 019	1 km	Kirts-Kajaran	Breeding, Migration, Wintering	Deciduous woodland
RT 020	1 km	Kirts-Kajaran	Breeding	Juniper woodland
RT 001	1 km	Sisian-Shenatagh	Migration, Wintering	Mountain steppe
RT 002	2 km	Sisian-Shenatagh	Migration, Wintering	Riparian scrubs and woodlands
RT 003	1 km	Sisian-Shenatagh	Migration, Wintering	Mountain steppe
RT 004	2 km	Tunnel	Migration	Subalpine meadows with rocks & screes
RT 006	1 km	Kirts-Kajaran	Breeding, Migration, Wintering	Deciduous woodland
RT 008	1 km	Kirts-Kajaran	Breeding, Migration, Wintering	Juniper woodland
RT 009	1 km	Kirts-Kajaran	Breeding, Migration, Wintering	Deciduous woodland

With this method, there are more requirements to data: precise identification of species, number of observed or acoustically recorded individuals, observation date, geographical coordinates of a beginning of the route, start and end times of the count, name of nearest locality (human settlement, mountain, historical site, etc.), breeding code, name and contacts of observer/s (Voříšek *et al.* 2008), as well as record of the birds' behaviour in regards to their use of habitats (feeding, displaying, nesting or just being present).

Collected data have been entered into standardized protocol and after finish of the field work have been inputted into database.

#### Time and effort of investigation<sup>1</sup>:

- **For breeding birds**

With weather permission, the counts have been made at the time of the day, when birds are most active (as a rule, early in the morning, although for nocturnal birds the night sampling after 23:00 will also be performed). The best season for survey of breeding birds is the period between 10th of May and 30th of June (Voříšek *et al.* 2008). All the nesting sites identified have been recorded in a GPS (including data on Species, Position, number of eggs and/or juveniles present in the nest if visible, habitats around, comments) and maps of potential breeding habitats for Biodiversity Priority Species have been realized.

- **For migratory birds**

The counts have been allocated in a way, to cover morning hours for the Passerines, which are getting rest in the scrubs, as well as the day hours, when the thermals are created, to cover the soaring migrants, such as Storks, Cranes, Raptors, and Pelicans. The best seasons for count of migratory birds are laid between 5<sup>th</sup> of Apr to 10<sup>th</sup> of May and then again from 15<sup>th</sup> of Aug to 30<sup>th</sup> of Oct.

- **For wintering birds**

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<sup>1</sup> Yearly (e.g. end of June/July) and during the day (e.g. at dusk and night after rain).

The counts have been made at the time day time, usually after 10:00, when the wintering birds are most active. The best season for count of wintering birds is the period between 15<sup>th</sup> of Nov to 5<sup>th</sup> of Apr.

#### Investigation tools:

For search of the birds and their identification we will use binocular 8x45 and spotting scope 25-40 x 80.

For fixing the coordinates we will use GPS Garmin

For data collection we will use the standardized protocols.

#### Data analysis methods:

The data analysis includes the computation of the densities of various species in the different habitats and analysis of the importance of the various habitats in the life of those bird species.

#### Results for April

Dates: 2-5 Apr 2021

- 2nd of April – Transfer to Sisian
- 3rd of Apr – count on RT 001, RT 002, transfer to Kapan
- 4th of Apr – count on RT 006, RT 008, RT 009, transfer to Sisian
- 5th of Apr – count on RT 003, transfer to Yerevan

**Table 11. The covered routes**

Code of Route	Length	Section	Season
RT 001	1 km	Sisian-Shenatagh	Breeding, Migration, Wintering
RT 002	2 km	Sisian-Shenatagh	Breeding, Migration, Wintering
RT 003	1 km	Sisian-Shenatagh	Breeding, Migration, Wintering
RT 006	1 km	Kirts-Kajaran	Breeding, Migration, Wintering
RT 008	1 km	Kirts-Kajaran	Breeding, Migration, Wintering
RT 009	1 km	Kirts-Kajaran	Breeding, Migration, Wintering

**Table 12. Collected data**

Date	Route #	Species name Eng (select from list)	Species name Lat (select from list)	Species number	Breeding code
4/3/2021	RT 001	Common Stonechat	<i>Saxicola rubicola</i>	13	2
4/3/2021	RT 001	Black Redstart	<i>Phoenicurus ochruros</i>	3	1
4/3/2021	RT 001	Common Blackbird	<i>Turdus merula</i>	2	2
4/3/2021	RT 001	Red-billed Chough	<i>Pyrrhocorax pyrrhocorax</i>	10	2
4/3/2021	RT 001	Rock Bunting	<i>Emberiza cia</i>	9	2
4/3/2021	RT 002	Finsch's Wheatear	<i>Oenanthe finschii</i>	1	1
4/3/2021	RT 002	Black Stork	<i>Ciconia nigra</i>	1	1
4/3/2021	RT 002	Common Linnet	<i>Carduelis cannabina</i>	3	1
4/3/2021	RT 002	Common Stonechat	<i>Saxicola rubicola</i>	3	2
4/3/2021	RT 002	Green Sandpiper	<i>Tringa ochropus</i>	2	0
4/3/2021	RT 002	White Wagtail	<i>Motacilla alba</i>	12	2
4/3/2021	RT 002	Yellow Wagtail	<i>Motacilla flava</i>	4	2
4/3/2021	RT 002	Common Chiffchaff	<i>Phylloscopus collybita</i>	7	0
4/3/2021	RT 002	Chukar	<i>Alectoris chukar</i>	2	2
4/3/2021	RT 002	Eurasian Griffon Vulture	<i>Gyps fulvus</i>	1	1
4/3/2021	RT 002	Rock Bunting	<i>Emberiza cia</i>	3	2
4/3/2021	RT 002	Armenian Gull	<i>Larus armenicus</i>	26	1

Date	Route #	Species name Eng (select from list)	Species name Lat (select from list)	Species number	Breeding code
4/3/2021	RT 002	Syrian Woodpecker	<i>Dendrocopos syriacus</i>	2	2
4/3/2021	RT 002	European Goldfinch	<i>Carduelis carduelis</i>	6	1
4/3/2021	RT 002	Grey Heron	<i>Ardea cinerea</i>	1	0
4/3/2021	RT 002	Common Kestrel	<i>Falco tinnunculus</i>	1	1
4/3/2021	RT 002	Common Moorhen	<i>Gallinula chloropus</i>	1	1
4/3/2021	RT 002	Common Starling	<i>Sturnus vulgaris</i>	2	1
4/3/2021	RT 002	Eurasian Hoopoe	<i>Upupa epops</i>	1	0
4/4/2021	RT 006	Common Blackbird	<i>Turdus merula</i>	2	2
4/4/2021	RT 006	Red-fronted Serin	<i>Serinus pusillus</i>	8	2
4/4/2021	RT 006	European Goldfinch	<i>Carduelis carduelis</i>	2	3
4/4/2021	RT 006	Rock Bunting	<i>Emberiza cia</i>	1	2
4/4/2021	RT 006	Great Tit	<i>Parus major</i>	2	3
4/4/2021	RT 006	Common Magpie	<i>Pica pica</i>	7	3
4/4/2021	RT 007	Common Chiffchaff	<i>Phylloscopus collybita</i>	9	2
4/4/2021	RT 007	Rock Bunting	<i>Emberiza cia</i>	7	2
4/4/2021	RT 007	Black Redstart	<i>Phoenicurus ochruros</i>	1	1
4/4/2021	RT 007	Yellow Wagtail	<i>Motacilla flava</i>	1	1
4/4/2021	RT 007	White Wagtail	<i>Motacilla alba</i>	2	2
4/4/2021	RT 007	Common Blackbird	<i>Turdus merula</i>	2	2
4/4/2021	RT 007	Rock Bunting	<i>Emberiza cia</i>	8	2
4/4/2021	RT 007	Western Rock Nuthatch	<i>Sitta neumayer</i>	4	3
4/4/2021	RT 007	Western Rock Nuthatch	<i>Sitta neumayer</i>	4	3
4/4/2021	RT 007	Black Redstart	<i>Phoenicurus ochruros</i>	1	2
4/4/2021	RT 007	European Goldfinch	<i>Carduelis carduelis</i>	1	1
4/4/2021	RT 007	Common Chaffinch	<i>Fringilla coelebs</i>	1	1
4/4/2021	RT 008	Rock Bunting	<i>Emberiza cia</i>	12	2
4/4/2021	RT 008	White-throated Robin	<i>Cinclus cinclus</i>	1	1
4/4/2021	RT 008	Common Chaffinch	<i>Fringilla coelebs</i>	2	1
4/4/2021	RT 008	Common Blackbird	<i>Turdus merula</i>	2	3
4/4/2021	RT 008	Black Redstart	<i>Phoenicurus ochruros</i>	1	1
4/4/2021	RT 008	Common Stonechat	<i>Saxicola rubicola</i>	1	1
4/4/2021	RT 008	Red-fronted Serin	<i>Serinus pusillus</i>	2	2
4/5/2021	RT 003	White Wagtail	<i>Motacilla alba</i>	4	2
4/5/2021	RT 003	European Goldfinch	<i>Carduelis carduelis</i>	6	2
4/5/2021	RT 003	Long-tailed Tit	<i>Aegithalos caudatus</i>	4	1
4/5/2021	RT 003	Red-fronted Serin	<i>Serinus pusillus</i>	2	1
4/5/2021	RT 003	Common Blackbird	<i>Turdus merula</i>	11	2
4/5/2021	RT 003	Eurasian Jay	<i>Garrulus glandarius</i>	1	2
4/5/2021	RT 003	Rock Bunting	<i>Emberiza cia</i>	3	2
4/5/2021	RT 003	Common Stonechat	<i>Saxicola rubicola</i>	5	2
4/5/2021	RT 003	Water Pipit	<i>Anthus spinoletta</i>	2	1
4/5/2021	RT 003	Yellow Wagtail	<i>Motacilla flava</i>	1	1
4/5/2021	RT 003	Hooded Crow	<i>Corvus corone</i>	4	3
4/5/2021	RT 003	Water Pipit	<i>Anthus spinoletta</i>	3	2
4/5/2021	RT 003	Common Linnet	<i>Carduelis cannabina</i>	2	2

### Results for June

EAAA 001

In total there are 11 species of birds recorded in this area. The bird fauna is mainly represented by steppe, meadow, and riparian species. The birds are widely using the rocky areas, which lay along the

road and the riparian zone. The full list of the birds is presented in Table 13. Among woodland patches of riparian areas, the Caucasian Chiffchaff *Phylloscopus lorenzii* was detected, which obviously is breeding here.

**Table 13. List of birds recorded during June**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
6/17/2021	RT 011	Rufous-tailed Rock Thrush	<i>Monticola saxatilis</i>	2	4
6/17/2021	RT 011	Ortolan Bunting	<i>Emberiza hortulana</i>	9	4
6/17/2021	RT 011	Rock Bunting	<i>Emberiza cia</i>	7	4
6/17/2021	RT 011	Black-headed Bunting	<i>Emberiza melanocephala</i>	7	4
6/17/2021	RT 011	Common Blackbird	<i>Turdus merula</i>	6	4
6/17/2021	RT 011	Cetti's Warbler	<i>Cettia cetti</i>	4	4
6/17/2021	RT 011	Common Rosefinch	<i>Carpodacus erythrinus</i>	2	4
6/17/2021	RT 011	Eurasian Jay	<i>Garrulus glandarius</i>	1	4
6/17/2021	RT 011	Western Rock Nuthatch	<i>Sitta neumayer</i>	6	4
6/17/2021	RT 011	Common Whitethroat	<i>Sylvia communis</i>	10	4
6/17/2021	RT 011	Lesser Whitethroat	<i>Sylvia curruca</i>	3	4
6/17/2021	RT 011	Eurasian Crag Martin	<i>Ptyonoprogne rupestris</i>	25	4

EAAA 002-003

In total there are 10 species of birds recorded in this area. The bird fauna is mainly represented by meadow and riparian species. The birds are widely using the riparian zone having the breeding territories here. The full list of the birds is presented in Table 14. The only subadult Bearded Vulture *Gypaetus barbatus* observed in this area appears to search for the food, but it obviously doesn't have a breeding area in within this site.

**Table 14. List of birds recorded during June**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
6/17/2021	RT 012	Common Blackbird	<i>Turdus merula</i>	11	4
6/17/2021	RT 012	Cetti's Warbler	<i>Cettia cetti</i>	9	4
6/17/2021	RT 012	Common Nightingale	<i>Luscinia megarhynchos</i>	12	4
6/17/2021	RT 012	Eurasian Crag Martin	<i>Ptyonoprogne rupestris</i>	2	4
6/17/2021	RT 012	Common Magpie	<i>Pica pica</i>	7	4
6/17/2021	RT 012	White-throated Dipper	<i>Cinclus cinclus</i>	4	4
6/17/2021	RT 012	Common Kingfisher	<i>Alcedo atthis</i>	4	4
6/17/2021	RT 012	Common Whitethroat	<i>Sylvia communis</i>	3	4
6/17/2021	RT 012	European Scops Owl	<i>Otus scops</i>	1	4
6/17/2021	RT 012	Bearded Vulture	<i>Gypaetus barbatus</i>	1	1

EAAA 004

In total there are 11 species of birds recorded in this area. The bird fauna is mainly represented by steppe and meadow species. The birds are mainly using the steppe area with scattered bushes as breeding area and for feeding. The full list of the birds is presented in Table 15.

**Table 15. List of birds recorded during June**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
6/18/2021	RT 013	Rufous-tailed Rock Thrush	<i>Monticola saxatilis</i>	1	4
6/18/2021	RT 013	Ortolan Bunting	<i>Emberiza hortulana</i>	11	4
6/18/2021	RT 013	Rock Bunting	<i>Emberiza cia</i>	5	4

6/18/2021	RT 013	Black-headed Bunting	<i>Emberiza melanocephala</i>	6	4
6/18/2021	RT 013	Common Blackbird	<i>Turdus merula</i>	8	4
6/18/2021	RT 013	Common Rosefinch	<i>Carpodacus erythrinus</i>	3	4
6/18/2021	RT 013	Eurasian Jay	<i>Garrulus glandarius</i>	2	4
6/18/2021	RT 013	Western Rock Nuthatch	<i>Sitta neumayer</i>	1	4
6/18/2021	RT 013	Common Whitethroat	<i>Sylvia communis</i>	12	4
6/18/2021	RT 013	Eurasian Crag Martin	<i>Ptyonoprogne rupestris</i>	3	4
6/18/2021	RT 013	Common Stonechat	<i>Saxicola rubicola</i>	6	12

## EAAA 005

In total there are 16 species of birds recorded in this area. The bird fauna is mainly represented by forest, meadow, and subalpine species. The birds are mainly using the forested patches and the riparian area for breeding and for feeding. The full list of the birds is presented in Table 16. The restricted range species Green Warbler *Phylloscopus nitidus* is mainly represented in the patches of the forest, where it obviously breeds with the fairly high density.

Table 16. List of birds recorded during June

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
6/18/2021	RT 014	Blackcap	<i>Sylvia atricapilla</i>	10	4
6/18/2021	RT 014	Common Whitethroat	<i>Sylvia communis</i>	12	4
6/18/2021	RT 014	Lesser Whitethroat	<i>Sylvia curruca</i>	3	4
6/18/2021	RT 014	Green Warbler	<i>Phylloscopus nitidus</i>	8	4
6/18/2021	RT 014	Common Chiffchaff	<i>Phylloscopus collybita</i>	5	4
6/18/2021	RT 014	Winter Wren	<i>Troglodytes troglodytes</i>	10	4
6/18/2021	RT 014	Common Blackbird	<i>Turdus merula</i>	6	4
6/18/2021	RT 014	Mistle Thrush	<i>Turdus viscivorus</i>	3	4
6/18/2021	RT 014	Common Rosefinch	<i>Carpodacus erythrinus</i>	8	4
6/18/2021	RT 014	Whinchat	<i>Saxicola rubetra</i>	3	4
6/18/2021	RT 014	Water Pipit	<i>Anthus spinoletta</i>	6	4
6/18/2021	RT 014	Horned Lark	<i>Eremophila alpestris</i>	3	4
6/19/2021	RT 015	Common Rosefinch	<i>Carpodacus erythrinus</i>	21	12
6/19/2021	RT 015	Common Whitethroat	<i>Sylvia communis</i>	24	7
6/19/2021	RT 015	Common Quail	<i>Coturnix coturnix</i>	2	4
6/19/2021	RT 015	Common Stonechat	<i>Saxicola rubicola</i>	7	12
6/19/2021	RT 015	Common Linnet	<i>Carduelis cannabina</i>	9	12
6/19/2021	RT 015	Tree Pipit	<i>Anthus trivialis</i>	5	4
6/19/2021	RT 015	Red-fronted Serin	<i>Serinus pusillus</i>	6	4
6/19/2021	RT 015	Western Rock Nuthatch	<i>Sitta neumayer</i>	2	4
6/19/2021	RT 015	Rock Bunting	<i>Emberiza cia</i>	4	4
6/19/2021	RT 015	White Wagtail	<i>Motacilla alba</i>	1	4
6/19/2021	RT 015	Rufous-tailed Rock Thrush	<i>Monticola saxatilis</i>	2	4
6/19/2021	RT 015	Twite	<i>Carduelis flavirostris</i>	6	4

## EAAA 006

In total there are 7 species of birds recorded in this area. The bird fauna is mainly represented by forest and meadow species. The birds are mainly using the forested patches and the riparian area for breeding and for feeding. The full list of the birds is presented in Table 17.

Table 17. List of birds recorded during June

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
6/19/2021	RT 016	Common Rosefinch	<i>Carpodacus erythrinus</i>	6	12
6/19/2021	RT 016	Common Whitethroat	<i>Sylvia communis</i>	8	12
6/19/2021	RT 016	Common Linnet	<i>Carduelis cannabina</i>	12	4
6/19/2021	RT 016	Tree Pipit	<i>Anthus trivialis</i>	9	4

6/19/2021	RT 016	Western Rock Nuthatch	<i>Sitta neumayer</i>	1	4
6/19/2021	RT 016	Rock Bunting	<i>Emberiza cia</i>	6	4
6/19/2021	RT 016	Common Blackbird	<i>Turdus merula</i>	3	4

EAAA 007-009

In total there are 11 species of birds recorded in this area. The bird fauna is mainly represented by forest and steppe species. The birds are mainly using the forested patches for breeding and for feeding, while some species concentrate mainly in riparian zone for feeding. The full list of the birds is presented in Table 18. The restricted range species Green Warbler *Phylloscopus nitidus* is mainly represented in the patches of the forest, where it breeds with quite low density.

**Table 18. : List of birds recorded during June**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
6/19/2021	RT 017	Blackcap	<i>Sylvia atricapilla</i>	5	4
6/19/2021	RT 017	Common Whitethroat	<i>Sylvia communis</i>	4	4
6/19/2021	RT 017	Lesser Whitethroat	<i>Sylvia curruca</i>	6	4
6/19/2021	RT 017	Green Warbler	<i>Phylloscopus nitidus</i>	3	4
6/19/2021	RT 017	Common Chiffchaff	<i>Phylloscopus collybita</i>	2	4
6/19/2021	RT 017	Winter Wren	<i>Troglodytes troglodytes</i>	1	4
6/19/2021	RT 017	Common Blackbird	<i>Turdus merula</i>	5	4
6/19/2021	RT 017	Mistle Thrush	<i>Turdus viscivorus</i>	4	4
6/19/2021	RT 017	Common Linnet	<i>Carduelis cannabina</i>	8	4
6/19/2021	RT 017	Tree Pipit	<i>Anthus trivialis</i>	5	4
6/19/2021	RT 017	Rock Bunting	<i>Emberiza cia</i>	5	4
6/19/2021	RT 017	Common Chaffinch	<i>Fringilla coelebs</i>	6	4

EAAA 010-012

In total there are 12 species of birds recorded in this area. The bird fauna is mainly represented by juniper woodland species and the species of riparian zone. The full list of the birds is presented in Table 19.

**Table 19. : List of birds recorded during June**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
6/20/2021	RT 018	Common Chaffinch	<i>Fringilla coelebs</i>	6	4
6/20/2021	RT 018	Eurasian Golden Oriole	<i>Oriolus oriolus</i>	3	4
6/20/2021	RT 018	Rock Bunting	<i>Emberiza cia</i>	8	4
6/20/2021	RT 018	Lesser Whitethroat	<i>Sylvia curruca</i>	12	4
6/20/2021	RT 018	Red-fronted Serin	<i>Serinus pusillus</i>	4	4
6/20/2021	RT 018	Syrian Woodpecker	<i>Dendrocopos syriacus</i>	1	4
6/20/2021	RT 018	European Nightjar	<i>Caprimulgus europaeus</i>	2	4
6/20/2021	RT 018	Western Rock Nuthatch	<i>Sitta neumayer</i>	1	4
6/20/2021	RT 018	Rock Bunting	<i>Emberiza cia</i>	4	4
6/20/2021	RT 018	Black-headed Bunting	<i>Emberiza melanocephala</i>	2	4
6/20/2021	RT 018	Corn Bunting	<i>Emberiza calandra</i>	1	4
6/20/2021	RT 018	Common Blackbird	<i>Turdus merula</i>	3	12

EAAA 013

In total there are 9 species of birds recorded in this area. The bird fauna is mainly represented by juniper woodland species and the species of riparian zone. The birds are mainly using the forested patches for breeding and for feeding. The full list of the birds is presented in Table 20.

**Table 20. : List of birds recorded during June**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
6/20/2021	RT 019	Common Chaffinch	<i>Fringilla coelebs</i>	4	4
6/20/2021	RT 019	Rock Bunting	<i>Emberiza cia</i>	6	4
6/20/2021	RT 019	Lesser Whitethroat	<i>Sylvia curruca</i>	8	4
6/20/2021	RT 019	Rock Bunting	<i>Emberiza cia</i>	6	4
6/20/2021	RT 019	Black-headed Bunting	<i>Emberiza melanocephala</i>	7	4
6/20/2021	RT 019	Corn Bunting	<i>Emberiza calandra</i>	3	4
6/20/2021	RT 019	Common Blackbird	<i>Turdus merula</i>	4	4
6/20/2021	RT 019	Lesser Grey Shrike	<i>Lanius minor</i>	2	4
6/20/2021	RT 019	Red-backed Shrike	<i>Lanius collurio</i>	2	4

EAAA 014-015

In total there are 9 species of birds recorded in this area. The bird fauna is mainly represented by juniper woodland species and the species of riparian zone. The birds are mainly using the forested patches for breeding and for feeding. The full list of the birds is presented in Table 21.

**Table 21. : List of birds recorded during June**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
6/20/2021	RT 020	Black-headed Bunting	<i>Emberiza melanocephala</i>	1	4
6/20/2021	RT 020	Corn Bunting	<i>Emberiza calandra</i>	3	4
6/20/2021	RT 020	Rock Bunting	<i>Emberiza cia</i>	7	4
6/20/2021	RT 020	Lesser Whitethroat	<i>Sylvia curruca</i>	11	4
6/20/2021	RT 020	Common Blackbird	<i>Turdus merula</i>	3	4
6/20/2021	RT 020	Lesser Grey Shrike	<i>Lanius minor</i>	2	4
6/20/2021	RT 020	Red-backed Shrike	<i>Lanius collurio</i>	1	4
6/20/2021	RT 020	Red-fronted Serin	<i>Serinus pusillus</i>	2	4
6/20/2021	RT 020	Blue Rock Thrush	<i>Monticola solitarius</i>	4	12

### Results for July

Dates: 30 Jul – 31 Aug

EAAA 001

In total there are 13 species of birds recorded in this area. The bird fauna is still mainly represented by steppe, meadow, and riparian species. The birds are widely using the rocky areas, which lay along the road and the riparian zone. The full list of the birds is presented in Table 22.

**Table 22. : List of birds recorded during end of July – beginning of August**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
7/30/2021	RT 011	Rufous-tailed Rock Thrush	<i>Monticola saxatilis</i>	6	12
7/30/2021	RT 011	Oortolan Bunting	<i>Emberiza hortulana</i>	16	12
7/30/2021	RT 011	Rock Bunting	<i>Emberiza cia</i>	4	4
7/30/2021	RT 011	Black-headed Bunting	<i>Emberiza melanocephala</i>	11	12
7/30/2021	RT 011	Common Blackbird	<i>Turdus merula</i>	18	12
7/30/2021	RT 011	Cetti's Warbler	<i>Cettia cetti</i>	2	4
7/30/2021	RT 011	Common Rosefinch	<i>Carpodacus erythrinus</i>	22	12
7/30/2021	RT 011	Eurasian Jay	<i>Garrulus glandarius</i>	2	4

7/30/2021	RT 011	Western Rock Nuthatch	<i>Sitta neumayer</i>	8	12
7/30/2021	RT 011	Common Whitethroat	<i>Sylvia communis</i>	18	12
7/30/2021	RT 011	Lesser Whitethroat	<i>Sylvia curruca</i>	5	12
7/30/2021	RT 011	Common Chaffinch	<i>Fringilla coelebs</i>	22	12
7/30/2021	RT 011	Eurasian Crag Martin	<i>Ptyonoprogne rupestris</i>	25	4

## EAAA 002-003

In total there are 18 species of birds recorded in this area. The bird fauna is mainly represented by meadow and riparian species. The birds are widely using the riparian zone having the breeding territories here. The full list of the birds is presented in Table 23. Among priority species we have recorded Lesser Spotted Eagle *Clanga pomarina*, which most probably doesn't breed in the area and was occasionally flying along the valley. Most of the species are observed feeding young or the young birds disperse and stay in the riparian woodlands. Some forest species move to this area in the end of the breeding season, so the area appears to be important to secure the post-fledgling dispersion.

**Table 23. : List of birds recorded during end of July – beginning of August**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
7/30/2021	RT 012	Common Blackbird	<i>Turdus merula</i>	21	12
7/30/2021	RT 012	Cetti's Warbler	<i>Cettia cetti</i>	1	4
7/30/2021	RT 012	Common Nightingale	<i>Luscinia megarhynchos</i>	1	4
7/30/2021	RT 012	Eurasian Crag Martin	<i>Ptyonoprogne rupestris</i>	6	4
7/30/2021	RT 012	Common Magpie	<i>Pica pica</i>	11	4
7/30/2021	RT 012	White-throated Dipper	<i>Cinclus cinclus</i>	6	12
7/30/2021	RT 012	Common Kingfisher	<i>Alcedo atthis</i>	2	4
7/30/2021	RT 012	Common Whitethroat	<i>Sylvia communis</i>	3	4
7/30/2021	RT 012	Wood Sandpiper *	<i>Tringa glareola</i>	14	1
7/30/2021	RT 012	Green Sandpiper	<i>Tringa ochropus</i>	6	4
7/30/2021	RT 012	Common Sandpiper	<i>Actitis hypoleucos</i>	18	12
7/30/2021	RT 012	Armenian Gull	<i>Larus armenicus</i>	26	1
7/30/2021	RT 012	Common Kestrel	<i>Falco tinnunculus</i>	14	1
7/30/2021	RT 012	European Green Woodpecker	<i>Picus viridis</i>	3	12
7/30/2021	RT 012	Great Spotted Woodpecker	<i>Dendrocopos major</i>	1	4
7/30/2021	RT 012	Syrian Woodpecker	<i>Dendrocopos syriacus</i>	5	12
7/30/2021	RT 012	Common Chaffinch	<i>Fringilla coelebs</i>	28	12
7/30/2021	RT 012	Eurasian Penduline Tit	<i>Remiz pendulinus</i>	10	12
7/30/2021	RT 012	Lesser Spotted Eagle	<i>Clanga pomarina</i>	1	4
7/30/2021	RT 012	Long-legged Buzzard	<i>Buteo rufinus</i>	3	12

## EAAA 004

In total there are 14 species of birds recorded in this area. The bird fauna is mainly represented by steppe and meadow species. The birds are mainly using the steppe area with scattered bushes as breeding area and for feeding. The full list of the birds is presented in Table 24. Most of the birds are with the fledglings, including some forest species, which move to this area at the end of the breeding season.

**Table 24. List of birds recorded during end of July – beginning of August**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
7/30/2021	RT 013	Rufous-tailed Rock Thrush	<i>Monticola saxatilis</i>	4	12
7/30/2021	RT 013	Ortolan Bunting	<i>Emberiza hortulana</i>	6	12
7/30/2021	RT 013	Rock Bunting	<i>Emberiza cia</i>	16	12
7/30/2021	RT 013	Common Blackbird	<i>Turdus merula</i>	21	4

7/30/2021	RT 013	Common Rosefinch	<i>Carpodacus erythrinus</i>	19	12
7/30/2021	RT 013	Eurasian Jay	<i>Garrulus glandarius</i>	6	4
7/30/2021	RT 013	Western Rock Nuthatch	<i>Sitta neumayer</i>	1	4
7/30/2021	RT 013	Common Whitethroat	<i>Sylvia communis</i>	16	12
7/30/2021	RT 013	European Green Woodpecker	<i>Picus viridis</i>	1	4
7/30/2021	RT 013	Great Tit	<i>Parus major</i>	13	4
7/30/2021	RT 013	Eurasian Crag Martin	<i>Ptyonoprogne rupestris</i>	6	4
7/30/2021	RT 013	Common Chaffinch	<i>Fringilla coelebs</i>	12	12
7/30/2021	RT 013	Common Stonechat	<i>Saxicola rubicola</i>	2	4
7/30/2021	RT 013	Eurasian Sparrowhawk	<i>Accipiter nisus</i>	2	4

## EAAA 005

In total there are 25 species of birds recorded in this area. The bird fauna is mainly represented by forest, meadow, and subalpine species. The birds are mainly using the forested patches and the riparian area for breeding and for feeding. The full list of the birds is presented in Table 25. The restricted range species Green Warbler *Phylloscopus nitidus* is mainly represented in the patches of the forest, where it obviously breeds with the fairly high density. The riparian area is widely used by Ring Ouzel *Turdus torquatus*, the subalpine species, and the Common Redstart *Phoenicurus phoenicurus*, the forest species.

**Table 25. List of birds recorded during end of July – beginning of August**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
7/30/2021	RT 014	Blackcap	<i>Sylvia atricapilla</i>	5	4
7/30/2021	RT 014	Common Whitethroat	<i>Sylvia communis</i>	14	12
7/30/2021	RT 014	Green Warbler	<i>Phylloscopus nitidus</i>	4	4
7/30/2021	RT 014	Common Chiffchaff	<i>Phylloscopus collybita</i>	8	4
7/30/2021	RT 014	Common Redstart	<i>Phoenicurus phoenicurus</i>	11	12
7/30/2021	RT 014	Winter Wren	<i>Troglodytes troglodytes</i>	8	4
7/30/2021	RT 014	Common Blackbird	<i>Turdus merula</i>	25	12
7/30/2021	RT 014	Mistle Thrush	<i>Turdus viscivorus</i>	8	12
7/30/2021	RT 014	Ring Ouzel	<i>Turdus torquatus</i>	18	12
7/30/2021	RT 014	Common Rosefinch	<i>Carpodacus erythrinus</i>	21	12
7/30/2021	RT 014	Whinchat	<i>Saxicola rubetra</i>	8	12
7/30/2021	RT 014	Water Pipit	<i>Anthus spinoletta</i>	11	12
7/30/2021	RT 014	Horned Lark	<i>Eremophila alpestris</i>	7	12
7/31/2021	RT 015	Common Rosefinch	<i>Carpodacus erythrinus</i>	14	12
7/31/2021	RT 015	Common Whitethroat	<i>Sylvia communis</i>	18	12
7/31/2021	RT 015	Common Quail	<i>Coturnix coturnix</i>	4	12
7/31/2021	RT 015	Common Stonechat	<i>Saxicola rubicola</i>	2	12
7/31/2021	RT 015	Common Linnet	<i>Carduelis cannabina</i>	19	12
7/31/2021	RT 015	Tree Pipit	<i>Anthus trivialis</i>	9	4
7/31/2021	RT 015	Red-fronted Serin	<i>Serinus pusillus</i>	27	12
7/31/2021	RT 015	Western Rock Nuthatch	<i>Sitta neumayer</i>	3	4
7/31/2021	RT 015	Rock Bunting	<i>Emberiza cia</i>	11	12
7/31/2021	RT 015	White Wagtail	<i>Motacilla alba</i>	2	12
7/31/2021	RT 015	Rufous-tailed Rock Thrush	<i>Monticola saxatilis</i>	3	12
7/31/2021	RT 015	Twite	<i>Carduelis flavirostris</i>	16	4

## EAAA 006

In total there are 7 species of birds recorded in this area. The bird fauna is mainly represented by forest and meadow species. The birds are mainly using the forested patches and the riparian area for breeding and for feeding. The full list of the birds is presented in Table 26. Most of the species have young.

**Table 26. List of birds recorded during end of July – beginning of August**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
7/31/2021	RT 016	Common Rosefinch	<i>Carpodacus erythrinus</i>	11	12
7/31/2021	RT 016	Common Whitethroat	<i>Sylvia communis</i>	9	12
7/31/2021	RT 016	Common Linnnet	<i>Carduelis cannabina</i>	19	12
7/31/2021	RT 016	Tree Pipit	<i>Anthus trivialis</i>	4	4
7/31/2021	RT 016	Western Rock Nuthatch	<i>Sitta neumayer</i>	1	4
7/31/2021	RT 016	Rock Bunting	<i>Emberiza cia</i>	13	12
7/31/2021	RT 016	Common Blackbird	<i>Turdus merula</i>	22	12

EAAA 007-009

In total there are 11 species of birds recorded in this area. The bird fauna is mainly represented by forest and steppe species. The birds are mainly using the forested patches for breeding and for feeding, while some species concentrate mainly in riparian zone for feeding. The full list of the birds is presented in Table 27. The restricted range species Green Warbler *Phylloscopus nitidus* is mainly represented in the patches of the forest, where it breeds with quite low density.

**Table 27. List of birds recorded during end of July – beginning of August**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
7/31/2021	RT 017	Blackcap	<i>Sylvia atricapilla</i>	2	4
7/31/2021	RT 017	Common Whitethroat	<i>Sylvia communis</i>	6	12
7/31/2021	RT 017	Lesser Whitethroat	<i>Sylvia curruca</i>	1	4
7/31/2021	RT 017	Green Warbler	<i>Phylloscopus nitidus</i>	5	4
7/31/2021	RT 017	Common Chiffchaff	<i>Phylloscopus collybita</i>	3	4
7/31/2021	RT 017	Winter Wren	<i>Troglodytes troglodytes</i>	4	4
7/31/2021	RT 017	Common Blackbird	<i>Turdus merula</i>	12	12
7/31/2021	RT 017	Common Linnnet	<i>Carduelis cannabina</i>	14	12
7/31/2021	RT 017	Rock Bunting	<i>Emberiza cia</i>	13	12
7/31/2021	RT 017	Common Chaffinch	<i>Fringilla coelebs</i>	2	4
7/31/2021	RT 017	European Green Woodpecker	<i>Picus viridis</i>	1	4
7/31/2021	RT 017	Blackcap	<i>Sylvia atricapilla</i>	2	4
7/31/2021	RT 017	Common Whitethroat	<i>Sylvia communis</i>	6	12

EAAA 010-012

In total there are 9 species of birds recorded in this area. The bird fauna is mainly represented by juniper woodland species and the species of riparian zone. The full list of the birds is presented in Table 28. Most of the species are with the fledglings and use the lower part of the valley for brooding the youngs.

**Table 28. List of birds recorded during end of July – beginning of August**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
8/1/2021	RT 018	Common Chaffinch	<i>Fringilla coelebs</i>	28	12
8/1/2021	RT 018	Rock Bunting	<i>Emberiza cia</i>	19	12
8/1/2021	RT 018	Lesser Whitethroat	<i>Sylvia curruca</i>	3	4
8/1/2021	RT 018	Red-fronted Serin	<i>Serinus pusillus</i>	15	12
8/1/2021	RT 018	Syrian Woodpecker	<i>Dendrocopos syriacus</i>	1	4
8/1/2021	RT 018	Western Rock Nuthatch	<i>Sitta neumayer</i>	3	12
8/1/2021	RT 018	Black-headed Bunting	<i>Emberiza melanocephala</i>	3	12
8/1/2021	RT 018	Corn Bunting	<i>Emberiza calandra</i>	18	12
8/1/2021	RT 018	Common Blackbird	<i>Turdus merula</i>	26	12

## EAAA 013

In total there are 7 species of birds recorded in this area. The bird fauna is mainly represented by juniper woodland species and the species of riparian zone. The birds are mainly using the forested patches for breeding and for feeding. The full list of the birds is presented in Table 29.

**Table 29. List of birds recorded during end of July – beginning of August**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
8/2/2021	RT 019	Common Chaffinch	<i>Fringilla coelebs</i>	10	12
8/2/2021	RT 019	Rock Bunting	<i>Emberiza cia</i>	16	12
8/2/2021	RT 019	Lesser Whitethroat	<i>Sylvia curruca</i>	2	4
8/2/2021	RT 019	Black-headed Bunting	<i>Emberiza melanocephala</i>	3	12
8/2/2021	RT 019	Corn Bunting	<i>Emberiza calandra</i>	13	12
8/2/2021	RT 019	Common Blackbird	<i>Turdus merula</i>	17	12
8/2/2021	RT 019	European Green Woodpecker	<i>Picus viridis</i>	1	4

## EAAA 014-015

In total there are 9 species of birds recorded in this area. The bird fauna is mainly represented by juniper woodland species and the species of riparian zone. The birds are mainly using the forested patches for breeding and for feeding. The full list of the birds is presented in Table 30.

**Table 30. List of birds recorded during end of July – beginning of August**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
8/2/2021	RT 020	Black-headed Bunting	<i>Emberiza melanocephala</i>	3	12
8/2/2021	RT 020	Corn Bunting	<i>Emberiza calandra</i>	6	12
8/2/2021	RT 020	Rock Bunting	<i>Emberiza cia</i>	16	12
8/2/2021	RT 020	Common Blackbird	<i>Turdus merula</i>	21	12
8/2/2021	RT 020	Red-fronted Serin	<i>Serinus pusillus</i>	8	12
8/2/2021	RT 020	Blue Rock Thrush	<i>Monticola solitarius</i>	2	12

### Results for November

#### Remark on study area

Since the shape of the planned road was significantly changed, the EAAAs were reshaped accordingly. Specific EAAAs are approved within the Fall Survey Guide and are presented in Figure 8.

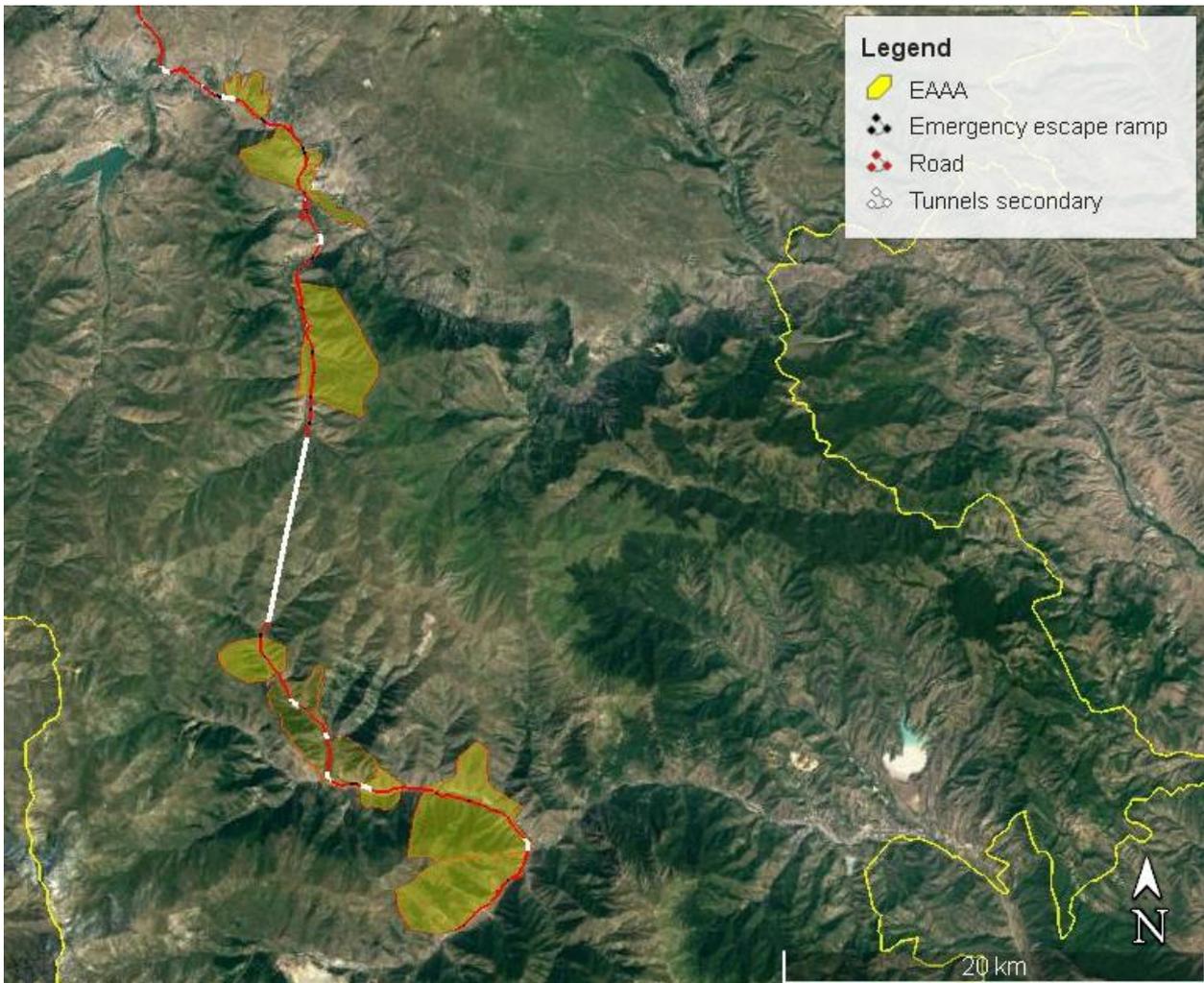


Figure 8. The EAAAs designed after update of the plan of the road

Dates: 4-7 Nov

EAAA 001

In total there are 9 species of birds recorded in this area. The bird fauna is still mainly represented by forest and steppe species. The birds are widely using the riparian zone along the road, and only Western Rock Nuthatch was attached to the rocky areas. The full list of the birds is presented in Table 31.

Table 31. List of birds recorded during early November

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
11/4/2021	RT 11	Common Chaffinch	<i>Fringilla coelebs</i>	16	0
11/4/2021	RT 11	Rock Bunting	<i>Emberiza cia</i>	6	0
11/4/2021	RT 11	Common Blackbird	<i>Turdus merula</i>	5	0
11/4/2021	RT 11	Eurasian Jay	<i>Garrulus glandarius</i>	4	0
11/4/2021	RT 11	Western Rock Nuthatch	<i>Sitta neumayer</i>	2	0
11/4/2021	RT 11	Common Linnet	<i>Carduelis cannabina</i>	24	0
11/4/2021	RT 11	European Goldfinch	<i>Carduelis carduelis</i>	36	0
11/4/2021	RT 11	Common Raven	<i>Corvus corax</i>	1	0
11/4/2021	RT 11	Great Tit	<i>Parus major</i>	4	0

EAAA 002-003

In total there are 15 species of birds recorded in this area. The bird fauna is mainly represented by forest species. The birds are widely using the riparianscrubs and forest as well as open water area for foraging and shelter. The full list of the birds is presented in Table 32. Among priority species we have recorded Armenian Gull *Larus armenicus* and Great Cormorant *Phalacrocorax carbo*, which probably stay here overwinter. Among observed species, there are ones, which do not breed in Armenia, but regularly visit the country to stay overwinter. Those are European Siskin *Carduelis spinus* and Brambling *Fringilla montifringilla*.

**Table 32. List of birds recorded during early November**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
11/4/2021	RT 12	Common Chaffinch	<i>Fringilla coelebs</i>	28	0
11/4/2021	RT 12	Common Blackbird	<i>Turdus merula</i>	9	0
11/4/2021	RT 12	Eurasian Jay	<i>Garrulus glandarius</i>	12	0
11/4/2021	RT 12	Common Linnet	<i>Carduelis cannabina</i>	16	0
11/4/2021	RT 12	European Goldfinch	<i>Carduelis carduelis</i>	64	0
11/4/2021	RT 12	European Siskin	<i>Carduelis spinus</i>	38	0
11/4/2021	RT 12	Brambling	<i>Fringilla montifringilla</i>	41	0
11/4/2021	RT 12	Common Raven	<i>Corvus corax</i>	1	0
11/4/2021	RT 12	Common Kestrel	<i>Falco tinnunculus</i>	1	0
11/4/2021	RT 12	Armenian Gull	<i>Larus armenicus</i>	28	0
11/4/2021	RT 12	Great Cormorant	<i>Phalacrocorax carbo</i>	12	0
11/4/2021	RT 12	Green Sandpiper	<i>Tringa ochropus</i>	4	0
11/4/2021	RT 12	Great Spotted Woodpecker	<i>Dendrocopos major</i>	1	0
11/4/2021	RT 12	European Green Woodpecker	<i>Picus viridis</i>	1	0
11/4/2021	RT 12	Great Tit	<i>Parus major</i>	5	0

EAAA 004

In total there are 14 species of birds recorded in this area. The bird fauna is mainly represented by forest species. The birds are widely using the lowland riparian area for foraging and shelter. The full list of the birds is presented in Table 33. Among priority species we have recorded Great Grey Shrike *Lanius excubitor*, hunting for Winter Wren *Troglodytes troglodytes*. This is one of the southernmost points for this winter visitor in Armenia country, and it appears that the species stays here overwinter. Among other observed wintering species, the European Siskin *Carduelis spinus* and Brambling *Fringilla montifringilla* should be mentioned.

**Table 33. List of birds recorded during early November**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
11/4/2021	RT 13	Common Chaffinch	<i>Fringilla coelebs</i>	14	0
11/4/2021	RT 13	Common Blackbird	<i>Turdus merula</i>	11	0
11/4/2021	RT 13	Eurasian Jay	<i>Garrulus glandarius</i>	7	0
11/4/2021	RT 13	Common Linnet	<i>Carduelis cannabina</i>	25	0
11/4/2021	RT 13	European Goldfinch	<i>Carduelis carduelis</i>	58	0
11/4/2021	RT 13	European Siskin	<i>Carduelis spinus</i>	21	0
11/4/2021	RT 13	Brambling	<i>Fringilla montifringilla</i>	38	0
11/4/2021	RT 13	Common Raven	<i>Corvus corax</i>	1	0
11/4/2021	RT 13	Common Kestrel	<i>Falco tinnunculus</i>	1	0
11/4/2021	RT 13	Long-legged Buzzard	<i>Buteo rufinus</i>	1	0
11/4/2021	RT 13	Mistle Thrush	<i>Turdus viscivorus</i>	6	0
11/4/2021	RT 13	Fieldfare	<i>Turdus pilaris</i>	9	0
11/4/2021	RT 13	Great Grey Shrike	<i>Lanius excubitor</i>	1	0
11/4/2021	RT 13	Black Redstart	<i>Phoenicurus ochruros</i>	2	0
11/4/2021	RT 13	Dunnock	<i>Prunella modularis</i>	1	0
11/4/2021	RT 13	Winter Wren	<i>Troglodytes troglodytes</i>	2	0

11/4/2021	RT 13	White-throated Dipper	<i>Cinclus cinclus</i>	1	0
11/4/2021	RT 13	Rock Bunting	<i>Emberiza cia</i>	6	0
11/4/2021	RT 13	Corn Bunting	<i>Emberiza calandra</i>	13	0
11/4/2021	RT 13	European Robin	<i>Erithacus rubecula</i>	3	0
11/4/2021	RT 13	Twite	<i>Carduelis flavirostris</i>	14	0

## EAAA 006

In total there are 15 species of birds recorded in this area. The bird fauna is mainly represented by forest species. The birds are mainly using the forested patches full of various bushes with berries and the riparian areas for feeding and as shelters. The full list of the birds is presented in Table 34.

**Table 34. List of birds recorded during early November**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
11/5/2021	RT 16	Common Chaffinch	<i>Fringilla coelebs</i>	8	0
11/5/2021	RT 16	Common Blackbird	<i>Turdus merula</i>	8	0
11/5/2021	RT 16	Eurasian Jay	<i>Garrulus glandarius</i>	5	0
11/5/2021	RT 16	Common Linnet	<i>Carduelis cannabina</i>	23	0
11/5/2021	RT 16	European Goldfinch	<i>Carduelis carduelis</i>	12	0
11/5/2021	RT 16	Red-fronted Serin	<i>Serinus pusillus</i>	11	0
11/5/2021	RT 16	Brambling *	<i>Fringilla montifringilla</i>	20	0
11/5/2021	RT 16	Common Raven	<i>Corvus corax</i>	1	0
11/5/2021	RT 16	Eurasian Sparrowhawk	<i>Accipiter nisus</i>	1	0
11/5/2021	RT 16	Mistle Thrush	<i>Turdus viscivorus</i>	7	0
11/5/2021	RT 16	Black Redstart	<i>Phoenicurus ochruros</i>	2	0
11/5/2021	RT 16	Dunnock	<i>Prunella modularis</i>	2	0
11/5/2021	RT 16	Winter Wren	<i>Troglodytes troglodytes</i>	1	0
11/5/2021	RT 16	Rock Bunting	<i>Emberiza cia</i>	12	0
11/5/2021	RT 16	Great Tit	<i>Parus major</i>	8	0

## EAAA 008

In total there are 18 species of birds recorded in this area. The bird fauna is mainly represented by forest and steppe species. The birds are mainly using the riparian zone for feeding and for getting shelter. The full list of the birds is presented in Table 35.

**Table 35. List of birds recorded during early November**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
11/5/2021	RT 17	Common Chaffinch	<i>Fringilla coelebs</i>	34	0
11/5/2021	RT 17	Common Blackbird	<i>Turdus merula</i>	8	0
11/5/2021	RT 17	Eurasian Jay	<i>Garrulus glandarius</i>	5	0
11/5/2021	RT 17	Common Linnet	<i>Carduelis cannabina</i>	35	0
11/5/2021	RT 17	European Goldfinch	<i>Carduelis carduelis</i>	62	0
11/5/2021	RT 17	Brambling *	<i>Fringilla montifringilla</i>	28	0
11/5/2021	RT 17	Common Raven	<i>Corvus corax</i>	1	0
11/5/2021	RT 17	Mistle Thrush	<i>Turdus viscivorus</i>	11	0
11/5/2021	RT 17	Dunnock	<i>Prunella modularis</i>	1	0
11/5/2021	RT 17	Winter Wren	<i>Troglodytes troglodytes</i>	2	0
11/5/2021	RT 17	Rock Bunting	<i>Emberiza cia</i>	14	0
11/5/2021	RT 17	Fieldfare *	<i>Turdus pilaris</i>	29	0
11/5/2021	RT 17	Common Chiffchaff	<i>Phylloscopus collybita</i>	16	0
11/5/2021	RT 17	Long-tailed Tit	<i>Aegithalos caudatus</i>	6	0
11/5/2021	RT 17	Great Tit	<i>Parus major</i>	5	0
11/5/2021	RT 17	Coal Tit	<i>Parus ater</i>	7	0

11/5/2021	RT 17	Blue Tit	<i>Parus caeruleus</i>	2	0
11/6/2021	RT 18	Common Chaffinch	<i>Fringilla coelebs</i>	18	0
11/6/2021	RT 18	Common Blackbird	<i>Turdus merula</i>	6	0
11/6/2021	RT 18	Eurasian Jay	<i>Garrulus glandarius</i>	7	0
11/6/2021	RT 18	Common Linnet	<i>Carduelis cannabina</i>	6	0
11/6/2021	RT 18	European Goldfinch	<i>Carduelis carduelis</i>	17	0
11/6/2021	RT 18	Common Raven	<i>Corvus corax</i>	1	0
11/6/2021	RT 18	Mistle Thrush	<i>Turdus viscivorus</i>	7	0
11/6/2021	RT 18	Dunnock	<i>Prunella modularis</i>	1	0
11/6/2021	RT 18	White-throated Dipper	<i>Cinclus cinclus</i>	1	0
11/6/2021	RT 18	Rock Bunting	<i>Emberiza cia</i>	6	0
11/6/2021	RT 18	Common Chiffchaff	<i>Phylloscopus collybita</i>	4	0
11/6/2021	RT 18	Great Tit	<i>Parus major</i>	7	0

## EAAA 013

In total there are 16 species of birds recorded in this area. The bird fauna is mainly represented by forest species which move lower in this season to stay during the late fall or even entire winter in the warmer zone with available food. Most of the species were concentrated in the riparian zone. The full list of the birds is presented in Table 36.

Table 36. List of birds recorded during early November

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
11/6/2021	RT 19	Common Chaffinch	<i>Fringilla coelebs</i>	27	0
11/6/2021	RT 19	Common Blackbird	<i>Turdus merula</i>	6	0
11/6/2021	RT 19	Eurasian Jay	<i>Garrulus glandarius</i>	8	0
11/6/2021	RT 19	Common Linnet	<i>Carduelis cannabina</i>	21	0
11/6/2021	RT 19	European Goldfinch	<i>Carduelis carduelis</i>	49	0
11/6/2021	RT 19	Brambling *	<i>Fringilla montifringilla</i>	23	0
11/6/2021	RT 19	Red-fronted Serin	<i>Serinus pusillus</i>	8	0
11/6/2021	RT 19	Mistle Thrush	<i>Turdus viscivorus</i>	16	0
11/6/2021	RT 19	Dunnock	<i>Prunella modularis</i>	2	0
11/6/2021	RT 19	Winter Wren	<i>Troglodytes troglodytes</i>	2	0
11/6/2021	RT 19	Rock Bunting	<i>Emberiza cia</i>	4	0
11/6/2021	RT 19	Long-tailed Tit	<i>Aegithalos caudatus</i>	3	0
11/6/2021	RT 19	Great Tit	<i>Parus major</i>	4	0
11/6/2021	RT 19	Coal Tit	<i>Parus ater</i>	2	0
11/6/2021	RT 19	Blue Tit	<i>Parus caeruleus</i>	1	0
11/6/2021	RT 19	Hawfinch	<i>Coccothraustes coccothraustes</i>	1	0

## EAAA 014

In total there are 23 species of birds recorded in this area. The bird fauna is mainly represented by forest and steppe species. The birds are mainly using the riparian area for feeding and for shelters. The full list of the birds is presented in Table 37. Among priority species, the Northern Goshawk *Accipiter gentilis* should be mentioned, which is probably uses the area to stay during the winter, by hunting the larger passerines, Jays, and possibly European Hare *Lepus europaeus*.

Table 37. List of birds recorded during early November

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
11/6/2021	RT 20	Common Blackbird	<i>Turdus merula</i>	4	0
11/6/2021	RT 20	Eurasian Jay	<i>Garrulus glandarius</i>	6	0
11/6/2021	RT 20	Common Linnet	<i>Carduelis cannabina</i>	14	0
11/6/2021	RT 20	European Goldfinch	<i>Carduelis carduelis</i>	27	0
11/6/2021	RT 20	Common Raven	<i>Corvus corax</i>	1	0
11/6/2021	RT 20	Rock Bunting	<i>Emberiza cia</i>	9	0

11/7/2021	RT 21	Common Chaffinch	<i>Fringilla coelebs</i>	10	0
11/7/2021	RT 21	Common Blackbird	<i>Turdus merula</i>	7	0
11/7/2021	RT 21	Eurasian Jay	<i>Garrulus glandarius</i>	7	0
11/7/2021	RT 21	Common Linnet	<i>Carduelis cannabina</i>	31	0
11/7/2021	RT 21	European Goldfinch	<i>Carduelis carduelis</i>	54	0
11/7/2021	RT 21	Brambling	<i>Fringilla montifringilla</i>	11	0
11/7/2021	RT 21	Common Raven	<i>Corvus corax</i>	1	0
11/7/2021	RT 21	Mistle Thrush	<i>Turdus viscivorus</i>	14	0
11/7/2021	RT 21	Dunnoek	<i>Prunella modularis</i>	2	0
11/7/2021	RT 21	Winter Wren	<i>Troglodytes troglodytes</i>	3	0
11/7/2021	RT 21	Rock Bunting	<i>Emberiza cia</i>	9	0
11/7/2021	RT 21	Fieldfare	<i>Turdus pilaris</i>	4	0
11/7/2021	RT 21	Common Chiffchaff	<i>Phylloscopus collybita</i>	5	0
11/7/2021	RT 21	Long-tailed Tit	<i>Aegithalos caudatus</i>	6	0
11/7/2021	RT 21	Great Tit	<i>Parus major</i>	4	0
11/7/2021	RT 21	Coal Tit	<i>Parus ater</i>	6	0
11/7/2021	RT 21	Blue Tit	<i>Parus caeruleus</i>	2	0
11/7/2021	RT 21	Great Spotted Woodpecker	<i>Dendrocopos major</i>	1	0
11/7/2021	RT 21	European Green Woodpecker	<i>Picus viridis</i>	2	0
11/7/2021	RT 21	Red-fronted Serin	<i>Serinus pusillus</i>	9	0
11/7/2021	RT 21	White-throated Dipper	<i>Cinclus cinclus</i>	1	0
11/7/2021	RT 21	European Siskin	<i>Carduelis spinus</i>	22	0
11/7/2021	RT 21	Northern Goshawk	<i>Accipiter gentilis</i>	1	0

## EAAA 016

In total there are 13 species of birds recorded in this area. The bird fauna is mainly represented by forest and steppe species, which move to this area where juniper woodland borders with mosaic orchards to stay here during the winter. The full list of the birds is presented in Table 38. Among priority species, the Golden Eagle *Aquila chrysaetos* should be mentioned, a subadult individual of which was just passing the area.

Table 38. List of birds recorded during early November

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
11/7/2021	RT 22	Common Chaffinch	<i>Fringilla coelebs</i>	16	0
11/7/2021	RT 22	Common Blackbird	<i>Turdus merula</i>	5	0
11/7/2021	RT 22	Eurasian Jay	<i>Garrulus glandarius</i>	11	0
11/7/2021	RT 22	European Goldfinch	<i>Carduelis carduelis</i>	16	0
11/7/2021	RT 22	Common Raven	<i>Corvus corax</i>	2	0
11/7/2021	RT 22	Mistle Thrush	<i>Turdus viscivorus</i>	4	0
11/7/2021	RT 22	Rock Bunting	<i>Emberiza cia</i>	6	0
11/7/2021	RT 22	Fieldfare	<i>Turdus pilaris</i>	8	0
11/7/2021	RT 22	Common Chiffchaff	<i>Phylloscopus collybita</i>	3	0
11/7/2021	RT 22	Great Tit	<i>Parus major</i>	6	0
11/7/2021	RT 22	Golden Eagle	<i>Aquila chrysaetos</i>	1	0
11/7/2021	RT 22	Eurasian Sparrowhawk	<i>Accipiter nisus</i>	1	0
11/7/2021	RT 22	Hawfinch	<i>Coccothraustes coccothraustes</i>	1	0

## Results for February

## Remark on study area

The same EAAAs, which were approved within the Fall Survey Guide were used (see Figure 9).

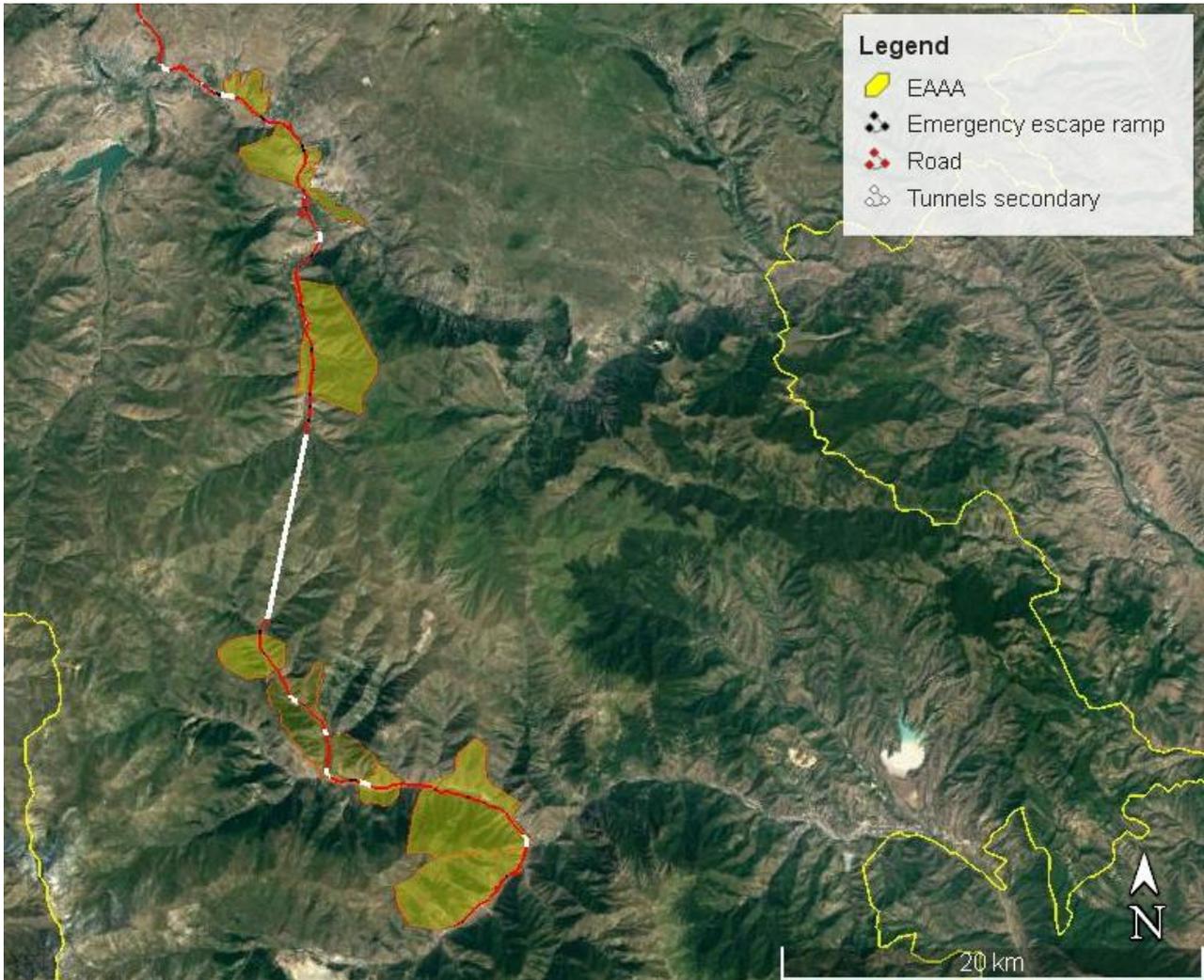


Figure 9. The EAAAs designed after update of the plan of the road

Dates: 11-14 Feb

EAAA 001

In total there are 79 species of birds recorded in this area. The bird fauna is still mainly represented by forest and steppe species. The birds are widely using the riparian zone along the road, and only Western Rock Nuthatch was attached to the rocky areas. The full list of the birds is presented in Table 39.

Table 39. List of birds recorded during February

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
2/11/2022	RT 11	Common Chaffinch	<i>Fringilla coelebs</i>	6	0
2/11/2022	RT 11	Common Blackbird	<i>Turdus merula</i>	3	0
2/11/2022	RT 11	Eurasian Jay	<i>Garrulus glandarius</i>	4	0
2/11/2022	RT 11	Common Raven	<i>Corvus corax</i>	1	0
2/11/2022	RT 11	Rock Bunting	<i>Emberiza cia</i>	5	0
2/11/2022	RT 11	Great Tit	<i>Parus major</i>	2	0
2/11/2022	RT 11	Western Rock Nuthatch	<i>Sitta neumayer</i>	2	0

EAAA 002-003

In total there are 14 species of birds recorded in this area. The bird fauna is mainly represented by forest species. The birds are widely using the riparianscrubs and forest as well as open water area for foraging and shelter. The full list of the birds is presented in Table 40. Among priority species we have recorded Armenian Gull *Larus armenicus* and Great Cormorant *Phalacrocorax carbo*, which probably stay here overwinter.

**Table 40. List of birds recorded during February**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
2/12/2022	RT 12	Common Chaffinch	<i>Fringilla coelebs</i>	12	0
2/12/2022	RT 12	Common Blackbird	<i>Turdus merula</i>	6	0
2/12/2022	RT 12	Eurasian Jay	<i>Garrulus glandarius</i>	6	0
2/12/2022	RT 12	Common Linnet	<i>Carduelis cannabina</i>	8	0
2/12/2022	RT 12	European Goldfinch	<i>Carduelis carduelis</i>	4	0
2/12/2022	RT 12	Brambling *	<i>Fringilla montifringilla</i>	10	0
2/12/2022	RT 12	Common Raven	<i>Corvus corax</i>	2	0
2/12/2022	RT 12	Common Kestrel	<i>Falco tinnunculus</i>	1	0
2/12/2022	RT 12	Armenian Gull	<i>Larus armenicus</i>	4	0
2/12/2022	RT 12	Great Cormorant	<i>Phalacrocorax carbo</i>	6	0
2/12/2022	RT 12	Green Sandpiper	<i>Tringa ochropus</i>	5	0
2/12/2022	RT 12	Grey Heron	<i>Ardea cinerea</i>	9	0
2/12/2022	RT 12	Rock Dove	<i>Columba livia</i>	15	0
2/12/2022	RT 12	Great Tit	<i>Parus major</i>	3	0

EAAA 004

In total there are 18 species of birds recorded in this area. The bird fauna is mainly represented by forest species. The birds are widely using the lowland riparian area for foraging and shelter. The full list of the birds is presented in Table 41. Among the observed wintering species, the European Siskin *Carduelis spinus* and Brambling *Fringilla montifringilla* should be mentioned.

**Table 41. List of birds recorded during February**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
2/12/2022	RT 13	Common Chaffinch	<i>Fringilla coelebs</i>	22	0
2/12/2022	RT 13	Common Blackbird	<i>Turdus merula</i>	4	0
2/12/2022	RT 13	Eurasian Jay	<i>Garrulus glandarius</i>	6	0
2/12/2022	RT 13	Common Linnet	<i>Carduelis cannabina</i>	9	0
2/12/2022	RT 13	European Goldfinch	<i>Carduelis carduelis</i>	6	0
2/12/2022	RT 13	European Siskin *	<i>Carduelis spinus</i>	7	0
2/12/2022	RT 13	Brambling *	<i>Fringilla montifringilla</i>	26	0
2/12/2022	RT 13	Common Raven	<i>Corvus corax</i>	1	0
2/12/2022	RT 13	Common Kestrel	<i>Falco tinnunculus</i>	1	0
2/12/2022	RT 13	Mistle Thrush	<i>Turdus viscivorus</i>	3	0
2/12/2022	RT 13	Fieldfare *	<i>Turdus pilaris</i>	1	0
2/12/2022	RT 13	Black Redstart	<i>Phoenicurus ochruros</i>	3	0
2/12/2022	RT 13	Dunnock	<i>Prunella modularis</i>	2	0
2/12/2022	RT 13	Winter Wren	<i>Troglodytes troglodytes</i>	3	0
2/12/2022	RT 13	White-throated Dipper	<i>Cinclus cinclus</i>	1	0
2/12/2022	RT 13	Rock Bunting	<i>Emberiza cia</i>	5	0
2/12/2022	RT 13	Corn Bunting	<i>Emberiza calandra</i>	18	0
2/12/2022	RT 13	Eurasian Tree Sparrow	<i>Passer montanus</i>	34	0

EAAA 006

In total there are 3 species of birds recorded in this area. The bird fauna is mainly represented by forest species. The birds are mainly using the riparian areas for feeding and as shelters. The full list of the birds is presented in Table 42.

**Table 42. List of birds recorded during February**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
2/13/2022	RT 16	White-throated Dipper	<i>Cinclus cinclus</i>	2	0
2/13/2022	RT 16	Common Blackbird	<i>Turdus merula</i>	2	0
2/13/2022	RT 16	Great Tit	<i>Parus major</i>	3	0

EAAA 008

In total there are 15 species of birds recorded in this area. The bird fauna is mainly represented by forest and steppe species. The birds are mainly using the riparian zone for feeding and for getting shelter. The full list of the birds is presented in Table 43.

**Table 43. List of birds recorded during February**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
2/13/2022	RT 17	Common Chaffinch	<i>Fringilla coelebs</i>	12	0
2/13/2022	RT 17	Common Blackbird	<i>Turdus merula</i>	2	0
2/13/2022	RT 17	Eurasian Jay	<i>Garrulus glandarius</i>	4	0
2/13/2022	RT 17	Common Linnet	<i>Carduelis cannabina</i>	7	0
2/13/2022	RT 17	European Goldfinch	<i>Carduelis carduelis</i>	3	0
2/13/2022	RT 17	Brambling *	<i>Fringilla montifringilla</i>	14	0
2/13/2022	RT 17	Common Raven	<i>Corvus corax</i>	2	0
2/13/2022	RT 17	Mistle Thrush	<i>Turdus viscivorus</i>	3	0
2/13/2022	RT 17	Winter Wren	<i>Troglodytes troglodytes</i>	2	0
2/13/2022	RT 17	Rock Bunting	<i>Emberiza cia</i>	5	0
2/13/2022	RT 17	Fieldfare *	<i>Turdus pilaris</i>	2	0
2/13/2022	RT 17	Great Tit	<i>Parus major</i>	4	0
2/13/2022	RT 17	Blue Tit	<i>Parus caeruleus</i>	3	0
2/13/2022	RT 18	Common Chaffinch	<i>Fringilla coelebs</i>	26	0
2/13/2022	RT 18	Common Blackbird	<i>Turdus merula</i>	6	0
2/13/2022	RT 18	Eurasian Jay	<i>Garrulus glandarius</i>	4	0
2/13/2022	RT 18	Common Linnet	<i>Carduelis cannabina</i>	12	0
2/13/2022	RT 18	European Goldfinch	<i>Carduelis carduelis</i>	9	0
2/13/2022	RT 18	Common Raven	<i>Corvus corax</i>	1	0
2/13/2022	RT 18	Mistle Thrush	<i>Turdus viscivorus</i>	6	0
2/13/2022	RT 18	Ring Ouzel	<i>Turdus torquatus</i>	4	0
2/13/2022	RT 18	White-throated Dipper	<i>Cinclus cinclus</i>	1	0
2/13/2022	RT 18	Rock Bunting	<i>Emberiza cia</i>	7	0
2/13/2022	RT 18	European Greenfinch	<i>Carduelis chloris</i>	11	0
2/13/2022	RT 18	Great Tit	<i>Parus major</i>	5	0

EAAA 013

In total there are 15 species of birds recorded in this area. The bird fauna is mainly represented by forest species which move lower in this season to stay during the late fall or even entire winter in the warmer zone with available food. Most of the species were concentrated in the riparian zone. Among the wintering species, the Brambling *Fringilla montifringilla* should be mentioned. The full list of the birds is presented in Table 44.

**Table 44. List of birds recorded during February**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
2/14/2022	RT 19	Common Chaffinch	<i>Fringilla coelebs</i>	19	0
2/14/2022	RT 19	Common Blackbird	<i>Turdus merula</i>	7	0
2/14/2022	RT 19	Eurasian Jay	<i>Garrulus glandarius</i>	6	0
2/14/2022	RT 19	Common Linnet	<i>Carduelis cannabina</i>	4	0

2/14/2022	RT 19	European Goldfinch	<i>Carduelis carduelis</i>	2	0
2/14/2022	RT 19	Brambling *	<i>Fringilla montifringilla</i>	11	0
2/14/2022	RT 19	Red-fronted Serin	<i>Serinus pusillus</i>	4	0
2/14/2022	RT 19	Mistle Thrush	<i>Turdus viscivorus</i>	6	0
2/14/2022	RT 19	European Robin	<i>Erithacus rubecula</i>	1	0
2/14/2022	RT 19	Winter Wren	<i>Troglodytes troglodytes</i>	1	0
2/14/2022	RT 19	Rock Bunting	<i>Emberiza cia</i>	12	0
2/14/2022	RT 19	Long-tailed Tit	<i>Aegithalos caudatus</i>	3	0
2/14/2022	RT 19	Great Tit	<i>Parus major</i>	5	0
2/14/2022	RT 19	European Greenfinch	<i>Carduelis chloris</i>	6	0
2/14/2022	RT 19	Hawfinch	<i>Coccothraustes coccothraustes</i>	2	0

## EAAA 014

In total there are 13 species of birds recorded in this area. The bird fauna is mainly represented by forest and steppe species. The birds are mainly using the riparian area for feeding and for shelters. The full list of the birds is presented in Table 45.

Table 45. List of birds recorded during February

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
2/14/2022	RT 20	Eurasian Jay	<i>Garrulus glandarius</i>	9	0
2/14/2022	RT 20	Common Linnet	<i>Carduelis cannabina</i>	6	0
2/14/2022	RT 20	European Goldfinch	<i>Carduelis carduelis</i>	2	0
2/14/2022	RT 20	Common Raven	<i>Corvus corax</i>	2	5
2/14/2022	RT 20	Rock Bunting	<i>Emberiza cia</i>	16	0
2/14/2022	RT 20	Common Blackbird	<i>Turdus merula</i>	6	0
2/14/2022	RT 20	Fieldfare *	<i>Turdus pilaris</i>	6	0
2/14/2022	RT 20	Mistle Thrush	<i>Turdus viscivorus</i>	9	0
2/14/2022	RT 20	Ring Ouzel	<i>Turdus torquatus</i>	7	0
2/14/2022	RT 20	Great Tit	<i>Parus major</i>	5	0
2/14/2022	RT 20	Blue Tit	<i>Parus caeruleus</i>	2	0
2/14/2022	RT 20	Red-fronted Serin	<i>Serinus pusillus</i>	18	0
2/14/2022	RT 20	European Greenfinch	<i>Carduelis chloris</i>	13	0
2/14/2022	RT 21	Mistle Thrush	<i>Turdus viscivorus</i>	4	0
2/14/2022	RT 21	Common Blackbird	<i>Turdus merula</i>	2	0
2/14/2022	RT 21	Eurasian Jay	<i>Garrulus glandarius</i>	2	0
2/14/2022	RT 21	European Green Woodpecker	<i>Picus viridis</i>	1	0
2/14/2022	RT 21	Great Tit	<i>Parus major</i>	4	0

## EAAA 016

In total there are 8 species of birds recorded in this area. The bird fauna is mainly represented by forest and steppe species, which move to this area where juniper woodland borders with mosaic orchards to stay here during the winter. The full list of the birds is presented in Table 46. Among priority species, the Golden Eagle *Aquila chrysaetos* should be mentioned, a subadult individual of which was just passing the area.

Table 46. List of birds recorded during February

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
2/12/2022	RT 22	Common Chaffinch	<i>Fringilla coelebs</i>	18	0
2/12/2022	RT 22	Common Blackbird	<i>Turdus merula</i>	6	0
2/12/2022	RT 22	Eurasian Jay	<i>Garrulus glandarius</i>	14	0
2/12/2022	RT 22	European Goldfinch	<i>Carduelis carduelis</i>	2	0
2/12/2022	RT 22	Rock Bunting	<i>Emberiza cia</i>	8	0

2/12/2022	RT 22	Great Tit	<i>Parus major</i>	7	0
2/12/2022	RT 22	Eurasian Tree Sparrow	<i>Passer montanus</i>	28	0
2/12/2022	RT 22	Hawfinch	<i>Coccothraustes coccothraustes</i>	2	0

### Results for April

#### Remark on study area

The same EAAAs, which were approved within the Fall Survey Guide were used (see Figure 10).

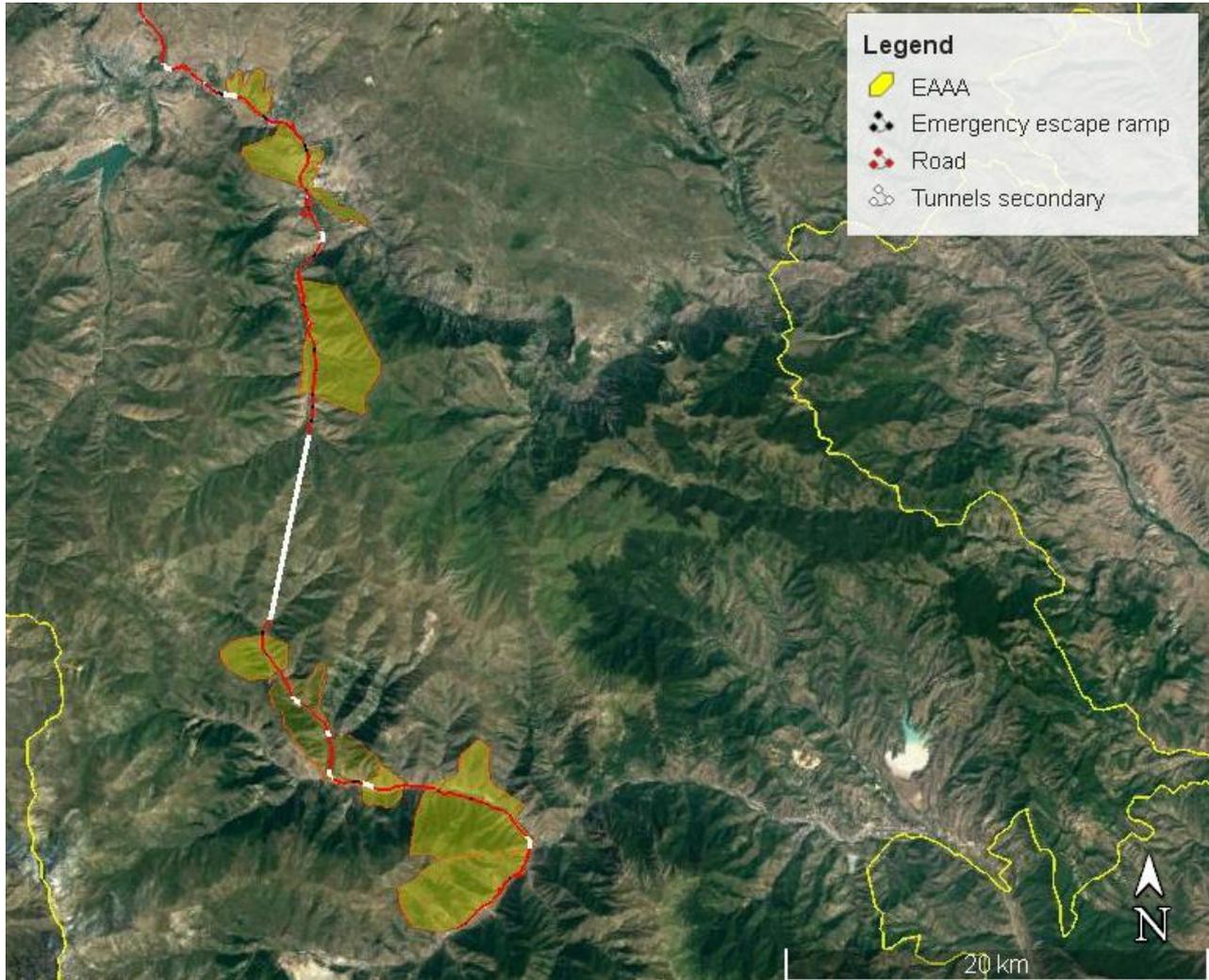


Figure 10. The EAAAs designed after update of the plan of the road

Dates: 8-11 Apr and 27-30 Apr

EAAA 001

In total there are 11 species of birds recorded in this area. The bird fauna is still mainly represented by forest and steppe species. The birds are widely using the riparian zone along the road, and only Western Rock Nuthatch was attached to the rocky areas. The full list of the birds is presented in Table 47.

Table 47. List of birds recorded during April

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
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4/11/2022	RT 11	Common Chaffinch	<i>Fringilla coelebs</i>	6	4
4/11/2022	RT 11	Common Blackbird	<i>Turdus merula</i>	3	4
4/11/2022	RT 11	Eurasian Jay	<i>Garrulus glandarius</i>	4	2
4/11/2022	RT 11	Common Raven	<i>Corvus corax</i>	1	2
4/11/2022	RT 11	Rock Bunting	<i>Emberiza cia</i>	6	4
4/11/2022	RT 11	Willow Warbler *	<i>Phylloscopus trochilus</i>	4	0
4/11/2022	RT 11	Great Tit	<i>Parus major</i>	3	4
4/11/2022	RT 11	Western Rock Nuthatch	<i>Sitta neumayer</i>	2	4
4/27/2022	RT 11	Common Linnet	<i>Carduelis cannabina</i>	6	4
4/27/2022	RT 11	Common Blackbird	<i>Turdus merula</i>	3	2
4/27/2022	RT 11	Eurasian Jay	<i>Garrulus glandarius</i>	2	4
4/27/2022	RT 11	Common Raven	<i>Corvus corax</i>	1	4
4/27/2022	RT 11	Rock Bunting	<i>Emberiza cia</i>	7	2
4/27/2022	RT 11	Willow Warbler *	<i>Phylloscopus trochilus</i>	2	0
4/27/2022	RT 11	Great Tit	<i>Parus major</i>	4	2
4/27/2022	RT 11	Western Rock Nuthatch	<i>Sitta neumayer</i>	2	4
4/27/2022	RT 11	Blue Rock Thrush	<i>Monticola solitarius</i>	1	4
4/27/2022	RT 11	Ortolan Bunting	<i>Emberiza hortulana</i>	4	4
4/27/2022	RT 11	Common Whitethroat	<i>Sylvia communis</i>	5	4

## EAAA 002-003

In total there are 19 species of birds recorded in this area. The bird fauna is mainly represented by forest species, but there are some raptors too. Thus, the was recording a migratory Short-toed Eagle *Circaetus gallicus* and a large ranged Griffon Vulture *Gyps fulvus*. The nest of Long-legged Buzzard *Buteo rufinus*, was also recorded in the nearby cliffs. The birds are widely using the riparian scrubs and forest as well as open water area for foraging and shelter. The full list of the birds is presented in Table 48. Among other priority species we have recorded Armenian Gull *Larus armenicus* and Great Cormorant *Phalacrocorax carbo*, which probably stay here overwinter.

Table 48. List of birds recorded during April

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
4/11/2022	RT 12	Common Chaffinch	<i>Fringilla coelebs</i>	8	2
4/11/2022	RT 12	Common Blackbird	<i>Turdus merula</i>	7	4
4/11/2022	RT 12	Eurasian Jay	<i>Garrulus glandarius</i>	3	2
4/11/2022	RT 12	Common Linnet	<i>Carduelis cannabina</i>	6	2
4/11/2022	RT 12	European Goldfinch	<i>Carduelis carduelis</i>	5	2
4/11/2022	RT 12	Short-toed Eagle	<i>Circaetus gallicus</i>	1	0
4/11/2022	RT 12	Long-legged Buzzard	<i>Buteo rufinus</i>	2	9
4/11/2022	RT 12	Eurasian Griffon Vulture	<i>Gyps fulvus</i>	1	0
4/11/2022	RT 12	Common Kestrel	<i>Falco tinnunculus</i>	2	4
4/11/2022	RT 12	Armenian Gull	<i>Larus armenicus</i>	8	0
4/11/2022	RT 12	Great Cormorant	<i>Phalacrocorax carbo</i>	5	0
4/11/2022	RT 12	Green Sandpiper	<i>Tringa ochropus</i>	3	0
4/11/2022	RT 12	Grey Heron	<i>Ardea cinerea</i>	8	0
4/11/2022	RT 12	Rock Dove	<i>Columba livia</i>	13	4
4/11/2022	RT 12	Great Tit	<i>Parus major</i>	4	2
4/27/2022	RT 12	Cattle Egret	<i>Bubulcus ibis</i>	1	0
4/27/2022	RT 12	Common Blackbird	<i>Turdus merula</i>	6	4
4/27/2022	RT 12	Eurasian Jay	<i>Garrulus glandarius</i>	2	4
4/27/2022	RT 12	Common Linnet	<i>Carduelis cannabina</i>	4	4
4/27/2022	RT 12	European Goldfinch	<i>Carduelis carduelis</i>	2	4
4/27/2022	RT 12	Long-legged Buzzard	<i>Buteo rufinus</i>	2	9
4/27/2022	RT 12	Common Kestrel	<i>Falco tinnunculus</i>	2	4
4/27/2022	RT 12	Armenian Gull	<i>Larus armenicus</i>	1	0

4/27/2022	RT 12	Green Sandpiper	<i>Tringa ochropus</i>	3	0
4/27/2022	RT 12	Common Sandpiper	<i>Actitis hypoleucos</i>	2	4
4/27/2022	RT 12	Rock Dove	<i>Columba livia</i>	12	4
4/27/2022	RT 12	Eurasian Penduline Tit	<i>Remiz pendulinus</i>	4	4
4/27/2022	RT 12	Red-breasted Flycatcher	<i>Ficedula parva</i>	6	0
4/27/2022	RT 12	Great Tit	<i>Parus major</i>	4	2

## EAAA 004

In total there are 18 species of birds recorded in this area. The bird fauna is mainly represented by forest species. The birds are widely using the lowland riparian area for foraging and shelter. The full list of the birds is presented in Table 49. Among the observed wintering species, the European Siskin *Carduelis spinus* and Brambling *Fringilla montifringilla* should be mentioned.

Table 49. List of birds recorded during early April

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
4/10/2022	RT 13	Common Chaffinch	<i>Fringilla coelebs</i>	10	4
4/10/2022	RT 13	Common Blackbird	<i>Turdus merula</i>	7	4
4/10/2022	RT 13	Eurasian Jay	<i>Garrulus glandarius</i>	6	4
4/10/2022	RT 13	Common Linnet	<i>Carduelis cannabina</i>	6	4
4/10/2022	RT 13	European Goldfinch	<i>Carduelis carduelis</i>	2	4
4/10/2022	RT 13	Common Raven	<i>Corvus corax</i>	2	4
4/10/2022	RT 13	Common Kestrel	<i>Falco tinnunculus</i>	1	4
4/10/2022	RT 13	Mistle Thrush	<i>Turdus viscivorus</i>	4	4
4/10/2022	RT 13	Black Redstart	<i>Phoenicurus ochruros</i>	5	4
4/10/2022	RT 13	Dunnock	<i>Prunella modularis</i>	3	4
4/10/2022	RT 13	Winter Wren	<i>Troglodytes troglodytes</i>	4	4
4/10/2022	RT 13	White-throated Dipper	<i>Cinclus cinclus</i>	2	4
4/10/2022	RT 13	Rock Bunting	<i>Emberiza cia</i>	11	4
4/10/2022	RT 13	Corn Bunting	<i>Emberiza calandra</i>	6	4
4/10/2022	RT 13	Common Redstart	<i>Phoenicurus phoenicurus</i>	5	4
4/10/2022	RT 13	Red-fronted Serin	<i>Serinus pusillus</i>	14	4
4/10/2022	RT 13	Willow Warbler *	<i>Phylloscopus trochilus</i>	7	4
4/10/2022	RT 13	Common Chiffchaff	<i>Phylloscopus collybita</i>	10	4

## EAAA 005

In total there are 29 species of birds recorded in this area. The bird fauna is mainly represented by subalpine and alpine species. The birds are widely using the frassy slopes as well as the rocky outcrops. The full list of the birds is presented in Table 50. Among the observed wintering species, the Caspian Snowcock *Tetraogallus caspius* and Caucasian Grouse *Tetrao mlokosiewiczi* are habitat specialists, which inhabit alpine zone with the rocky outcrops, while adult Bearded Vulture *Gypaetus barbatus* uses the area, searching for carrion, within its foraging range.

Table 50. List of birds recorded during April

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
4/28/2022	RT 14	Common Chaffinch	<i>Fringilla coelebs</i>	6	4
4/28/2022	RT 14	Common Blackbird	<i>Turdus merula</i>	8	4
4/28/2022	RT 14	Eurasian Jay	<i>Garrulus glandarius</i>	4	4
4/28/2022	RT 14	Common Linnet	<i>Carduelis cannabina</i>	7	4
4/28/2022	RT 14	European Goldfinch	<i>Carduelis carduelis</i>	2	4
4/28/2022	RT 14	Common Raven	<i>Corvus corax</i>	2	4
4/28/2022	RT 14	Common Kestrel	<i>Falco tinnunculus</i>	1	4

4/28/2022	RT 14	Mistle Thrush	<i>Turdus viscivorus</i>	4	4
4/28/2022	RT 14	Ring Ouzel	<i>Turdus torquatus</i>	5	4
4/28/2022	RT 14	Black Redstart	<i>Phoenicurus ochruros</i>	6	4
4/28/2022	RT 14	Winter Wren	<i>Troglodytes troglodytes</i>	2	4
4/28/2022	RT 14	White-throated Dipper	<i>Cinclus cinclus</i>	2	4
4/28/2022	RT 14	Rock Bunting	<i>Emberiza cia</i>	6	4
4/28/2022	RT 14	Corn Bunting	<i>Emberiza calandra</i>	2	4
4/28/2022	RT 14	Common Redstart	<i>Phoenicurus phoenicurus</i>	2	4
4/28/2022	RT 14	Red-fronted Serin	<i>Serinus pusillus</i>	12	4
4/28/2022	RT 14	Willow Warbler *	<i>Phylloscopus trochilus</i>	5	4
4/28/2022	RT 14	Common Chiffchaff	<i>Phylloscopus collybita</i>	3	4
4/28/2022	RT 14	Red-backed Shrike	<i>Lanius collurio</i>	2	4
4/28/2022	RT 14	Common Whitethroat	<i>Sylvia communis</i>	5	4
4/28/2022	RT 14	Water Pipit	<i>Anthus spinoletta</i>	7	4
4/28/2022	RT 14	Tree Pipit	<i>Anthus trivialis</i>	3	4
4/28/2022	RT 14	Whinchat	<i>Saxicola rubetra</i>	6	4
4/28/2022	RT 14	Caspian Snowcock	<i>Tetrao gallus caspius</i>	3	4
4/29/2022	RT 15	White Wagtail	<i>Motacilla alba</i>	4	4
4/29/2022	RT 15	Grey Wagtail	<i>Motacilla cinerea</i>	4	4
4/29/2022	RT 15	Common Blackbird	<i>Turdus merula</i>	6	4
4/29/2022	RT 15	Eurasian Jay	<i>Garrulus glandarius</i>	4	4
4/29/2022	RT 15	Common Linnet	<i>Carduelis cannabina</i>	5	4
4/29/2022	RT 15	European Goldfinch	<i>Carduelis carduelis</i>	2	4
4/29/2022	RT 15	Common Raven	<i>Corvus corax</i>	2	4
4/29/2022	RT 15	Mistle Thrush	<i>Turdus viscivorus</i>	2	4
4/29/2022	RT 15	Ring Ouzel	<i>Turdus torquatus</i>	2	4
4/29/2022	RT 15	Black Redstart	<i>Phoenicurus ochruros</i>	2	4
4/29/2022	RT 15	White-throated Dipper	<i>Cinclus cinclus</i>	3	4
4/29/2022	RT 15	Rock Bunting	<i>Emberiza cia</i>	5	4
4/29/2022	RT 15	Red-fronted Serin	<i>Serinus pusillus</i>	8	4
4/29/2022	RT 15	Willow Warbler *	<i>Phylloscopus trochilus</i>	7	4
4/29/2022	RT 15	Red-backed Shrike	<i>Lanius collurio</i>	1	4
4/29/2022	RT 15	Common Whitethroat	<i>Sylvia communis</i>	7	4
4/29/2022	RT 15	Tree Pipit	<i>Anthus trivialis</i>	3	4
4/29/2022	RT 15	Whinchat	<i>Saxicola rubetra</i>	2	4
4/29/2022	RT 15	Common Stonechat	<i>Saxicola rubicola</i>	1	4
4/29/2022	RT 15	Lammergeier	<i>Gypaetus barbatus</i>	1	4
4/29/2022	RT 15	Caucasian Grouse	<i>Tetrao mlokosiewiczi</i>	1	4

EAAA 006

In total there are 20 species of birds recorded in this area. The bird fauna is mainly represented by forest and some steppe species. The birds are now widely using entire area for feeding and nesting. The full list of the birds is presented in Table 51.

**Table 51. List of birds recorded during April**

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
4/9/2022	RT 16	White-throated Dipper	<i>Cinclus cinclus</i>	2	4
4/9/2022	RT 16	Common Blackbird	<i>Turdus merula</i>	7	4
4/9/2022	RT 16	Great Tit	<i>Parus major</i>	10	4
4/9/2022	RT 16	Mistle Thrush	<i>Turdus viscivorus</i>	6	4
4/9/2022	RT 16	Ring Ouzel	<i>Turdus torquatus</i>	4	4
4/9/2022	RT 16	Blue Tit	<i>Parus caeruleus</i>	3	4
4/9/2022	RT 16	Coal Tit	<i>Parus ater</i>	5	4
4/9/2022	RT 16	Dunnock	<i>Prunella modularis</i>	1	4
4/9/2022	RT 16	Winter Wren	<i>Troglodytes troglodytes</i>	4	4

4/9/2022	RT 16	Rock Bunting	<i>Emberiza cia</i>	10	4
4/9/2022	RT 16	Common Redstart	<i>Phoenicurus phoenicurus</i>	6	4
4/9/2022	RT 16	Red-fronted Serin	<i>Serinus pusillus</i>	8	4
4/9/2022	RT 16	Willow Warbler *	<i>Phylloscopus trochilus</i>	5	0
4/9/2022	RT 16	Common Chiffchaff	<i>Phylloscopus collybita</i>	11	4
4/9/2022	RT 16	Common Buzzard	<i>Buteo buteo</i>	3	4
4/9/2022	RT 16	Long-legged Buzzard	<i>Buteo rufinus</i>	2	4
4/9/2022	RT 16	Eurasian Sparrowhawk	<i>Accipiter nisus</i>	1	4
4/9/2022	RT 16	Northern Goshawk	<i>Accipiter gentilis</i>	1	4
4/9/2022	RT 16	Golden Eagle	<i>Aquila chrysaetos</i>	1	1
4/9/2022	RT 16	Eurasian Jay	<i>Garrulus glandarius</i>	5	4

## EAAA 008

In total there are 17 species of birds recorded in this area. The bird fauna is mainly represented by forest and steppe species. The birds are mainly using the riparian zone for feeding and for getting shelter. The full list of the birds is presented in Table 52.

Table 52. List of birds recorded during April

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
4/9/2022	RT 17	Common Chaffinch	<i>Fringilla coelebs</i>	10	4
4/9/2022	RT 17	Common Linnet	<i>Carduelis cannabina</i>	2	4
4/9/2022	RT 17	European Goldfinch	<i>Carduelis carduelis</i>	2	4
4/9/2022	RT 17	Common Blackbird	<i>Turdus merula</i>	7	4
4/9/2022	RT 17	Mistle Thrush	<i>Turdus viscivorus</i>	5	4
4/9/2022	RT 17	Winter Wren	<i>Troglodytes troglodytes</i>	2	4
4/9/2022	RT 17	Dunnock	<i>Prunella modularis</i>	3	4
4/9/2022	RT 17	Eurasian Jay	<i>Garrulus glandarius</i>	3	4
4/9/2022	RT 17	Common Raven	<i>Corvus corax</i>	1	4
4/9/2022	RT 17	European Green Woodpecker	<i>Picus viridis</i>	1	4
4/9/2022	RT 17	Great Spotted Woodpecker	<i>Dendrocopos major</i>	1	4
4/9/2022	RT 17	Willow Warbler *	<i>Phylloscopus trochilus</i>	8	0
4/9/2022	RT 17	Common Chiffchaff	<i>Phylloscopus collybita</i>	9	4
4/9/2022	RT 17	Rock Bunting	<i>Emberiza cia</i>	3	4
4/9/2022	RT 17	Coal Tit	<i>Parus ater</i>	4	4
4/9/2022	RT 17	Great Tit	<i>Parus major</i>	10	4
4/9/2022	RT 17	Blue Tit	<i>Parus caeruleus</i>	2	4

## EAAA 013

In total there are 15 species of birds recorded in this area. The bird fauna is represented by forest species, as well as by species of Juniper woodlands, which are using the area for foraging and breeding. Among priority species, the Wallcreeper *Tichodroma muraria* should be mentioned, which is most probably doing a vertical migration through the valley. The full list of the birds is presented in Table 53.

Table 53. List of birds recorded during April

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
4/9/2022	RT 18	Common Chaffinch	<i>Fringilla coelebs</i>	4	4
4/9/2022	RT 18	Common Linnet	<i>Carduelis cannabina</i>	8	4
4/9/2022	RT 18	European Goldfinch	<i>Carduelis carduelis</i>	3	4
4/9/2022	RT 18	Common Blackbird	<i>Turdus merula</i>	5	4
4/9/2022	RT 18	Mistle Thrush	<i>Turdus viscivorus</i>	1	4

4/9/2022	RT 18	Winter Wren	<i>Troglodytes troglodytes</i>	1	4
4/9/2022	RT 18	Dunnock	<i>Prunella modularis</i>	1	4
4/9/2022	RT 18	Eurasian Jay	<i>Garrulus glandarius</i>	2	4
4/9/2022	RT 18	Common Raven	<i>Corvus corax</i>	1	4
4/9/2022	RT 18	Willow Warbler *	<i>Phylloscopus trochilus</i>	8	0
4/9/2022	RT 18	Rock Bunting	<i>Emberiza cia</i>	10	4
4/9/2022	RT 18	Great Tit	<i>Parus major</i>	4	4
4/9/2022	RT 18	European Greenfinch	<i>Carduelis chloris</i>	2	4
4/9/2022	RT 18	Red-fronted Serin	<i>Serinus pusillus</i>	9	4
4/9/2022	RT 18	Wallcreeper	<i>Tichodroma muraria</i>	1	1

## EAAA 014

In total there are 13 species of birds recorded in this area. The bird fauna is mainly represented by juniper woodland, forest and steppe species. The birds are using the entire area for feeding and nesting. The full list of the birds is presented in Table 54.

Table 54. List of birds recorded during April

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
4/9/2022	RT 19	Common Chaffinch	<i>Fringilla coelebs</i>	2	4
4/9/2022	RT 19	Common Linnet	<i>Carduelis cannabina</i>	8	4
4/9/2022	RT 19	European Goldfinch	<i>Carduelis carduelis</i>	6	4
4/9/2022	RT 19	Common Blackbird	<i>Turdus merula</i>	4	4
4/9/2022	RT 19	Mistle Thrush	<i>Turdus viscivorus</i>	1	4
4/9/2022	RT 19	Eurasian Jay	<i>Garrulus glandarius</i>	6	4
4/9/2022	RT 19	Willow Warbler *	<i>Phylloscopus trochilus</i>	4	0
4/9/2022	RT 19	Rock Bunting	<i>Emberiza cia</i>	8	4
4/9/2022	RT 19	Great Tit	<i>Parus major</i>	6	4
4/9/2022	RT 19	Red-fronted Serin	<i>Serinus pusillus</i>	2	4
4/9/2022	RT 19	House Sparrow	<i>Passer domesticus</i>	12	4
4/9/2022	RT 19	Eurasian Tree Sparrow	<i>Passer montanus</i>	4	4
4/9/2022	RT 19	Syrian Woodpecker	<i>Dendrocopos syriacus</i>	2	4

## EAAA 016

In total there are 10 species of birds recorded in this area. The bird fauna is mainly represented by forest and juniper woodland species, which use the entire area for feeding and nesting. The full list of the birds is presented in Table 55.

Table 55. List of birds recorded during April

Date	Route #	Species name English	Species name Latin	Species number	Breeding code
4/8/2022	RT 20	Eurasian Jay	<i>Garrulus glandarius</i>	2	4
4/8/2022	RT 20	Common Linnet	<i>Carduelis cannabina</i>	8	4
4/8/2022	RT 20	European Goldfinch	<i>Carduelis carduelis</i>	2	4
4/8/2022	RT 20	Common Raven	<i>Corvus corax</i>	1	4
4/8/2022	RT 20	Rock Bunting	<i>Emberiza cia</i>	10	4
4/8/2022	RT 20	Common Blackbird	<i>Turdus merula</i>	4	4
4/8/2022	RT 20	Chukar	<i>Alectoris chukar</i>	2	4
4/8/2022	RT 20	Great Tit	<i>Parus major</i>	5	4
4/8/2022	RT 20	Red-fronted Serin	<i>Serinus pusillus</i>	6	4
4/8/2022	RT 21	Common Chaffinch	<i>Fringilla coelebs</i>	4	4
4/8/2022	RT 21	Mistle Thrush	<i>Turdus viscivorus</i>	2	4
4/8/2022	RT 21	Common Blackbird	<i>Turdus merula</i>	4	4

4/8/2022	RT 21	Eurasian Jay	<i>Garrulus glandarius</i>	2	4
4/8/2022	RT 21	European Green Woodpecker	<i>Picus viridis</i>	1	4
4/8/2022	RT 21	Great Tit	<i>Parus major</i>	6	4
4/8/2022	RT 22	Common Chaffinch	<i>Fringilla coelebs</i>	6	4
4/8/2022	RT 22	Common Blackbird	<i>Turdus merula</i>	4	4
4/8/2022	RT 22	Eurasian Jay	<i>Garrulus glandarius</i>	1	4
4/8/2022	RT 22	European Goldfinch	<i>Carduelis carduelis</i>	2	4
4/8/2022	RT 22	Rock Bunting	<i>Emberiza cia</i>	3	4
4/8/2022	RT 22	Great Tit	<i>Parus major</i>	6	4
4/8/2022	RT 22	Blue Tit	<i>Parus caeruleus</i>	2	4

**Birds priority species**

The priority species in the area can be divided into two groups: the ones which use the area for the full cycle of breeding and those which have wide ranges and use the area in a part of their life cycle or as a part of their large range. Among the first group, there are: *Tetrao mlokosiewiczzi*, *Tetraogallus caspius*, *Phylloscopus lorenzii*, *Phylloscopus nitidus*, *Aquila pennata*, and *Accipiter gentilis*. In the next group those are: *Gypaetus barbatus*, *Clanga pomarina*, *Larus armenicus*, and *Aquila chrysaetos*. The spots, where those species have been recorded are shown in Figure 11.



Figure 11. Distribution spots of the priority bird species

### Birds' biodiversity priority features

Below is presented the preliminary list of the potential birds' biodiversity priority features in the study area. This list has been updated through the ESIA process, following the different fieldwork sessions and maps have been realized presenting the observations, habitats use of the Biodiversity priority species.

**Table 56. Synthetic table of birds' biodiversity priority features in the study area**

N°	Family	Species			Status			Restricted-range/endemism	Site use	Potential location/distribution in the study area
		Species name	Scientific name	Armenian name	IUCN Redlist Status	National Red data book Status	EU Bird Directive			
1	Phasianidae	Caspian Snowcock	<i>Tetraogallus caspius</i>		LC	VU	/	Restricted range	Breeding	EAAA 005. Subalpine meadows with rocks & screes
2	Phasianidae	Caucasian Black Grouse	<i>Tetrao mlokosiewiczi</i>		NT	VU	/	Caucasus	Breeding	EAAA 005. Subalpine meadows with rocks & screes
3	Accipitridae	Bearded Vulture	<i>Gypaetus barbatus</i>		NT	VU	Annex I		Foraging	EAAA 002, 003. Rocks and cliffs
4	Accipitridae	Egyptian Vulture	<i>Neophron percnopterus</i>		EN	EN	Annex I		Foraging	Rocks and cliffs
5	Accipitridae	Golden Eagle	<i>Aquila chrysaetos</i>		LC	VU	Annex I		Breeding	Rocks and cliffs
6	Accipitridae	Lesser Spotted Eagle	<i>Clanga pomarina</i>		LC	VU	Annex I		Breeding	Deciduous woodland
7	Accipitridae	Black Vulture	<i>Aegypius monachus</i>		NT	EN	Annex I		Foraging	Juniper woodland
8	Accipitridae	Griffon Vulture	<i>Gyps fulvus</i>		LC	VU	Annex I		Foraging	Rocks and cliffs
9	Accipitridae	Northern Goshawk	<i>Accipiter gentilis</i>		LC	VU	Annex I		Breeding	Deciduous woodland
10	Accipitridae	Short-toed Snake-eagle	<i>Circaetus gallicus</i>		LC	VU	Annex I		Breeding	Juniper woodland
11	Laridae	Armenian Gull	<i>Larus armenicus</i>		NT	VU	/	Restricted range	Migratory	Rivers and reservoirs
12	Coraciidae	European Roller	<i>Coracias garrulus</i>		LC	VU	Annex I		Breeding	Juniper woodland
13	Sylviidae	Caucasian Chiffchaff	<i>Phylloscopus lorenzii</i>		LC	NE	/	Caucasus	Breeding	EAAA 1, Riparian woodland, Deciduous woodland
14	Sylviidae	Green Warbler	<i>Phylloscopus nitidus</i>		LC	NE	/	Restricted range	Breeding	EAAA 005, 007, 008, 009. Deciduous woodland



## Terrestrial mammals

### Protocols

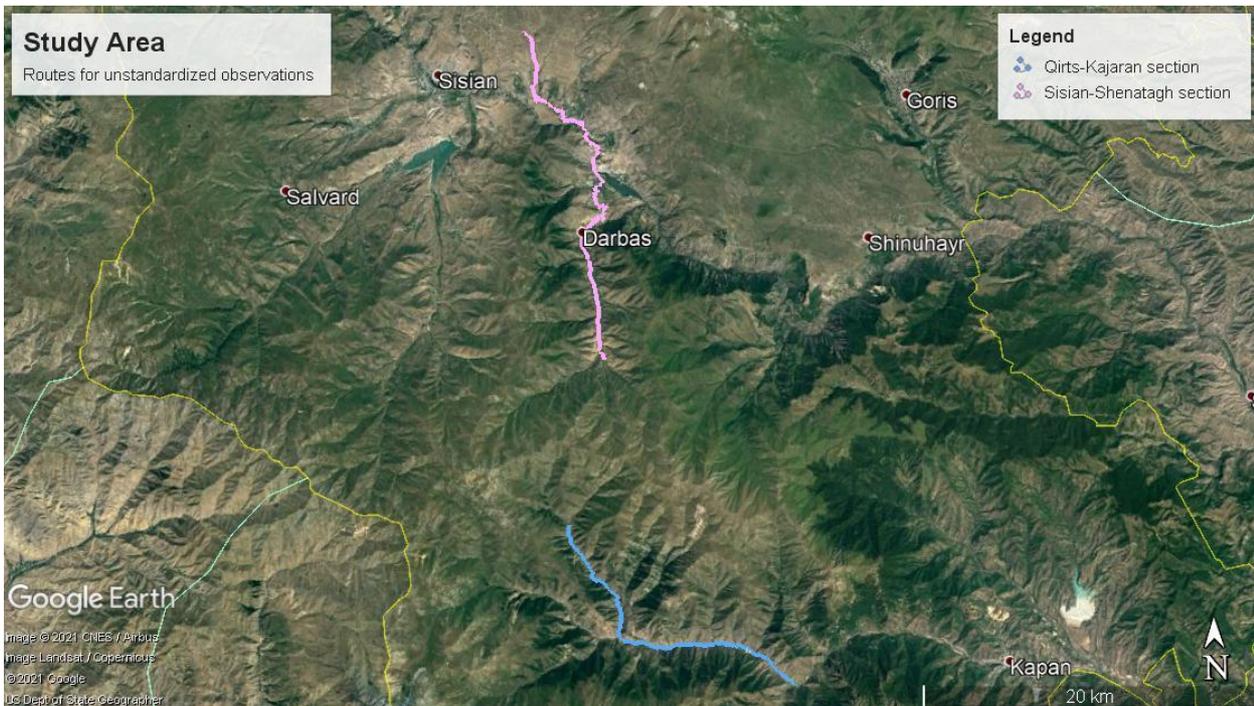
#### Investigation area:

The previously collected data suggests that there are two categories of priority species, that can be expected in the study area:

1. Small terrestrial mammals, like various rodents and insectivores for which the sampling can be applied;
2. Medium and large mammals, like wolves, brown bears, bezoar goats and Armenian mouflons, which require complete check of the entire area of the open part of the road and its proximity

Taking that into consideration, we define the study area within the 500 m buffer zone at each side of the proposed road, as the road can have various types of the influence: physical footprint, effluents, and emissions. Therefore, the following areas are proposed for being investigated:

1. The entire road itself (see Figure 12) with the main surveying area of 500 meters from each side.
2. All types of the habitat within the 500 m buffer zone from proposed road have been surveyed additionally. They include: mountain steppe, subalpine meadows, juniper woodland, deciduous woodland, riparian scrubs and woodland. Based on the given natural habitats the following 15 preliminary ecologically appropriate areas of analysis (preliminary EAAAs) have been identified (see Figures 13-15) and the sampling areas have been set up.



**Figure 12.** The main road, where the transects have been implemented

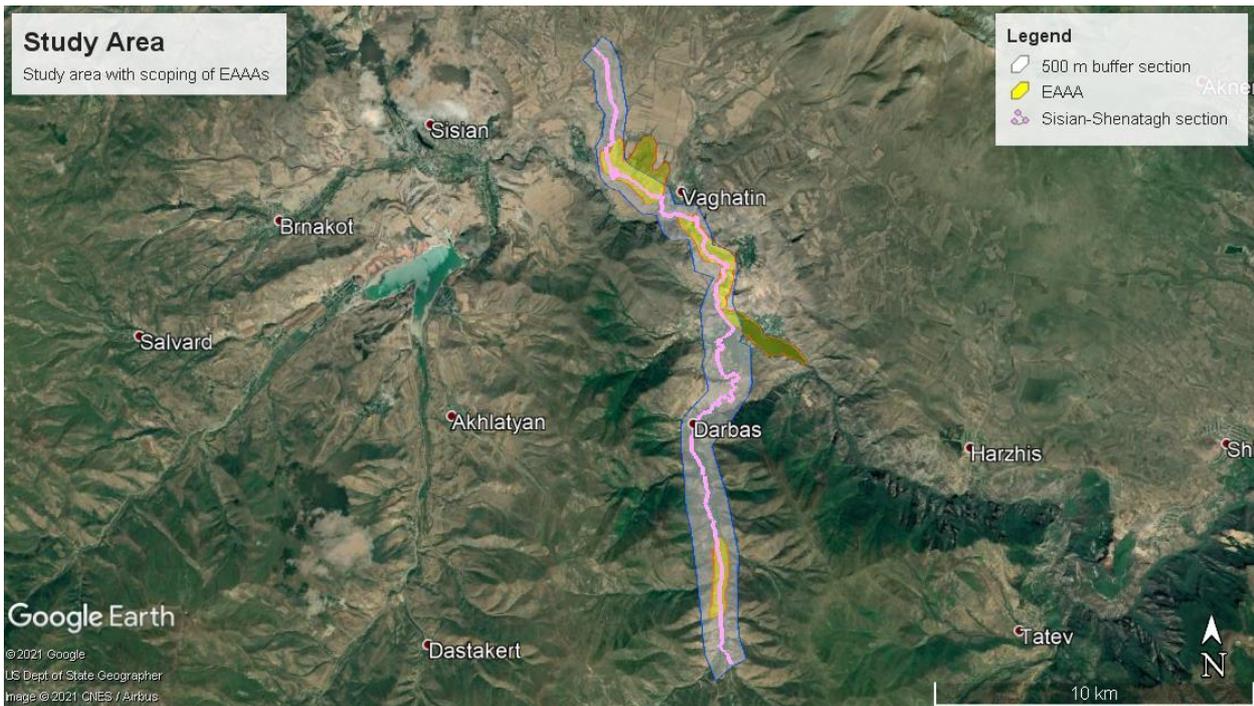


Figure 13. The preliminary EAAAs of the section Sisian-Shenatagh

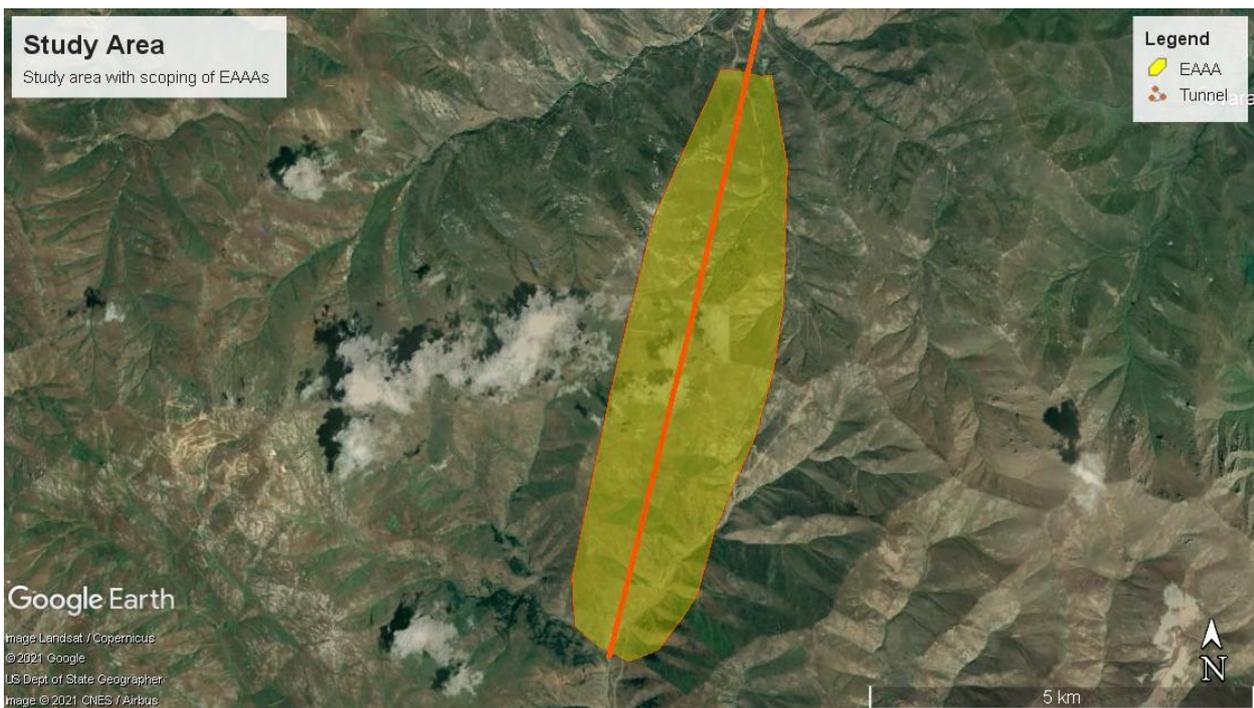


Figure 14. The preliminary EAAAs of the tunnel section



**Figure 15. The preliminary EAAAs of the section Kirts-Kajaran**

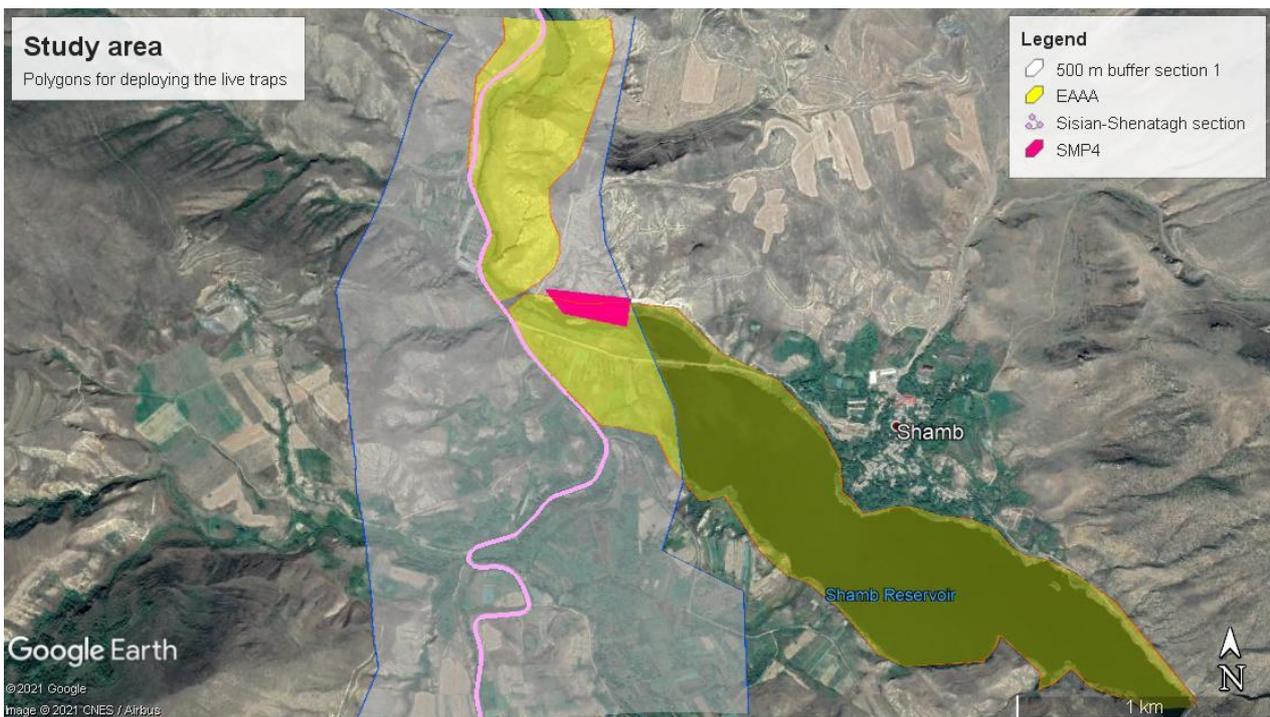
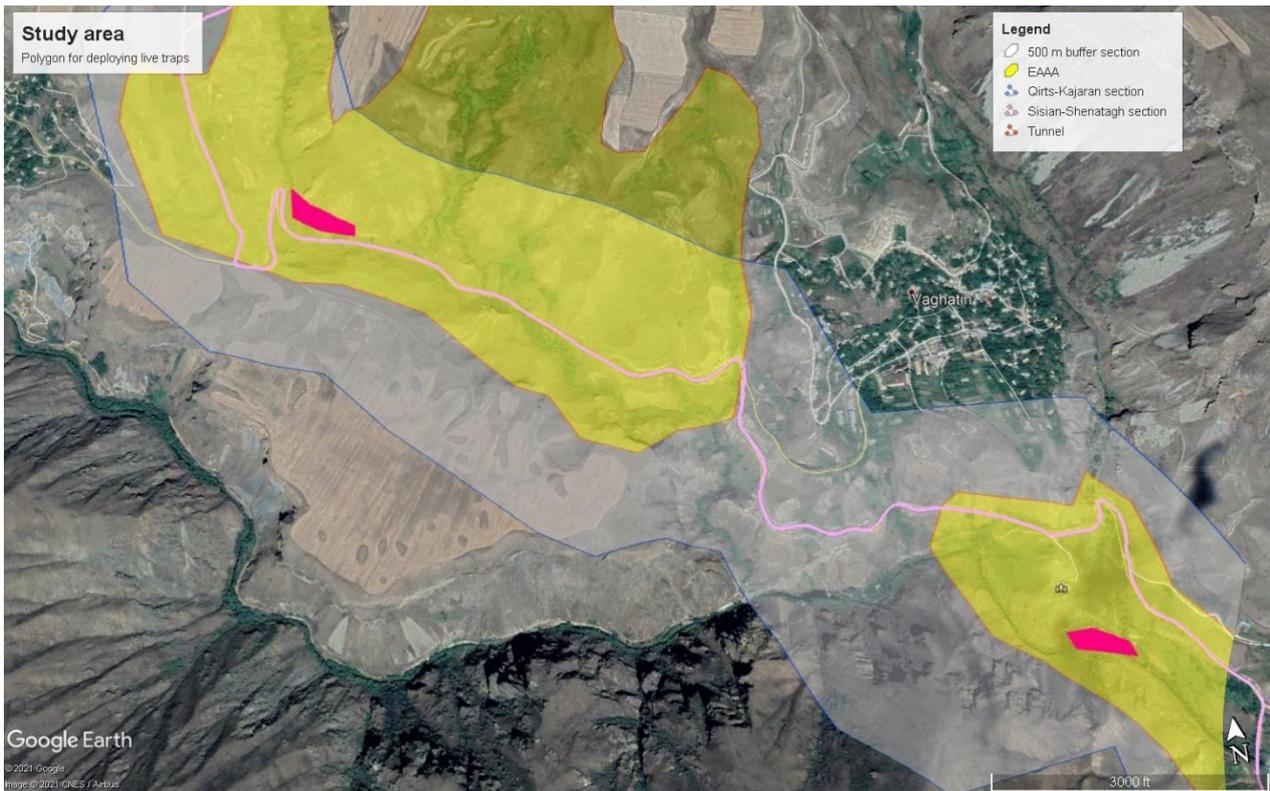
#### Survey methods:

As it was mentioned above, the mammal groups are diverse and therefore require diverse strategies for the survey.

1. For survey of the small mammals, we will use the trapping method (Gurnell & Flowerdew 1994, Flowerdew *et al.* 2004, Gurnell & Flowerdew 2006). Live traps have been set up at the surrounding areas along highway within the EAAAs, in the way to cover all the types of habitats within the study area. Specifically, the live traps will mainly be placed near burrows and near the water sources in study area (see Figure 16 and Table 56).

Using live trapping of small mammals, we have been able to determine the species composition and their level of use of the certain habitats and/or areas. Using this method, we will also be able to gauge the size of a mammal population and the way of their use of the certain habitats.

The live traps have been deployed at 8 plots, and within the sampling plots the traps have been allocated either along line when the terrain is too steep or in a square grid at the flatter terrain. Within each polygon we will set up 25, 50, or 100 traps, depending on the specific terrain. Typically, we will nightly deploy 50 small mammal traps for one or two days. The traps have been placed in thick vegetation as small mammals tend to avoid open spaces, and the traps' leading edges have been flush with ground level. All the traps have been marked with brightly coloured tape to ensure that they can be found each morning after trapping has taken place. The traps should be set out in the evening and checked the following morning, within the space of 12 hours, as small mammals such as shrews do not last long in traps. The traps have been charged by the bait. The baits have been selected in a way to be attractive to a wide range of the potentially possible animals, be standard and readily available for use in a variety of conditions. For the mentioned reasons, the bait consisting of a cube of bread soaked by the sunflower oil, have been used.



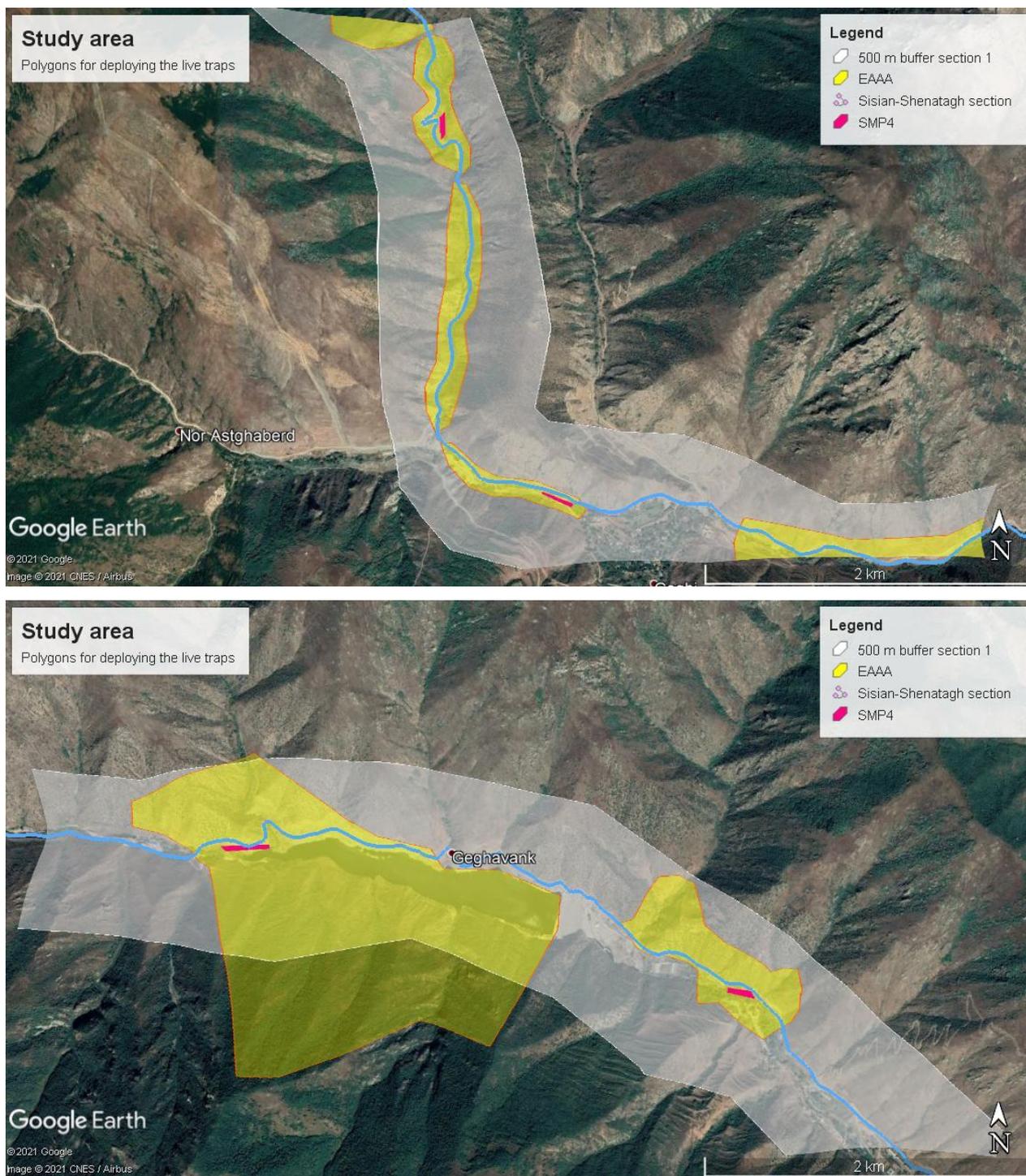


Figure 16. Examples of polygons for deploying live traps



**Figure 17. Observation points for the Armenian Mouflon and Bezoar Goat**

1. For monitoring of the areas where the medium and large mammals are mainly crossing the proposed road, we will use transects (see Figure 16), which have been surveyed along the constructed road area. At the transects we will record vital signals of animals (footprints and droppings). In addition, we will conduct observation of mountain slopes by binoculars and spotting scopes from three observation points (see Figure 17) for search of bezoar goats and Armenian mouflons.
2. Also, in addition to the described methodology, all the possible burrows have been checked by endoscopes for detection of medium and small mammal species.

**Table 57. Major characters of the sampling plots**

Code of Route	Section	Season	Core Habitat
SMP 1	Sisian-Shenatagh	Breeding, Wintering	Mountain steppe
SMP 2	Sisian-Shenatagh	Breeding, Wintering	River valley, Mountain steppe
SMP 4	Sisian-Shenatagh	Breeding, Wintering	River valley
SMP 6	Kirts-Kajaran	Breeding, Wintering	River valley, Mountain steppe
SMP 8	Kirts-Kajaran	Breeding, Wintering	River valley, Mountain steppe
SMP 9	Kirts-Kajaran	Breeding, Wintering	River valley, Mountain steppe
SMP 11	Kirts-Kajaran	Breeding, Wintering	River valley, Mountain steppe
SMP 12	Kirts-Kajaran	Breeding, Wintering	Mountain steppe

**Time and effort of investigation:**

▪ **For large and medium size mammals**

The surveys have been conducted in mid-June, and will be continued from September to October. For identifying the migration route of Mouflons (the summer places of mouflon mainly situated on Zangezur ridge, winter places are on Bargushat ridge). The observations have been made in the morning from 7:00 to 9:00 and in the evening 2 hours 19:00-21:00 (In October we will start early 17:30-19:30). For tracking the large

mammals' vital signals on the road, we will walk the transects along the constructed road in the morning and in the evening.

- **For small mammals**

Since it is recommended that 50 small mammal traps are deployed nightly for a period of 1-2 days, then during June to October we will deploy the traps 3 times: June, August, late September /October.

**Investigation tools:**

GPS Garmin 62, binocular Celestron, Spotting Scope, digital camera, live traps for small mammals, endoscope, and standardized protocols.

**Data analysis methods:**

The data analysis will include computation of the densities of various species in the different habitats and analysis of the importance of the various habitats in the life of those terrestrial mammal species.

### Results for April

During the 4-day field survey, the Project area and vicinities were passed along. The animals or their vital signs were found only in two areas EAAA 001 and EAAA 0015. The nests of porcupines (*Hystrix indica*) in Sisian-Shenatagh road section were found. There were the footprint and feces of eagles in the small caves. The broken egg were found in another cave. It could eaten by fox (*Vulpes vulpes*) and least weasels (*Mustella nivalis*). Some footprints on the snow were tried to distinguish, however, the rain and new snow layer was destroyed the first layer on the old snow cover. Fox (*Vulpes vulpes*) and Golden Jackal (*Canis aureus*) were also observed during the field study in EAAA0015 (Table 57).

**Table 58. List of mammals recorded during April**

Date	Route #	Species name English	Species name Latin	Species number
04/02/2021	EAAA001	Indian crested porcupines	<i>Hystrix indica</i>	4
04/02/2021	EAAA001	Red fox	<i>Vulpes vulpes</i>	1
04/02/2021	EAAA001	Least weasel	<i>Mustella nivalis</i>	1
04/03/2021	EAAA0015	Red fox	<i>Vulpes vulpes</i>	1
04/03/2021	EAAA0015	Golden Jackal	<i>Canis aureus</i>	1

### Results for June

In total 11 species of terrestrial mammals were recorded during fieldwork done on June. Mice were caught by Sharman traps. The other species were recorded by vital signs and by nests.

There were 2 species recorded in EAAA001 area. The feces of these animals were found along the road.

**Table 59. List of mammals recorded during June**

Date	Route #	Species name English	Species name Latin	Species number
6/17/2021	EAAA001	Least weasel	<i>Mustella nivalis</i>	1
6/17/2021	EAAA001	Southern white - breasted hedgehog	<i>Erinaceus concolor</i>	1

There were 4 species recorded in EAAA002-EAAA003. Mainly EAAA003 were used by Animals, because of presence of water. Black Sea field mouse were caught by sharman traps near to Shamb reservoir.

**Table 60. List of mammals recorded during June**

Date	Route #	Species name English	Species name Latin	Species number
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6/17/2021	EAAA002-EAAA003	Least weasel	<i>Mustella nivalis</i>	1
6/17/2021	EAAA002-EAAA003	Southern white - breasted hedgehog	<i>Erinaceus concolor</i>	2
6/17/2021	EAAA002-EAAA003	Stone Marten	<i>Martes foina</i>	1
6/17/2021	EAAA002-EAAA003	Badger	<i>Meles meles</i>	1
6/17/2021	EAAA002-EAAA003	Red fox	<i>Vulpes vulpes</i>	1
6/17/2021	SMP2	Black Sea field mouse	<i>Apodemus ponticus</i>	1

No animals and nor vital signs were recorded in EAAA004.  
Feces of 4 well distributed species were recorded in EAAA005

**Table 61. List of mammals recorded during June**

Date	Route #	Species name English	Species name Latin	Species number
6/18/2021	EAAA005	Southern white - breasted hedgehog	<i>Erinaceus concolor</i>	1
6/18/2021	EAAA005	Stone Marten	<i>Martes foina</i>	1
6/18/2021	EAAA005	Badger	<i>Meles meles</i>	1
6/18/2021	EAAA005	Red fox	<i>Vulpes vulpes</i>	1

5 species of mammals were recorded in EAAA006, from which, one is Indian porcupine. This animal registered in Red data book of RA. There were nests for badgers and foes in area.

**Table 62. List of mammals recorded during June**

Date	Route #	Species name English	Species name Latin	Species number
6/19/2021	EAAA006	Southern white - breasted hedgehog	<i>Erinaceus concolor</i>	1
6/19/2021	EAAA006	Stone Marten	<i>Martes foina</i>	1
6/19/2021	EAAA006	Badger	<i>Meles meles</i>	1
6/19/2021	EAAA006	Red fox	<i>Vulpes vulpes</i>	1
6/19/2021	EAAA006	Indian porcupine	<i>Hystrix indica</i>	1
6/19/2021	EAAA006	Brown bear	<i>Ursus arctos</i>	1

Stone marten and badger feces were found in EAAA007. There was nest for badger.

**Table 63. List of mammals recorded during June**

Date	Route #	Species name English	Species name Latin	Species number
6/19/2021	EAAA007	Stone Marten	<i>Martes foina</i>	1
6/19/2021	EAAA007	Badger	<i>Meles meles</i>	1

Stone marten's and fox's feces were recorded in EAAA008-0011.

**Table 64. List of mammals recorded during June**

Date	Route #	Species name English	Species name Latin	Species number
6/20/2021	EAAA008-EAAA011	Stone Marten	<i>Martes foina</i>	1
6/20/2021	EAAA008-EAAA011	Red fox	<i>Vulpes vulpes</i>	1

Dead Southern white-breasted hedgehog was found in EAAA013.

**Table 65. List of mammals recorded during June**

Date	Route #	Species name English	Species name Latin	Species number
6/20/2021	EAAA013	Southern white - breasted hedgehog	<i>Erinaceus concolor</i>	1

4 species of mammals were recorded in EAAA014. Black Sea field mouse were caught by shaman traps. The feces of 3 species were observed.

**Table 66. List of mammals recorded during June**

Date	Route #	Species name English	Species name Latin	Species number
6/20/2021	EAAA014	Southern white - breasted hedgehog	<i>Erinaceus concolor</i>	1
6/20/2021	EAAA014	Golden jackal	<i>Canis aureus</i>	1
6/20/2021	EAAA014	Red fox	<i>Vulpes vulpes</i>	1
6/20/2021	SMP11	Black Sea field mouse	<i>Apodemus ponticus</i>	1

There were no animals and vital signs recorded in EAAA0015.

### Results for July

Dates 30 Jul - 31 Aug

In total, 10 species of terrestrial mammals were recorded during fieldwork done on July - August. Mice were caught by shaman traps. The other species were recorded by vital signs and by nests.

There were 2 species recorded in EAAA001 area. The feces of these animals were found along the road and nearby canyon.

**Table 67. List of mammals recorded during July - August in EAAA001**

Date	Route #	Species name English	Species name Latin	Species number
7/30/2021	EAAA001	Indian porcupine	<i>Hystrix indica</i>	3
7/30/2021	EAAA001	Southern white - breasted hedgehog	<i>Erinaceus concolor</i>	1

There were 5 species recorded in EAAA002-EAAA003. Mainly EAAA003 were used by animals, because of presence of water. Black Sea field mouse and European water vole were caught by shaman traps near to Shamb reservoir.

**Table 68. List of mammals recorded during July - August in EAAA002-EAAA003**

Date	Route #	Species name English	Species name Latin	Species number
7/30/2021	EAAA002-EAAA003	Southern white - breasted hedgehog	<i>Erinaceus concolor</i>	1
7/30/2021	EAAA002-EAAA003	Stone Marten	<i>Martes foina</i>	1
7/30/2021	EAAA002-EAAA003	Red fox	<i>Vulpes vulpes</i>	1
7/30/2021	SMP2	Black Sea field mouse	<i>Apodemus ponticus</i>	1
7/30/2021	SMP2	European water vole	<i>Arvicola terrestris</i>	1

Common vole was recorded in EAAA004, in agricultural lands.

**Table 69. List of mammals recorded during July - August in EAAA004**

Date	Route #	Species name English	Species name Latin	Species number
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7/30/2021	EAAA004	Common vole	<i>Microtus arvalis</i>	2
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Feces of 2 well distributed species were recorded in EAAA005

**Table 70. List of mammals recorded during July - Augst in EAAA005**

Date	Route #	Species name English	Species name Latin	Species number
7/30/2021	EAAA 005	Badger	<i>Meles meles</i>	1
7/30/2021	EAAA 005	Red fox	<i>Vulpes vulpes</i>	1

3 species of mammals were recorded in EAAA006.

Two of these species registered in Red data book of RA.

**Table 71. List of mammals recorded during July - Augst in EAAA006**

Date	Route #	Species name English	Species name Latin	Species number
7/31/2021	EAAA006	Red fox	<i>Vulpes vulpes</i>	1
7/31/2021	EAAA006	Indian porcupine	<i>Hystrix indica</i>	1
7/31/2021	EAAA006	Brown bear	<i>Ursus arctos</i>	1

Stone marten and bader feces were found in EAAA007. There were nest for badger.

**Table 72. List of mammals recorded during July - Augst in EAAA007**

Date	Route #	Species name English	Species name Latin	Species number
8/01/2021	EAAA007	Brown bear	<i>Ursus arctos</i>	1

Stone marten's and fox's feces were recorded in EAAA008-0011.

BADger and Indian porcupine were run away from us during our fieldwork.

**Table 73. List of mammals recorded during July - Augst in EAAA008-EAAA011**

Date	Route #	Species name English	Species name Latin	Species number
8/01/2021	EAAA008-EAAA011	Stone Marten	<i>Martes foina</i>	1
8/01/2021	EAAA 005	Badger	<i>Meles meles</i>	1
8/01/2021	EAAA006	Indian porcupine	<i>Hystrix indica</i>	1
8/01/2021	EAAA008-EAAA011	Red fox	<i>Vulpes vulpes</i>	1

No mammals were recorded in EAAA012.

Golden Jackal was registered in EAAA013. Jackals are feeding by trash nearby to Geghi village

**Table 74. List of mammals recorded during July - Augst in EAAA013**

Date	Route #	Species name English	Species name Latin	Species number
8/02/2021	EAAA013	Golden Jackal	<i>Canis aureus</i>	1

5 species of mammals were recorded in EAAA014. Black Sea field mouse and european water vole were caught by sharman traps. Golden Jackal, fox and hedgehog were observed near to Geghi dam.

**Table 75. List of mammals recorded during July - Augst in EAAA014**

Date	Route #	Species name English	Species name Latin	Species number
8/02/2021	EAAA014	Southern white - breasted hedgehog	<i>Erinaceus concolor</i>	1
8/02/2021	EAAA014	Goolden jackal	<i>Canis aureus</i>	1
8/02/2021	EAAA014	Red fox	<i>Vulpes vulpes</i>	1
8/02/2021	SMP11	Black Sea field mouse	<i>Apodemus ponticus</i>	1
8/02/2021	SMP11	European water vole	<i>Arvicola terrestris</i>	

**Table 76. List of mammals recorded during July - Augst in EAAA015**

Date	Route #	Species name English	Species name Latin	Species number
8/02/2021	EAAA014	Goolden jackal	<i>Canis aureus</i>	1

### Results for December

Dates: 4-7 Dec 2021

In total, 13 species of terrestrial mammals were recorded during fieldwork done in December. The animals were observed during evenings and also were recorded by vital signs during the day time.

There were 2 species recorded in EAAA001 area. The feces of these animals were found along the road and nearby canyon.

**Table 77. List of mammals recorded during December in EAAA001**

Date	Route #	Species name English	Species name Latin	Species number
12/06/2021	EAAA001	Indian porcupine	<i>Hystrix indica</i>	1
12/06/2021	EAAA001	Red fox	<i>Vulpes vulpes</i>	1

There were 2 species recorded in EAAA002-EAAA003. Stone marten's and red fox' feces were recoded near to Shamb reservoir.

**Table 78. List of mammals recorded during December in EAAA002- EAAA003**

Date	Route #	Species name English	Species name Latin	Species number
12/06/2021	EAAA002- EAAA003	Stone Marten	<i>Martes foina</i>	1
12/06/2021	EAAA002- EAAA003	Red fox	<i>Vulpes vulpes</i>	1

Common vole was captured by hand in EAAA004, in agricultural lands.

They have their nests under the big stones.

**Table 79. List of mammals recorded during December in EAAA004**

Date	Route #	Species name English	Species name Latin	Species number
12/06/2021	EAAA004	Common vole	<i>Microtus arvalis</i>	1

Feces of 2 well distributed species were recorded in EAAA005. The animal feces were recorded near to tunnel entries from Kitsk site brown bear and badger – from Shenatagh site. In the upper part of tunnel entries European snow voles footprint were recorded on snow.

**Table 80. List of mammals recorded during December in EAAA005**

Date	Route #	Species name English	Species name Latin	Species number
12/06/2021	EAAA 005	Badger	<i>Meles meles</i>	1
12/04/2021	EAAA 005	Brown bear	<i>Ursus arctos</i>	1
12/04/2021	EAAA 005	European snow vole	<i>Chionomys nivalis</i>	1

Two species of mammals vital signes were recorded in EAAA006.

Brown bear registered in Red Data Book of RA.

**Table 81. List of mammals recorded during December in EAAA006**

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	EAAA 006	Wild boar	<i>Sus scrofa</i>	1-2
12/04/2021	EAAA 006	Brown bear	<i>Ursus arctos</i>	1
12/04/2021	EAAA 006	Stone Marten	<i>Martes foina</i>	1

Three speceas of mammals were recorded in EAAA008. Bezoar goats have been registered on slopes of mountain. Four males were observed moving down to the canyon. Wild boar digged signes were also found in canyon.

**Table 82. List of mammals recorded during December in EAAA008**

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	EAAA 008	Wild boar	<i>Sus scrofa</i>	1-4
12/04/2021	EAAA 008	Brown bear	<i>Ursus arctos</i>	1
12/04/2021	EAAA 008	Bezoar goat	<i>Capra aegagrus</i>	4

Golden Jackal and least weale were seen in EAAA013. Badger feces were found in area.

**Table 83. List of mammals recorded during December in EAAA013**

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	EAAA 013	Golden Jackal	<i>Canis aureus</i>	1
12/04/2021	EAAA 013	Badger	<i>Meles meles</i>	1
12/04/2021	EAAA 013	Least weasel	<i>Mustela nivalis</i>	1

Three species of mammals were recorded in EAAA014. Pallets of bezoar goats were found in slopes of mountain. Red fox was seen near to Geghi dam during evening survey. The level water in Geghi dam was very low and it was possible to walk in a river bank where we have registered wolfs' footprint.

**Table 84. List of mammals recorded during December in EAAA014**

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	EAAA 014	Bezoar goat	<i>Capra aegagrus</i>	1
12/04/2021	EAAA 014	Grey wolf	<i>Canis lupus</i>	1
12/04/2021	EAAA 014	Red fox	<i>Vulpes vulpes</i>	1

### Results for February

Dates: 04-07 February 2022

In total, 7 species of terrestrial mammals were recorded by vital signs during fieldwork done in 04-07 February 2022.

There were foxes recorded in EAAA001 area. The faeces of these animals were found along the road and nearby canyon.

**Table 85. List of mammals recorded during February in EAAA001**

Date	Route #	Species name English	Species name Latin	Species number
06/02/2022	EAAA001	Red fox	<i>Vulpes vulpes</i>	1

There were 2 species recorded in EAAA002-EAAA003. Stone marten's and red fox' faces and footprints were recorded along to Vorotan river. Rodents vital signs were observed.

**Table 86. List of mammals recorded during February in EAAA002 - EAAA003**

Date	Route #	Species name English	Species name Latin	Species number
06/02/2022	EAAA002-EAAA003	Stone Marten	<i>Martes foina</i>	1
06/02/2022	EAAA002-EAAA003	Red fox	<i>Vulpes vulpes</i>	1

Footprints of European hare were recorded in EAAA004 and EAAA005

**Table 87. List of mammals recorded during February in EAAA004**

Date	Route #	Species name English	Species name Latin	Species number
07/02/2022	EAAA004	European hare	<i>Lepus europeus</i>	1

**Table 88. List of mammals recorded during February in EAAA005**

Date	Route #	Species name English	Species name Latin	Species number
06/02/2022	EAAA 005	European hare	<i>Lepus europeus</i>	1

Two species of mammals' vital signs and footprints were recorded in EAAA006.

**Table 89. List of mammals recorded during February in EAAA006**

Date	Route #	Species name English	Species name Latin	Species number
05/02/2022	EAAA006	Wild boar	<i>Sus scrofa</i>	A lot
05/02/2022	EAAA006	Grey wolf	<i>Canis lupus</i>	1

Three species of mammals were recorded in EAAA008. Two males of Bezoar goat have been registered on slopes of mountain.

**Table 90. List of mammals recorded during February in EAAA008**

Date	Route #	Species name English	Species name Latin	Species number
05/02/2022	EAAA008	Wild boar	<i>Sus scrofa</i>	A lot
05/02/2022	EAAA008	Bezoar goat	<i>Capra aegagrus</i>	2
05/02/2022	EAAA008	European hare	<i>Lepus europeus</i>	1

Least weasel were seen in EAAA013. European hare footprints were found in area.

**Table 91. List of mammals recorded during February in EAAA013**

Date	Route #	Species name English	Species name Latin	Species number
05/02/2022	EAAA013	Least weasel	<i>Mustela nivalis</i>	1

05/02/2022	EAAA013	European hare	<i>Lepus europeus</i>	1
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Two species of mammals were recorded in EAAA014 by footprints on snow.

**Table 92. List of mammals recorded during February in EAAA014**

Date	Route #	Species name English	Species name Latin	Species number
05/02/2022	EAAA014	Stone Marten	<i>Martes foina</i>	1
05/02/2022	EAAA014	European hare	<i>Lepus europeus</i>	1

### Results for February collected from camera traps

Collected dates: 04-07 February 2022

Camera traps were installed 03-07 of December of 2021. After 40 days, the camera traps were checked for batteries and SD cards.

In total, we have recorded 11 species of mammals.

Camera trap N0010 did not photographed any photos, There were some problem with program inside of camera. We took it with us to check the cameras settings.

Camera trap N 0003 has recorded only one Bezoar goat male's horns. No other animals were recorded. Camera trap N 0001 were recorded nice biodiversity 7 species.

There are a lot of photos of wild boars in the surrounding territories of Qarut –Kitsq villages.

**Table 93. List of mammals recorded by Camera trap N 0001**

Date	Route #	Species name English	Species name Latin	Species number
12/05/2021	CT0001	Wildcat	<i>Felis sylvestris</i>	1
12/07/2021	CT0001	Stone marten	<i>Martes foina</i>	1
12/08/2021	CT0001	Indian crested porcupine	<i>Hystrix indica</i>	1
12/11/2021	CT0001	Indian crested porcupine	<i>Hystrix indica</i>	1
12/14/2021	CT0001	Stone marten	<i>Martes foina</i>	1
12/17/2021	CT0001	Grey wolf	<i>Canis lupus</i>	1
12/18/2021	CT0001	Stone marten	<i>Martes foina</i>	1
12/21/2021	CT0001	Grey wolf	<i>Canis lupus</i>	1
12/22/2021	CT0001	Red fox	<i>Vulpes vulpes</i>	1
12/27/2021	CT0001	Eurasian lynx	<i>Lynx lynx</i>	2
01/01/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/02/2022	CT0001	European budger	<i>Meles meles</i>	1
01/03/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/05/2022	CT0001	Indian crested porcupine	<i>Hystrix indica</i>	1
01/05/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/07/2022	CT0001	Stone marten	<i>Martes foina</i>	1
01/13/2022	CT0001	Stone marten	<i>Martes foina</i>	1
01/24/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/30/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/31/2022	CT0001	Stone marten	<i>Martes foina</i>	1
02/01/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	3
02/02/2022	CT0001	Stone marten	<i>Martes foina</i>	1

**Table 94. List of mammals recorded by Camera trap N 0002**

Date	Route #	Species name English	Species name Latin	Species number
12/05/2021	CT0002	Stone marten	<i>Martes foina</i>	1

12/05/2021	CT0002	Grey wolf	<i>Canis lupus</i>	1
12/06/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/09/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/13/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/09/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/15/2021	CT0002	Grey wolf	<i>Canis lupus</i>	1
12/20/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/22/2021	CT0002	European hare	<i>Lepus europeus</i>	1
12/23/2021	CT0002	Grey wolf	<i>Canis lupus</i>	1
01/02/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/04/2022	CT0002	Grey wolf	<i>Canis lupus</i>	1
01/06/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/07/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/08/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/11/2022	CT0002	Golden jackal	<i>Canis aureus</i>	2
01/13/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/24/2022	CT0002	Eurasian lynx	<i>Lynx lynx</i>	1
01/31/2022	CT0002	Indian crested porcupine	<i>Hystrix indica</i>	1

Table 95. List of mammals recorded by Camera trap N 0003

Date	Route #	Species name English	Species name Latin	Species number
12/31/2021	CT0003	Bezoar goat	<i>Capra aegagrus</i>	1

Table 96. List of mammals recorded by Camera trap N 0004

Date	Route #	Species name English	Species name Latin	Species number
12/28/2021	CT0004	Red fox	<i>Vulpes vulpes</i>	1
12/29/2021	CT0004	Eurasian lynx	<i>Lynx lynx</i>	1
01/02/2022	CT0004	Grey wolf	<i>Canis lupus</i>	2
01/03/2022	CT0004	Eurasian lynx	<i>Lynx lynx</i>	1+2juv
01/05/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
01/07/2022	CT0004	Grey wolf	<i>Canis lupus</i>	2
01/09/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
01/11/2022	CT0004	Stone marten	<i>Martes foina</i>	1
01/12/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
01/12/2022	CT0004	Wild boar	<i>Sus scrofa</i>	1
01/15/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
01/23/2022	CT0004	Golden jackal	<i>Canis aureus</i>	2
01/30/2022	CT0004	Stone marten	<i>Martes foina</i>	1
01/30/2022	CT0004	Eurasian lynx	<i>Lynx lynx</i>	1
01/30/2022	CT0004	Wild boar	<i>Sus scrofa</i>	2
02/02/2022	CT0004	Stone marten	<i>Martes foina</i>	1

Table 97. List of mammals recorded by Camera trap N 0005

Date	Route #	Species name English	Species name Latin	Species number
12/07/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/07/2021	CT0005	Brown bear	<i>Ursus arctos</i>	1+2 youngs
12/10/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/11/2021	CT0005	Wild boar	<i>Sus scrofa</i>	6
12/11/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1

12/12/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/12/2021	CT0005	Wild boar	<i>Sus scrofa</i>	1
12/14/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/15/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
12/16/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/19/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/20/2021	CT0005	European hare	<i>Lepus europeus</i>	2
12/20/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/22/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
12/25/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/25/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
12/26/2021	CT0005	European hare	<i>Lepus europeus</i>	2
12/28/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/28/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1juv
12/30/2021	CT0005	European hare	<i>Lepus europeus</i>	
12/31/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
01/05/2022	CT0005	Eurasian lynx	<i>Lynx lynx</i>	1
01/07/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/08/2022	CT0005	European hare	<i>Lepus europeus</i>	2
01/09/2022	CT0005	Grey wolf	<i>Canis lupus</i>	2
01/09/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/10/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
01/13/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/15/2022	CT0005	Eurasian lynx	<i>Lynx lynx</i>	1Adult +2juv
01/17/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/19/2022	CT0005	European hare	<i>Lepus europeus</i>	2
01/20/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/21/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/21/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
01/22/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/22/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
01/23/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/24/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/25/2022	CT0005	European hare	<i>Lepus europeus</i>	2
01/27/2022	CT0005	Wild boar	<i>Sus scrofa</i>	1
01/28/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/30/2022	CT0005	European hare	<i>Lepus europeus</i>	1
02/02/2022	CT0005	European hare	<i>Lepus europeus</i>	1
02/03/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
02/03/2022	CT0005	European hare	<i>Lepus europeus</i>	2
02/05/2022	CT0005	European hare	<i>Lepus europeus</i>	1

Table 98. List of mammals recorded by Camera trap N 0006

Date	Route #	Species name English	Species name Latin	Species number
16/01/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1
01/20/2022	CT0006	Bezoar goat	<i>Capra aegagrus</i>	1 male
01/31/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1

Table 99. List of mammals recorded by Camera trap N 0007

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1 male

12/05/2021	CT0007	Wild boar	<i>Sus scrofa</i>	2
12/06/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1
12/08/2021	CT0007	Wild boar	<i>Sus scrofa</i>	2 male
12/10/2021	CT0007	Stone marten	<i>Martes foina</i>	1
12/13/2021	CT0007	Wild boar	<i>Sus scrofa</i>	16 female 9 unspecified
12/14/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1 male
12/18/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1 male
12/19/2021	CT0007	European hare	<i>Lepus europeus</i>	1
12/20/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1 female
12/23/2021	CT0007	Wild boar	<i>Sus scrofa</i>	23 female 1 male 4 juv 10 unspecified
12/23/2021	CT0007	Grey wolf	<i>Canis lupus</i>	3
12/24/2021	CT0007	Bezoar goat	<i>Capra aegagrus</i>	1 male
12/24/2021	CT0007	Wild boar	<i>Sus scrofa</i>	2
12/26/2021	CT0007	Eurasian lynx	<i>Lynx lynx</i>	1
12/28/2021	CT0007	Wild boar	<i>Sus scrofa</i>	3 female 2 male
01/10/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1 female 1 male
01/11/2022	CT0007	Wild boar	<i>Sus scrofa</i>	2 female 2 male
01/18/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1
01/20/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1
01/25/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1
01/26/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1 female
02/02/2022	CT0007	Wild boar	<i>Sus scrofa</i>	10 female
02/04/2022	CT0007	Wild boar	<i>Sus scrofa</i>	2

Table 100. List of mammals recorded by Camera trap N 0008

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	CT0008	Wild boar	<i>Sus scrofa</i>	1
12/05/2021	CT0008	Red fox	<i>Vulpes vulpes</i>	1
12/06/2021	CT0008	Stone marten	<i>Martes foina</i>	1
12/08/2021	CT0008	Wild boar	<i>Sus scrofa</i>	8+
12/17/2021	CT0008	Wild boar	<i>Sus scrofa</i>	1
12/21/2021	CT0008	Wild boar	<i>Sus scrofa</i>	3
12/23/2021	CT0008	European hare	<i>Lepus europeus</i>	1
01/09/2022	CT0008	Grey wolf	<i>Canis lupus</i>	6
01/10/2022	CT0008	Wild boar	<i>Sus scrofa</i>	1
01/11/2022	CT0008	Wild boar	<i>Sus scrofa</i>	2
02/04/2022	CT0008	Grey wolf	<i>Canis lupus</i>	5

Camera trap N0009 has detected only two species wild boar and grey wolf, which are passing the camera trap location several time.

Table 101. List of mammals recorded by Camera trap N 0009

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	CT0009	Wild boar	<i>Sus scrofa</i>	1
12/14/2021	CT0009	Wild boar	<i>Sus scrofa</i>	1
12/19/2021	CT0009	Grey wolf	<i>Canis lupus</i>	1
12/21/2021	CT0009	Wild boar	<i>Sus scrofa</i>	6+

12/22/2021	CT0009	Wild boar	<i>Sus scrofa</i>	5
12/23/2021	CT0009	Wild boar	<i>Sus scrofa</i>	2
12/23/2021	CT0009	Grey wolf	<i>Canis lupus</i>	2
12/25/2021	CT0009	Wild boar	<i>Sus scrofa</i>	1
12/26/2021	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/01/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/02/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/04/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/05/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/07/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/08/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/09/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/09/2022	CT0009	Grey wolf	<i>Canis lupus</i>	1
01/10/2022	CT0009	Wild boar	<i>Sus scrofa</i>	2 2 male
01/11/2022	CT0009	Wild boar	<i>Sus scrofa</i>	2 female 2 male
01/18/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/20/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/25/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/26/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1 female
02/02/2022	CT0009	Wild boar	<i>Sus scrofa</i>	10 female
02/04/2022	CT0009	Wild boar	<i>Sus scrofa</i>	2

### Results for March collected from camera traps

Collected dates: 04-07 March 2022

Camera traps were installed 03-07 of December of 2021. After 40 days, the camera traps were checked for batteries and SD cards.

Camera trap N0010 did not photographed any photos again.

Camera trap N003, N005, N007, N009 did not recorded any animals, but nearby of N 003 we have registered fresh footprints of big bear.

**Table 102. List of mammals recorded by Camera trap N 0001**

Date	Route #	Species name English	Species name Latin	Species number
12/05/2021	CT0001	Wildcat	<i>Felis sylvestris</i>	1
12/07/2021	CT0001	Stone marten	<i>Martes foina</i>	1
12/08/2021	CT0001	Indian crested porcupine	<i>Hystrix indica</i>	1
12/11/2021	CT0001	Indian crested porcupine	<i>Hystrix indica</i>	1
12/14/2021	CT0001	Stone marten	<i>Martes foina</i>	1
12/17/2021	CT0001	Grey wolf	<i>Canis lupus</i>	1
12/18/2021	CT0001	Stone marten	<i>Martes foina</i>	1
12/21/2021	CT0001	Grey wolf	<i>Canis lupus</i>	1
12/22/2021	CT0001	Red fox	<i>Vulpes vulpes</i>	1
12/27/2021	CT0001	Eurasian lynx	<i>Lynx lynx</i>	2
01/01/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/02/2022	CT0001	European budger	<i>Meles meles</i>	1
01/03/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/05/2022	CT0001	Indian crested porcupine	<i>Hystrix indica</i>	1
01/05/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/07/2022	CT0001	Stone marten	<i>Martes foina</i>	1
01/13/2022	CT0001	Stone marten	<i>Martes foina</i>	1

01/24/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/30/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/31/2022	CT0001	Stone marten	<i>Martes foina</i>	1
02/01/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	3
02/02/2022	CT0001	Stone marten	<i>Martes foina</i>	1
02/06/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
02/13/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
02/14/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
02/15/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
02/16/2022	CT0001	Badger	<i>Meles meles</i>	1
02/18/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
02/21/2022	CT0001	Grey wolf	<i>Canis lupus</i>	1
02/22/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
02/22/2022	CT0001	European hare	<i>Lepus europeus</i>	1
02/22/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
02/23/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
02/26/2022	CT0001	Stone marten	<i>Martes foina</i>	1
02/27/2022	CT0001	Wild boar	<i>Sus scrofa</i>	3

Table 103. List of mammals recorded by Camera trap N 0002-N 0003

Date	Route #	Species name English	Species name Latin	Species number
12/05/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/05/2021	CT0002	Grey wolf	<i>Canis lupus</i>	1
12/06/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/09/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/13/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/09/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/15/2021	CT0002	Grey wolf	<i>Canis lupus</i>	1
12/20/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/22/2021	CT0002	European hare	<i>Lepus europeus</i>	1
12/23/2021	CT0002	Grey wolf	<i>Canis lupus</i>	1
01/02/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/04/2022	CT0002	Grey wolf	<i>Canis lupus</i>	1
01/06/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/07/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/08/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/11/2022	CT0002	Golden jackal	<i>Canis aureus</i>	2
01/13/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/24/2022	CT0002	Eurasian lynx	<i>Lynx lynx</i>	1
01/31/2022	CT0002	Indian crested porcupine	<i>Hystrix indica</i>	1
02/06/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
02/06/2022	CT0002	Grey wolf	<i>Canis lupus</i>	1
02/11/2022	CT0002	Grey wolf	<i>Canis lupus</i>	4
02/11/2022	CT0002	Grey wolf	<i>Canis lupus</i>	4
02/20/2022	CT0002	European hare	<i>Lepus europeus</i>	1
02/21/2022	CT0002	Wild boar	<i>Sus scrofa</i>	11
02/22/2022	CT0002	European hare	<i>Lepus europeus</i>	1
02/23/2022	CT0002	European hare	<i>Lepus europeus</i>	1
02/25/2022	CT0002	Stone marten	<i>Martes foina</i>	1
02/27/2022	CT0002	European wildcat	<i>Felis silvestris</i>	1
02/28/2022	CT0002	European hare	<i>Lepus europeus</i>	1
03/01/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
03/02/2022	CT0002	Grey wolf	<i>Canis lupus</i>	1

03/02/2022	CT0002	Red fox	<i>Vulpes vulpes</i>	1
03/02/2022	CT0002	Red fox	<i>Vulpes vulpes</i>	1
03/02/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
12/31/2021	CT0003	Bezoar goat	<i>Capra aegagrus</i>	1

**Table 104. List of mammals recorded by Camera trap N 0004**

Date	Route #	Species name English	Species name Latin	Species number
12/28/2021	CT0004	Red fox	<i>Vulpes vulpes</i>	1
12/29/2021	CT0004	Eurasian lynx	<i>Lynx lynx</i>	1
01/02/2022	CT0004	Grey wolf	<i>Canis lupus</i>	2
01/03/2022	CT0004	Eurasian lynx	<i>Lynx lynx</i>	1+2juv
01/05/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
01/07/2022	CT0004	Grey wolf	<i>Canis lupus</i>	2
01/09/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
01/11/2022	CT0004	Stone marten	<i>Martes foina</i>	1
01/12/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
01/12/2022	CT0004	Wild boar	<i>Sus scrofa</i>	1
01/15/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
01/23/2022	CT0004	Golden jackal	<i>Canis aureus</i>	2
01/30/2022	CT0004	Stone marten	<i>Martes foina</i>	1
01/30/2022	CT0004	Eurasian lynx	<i>Lynx lynx</i>	1
01/30/2022	CT0004	Wild boar	<i>Sus scrofa</i>	2
02/02/2022	CT0004	Stone marten	<i>Martes foina</i>	1
02/06/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
02/16/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
03/04/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
03/04/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
03/04/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1

**Table 105. List of mammals recorded by Camera trap N 0005**

Date	Route #	Species name English	Species name Latin	Species number
12/07/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/07/2021	CT0005	Brown bear	<i>Ursus arctos</i>	1+ 2youngs
12/10/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/11/2021	CT0005	Wild boar	<i>Sus scrofa</i>	6
12/11/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
12/12/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/12/2021	CT0005	Wild boar	<i>Sus scrofa</i>	1
12/14/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/15/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
12/16/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/19/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/20/2021	CT0005	European hare	<i>Lepus europeus</i>	2
12/20/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/22/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
12/25/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/25/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
12/26/2021	CT0005	European hare	<i>Lepus europeus</i>	2
12/28/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/28/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1juv
12/30/2021	CT0005	European hare	<i>Lepus europeus</i>	

12/31/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
01/05/2022	CT0005	Eurasian lynx	<i>Lynx lynx</i>	1
01/07/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/08/2022	CT0005	European hare	<i>Lepus europeus</i>	2
01/09/2022	CT0005	Grey wolf	<i>Canis lupus</i>	2
01/09/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/10/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
01/13/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/15/2022	CT0005	Eurasian lynx	<i>Lynx lynx</i>	1Adult +2juv
01/17/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/19/2022	CT0005	European hare	<i>Lepus europeus</i>	2
01/20/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/21/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/21/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
01/22/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/22/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
01/23/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/24/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/25/2022	CT0005	European hare	<i>Lepus europeus</i>	2
01/27/2022	CT0005	Wild boar	<i>Sus scrofa</i>	1
01/28/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/30/2022	CT0005	European hare	<i>Lepus europeus</i>	1
02/02/2022	CT0005	European hare	<i>Lepus europeus</i>	1
02/03/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
02/03/2022	CT0005	European hare	<i>Lepus europeus</i>	2
02/05/2022	CT0005	European hare	<i>Lepus europeus</i>	1

Table 106. List of mammals recorded by Camera trap N 0006

Date	Route #	Species name English	Species name Latin	Species number
16/01/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1
01/20/2022	CT0006	Bezoar goat	<i>Capra aegagrus</i>	1 male
01/31/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1
02/11/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1

Table 107. List of mammals recorded by Camera trap N 0007

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1 male
12/05/2021	CT0007	Wild boar	<i>Sus scrofa</i>	2
12/06/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1
12/08/2021	CT0007	Wild boar	<i>Sus scrofa</i>	2 male
12/10/2021	CT0007	Stone marten	<i>Martes foina</i>	1
12/13/2021	CT0007	Wild boar	<i>Sus scrofa</i>	16 female 9 unspecified
12/14/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1 male
12/18/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1 male
12/19/2021	CT0007	European hare	<i>Lepus europeus</i>	1
12/20/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1 female
12/23/2021	CT0007	Wild boar	<i>Sus scrofa</i>	23 female 1 male 4 juv 10 unspecified
12/23/2021	CT0007	Grey wolf	<i>Canis lupus</i>	3

12/24/2021	CT0007	Bezoar goat	<i>Capra aegagrus</i>	1 male
12/24/2021	CT0007	Wild boar	<i>Sus scrofa</i>	2
12/26/2021	CT0007	Eurasian lynx	<i>Lynx lynx</i>	1
12/28/2021	CT0007	Wild boar	<i>Sus scrofa</i>	3 female 2 male
01/10/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1 female 1 male
01/11/2022	CT0007	Wild boar	<i>Sus scrofa</i>	2 female 2 male
01/18/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1
01/20/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1
01/25/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1
01/26/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1 female
02/02/2022	CT0007	Wild boar	<i>Sus scrofa</i>	10 female
02/04/2022	CT0007	Wild boar	<i>Sus scrofa</i>	2

**Table 108. List of mammals recorded by Camera trap N 0008**

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	CT0008	Wild boar	<i>Sus scrofa</i>	1
12/05/2021	CT0008	Red fox	<i>Vulpes vulpes</i>	1
12/06/2021	CT0008	Stone marten	<i>Martes foina</i>	1
12/08/2021	CT0008	Wild boar	<i>Sus scrofa</i>	8+
12/17/2021	CT0008	Wild boar	<i>Sus scrofa</i>	1
12/21/2021	CT0008	Wild boar	<i>Sus scrofa</i>	3
12/23/2021	CT0008	European hare	<i>Lepus europeus</i>	1
01/09/2022	CT0008	Grey wolf	<i>Canis lupus</i>	6
01/10/2022	CT0008	Wild boar	<i>Sus scrofa</i>	1
01/11/2022	CT0008	Wild boar	<i>Sus scrofa</i>	2
02/04/2022	CT0008	Grey wolf	<i>Canis lupus</i>	5
03/02/2022	CT0008	Grey wolf	<i>Canis lupus</i>	6

Camera trap N0009 has detected only two species wild boar and grey wolf, which are passing the camera trap location several time.

**Table 109. List of mammals recorded by Camera trap N 0009**

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	CT0009	Wild boar	<i>Sus scrofa</i>	1
12/14/2021	CT0009	Wild boar	<i>Sus scrofa</i>	1
12/19/2021	CT0009	Grey wolf	<i>Canis lupus</i>	1
12/21/2021	CT0009	Wild boar	<i>Sus scrofa</i>	6+
12/22/2021	CT0009	Wild boar	<i>Sus scrofa</i>	5
12/23/2021	CT0009	Wild boar	<i>Sus scrofa</i>	2
12/23/2021	CT0009	Grey wolf	<i>Canis lupus</i>	2
12/25/2021	CT0009	Wild boar	<i>Sus scrofa</i>	1
12/26/2021	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/01/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/02/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/04/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/05/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/07/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/08/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/09/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1

01/09/2022	CT0009	Grey wolf	<i>Canis lupus</i>	1
01/10/2022	CT0009	Wild boar	<i>Sus scrofa</i>	2 2 male
01/11/2022	CT0009	Wild boar	<i>Sus scrofa</i>	2 female 2 male
01/18/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/20/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/25/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/26/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1 female
02/02/2022	CT0009	Wild boar	<i>Sus scrofa</i>	10 female
02/04/2022	CT0009	Wild boar	<i>Sus scrofa</i>	2

### Results for March collected from camera traps

Collected dates: 08-11 April 2022

Camera traps were installed 03-07 of December of 2021.

After 40 days, the camera traps were checked for batteries and SD cards.

The Camera traps were collected on 19 od April of 2022

**Table 110. List of mammals recorded by Camera trap N 0001**

Date	Route #	Species name English	Species name Latin	Species number
12/05/2021	CT0001	Wildcat	<i>Felis sylvestris</i>	1
12/07/2021	CT0001	Stone marten	<i>Martes foina</i>	1
12/08/2021	CT0001	Indian crested porcupine	<i>Hystrix indica</i>	1
12/11/2021	CT0001	Indian crested porcupine	<i>Hystrix indica</i>	1
12/14/2021	CT0001	Stone marten	<i>Martes foina</i>	1
12/17/2021	CT0001	Grey wolf	<i>Canis lupus</i>	1
12/18/2021	CT0001	Stone marten	<i>Martes foina</i>	1
12/21/2021	CT0001	Grey wolf	<i>Canis lupus</i>	1
12/22/2021	CT0001	Red fox	<i>Vulpes vulpes</i>	1
12/27/2021	CT0001	Eurasian lynx	<i>Lynx lynx</i>	2
01/01/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/02/2022	CT0001	European budger	<i>Meles meles</i>	1
01/03/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/05/2022	CT0001	Indian crested porcupine	<i>Hystrix indica</i>	1
01/05/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/07/2022	CT0001	Stone marten	<i>Martes foina</i>	1
01/13/2022	CT0001	Stone marten	<i>Martes foina</i>	1
01/24/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/30/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
01/31/2022	CT0001	Stone marten	<i>Martes foina</i>	1
02/01/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	3
02/02/2022	CT0001	Stone marten	<i>Martes foina</i>	1
02/06/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
02/13/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
02/14/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
02/15/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
02/16/2022	CT0001	Badger	<i>Meles meles</i>	1
02/18/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
02/21/2022	CT0001	Grey wolf	<i>Canis lupus</i>	1

02/22/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
02/22/2022	CT0001	European hare	<i>Lepus europeus</i>	1
02/22/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
02/23/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
02/26/2022	CT0001	Stone marten	<i>Martes foina</i>	1
02/27/2022	CT0001	Wild boar	<i>Sus scrofa</i>	3
03/05/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
03/06/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
03/06/2022	CT0001	Wild boar	<i>Sus scrofa</i>	3+2
03/07/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
03/08/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
03/09/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
03/10/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
03/11/2022	CT0001	Stone marten	<i>Martes foina</i>	1
03/11/2022	CT0001	Wild boar	<i>Sus scrofa</i>	1
03/17/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
03/18/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
03/24/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
03/26/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
03/29/2022	CT0001	Stone marten	<i>Martes foina</i>	1
03/31/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1
04/01/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
04/02/2022	CT0001	Red fox	<i>Vulpes vulpes</i>	1
04/05/2022	CT0001	European wildcat	<i>Felis sylvestris</i>	1
04/06/2022	CT0001	Golden jackal	<i>Canis aureus</i>	1

Table 111. List of mammals recorded by Camera trap N 0002

Date	Route #	Species name English	Species name Latin	Species number
12/05/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/05/2021	CT0002	Grey wolf	<i>Canis lupus</i>	1
12/06/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/09/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/13/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/09/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/15/2021	CT0002	Grey wolf	<i>Canis lupus</i>	1
12/20/2021	CT0002	Stone marten	<i>Martes foina</i>	1
12/22/2021	CT0002	European hare	<i>Lepus europeus</i>	1
12/23/2021	CT0002	Grey wolf	<i>Canis lupus</i>	1
01/02/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/04/2022	CT0002	Grey wolf	<i>Canis lupus</i>	1
01/06/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/07/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/08/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/11/2022	CT0002	Golden jackal	<i>Canis aureus</i>	2
01/13/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
01/24/2022	CT0002	Eurasian lynx	<i>Lynx lynx</i>	1
01/31/2022	CT0002	Indian crested porcupine	<i>Hystrix indica</i>	1
02/06/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
02/06/2022	CT0002	Grey wolf	<i>Canis lupus</i>	1
02/11/2022	CT0002	Grey wolf	<i>Canis lupus</i>	4
02/11/2022	CT0002	Grey wolf	<i>Canis lupus</i>	4
02/20/2022	CT0002	European hare	<i>Lepus europeus</i>	1
02/21/2022	CT0002	Wild boar	<i>Sus scrofa</i>	11

02/22/2022	CT0002	European hare	<i>Lepus europeus</i>	1
02/23/2022	CT0002	European hare	<i>Lepus europeus</i>	1
02/25/2022	CT0002	Stone marten	<i>Martes foina</i>	1
02/27/2022	CT0002	European wildcat	<i>Felis silvestris</i>	1
02/28/2022	CT0002	European hare	<i>Lepus europeus</i>	1
03/01/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
03/02/2022	CT0002	Grey wolf	<i>Canis lupus</i>	1
03/02/2022	CT0002	Red fox	<i>Vulpes vulpes</i>	1
03/02/2022	CT0002	Red fox	<i>Vulpes vulpes</i>	1
03/02/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
03/05/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
03/05/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
03/08/2022	CT0002	Stone marten	<i>Martes foina</i>	1
03/11/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
03/11/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
03/11/2022	CT0002	Badger	<i>Meles meles</i>	1
03/13/2022	CT0002	European hare	<i>Lepus europeus</i>	1
03/18/2022	CT0002	European hare	<i>Lepus europeus</i>	1
03/19/2022	CT0002	European hare	<i>Lepus europeus</i>	1
03/25/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
03/26/2022	CT0002	Grey wolf	<i>Canis lupus</i>	5
03/27/2022	CT0002	Bezoar goat	<i>Capra aegagrus</i>	1 male
03/27/2022	CT0002	Grey wolf	<i>Canis lupus</i>	1
03/27/2022	CT0002	Wild boar	<i>Sus scrofa</i>	9
03/28/2022	CT0002	Wild boar	<i>Sus scrofa</i>	1
04/02/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
04/03/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
04/04/2022	CT0002	Southern white-breasted hedgehog	<i>Erinaceus concolor</i>	
04/04/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
04/05/2022	CT0002	European wildcat	<i>Felis silvestris</i>	1
04/06/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
04/06/2022	CT0002	Golden jackal	<i>Canis aureus</i>	1
04/08/2022	CT0002	Brown bear	<i>Ursus arctos</i>	1

Table 112. List of mammals recorded by Camera trap N 0003

Date	Route #	Species name English	Species name Latin	Species number
12/31/2021	CT0003	Bezoar goat	<i>Capra aegagrus</i>	1
03/29/2022	CT0003	Golden jackal	<i>Canis aureus</i>	1
03/31/2022	CT0003	Brown bear	<i>Ursus arctos</i>	1
04/03/2022	CT0003	Brown bear	<i>Ursus arctos</i>	2

Table 113. List of mammals recorded by Camera trap N 0004

Date	Route #	Species name English	Species name Latin	Species number
12/28/2021	CT0004	Red fox	<i>Vulpes vulpes</i>	1
12/29/2021	CT0004	Eurasian lynx	<i>Lynx lynx</i>	1
01/02/2022	CT0004	Grey wolf	<i>Canis lupus</i>	2
01/03/2022	CT0004	Eurasian lynx	<i>Lynx lynx</i>	1+2juv
01/05/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
01/07/2022	CT0004	Grey wolf	<i>Canis lupus</i>	2
01/09/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
01/11/2022	CT0004	Stone marten	<i>Martes foina</i>	1

01/12/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
01/12/2022	CT0004	Wild boar	<i>Sus scrofa</i>	1
01/15/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
01/23/2022	CT0004	Golden jackal	<i>Canis aureus</i>	2
01/30/2022	CT0004	Stone marten	<i>Martes foina</i>	1
01/30/2022	CT0004	Eurasian lynx	<i>Lynx lynx</i>	1
01/30/2022	CT0004	Wild boar	<i>Sus scrofa</i>	2
02/02/2022	CT0004	Stone marten	<i>Martes foina</i>	1
02/06/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
02/16/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
03/04/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
03/04/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
03/04/2022	CT0004	Grey wolf	<i>Canis lupus</i>	1
03/24/2022	CT0004	Stone marten	<i>Martes foina</i>	1
04/03/2022	CT0004	Eurasian lynx	<i>Lynx lynx</i>	1

Table 114. List of mammals recorded by Camera trap N 0005

Date	Route #	Species name English	Species name Latin	Species number
12/07/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/07/2021	CT0005	Brown bear	<i>Ursus arctos</i>	1+2youngs
12/10/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/11/2021	CT0005	Wild boar	<i>Sus scrofa</i>	6
12/11/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
12/12/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/12/2021	CT0005	Wild boar	<i>Sus scrofa</i>	1
12/14/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/15/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
12/16/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/19/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/20/2021	CT0005	European hare	<i>Lepus europeus</i>	2
12/20/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/22/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
12/25/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/25/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
12/26/2021	CT0005	European hare	<i>Lepus europeus</i>	2
12/28/2021	CT0005	European hare	<i>Lepus europeus</i>	1
12/28/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1juv
12/30/2021	CT0005	European hare	<i>Lepus europeus</i>	
12/31/2021	CT0005	Grey wolf	<i>Canis lupus</i>	1
01/05/2022	CT0005	Eurasian lynx	<i>Lynx lynx</i>	1
01/07/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/08/2022	CT0005	European hare	<i>Lepus europeus</i>	2
01/09/2022	CT0005	Grey wolf	<i>Canis lupus</i>	2
01/09/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/10/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
01/13/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/15/2022	CT0005	Eurasian lynx	<i>Lynx lynx</i>	1Adult+2juv
01/17/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/19/2022	CT0005	European hare	<i>Lepus europeus</i>	2
01/20/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/21/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/21/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
01/22/2022	CT0005	European hare	<i>Lepus europeus</i>	1

01/22/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
01/23/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/24/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/25/2022	CT0005	European hare	<i>Lepus europeus</i>	2
01/27/2022	CT0005	Wild boar	<i>Sus scrofa</i>	1
01/28/2022	CT0005	European hare	<i>Lepus europeus</i>	1
01/30/2022	CT0005	European hare	<i>Lepus europeus</i>	1
02/02/2022	CT0005	European hare	<i>Lepus europeus</i>	1
02/03/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
02/03/2022	CT0005	European hare	<i>Lepus europeus</i>	2
02/05/2022	CT0005	European hare	<i>Lepus europeus</i>	1
03/08/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
03/08/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
03/09/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
03/09/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
03/09/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
03/09/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
03/10/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
03/11/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
03/11/2022	CT0005	Wild boar	<i>Sus scrofa</i>	1
03/11/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
03/12/2022	CT0005	Badger	<i>Meles meles</i>	1
03/13/2022	CT0005	Wild boar	<i>Sus scrofa</i>	9
03/14/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
03/14/2022	CT0005	Badger	<i>Meles meles</i>	1
03/16/2022	CT0005	European hare	<i>Lepus europeus</i>	1
03/19/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
03/20/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
03/20/2022	CT0005	European hare	<i>Lepus europeus</i>	1
03/22/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
03/22/2022	CT0005	Grey wolf	<i>Canis lupus</i>	1
03/23/2022	CT0005	European hare	<i>Lepus europeus</i>	1
03/23/2022	CT0005	European hare	<i>Lepus europeus</i>	1
03/24/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
03/25/2022	CT0005	European hare	<i>Lepus europeus</i>	1
03/26/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
03/26/2022	CT0005	European hare	<i>Lepus europeus</i>	1
03/27/2022	CT0005	Wild boar	<i>Sus scrofa</i>	2
03/27/2022	CT0005	European hare	<i>Lepus europeus</i>	1
03/29/2022	CT0005	Grey wolf	<i>Canis lupus</i>	3
04/02/2022	CT0005	Indian crested porcupine	<i>Hystrix indica</i>	
04/04/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1
04/08/2022	CT0005	Golden jackal	<i>Canis aureus</i>	1

Table 115. List of mammals recorded by Camera trap N 0006

Date	Route #	Species name English	Species name Latin	Species number
16/01/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1
01/20/2022	CT0006	Bezoar goat	<i>Capra aegagrus</i>	1 male
01/31/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1
02/11/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1
03/05/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1
03/06/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1
03/08/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1

03/09/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1
03/12/2022	CT0006	Grey wolf	<i>Canis lupus</i>	6
03/18/2022	CT0006	Bezoar goat	<i>Capra aegagrus</i>	2 male
03/19/2022	CT0006	Bezoar goat	<i>Capra aegagrus</i>	2 male
03/19/2022	CT0006	Bezoar goat	<i>Capra aegagrus</i>	2 male
03/20/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1
03/21/2022	CT0006	Bezoar goat	<i>Capra aegagrus</i>	2 female
03/31/2022	CT0006	Wild boar	<i>Sus scrofa</i>	2
04/01/2022	CT0006	Wild boar	<i>Sus scrofa</i>	5
04/02/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1
04/03/2022	CT0006	Wild boar	<i>Sus scrofa</i>	3
04/04/2022	CT0006	Wild boar	<i>Sus scrofa</i>	3
04/05/2022	CT0006	Stone marten	<i>Martes foina</i>	1
04/05/2022	CT0006	Wild boar	<i>Sus scrofa</i>	2
04/06/2022	CT0006	Wild boar	<i>Sus scrofa</i>	1

Table 116. List of mammals recorded by Camera trap N 0007

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1 male
12/05/2021	CT0007	Wild boar	<i>Sus scrofa</i>	2
12/06/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1
12/08/2021	CT0007	Wild boar	<i>Sus scrofa</i>	2 male
12/10/2021	CT0007	Stone marten	<i>Martes foina</i>	1
12/13/2021	CT0007	Wild boar	<i>Sus scrofa</i>	16 female 9 unspecified
12/14/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1 male
12/18/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1 male
12/19/2021	CT0007	European hare	<i>Lepus europeus</i>	1
12/20/2021	CT0007	Wild boar	<i>Sus scrofa</i>	1 female
12/23/2021	CT0007	Wild boar	<i>Sus scrofa</i>	23 female 1 male 4 juv 10 unspecified
12/23/2021	CT0007	Grey wolf	<i>Canis lupus</i>	3
12/24/2021	CT0007	Bezoar goat	<i>Capra aegagrus</i>	1 male
12/24/2021	CT0007	Wild boar	<i>Sus scrofa</i>	2
12/26/2021	CT0007	Eurasian lynx	<i>Lynx lynx</i>	1
12/28/2021	CT0007	Wild boar	<i>Sus scrofa</i>	3 female 2 male
01/10/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1 female 1 male
01/11/2022	CT0007	Wild boar	<i>Sus scrofa</i>	2 female 2 male
01/18/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1
01/20/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1
01/25/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1
01/26/2022	CT0007	Wild boar	<i>Sus scrofa</i>	1 female
02/02/2022	CT0007	Wild boar	<i>Sus scrofa</i>	10 female
02/04/2022	CT0007	Wild boar	<i>Sus scrofa</i>	2
03/20/2022	CT0007	Bezoar goat	<i>Capra aegagrus</i>	2 male

Table 117. List of mammals recorded by Camera trap N 0008

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	CT0008	Wild boar	<i>Sus scrofa</i>	1

12/05/2021	CT0008	Red fox	<i>Vulpes vulpes</i>	1
12/06/2021	CT0008	Stone marten	<i>Martes foina</i>	1
12/08/2021	CT0008	Wild boar	<i>Sus scrofa</i>	8+
12/17/2021	CT0008	Wild boar	<i>Sus scrofa</i>	1
12/21/2021	CT0008	Wild boar	<i>Sus scrofa</i>	3
12/23/2021	CT0008	European hare	<i>Lepus europeus</i>	1
01/09/2022	CT0008	Grey wolf	<i>Canis lupus</i>	6
01/10/2022	CT0008	Wild boar	<i>Sus scrofa</i>	1
01/11/2022	CT0008	Wild boar	<i>Sus scrofa</i>	2
02/04/2022	CT0008	Grey wolf	<i>Canis lupus</i>	5
03/02/2022	CT0008	Grey wolf	<i>Canis lupus</i>	6
03/08/2022	CT0008	European hare	<i>Lepus europeus</i>	2
03/27/2022	CT0008	European hare	<i>Lepus europeus</i>	1
03/28/2022	CT0008	European hare	<i>Lepus europeus</i>	1
04/03/2022	CT0007	Eurasian lynx	<i>Lynx lynx</i>	1
04/04/2022	CT0007	Wild boar	<i>Sus scrofa</i>	5
04/05/2022	CT0007	Brown bear	<i>Ursus arctos</i>	1

Camera trap N0009 has detected only two species wild boar and grey wolf, which are passing the camera trap location several time.

**Table 118. List of mammals recorded by Camera trap N 0009**

Date	Route #	Species name English	Species name Latin	Species number
12/04/2021	CT0009	Wild boar	<i>Sus scrofa</i>	1
12/14/2021	CT0009	Wild boar	<i>Sus scrofa</i>	1
12/19/2021	CT0009	Grey wolf	<i>Canis lupus</i>	1
12/21/2021	CT0009	Wild boar	<i>Sus scrofa</i>	6+
12/22/2021	CT0009	Wild boar	<i>Sus scrofa</i>	5
12/23/2021	CT0009	Wild boar	<i>Sus scrofa</i>	2
12/23/2021	CT0009	Grey wolf	<i>Canis lupus</i>	2
12/25/2021	CT0009	Wild boar	<i>Sus scrofa</i>	1
12/26/2021	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/01/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/02/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/04/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/05/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/07/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/08/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/09/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/09/2022	CT0009	Grey wolf	<i>Canis lupus</i>	1
01/10/2022	CT0009	Wild boar	<i>Sus scrofa</i>	2 2 male
01/11/2022	CT0009	Wild boar	<i>Sus scrofa</i>	2 female 2 male
01/18/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/20/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/25/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
01/26/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1 female
02/02/2022	CT0009	Wild boar	<i>Sus scrofa</i>	10 female
02/04/2022	CT0009	Wild boar	<i>Sus scrofa</i>	2
03/06/2022	CT0009	Wild boar	<i>Sus scrofa</i>	5
03/09/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
03/10/2022	CT0009	Wild boar	<i>Sus scrofa</i>	2
03/11/2022	CT0009	Wild boar	<i>Sus scrofa</i>	3
03/16/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
03/26/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
03/27/2022	CT0009	Grey wolf	<i>Canis lupus</i>	1
04/01/2022	CT0009	Wild boar	<i>Sus scrofa</i>	2
04/03/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
04/04/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
04/05/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
04/05/2022	CT0009	Eurasian lynx	<i>Lynx lynx</i>	1
04/05/2022	CT0009	Wild boar	<i>Sus scrofa</i>	1
04/07/2022	CT0009	Wild boar	<i>Sus scrofa</i>	2
04/08/2022	CT0009	Brown bear	<i>Ursus arctos</i>	1
04/08/2022	CT0009	European hare	<i>Lepus europeus</i>	1

### Results for April

Dates: 27-30 April 2022

In total, 13 species of terrestrial mammals were recorded during fieldwork done in April. The animals were observed during fieldtrips and also were recorded by vital signs during the day time.

The feces of Indian porcupine were found in EAAA001 area.

**Table 119. List of mammals recorded during April in EAAA001**

Date	Route #	Species name English	Species name Latin	Species number
27/04/2022	EAAA001	Indian porcupine	<i>Hystrix indica</i>	1

There were 2 species recorded in EAAA002-EAAA003. Stone marten's and steppe field mouse were recorded. Nuts bitten by rodents were found in area.

**Table 120. List of mammals recorded during April in EAAA002- EAAA003**

Date	Route #	Species name English	Species name Latin	Species number
27/04/2022	EAAA002-EAAA003	Stone Marten	<i>Martes foina</i>	1
27/04/2022	EAAA002-EAAA003	Steppe field mouse	<i>Apodemus witherbyi</i>	2

Common has seen in EAAA004, in agricultural lands. Feces of least weasel and the alive southern –breasted hedgehog were detected.

**Table 121. List of mammals recorded during April in EAAA004**

Date	Route #	Species name English	Species name Latin	Species number
27/04/2022	EAAA004	Common vole	<i>Microtus arvalis</i>	1
27/04/2022	EAAA004	Southern white-breasted hedgehog	<i>Erinaceus concolor</i>	1
27/04/2022	EAAA004	Least weasel	<i>Mustela nivalis</i>	1

Feces of 3 species were recorded in EAAA005. The animal feces were recorded near to village Shenatagh.

**Table 122. List of mammals recorded during April in EAAA005**

Date	Route #	Species name English	Species name Latin	Species number
28/04/2022	EAAA005	Badger	<i>Meles meles</i>	1
28/04/2022	EAAA005	Red fox	<i>Vulpes vulpes</i>	1
28/04/2022	EAAA005	Grey wolf	<i>Canis lupus</i>	1

A big european hare were run away during our trip in area. Footprints of bezoar goats were observed. Feces of stone marten is recorded in EAAA 006. Several voles were detected.

**Table 123. List of mammals recorded during April in EAAA006**

Date	Route #	Species name English	Species name Latin	Species number
29/04/2022	EAAA006	Bezoar goat	<i>Capra aegagrus</i>	1
29/04/2022	EAAA006	European hare	<i>Lepus europeus</i>	1
29/04/2022	EAAA006	Stone Marten	<i>Martes foina</i>	1
29/04/2022	EAAA006	Voles	<i>Microtus sp</i>	6

Traces dug by wild boar and bear feces were registered in EAAA008

**Table 124. List of mammals recorded during April in EAAA008**

Date	Route #	Species name English	Species name Latin	Species number
29/04/2022	EAAA008	Wild boar	<i>Sus scrofa</i>	
29/04/2022	EAAA008	Brown bear	<i>Ursus arctos</i>	1

Least weale were seen in EAAA013. Badger feces were found in area.

**Table 125. List of mammals recorded during April in EAAA013**

Date	Route #	Species name English	Species name Latin	Species number
29/04/2022	EAAA013	Badger	<i>Meles meles</i>	1
29/04/2022	EAAA013	Least weasel	<i>Mustela nivalis</i>	1

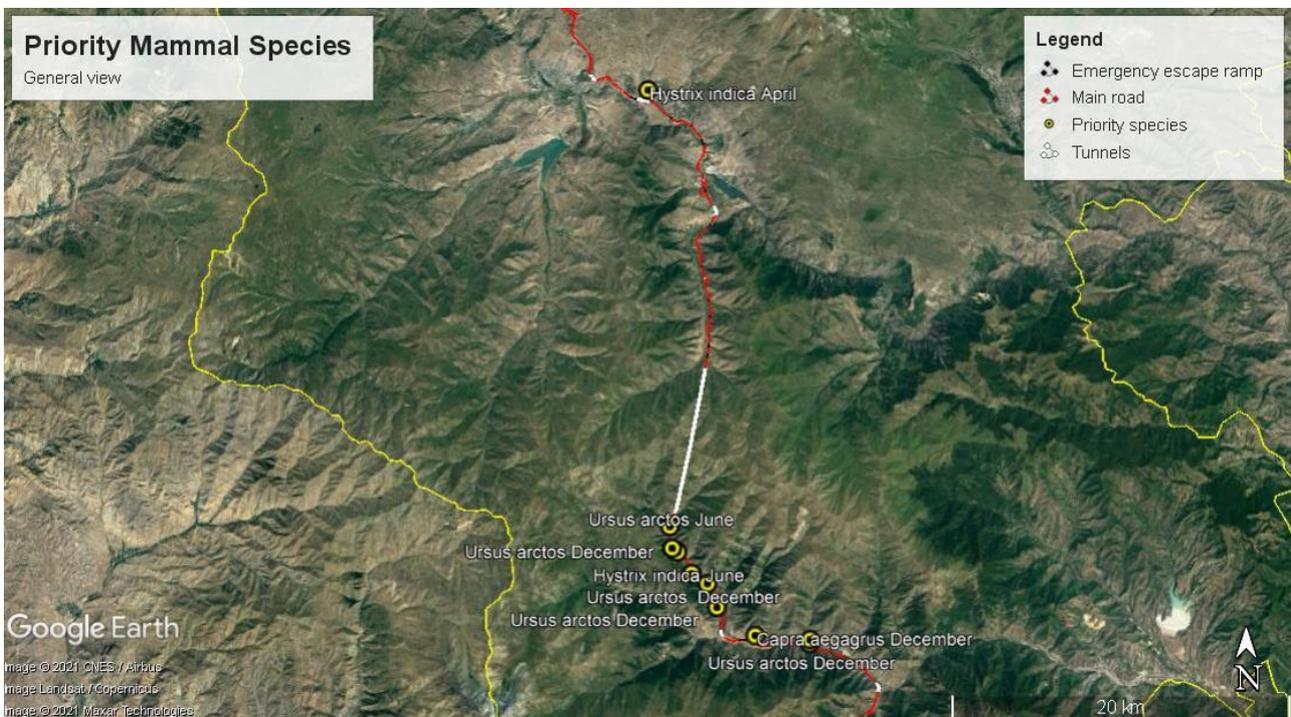
Three species of mammals were recorded in EAAA014. Pallets of bezoar goats were observed. footprints of fox and wolf have found near to reservoir. The level water in Geghi dam was very low and it was possible to walk in a river bank where we have registered footprints.

**Table 126. List of mammals recorded during April in EAAA014**

Date	Route #	Species name English	Species name Latin	Species number
29/04/2022	EAAA014	Bezoar goat	<i>Capra aegagrus</i>	1
29/04/2022	EAAA014	Grey wolf	<i>Canis lupus</i>	1
29/04/2022	EAAA014	Red fox	<i>Vulpes vulpes</i>	1

### Priority species

In total there are 2 priority species recorded in the study area. Those are: *Hystrix indica* and *Ursus arctos*. The spots, where those species have been recorded are shown on the Figure 18.



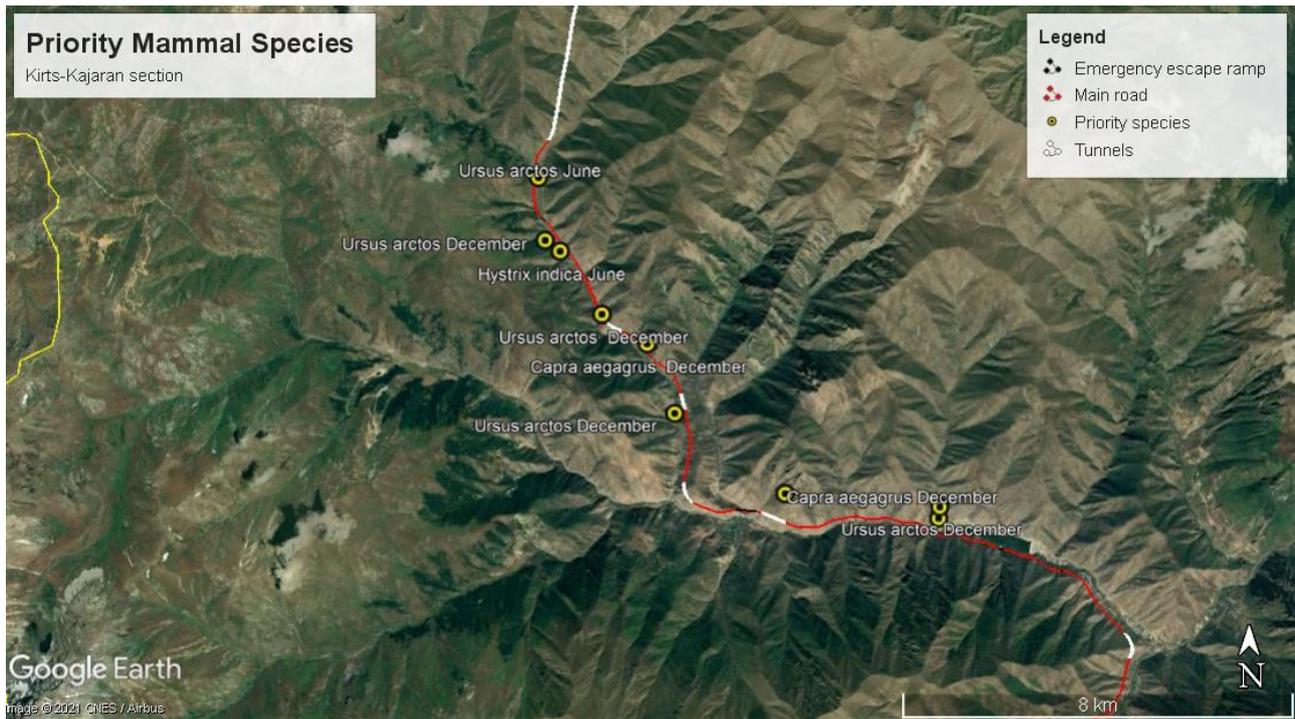


Figure 18. Distribution spots of the priority mammal species

### Potential terrestrial mammals' biodiversity priority features

Below is presented the preliminary list of the potential terrestrial mammals' biodiversity priority features in the study area. This list has been updated through the ESIA process, following the different fieldwork sessions and maps have been realized presenting the observations, habitats use of the Biodiversity priority species.

**Table 127. Synthetic table of terrestrial mammals' biodiversity priority features in the study area**

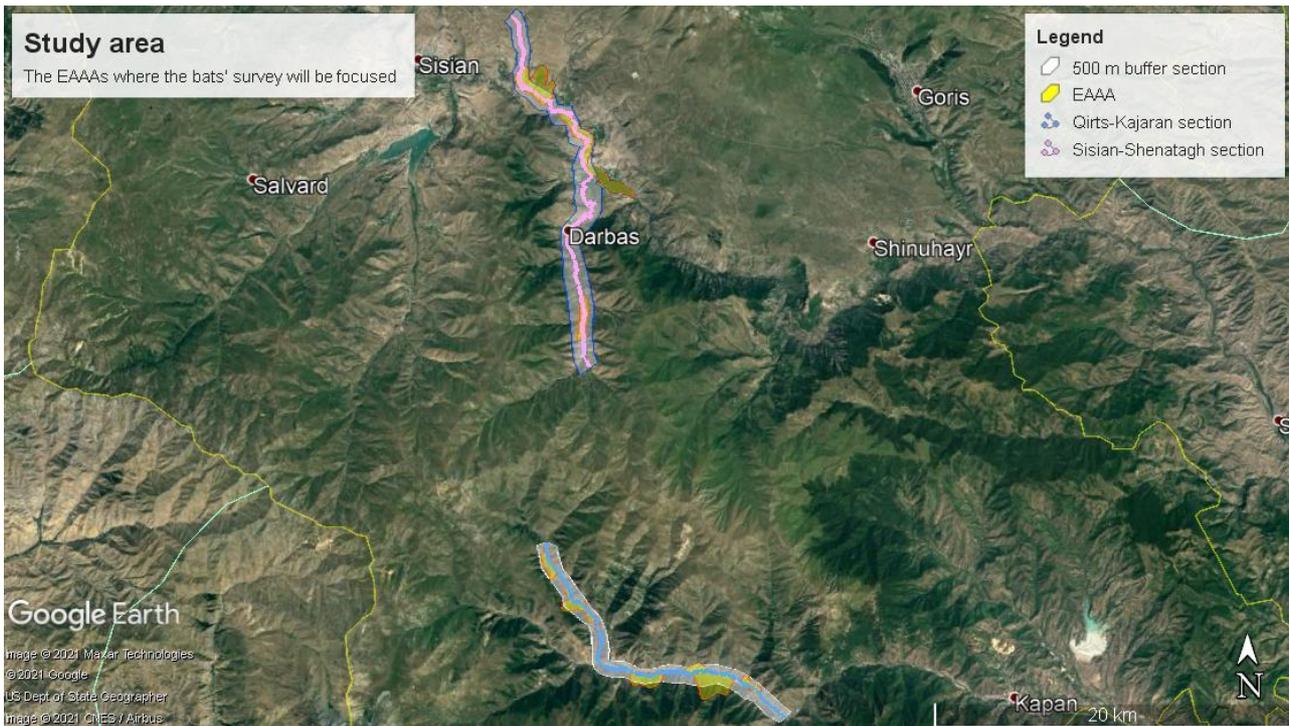
N°	Group	Species			Status			Restricted range/endemism	Site use	Potential location/distribution in the study area
		Species name	Scientific name	Armenian name	IUCN Redlist Status	National Red data book Status	EU Habitat Directive			
1	Erinaceidae	Long-eared hedgehog	<i>Hemiechinus auritus</i>	Լայնական ղոնի	LC	EN B1ab(iii)+2a b(iii)			Foraging/ Breeding	Qirts - Kajaran
2	Soricidae	Transcaucasian water shrew	<i>Neomys teres</i>	Կուտորա / Ջրային սրբնչակ	LC	EN B1a+2a			Foraging/ Breeding	Along the road near to rivers
3	Hystricidae	Indian porcupine	<i>Hystrix indica</i>	Հնդկական վայրենակերպ	LC	VU B2a			Foraging/ Breeding/ Wintering	Along the road
4	Mustellidae	Marbled polecat	<i>Vormella peregusna</i>	Խայտաքիս	VU	VU A2c+B1 b(iii)			Foraging	Semiarid rocky areas
5	Ursidae	Brown bear	<i>Ursus arctos</i>	Գորշ արջ	LC	VU B1 b(iii)			Breeding	Qirts - Kajaran
6	Felidae	Wild cat	<i>Felis silvestris</i>	Անտառային կատու	LC	VU B1ab (iii)			Foraging	Qirts - Kajaran
7	Felidae	Leopard	<i>Pantera pardus saxicolor</i>	Հովազ	NT	CR			Foraging	Qirts - Kajaran
8	Bovidae	Wild goat	<i>Capra aegagrus</i>	Բեզուրյան այծ	VU A2cd	VU			Breeding	Rocks and cliffs
9	Bovidae	Mouflon	<i>Ovis orientalis gmelini</i>	Հայկական մուֆլոն	VU	EN		Caucasus	Breeding	Qirts - Kajaran

## Bats

### Protocols

#### Investigation area:

To determine the value of the Site to rare bat species and to assess the potential effects of the development on bat populations, we will follow the recommendations outlined within Guidelines for Surveillance and Monitoring of European Bats (Battersby *et al.* 2010), and Bat Surveys' Best Practice Guide (Hudt 2012). Therefore, our survey area includes the main possible feeding sites of the bats near aquatic habitats within the identified EAAAs (see Figure 19), and entire open area of the road for identification of the main routes of the bats, when they transfer between resting and feeding areas and the main seasonal migration routes.



**Figure 19.** The EAAAs which potentially include the possible feeding sites of bats

#### Survey methods:

For surveying diversity of the bats in the study area, we will use method of their acoustic detection and identification. Specifically, we will conduct the transect surveys along the constructed road using Manual Bat detectors. The collected data have been used for identification of the bat species diversity and for computation of the bat activity index (BAI), which is estimated as a number of bat sounds recorded within the certain time period (e.g., a night, a month, a season). These bat surveys have been implemented in the good weather conditions. In addition, we will install passive bat detectors (automated bat recorder) and the mist nets near probable feeding areas of bats, usually near water sources (see Figure 20), which will allow to supplement the bat species diversity and to better define bat activity and their use of the riparian and aquatic habitats.

Two locations have been selected for the passive detectors to provide us with the full pattern of bats activity and use of the habitats in feeding areas:

- One spot located in a very arid area
- one spot located near Shamb reservoir with a rich vegetation.

Meanwhile, the main data have been collected via recording by Manual bat detectors along the entire road, providing us with the species diversity and their flying routes in entire study area.

Mist nets used for capturing bats are of 7 m length and 3 m width, they have five shelves and were made by Ecotone, Poland. During night time, nets have been checked continuously. For each captured specimen the

following standard values have been noted: species name, sex, age, some measurements. Bats have been marked with impermanent markers to avoid recapturing.

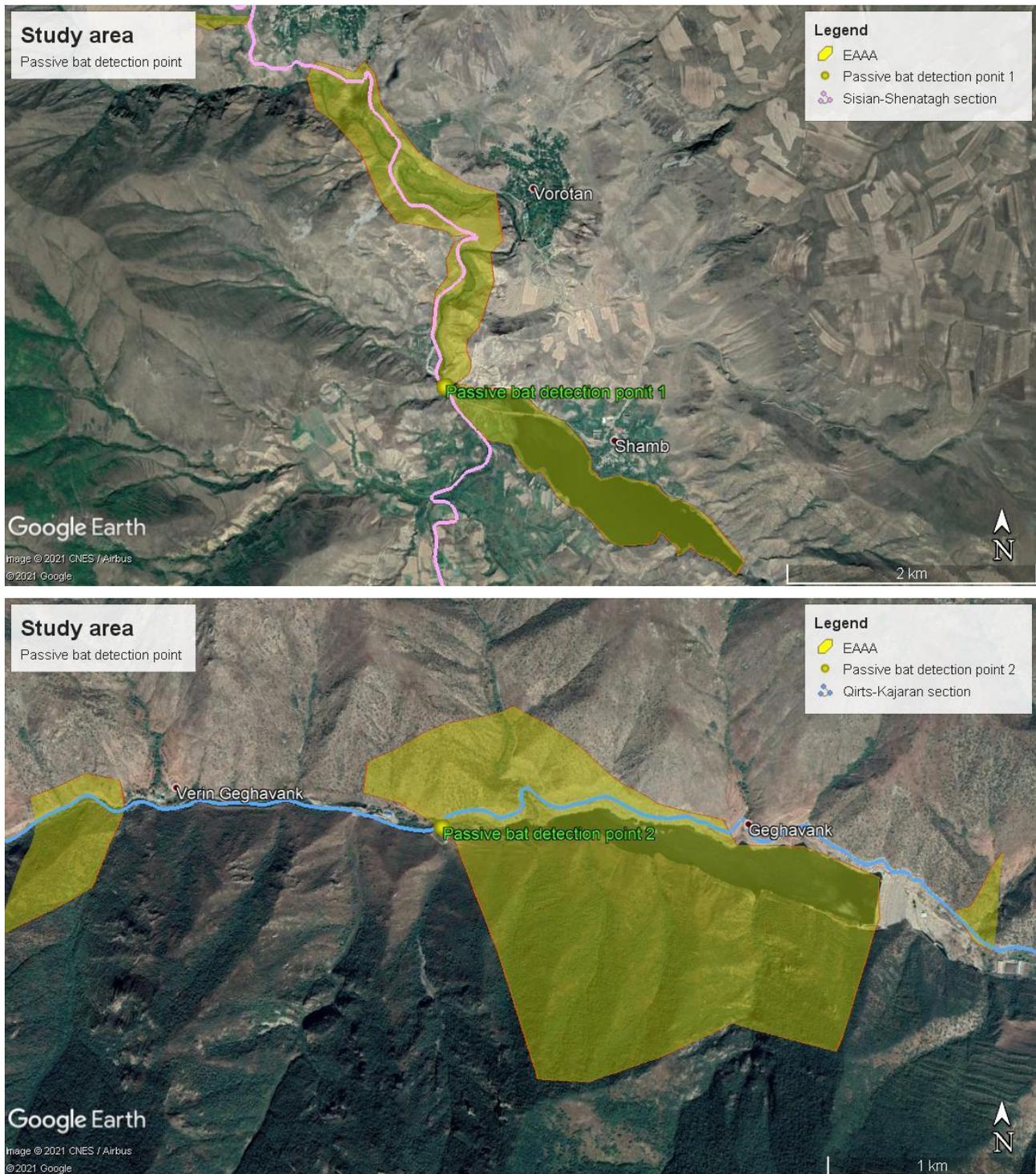


Figure 20. Bat passive detectors' installation points

#### Time and effort of investigation:

Spring and Summer 2021 (April to July) To determine if the site is used by spring migrating bats, and to record the number of bats using the Site during the breeding season, it is recommended that a series of activity surveys are undertaken as outlined below, backed up with automated detector recording. One activity survey should be undertaken monthly between April and July 2021 (inclusive). To compliment these surveys 2-3 consecutive nights of automated detector recording have been undertaken each month. The level of survey

effort outline above is sufficient to determine if the Site constitutes an important location for bats during both the spring and autumn migration periods, and will also determine the numbers and distribution of rare species of bat breeding within the Site. Mitigation to be implemented to prevent impacts to these species have been detailed following the results of the survey work, along with any future monitoring surveys to be undertaken.

Autumn 2021 (mid-August to mid-October) Many species of European and Asian bats migrate, not just over short distances from their summer roosts to their hibernation roosts, but also using regular migration routes covering distances of hundreds of kilometres across regional and national borders. Bats also gather together in large numbers in the autumn at swarming sites, where mating takes place. To determine if the Site is used by autumn migrating bats, it is recommended that a series of activity surveys are undertaken backed up with automated detector recording. One activity survey should be undertaken per month between August and October 2021 (inclusive). The nocturnal bat activity surveys should be carried out in suitable weather conditions (night time air temperature >8°C, dry and little to no wind) over a period of three hours, starting at dusk and continuing for three hours after dusk, or starting three hours before dawn and continuing up until dawn.

It is recommended that transect routes are covered during each survey. The transect routes should be designed to cover the majority of suitable habitats within the Site. Walking along the constructed road have been the main transect.

#### Investigation tools:

GPS, mist nets, smartphone with echo meter touch 2 pro, bat logger C, Bat explorer, Bat detector Pettersson D 240x and standardized protocols.

#### Data analysis methods:

The data analysis will include computation of the densities of various species in the different habitats and analysis of the importance of the various habitats in the life of those bird species.

#### Results for April

There are many rocky mountains with a lot of spots, which could be habitat for several bat species. we did not record any bat activities during April visit. It was too early for bats.

#### Results for June

June is very important month for bats. It is time for breeding. In total 12 species of bats were recorded during fieldwork. Four species were recorded during June in EAAA001. These species are very well distributed in area.

**Table 128. List of bats recorded during June**

Date	Route #	Species name English	Species name Latin	Calls number
6/17/2021	EAAA001	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	17
6/17/2021	EAAA001	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	7
6/17/2021	EAAA001	David's myotis	<i>Myotis davidii</i>	4
6/17/2021	EAAA001	Whiskered bat	<i>Myotis mystacinus</i>	3

4863 records were received via Passive bat detector (BAT logger C) placed near to Shamb reservoir. 1369 records were important and were analysed. 10 species of bats were recorded during a night. All species are well distributed.

**Table 129. List of bats recorded during June**

Date	Route #	Species name English	Species name Latin	Calls number
6/17/2021	EAAA002-EAAA003	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	389
6/17/2021	EAAA002-EAAA003	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	277
6/17/2021	EAAA002-EAAA003	David's myotis	<i>Myotis davidii</i>	189

6/17/2021	EAAA002-EAAA003	Whiskered bat	<i>Myotis mystacinus</i>	219
6/17/2021	EAAA002-EAAA003	Mountain long-eared bat	<i>Plecotus macrobularis</i>	29
6/17/2021	EAAA002-EAAA003	Lesser mouse-eared bat	<i>Myotis blythi</i>	166
6/17/2021	EAAA002-EAAA003	Geoffroy's, bat	<i>Myotis emarginatus</i>	57
6/17/2021	EAAA002-EAAA003	Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	8
6/17/2021	EAAA002-EAAA003	Savi's pipistrelle	<i>Hypsugo savii</i>	19
6/17/2021	EAAA002-EAAA003	Daubento's bat	<i>Myotis daubentoni</i>	16

There were no bat records in EAAA004, EAAA 005, EAAA006 EAAA 008-011, EAAA012.

Only two bat species were recorded in EAAA007 and EAAA013.

**Table 130. List of bats recorded during June**

Date	Route #	Species name English	Species name Latin	Calls number
6/19/2021	EAAA007	Mountain long-eared bat	<i>Plecotus macrobularis</i>	3
6/19/2021	EAAA007	Lesser mouse-eared bat	<i>Myotis blythi</i>	11

**Table 131. List of bats recorded during June**

Date	Route #	Species name English	Species name Latin	Calls number
6/20/2021	EAAA013	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	19
6/20/2021	EAAA013	Lesser mouse-eared bat	<i>Myotis blythi</i>	7

The second place were passive bat detector were places in Geghi reservoir (EAAA 014). 1295 records were analysed and 11 species of bats were identified.

**Table 132. List of bats recorded during June**

Date	Route #	Species name English	Species name Latin	Calls number
6/20/2021	EAAA014	Lesser mouse-eared bat	<i>Myotis blythi</i>	149
6/20/2021	EAAA014	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	468
6/20/2021	EAAA014	David's myotis	<i>Myotis davidii</i>	59
6/20/2021	EAAA014	Whiskered bat	<i>Myotis mystacinus</i>	95
6/20/2021	EAAA014	Mountain long-earedbat	<i>Plecotus macrobularis</i>	64
6/20/2021	EAAA014	Lesser mouse-eared bat	<i>Myotis blythi</i>	285
6/20/2021	EAAA014	Geoffroy's, bat	<i>Myotis emarginatus</i>	67
6/20/2021	EAAA014	Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	18
6/20/2021	EAAA014	Greater horeshoe bat	<i>Rhinolophus ferrumequinum</i>	27
6/20/2021	EAAA014	Savi's pipistrelle	<i>Hypsugo savii</i>	16
6/20/2021	EAAA014	Daubento's bat	<i>Myotis daubentoni</i>	47

5 species of bats were recorded in EAAA015.

Kuhl's pipistrelle, Common pipistrelle and Lesser mouse-eared bat bat wrer recorde almost everywhere.

**Table 133. List of bats recorded during June**

Date	Route #	Species name English	Species name Latin	Calls number
6/20/2021	EAAA015	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	11
6/20/2021	EAAA015	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	16

6/20/2021	EAAA015	Whiskered bat	<i>Myotis mystacinus</i>	7
6/20/2021	EAAA015	Mountain long-eared bat	<i>Plecots macrobularis</i>	1
6/20/2021	EAAA015	Lesser mouse-eared bat	<i>Myotis blythi</i>	8

### Results for July

Dates 30 Jul - 31 Aug

In total 12 species of bats were recorded during the fieldwork.

Four species were recorded during this field survey in EAAA001. These species are very well distributed in area.

**Table 134. List of bats recorded during July-August**

Date	Route #	Species name English	Species name Latin	Calls number
7/30/2021	EAAA001	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	36
7/30/2021	EAAA001	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	21
7/30/2021	EAAA001	David's myotis	<i>Myotis davidii</i>	16
7/30/2021	EAAA001	Geoffroy's bat	<i>Myotis emarginatus</i>	3

8349 records were done by Passive bat detector (BAT logger C) placed near to Shamb reservoir. 2495 records were important and were analysed. 12 species of bats were recorded during a night. All species are well distributed.

**Table 135. List of bats recorded during July-August in EAA 002-003**

Date	Route #	Species name English	Species name Latin	Calls number
7/30/2021	EAAA002-EAAA003	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	468
7/30/2021	EAAA002-EAAA003	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	357
7/30/2021	EAAA002-EAAA003	David's myotis	<i>Myotis davidii</i>	122
7/30/2021	EAAA002-EAAA003	Whiskered bat	<i>Myotis mystacinus</i>	378
7/30/2021	EAAA002-EAAA003	Mountain long-eared bat	<i>Plecotus macrobularis</i>	12
7/30/2021	EAAA002-EAAA003	Lesser mouse-eared bat	<i>Myotis blythi</i>	110
7/30/2021	EAAA002-EAAA003	Geoffroy's, bat	<i>Myotis emarginatus</i>	21
7/30/2021	EAAA002-EAAA003	Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	2
7/30/2021	EAAA002-EAAA003	Savi's pipistrelle	<i>Hypsugo savii</i>	6
7/30/2021	EAAA002-EAAA003	Daubenton's bat	<i>Myotis daubentoni</i>	59
7/30/2021	EAAA002-EAAA003	Particoloured bat	<i>Vespertilio murinus</i>	12
7/30/2021	EAAA002-EAAA003	Serotine bat	<i>Eptesicus serotinus</i>	9

There were 5 species of bats registered in EAAA004.

**Table 136. List of bats recorded during July-August in EAA 004**

Date	Route #	Species name English	Species name Latin	Calls number
7/30/2021	EAAA004	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	3
7/30/2021	EAAA004	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	6
7/30/2021	EAAA004	David's myotis	<i>Myotis davidii</i>	12

7/30/2021	EAAA004	Geoffroy's, bat	<i>Myotis emarginatus</i>	2
7/30/2021	EAAA004	Savi's pipistrelle	<i>Hypsugo savii</i>	1

There were no bat records in EAAA005 and EAAA007

There were only 3 species of bats registered in EAAA006

**Table 137. List of bats recorded during July-August in EAA 006**

Date	Route #	Species name English	Species name Latin	Calls number
7/31/2021	EAAA006	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	5
7/31/2021	EAAA006	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	2
7/31/2021	EAAA006	David's myotis	<i>Myotis davidii</i>	3

6 species of bats were recorded in EAAA008-011.

**Table 138. List of bats recorded during July-August in EAA 008-011**

Date	Route #	Species name English	Species name Latin	Calls number
8/01/2021	EAAA008-011	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	11
8/01/2021	EAAA008-011	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	6
8/01/2021	EAAA008-011	Mountain long-eared bat	<i>Plecotus macrobularis</i>	2
8/01/2021	EAAA008-011	Lesser mouse-eared bat	<i>Myotis blythi</i>	9
8/01/2021	EAAA008-011	Geoffroy's, bat	<i>Myotis emarginatus</i>	3
8/01/2021	EAAA008-011	David's myotis	<i>Myotis davidii</i>	8

The activity of bats in EAAA 012 and EAAA 013 were low.

**Table 139. List of bats recorded during July-August in EAA 012**

Date	Route #	Species name English	Species name Latin	Calls number
8/01/2021	EAAA012	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	5
8/01/2021	EAAA012	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	1
8/01/2021	EAAA012	David's myotis	<i>Myotis davidii</i>	2

Five species of bats were registered in EAAA 013. The activity of bats in this area were low.

**Table 140. List of bats recorded during July-August in EAA 013**

Date	Route #	Species name English	Species name Latin	Calls number
8/02/2021	EAAA013	Mountain long-eared bat	<i>Plecotus macrobularis</i>	3
8/02/2021	EAAA013	Lesser mouse-eared bat	<i>Myotis blythi</i>	4
8/02/2021	EAAA013	David's myotis	<i>Myotis davidii</i>	2
8/02/2021	EAAA013	Savi's pipistrelle	<i>Hypsugo savii</i>	1
8/02/2021	EAAA013	Particoloured bat	<i>Vespertilio murinus</i>	2

The second place were passive bat detector were places in Geghi reservoir (EAAA 014). 3756 records were analysed and 10 species of bats were identified.

**Table 141. List of bats recorded during July-August in EAA 014-015**

Date	Route #	Species name English	Species name Latin	Calls number
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8/02/2021	EAAA014-015	Lesser mouse-eared bat	<i>Myotis blythi</i>	19
8/02/2021	EAAA014-015	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	421
8/02/2021	EAAA014	David's myotis	<i>Myotis davidii</i>	124
8/02/2021	EAAA014	Whiskered bat	<i>Myotis mystacinus</i>	27
8/02/2021	EAAA014	Mountain long-eared bat	<i>Plecotus macrobularis</i>	11
8/02/2021	EAAA014	Geoffroy's, bat	<i>Myotis emarginatus</i>	37
8/02/2021	EAAA014	Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	10
8/02/2021	EAAA014	Greater horseshoe bat	<i>Rhinolophus ferrumequinum</i>	11
8/02/2021	EAAA014-015	Savi's pipistrelle	<i>Hypsugo savii</i>	38
8/02/2021	EAAA014	Daubenton's bat	<i>Myotis daubentoni</i>	78

3 species of bats were recorded in EAAA015.

Kuhl's pipistrelle, Common pipistrelle and Lesser mouse-eared bat were recorded almost everywhere.

### Results for April

Dates 27-30 April 2022

In total 3 species of bats were recorded during the fieldwork.

Two genus of bats (*Pipistrellu sp* and *Myotis sp*) were recorded during field survey in EAAA001.

These species are very well distributed in area.

**Table 142. List of bats recorded during April 2022**

Date	Route #	Species name English	Species name Latin	Calls number
27/04/2021	EAAA001	Mouse-eared bats	<i>Myotis sp</i>	
27/04/2021	EAAA001	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	

128 calls were recorded by Manual bat detector. 3 species of bats were recorded during a night. All species are well distributed. The feces and also 7 individuals of lesser mouse-eared bats were observed in Vorotnavanq.

**Table 143. List of bats recorded during April 2022 in EAAA-002-003**

Date	Route #	Species name English	Species name Latin	Calls number
27/04/2022	EAAA002-EAAA003	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	8
27/04/2022	EAAA002-EAAA003	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	3
7/30/2021	EAAA002-EAAA003	Lesser mouse-eared bat	<i>Myotis blythi</i>	7 individuals

Only 3 species of bats registered in EAAA004.

**Table 144. List of bats recorded during April 2022 in EAAA-004**

Date	Route #	Species name English	Species name Latin	Calls number
27/04/2022	EAAA004	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	1
27/04/2022	EAAA004	Kuhl's pipistrelle	<i>Pipistrellus kuhli</i>	2
27/04/2022	EAAA004	Mouse eared bats	<i>Myotis sp</i>	1

There were only one bat flying in Shenatagh village on 27.04.2022. It was common pipistrelle.

**Table 145. List of bats recorded during April 2022 in EAAA-005**

Date	Route #	Species name English	Species name Latin	Calls number
27/04/2022	EAAA005	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	1

There were no bat records in EAAA006 and EAAA0014 due to weather conditions.

### Priority species

None of the priority bat species have been recorded in the study area during the survey period.

#### Additional remarks

Also, the areas allocated for potential waste sites, aimed for the construction waste, have been surveyed. Almost all selected areas are natural with low human influence. The dam waste 007 and 008 should not be considered as the areas for construction waste. The 007 dam waste is a very important area for bezoar goats and other wildlife. A few years ago, mouflons were found nearby. During the construction works of the Kitsk-Karut-Geghi section, most of the animals will most probably move to the nearby gorge due to noise, where the area of 007 dam waste is located. We propose to use the area under the Geghi water reservoir/dam as an area for construction waste, which has already been modified and will not have much effect on the animals. At the same time the construction waste could possibly be used for strengthening of the water reservoir/dam base.

During our meeting with Arman Mkrtchyan, director of the Zangezur Biosphere he suggested contacting the Ministry of Defense to use construction waste as a means of fortifying border areas.

On other matter, there is a necessity for developing green bridges in the area. The Figure below presents the places where it is possible to build the passages for wild animals. The choice of these bridges was made on the following reasons:

- Animal registrations
- Results of joint discussion with the staff of the Zangezur biosphere
- Results of camera traps

These passages can be either green bridges or wide passageways-tunnels.



**Figure 21. Possible locations for the green bridges**

### Potential bats biodiversity priority features

Below is presented the preliminary list of the potential bats' biodiversity priority features in the study area.

This list have been updated through the ESIA process, following the different fieldwork sessions and maps have been realized presenting the observations, habitats use of the Biodiversity priority species.

**Table 146. Synthetic table of bats' biodiversity priority features in the study area**

N°	Group	Species			Status			Restricted range/endemism	Site use	Potential location/distribution in the study area
		Species name	Scientific name	Armenian name	IUCN Redlist Status	National Red data book Status	EU Habitat Directive			
1	Bats	Mediterranean horseshoe bat	<i>Rhinolophus euryale</i>	Հարավային պայտաքիթ	NT	VU B1ab+2a			Foraging	Qirts- Kajaran
2	Bats	Blasius's horseshoe bat	<i>Rhinolophus blassi</i>	Բալդիուսի պայտաքիթ	LC	EN B1a+2a			Foraging	Qirts- Kajaran
3	Bats	Caspian barbastelle bat	<i>Barbastella caspica (leucomelas)</i>	Կասպիական լայնականջ	LC	VU B1ab (iii)			Foraging	
4	Bats	Schreiber's bat, common bent-winged bat	<i>Miniopterus schreibersii</i>	Մովորական երկարաթև	NT	VU B1ab (iii)+2ab(iii)			Foraging	Sisian Shenatagh

## Reptiles

### Protocols

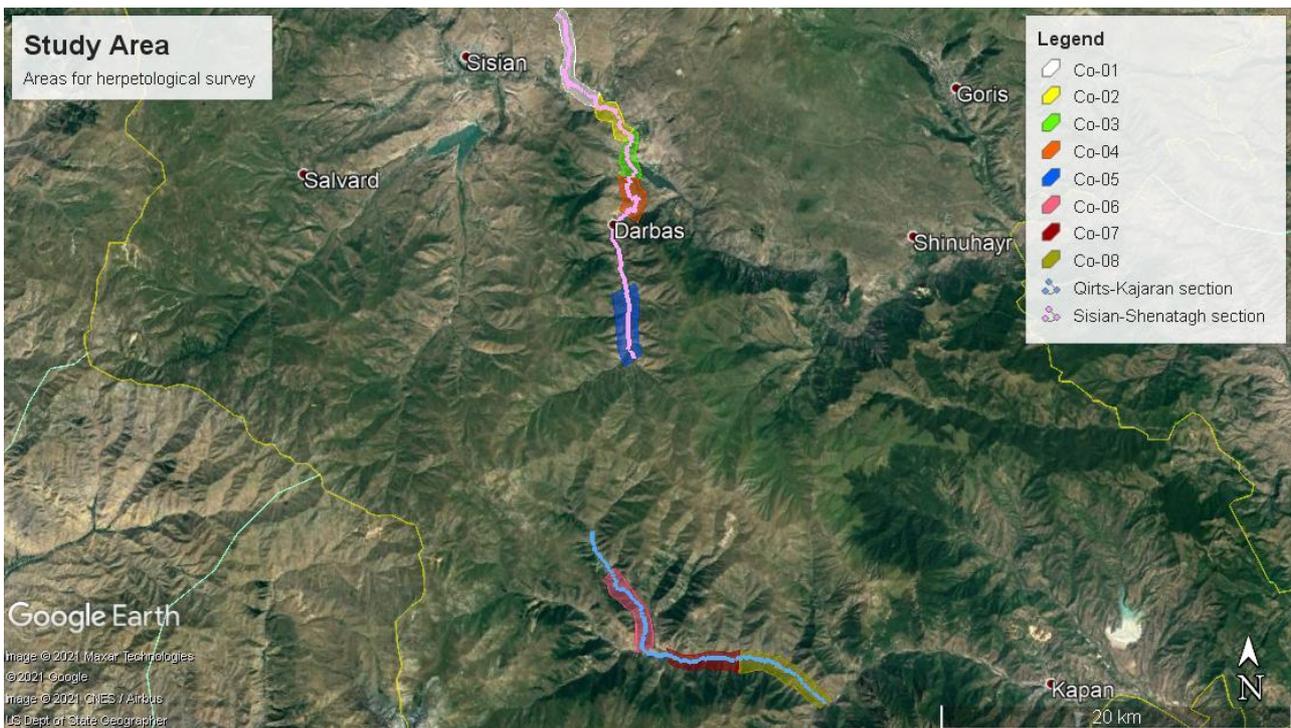
#### Investigation area:

The previous studies show that we have to expect 53 species of reptiles in the study area, including seven species recorded in the Red Books of Armenia and the IUCN Red List. The species can breed in some specific habitats within the area of potential influence of the road, as well as can migrate through the road at some stages of their life-cycle. Taking that into consideration, we define the study area within the 500 m buffer zone at each side of the proposed road, as the road can have various types of the influence: physical footprint, effluents, and emissions. Therefore, the following areas are proposed for being investigated:

1. The entire road itself (see Figure 22). Here we divide the section Sisian-Shenatax up to the beginning of the tunnel into five sections of lengths 2 and 3 km. These are:
  - a. the beginning of the road to Shenatax up to the village of Vagatin - 2 km.
  - b. from Vagatin along the road in the direction of the Shamb reservoir - 3 km.
  - c. from the previous point up to the Shamb reservoir - 2 km.
  - d. from the Shamb reservoir to the village of Darbas - 2 km.
  - e. from Darbas to Shenatax (up to the entrance into the tunnel) - 2 km.

The section from Qirts to the M2 road junction (Kajaran) have been divided into three 3 km sections. These are:

- f. from Qirts to the village of Gexi - 3 km.
  - g. from Gexi village to the Gexavanq reservoir - 3 km.
  - h. from the Gexavanq reservoir to the M2 road (Kajaran) - 3 km
2. All types of the habitat within the 500 m buffer zone from proposed road have been surveyed additionally. They include: mountain steppe, subalpine meadows, juniper woodland, deciduous woodland, riparian scrubs and woodland. Based on the given natural habitats the following 14 preliminary ecologically appropriate areas of analysis (preliminary EAAAs) have been identified (see Figures 23-24) and the sampling areas have been set up in a way to reflect the core of EAAAs (see Figure 25). These sampling sites also represent transects of 1-3 km long (see Figures 26-27).



**Figure 22. Sections of the proposed road to be surveyed for identification of reptiles' migration**

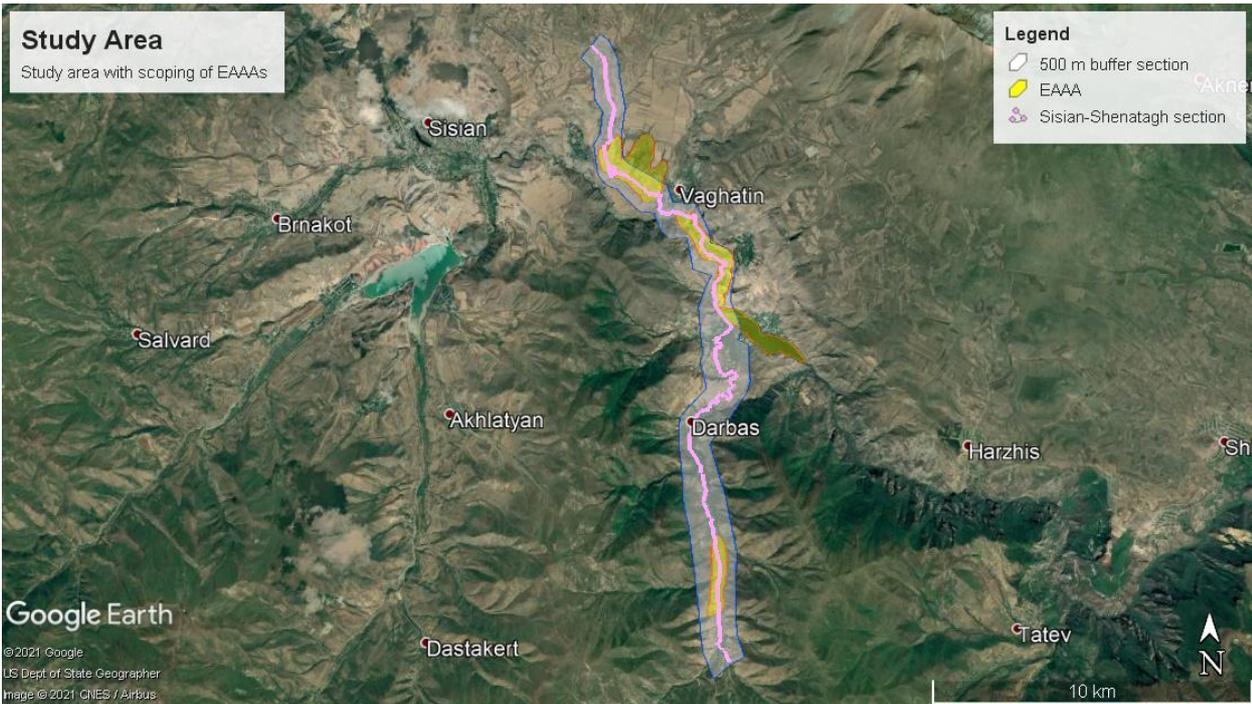


Figure 23. The preliminary EAAAs of the section Sisian-Shenatagh

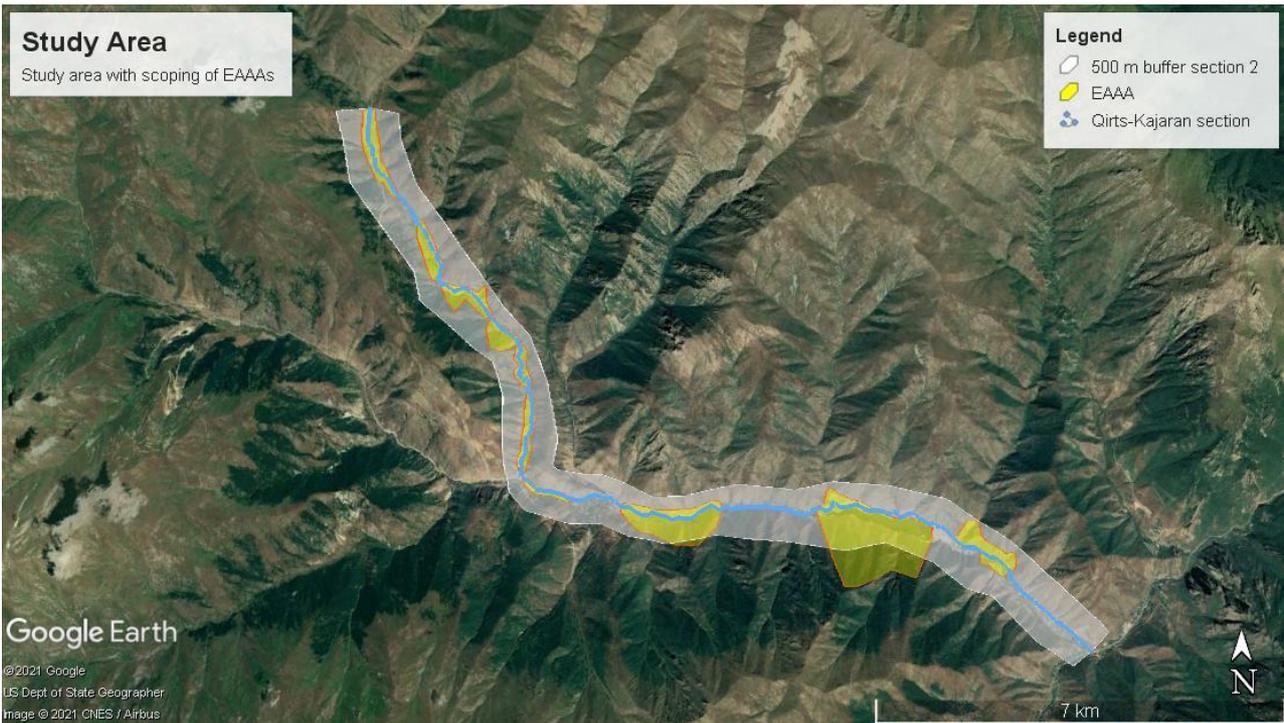


Figure 24. The preliminary EAAAs of the section Kirts-Kajaran



**Figure 25. The preliminary EAAAs and the sampling sites**

#### Survey methods:

Studies of the herpetofauna have been conducted in accordance to the common methods (Darevsky, 1967 [RUS]; Danielyan, 1972; Arakelyan and Danielyan, 2011; Arakelyan and Danielyan, 2012; Danielyan and Arakelyan, 2016).

The main purpose of the data collection is to clarify the species composition and identifying the commonly-found species for this region, as well as studying the rare, endemic and red-listed species in the specified area.

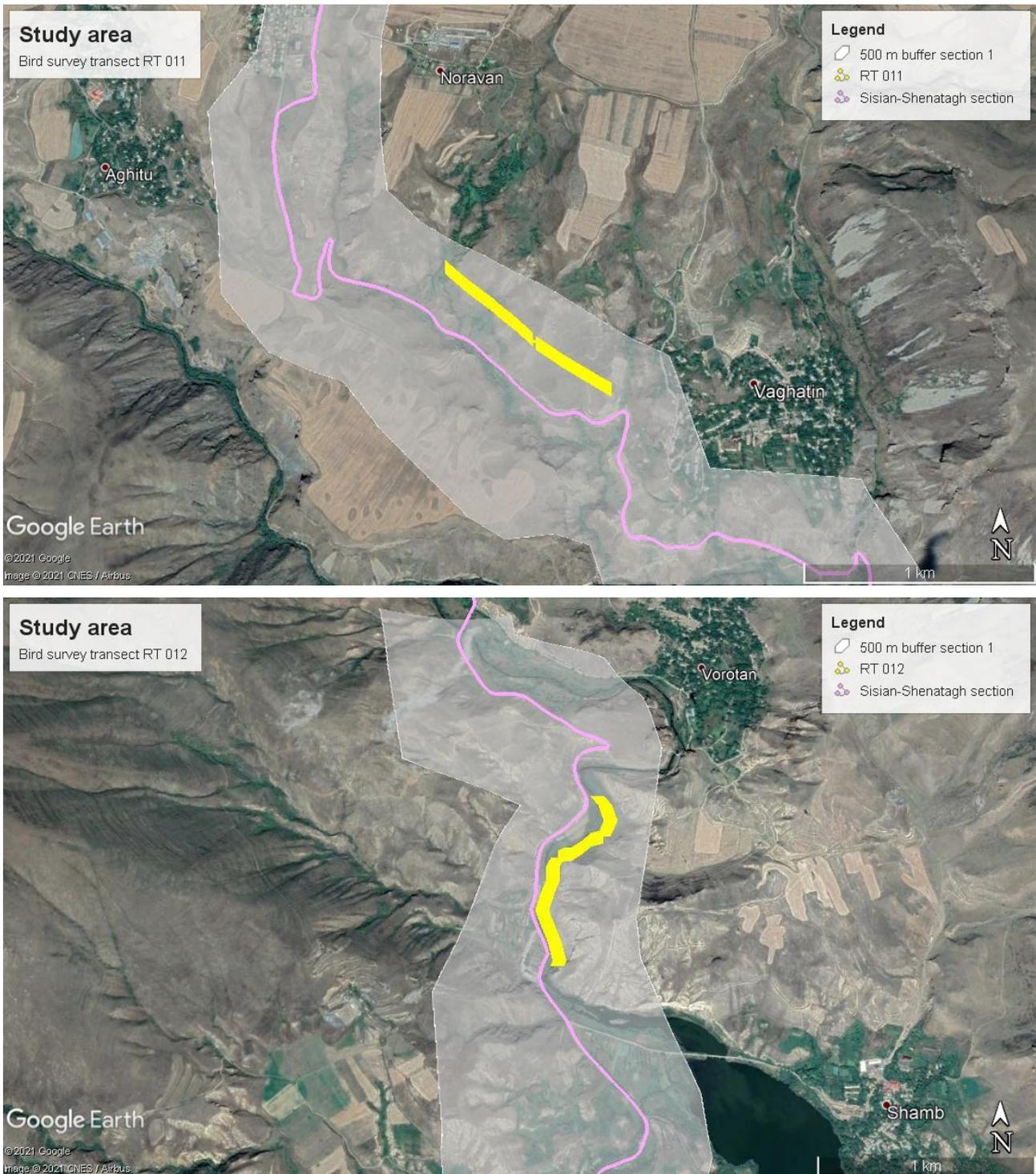
The data collected should reflect:

- species composition of the reptilian fauna in the study areas;
- total number of animals, habitats by species and families, food supplies;
- daily and seasonal behaviour, transition and migration paths of the animals and their causes;
- breeding and wintering sites;
- presence of endemic, rare and endangered species;
- exposure of animals to anthropogenic influence.

Observation of reptiles have been done by transect survey. Animals encountered and locations of their permanent shelters have been recorded with GPS devices.

A field protocol has been filed for each species, indicating species, sex, age of the animal, its localization, biotope, time and weather of encounter. If possible, the animals have been photographed.

Reptiles mostly venture to the surface in sunny weather in the morning and in the evening, when there is an opportunity to warm themselves on the rocks. Because of this, it is necessary to take into account that in view of the late start of fieldwork, important information on the reproduction of animals, which can be collected only in springtime, have been hardly possible to gather.



**Figure 26. Examples of the transects in mountain steppes and riparian scrubs and woodlands**

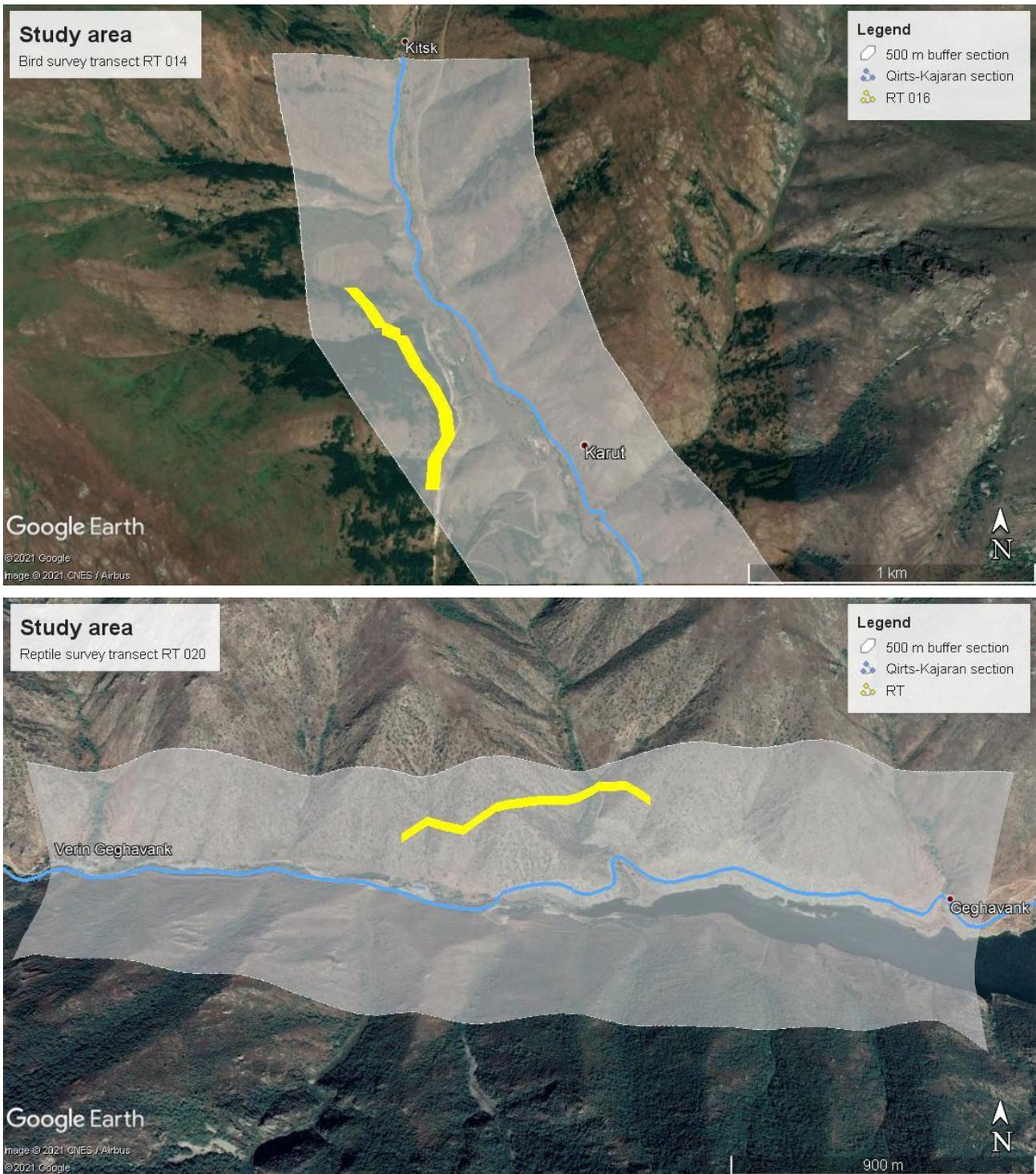


Figure 27. Examples of the transects in deciduous and juniper woodlands

The main characteristics of the transects located along the road are presented in Table 146. They are totalling with the length in 17 km.

Table 147. Characters of the major routes

Route code	Length	Section	Study aspects
Co-01	2 km	Sisian-Shenatax	Activity, migration, numbers, breeding, wintering
Co-02	2 km	Sisian-Shenatax	Activity, migration, numbers, breeding, wintering

Co-03	1 km	Sisian-Shenatax	Activity, migration, numbers, breeding, wintering
Co-04	2 km	Sisian-Shenatax	Activity, migration, numbers, breeding, wintering
Co-05	1 km	Sisian-Shenatax	Activity, migration, numbers, breeding, wintering
Co-06	3 km	Qirts-Kajaran	Activity, migration, numbers, breeding, wintering
Co-07	3 km	Qirts-Kajaran	Activity, migration, numbers, breeding, wintering
Co-08	3 km	Qirts-Kajaran	Activity, migration, numbers, breeding, wintering

Collected data have been entered into standardized protocol and after finish of the field work have been inputted into database.

#### Time and effort of investigation<sup>2</sup> :

The state of the herpetofauna at each site have been surveyed over the course of three seasons: in spring, after the animals emerge from wintering, in summer, during the breeding season, and in autumn, when the animals prepare for wintering.

#### Investigation tools:

GPS, telescopic stick with loop, binocular, photo camera, snake-catching stick, and standardized protocols.

#### Data analysis methods:

The data analysis will include computation of the densities of various species in the different habitats and analysis of the importance of the various habitats in the life of those bird species.

### Results for June

The herpetofauna was poorly represented in all investigated areas during this period. Mostly there were single individuals of common species, which are numerous in this region and are found everywhere.

In our opinion, the main reason for the low number of reptiles was the incredibly hot weather throughout Armenia in the first half of June this year. It is known that in normal sunny weather reptiles typically surface in the morning and evening during which time they warm themselves on the rocks. But when the air temperature reaches 37<sup>0</sup>-38<sup>0</sup> degrees (and it reaches even greater heights directly on the surface of the land) the reptiles go into summer hibernation. In this regard, it is necessary to consider in view of the late start of field work that collecting crucial information on the numbers and reproduction of the animals (which can only be collected in spring, after the reptiles have come out of hibernation and prepare for reproduction) will be difficult.

We observed several individuals of green lizards *L. strigata* and *L. media* in the grass, and several rock lizards *D. raddei*, as well as *L. caucasica*, were observed on rock complexes and on coastal and roadside rocks. These mostly hid beneath the rocks - it was noticeable that most of the lizards had entered summered hibernation due to the heat. In the valley of the Vorotan river, several individuals of the species *L. caucasica*, *N. tessellata*, and *Macrovipera lebetina* were observed near the water, while on the southern slope of the Bargushat range, at an altitude of 2045 m above sea level near the tunnel exit, under piles of stone (for the first time in this area!) was recorded the Armenian steppe viper - *Vipera erivanensis* (this is a red-listed species of Armenia). On the slopes of this ridge, as well as in the river valley, they met *L. strigata*, *L. caucasica*, *D. raddei*.

EAAA 001

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<sup>2</sup> Yearly (e.g. end of June/July) and during the day (e.g. at dusk and night after rain)

In total there are 3 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock-associated species. The reptiles have been widely using the rocky areas, which lay along the road and the riparian zone. The full list of the birds is presented in Table 147.

**Table 148. List of reptiles recorded during June**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
17.06.2021	CO-01	Raddea rock lizard	<i>Darevskia raddei</i>	9
17.06.2021	CO-01	Caucasian agama	<i>Laudakia caucasica</i>	6
17.06.2021	CO-01	Striped green lizard	<i>Lacerta strigata</i>	5

EAAA 002-003

In total there are 6 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock-associated species. The reptiles have been widely using the riparian areas. The full list of the birds is presented in Table 148.

**Table 149. List of reptiles recorded during June**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
17.06.2021	CO-02	Medium lizard	<i>Lacerta media</i>	2
17.06.2021	CO-02	Water already	<i>Natrix tessellata</i>	1
17.06.2021	CO-02	Raddea rock lizard	<i>Darevskia raddei</i>	4
17.06.2021	CO-02	Caucasian agama	<i>Lacerta strigata</i>	2
17.06.2021	CO-03	Water already	<i>Natrix tessellata</i>	4
17.06.2021	CO-03	Caucasian gyurza	<i>Macrovipera lebetina</i>	1
17.06.2021	CO-03	Transcaucasian snake	<i>Zamenis hohenackeri</i>	1
17.06.2021	CO-03	Raddea rock lizard	<i>Darevskia raddei</i>	6

EAAA is not defined

In total there are 3 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock-associated species. The full list of the birds is presented in Table 149.

**Table 150. List of reptiles recorded during June**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
18.06.2021	CO-04	Caucasian agama	<i>Laudakia caucasica</i>	3
18.06.2021	CO-04	Striped green lizard Green strigata lizard	<i>Lacerta strigata</i>	3
18.06.2021	CO-04	Caucasian agama	<i>Laudakia caucasica</i>	2

EAAA 004

In total there are 2 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock associated species. The full list of the birds is presented in Table 150.

**Table 151. List of reptiles recorded during June**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
19.06.2021	CO-05	Raddea rock lizard	<i>Darevskia raddei</i>	4

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
19.06.2021	CO-05	Caucasian agama	<i>Laudakia caucasica</i>	2

EAAA 006

In total there is 1 species of reptiles recorded in this area, and is presented in Table 151.

**Table 152. List of reptiles recorded during June**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
19.06.2021	CO-09	Mountain steppe viper	<i>Vipera erevanensis</i>	1

EAAA 007-009

In total there is 1 species of reptiles recorded in this area, and is presented in Table 152.

**Table 153. List of reptiles recorded during June**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
19.06.2021	CO-06	Medium lizard	<i>Lacerta media</i>	1

EAAA 010-012

In total there is 1 species of reptiles recorded in this area, and is presented in Table 153.

**Table 154. List of reptiles recorded during June**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
20.06.2021	CO-06	Medium lizard	<i>Lacerta media</i>	1

EAAA 013

In total there is 1 species of reptiles recorded in this area, and is presented in Table 154.

**Table 155. List of reptiles recorded during June**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
20.06.2021	CO-07	Raddea rock lizard	<i>Darevskia raddei</i>	4

EAAA 014-015

In total there are 2 species of birds recorded in this area. The bird fauna is mainly represented by juniper woodland species and the species of riparian zone. The birds are mainly using the forested patches for breeding and for feeding. The full list of the birds is presented in Table 155.

**Table 156. List of reptiles recorded during June**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
20.06.2021	CO-08	Raddea rock lizard	<i>Darevskia raddei</i>	2
20.06.2021	CO-08	Caucasian agama	<i>Laudakia caucasica</i>	1

## Results for July

Dates 30 Jul - 31 Aug

The herpetofauna was steel poorly represented in the investigated areas, although better than in June.

EAAA 001

In total there are 4 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock-associated species. The reptiles have been widely using the rocky areas, which lay along the road and the riparian zone. The full list of the birds is presented in Table 156.

**Table 157. List of reptiles recorded during July**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
30.07.2021	CO-01	Raddea rock lizard	<i>Darevskia raddei</i>	11
30.07.2021	CO-01	Caucasian agama	<i>Laudakia caucasica</i>	8
30.07.2021	CO-01	Striped green lizard	<i>Lacerta strigata</i>	4
30.07.2021	CO-01	Medium lizard	<i>Lacerta media</i>	2

EAAA 002-003

In total there are 4 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock-associated species. The reptiles have been widely using the riparian areas. The full list of the birds is presented in Table 157.

**Table 158. List of reptiles recorded during July**

Date	Route#	Species name Eng (selectfrom list)	Species name Lat (selectfrom list)	Species number
30.07.2021	CO-02	Medium lizard	<i>Lacerta media</i>	1
30.07.2021	CO-02	Water already	<i>Natrix tesselata</i>	1
30.07.2021	CO-02	Raddea rock lizard	<i>Darevskia raddei</i>	6
30.07.2021	CO-02	Caucasian agama	<i>Laudakia caucasica</i>	4
30.07.2021	CO-03	Water already	<i>Natrix tesselata</i>	2
30.07.2021	CO-03	Raddea rock lizard	<i>Darevskia raddei</i>	6
30.07.2021	CO-03	Medium lizard	<i>Lacerta media</i>	2

EAAA is not defined

In total there are 2 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock-associated species. The full list of the birds is presented in Table 158.

**Table 159. List of reptiles recorded during July**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
30.07.2021	CO-04	Caucasian agama	<i>Laudakia caucasica</i>	4
30.07.2021	CO-04	Striped green lizard	<i>Lacerta strigata</i>	8

EAAA 004

In total there are 2 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock associated species. The full list of the birds is presented in Table 159.

**Table 160. List of reptiles recorded during July**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
30.07.2021	CO-05	Raddea rock lizard	<i>Darevskia raddei</i>	4
30.07.2021	CO-05	Caucasian agama	<i>Laudakia caucasica</i>	2

EAAA 006

In total there are 2 species of reptiles recorded in this area, and is presented in Table 160.

**Table 161. List of reptiles recorded during July**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
31.07.2021	CO-09	Raddea rock lizard	<i>Darevskia raddei</i>	2
31.07.2021	CO-09	Medium lizard	<i>Lacerta media</i>	1

EAAA 007-009

In total there are 2 species of reptiles recorded in this area, and is presented in Table 161.

**Table 162. List of reptiles recorded during July**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
31.01.2021	CO-06	Medium lizard	<i>Lacerta media</i>	1
31.01.2021	CO-06	Raddea rock lizard	<i>Darevskia raddei</i>	2

EAAA 010-012

In total there are 3 species of reptiles recorded in this area, and is presented in Table 162.

**Table 163. List of reptiles recorded during July**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
1.08.2021	CO-06	Medium lizard	<i>Lacerta media</i>	3
1.08.2021	CO-06	Raddea rock lizard	<i>Darevskia raddei</i>	4
1.08.2021	CO-06	Caucasian agama	<i>Laudakia caucasica</i>	1

EAAA 013

In total there is 1 species of reptiles recorded in this area, and is presented in Table 163.

**Table 164. List of reptiles recorded during July**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
2.08.2021	CO-07	Raddea rock lizard	<i>Darevskia raddei</i>	3

EAAA 014-015

In total there are 2 species of reptiles recorded in this area, and they are presented in Table 164.

**Table 165. List of reptiles recorded during July**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
2.08.2021	CO-08	Raddea rock lizard	<i>Darevskia raddei</i>	5
20.06.2021	CO-08	Caucasian agama	<i>Laudakia caucasica</i>	2

**Results for November**

Dates: 4-7 November, 2021

In different areas of Armenia the reptiles start to go to hibernation (bromating) from September until November and coming up from hibernation starting from March. It influenced in some extent the observed fauna of the reptiles, as most of those were the species, which hibernate later than the others.

EAAA 001

In total there are 3 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock-associated species. The reptiles have been widely using the rocky areas, which lay along the road and the riparian zone.

**Table 166. List of reptiles recorded during early November**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
11/4/2021	CO-01	Raddei rock lizard	<i>Darevskia raddei</i>	2
11/4/2021	CO-01	Caucasian agama	<i>Laudakia caucasica</i>	1
11/4/2021	CO-01	Medium lizard	<i>Lacerta media</i>	1

EAAA 002-003

In total there are 4 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock-associated species. The reptiles have been widely using the riparian areas.

**Table 167. List of reptiles recorded early November**

Date	Route#	Species name Eng (selectfrom list)	Species name Lat (selectfrom list)	Species number
11/4/2021	CO-02	Medium lizard	<i>Lacerta media</i>	1
11/4/2021	CO-02	Raddea rock lizard	<i>Darevskia raddei</i>	1
11/4/2021	CO-02	Caucasian agama	<i>Laudakia caucasica</i>	1
11/4/2021	CO-03	Dice snake	<i>Natrix tessellata</i>	1

EAAA 004

In total there are 1 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock associated species.

**Table 168. List of reptiles recorded early November**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
11/4/2021	CO-05	Raddea rock lizard	<i>Darevskia raddei</i>	1

EAAA 006

In total there is 1 species of reptiles recorded in this area.

**Table 169. List of reptiles recorded early November**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
11/5/2021	CO-06	Dice snake	<i>Natrix tessellata</i>	1

EAAA 007-009

In total there is 1 species of reptiles recorded in this area.

**Table 170. List of reptiles recorded early November**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
11/5/2021	CO-06	Medium lizard	<i>Lacerta media</i>	1

EAAA 010-012

In total there is 0 species of reptiles recorded in this area.

**Table 171. List of reptiles recorded early November**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
11/6/2021	CO-06			0
11/6/2021	CO-06			0
11/6/2021	CO-06			0

EAAA 013

In total there is 1 species of reptiles recorded in this area.

**Table 172. List of reptiles recorded early November**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
11/6/2021	CO-07	Raddea rock lizard	<i>Darevskia raddei</i>	1

EAAA 014-016

In total there are 2 species of reptiles recorded in this area.

**Table 173. List of reptiles recorded early November**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
11/7/2021	CO-08	Raddea rock lizard	<i>Darevskia raddei</i>	1
11/7/2021	CO-08	Caucasian agama	<i>Laudakia caucasica</i>	1

### Results for May

Dates: 6-10 May, 2022

In different areas of Armenia the reptiles starts to go out from hibernation sites since April-May. Therefore, connected to that argument in our investigation areas we have seen the reptiles not very often in May because it was still cool weather.

EAAA 001

In total there are 3 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock-associated species. The reptiles have been widely using the rocky areas, which lay along the road and the riparian zone.

**Table 174. List of reptiles recorded during May**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat(selectfrom list)	Species number
06.05.2022	CO-01	Raddei rock lizard	<i>Darevskia raddei</i>	4
06.05.2022	CO-01	Caucasian agama	<i>Laudakia caucasica</i>	2
06.05.2022	CO-01	Striped green lizard	<i>Lacerta strigata</i>	2

EAAA 002-003

In total there are 5 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock-associated species. The reptiles have been widely using the riparian areas.

**Table 175. List of reptiles recorded during May**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
07.05.2022	CO-02	Medium lizard	<i>Lacerta media</i>	2
07.05.2022	CO-02	Raddei rock lizard	<i>Darevskia raddei</i>	3
07.05.2021	CO-02	Caucasian agama	<i>Laudakia caucasica</i>	2
07.05.2021	CO-03	Dice snake	<i>Natrix tessellata</i>	2
07.05.2021	CO-03	Transcaucasian snake	<i>Zamenis hohenackeri</i>	1
07.05.2021	CO-03	Raddei rock lizard	<i>Darevskia raddei</i>	4

EAAA 004

In total there are 3 species of reptiles recorded in this area. The reptile fauna is mainly represented by steppe and rock associated species. The list of the reptiles is presented in Table 175.

**Table 176. List of reptiles recorded during May**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
08.05.2022	CO-04	Striped green lizard Green strigata lizard	<i>Lacerta strigata</i>	2
08.08.2022	CO-05	Raddea rock lizard	<i>Darevskia raddei</i>	3
08.05.2022	CO-05	Caucasian agama	<i>Laudakia caucasica</i>	1

EAAA 006

In total there is 1 species of reptiles recorded in this area.

**Table 177. List of reptiles recorded during May**

Date	Route#	SpeciesnameEng(selectfro m list)	Speciesname Lat(selectfrom list)	Species number
08.05.2022	CO-06	Dice snake	<i>Natrix tessellata</i>	1

EAAA 007-009

In total there is 1 specie of reptiles recorded in this area.

**Table 178. List of reptiles recorded during May**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
08.05.2022	CO-06	Medium lizard	<i>Lacerta media</i>	1

EAAA 010-012

In total there is 1 specie of reptiles recorded in this area.

**Table 179. List of reptiles recorded during May**

Date	Route#	SpeciesnameEng(selectfro m list)	Speciesname Lat(selectfrom list)	Species number
09.05.2022	CO-06	Medium lizard	<i>Lacerta media</i>	1

EAAA 013

In total there is 1 species of reptiles recorded in this area, and is presented in Table 179.

**Table 180. List of reptiles recorded during May**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
09.05.2022	CO-07	Raddea rock lizard	<i>Darevskia raddei</i>	2

EAAA 014-015

In total there are 2 species of reptiles recorded in this area (Table 180).

**Table 181. List of reptiles recorded during May**

Date	Route#	SpeciesnameEng (selectfrom list)	Speciesname Lat (selectfrom list)	Species number
10.05.2022	CO-08	Raddea rock lizard	<i>Darevskia raddei</i>	2
10.05.2022	CO-08	Caucasian agama	<i>Laudakia caucasica</i>	1

### Priority species

In total there are 2 priority species recorded in the study area. Those are: *Zamenis hohenackeri* and *Vipera erevanensis*. The spots, where those species have been recorded are shown on the Figure 28.

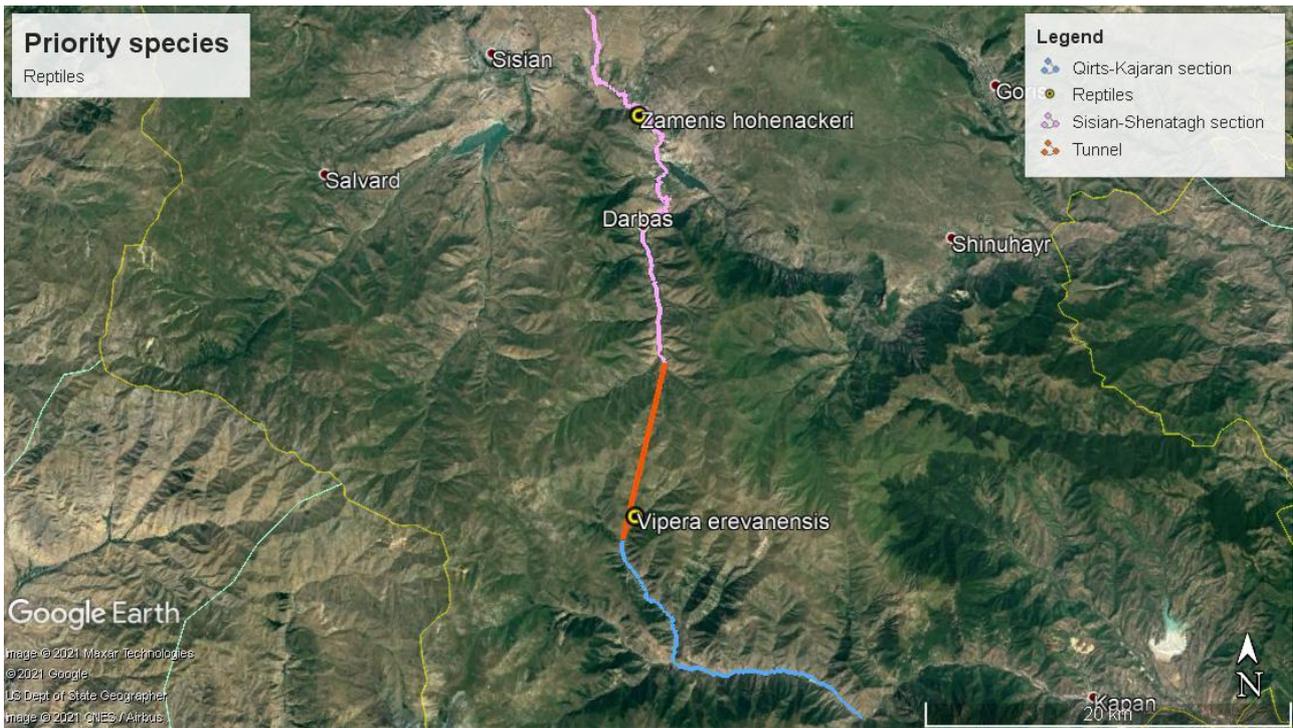


Figure 28. Distribution spots of the priority reptile species

### Potential reptiles' biodiversity priority features

Below is presented the preliminary list of the potential reptiles' biodiversity priority features in the study area. This list have been updated through the ESIA process, following the different fieldwork sessions and maps have been realized presenting the observations, habitats use of the Biodiversity priority species.

**Table 182. Synthetic table of reptiles' biodiversity priority features in the study area**

N°	Family	Species			Status			Restricted-range/endemism	Site use	Potential location/distribution in the study area
		Species name	Scientific name	Armenian name	IUCN Redlist Status	National Red data book Status	International status			
1	Viperidae	Armenian steppe viper	Vipera (Pelias) eriwanensis	Հայկական լեռնատափաստանային իծ	VU	VU		Yes		EAAA 006, feeding,
2	Colubridae	Schneider's skink	Eumeces schneideri	Երկարատու սցինկ	-	VU		Yes		
3	Colubridae	Cat snake	Telescopus fallax	Կովկասյան Կատվաօձ	LC	VU B 1ab (iii)		Yes		
4	Colubridae	Transcaucasian rat snake	Zamenis hohenackeri	Անդրկովկասյան սահնօձ	LC	VU B 1ab (iii)				
5	Viperidae	Radde's viper	Macrovipera raddei	Ռադդեի իծ	NT	VU B 1a+2b (iii). 2cd;)				
6	Testudinidae	Mediterranean turtle	Testudo greaca	Միջերկրածովյան կրիա	VU	VU A2cd; B1a+2ab (iii)				

## Amphibians

### Protocols

#### Investigation area:

Amphibians are somewhat different from the other animals as they have two clearly different stages: one related to their breeding and development of their larval stage in the water body and further distribution and migration, which can be as in aquatic and as in terrestrial habitats. Therefore, the collection of the data on amphibians have been aimed not just at revealing of their species diversity and relative abundance, but also at their use of the road and its outskirts during various phenological stages. Taking the described above into consideration we are defining the study area as including the main water bodies (with appropriate EAAAs) and the road with its close outskirts (see Figures 29, 30, and 31).

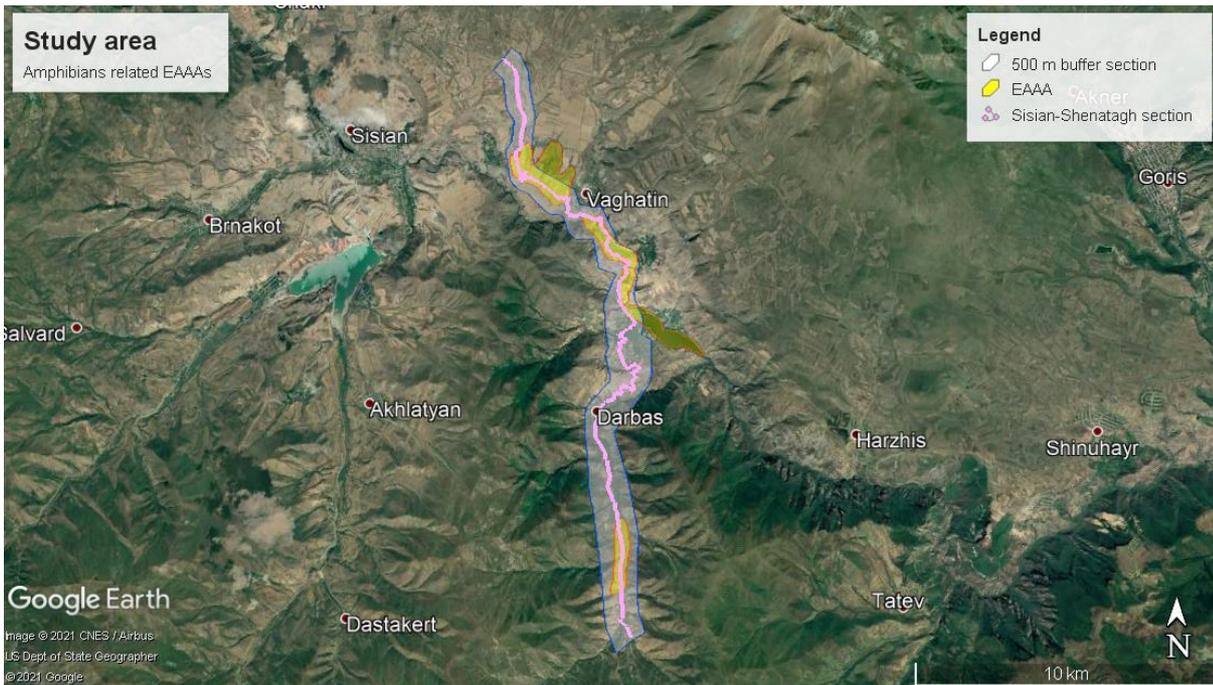
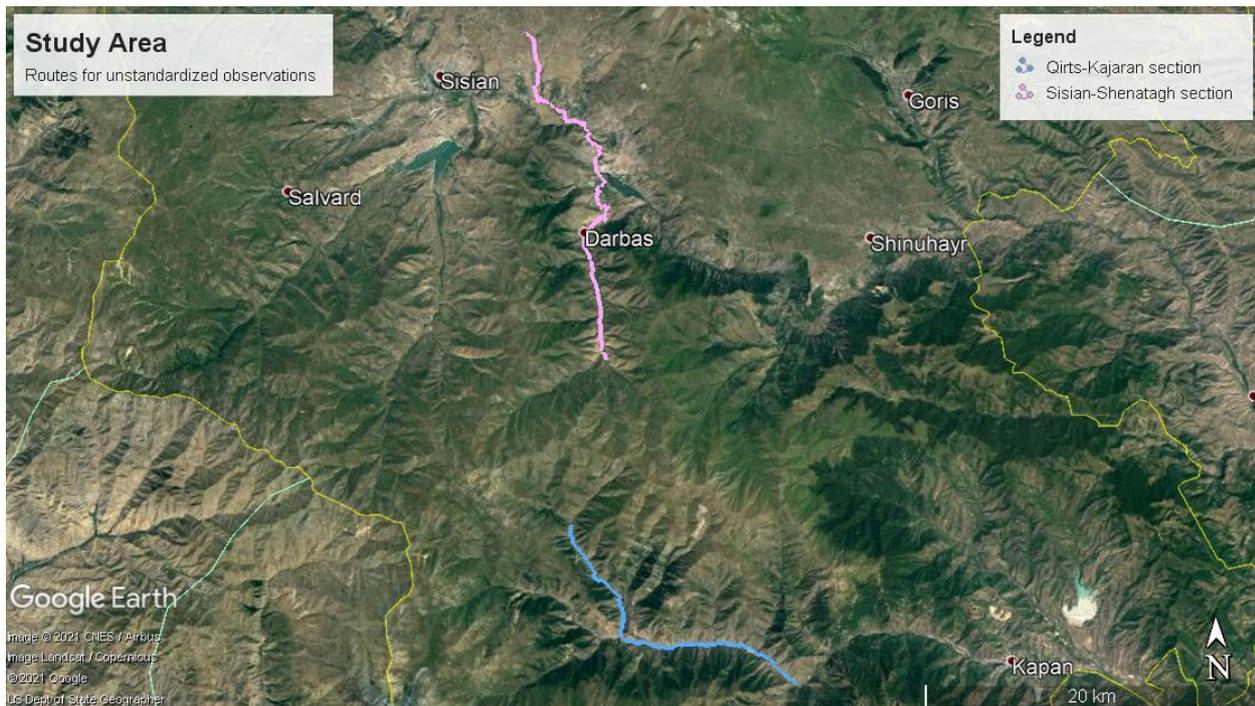


Figure 29. The preliminary EAAAs which are related to the amphibians in the section Sisian-Shenatagh



**Figure 30. The preliminary EAAAs which are related to the amphibians in the section Qirts-Kajaran**



**Figure 31. The main roads where the surveys of amphibians have been implemented**

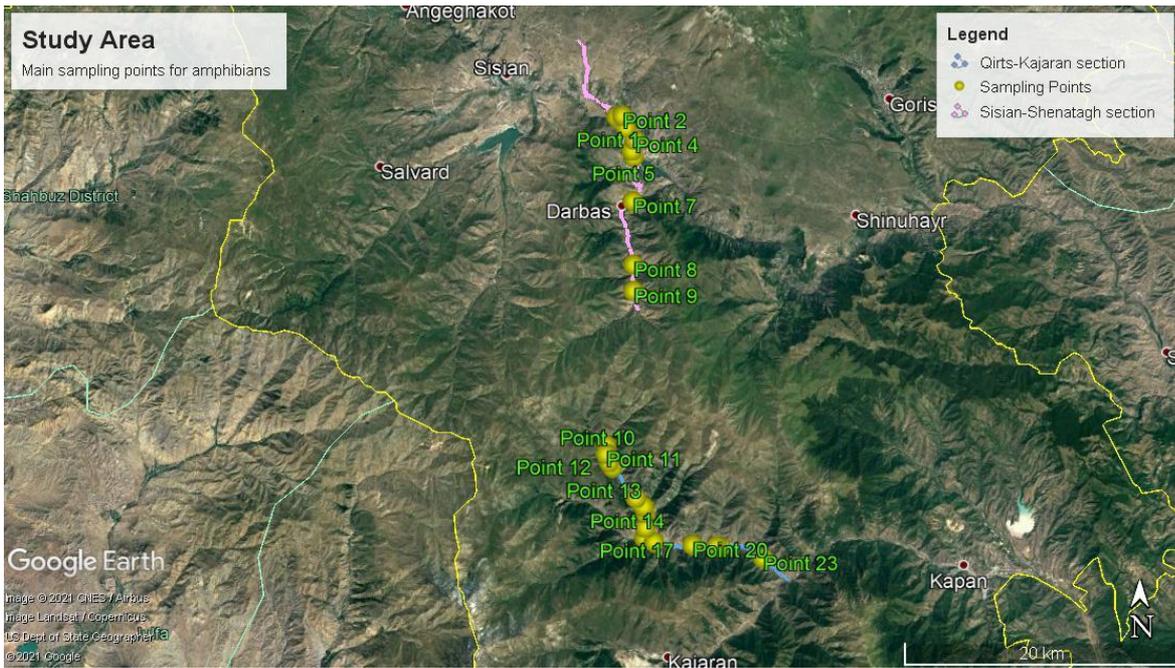
#### Survey methods:

The data on amphibia have been obtained from two different types of observations:

1. Identification of the species composition and relative number of amphibians at the main water bodies, namely: reservoirs, puddles, rivers and streams. For this purpose, the water bodies have been visited and all the specimens of amphibia have been examined, the species have been identified, and number of all the species have been counted and recorded in the protocols. Those surveys have been implemented at 23 points, where the road can potentially influence the river bodies (see Figure 32).
2. Recording of the main phenological phenomena of the active period of these amphibia: general activity, reproduction, metamorphosis, transition to terrestrial life. For this purpose, we will record activity of the specimens at the water bodies, as well as will do night transects (see Figure 33) along the road to record the migration of the amphibia species on the road and its close outskirts.

The surveys are somewhat different in the different seasons:

- During late May and early June, the species and number of amphibians of the selected areas have been counted in the breeding places. Their daily activities will also be recorded.
- During late June to July, the studies will continue in the same places for recording of the next stages of amphibian breeding.
- During August we will record the metamorphosis of amphibians' tadpoles, as well as their emergence.

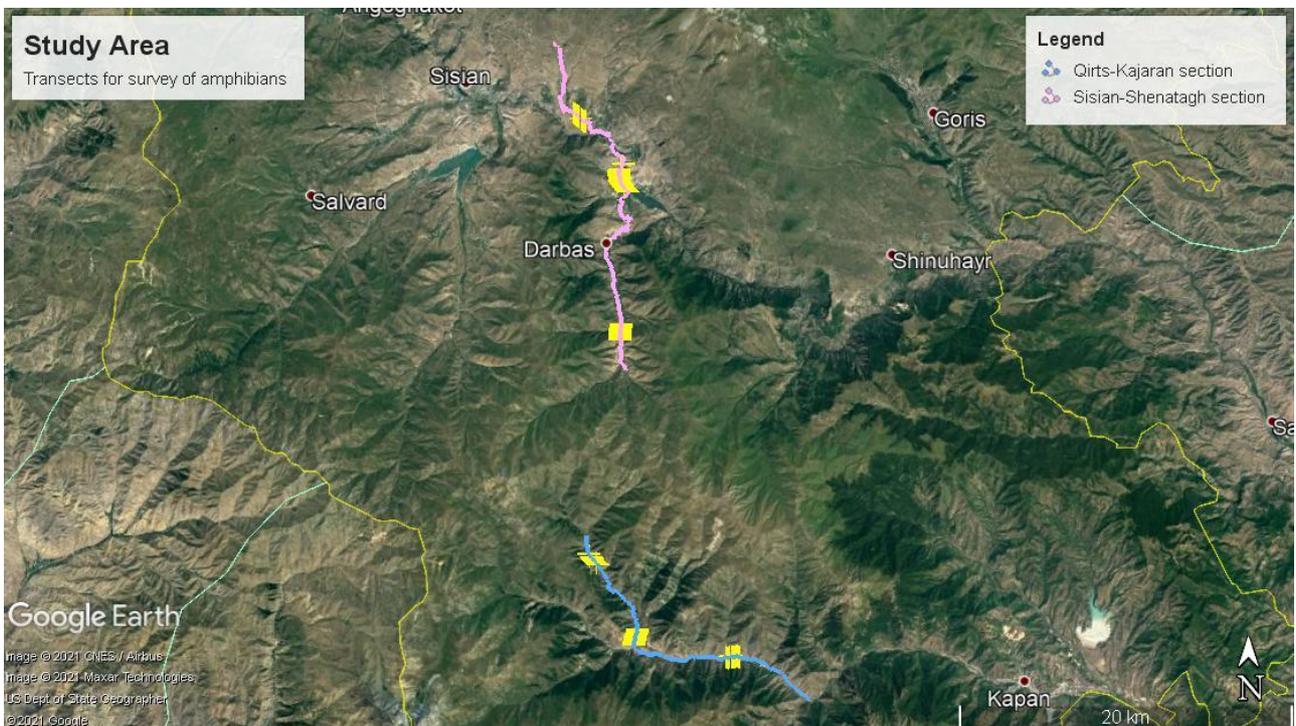


**Figure 32. Sampling sites of amphibians**

The observations have been made during the day and night, in order to determine all the species of amphibians in the project areas. In addition, hand-fishing nets have been used for aquatic species capture, as well as the night capture cones have been placed in the ground at their inhabiting places. Also, the possible hiding places of amphibia under rocks, fallen tree trunks and natural holes have been observed.

In order to determine the tadpole growth and their emergence timing, the monitoring have been conducted in the reservoirs selected for the study of peculiarities and metamorphosis of amphibian development.

Generally, the species determination of adult amphibians has been done using identification guide of Arakelyan et al., (2011), and that of tadpoles by Kuzmin (2012).



**Figure 33. Transects for survey of amphibians**

The main characteristics of the transects are presented in the Table 182) totalling with the length in 12 km.

**Table 183. Major characters of the transects**

Code of Route	Length	Section	Season	Closest Main Habitat
AST 001	1 km	Sisian-Shenatagh	Spring, Summer	Mountain steppe
AST 002	2 km	Sisian-Shenatagh	Spring, Summer	Riparian scrubs and woodlands
AST 003	1 km	Sisian-Shenatagh	Spring, Summer	Mountain steppe
AST 004	1 km	Kirts-Kajaran	Spring, Summer	Deciduous woodland
AST 005	1 km	Kirts-Kajaran	Spring, Summer	Juniper woodland
AST 006	1 km	Kirts-Kajaran	Spring, Summer	Juniper woodland

Collected data have been entered into standardized protocol and after finish of the field work have been inputted into database.

#### Time and effort of investigation<sup>3</sup> :

In total, 18 days of field observations have been carried out, of which 4 days in May, 6 days in June, the further planned are 4 days in July, and 4 days in August.

#### Investigation tools:

GPS Garmin, net, night-light, and standardized protocols.

#### Data analysis methods:

The data analysis will include computation of the densities of various species in the different habitats and analysis of the importance of the various habitats in the life of those bird species.

#### Results for June

Each EAAA was surveyed in the coastal and adjacent rivers, ponds, and reservoirs up to 15 m. In each case, a 120-150 m long coastal area was selected and the number of amphibians observed in that area was calculated. In some cases, when the studies did not yield results or there were unfavorable conditions, surveys were conducted with the local people.

EAAA 002

In total there was a one species of amphibia recorded in this EAAA.

**Table 184. List of amphibians recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/17/2021	1	Marsh frog	<i>Pelophylax ridibundus</i>	27
6/17/2021	2	Absent	-	-
6/17/2021	3	Marsh frog	<i>Pelophylax ridibundus</i>	1
6/17/2021	4	Marsh frog	<i>Pelophylax ridibundus</i>	2
6/17/2021	5	Marsh frog	<i>Pelophylax ridibundus</i>	14
6/17/2021	6	Marsh frog	<i>Pelophylax ridibundus</i>	2

EAAA is not defined, but the survey was conducted

According to surveys conducted with local people, there are two types of amphibians

**Table 185. List of amphibians recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/17/2021	7	Marsh frog	<i>Pelophylax ridibundus</i>	?

<sup>3</sup> Yearly (e.g. end of June/July) and during the day (e.g. at dusk and night after rain)

6/17/2021	7	Long-legged wood frog	<i>Rana macrocnemis</i>	?
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EAAA 004

In total there are 2 species of amphibia recorded in this EAAA.

**Table 186. List of amphibians recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/18/2021	8	Marsh frog	<i>Pelophylax ridibundus</i>	1
		Long-legged wood frog	<i>Rana macrocnemis</i>	3
6/18/2021	9	Long-legged wood frog	<i>Rana macrocnemis</i>	1+18*

\*- One adult and 18 tadpoles, 3-3.5 cm long, were found in Point 9, inhabiting a small, about 60 m<sup>2</sup> shallow pond near the Loradzor River

EAAA 006

In total there are one species of amphibia recorded in this EAAA.

**Table 187. List of amphibians recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/18/2021	10	Long-legged wood frog	<i>Rana macrocnemis</i>	1
6/18/2021	11	Long-legged wood frog	<i>Rana macrocnemis</i>	*
6/18/2021	12	Long-legged wood frog	<i>Rana macrocnemis</i>	*
6/18/2021	13	Long-legged wood frog	<i>Rana macrocnemis</i>	2

\*- Species availability data are based on surveys conducted with the local people.

EAAA 008

In total there are one species of amphibia recorded in this EAAA.

**Table 188. List of amphibians recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/19/2021	14	Long-legged wood frog	<i>Rana macrocnemis</i>	2

EAAA 010-012

In total there are one species of amphibia recorded in this EAAA.

**Table 189. List of amphibians recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/19/2021	15	Long-legged wood frog	<i>Rana macrocnemis</i>	*
6/19/2021	16	Long-legged wood frog	<i>Rana macrocnemis</i>	2
6/19/2021	17	Long-legged wood frog	<i>Rana macrocnemis</i>	*
6/19/2021	18	Long-legged wood frog	<i>Rana macrocnemis</i>	*
6/19/2021	19	Long-legged wood frog	<i>Rana macrocnemis</i>	*

\*- Species availability data are based on surveys conducted with the local people.

EAAA 013

In total there are one species of amphibia recorded in this EAAA.

**Table 190. List of amphibians recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
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6/20/2021	20	Long-legged wood frog	<i>Rana macrocnemis</i>	*
6/20/2021	20	Marsh frog	<i>Pelophylax ridibundus</i>	*

\*- Species availability data are based on surveys conducted with the local people.

EAAA 014-015

In total there are 2 species of amphibia recorded in this EAAA.

**Table 191. List of amphibians recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/20/2021	21	Long-legged wood frog	<i>Rana macrocnemis</i>	*
6/20/2021	21	Marsh frog	<i>Pelophylax ridibundus</i>	*
6/20/2021	22	Marsh frog	<i>Pelophylax ridibundus</i>	*
6/20/2021	23	Marsh frog	<i>Pelophylax ridibundus</i>	*

\*- Species availability data are based on surveys conducted with the local people.

### Results for July

Each EAAA was surveyed in the coastal and adjacent rivers, ponds, and reservoirs up to 15 m. In each case, a 120-150 m long coastal area was selected and the number of amphibians observed in that area was calculated. In some cases, when the studies did not yield results or there were unfavorable conditions, surveys were conducted with the local people.

EAAA 002

In total there was a one species of amphibia recorded in this EAAA.

**Table 192. List of amphibians recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
7/30/2021	1	Marsh frog	<i>Pelophylax ridibundus</i>	12
7/30/2021	2	Absent	-	-
7/30/2021	3	Absent	-	-
7/30/2021	4	Absent	-	-
7/30/2021	5	Marsh frog	<i>Pelophylax ridibundus</i>	4
7/30/2021	6	Absent	-	-

EAAA is not defined, but the survey was conducted

In total there are no species of amphibia recorded in this EAAA.

**Table 193. List of amphibians recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
7/30/2021	7	Absent	-	-

EAAA 004

In total there are 1 species of amphibia recorded in this EAAA.

**Table 194. List of amphibians recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
7/30/2021	8	Absent	-	-
7/30/2021	9	Long-legged wood frog	<i>Rana macrocnemis</i>	1+24*

\*- One adult female and 24 tadpoles, 4-5.5 cm long, were found in Point 9, inhabiting a small, about 60 m<sup>2</sup> shallow pond near the Loradzor River.

EAAA 006

In total there are no species of amphibia recorded in this EAAA.

**Table 195. List of amphibians recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
7/31/2021	10	Absent	-	-
7/31/2021	11	Absent	-	-
7/31/2021	12	Absent	-	-
7/31/2021	13	Absent	-	-

EAAA 008

In total there are no species of amphibia recorded in this EAAA.

**Table 196. List of amphibians recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
8/1/2021	14	Absent	-	-

EAAA 010-012

In total there are no species of amphibia recorded in this EAAA.

**Table 197. List of amphibians recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
8/1/2021	15	Absent	-	-
8/1/2021	16	Absent	-	-
8/1/2021	17	Absent	-	-
8/1/2021	18	Absent	-	-
8/1/2021	19	Absent	-	-

\*- Species availability data are based on surveys conducted with the local people.

EAAA 013

In total there are no species of amphibia recorded in this EAAA.

**Table 198. List of amphibians recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
8/2/2021	20	Absent	-	-
8/2/2021	20	Absent	-	-

\*- Species availability data are based on surveys conducted with the local people.

EAAA 014-015

In total there are no species of amphibia recorded in this EAAA.

**Table 199. List of amphibians recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
8/2/2021	21	Absent	-	-

8/2/2021	21	Absent	-	-
8/2/2021	22	Absent	-	-
8/2/2021	23	Absent	-	-

\*- Species availability data are based on surveys conducted with the local people.

### Results for November

Each EAAA was surveyed in the coastal and adjacent rivers, ponds, and reservoirs up to 15 m. In each case, a 120-150 m long coastal area was selected and the number of amphibians observed in that area was calculated. In some cases, when the studies did not yield results or there were unfavorable conditions, surveys were conducted with the local people.

EAAA 002

In total there are no species of amphibia recorded in this EAAA

**Table 200. List of amphibians recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/29/2021	1	Absent	-	-
11/29/2021	2	Absent	-	-
11/29/2021	3	Absent	-	-
11/29/2021	4	Absent	-	-
11/29/2021	5	Absent	-	-
11/29/2021	6	Absent	-	-

EAAA is not defined, but the survey was conducted

In total there are no species of amphibia recorded in this EAAA.

**Table 201. List of amphibians recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/30/2021	7	Absent	-	-

EAAA 004

In total there are no species of amphibia recorded in this EAAA.

**Table 202. List of amphibians recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/30/2021	8	Absent	-	-
11/30/2021	9	Absent	-	-

EAAA 006

In total there are no species of amphibia recorded in this EAAA.

**Table 203. List of amphibians recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/27/2021	10	Absent	-	-
11/27/2021	11	Absent	-	-
11/27/2021	12	Absent	-	-
11/27/2021	13	Absent	-	-

EAAA 008

In total there are no species of amphibia recorded in this EAAA.

**Table 204. List of amphibians recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/27/2021	14	Absent	-	-

EAAA 010-012

In total there are no species of amphibia recorded in this EAAA.

**Table 205. List of amphibians recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/28/2021	15	Absent	-	-
11/28/2021	16	Absent	-	-
11/28/2021	17	Absent	-	-
11/28/2021	18	Absent	-	-
11/28/2021	19	Absent	-	-

EAAA 013

In total there are no species of amphibia recorded in this EAAA.

**Table 206. List of amphibians recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/28/2021	20	Absent	-	-

EAAA 014-015

In total there are no species of amphibia recorded in this EAAA.

**Table 207. List of amphibians recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/28/2021	21	Absent	-	-
11/28/2021	22	Absent	-	-
11/28/2021	23	Absent	-	-

### Results for April

Each EAAA was surveyed in the coastal and adjacent rivers, ponds, and reservoirs up to 15 m. In each case, a 120-150 m long coastal area was selected and the number of amphibians observed in that area was calculated. In some cases, when the studies did not yield results or there were unfavorable conditions, surveys were conducted with the local people.

EAAA 002

In total there are one species of amphibia recorded in this EAAA

**Table 208. List of amphibians recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/08/2022	1	Marsh frog	<i>Pelophilax ridibundus</i>	2

04/08/2022	2	Absent	-	-
04/08/2022	3	Absent	-	-
04/08/2022	4	Absent	-	-
04/11/2022	5	Absent	-	-
04/11/2022	6	Marsh frog	<i>Pelophilax ridibundus</i>	1 adult 2 clutch

EAAA is not defined, but the survey was conducted

In total there are no species of amphibia recorded in this EAAA.

**Table 209. List of amphibians recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/11/2022	7	Absent	-	-

EAAA 004

In total there are one species of amphibia recorded in this EAAA.

**Table 210. List of amphibians recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/11/2022	8	Long-legged wood frog	<i>Rana macrocnemis</i>	2
04/11/2022	9	Long-legged wood frog	<i>Rana macrocnemis</i>	3 adult 39 clutch

EAAA 006

In total there are one species of amphibia recorded in this EAAA.

**Table 211. List of amphibians recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/09/2022	10	Absent	-	-
04/09/2022	11	Absent	-	-
04/09/2022	12	Long-legged wood frog	<i>Rana macrocnemis</i>	8 clutch
04/09/2022	13	Absent	-	-

EAAA 008

In total there are no species of amphibia recorded in this EAAA.

**Table 212. List of amphibians recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/09/2022	14	Absent	-	-

EAAA 010-012

In total there are no species of amphibia recorded in this EAAA.

**Table 213. List of amphibians recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/10/2022	15	Absent	-	-
04/10/2022	16	Absent	-	-
04/10/2022	17	Absent	-	-
04/10/2022	18	Absent	-	-

04/10/2022	19	Absent	-	-
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EAAA 013

In total there are no species of amphibia recorded in this EAAA.

**Table 214. List of amphibians recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/10/2022	20	Absent	-	-

EAAA 014-015

In total there are no species of amphibia recorded in this EAAA.

**Table 215. List of amphibians recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/10/2022	21	Absent	-	-
04/10/2022	22	Absent	-	-
04/10/2022	23	Absent	-	-

### Results for May

Each EAAA was surveyed in the coastal and adjacent rivers, ponds, and reservoirs up to 15 m. In each case, a 120-150 m long coastal area was selected and the number of amphibians observed in that area was calculated. In some cases, when the studies did not yield results or there were unfavorable conditions, surveys were conducted with the local people.

EAAA 002

In total there are one species of amphibia recorded in this EAAA

**Table 216. List of amphibians recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/07/2022	1	Marsh frog	<i>Pelophilax ridibundus</i>	7
05/07/2022	2	Absent	-	-
05/07/2022	3	Absent	-	-
05/07/2022	4	Absent	-	-
05/11/2022	5	Marsh frog	<i>Pelophilax ridibundus</i>	1
05/11/2022	6	Marsh frog	<i>Pelophilax ridibundus</i>	18, numerous tadpoles

EAAA is not defined, but the survey was conducted

In total there are one species of amphibia recorded in this EAAA.

**Table 217. List of amphibians recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/10/2022	7	Long-legged wood frog	<i>Rana macrocnemis</i>	1

EAAA 004

In total there are one species of amphibia recorded in this EAAA.

**Table 218. List of amphibians recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/10/2022	8	Long-legged wood frog	<i>Rana macrocnemis</i>	2
05/10/2022	9	Long-legged wood frog	<i>Rana macrocnemis</i>	Numerous tadpoles

EAAA 006

In total there are one species of amphibia recorded in this EAAA.

**Table 219. List of amphibians recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/08/2022	10	Absent	-	-
05/08/2022	11	Absent	-	-
05/08/2022	12	Long-legged wood frog	<i>Rana macrocnemis</i>	8 clutch
05/08/2022	13	Absent	-	-

EAAA 008

In total there are no species of amphibia recorded in this EAAA.

**Table 220. List of amphibians recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/08/2022	14	Absent	-	-

EAAA 010-012

In total there are one species of amphibia recorded in this EAAA.

**Table 221. List of amphibians recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/08/2022	15	Absent	-	-
05/08/2022	16	Absent	-	-
05/08/2022	17	Absent	-	-
05/08/2022	18	Long-legged wood frog	<i>Rana macrocnemis</i>	1 clutch
05/08/2022	19	Absent	-	-

EAAA 013

In total there are no species of amphibia recorded in this EAAA.

**Table 222. List of amphibians recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/08/2022	20	Absent	-	-

EAAA 014-015

In total there are no species of amphibia recorded in this EAAA.

**Table 223. List of amphibians recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/08/2022	21	Absent	-	-

05/08/2022	22	Absent	-	-
05/08/2022	23	Absent	-	-

### Priority species

So far, there are no priority species recorded in the study area.

### Potential amphibians' biodiversity priority features

Below is presented the preliminary list of the potential amphibians' biodiversity priority features in the study area. This list have been updated through the ESIA process, following the different fieldwork sessions and maps have been realized presenting the observations, habitats use of the Biodiversity priority species.

**Table 224. Synthetic table of amphibians' biodiversity priority features in the study area**

N°	Family	Species			Status			Restricted-range/endemism	Site use	Potential location/distribution in the study area
		Species name	Scientific name	Armenian name	IUCN Redlist Status	National Red data book Status	Other protected status			
1	Amphibia	Syrian spadefoot	<i>Pelobates syriacus</i>	Սիրիական սխտորագորտ	LC	VU B2ab (ii, iii)		Distributed in the South Caucasus, the Middle East	Inhabits and reproduces in the area.	Occurs up to 1400 m above sea level. Located in loamy soils, where it breeds in small underground feeding ponds.

## Fishes

### Protocols

#### Investigation area:

Previous surveys of the outskirts of the study area suggest occurrence of at least 5 species of fishes. The data on the fish species diversity, relative abundance, and important biological peculiarities have been obtained from two different types of observation:

1. Identification of the fish species composition in the study areas and their relative abundance;
2. Identification of the main pathways of the seasonal migration of fish and breeding terms.

Therefore, there are several EAAAs, which can be influenced by the physical footprint, effluents, and emissions of the proposed road (see Figures 34 and 35). To carry out the above-mentioned surveys, 22 sampling sites at the rivers and reservoir sections of the study area are identified (see Figure 36).

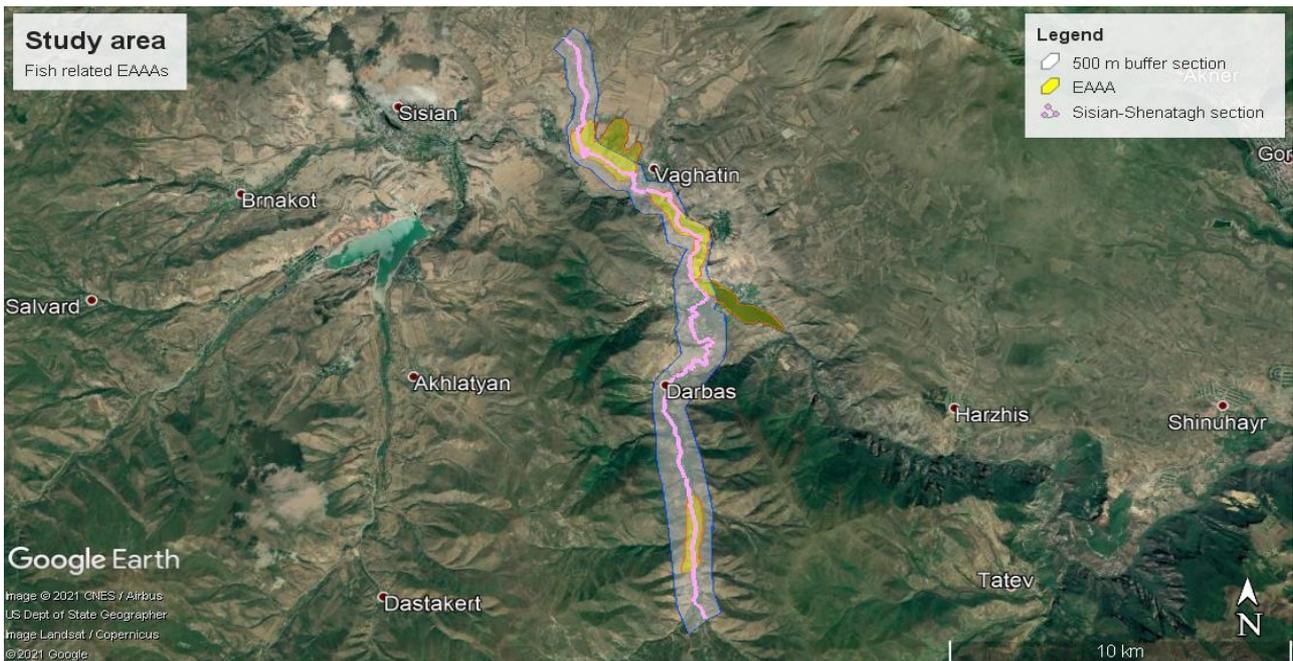


Figure 34. The EAAAs which are related to the fishes in Sisian-Shenatagh section



**Figure 35. The preliminary EAAAs which are related to the fishes in the section Sisian-Shenatagh****Figure 36. Fish sampling points****Survey methods:**

The following actions have been carried out at the mentioned sampling spots:

1. At the freshwater sites (rivers, reservoirs) adjacent to the selected areas, we will record the changes in the fish species composition and their quantitative ratio monthly.
2. The ways of migration of the found fish species have been studied, and the possible negative effects of road construction on those have been assessed.

The capture of the fishes has been carried out to determine the fish species in the study areas. For this purpose, the sampling sites on the river and reservoirs, each with a length of 50-100m have been selected, where crayfish device and fishing baskets have been installed. Also, the fish have been caught with the nets and fishing hooks. In some cases, the fish will also be caught by electrofishing.

The fish species have been determined by visual characteristics using Pipoyan (2021) identification guide.

After identification, the caught fish have been released into the water again. In some cases, when the fish may be subjected to additional laboratory tests for species identification, it has been taken to the lab.

Using this method, the diversity of fish species in the rivers and reservoirs adjacent to the selected areas have been studied, and the number of each fish species in the caught samples have been counted.

Then, the percentage ratio of the number of individuals caught for every species have been taken into account to determine the frequency of the given fish species (numerous, common, rare).

The species that makes over 30% of the caught fishes have been considered conventionally numerous, the fish that makes 10-30% of the caught fishes have been considered common, and when the number of the fish species makes less than 10% it has been considered rare (Pipoyan, 2012).

Collected data have been entered into standardized protocol and after finish of the field work have been inputted into database.

**Time and effort of investigation:**

In total, 15 days are planned to be spent for the field observations, of which 4 days have been spent in June, and further 4 days in July, 4 days in August, and 3 days in September are anticipated. Additionally, 6 days of laboratory and office work will be spent.

#### Investigation tools:

GPS, crayfish device, fishing baskets, nets, fishing hooks, electrofishing device, and standardized protocols.

#### Data analysis methods:

The data analysis will include computation of the densities of various species in the different habitats and analysis of the importance of the various habitats in the life of those bird species.

### Results for June

EAAA 002

In total there are 8 species of fish recorded in this EAAA.

**Table 225. List of fishes recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/17/2021	1	Caucasian scraper	<i>Capoeta capoeta</i>	3
6/17/2021	1	Kura barbel	<i>Barbus cyri</i>	2
6/17/2021	1	Kura chub	<i>Alburnoides eichwaldii</i>	15
6/17/2021	1	Kura loach	<i>Oxynoemacheilus brandtii</i>	1
6/17/2021	1	Crucian carp	<i>Carassius gibelio</i>	9
6/17/2021	1	Brown trout	<i>Salmo trutta fario</i>	1
6/17/2021	2	There are no species of fish recorded in this point.		-
6/17/2021	3	Caucasian scraper	<i>Capoeta capoeta</i>	2
6/17/2021	3	Kura barbel	<i>Barbus cyri</i>	3
6/17/2021	3	Kura chub	<i>Alburnoides eichwaldii</i>	7
6/17/2021	3	Brown trout	<i>Salmo trutta fario</i>	1
6/17/2021	4	Caucasian scraper	<i>Capoeta capoeta</i>	2
6/17/2021	4	Kura barbel	<i>Barbus cyri</i>	4
6/17/2021	4	Kura chub	<i>Alburnoides eichwaldii</i>	9
6/17/2021	4	Brown trout	<i>Salmo trutta fario</i>	1
6/17/2021	4	Rainbow trout	<i>Oncorhynchus mykiss</i>	1
6/17/2021	5	Caucasian scraper	<i>Capoeta capoeta</i>	1
6/17/2021	5	Kura barbel	<i>Barbus cyri</i>	3
6/17/2021	5	Kura chub	<i>Alburnoides eichwaldii</i>	15
6/17/2021	5	Brown trout	<i>Salmo trutta fario</i>	1
6/17/2021	6	Caucasian scraper	<i>Capoeta capoeta</i>	6
6/17/2021	6	Kura barbel	<i>Barbus cyri</i>	11
6/17/2021	6	Kura chub	<i>Alburnoides eichwaldii</i>	18
6/17/2021	6	Crucian carp	<i>Carassius gibelio</i>	1
6/17/2021	6	Stone morokko	<i>Pseudorasbora parva</i>	6
6/17/2021	6	Brown trout	<i>Salmo trutta fario</i>	3
6/17/2021	6	Rainbow trout	<i>Oncorhynchus mykiss</i>	2

EAAA is not defined

In total there are 2 species of fish recorded in this point.

Caucasian scraper and Brown trout are also likely to be found.

**Table 226. List of fishes recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/18/2021	7	Kura barbel	<i>Barbus cyri</i>	8
6/18/2021	7	Kura chub	<i>Alburnoides eichwaldii</i>	2

EAAA 004

In total there are 3 fish species recorded in this EAAA.

**Table 227. List of fishes recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/18/2021	8	Kura barbel	<i>Barus cyri</i>	*
6/18/2021	8	Kura chub	<i>Alburnoides eichwaldii</i>	*
6/18/2021	8	Brown trout	<i>Salmo trutta fario</i>	*
6/18/2021	9	Brown trout	<i>Salmo trutta fario</i>	*

\*- Species availability data are based on surveys conducted with the local people.

EAAA 006

In total there is one fish species recorded in this EAAA.

**Table 228. List of fishes recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/18/2021	10	Brown trout	<i>Salmo trutta fario</i>	*
6/18/2021	11	Brown trout	<i>Salmo trutta fario</i>	*
6/18/2021	12	Brown trout	<i>Salmo trutta fario</i>	*
6/18/2021	13	Brown trout	<i>Salmo trutta fario</i>	*

\*- Species availability data are based on surveys conducted with the local people.

EAAA 008

In total there are 3 fish species recorded in this EAAA.

**Table 229. List of fishes recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/18/2021	14	Kura barbel	<i>Barus cyri</i>	*
6/18/2021	14	Kura chub	<i>Alburnoides eichwaldii</i>	*
6/18/2021	14	Brown trout	<i>Salmo trutta fario</i>	*

\*- Species availability data are based on surveys conducted with the local people.

EAAA 010-012

In total there are 3 fish species recorded in this EAAA.

**Table 230. List of fishes recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/20/2021	15	Kura barbel	<i>Barus cyri</i>	*
6/20/2021	15	Kura chub	<i>Alburnoides eichwaldii</i>	*
6/20/2021	15	Brown trout	<i>Salmo trutta fario</i>	*
6/20/2021	16	Kura barbel	<i>Barus cyri</i>	*
6/20/2021	16	Kura chub	<i>Alburnoides eichwaldii</i>	*
6/20/2021	16	Brown trout	<i>Salmo trutta fario</i>	*
6/20/2021	17	Kura barbel	<i>Barus cyri</i>	*

6/20/2021	17	Kura chub	<i>Alburnoides eichwaldii</i>	*
6/20/2021	17	Brown trout	<i>Salmo trutta fario</i>	*
6/20/2021	18	Kura barbel	<i>Barus cyri</i>	*
6/20/2021	18	Caucasian scrapper	<i>Capoeta capoeta</i>	*
6/20/2021	18	Kura chub	<i>Alburnoides eichwaldii</i>	*
6/20/2021	18	Brown trout	<i>Salmo trutta fario</i>	*
6/20/2021	19	Kura barbel	<i>Barus cyri</i>	*
6/20/2021	19	Caucasian scrapper	<i>Capoeta capoeta</i>	*
6/20/2021	19	Kura chub	<i>Alburnoides eichwaldii</i>	*
6/20/2021	19	Brown trout	<i>Salmo trutta fario</i>	*

\*- Species availability data are based on surveys conducted with the local people.

EAAA 013

In total there are 4 fish species recorded in this EAAA.

**Table 231. List of fishes recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/20/2021	20	Kura barbel	<i>Barus cyri</i>	*
6/20/2021	20	Caucasian scrapper	<i>Capoeta capoeta</i>	*
6/20/2021	20	Kura chub	<i>Alburnoides eichwaldii</i>	*
6/20/2021	20	Brown trout	<i>Salmo trutta fario</i>	*

\*- Species availability data are based on surveys conducted with the local people.

EAAA 014-015

In total there are 4 fish species recorded in this EAAA.

**Table 232. List of fishes recorded during June**

Date	Point #	Species name English	Species name Latin	Species number
6/20/2021	21	Kura barbel	<i>Barus cyri</i>	*
6/20/2021	21	Caucasian scrapper	<i>Capoeta capoeta</i>	*
6/20/2021	21	Kura chub	<i>Alburnoides eichwaldii</i>	*
6/20/2021	21	Brown trout	<i>Salmo trutta fario</i>	*
6/20/2021	22	Kura barbel	<i>Barus cyri</i>	*
6/20/2021	22	Caucasian scrapper	<i>Capoeta capoeta</i>	*
6/20/2021	22	Kura chub	<i>Alburnoides eichwaldii</i>	251
6/20/2021	22	Brown trout	<i>Salmo trutta fario</i>	*
6/20/2021	23	Kura barbel	<i>Barus cyri</i>	*
6/20/2021	23	Caucasian scrapper	<i>Capoeta capoet</i>	*
6/20/2021	23	Kura chub	<i>Alburnoides eichwaldii</i>	*
6/20/2021	23	Brown trout	<i>Salmo trutta fario</i>	*

\*- Species availability data are based on surveys conducted with the local people.

### Results for July

Dates 30 Jul - 31 Aug

EAAA 002

In total there are 4 species of fish recorded in this EAAA.

**Table 233. List of fishes recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
7/30/2021	1	Kura chub	<i>Alburnoides eichwaldii</i>	34
7/30/2021	1	Brown trout	<i>Salmo trutta fario</i>	1
7/30/2021	2	There are no species of fish recorded in this point.		-
7/30/2021	3	Kura chub	<i>Alburnoides eichwaldii</i>	19
7/30/2021	3	Brown trout	<i>Salmo trutta fario</i>	1
7/30/2021	4	Kura barbel	<i>Barbus cyri</i>	1
7/30/2021	4	Kura chub	<i>Alburnoides eichwaldii</i>	21
7/30/2021	5	Kura chub	<i>Alburnoides eichwaldii</i>	17
7/30/2021	5	Brown trout	<i>Salmo trutta fario</i>	1
7/30/2021	6	Kura chub	<i>Alburnoides eichwaldii</i>	41
7/30/2021	6	Crucian carp	<i>Carassius gibelio</i>	8
7/30/2021	6	Stone morokko	<i>Pseudorasbora parva</i>	11

EAAA is not defined

In total there are 2 species of fish recorded in this point.

**Table 234. List of fishes recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
7/30/2021	7	Brown trout	<i>Salmo trutta fario</i>	1
7/30/2021	7	Kura chub	<i>Alburnoides eichwaldii</i>	15

EAAA 004

In total there are no fish species recorded in this EAAA.

**Table 235. List of fishes recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
7/30/2021	8	Absent	-	-
7/30/2021	9	Absent	-	-

EAAA 006

In total there is no fish species recorded in this EAAA.

**Table 236. List of fishes recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
7/31/2021	10	Absent	-	-
7/31/2021	11	Absent	-	-
7/31/2021	12	Absent	-	-
7/31/2021	13	Absent	-	-

EAAA 008

In total there are 2 fish species recorded in this EAAA.

**Table 237. List of fishes recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
8/1/2021	14	Kura chub	<i>Alburnoides eichwaldii</i>	1

8/1/2021	14	Brown trout	<i>Salmo trutta fario</i>	2
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EAAA 010-012

In total there are 1 fish species recorded in this EAAA.

**Table 238. List of fishes recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
8/1/2021	15	Absent	-	-
8/1/2021	16	Kura chub	<i>Alburnoides eichwaldii</i>	1
8/1/2021	17	Kura chub	<i>Alburnoides eichwaldii</i>	16
8/1/2021	18	Kura chub	<i>Alburnoides eichwaldii</i>	18
8/1/2021	19	Absent	-	-

EAAA 013

In total there are 1 fish species recorded in this EAAA.

**Table 239. List of fishes recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
8/2/2021	20	Kura chub	<i>Alburnoides eichwaldii</i>	230

EAAA 014-015

In total there are 3 fish species recorded in this EAAA.

**Table 240. List of fishes recorded during July**

Date	Point #	Species name English	Species name Latin	Species number
8/2/2021	21	Kura chub	<i>Alburnoides eichwaldii</i>	69
8/2/2021	22	Kura chub	<i>Alburnoides eichwaldii</i>	171
8/2/2021	23	Kura chub	<i>Alburnoides eichwaldii</i>	34
8/2/2021	23	Kura barbel	<i>Barus cyri</i>	1
8/2/2021	23	Brown trout	<i>Salmo trutta fario</i>	1

### Results for November

EAAA 002

In total there are 2 species of fish recorded in this EAAA

**Table 241. List of fishes recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/29/2021	1	Kura chub	<i>Alburnoides eichwaldii</i>	1
11/29/2021	1	Brown trout	<i>Salmo trutta fario</i>	2
7/30/2021	2	There are no species of fish recorded in this point.		-
7/30/2021	3	Brown trout	<i>Salmo trutta fario</i>	3
7/30/2021	4	Kura chub	<i>Alburnoides eichwaldii</i>	5
7/30/2021	5	Kura chub	<i>Alburnoides eichwaldii</i>	1
7/30/2021	6	Kura chub	<i>Alburnoides eichwaldii</i>	12

EAAA is not defined

In total there are 2 species of fish recorded in this point.

**Table 242. List of fishes recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/30/2021	7	Brown trout	<i>Salmo trutta fario</i>	2
11/30/2021	7	Kura chub	<i>Alburnoides eichwaldii</i>	4

EAAA 004

In total there are no fish species recorded in this EAAA.

**Table 243. List of fishes recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/30/2021	8	Absent	-	-
11/30/2021	9	Absent	-	-

EAAA 006

In total there is 1 fish species recorded in this EAAA.

**Table 244. List of fishes recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/27/2021	10	Brown trout	<i>Salmo trutta fario</i>	2
11/27/2021	11	Absent	-	-
11/27/2021	12	Absent	-	-
11/27/2021	13	Brown trout	<i>Salmo trutta fario</i>	1

EAAA 008

In total there are 1 fish species recorded in this EAAA.

**Table 245. List of fishes recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/27/2021	14	Brown trout	<i>Salmo trutta fario</i>	1

EAAA 010-012

In total there are 1 fish species recorded in this EAAA.

**Table 246. List of fishes recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
11/28/2021	15	Absent	-	-
11/28/2021	16	Absent	-	-
11/28/2021	17	Absent	-	-
11/28/2021	18	Kura chub	<i>Alburnoides eichwaldii</i>	5
11/28/2021	19	Absent	-	-

EAAA 013

In total there are 1 fish species recorded in this EAAA.

**Table 247. List of fishes recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
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11/28/2021	20	Kura chub	<i>Alburnoides eichwaldii</i>	14
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EAAA 014-015

In total there are 2 fish species recorded in this EAAA.

**Table 248. List of fishes recorded during November**

Date	Point #	Species name English	Species name Latin	Species number
8/2/2021	21	Kura chub	<i>Alburnoides eichwaldii</i>	4
8/2/2021	22	Kura chub	<i>Alburnoides eichwaldii</i>	21
8/2/2021	23	Kura chub	<i>Alburnoides eichwaldii</i>	2
8/2/2021	23	Brown trout	<i>Salmo trutta fario</i>	3

**Results for April**

EAAA 002

In total there are 4 species of fish recorded in this EAAA.

**Table 249. List of fishes recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/08/2022	1	Kura chub	<i>Alburnoides eichwaldii</i>	19
04/08/2022	1	Kura barbel	<i>Barbus cyri</i>	2
04/08/2022	2	Absent	-	-
04/08/2022	3	-	-	-
04/08/2022	4	-	-	-
04/11/2022	5	Kura chub	<i>Alburnoides eichwaldii</i>	3
04/11/2022	6	Stone moroko	<i>Pseudorasbora parva</i>	187
04/11/2022	6	Crucian carp	<i>Carassius gibelio</i>	6

EAAA is not defined

In total there are one species of fish recorded in this point.

**Table 250. List of fishes recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/11/2022	7	Kura barbel	<i>Barbus cyri</i>	13

EAAA 004

In total there are no fish species recorded in this EAAA.

**Table 251. List of fishes recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/11/2022	8	Absent	-	-
04/11/2022	9	Absent	-	-

EAAA 006

In total there is no fish species recorded in this EAAA.

**Table 252. List of fishes recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
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04/09/2022	10	Absent	-	-
04/09/2022	11	Absent	-	-
04/09/2022	12	Absent	-	-
04/09/2022	13	Absent	-	-

EAAA 008

In total there are no fish species recorded in this EAAA.

**Table 253. List of fishes recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/10/2022	14	Absent	-	-

EAAA 010-012

In total there are no fish species recorded in this EAAA.

**Table 254. List of fishes recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/10/2022	15	Absent	-	-
04/10/2022	16	Absent	-	-
04/10/2022	17	Absent	-	-
04/10/2022	18	Absent	-	-
04/10/2022	19	Absent	-	-

EAAA 013

In total there are no fish species recorded in this EAAA.

**Table 255. List of fishes recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
04/10/2022	20	Absent	-	-

EAAA 014-015

In total there are one fish species recorded in this EAAA.

**Table 256. List of fishes recorded during April**

Date	Point #	Species name English	Species name Latin	Species number
8/2/2021	21	Absent	-	-
8/2/2021	22	Absent	-	-
8/2/2021	23	Kura chub	<i>Alburnoides eichwaldii</i>	6

### Results for May

EAAA 002

In total there are 8 species of fish recorded in this EAAA.

**Table 257. List of fishes recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/07/2022	1	Kura chub	<i>Alburnoides eichwaldii</i>	151
05/07/2022	1	Kura barbel	<i>Barbus cyri</i>	5

05/07/2022	1	Rainbow trout	<i>Oncorhynchus mykiss</i>	2
05/07/2022	2	-	-	-
05/07/2022	3	-	-	-
05/07/2022	4	Kura chub	<i>Alburnoides eichwaldii</i>	12
05/11/2022	5	Kura chub	<i>Alburnoides eichwaldii</i>	18
05/11/2022	6	Stone moroko	<i>Pseudorasbora parva</i>	108
05/11/2022	6	Crucian carp	<i>Carassius gibelio</i>	6
05/11/2022	6	Scrapper	<i>Capoeta capoeta</i>	44
05/11/2022	6	Kura chub	<i>Alburnoides eichwaldii</i>	45
05/11/2022	6	Kura barbel	<i>Barbus cyri</i>	16
05/11/2022	6	Broun trout	<i>Salmo trutta fario</i>	6

EAAA is not defined

In total there are 3 species of fish recorded in this point

**Table 258. List of fishes recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/10/2022	7	Kura barbel	<i>Barbus cyri</i>	34
05/10/2022	7	Scrapper	<i>Capoeta capoeta</i>	3
05/10/2022	7	Kura chub	<i>Alburnoides eichwaldii</i>	2

EAAA 004

In total there are one fish species recorded in this EAAA.

**Table 259. List of fishes recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/10/2022	8	Kura barbel	<i>Barbus cyri</i>	12
04/11/2022	9	Absent	-	-

EAAA 006

In total there is no fish species recorded in this EAAA.

**Table 260. List of fishes recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/08/2022	10	Absent	-	-
05/08/2022	11	Absent	-	-
05/08/2022	12	Absent	-	-
05/08/2022	13	Absent	-	-

EAAA 008

In total there are no fish species recorded in this EAAA.

**Table 261. List of fishes recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/08/2022	14	Absent	-	-

EAAA 010-012

In total there are no fish species recorded in this EAAA.

**Table 262. List of fishes recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/08/2022	15	Absent	-	-
05/08/2022	16	Absent	-	-
05/08/2022	17	Absent	-	-
05/08/2022	18	Absent	-	-
05/08/2022	19	Absent	-	-

EAAA 013

In total there are one fish species recorded in this EAAA.

**Table 263. List of fishes recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/08/2022	20	Kura chub	<i>Alburnoides eichwaldii</i>	12

EAAA 014-015

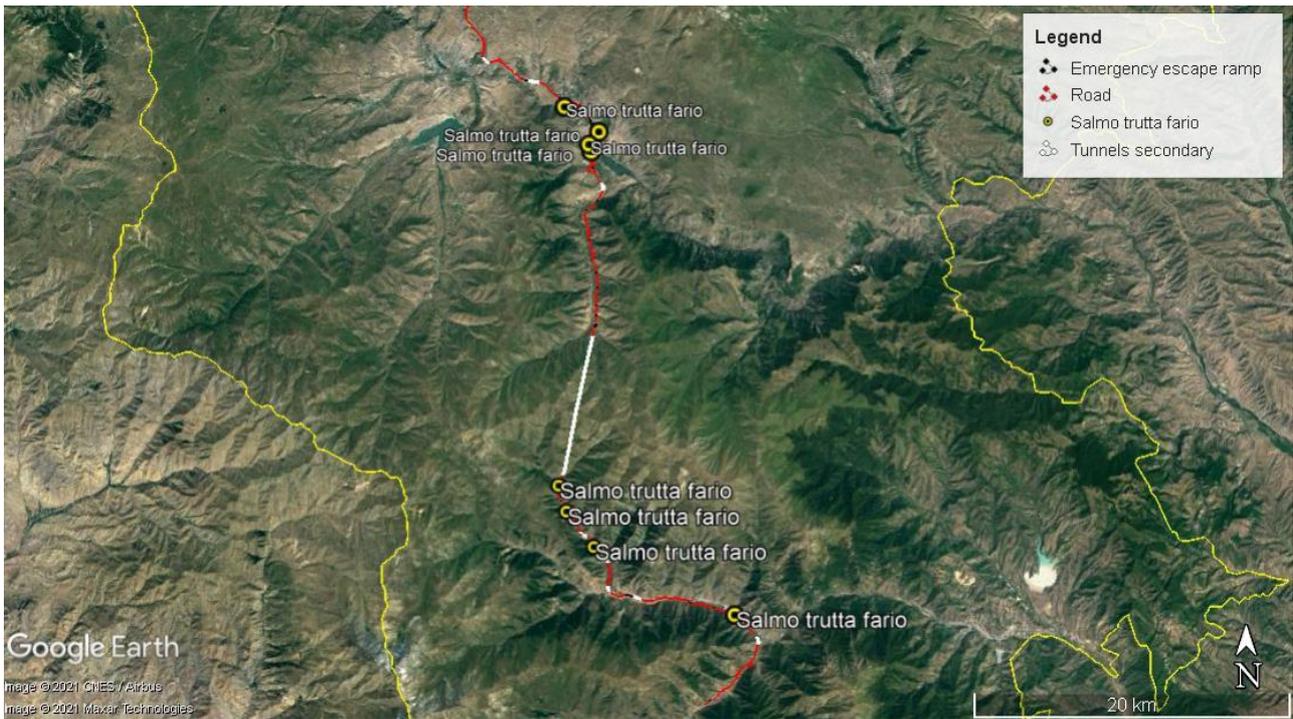
In total there are one fish species recorded in this EAAA.

**Table 264. List of fishes recorded during May**

Date	Point #	Species name English	Species name Latin	Species number
05/08/2022	21	Kura chub	<i>Alburnoides eichwaldii</i>	101
05/08/2022	22	Kura chub	<i>Alburnoides eichwaldii</i>	48
05/08/2022	23	Kura chub	<i>Alburnoides eichwaldii</i>	29

### Priority species

In total there is 1 species that conditionally can be considered a priority one, was recorded in the study area. That is *Salmo trutta fario*, and although the species has not been yet included in the current Red Book (2010), it is a subject of assessment for the upcoming edition. Also, it is worth to mention that the species is an important object of sport fishing in Armenia and beyond it, and therefore can be an important aspect of local fishing tourism development, and therefore an aspect of local livelihood. The spots, where the species has been recorded are shown in Figure 37.



**Figure 37. Distribution spots of the priority fish species**

### Potential fishes' biodiversity priority features

Below is presented the preliminary list of the potential fishes biodiversity priority features in the study area. This list have been updated through the ESIA process, following the different fieldwork sessions and maps have been realized presenting the observations, habitats use of the Biodiversity priority species.

**Table 265. Synthetic table of fishes' biodiversity priority features in the study area**

N°	Family	Species			Status			Restricted-range/ endemism	Site use	Potential location/ distribution in the study area
		Species name	Scientific name	Armenian name	IUCN Redlist Status	National Red data book Status	Other protected status			
	<i>Salmonidae</i>	Brown Trout	<i>Salmo trutta fario</i>	Կարմրախայտ	LC	NE		Local morph	Full cycle of breeding	EAAA 002,004,006, 008, 010-012, 014-015

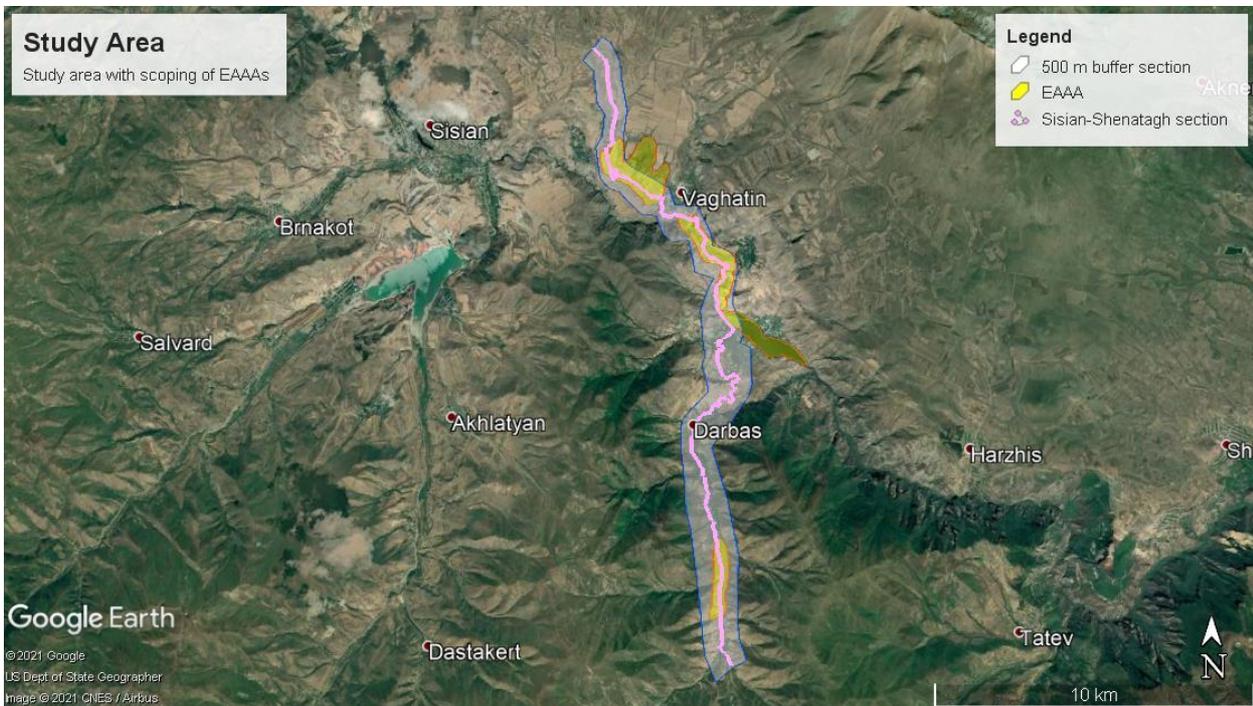
## Flora

### Protocols

#### Investigation area:

The previously collected data suggest quite a wide variety of the species of vascular plants to be expected in the study area, including number of priority species. Taking that into consideration, we define the study area within the 500 m buffer zone at each side of the proposed road, as the road can have various types of the influence: physical footprint, effluents, and emissions. Therefore, the following areas are proposed for being investigated:

1. All type of the habitat within the 500 m buffer zone from proposed road which conditionally can be divided into: mountain steppe, subalpine meadows, juniper woodland, deciduous woodland, riparian scrubs and woodland. Based on the given natural habitats the following 15 preliminary ecologically appropriate areas of analysis (preliminary EAAAs) have been identified (see Figures 38-39) and the sampling areas have been set up (see Figure 40).
2. In addition, the entire road itself (see Figure 41) will also be surveyed for measuring the immediate damage.



**Figure 38. The preliminary EAAAs of the section Sisian-Shenatagh**

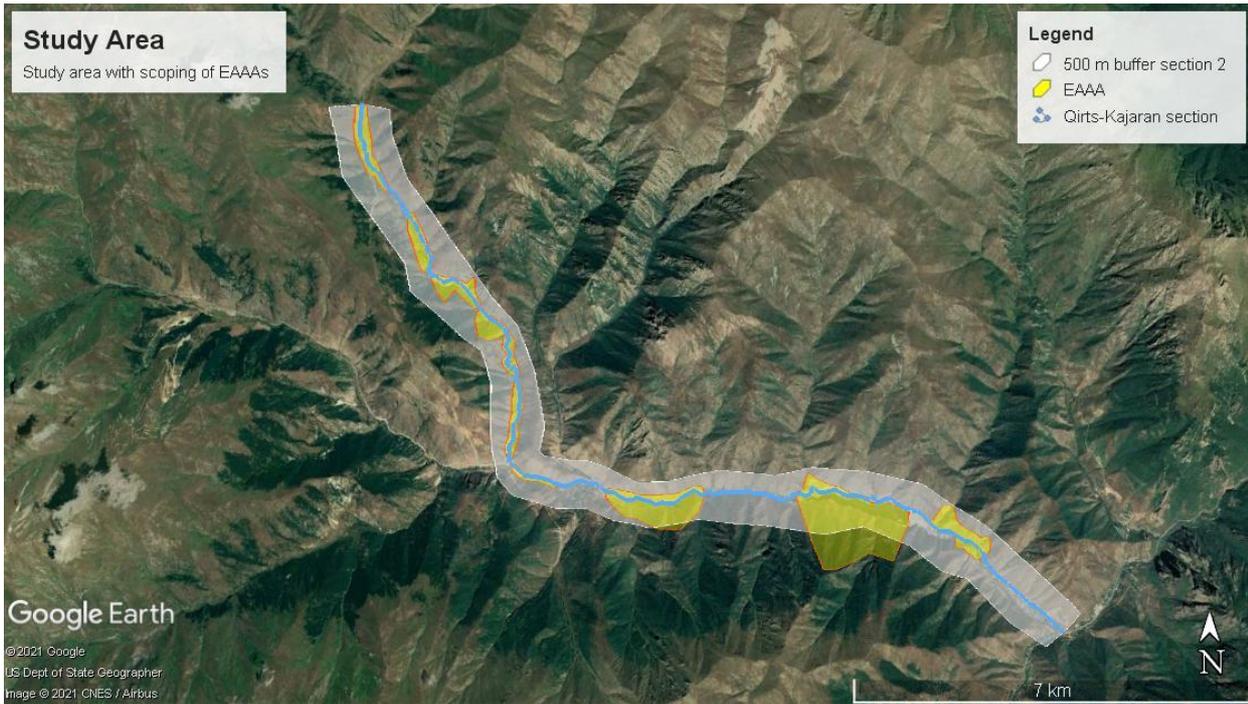


Figure 39. The preliminary EAAAs of the section Kirts-Kajaran

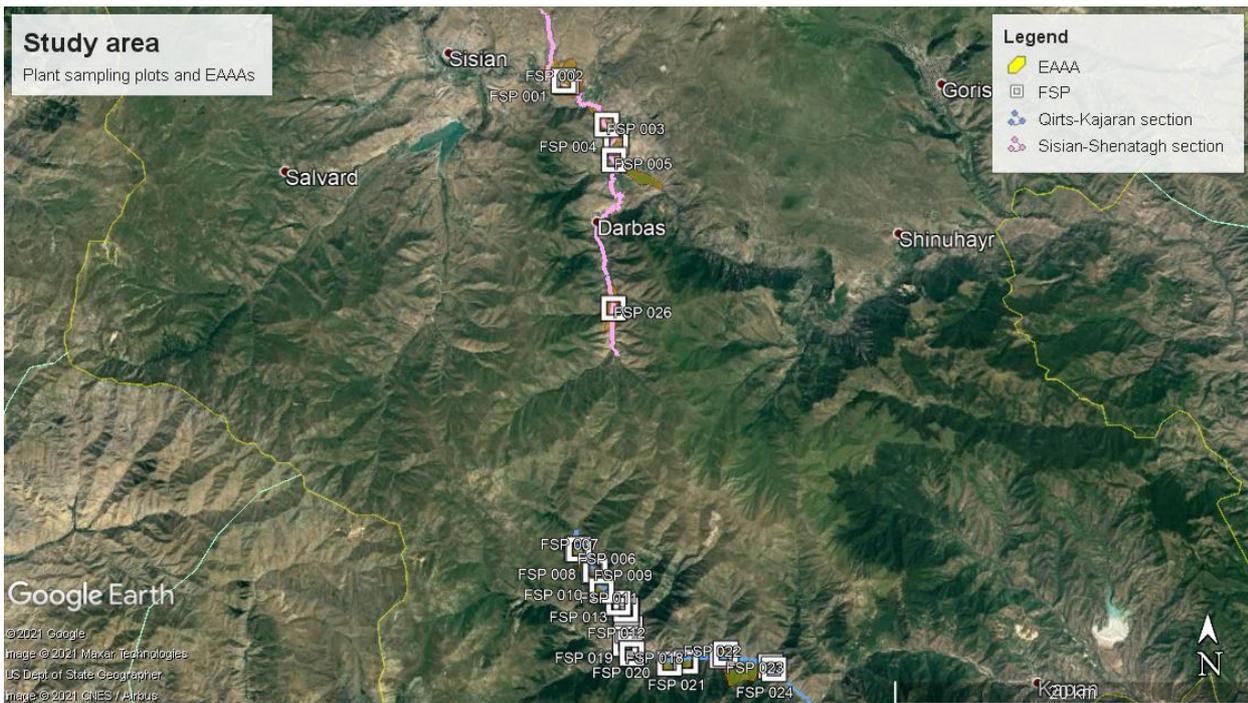
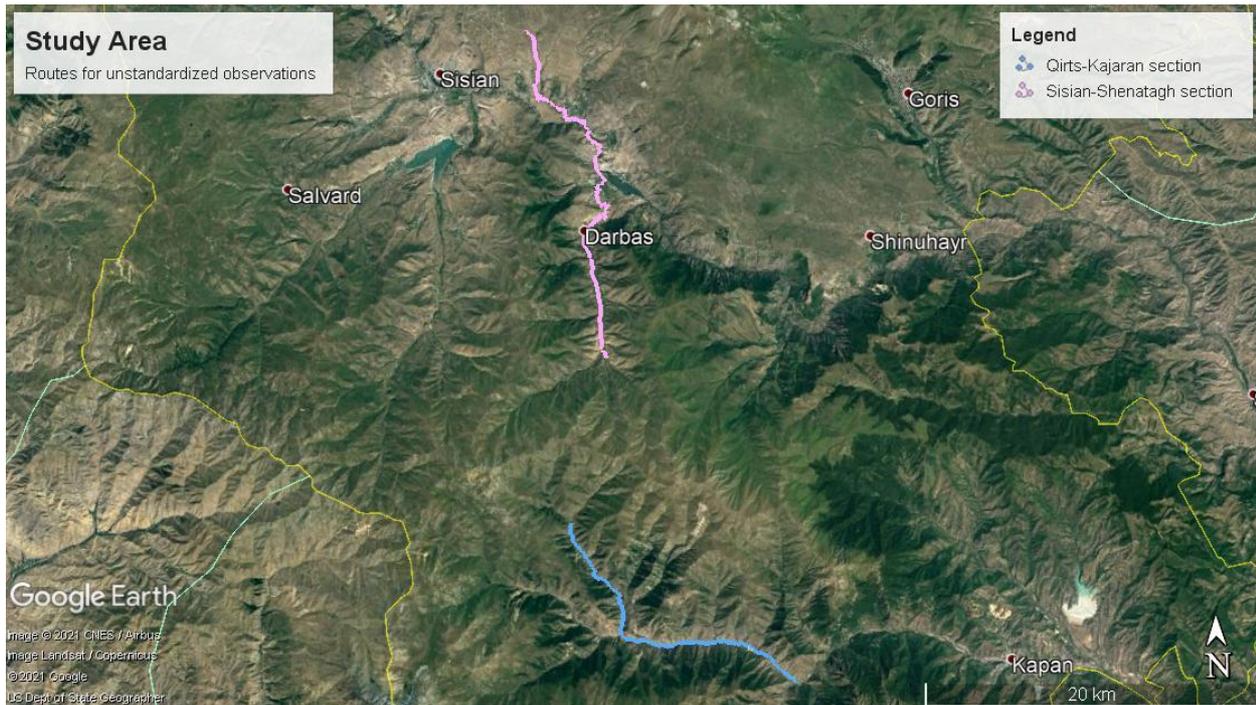


Figure 40. The preliminary EAAAs and the sampling sites



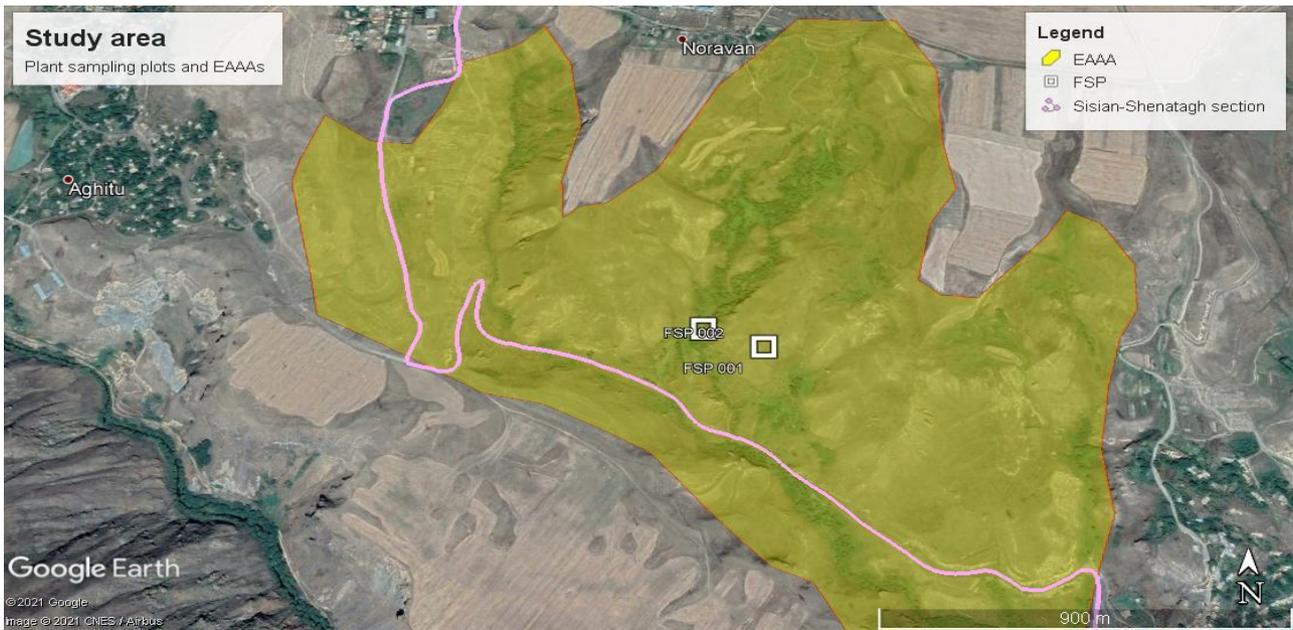
**Figure 41.** The main road, where the additional data collection have been implemented

#### Survey methods:

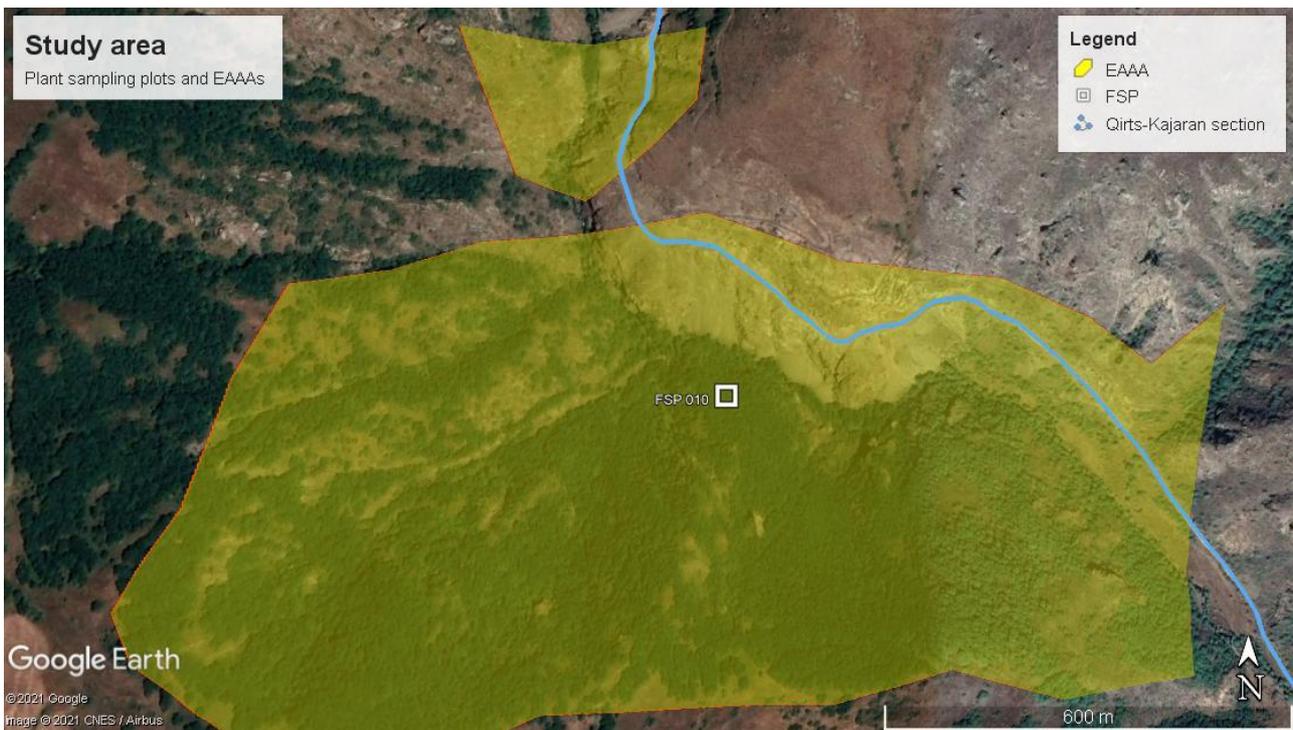
The surveys have been aimed at identification of the diversity of higher vascular plants. The data collection plots have been set up within the core habitat and will have a shape of squares of 100 x 100 meters (see Figures 42-43). Within the sampling squares we will conduct a full inventory of the species composition of the plants. Most of the plants have been identified visually at the sampling areas; those plants, which require lab identification, have been collected in the herbariums and identified later. The coordinates of such plots of high species diversity have been taken using Garmin-2 GPS device. All the habitats and specific plant species have been photographed for further presentation.

For identification of the plant species, we will use Flora of Armenia (11 volumes, 1954-2009). Scientific plant names have been presented according to manual of S. Tcherepanov (Tcherepanov, 1995) etc. For the data analysis we will use quantitative methods of species composition analysis according to L.I. Malisheva (1975).

In addition, we will walk along the road and will fix the coordinates of every spot, where the physical damage to the trees is projected.



**Figure 42. Examples of the flora sampling plots in mountain steppes and riparian scrubs and woodlands**



**Figure 43. Examples of the transects in deciduous woodlands**

Collected data have been entered into standardized protocol and after finish of the field work have been inputted into database.

**Time and effort of investigation:**

Considering the blooming period, the survey has been conducted in mid June, during the day time.

**Investigation tools:**

GPS; digital camera; magnifying glass; herbarium nets with paper; standardized protocols.

**Data analysis methods:**

The data analysis will include computation of the densities of various species in the different habitats and analysis of the importance of the various habitats in the life of those bird species.

## Results for June

EAAA 001

In total there are **85** species of vascular plants recorded in this area. The flora is mainly represented by steppe (FSP 001) and riparian (FSP 002) zone. The full list of the flora is presented in Table 265.

Table 266. List of plants recorded during June

Date	Plot #	Species name Latin and Arm
6/18/2021	FSP 002	<i>Acer negundo</i> L. - Թխկի հացենիատերև
6/18/2021	FSP 001, 002	<i>Amaranthus retroflexus</i> L. - Հավակաստար սովորական
6/18/2021	FSP 001, 002	<i>Astrodaucus orientalis</i> (L.) Drude - Աստղագագար արևելյան
6/18/2021	FSP 001, 002	<i>Daucus carota</i> L. - Գագար վայրի
6/18/2021	FSP 001, 002	<i>Falcaria vulgaris</i> Bernh. - Միբեխ սովորական
6/18/2021	FSP 001	<i>Prangos ferulacea</i> (L.) Lindl. - Պրանգոս նարդեասնման
6/18/2021	FSP 001	<i>Eremurus spectabilis</i> N. Bieb. - Շրեշ ուշագրավ
6/18/2021	FSP 001, 002	<i>Achillea millefolium</i> L. - Հագարատերևուկ սովորական
6/18/2021	FSP 001	<i>Artemisia annua</i> L. - Օշինդր միամյա
6/18/2021	FSP 001, 002	<i>Artemisia vulgaris</i> L. - Օշինդր սովորական
6/18/2021	FSP 001	<i>Chondrilla juncea</i> L. - Ծամանիկ, Խիժաճարճատուկ կնյունանման
6/18/2021	FSP 001, 002	<i>Cichorium intybus</i> L. - Եղերդակ, ճարճատուկ սովորական
6/18/2021	FSP 001, 002	<i>Lactuca serriola</i> L. - Մառոլ, Հագար, Կաթնուկ կողմնացույց
6/18/2021	FSP 001, 002	<i>Taraxacum officinale</i> Wigg. - Խատուտիկ դեղատու
6/18/2021	FSP 001, 002	<i>Xanthium italicum</i> Moretti - Դառնափուշ, Դառնուկ իտալական
6/18/2021	FSP 001	<i>Xeranthemum squarrosum</i> Boiss. - Չորաբույս, Անմեռուկ չոված
6/18/2021	FSP 002	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
6/18/2021	FSP 001	<i>Echium vulgare</i> L. - Իժախտ սովորական
6/18/2021	FSP 001, 002	<i>Myosotis arvensis</i> (L.) Hill. - Անմռռուկ դաշտային
6/18/2021	FSP 001, 002	<i>Symphytum asperum</i> Lepech. - Քարխտո կոշտ
6/18/2021	FSP 001	<i>Alyssum desertorum</i> Stapf. - Վառվռուկ անապատային
6/18/2021	FSP 001, 002	<i>Capsella bursa-pastoris</i> (L.) Medik. - Ծոսապաշար, Հովվամաղախ
6/18/2021	FSP 001	<i>Crambe orientalis</i> L. - Ծովակաղամբ արևելյան
6/18/2021	FSP 001, 002	<i>Lepidium campestre</i> (L.) R. Br. - Կոտեմ դաշտային
6/18/2021	FSP 002	<i>Nasturtium officinale</i> R. Br. - Ջրկոտեմ դեղատու
6/18/2021	FSP 001	<i>Michauxia laevigata</i> Vent. - Միշոքսիա հարթ
6/18/2021	FSP 001	<i>Dianthus cretaceus</i> Adams - Մեխակ կավճային
6/18/2021	FSP 001, 002	<i>Ceratocarpus arenarius</i> L. - Եզնաբզեզ ավազուտային
6/18/2021	FSP 001	<i>Chenopodium foliosum</i> Aschers. - Թելուկ բազմատերև
6/18/2021	FSP 001, 002	<i>Convolvulus arvensis</i> L. - Պատատուկ դաշտային
6/18/2021	FSP 001	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմակ անդրկովկասյան
6/18/2021	FSP 002	<i>Elaeagnus angustifolia</i> L. - Փշատ նեղատերև
6/18/2021	FSP 001	<i>Euphorbia sequierana</i> Neck. - Իշակաթնուկ Սեզիերի
6/18/2021	FSP 001	<i>Astragalus xiphidium</i> Bunge - Գագ թրածև
6/18/2021	FSP 001, 002	<i>Medicago coerulea</i> Less. ex Ledeb. - Առվույտ երկնագույն
6/18/2021	FSP 001	<i>Medicago rigidula</i> (L.) Desr. - Առվույտ կոշտավուն
6/18/2021	FSP 001, 002	<i>Melilotus officinalis</i> (L.) Pall. - Իշառվույտ դեղատու
6/18/2021	FSP 001, 002	<i>Fumaria officinalis</i> L. - Ծխաբույս, Տերուկ դեղատու
6/18/2021	FSP 001, 002	<i>Erodium cicutarium</i> (L.) L'Her. - Ճայկտուց խնդամոլային
6/18/2021	FSP 001	<i>Ornithogalum montanum</i> Cirillo - Սպիտակ բանջար, Աստղաշուշան լեռնային
6/18/2021	FSP 001, 002	<i>Hypericum perforatum</i> L. - Մրոհունդ խոցված
6/18/2021	FSP 001	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային

6/18/2021	FSP 001	<i>Iris lineolata</i> (Trautv.) Grossh. - Հիրիկ նեղգծային
6/18/2021	FSP 001	<i>Ajuga chia</i> Schreb. - Ճանկխոտ հիոսական
6/18/2021	FSP 002	<i>Mentha longifolia</i> (L.) Huds. - Անանուխ, Դաղձ երկարատերև
6/18/2021	FSP 001	<i>Thymus collinus</i> Bieb. - Ուրց բլրակային
6/18/2021	FSP 001	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
6/18/2021	FSP 001	<i>Thymus transcausicus</i> Ronn. - Ուրց անդրկովկասյան
6/18/2021	FSP 001, 002	<i>Gagea bulbifera</i> (Pall.) Salisb. - Սագասոխուկ սոխուկակիր
6/18/2021	FSP 002	<i>Alcea rugosa</i> Alef. - Տուղտավարդ կնճռոտ
6/18/2021	FSP 001, 002	<i>Malva neglecta</i> Wallr. - Մոլոշ, Փիփերթ արհամարհված
6/18/2021	FSP 002	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
6/18/2021	FSP 001, 002	<i>Papaver commutatum</i> Fisch. et C.A. Mey. - Կակաչ խճճված
6/18/2021	FSP 001, 002	<i>Papaver fugax</i> Poir. - Կակաչ թռչող
6/18/2021	FSP 001, 002	<i>Papaver macrostomum</i> Boiss. et Huet - Կակաչ խոշորատուփիկ
6/18/2021	FSP 001, 002	<i>Plantago major</i> L. - Ջղախոտ, Եզան լեզու մեծ
6/18/2021	FSP 001, 002	<i>Plantago media</i> L. - Ջղախոտ, Եզան լեզու միջին
6/18/2021	FSP 001	<i>Acantholimon bracteatum</i> (Girard) Boiss. - Ոգնաթուփ ծաղկակիցային
6/18/2021	FSP 001	<i>Aegilops cylindrica</i> Host - Այծակն գլանաձև
6/18/2021	FSP 001	<i>Aegilops tauschii</i> Coss. - Այծակն Թաուշի
6/18/2021	FSP 001	<i>Avena fatua</i> L. - Խրբուկ, Վարսակ դատարկ, Վ. պոչուկ
6/18/2021	FSP 001, 002	<i>Dactylis glomerata</i> L. - Ոգնախոտ հավաքված
6/18/2021	FSP 001	<i>Hordeum bulbosum</i> L. - Գարի սոխուկավոր
6/18/2021	FSP 002	<i>Phragmites australis</i> (Cav.) Trin ex Steud. - Եղեգնատունկ, Եղեգ հարավային
6/18/2021	FSP 001, 002	<i>Poa bulbosa</i> L. - Արոտածիլ, Հուրանախոտ, Դաշտավունկ սոխուկավոր
6/18/2021	FSP 001	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
6/18/2021	FSP 002	<i>Polygonum aviculare</i> L. - Մատիտեղ ճնճղուկի
6/18/2021	FSP 001, 002	<i>Rumex crispus</i> L. - Ավելուկ գանգուր
6/18/2021	FSP 001, 002	<i>Portulaca oleracea</i> L. - Դանդուտ սովորական
6/18/2021	FSP 002	<i>Primula macracalyx</i> Bunge - Գնարբուկ խոշորաբաժակ
6/18/2021	FSP 002	<i>Rhamnus spathulifolia</i> Fisch et C.A. Mey. - Դժնիկ թիասերև
6/18/2021	FSP 002	<i>Armeniaca vulgaris</i> Lam. - Ծիրան սովորական
6/18/2021	FSP 001	<i>Cerasus incana</i> (Pall.) Spach - Կեռասենի ալեհեր
6/18/2021	FSP 002	<i>Cerasus vulgaris</i> Mill. - Բալենի սովորական
6/18/2021	FSP 001, 002	<i>Geum urbanum</i> L. - Շահոքրամ սովորական
6/18/2021	FSP 001, 002	<i>Malus domestica</i> Borkh. - Խնձորենի սովորական
6/18/2021	FSP 002	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
6/18/2021	FSP 001, 002	<i>Pyrus communis</i> L. - Տանձենի սովորական
6/18/2021	FSP 001, 002	<i>Galium aparine</i> L. - Մակարդախոտ կաչուն
6/18/2021	FSP 002	<i>Populus bolleana</i> Lauche - Բարդի Բոլլեի, Բ. Սամարդանդի
6/18/2021	FSP 002	<i>Populus nigra</i> L. - Բարդի սև
6/18/2021	FSP 002	<i>Salix excelsa</i> S. G. Gmel. - Ուտենի բարձր
6/18/2021	FSP 001, 002	<i>Datura stramonium</i> L. - Արջընկույզ սովորական
6/18/2021	FSP 001, 002	<i>Hyoscyamus niger</i> L. - Բանգի սև
6/18/2021	FSP 002	<i>Ulmus minor</i> Mill. - Թեղի փոքր
<b>Total</b>		<b>85</b>

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In total there are **124** species of vascular plants recorded in this area. The flora is mainly represented by steppe species and the species of riparian zone. The full list of the flora is presented in the Table 266. Among steppe patches of diatomaceous clay areas, the *Iris lineolata* was detected.

**Table 267. List of plants recorded during June**

Date	Route #	Species name English
6/18/2021	FSP 003, 005	<i>Equisetum arvense</i> L. - Չիաձեւո դաշտային
6/18/2021	FSP 004	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/18/2021	FSP 004	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
6/18/2021	FSP 004	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Սարի չամիչ բարձր
6/18/2021	FSP 003	<i>Acer campestre</i> L. - Թխկի դաշտային
6/18/2021	FSP 003	<i>Acer hyrcanum</i> Fisch. et C.A. Mey. - Թխկի հիրկանյան
6/18/2021	FSP 003	<i>Acer negundo</i> L. - Թխկի հացենիատերև
6/18/2021	FSP 003, 004	<i>Amaranthus retroflexus</i> L. - Հավակատար սովորական
6/18/2021	FSP 004	<i>Astrodaucus orientalis</i> (L.) Drude - Աստղագագար արևելյան
6/18/2021	FSP 003, 004, 005	<i>Daucus carota</i> L. - Գագար վայրի
6/18/2021	FSP 003, 005	<i>Heracleum sosnowskyi</i> Manden. - Բալդրդան Սոսնովսկու
6/18/2021	FSP 004	<i>Prangos ferulacea</i> (L.) Lindl. - Պրանգոս նարդեանման
6/18/2021	FSP 004	<i>Vinca herbacea</i> W. K. - Կուսածաղիկ խոտային
6/18/2021	FSP 003, 004, 005	<i>Cynanchum acutum</i> L. - Շնախոտ սուր
6/18/2021	FSP 003, 005	<i>Asparagus officinalis</i> L. - Ձնեբեկ, Ծնեփակ դեղատու
6/18/2021	FSP 004	<i>Eremurus spectabilis</i> N. Bieb. - Շրեշ ուշագրավ
6/18/2021	FSP 003, 004, 005	<i>Achillea millefolium</i> L. - Հագարատերևուկ սովորական
6/18/2021	FSP 003, 005	<i>Arctium lappa</i> L. - Կոծոճ, Կռատուկ երեսնակ
6/18/2021	FSP 003, 004, 005	<i>Artemisia annua</i> L. - Օշինդր միամյա
6/18/2021	FSP 004	<i>Artemisia fragrans</i> Willd. - Օշինդր բուրավետ
6/18/2021	FSP 003, 005	<i>Artemisia vulgaris</i> L. - Օշինդր սովորական
6/18/2021	FSP 003, 004, 005	<i>Chondrilla juncea</i> L. - Ծամանիկ, Խիժածարձատուկ կնյունանման
6/18/2021	FSP 003, 004, 005	<i>Cichorium intybus</i> L. - Եղերդակ, Ճարձատուկ սովորական
6/18/2021	FSP 003, 004, 005	<i>Lactuca serriola</i> L. - Մառոլ, Հագար, Կաթնուկ կողմնացույց
6/18/2021	FSP 003, 004, 005	<i>Taraxacum officinale</i> Wigg. - Խատուտիկ դեղատու
6/18/2021	FSP 003, 004, 005	<i>Xanthium italicum</i> Moretti - Դառնափուռ, Դառնուկ խոտակական
6/18/2021	FSP 004	<i>Xeranthemum squarrosum</i> Boiss. - Չորաբույս, Անմեռուկ չոված
6/18/2021	FSP 003, 005	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
6/18/2021	FSP 004	<i>Echium vulgare</i> L. - Իժախոտ սովորական
6/18/2021	FSP 003, 004, 005	<i>Myosotis arvensis</i> (L.) Hill. - Անմեռուկ դաշտային
6/18/2021	FSP 003, 005	<i>Symphytum asperum</i> Lepech. - Քարխոտ կոշտ
6/18/2021	FSP 003, 004, 005	<i>Capsella bursa-pastoris</i> (L.) Medik. - Ծոսպաշար, Հովվամաղախ
6/18/2021	FSP 004	<i>Crambe orientalis</i> L. - Ծովակաղամբ արևելյան
6/18/2021	FSP 003, 004, 005	<i>Lepidium campestre</i> (L.) R. Br. - Կոտեմ դաշտային
6/18/2021	FSP 003, 004, 005	<i>Thlaspi perfoliatum</i> L. - Շնկոտեմ թափանցված
6/18/2021	FSP 004	<i>Michauxia laevigata</i> Vent. - Միշոքսիա հարթ
6/18/2021	FSP 003, 005	<i>Lonicera caucasica</i> Pall. - Ցախակեռաս կովկասյան
6/18/2021	FSP 004, 005	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
6/18/2021	FSP 004	<i>Dianthus cretaceus</i> Adams - Մեխակ կավճային
6/18/2021	FSP 003, 004, 005	<i>Chenopodium foliosum</i> Aschers. - Թելուկ բազմատերև
6/18/2021	FSP 004	<i>Salsola dendroides</i> Pall. - Օշան ծառանման
6/18/2021	FSP 004	<i>Rosularia sempervivum</i> (Bieb.) Berger - Վարդակուկ մշտադալար
6/18/2021	FSP 004	<i>Sedum caucasicum</i> (Grossh.) A. Bor. - Թանթոնիկ կովկասյան

6/18/2021	FSP 004	<i>Sedum oppositifolium</i> Sims. - Թանթռնիկ հակադրաստերն
6/18/2021	FSP 004	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմակ անդրկովկասյան
6/18/2021	FSP 003, 004, 005	<i>Cuscuta cesattiana</i> Bertol. - Գայլխոտ, Գաղձ Ցեզատի
6/18/2021	FSP 004	<i>Scabiosa caucasica</i> Bieb. - Քոսքսուկ կովկասյան
6/18/2021	FSP 003, 005	<i>Elaeagnus angustifolia</i> L. - Փշատ նեղատերն
6/18/2021	FSP 003, 004, 005	<i>Euphorbia sequierana</i> Neck. - Բշակաթնուկ Սեզիերի
6/18/2021	FSP 004	<i>Astragalus microcephalus</i> Willd. - Գազ մանրագլխիկ
6/18/2021	FSP 004	<i>Astragalus xiphidium</i> Bunge - Գազ թրածն
6/18/2021	FSP 003, 004, 005	<i>Melilotus officinalis</i> (L.) Pall. - Իշատվույտ դեղատու
6/18/2021	FSP 003, 004, 005	<i>Trifolium campestre</i> Schreb. - Երեքնուկ դաշտային
6/18/2021	FSP 003, 004, 005	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
6/18/2021	FSP 003, 004, 005	<i>Fumaria officinalis</i> L. - Ծխաբույս, Տերուկ դեղատու
6/18/2021	FSP 003, 004, 005	<i>Erodium cicutarium</i> (L.) L'Her. - Ճայկտուց խնդամուղային
6/18/2021	FSP 003, 004, 005	<i>Ornithogalum montanum</i> Cirillo - Սպիտակ բանջար, Աստղաշուշան լեռնային
6/18/2021	FSP 003, 004, 005	<i>Hypericum perforatum</i> L. - Մրոհունդ խցված
6/18/2021	FSP 004	<i>Gladiolus hajastanicus</i> Gabrielian - Թրաշուշան հայաստանյան
6/18/2021	FSP 003, 004, 005	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
6/18/2021	FSP 004	<i>Iris lineolata</i> (Trautv.) Grossh. - Հիրիկ նեղգծային
6/18/2021	FSP 003, 005	<i>Juglans regia</i> L. - Ընկուզենի սովորական
6/18/2021	FSP 003, 005	<i>Juncus inflexus</i> L. - Կնյուն կոսցած
6/18/2021	FSP 003, 005	<i>Mentha longifolia</i> (L.) Huds. - Անանուխ, Դաղձ երկարատերն
6/18/2021	FSP 004	<i>Nepeta mussinii</i> Spreng. - Կատվադաղձ Մուսինի
6/18/2021	FSP 003, 004, 005	<i>Origanum vulgare</i> L. - Խնկածաղիկ սովորական
6/18/2021	FSP 003, 004, 005	<i>Teucrium polium</i> L. - Լերդախոտ ալեհեր
6/18/2021	FSP 004	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
6/18/2021	FSP 004	<i>Ziziphora rigida</i> (Boiss.) Stapf - Ուրցադաղձ կոշտ
6/18/2021	FSP 003, 004, 005	<i>Arceuthobium oxycedri</i> (DC.) Bieb. - Արցեութոբիում գիհու
6/18/2021	FSP 003, 004, 005	<i>Alcea rugosa</i> Alef. - Տուղտավաղդ կնճոտ
6/18/2021	FSP 003, 005	<i>Morus alba</i> - Թթենի սպիտակ
6/18/2021	FSP 003, 005	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
6/18/2021	FSP 003, 005	<i>Epilobium hirsutum</i> L. - Ապուզան թավոտ
6/18/2021	FSP 003, 005	<i>Orchis mascula</i> (L.) L. - Խոլորձ արական
6/18/2021	FSP 003, 004, 005	<i>Papaver fugax</i> Poir. - Կակաչ թոչող
6/18/2021	FSP 003, 004, 005	<i>Papaver macrostomum</i> Boiss. et Huet - Կակաչ խոշորատուփիկ
6/18/2021	FSP 004	<i>Acantholimon bracteatum</i> (Girard) Boiss. - Ոգնաթուփ ծաղկակիցային
6/18/2021	FSP 004	<i>Aegilops cylindrica</i> Host - Այծակն գլանաձև
6/18/2021	FSP 004	<i>Aegilops tauschii</i> Coss. - Այծակն Թաուշի
6/18/2021	FSP 004	<i>Avena fatua</i> L. - Խրբուկ, Վարսակ դատարիկ, Վ. պոչուկ
6/18/2021	FSP 003, 004, 005	<i>Dactylis glomerata</i> L. - Ոգնախոտ հավաքված
6/18/2021	FSP 004	<i>Festuca chalcophaea</i> V. I. Krecz. et Bobrov - Շյուդախոտ պղնձագորշ
6/18/2021	FSP 003, 004, 005	<i>Hordeum bulbosum</i> L. - Գարի սոխուկավոր
6/18/2021	FSP 003, 005	<i>Phragmites australis</i> (Cav.) Trin ex Steud. - Եղեգնատունկ, Եղեգ հարավային
6/18/2021	FSP 003, 004, 005	<i>Poa bulbosa</i> L. - Արոտածիլ, Հուրանախոտ, Դաշտավլուկ սոխուկավոր
6/18/2021	FSP 004	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
6/18/2021	FSP 003, 004, 005	<i>Rumex crispus</i> L. - Ավելուկ գանգոթ
6/18/2021	FSP 003, 004, 005	<i>Portulaca oleracea</i> L. - Դանդուտ սովորական
6/18/2021	FSP 003, 004, 005	<i>Primula macrocalyx</i> Bunge - Գնարբուկ խոշորաբաժակ
6/18/2021	FSP 003, 005	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
6/18/2021	FSP 004	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր

6/18/2021	FSP 003, 005	<i>Rhamnus spathulifolia</i> Fisch et C.A. Mey. - Դժնիկ թիաստերև
6/18/2021	FSP 004	<i>Amygdalus fenzliana</i> (Fritsch) Lipsky - Նշենի Ֆենցլի
6/18/2021	FSP 003, 004, 005	<i>Armeniaca vulgaris</i> Lam. - Ծիրան սովորական
6/18/2021	FSP 003, 004, 005	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
6/18/2021	FSP 003, 004, 005	<i>Cerasus vulgaris</i> Mill. - Բալենի սովորական
6/18/2021	FSP 003, 005	<i>Cerasus mahaleb</i> (L.) Mill. - Բալենի մահալեբի
6/18/2021	FSP 004, 005	<i>Cotoneaster integerrimus</i> Medik. - Չսենի ամբողջաբեր
6/18/2021	FSP 003, 004, 005	<i>Crataegus monogyna</i> Jacq. - Ալոճ, Սգնի միասունակ
6/18/2021	FSP 003, 004, 005	<i>Cydonia oblonga</i> Mill. - Սերկնիլ սովորական
6/18/2021	FSP 003, 004, 005	<i>Fragaria viridis</i> (Duch.) Weston - Ելակ կանաչ
6/18/2021	FSP 003, 004, 005	<i>Geum urbanum</i> L. - Շահոքրամ սովորական
6/18/2021	FSP 003, 004, 005	<i>Malus domestica</i> Borkh. - Խնձորենի սովորական
6/18/2021	FSP 003, 004, 005	<i>Persica vulgaris</i> Mill. - Դեղձենի սովորական
6/18/2021	FSP 003, 004, 005	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
6/18/2021	FSP 003, 005	<i>Prunus domestica</i> L. - Դամբուլ
6/18/2021	FSP 003, 004, 005	<i>Pyrus caucasica</i> Fed. - Տանձենի կովկասյան
6/18/2021	FSP 003, 004, 005	<i>Pyrus communis</i> L. - Տանձենի սովորական
6/18/2021	FSP 004	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուտենատերև
6/18/2021	FSP 003, 004, 005	<i>Rosa iberica</i> Stev. ex Bieb. - Մասրենի վրացական
6/18/2021	FSP 003, 004, 005	<i>Rosa spinosissima</i> L. - Մասրենի առատափուշ
6/18/2021	FSP 003, 004, 005	<i>Spiraea crenata</i> L. - Ասպիրակ աղեղնեզր
6/18/2021	FSP 003, 004, 005	<i>Spiraea hypericifolia</i> L. - Ասպիրակ արևքուրիկատերև
6/18/2021	FSP 003, 004, 005	<i>Galium aparine</i> L. - Մակարդախոտ կաշուն
6/18/2021	FSP 003, 004, 005	<i>Galium verum</i> Scop. - Մակարդախոտ գարնանային
6/18/2021	FSP 003, 005	<i>Populus bolleana</i> Lauche - Բարդի Բոլլեի, Բ. սամարղանդի
6/18/2021	FSP 003, 005	<i>Populus nigra</i> L. - Բարդի սև
6/18/2021	FSP 003, 005	<i>Salix elbursensis</i> Boiss. - Ուտենի էլբուրսյան
6/18/2021	FSP 003, 005	<i>Salix excelsa</i> S. G. Gmel. - Ուտենի բարձր
6/18/2021	FSP 003, 005	<i>Salix triandra</i> L. - Ուտենի եռառեզ
6/18/2021	FSP 004	<i>Datura stramonium</i> L. - Արջընկույզ սովորական
6/18/2021	FSP 003, 005	<i>Typha latifolia</i> L. - Որձախոտ, Կեռոն լայնատերև
6/18/2021	FSP 003, 005	<i>Ulmus minor</i> Mill. - Թեղի փոքր
<b>Total</b>		<b>124</b>

EAAA 004

In total there are **61** species of vascular plants recorded in this area. The flora is mainly represented by steppe species and the species of riparian zone. The full list of the flora is presented in Table 267.

**Table 268. List of plants recorded during June**

Date	Route #	Species name English
6/18/2021	FSP 026	<i>Dryopteris filix-mas</i> (L.) Shott. - Վահանապտեր արական
6/18/2021	FSP 026	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/18/2021	FSP 026	<i>Juniperus polycarpos</i> K. Koch. - Գիհի բազմապտուղ
6/18/2021	FSP 026	<i>Acer campestre</i> L. - Թխկի դաշտային
6/18/2021	FSP 026	<i>Allium fuscoviolaceum</i> Fomin - Սոխ գորշ մանուշակագույն
6/18/2021	FSP 026	<i>Allium szovitsii</i> Regel - Սոխ Շովիցի
6/18/2021	FSP 026	<i>Chaerophyllum macrospermum</i> (Willd. ex Spreng.) Fisch. et C.A. Mey. - Շուշանաբանջար խոշորապտուղ
6/18/2021	FSP 026	<i>Eryngium caucasicum</i> Trautv. - Երնջնակ կովկասյան

6/18/2021	FSP 026	<i>Heracleum trachyloma</i> Fisch. et C.A. Mey. - Բալդրդան թավրտ
6/18/2021	FSP 026	<i>Vinca herbacea</i> W. K. - Կուսածաղիկ խոտային
6/18/2021	FSP 026	<i>Vincetoxicum amplifolium</i> K. Koch - Թունաթափ լայնատերև
6/18/2021	FSP 026	<i>Eremurus spectabilis</i> N. Bieb. - Շրեշ ուշագրավ
6/18/2021	FSP 026	<i>Artemisia absinthium</i> L. - Օշինդր դառը
6/18/2021	FSP 026	<i>Artemisia incana</i> (L.) Druce - Օշինդր պեհեր
6/18/2021	FSP 026	<i>Tussilago farfara</i> L. - Տատրակ սովորական, Խոճկորիկ
6/18/2021	FSP 026	<i>Berberis vulgaris</i> L. - Կծիխուր սովորական
6/18/2021	FSP 026	<i>Cleome ornithopodioides</i> L. - Թռչնաթաթ թռչնաթաթանման
6/18/2021	FSP 026	<i>Lonicera caucasica</i> Pall. - Ցախակեռաս կովկասյան
6/18/2021	FSP 026	<i>Viburnum lantana</i> L. - Գերիմաստի
6/18/2021	FSP 026	<i>Petrohragia alpina</i> (Habl.) P.W.Ball et Heywood
6/18/2021	FSP 026	<i>Silene ruprechtii</i> Schischk. - Ծվծվուկ Ռուպրեխտի
6/18/2021	FSP 026	<i>Colchicum speciosum</i> Steven - Շնդեղ հրաշալի
6/18/2021	FSP 026	<i>Convolvulus arvensis</i> L. - Պատաստուկ դաշտային
6/18/2021	FSP 026	<i>Hippophae rhamnoides</i> L. - Չիչխան դժնիկանման
6/18/2021	FSP 026	<i>Trifolium trichocephalum</i> Bieb. - Երեքնուկ մազմզոտագլուխ
6/18/2021	FSP 026	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
6/18/2021	FSP 026	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
6/18/2021	FSP 026	<i>Juglans regia</i> L. - Ընկուզենի սովորական
6/18/2021	FSP 026	<i>Lamium album</i> L. - Խուլ եղինջ սպիտակ
6/18/2021	FSP 026	<i>Leonurus cardiaca</i> L. - Աղյուծագի սովորական
6/18/2021	FSP 026	<i>Chamaenerion angustifolium</i> (L.) Scop. - Նեղտերևի նեղատերև
6/18/2021	FSP 026	<i>Papaver fugax</i> Poir. - Կակաշ թռչող
6/18/2021	FSP 026	<i>Hordeum violaceum</i> Boiss. et Huet - Գարի մանուշակագույն
6/18/2021	FSP 026	<i>Rumex acetosa</i> L. - Ավելուկ սովորական
6/18/2021	FSP 026	<i>Rumex acetoselloides</i> Bal. - Ավելուկ ավելուկանման
6/18/2021	FSP 026	<i>Rumex crispus</i> L. - Ավելուկ գանգուր
6/18/2021	FSP 026	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
6/18/2021	FSP 026	<i>Cerasus vulgaris</i> Mill. - Բալենի սովորական
6/18/2021	FSP 026	<i>Cotoneaster saxatilis</i> Pojark. - Չմենի ժայռային
6/18/2021	FSP 026	<i>Crataegus orientalis</i> Pall. ex Bieb. - Ալոճ, Սզնի արևելյան
6/18/2021	FSP 026	<i>Fragaria viridis</i> (Duch.) Weston - Ելակ կանաչ
6/18/2021	FSP 026	<i>Malus domestica</i> Borkh. - Խնձորենի սովորական
6/18/2021	FSP 026	<i>Persica vulgaris</i> Mill. - Դեղձենի սովորական
6/18/2021	FSP 026	<i>Prunus divaricata</i> Ldb. - Մալոր, Շլոր
6/18/2021	FSP 026	<i>Prunus domestica</i> L. - Դամբուլ
6/18/2021	FSP 026	<i>Pyrus caucasica</i> Fed. - Տանձենի կովկասյան
6/18/2021	FSP 026	<i>Pyrus communis</i> L. - Տանձենի սովորական
6/18/2021	FSP 026	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռենատերև
6/18/2021	FSP 026	<i>Rosa canina</i> L. - Մաարենի շան
6/18/2021	FSP 026	<i>Rosa iberica</i> Stev. ex Bieb. - Մաարենի վրացական
6/18/2021	FSP 026	<i>Rosa spinosissima</i> L. - Մաարենի առատափուշ
6/18/2021	FSP 026	<i>Spiraea hypericifolia</i> L. - Սսպիրակ արևբուրիկատերև
6/18/2021	FSP 026	<i>Populus nigra</i> L. - Բարդի սև
6/18/2021	FSP 026	<i>Salix caprea</i> L. - Այծուռենի, Որձուռի
6/18/2021	FSP 026	<i>Salix elbursensis</i> Boiss. - Ուռենի էլբուրյան
6/18/2021	FSP 026	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
6/18/2021	FSP 026	<i>Salix triandra</i> L. - Ուռենի երատեջ

6/18/2021	FSP 026	<i>Ulmus minor</i> Mill. - Թեղի փոքր
6/18/2021	FSP 026	<i>Urtica dioica</i> L. - Եղինջ երկտուն
6/18/2021	FSP 026	<i>Valeriana alliarifolia</i> Adams - Կառվախոտ սխտորուկատերև
6/18/2021	FSP 026	<i>Viola odorata</i> L. - Մանուշակ բուրավետ
<b>Total</b>		<b>61</b>

## EAAA 005

In total there are **23** species of vascular plants recorded in this area. The flora is mainly represented by forest, steppemeadow, and subalpine species. The full list of the flora is presented in Table 268.

**Table 269. List of plants recorded during June**

Date	Route #	Species name English
6/18/2021	Steppemeadow and Subalpine	<i>Juniperus depressa</i> Stev. - Գիհի ցածր
6/18/2021	Steppemeadow and Subalpine	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/18/2021	Steppemeadow and Subalpine	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
6/18/2021	Steppemeadow and Subalpine	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Սարի չամիչ բարձր
6/18/2021	Steppemeadow and Subalpine	<i>Asparagus officinalis</i> L. - Չնեբեկ, Ծնեփակ դեղատու
6/18/2021	Steppemeadow and Subalpine	<i>Grossheimia macrocephala</i> (Muss.-Puschk. ex Willd.) Sosn. et Takht. - Գրոսհեյմիա խոշորագլուխ
6/18/2021	Steppemeadow and Subalpine	<i>Sedum oppositifolium</i> Sims. - Թանթոնիկ հակադրատերև
6/18/2021	Steppemeadow and Subalpine	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմակ անդրկովկասյան
6/18/2021	Steppemeadow and Subalpine	<i>Bryonia alba</i> L. - Լոշտակ սպիտակ
6/18/2021	Steppemeadow and Subalpine	<i>Euphorbia iberica</i> Boiss. - Իշակաթնուկ վրացական/իբերիական/
6/18/2021	Steppemeadow and Subalpine	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
6/18/2021	Steppemeadow and Subalpine	<i>Hypericum perforatum</i> L. - Մրոհունդ խոցված
6/18/2021	Steppemeadow and Subalpine	<i>Origanum vulgare</i> L. - Խնկածաղիկ սովորական
6/18/2021	Steppemeadow and Subalpine	<i>Thymus collinus</i> Bieb. - Ուրց բլրակային
6/18/2021	Steppemeadow and Subalpine	<i>Papaver fugax</i> Poir. - Կակաչ թռչող
6/18/2021	Steppemeadow and Subalpine	<i>Papaver orientale</i> L. - Կակաչ արևելյան
6/18/2021	Steppemeadow and Subalpine	<i>Hordeum violaceum</i> Boiss. et Huet - Գարի մանուշակագույն
6/18/2021	Steppemeadow and Subalpine	<i>Secale vavilovii</i> Grossh. - Տարեկան, Աշորա Վավիլովի, Ա. Վայրի սիսակա,
6/18/2021	Steppemeadow and Subalpine	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
6/18/2021	Steppemeadow and Subalpine	<i>Prunus divaricata</i> Ldb. - Մալոր, Շրոր
6/18/2021	Steppemeadow and Subalpine	<i>Rosa spinosissima</i> L. - Մասրենի առատափուշ
6/18/2021	Steppemeadow and Subalpine	<i>Spiraea hypericifolia</i> L. - Ասպիրակ արևբուրիկատերև
6/18/2021	Steppemeadow and Subalpine	<i>Salix elbursensis</i> Boiss. - Ուռենի
<b>Total</b>		<b>23</b>

## EAAA 006

In total there are **39** species of vascular plants recorded in this area. The flora is mainly represented by bushes, steppemeadow species and the species of riparian zone. The full list of the flora is presented in Table 269.

**Table 270. List of plants recorded during June**

Date	Route #	Species name English
6/19/2021	FSP 006	<i>Asplenium septentrionale</i> (L.) Hoffm. - Ասպլեն հյուսիսային
6/19/2021	FSP 006	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/19/2021	FSP 006	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ

6/19/2021	FSP 006	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Սարի չամիչ բարձր
6/19/2021	FSP 006, 007	<i>Daucus carota</i> L. - Գազար վայրի
6/19/2021	FSP 006	<i>Eryngium billardieri</i> Delaroche - Երնջնակ Բիլարդեի
6/19/2021	FSP 006, 007	<i>Asparagus persicus</i> Baker - Չնեբեկ, Ծնեփակ պարսկական
6/19/2021	FSP 006	<i>Artemisia incana</i> (L.) Druce - Օշինդր ալեհեր
6/19/2021	FSP 006, 007	<i>Tanacetum vulgare</i> L. - Տարկավան, Լվածաղիկ սովորական
6/19/2021	FSP 006	<i>Tussilago farfara</i> L. - Տատրակ սովորական, Խոճկորիկ
6/19/2021	FSP 007	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
6/19/2021	FSP 006	<i>Aethionema arabicum</i> (L.) Lipsky - Բոցաթելուկ արաբական
6/19/2021	FSP 006	<i>Alyssum tortuosum</i> Waldst. et Kit. ex Willd. - Վառվռուկ, Փարա-փարա-ավել
6/19/2021	FSP 007	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
6/19/2021	FSP 007	<i>Nasturtium officinale</i> R. Br. - Ջրկոտեմ դեղատու
6/19/2021	FSP 006, 007	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
6/19/2021	FSP 006	<i>Petrorhagia alpina</i> (Habl.) P.W.Ball et Heywood
6/19/2021	FSP 006	<i>Sedum caucasicum</i> (Grossh.) A. Bor. - Թանթոնիկ կովկասյան
6/19/2021	FSP 006	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմակ անդրկովկասյան
6/19/2021	FSP 006	<i>Trifolium alpestre</i> L. - Երեքնուկ ալպյան
6/19/2021	FSP 006	<i>Trifolium trichocephalum</i> Bieb. - Երեքնուկ մազմզոտազրուխ
6/19/2021	FSP 006, 007	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
6/19/2021	FSP 006, 007	<i>Hypericum perforatum</i> L. - Սրռհունդ խոցված
6/19/2021	FSP 006	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
6/19/2021	FSP 006	<i>Betonica macrantha</i> K. Koch - Թթվիճ խոշորածաղիկ
6/19/2021	FSP 007	<i>Nasturtium officinale</i> R. Br. - Ջրկոտեմ դեղատու
6/19/2021	FSP 006	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
6/19/2021	FSP 006	<i>Thymus transcaucasicus</i> Ronn. - Ուրց անդրկովկասյան
6/19/2021	FSP 006	<i>Ziziphora rigida</i> (Boiss.) Stapf - Ուրցադաղձ կոշտ
6/19/2021	FSP 006	<i>Briza elatior</i> L. - Դողդողուն բարձր
6/19/2021	FSP 007	<i>Phragmites australis</i> (Cav.) Trin ex Steud. - Եղեգնատունկ, Եղեգ հարավային
6/19/2021	FSP 006, 007	<i>Rumex acetosa</i> L. - Ավելուկ սովորական
6/19/2021	FSP 006, 007	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
6/19/2021	FSP 006, 007	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
6/19/2021	FSP 006, 007	<i>Pyrus zangezura</i> Maleev - Տանձենի գանգեզուրի
6/19/2021	FSP 006	<i>Rosa spinosissima</i> L. - Մասրենի առատափուռ
6/19/2021	FSP 007	<i>Salix caprea</i> L. - Այծուռենի, Որձուռի
6/19/2021	FSP 007	<i>Salix elbursensis</i> Boiss. - Ուռենի էլբուրսյան
6/19/2021	FSP 007	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
<b>Total</b>		<b>39</b>

EAAA 007-009

In total there are **49** species of vascular plants recorded in this area. The flora is mainly represented by forest, bushes, steppe and riparian species. The full list of the flora is presented in Table 270.

**Table 271. List of plants recorded during June**

Date	Route #	Species name English
6/19/2021	FSP 008, 009	<i>Asplenium septentrionale</i> (L.) Hoffm. - Ասպլեն հյուսիսային
6/19/2021	FSP 009, 010, 011	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/19/2021	FSP 009, 010	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
6/19/2021	FSP 008, 009	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Սարի չամիչ բարձր
6/19/2021	FSP 009, 010, 011	<i>Acer campestre</i> L. - Թխկի դաշտային

6/19/2021	FSP 009, 010, 011	<i>Acer ibericum</i> Bieb. - Թխլի իբերիական
6/19/2021	FSP 008, 009, 010	<i>Daucus carota</i> L. - Գազար վայրի
6/19/2021	FSP 009, 010, 011	<i>Asparagus persicus</i> Baker - Ձեռքեկ, Օնեփակ պարսկական
6/19/2021	FSP 008, 009	<i>Artemisia absinthium</i> L. - Օշինդր դառը
6/19/2021	FSP 008, 009	<i>Grossheimia macrocephala</i> (Muss.-Puschk. ex Willd.) Sosn. et Takht. - Գրոսհեյմիա խոշորագլուխ
6/19/2021	FSP 008, 009, 010	<i>Tussilago farfara</i> L. - Տատրակ սովորական, խոճկորիկ
6/19/2021	FSP 009, 010, 011	<i>Berberis vulgaris</i> L. - Կոնյուր
6/19/2021	FSP 008,	<i>Aethionema arabicum</i> (L.) Lipsky - Բոցաթելուկ արաբական
6/19/2021	FSP 008, 009	<i>Alyssum tortuosum</i> Waldst. et Kit. ex Willd. - Վառվռուկ, Փարա-փարա-ավել
6/19/2021	FSP 009, 011	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
6/19/2021	FSP 008, 009	<i>Sedum caucasicum</i> (Grossh.) A. Bor. - Թանթոնիկ կովկասյան
6/19/2021	FSP 008	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմակ անդրկովկասյան
6/19/2021	FSP 008, 009	<i>Trifolium alpestre</i> L. - Երեքնուկ ալպյան
6/19/2021	FSP 008	<i>Trifolium trichocephalum</i> Bieb. - Երեքնուկ մագնոսագլուխ
6/19/2021	FSP 010, 011	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
6/19/2021	FSP 008, 009, 010, 011	<i>Hypericum perforatum</i> L. - Սրոհունդ խոցված
6/19/2021	FSP 008, 009, 010	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
6/19/2021	FSP 008	<i>Betonica macrantha</i> K. Koch - Թթվիճ խոշորածաղիկ
6/19/2021	FSP 008, 009	<i>Thymus collinus</i> Bieb. - Ուրց բլրակային
6/19/2021	FSP 008, 009	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
6/19/2021	FSP 008, 009	<i>Ziziphora rigida</i> (Boiss.) Stapf - Ուրցաղաղձ կոշտ
6/19/2021	FSP 010, 011	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
6/19/2021	FSP 008, 009, 010, 011	<i>Dactylis glomerata</i> L. - Ոգնախոտ հավաքված
6/19/2021	FSP 009, 010	<i>Rumex obtusifolius</i> L. - Ավելուկ բթասերև
6/19/2021	FSP 009, 010, 011	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
6/19/2021	FSP 009	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր
6/19/2021	FSP 009	<i>Amygdalus fenzliana</i> (Fritsch) Lipsky - Նշենի Ֆենցլի
6/19/2021	FSP 010, 011	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
6/19/2021	FSP 011	<i>Cerasus mahaleb</i> (L.) Mill. - Բալենի մահալեբի
6/19/2021	FSP 008, 009	<i>Cotoneaster integerrimus</i> Medik. - Չմենի ամբողջաեզր
6/19/2021	FSP 008, 009	<i>Cotoneaster saxatilis</i> Pojark. - Չմենի ժայռային
6/19/2021	FSP 008, 009, 010, 011	<i>Fragaria viridis</i> (Duch.) Weston - Ելակ կանաչ
6/19/2021	FSP 008, 009, 010, 011	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
6/19/2021	FSP 010, 011	<i>Pyrus zangezura</i> Maleev - Տանձենի զանգեզուրի
6/19/2021	FSP 008, 009, 010	<i>Rosa spinosissima</i> L. - Մասրենի առատափուռ
6/19/2021	FSP 009, 010, 011	<i>Rubus armeniacus</i> Focke. - Մոշենի հայկական
6/19/2021	FSP 010, 011	<i>Sorbus aucuparia</i> L. - Օտիխնձոր, Արոսի սովորական
6/19/2021	FSP 011	<i>Populus italica</i> (Dur.) Moench - Բարդի բրզաձև իտալական
6/19/2021	FSP 011	<i>Populus nigra</i> L. - Բարդի սև
6/19/2021	FSP 011	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
6/19/2021	FSP 011	<i>Salix triandra</i> L. - Ուռենի եռաթել
6/19/2021	FSP 011	<i>Typha latifolia</i> L. - Որձախոտ, Կեռոն լայնատերև
6/19/2021	FSP 009, 011	<i>Parietaria judaica</i> Strand. - Կովինչ հուդայի
6/19/2021	FSP 008, 009, 010, 011	<i>Urtica dioica</i> L. - Եղինջ երկտուն
<b>Total</b>		<b>49</b>

EAAA 010-012

In total there are **48** species of vascular plants recorded in this area. The flora is mainly represented by juniper woodland, steppe, bushes species and the species of riparian zone. The full list of the flora is presented in Table 271.

**Table 272. List of plants recorded during June**

Date	Route #	Species name English
6/19/2021	FSP 014, 019	<i>Asplenium septentrionale</i> (L.) Hoffm. - Ասպլեն հյուսիսային
6/19/2021	FSP 014, 019	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/19/2021	FSP 014, 019	<i>Juniperus polycarpos</i> K. Koch. - Գիհի բազմապտուղ
6/19/2021	FSP 012, 013, 019	<i>Acer campestre</i> L. - Թխկի դաշտային
6/19/2021	FSP 012, 013, 014, 019	<i>Acer ibericum</i> Bieb. - Թխկի իբերիական
6/19/2021	FSP 012, 013, 019	<i>Cotinus coggygria</i> Scop. - Դրախտածառ սովորական
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Astrodaucus orientalis</i> (L.) Drude - Աստղագազար արևելյան
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Daucus carota</i> L. - Գազար վայրի
6/19/2021	FSP 013, 014, 015, 016. 017, 018, 019	<i>Prangos ferulacea</i> (L.) Lindl. - Պրանգոս նարդեանման
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Asparagus persicus</i> Baker - Չներեկ, Ծնեփակ պարսկական
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Achillea millefolium</i> L. - Հազարատերևուկ սովորական
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 019	<i>Cichorium intybus</i> L. - Եղերդակ, Ճարճատուկ սովորական
6/19/2021	FSP 013, 014, 015, 017, 019	<i>Tussilago farfara</i> L. - Տատրակ սովորական, Խոճկորիկ
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 019	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
6/19/2021	FSP 013, 014, 015, 016. 017, 018, 019	<i>Alyssum persicum</i> Boiss. - Վառվռուկ պարսկական
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 019	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
6/19/2021	FSP 012, 013, 014, 019	<i>Viburnum lantana</i> L. - Գերինաստի
6/19/2021	FSP 013, 014, 015, 016. 017, 018, 019	<i>Merendera trigyna</i> (Steven ex Adam) Stapf - Խլոպուզ, Չնձաղիկ եռավարսանդ
6/19/2021	FSP 013, 014, 015, 016. 017, 018, 019	<i>Sedum caucasicum</i> (Grossh.) A. Bor. - Թանթոնիկ կովկասյան
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 019	<i>Lotus caucasicus</i> Kuprian. ex Juz. - Եղջերատվույտ կովկասյան
6/19/2021	FSP 013, 014, 015, 016. 017, 018, 019	<i>Trifolium trichocephalum</i> Bieb. - Երեքնուկ մագճոտազուխ
6/19/2021	FSP 013, 014, 019	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Hypericum perforatum</i> L. - Սրոհունդ խոցված
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
6/19/2021	FSP 013, 014, 015, 016. 017, 019	<i>Betonica macrantha</i> K. Koch - Թթվիճ խոշորածաղիկ
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 019	<i>Lamium album</i> L. - Խուլ եղինջ սպիտակ
6/19/2021	FSP 013, 014, 015, 016. 017, 018, 019	<i>Sideritis montana</i> L. - Երնջա լեռնային
6/19/2021	FSP 012, 014, 015, 016. 017, 018, 019	<i>Thymus collinus</i> Bieb. - Ուրց բլրակային
6/19/2021	FSP 012, 013, 014, 019	<i>Tulipa sosnowskyi</i> Achv. et Mirzoeva - Վարդակակաչ Սոսնովսկու

6/19/2021	FSP 013	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
6/19/2021	FSP 012, 014, 015, 016, 017, 018, 019	<i>Papaver orientale</i> L. - Կակաչ արևելյան
6/19/2021	FSP 018	<i>Peganum harmala</i> L. - Սպանդ սովորական
6/19/2021	FSP 012, 014, 015, 016, 017, 018, 019	<i>Hordeum bulbosum</i> L. - Գարի սոխուկավոր
6/19/2021	FSP 012, 014, 015, 016, 017, 018, 019	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
6/19/2021	FSP 012, 013, 014, 015, 016, 017, 019	<i>Primula macrocalyx</i> Bunge - Գնարբուկ խոշորաբաժակ
6/19/2021	FSP 012, 013, 014, 015, 016, 017, 019	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
6/19/2021	FSP 014, 015, 016, 017, 018, 019	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր
6/19/2021	FSP 012, 014, 015, 016, 017, 018, 019	<i>Amygdalus fenzliana</i> (Fritsch) Lipsky - Նշենի Ֆենցլի
6/19/2021	FSP 013	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
6/19/2021	FSP 012, 014, 015, 016, 017, 019	<i>Cotoneaster integerrimus</i> Medik. - Չմենի ամբողջաեզր
6/19/2021	FSP 012, 014, 015, 016, 017, 019	<i>Cotoneaster saxatilis</i> Pojark. - Չմենի ժայռային
6/19/2021	FSP 012, 014, 015, 016, 017, 019	<i>Crataegus orientalis</i> Pall. ex Bieb. - Ալոճ, Սզնի արևելյան
6/19/2021	FSP 012, 013, 015, 016, 017, 019	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
6/19/2021	FSP 012, 013, 015, 016, 017	<i>Prunus spinosa</i> L. - Սալոր փշավոր
6/19/2021	FSP 013, 019	<i>Rubus armeniacus</i> Focke. - Մոշենի հայկական
6/19/2021	FSP 013, 019	<i>Sorbus graeca</i> (Spach) Hedl. - Ասպար, Արոսի հունական
6/19/2021	FSP 012, 013, 014, 015, 016, 017, 019	<i>Celtis caucasica</i> Willd. - Փռչնի կովկասյան
6/19/2021	FSP 013	<i>Ulmus minor</i> Mill. - Թեղի փոքր
<b>Total</b>		<b>48</b>

## EAAA 013

In total there are **46** species of vascular plants recorded in this area. The flora is mainly represented by forest, bushes and steppe species. The full list of the flora is presented in Table 272.

**Table 273. List of plants recorded during June**

Date	Route #	Species name English
6/19/2021	FSP 021	<i>Equisetum ramosissimum</i> Dsf. - Չիածեն ճյուղավոր
6/19/2021	FSP 020, 021	<i>Juniperus foetidissima</i> Willd. - Յրտնենի, Գիհի գարշահոտ
6/19/2021	FSP 020, 021	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/19/2021	FSP 020, 021	<i>Juniperus polycarpos</i> K. Koch. - Գիհի բազմապտուղ
6/19/2021	FSP 020, 021	<i>Pinus sylvestris</i> L. - Մոճի սովորական
6/19/2021	FSP 021	<i>Acer campestre</i> L. - Թխկի դաշտային
6/19/2021	FSP 021	<i>Acer ibericum</i> Bieb. - Թխկի իբերիական
6/19/2021	FSP 020, 021	<i>Vincetoxicum amplifolium</i> K. Koch - Թունաթափ լայնատերև
6/19/2021	FSP 020	<i>Artemisia fragrans</i> Willd. - Օշինդր բուրավետ
6/19/2021	FSP 020	<i>Echinops pungens</i> Trautv. - Թուփիուշ, Ոզնագլխիկ փշոտ
6/19/2021	FSP 020, 021	<i>Inula helenium</i> L. - Կղմուխ մեծ
6/19/2021	FSP 020	<i>Xeranthemum squarrosum</i> Boiss. - Չորաբույս, Անսևռուկ չոված

6/19/2021	FSP 021	<i>Anchusa azurea</i> Mill. - Կապածիպակ լազուր
6/19/2021	FSP 020, 021	<i>Myosotis sylvatica</i> Ehrh. ex Hoffm. - Անմոռուկ անտառային
6/19/2021	FSP 020, 021	<i>Capsella bursa-pastoris</i> (L.) Medik. - Ծոսապաշար, Հովվամաղախ
6/19/2021	FSP 020, 021	<i>Campanula glomerata</i> L. - Զանգակ խմբված
6/19/2021	FSP 021	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
6/19/2021	FSP 020, 021	<i>Sagina procumbens</i> L. - Մազին պտկած
6/19/2021	FSP 020, 021	<i>Silene ruprechtii</i> Schischk. - Ծվծվուկ Ռուպրեխտի
6/19/2021	FSP 021	<i>Swida australis</i> (C.A. Mey.) Pojark. ex Grossh. - Ճապկի հարավի
6/19/2021	FSP 020, 021	<i>Hypericum perforatum</i> L. - Մրոհունդ խոցված
6/19/2021	FSP 021	<i>Juglans regia</i> L. - Ընկուզենի սովորական
6/19/2021	FSP 020, 021	<i>Teucrium polium</i> L. - Լերդախոտ ալեհեր
6/19/2021	FSP 020	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
6/19/2021	FSP 020, 021	<i>Linum nervosum</i> Waldst. et Kit. - Վուշ ջղավոր
6/19/2021	FSP 021	<i>Malva sylvestris</i> L. - Փիփերթ անտառային
6/19/2021	FSP 021	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
6/19/2021	FSP 020, 021	<i>Plantago major</i> L. - Ջղախոտ, Եզան լեզու մեծ
6/19/2021	FSP 020, 021	<i>Dactylis glomerata</i> L. - Ոզնախոտ հավաքված
6/19/2021	FSP 020, 021	<i>Hordeum bulbosum</i> L. - Գարի սոխուկավոր
6/19/2021	FSP 020	<i>Sorghum halepense</i> (L.) Pers. - Մորզո հալեպյան, Ջոնսոնյան խոտ
6/19/2021	FSP 020, 021	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
6/19/2021	FSP 020, 021	<i>Primula macrocalyx</i> Bunge - Գնարբուկ խոշորաբաժակ
6/19/2021	FSP 020, 021	<i>Paliurus spina-christ</i> (Mill) A.C. Sch. - Ժանտափուշ, Ցաքի փշոտ
6/19/2021	FSP 021	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
6/19/2021	FSP 021	<i>Filipendula ulmaria</i> (L.) Maxim. - Փրփրուկ թեղանման
6/19/2021	FSP 021	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
6/19/2021	FSP 020, 021	<i>Prunus divaricata</i> Ldb. - Մալոր, Շլոր
6/19/2021	FSP 020, 021	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռենասերև
6/19/2021	FSP 021	<i>Rubus armeniacus</i> Focke. - Մոշենի հայկական
6/19/2021	FSP 021	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
6/19/2021	FSP 021	<i>Salix triandra</i> L. - Ուռենի եռառեջ
6/19/2021	FSP 021	<i>Sambucus ebulus</i> L. - Կտակենի խոտային
6/19/2021	FSP 020, 021	<i>Celtis caucasica</i> Willd. - Փռչնի կովկասյան
6/19/2021	FSP 021	<i>Ulmus minor</i> Mill. - Թեղի փոքր
6/19/2021	FSP 020, 021	<i>Urtica dioica</i> L. - Եղինջ երկտուն
<b>Total</b>		<b>46</b>

EAAA 014-015

In total there are **156** species of vascular plants recorded in this area. The flora is mainly represented by juniper woodland, bushes, steppe species and the species of riparian zone. The full list of the flora is presented in Table 273.

**Table 274. List of plants recorded during June**

Date	Route #	Species name English
6/19/2021	FSP 024	<i>Equisetum ramosissimum</i> Dsf. - Զիաձետ ճյուղավոր
6/19/2021	FSP 022, 023, 024	<i>Ceterach officinarum</i> W. - Շետերակ դեղատու
6/19/2021	FSP 022	<i>Juniperus foetidissima</i> Willd. - Ցրտնենի, Գիհի գարշահոտ
6/19/2021	FSP 022	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարասերև
6/19/2021	FSP 022	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
6/19/2021	FSP 022, 023, 024	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Մարի չամիչ բարձր

6/19/2021	FSP 022, 025	<i>Acer campestre L.</i> - Թխկի դաշտային
6/19/2021	FSP 022, 025	<i>Acer ibericum Bieb.</i> - Թխկի իբերիական
6/19/2021	FSP 022, 023, 024	<i>Allium flavum L.</i> - Սոխ դեղին
6/19/2021	FSP 022, 023, 024, 025	<i>Amaranthus retroflexus L.</i> - Հավակատար սովորական
6/19/2021	FSP 022, 025	<i>Cotinus coggygria Scop.</i> - Դրախտածառ սովորական
6/19/2021	FSP 025	<i>Astrantia maxima Pall.</i> - Աստղաբույս ամենամեծ
6/19/2021	FSP 022, 023, 024, 025	<i>Astrodaucus orientalis (L.) Drude</i> - Աստղագազար արևելյան
6/19/2021	FSP 022, 025	<i>Chaerophyllum aureum L.</i> - Շուշանաբանջար ոսկեգոծ
6/19/2021	FSP 022, 023, 024	<i>Daucus carota L.</i> - Գազար վարրի
6/19/2021	FSP 022, 023, 024	<i>Falcaria vulgaris Bernh.</i> - Միբեխ սովորական
6/19/2021	FSP 022, 023, 024	<i>Hippomarathrum microcarpum (Bieb.) V. Petron</i> - Բոխի մանրապտուղ
6/19/2021	FSP 022, 023, 024	<i>Prangos ferulacea (L.) Lindl.</i> - Պրանգոս նարդեանման
6/19/2021	FSP 022, 023, 024	<i>Vinca herbacea W. K.</i> - Կուսածաղիկ խոտային
6/19/2021	FSP 025	<i>Arum orientale M. Bieb.</i> - Նվիկ արևելյան
6/19/2021	FSP 022, 024, 025	<i>Vincetoxicum amplifolium K. Koch</i> - Թունաթափ լայնատերև
6/19/2021	FSP 022, 023, 024	<i>Asparagus officinalis L.</i> - Չնեբեկ, Ծնեփակ դեղատու
6/19/2021	FSP 022, 023, 024	<i>Asparagus verticillatus L.</i> - Չնեբեկ, Ծնեփակ օղակավոր
6/19/2021	FSP 023, 024	<i>Eremurus spectabilis N. Bieb.</i> - Շրեշ ուշագրավ
6/19/2021	FSP 022, 023, 024	<i>Achillea millefolium L.</i> - Հազարատերևուկ սովորական
6/19/2021	FSP 022, 023, 024	<i>Artemisia fragrans Willd.</i> - Օշինդր բուրավետ
6/19/2021	FSP 022, 023, 024	<i>Artemisia vulgaris L.</i> - Օշինդր սովորական
6/19/2021	FSP 023, 024	<i>Chondrilla juncea L.</i> - Ծամանիկ, Խիծաճարճատուկ կնյունանման
6/19/2021	FSP 022, 023, 024	<i>Cichorium intybus L.</i> - Եղերդակ, Ճարճատուկ սովորական
6/19/2021	FSP 022, 023, 024	<i>Cirsium esculentum (Siev.) C.A. Mey.</i> - Գեղավեր, Տատասկ ուսվող
6/19/2021	FSP 022, 023, 024	<i>Conyza canadensis (L.) Cronq.</i> - Կոնիզա կանադական
6/19/2021	FSP 023, 024	<i>Galinsoga parviflora Cav.</i> - Գալինսոգա մանրածաղիկ
6/19/2021	FSP 022, 023, 024	<i>Hieracium piloselloides Vill.</i> - Ճուռակախոտ մազոտանման
6/19/2021	FSP 023, 024	<i>Inula germanica L.</i> - Կղմուխ գերմանական
6/19/2021	FSP 022, 023, 024	<i>Tanacetum canescens DC.</i> - Տարկավան, Լվածաղիկ ալեհեր
6/19/2021	FSP 023, 024	<i>Tanacetum chiliophyllum (Fisch. et C.A. Mey. ex DC.) Sch. Bip.</i> - Տարկավան, Լվածաղիկ հազարատերև
6/19/2021	FSP 023, 024	<i>Tanacetum vulgare L.</i> - Տարկավան, Լվածաղիկ սովորական
6/19/2021	FSP 022, 023, 024	<i>Tripleurospermum disciforme (C.A. Mey) Sch. Bip.</i> - Եռակողասերմիկ սկավառակաձև
6/19/2021	FSP 023, 024	<i>Tussilago farfara L.</i> - Տատրակ սովորական, Խոճկորիկ
6/19/2021	FSP 022, 023, 024	<i>Xanthium strumarium L.</i> - Դառնափուշ, Դառնուկ խալիպաձև
6/19/2021	FSP 022, 023, 024	<i>Berberis vulgaris L.</i> - Կծոխուր սովորական
6/19/2021	FSP 025	<i>Carpinus betulus L.</i> - Բոխի սովորական
6/19/2021	FSP 025	<i>Corylus avellana L.</i> - Տխլենի սովորական
6/19/2021	FSP 022, 023	<i>Cerinth minor L.</i> - Մոմախոտ փոքր
6/19/2021	FSP 022, 023, 024	<i>Lappula squarrosa (Retz.) Dumort.</i> - Կպշուկ չրված
6/19/2021	FSP 023, 024	<i>Alyssum desertorum Stapf.</i> - Վառփուկ անապատային
6/19/2021	FSP 022, 023, 024, 025	<i>Capsella bursa-pastoris (L.) Medik.</i> - Ծտապաշար, Հովվամաղախ
6/19/2021	FSP 022, 025	<i>Hesperis matronalis L.</i> - Գիշերային մանուշակ
6/19/2021	FSP 022, 023, 024	<i>Campanula glomerata L.</i> - Զանգակ խմբված
6/19/2021	FSP 023, 024	<i>Michauxia laevigata Vent.</i> - Միշոքսիա հարթ
6/19/2021	FSP 022, 024	<i>Lonicera iberica Bieb.</i> - Ցախակեռաս վրացական
6/19/2021	FSP 023, 024	<i>Sambucus ebulus L.</i> - Կտտկենի խոտային
6/19/2021	FSP 023, 024	<i>Dianthus cretaceus Adams</i> - Մեխակ կավճային

6/19/2021	FSP 023, 024	<i>Dianthus crinitus</i> Smith - Մեխակ խավավոր
6/19/2021	FSP 023, 024	<i>Silene ruprechtii</i> Schischk. - Ծվծվուկ Ռուպրեխտի
6/19/2021	FSP 025	<i>Euonymus latifolia</i> (L.) Mill. - Բլենի լայնատերև
6/19/2021	FSP 022, 024	<i>Atriplex tatarica</i> L. - Թալ թաթարական
6/19/2021	FSP 022, 023, 024	<i>Ceratocarpus arenarius</i> L. - Եզնաբզեզ ավազուտային
6/19/2021	FSP 022, 023, 024	<i>Chenopodium album</i> L. - Թելուկ սպիտակ /կամ սովորական/
6/19/2021	FSP 022, 023, 024	<i>Chenopodium botrys</i> L. - Թելուկ հոտավետ
6/19/2021	FSP 022, 024	<i>Colchicum speciosum</i> Steven - Շնդեղ հրաշալի
6/19/2021	FSP 025	<i>Polygonatum verticillatum</i> (L.) All. - Սինդրիկ օղակավոր
6/19/2021	FSP 023025	<i>Cornus mas</i> L. - Հոն սովորական
6/19/2021	FSP 022, 025	<i>Swida australis</i> (C.A. Mey.) Pojark. ex Grossh. - Ճապկի հարավի
6/19/2021	FSP 022, 024	<i>Sedum sempervivoides</i> Fisch. - Թանթոնիկ դիմացկուն
6/19/2021	FSP 022, 024	<i>Bryonia alba</i> L. - Լոշտակ սպիտակ
6/19/2021	FSP 022, 023, 024	<i>Cuscuta cesattiana</i> Bertol. - Գայլխոտ, Գաղձ Յեզատի
6/19/2021	FSP 023	<i>Carex caucasica</i> Stev. - Բոշխ կովկասյան
6/19/2021	FSP 023, 024	<i>Dipsacus laciniatus</i> L. - Ակքան կտրտված
6/19/2021	FSP 022, 024	<i>Scabiosa caucasica</i> Bieb. - Քոսքոսկ կովկասյան
6/19/2021	FSP 023	<i>Hippophae rhamnoides</i> L. - Չիչխան դժնիկանման
6/19/2021	FSP 022, 023, 024	<i>Alhagi pseudalhagi</i> (Bieb.) Desv. - Ուղտափուշ սովորական
6/19/2021	FSP 023, 024	<i>Astragalus microcephalus</i> Willd. - Գազ մանրագլխիկ
6/19/2021	FSP 022, 023, 024	<i>Genista tinctoria</i> L. - Օրոճ, Դեղնածաղիկ ներկատու
6/19/2021	FSP 023, 024	<i>Medicago coerulea</i> Less. ex Ledeb. - Առվույտ երկնագույն
6/19/2021	FSP 022, 023, 024, 025	<i>Melilotus officinalis</i> (L.) Pall. - Բշտավույտ դեղատու
6/19/2021	FSP 022, 023, 024	<i>Onobrychis cornuta</i> (L.) Desv. - Կորնգան եղջրավոր
6/19/2021	FSP 023, 025	<i>Robinia pseudoacacia</i> L. - Ռոբինիա կեղծ ակացիա
6/19/2021	FSP 023, 024	<i>Trifolium arvense</i> L. - Երեքնուկ վարելահողային
6/19/2021	FSP 023, 024	<i>Trifolium pratense</i> L. var <i>geniculatum</i> R. et F. - Երեքնուկ մարգագետնային
6/19/2021	FSP 025	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
6/19/2021	FSP 022, 024	<i>Erodium cicutarium</i> (L.) L'Her. - Ճայկտուց խնդանդային
6/19/2021	FSP 022, 025	<i>Geranium sylvaticum</i> L. - Խորդենի անտառային
6/19/2021	FSP 022, 023, 024	<i>Ornithogalum montanum</i> Cirillo - Սպիտակ բանջար, Աստղաշուշան լեռնային
6/19/2021	FSP 022, 023, 024	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
6/19/2021	FSP 025	<i>Juglans regia</i> L. - Ընկուզենի սովորական
6/19/2021	FSP 023	<i>Mentha longifolia</i> (L.) Huds. - Անանուխ, Դաղձ երկարատերև
6/19/2021	FSP 022, 023, 024	<i>Nepeta mussinii</i> Spreng. - Կատվադաղձ Մուսինի
6/19/2021	FSP 022, 023, 024	<i>Scutellaria orientalis</i> L. - Սաղավարտուկ արևելյան
6/19/2021	FSP 022, 023, 024	<i>Teucrium polium</i> L. - Լերդախոտ ալեհեր
6/19/2021	FSP 024	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
6/19/2021	FSP 022, 023, 024, 025	<i>Tulipa sosnowskyi</i> Achv. et Mirzoeva - Վարդակակաչ Մոսնովսկու
6/19/2021	FSP 022, 023, 024	<i>Linum nervosum</i> Waldst. et Kit. - Վուշ ջղավոր
6/19/2021	FSP 022, 023, 024	<i>Alcea rugosa</i> Alef. - Տուղտավարդ կնճռոտ
6/19/2021	FSP 023, 025	<i>Morus alba</i> - Թթենի սպիտակ
6/19/2021	FSP 023, 025	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
6/19/2021	FSP 022, 023, 024	<i>Jasminum fruticans</i> L. - Հասմիկ թփուտային
6/19/2021	FSP 022, 023, 025	<i>Ligustrum vulgare</i> L. - Կիսրոս սովորական
6/19/2021	FSP 022, 023, 024	<i>Diphelipaea coccinea</i> (Bieb.) Nicolson - Եղբայրարյուն կարմիր
6/19/2021	FSP 023, 024	<i>Papaver commutatum</i> Fisch. et C.A. Mey. - Կակաչ խճճված

6/19/2021	FSP 022, 023, 024	<i>Papaver fugax</i> Poir. - Կակաչ թռչող
6/19/2021	FSP 022, 023, 024	<i>Plantago media</i> L. - Ջղախոտ, Եգան լեզու միջին
6/19/2021	FSP 022, 024	<i>Aegilops cylindrica</i> Host - Այծակն գլանաձև
6/19/2021	FSP 022, 024	<i>Aegilops tauschii</i> Coss. - Այծակն Թաուշի
6/19/2021	FSP 022, 023, 024	<i>Avena fatua</i> L. - Խրբուկ, Վարսակ դատարկ, Վ. պոչուկ
6/19/2021	FSP 022, 023, 024	<i>Bromus japonicus</i> Thunb. - Ցորնուկ ճապոնական
6/19/2021	FSP 022, 023, 024, 025	<i>Dactylis glomerata</i> L. - Ոգնախոտ հավաքված
6/19/2021	FSP 022, 024	<i>Hordeum bulbosum</i> L. - Գարի սխուկավոր
6/19/2021	FSP 022, 023, 024, 025	<i>Poa bulbosa</i> L. - Արոտածիլ, Հուրանախոտ, Դաշտավունկ սխուկավոր
6/19/2021	FSP 022, 023, 024	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
6/19/2021	FSP 022, 023	<i>Polygonum aviculare</i> L. - Մատիտեղ ճնճղուկի
6/19/2021	FSP 022, 023, 024	<i>Rumex crispus</i> L. - Ավելուկ գանգուր
6/19/2021	FSP 023	<i>Portulaca oleracea</i> L. - Դանդուռ սովորական
6/19/2021	FSP 022, 023, 024, 025	<i>Primula macracalyx</i> Bunge - Գնարբուկ խոշորաբաժակ
6/19/2021	FSP 023, 024	<i>Reseda lutea</i> L. - Հափուկ դեղին
6/19/2021	FSP 022, 024	<i>Paliurus spina-christ</i> (Mill) A.C. Sch. - Ժանտափուշ, Ցաքի փշոտ
6/19/2021	FSP 022, 023, 025	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
6/19/2021	FSP 022, 023, 024	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր
6/19/2021	FSP 022, 023, 024	<i>Amygdalus fenzliana</i> (Fritsch) Lipsky - Նշենի Ֆենցլի
6/19/2021	FSP 023, 025	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
6/19/2021	FSP 023, 024	<i>Cerasus incana</i> (Pall.) Spach - Կեռասենի ալեհեր
6/19/2021	FSP 022, 023	<i>Cerasus vulgaris</i> Mill. - Բալենի սովորական
6/19/2021	FSP 022, 023,	<i>Cerasus mahaleb</i> (L.) Mill. - Բալենի մահալերի
6/19/2021	FSP 022, 023, 024	<i>Cotoneaster saxatilis</i> Pojark. - Չսենի ժայռային
6/19/2021	FSP 022, 023, 024	<i>Crataegus orientalis</i> Pall. ex Bieb. - Ալոճ, Սզնի արևելյան
6/19/2021	FSP 023, 024	<i>Cydonia oblonga</i> Mill. - Սերկնիլ սովորական
6/19/2021	FSP 022, 023, 024	<i>Fragaria viridis</i> (Duch.) Weston - Ելակ կանաչ
6/19/2021	FSP 022, 023, 024	<i>Geum urbanum</i> L. - Շահոքրամ սովորական
6/19/2021	FSP 023, 024, 025	<i>Malus domestica</i> Borkh. - Խնձորենի սովորական
6/19/2021	FSP 022, 025	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
6/19/2021	FSP 022, 023, 024	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
6/19/2021	FSP 023, 025	<i>Prunus domestica</i> L. - Դամբուլ
6/19/2021	FSP 022, 023, 024	<i>Prunus spinosa</i> L. - Մալոր փշավոր
6/19/2021	FSP 022, 023, 025	<i>Pyrus communis</i> L. - Տանձենի սովորական
6/19/2021	FSP 022, 023, 024	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռենաստերև
6/19/2021	FSP 022, 023, 024	<i>Rosa iberica</i> Stev. ex Bieb. - Մարենի վրացական
6/19/2021	FSP 022, 023, 024	<i>Rosa spinosissima</i> L. - Մարենի առատափուշ
6/19/2021	FSP 023	<i>Rubus caesius</i> L. - Մոշենի գեղիոս
6/19/2021	FSP 023, 025	<i>Sorbus graeca</i> (Spach) Hedl. - Ասպար, Արոսի հունական
6/19/2021	FSP 022, 023, 024	<i>Spiraea crenata</i> L. - Ասպիրակ աղեղնեզր
6/19/2021	FSP 022, 023, 024	<i>Spiraea hypericifolia</i> L. - Ասպիրակ արևբուրիկաստերև
6/19/2021	FSP 022, 023, 024	<i>Galium aparine</i> L. - Մակարդախոտ կաչուն
6/19/2021	FSP 023	<i>Populus italica</i> (Dur.) Moench - Բարդի բրգաձև իտալական
6/19/2021	FSP 023	<i>Salix caprea</i> L. - Այծուռենի, Որձուտի
6/19/2021	FSP 023	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
6/19/2021	FSP 023	<i>Salix triandra</i> L. - Ուռենի եռառէջ
6/19/2021	FSP 023, 024	<i>Sambucus ebulus</i> L. - Կտտկենի խոտային
6/19/2021	FSP 023, 024	<i>Bungea trifida</i> (Vahl) C. A. Mey. - Բունգեա եռաբաժան
6/19/2021	FSP 023	<i>Ailanthus altissima</i> (Mill.) Swingle - Երկնածառ բարձրափուն

6/19/2021	FSP 022, 023, 024	<i>Hyoscyamus niger</i> L. - Բանգի սև
6/19/2021	FSP 022, 023, 025	<i>Celtis caucasica</i> Willd. - Փռչնի կովկասյան
6/19/2021	FSP 022, 023, 025	<i>Ulmus minor</i> Mill. - Թեղի փոքր
6/19/2021	FSP 022, 023, 024, 025	<i>Urtica dioica</i> L. - Եղինջ երկտուն
6/19/2021	FSP 022, 023, 025	<i>Valeriana officinalis</i> L. - Կատվախոտ դեղատու
6/19/2021	FSP 022, 023, 024, 025	<i>Viola odorata</i> L. - Մանուշակ բուրավետ
6/19/2021	FSP 024	<i>Tribulus terrestris</i> L. - Տատաշ փոփոդ
<b>Total</b>		<b>156</b>

### Results for July

Dates 30 Jul - 31 Aug

EAAA 001

In total there are **33** species of vascular plants recorded in this area. The flora is mainly represented by steppe (FSP 001) and riparian (FSP 002) zone. The full list of the flora is presented in Table 274

**Table 275. List of plants recorded during July**

Date	Plot #	Species name Latin and Arm
7/30/2021	FSP 001, 002	<i>Amaranthus retroflexus</i> L. - Հավակատար սովորական
7/30/2021	FSP 001, 002	<i>Astrodaucus orientalis</i> (L.) Drude - Աստղազազար արևելյան
7/30/2021	FSP 001	<i>Daucus carota</i> L. - Գազար վայրի
7/30/2021	FSP 001	<i>Prangos ferulacea</i> (L.) Lindl. - Պրանգոս նարդեասանման
7/30/2021	FSP 001	<i>Artemisia vulgaris</i> L. - Օշինդր սովորական
7/30/2021	FSP 001, 002	<i>Chondrilla juncea</i> L. - Ծամանիկ, Խիժաճարճատուկ կնյունանման
7/30/2021	FSP 001, 002	<i>Cichorium intybus</i> L. - Եղերդակ, ճարճատուկ սովորական
7/30/2021	FSP 001, 002	<i>Lactuca serriola</i> L. - Մառոլ, Հազար, Կաթնուկ կողմնացույց
7/30/2021	FSP 002	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
7/30/2021	FSP 001	<i>Crambe orientalis</i> L. - Ծովակաղամբ արևելյան
7/30/2021	FSP 002	<i>Nasturtium officinale</i> R. Br. - Ջրկոտեմ դեղատու
7/30/2021	FSP 001	<i>Dianthus cretaceus</i> Adams - Մեխակ կավճային
7/30/2021	FSP 001	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմակ անդրկովկասյան
7/30/2021	FSP 002	<i>Elaeagnus angustifolia</i> L. - Փշատ նեղատերև
7/30/2021	FSP 001	<i>Melilotus officinalis</i> (L.) Pall. - Բշտովույտ դեղատու
7/30/2021	FSP 001, 002	<i>Hypericum perforatum</i> L. - Սրոհունդ խոցված
7/30/2021	FSP 001, 002	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմիւնդրային
7/30/2021	FSP 002	<i>Mentha longifolia</i> (L.) Huds. - Անանուխ, Դաղձ երկարատերև
7/30/2021	FSP 001	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
7/30/2021	FSP 001, 002	<i>Malva neglecta</i> Wallr. - Մոլոշ, Փիփերթ արհամարհված
7/30/2021	FSP 002	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
7/30/2021	FSP 001	<i>Papaver fugax</i> Poir. - Կակաչ թռչող
7/30/2021	FSP 002	<i>Plantago major</i> L. - Ջղախոտ, Եզան լեզու մեծ
7/30/2021	FSP 001, 002	<i>Dactylis glomerata</i> L. - Ոգնախոտ հավաքված
7/30/2021	FSP 002	<i>Phragmites australis</i> (Cav.) Trin ex Steud. - Եղեգնատունկ, Եղեգ հարավային
7/30/2021	FSP 001	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
7/30/2021	FSP 001, 002	<i>Rumex crispus</i> L. - Ավելուկ գանգուր
7/30/2021	FSP 001	<i>Cerasus incana</i> (Pall.) Spach - Կեռասենի ալեհեր
7/30/2021	FSP 002	<i>Geum urbanum</i> L. - Շահոքրամ սովորական
7/30/2021	FSP 002	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
7/30/2021	FSP 002	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
7/30/2021	FSP 001, 002	<i>Hyoscyamus niger</i> L. - Բանգի սև

7/30/2021	FSP 002	<i>Ulmus minor</i> Mill. - Թեղի փռքք
<b>Total</b>		<b>33</b>

EAAA 002-003

In total there are **53** species of vascular plants recorded in this area. The flora is mainly represented by steppe species and the species of riparian zone. The full list of the flora is presented in Table 275. Among steppe patches of diatomaceous clay areas, the *Iris lineolata* was detected.

**Table 276. List of plants recorded during July**

Date	Route #	Species name English
7/30/2021	FSP 004, 005	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
7/30/2021	FSP 005	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
7/30/2021	FSP 004	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Սարի չամիչ բարձր
7/30/2021	FSP 005	<i>Acer campestre</i> L. - Թխկի դաշտային
7/30/2021	FSP 005	<i>Heracleum sosnowskyi</i> Manden. - Բալդրդան Սոսնովսկու
7/30/2021	FSP 003	<i>Prangos ferulacea</i> (L.) Lindl. - Պրանգոս նարդեսանման
7/30/2021	FSP 004	<i>Cynanchum acutum</i> L. - Շնախոտ սուր
7/30/2021	FSP 004	<i>Asparagus officinalis</i> L. - Ձնեբեկ, Ծնեփակ դեղատու
7/30/2021	FSP 004	<i>Achillea millefolium</i> L. - Հազարատերևուկ սովորական
7/30/2021	FSP 004	<i>Artemisia fragrans</i> Willd. - Օշինդր բուրավետ
7/30/2021	FSP 004	<i>Chondrilla juncea</i> L. - Ծամանիկ, Խիժաճարճատուկ կնյունանման
7/30/2021	FSP 003	<i>Lactuca serriola</i> L. - Մառոլ, Հազար, Կաթնուկ կողմնացույց
7/30/2021	FSP 004	<i>Tanacetum chiliophyllum</i> (Fisch. et C.A. Mey. ex DC.) Sch. Bip. - Տարկավան, Լվածաղիկ հազարատերև
7/30/2021	FSP 003, 004, 005	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
7/30/2021	FSP 005	<i>Turritis glabra</i> L. - Տուրիտիս հարթ
7/30/2021	FSP 005	<i>Lonicera caucasica</i> Pall. - Ցախակեռաս կովկասյան
7/30/2021	FSP 004	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
7/30/2021	FSP 004	<i>Salsola dendroides</i> Pall. - Օջան ծառանման
7/30/2021	FSP 004	<i>Sedum caucasicum</i> (Grossh.) A. Bor. - Թանթոնիկ կովկասյան
7/30/2021	FSP 005	<i>Scabiosa caucasica</i> Bieb. - Քոսքսուկ կովկասյան
7/30/2021	FSP 003	<i>Elaeagnus angustifolia</i> L. - Փշատ նեղատերև
7/30/2021	FSP 005	<i>Hippophae rhamnoides</i> L. - Չիչյան դժնիկանման
7/30/2021	FSP 004	<i>Astragalus microcephalus</i> Willd. - Գազ մանրագլխիկ
7/30/2021	FSP 004, 005	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
7/30/2021	FSP 004	<i>Hypericum perforatum</i> L. - Մրոհունդ խոցված
7/30/2021	FSP 003, 004, 005	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
7/30/2021	FSP 004	<i>Juglans regia</i> L. - Ընկուզենի սովորական
7/30/2021	FSP 004	<i>Nepeta mussinii</i> Spreng. - Կատվադաղձ Մուսինի
7/30/2021	FSP 004	<i>Origanum vulgare</i> L. - Խնկածաղիկ սովորական
7/30/2021	FSP 004	<i>Teucrium polium</i> L. - Լերդախոտ պլեհեր
7/30/2021	FSP 003, 004	<i>Thymus transcaucasicus</i> Ronn. - Ուրց անդրկովկասյան
7/30/2021	FSP 005	<i>Arceuthobium oxycedri</i> (DC.) Bieb. - Արցեութոբիում գիհու
7/30/2021	FSP 003, 004	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
7/30/2021	FSP 004	<i>Epilobium hirsutum</i> L. - Սպուզան թավոտ
7/30/2021	FSP 003	<i>Avena fatua</i> L. - Խրբուկ, Վարսակ դատարկ, Վ. պոչուկ
7/30/2021	FSP 003	<i>Hordeum bulbosum</i> L. - Գարի սոխուկավոր
7/30/2021	FSP 003	<i>Phragmites australis</i> (Cav.) Trin ex Steud. - Եղեգնատունկ, Եղեգ հարավային
7/30/2021	FSP 003	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր

7/30/2021	FSP 004	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
7/30/2021	FSP 004	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր
7/30/2021	FSP 004	<i>Amygdalus fenzliana</i> (Fritsch) Lipsky - Նշենի Ֆենցլի
7/30/2021	FSP 004	<i>Cerasus mahaleb</i> (L.) Mill. - Բալենի մահալեբի
7/30/2021	FSP 004	<i>Cotoneaster integerrimus</i> Medik. - Չմենի ամբողջաեզր
7/30/2021	FSP 004	<i>Crataegus monogyna</i> Jacq. - Ալոճ, Սզնի միասունակ
7/30/2021	FSP 004	<i>Cydonia oblonga</i> Mill. - Սերկնիլ սովորական
7/30/2021	FSP 004	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
7/30/2021	FSP 004	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռենասերև
7/30/2021	FSP 004	<i>Rosa spinosissima</i> L. - Մասրենի առաստափուշ
7/30/2021	FSP 004	<i>Spiraea hypericifolia</i> L. - Սսպիրակ արևքորիկատերև
7/30/2021	FSP 004, 005	<i>Salix elbursensis</i> Boiss. - Ուռենի էրուրայան
7/30/2021	FSP 005	<i>Salix triandra</i> L. - Ուռենի եռառեջ
7/30/2021	FSP 004	<i>Typha latifolia</i> L. - Որձախոտ, Կեռոն
7/30/2021	FSP 004, 005	<i>Ulmus minor</i> Mill. - Թեղի փոքր
<b>Total</b>		<b>53</b>

## EAAA 004

In total there are **31** species of vascular plants recorded in this area. The flora is mainly represented by steppe species and the species of riparian zone. The full list of the flora is presented in Table 276.

**Table 277. List of plants recorded during July**

Date	Route #	Species name English
7/30/2021	FSP 026	<i>Dryopteris filix-mas</i> (L.) Shott. - Վահանապտեր արական
7/30/2021	FSP 026	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
7/30/2021	FSP 026	<i>Juniperus polycarpos</i> K. Koch. - Գիհի բազմապտուղ
7/30/2021	FSP 026	<i>Acer campestre</i> L. - Թխկի դաշտային
7/30/2021	FSP 026	<i>Eryngium caucasicum</i> Trautv. - Երնջնակ կովկասյան
7/30/2021	FSP 026	<i>Vincetoxicum amplifolium</i> K. Koch - Թունաթափ լայնատերև
7/30/2021	FSP 026	<i>Artemisia absinthium</i> L. - Օշինդր դառը
7/30/2021	FSP 026	<i>Berberis vulgaris</i> L. - Կծղխուր սովորական
7/30/2021	FSP 026	<i>Lonicera caucasica</i> Pall. - Ցախակեռաս կովկասյան
7/30/2021	FSP 026	<i>Viburnum lantana</i> L. - Գերիմաստի
7/30/2021	FSP 026	<i>Silene ruprechtii</i> Schischk. - Ծվծվուկ Ռուպրեխտի
7/30/2021	FSP 026	<i>Convolvulus arvensis</i> L. - Պատաստուկ դաշտային
7/30/2021	FSP 026	<i>Hippophae rhamnoides</i> L. - Չիչխան դժնիկանման
7/30/2021	FSP 026	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
7/30/2021	FSP 026	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
7/30/2021	FSP 026	<i>Lamium album</i> L. - Խուլ եղինջ սպիտակ
7/30/2021	FSP 026	<i>Chamaenerion angustifolium</i> (L.) Scop. - Նեղտերևի նեղատերև
7/30/2021	FSP 026	<i>Hordeum violaceum</i> Boiss. et Huet - Գարի մանուշակագույն
7/30/2021	FSP 026	<i>Rumex acetosa</i> L. - Ավելուկ սովորական
7/30/2021	FSP 026	<i>Rumex crispus</i> L. - Ավելուկ գանգուր
7/30/2021	FSP 026	<i>Cotoneaster saxatilis</i> Pojark. - Չմենի ժայռային
7/30/2021	FSP 026	<i>Crataegus orientalis</i> Pall. ex Bieb. - Ալոճ, Սզնի արևելյան
7/30/2021	FSP 026	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
7/30/2021	FSP 026	<i>Pyrus caucasica</i> Fed. - Տանձենի կովկասյան
7/30/2021	FSP 026	<i>Rosa canina</i> L. - Մասրենի շան
7/30/2021	FSP 026	<i>Rosa spinosissima</i> L. - Մասրենի առաստափուշ

7/30/2021	FSP 026	<i>Populus nigra L. - Բարդի սև</i>
7/30/2021	FSP 026	<i>Salix caprea L. - Այծուռենի, Որձուռի</i>
7/30/2021	FSP 026	<i>Salix triandra L. - Ուռենի եռաթելջ</i>
7/30/2021	FSP 026	<i>Ulmus minor Mill. - Թեղի փոքր</i>
7/30/2021	FSP 026	<i>Valeriana alliariifolia Adams - Կասովախոտ սխտորուկատերև</i>
<b>Total</b>		<b>31</b>

EAAA 005

In total there are **20** species of vascular plants recorded in this area. The flora is mainly represented by forest, steppemeadow, and subalpine species. The full list of the flora is presented in Table 277.

**Table 278. List of plants recorded during July**

Date	Route #	Species name English
7/31/2021	Steppemeadow and Subalpine	<i>Juniperus depressa Stev. - Գիհի ցածր</i>
7/31/2021	Steppemeadow and Subalpine	<i>Juniperus oblonga Bieb. - Գիհի երկարատերև</i>
7/31/2021	Steppemeadow and Subalpine	<i>Juniperus polycarpus K. Koch. - Գիհի բազմապտուղ</i>
7/31/2021	Steppemeadow and Subalpine	<i>Ephedra procera Fisch. et C.A. Mey. - Սարի չամիչ բարձր</i>
7/31/2021	Steppemeadow and Subalpine	<i>Asparagus officinalis L. - Չնեբեկ, Ծնեփակ դեղատու</i>
7/31/2021	Steppemeadow and Subalpine	<i>Grossheimia macrocephala (Muss.-Puschk. ex Willd.) Sosn. et Takht. - Գրոսհեյմիա խոշորագույն</i>
7/31/2021	Steppemeadow and Subalpine	<i>Sedum oppositifolium Sims. - Թանթոնիկ հակադրատերև</i>
7/31/2021	Steppemeadow and Subalpine	<i>Sempervivum transcaucasicum Muirhead - Գառանդմակ անդրկովկասյան</i>
7/31/2021	Steppemeadow and Subalpine	<i>Quercus macranthera F. et M. ex Hohen. - Կաղնի արևելյան</i>
7/31/2021	Steppemeadow and Subalpine	<i>Hypericum perforatum L. - Մրոհունդ խոցված</i>
7/31/2021	Steppemeadow and Subalpine	<i>Origanum vulgare L. - Խնկածաղիկ սովորական</i>
7/31/2021	Steppemeadow and Subalpine	<i>Thymus collinus Bieb. - Ուրց բլրակային</i>
7/31/2021	Steppemeadow and Subalpine	<i>Papaver orientale L. - Կակաչ արևելյան</i>
7/31/2021	Steppemeadow and Subalpine	<i>Hordeum violaceum Boiss. et Huet - Գարի մանուշակագույն</i>
7/31/2021	Steppemeadow and Subalpine	<i>Secale vavilovii Grossh. - Տարեկան, Աշորա Կավիլովի, Ա. Կայրի միամյա,</i>
7/31/2021	Steppemeadow and Subalpine	<i>Malus orientalis Uglitzk. - Խնձորենի արևելյան</i>
7/31/2021	Steppemeadow and Subalpine	<i>Prunus divaricata Ldb. - Սալոր, Շլոր</i>
7/31/2021	Steppemeadow and Subalpine	<i>Rosa spinosissima L. - Մալբենի առատափուլ</i>
7/31/2021	Steppemeadow and Subalpine	<i>Spiraea hypericifolia L. - Ասպիրակ արևբուրիկատերև</i>
7/31/2021	Steppemeadow and Subalpine	<i>Salix elbursensis Boiss. - Ուռենի էլբուրյան</i>
<b>Total</b>		<b>20</b>

EAAA 006

In total there are **19** species of vascular plants recorded in this area. The flora is mainly represented by bushes, steppemeadow species and the species of riparian zone. The full list of the flora is presented in Table 278.

**Table 279. List of plants recorded during July**

Date	Route #	Species name English
7/31/2021	FSP 006, 007	<i>Juniperus oblonga Bieb. - Գիհի երկարատերև</i>
7/31/2021	FSP 006, 007	<i>Juniperus polycarpus K. Koch. - Գիհի բազմապտուղ</i>
7/31/2021	FSP 006, 007	<i>Eryngium billardieri Delaroche - Երնջնակ Բիլարդեի</i>

7/31/2021	FSP 006, 007	<i>Tanacetum vulgare</i> L. - Տարկալան, Լվածաղիկ սովորական
7/31/2021	FSP 006, 007	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
7/31/2021	FSP 007	<i>Nasturtium officinale</i> R. Br. - Ջրկոտեմ դեղատու
7/31/2021	FSP 006, 007	<i>Petrorhagia alpina</i> (Habl.) P.W.Ball et Heywood
7/31/2021	FSP 006	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմակ անդրկովկասյան
7/31/2021	FSP 006, 007	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
7/31/2021	FSP 006, 007	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
7/31/2021	FSP 007	<i>Briza elatior</i> L. - Դողդողուն բարձր
7/31/2021	FSP 006	<i>Phragmites australis</i> (Cav.) Trin ex Steud. - Եղեգնատունկ, Եղեգ հարավային
7/31/2021	FSP 007	<i>Rumex acetoselloides</i> Bal. - Ավելուկ ավելուկանման
7/31/2021	FSP 007	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
7/31/2021	FSP 007	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
7/31/2021	FSP 006, 007	<i>Pyrus zangezura</i> Maleev - Տանձենի զանգեզուրի
7/31/2021	FSP 006	<i>Rosa spinosissima</i> L. - Մասրենի առատափուշ
7/31/2021	FSP 006, 007	<i>Salix caprea</i> L. - Այծուռենի, Որձուռի
7/31/2021	FSP 006	<i>Salix elbursensis</i> Boiss. - Ուռենի էլբուրսյան
<b>Total</b>		<b>19</b>

EAAA 007-009

In total there are **32** species of vascular plants recorded in this area. The flora is mainly represented by forest, bushes, steppe and riparian species. The full list of the flora is presented in Table 279.

**Table 280. List of plants recorded during July**

Date	Route #	Species name English
8/1/2021	FSP 009, 0011	<i>Asplenium septentrionale</i> (L.) Hoffm. - Ասպլեն հյուսիսային
8/1/2021	FSP 008, 009, 010, 011	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
8/1/2021	FSP 009, 011	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Սարի չամիչ բարձր
8/1/2021	FSP 008, 009, 010, 011	<i>Acer ibericum</i> Bieb. - Թխիկ իբերիական
8/1/2021	FSP 009, 010, 011	<i>Daucus carota</i> L. - Գազար վայրի
8/1/2021	FSP 009, 011	<i>Asparagus persicus</i> Baker - Չնեբեկ, Ծնեփակ պարսկական
8/1/2021	FSP 008, 009, 010	<i>Artemisia absinthium</i> L. - Օշինդր դառը
8/1/2021	FSP 008, 010	<i>Grossheimia macrocephala</i> (Muss.-Puschk. ex Willd.) Sosn. et Takht. - Գրոսհեյմիա խոշորագլուխ
8/1/2021	FSP 008, 009, 010, 011	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
8/1/2021	FSP 008, 009, 010, 011	<i>Sedum caucasicum</i> (Grossh.) A. Bor. - Թանթոնիկ կովկասյան
8/1/2021	FSP 008, 010	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմակ անդրկովկասյան
8/1/2021	FSP 008, 009, 010, 011	<i>Trifolium trichocephalum</i> Bieb. - Երեքնուկ մազվզոտագլուխ
8/1/2021	FSP 008, 009, 010, 011	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
8/1/2021	FSP 008, 009	<i>Hypericum perforatum</i> L. - Մրոհունդ խոցված
8/1/2021	FSP 009, 011	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
8/1/2021	FSP 009, 011	<i>Betonica macrantha</i> K. Koch - Թթվիճ խոշորածաղիկ
8/1/2021	FSP 008, 010	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
8/1/2021	FSP 008, 010	<i>Ziziphora rigida</i> (Boiss.) Stapf - Ուրցաղաղձ կոշտ
8/1/2021	FSP 008	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
8/1/2021	FSP 008, 010	<i>Rumex obtusifolius</i> L. - Ավելուկ բթատերև
8/1/2021	FSP 008, 010	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
8/1/2021	FSP 008, 010	<i>Cerasus mahaleb</i> (L.) Mill. - Բալենի մահալեբի
8/1/2021	FSP 008	<i>Cotoneaster integerrimus</i> Medik. - Չմենի ամբողջատեր
8/1/2021	FSP 008, 009	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր

8/1/2021	FSP 008, 009	<i>Pyrus zangezura</i> Maleev - Տանձենի զանգեզուրի
8/1/2021	FSP 008, 010	<i>Rosa spinosissima</i> L. - Մասրենի առատափուշ
8/1/2021	FSP 008, 010	<i>Sorbus aucuparia</i> L. - Օտիխնձոր, Արոսի սովորական
8/1/2021	FSP 008, 010	<i>Populus italica</i> (Dur.) Moench - Բարդի բրգաձև իտալական
8/1/2021	FSP 008, 010	<i>Salix triandra</i> L. - Ուռենի եռառեջ
8/1/2021	FSP 008, 010	<i>Typha latifolia</i> L. - Որձախոտ, Կեռն լայնատերև
8/1/2021	FSP 008	<i>Parietaria judaica</i> Strand. - Կովինչ հուղայի
8/1/2021	FSP 009	<i>Urtica dioica</i> L. - Եղինջ երկտուն
<b>Total</b>		<b>32</b>

EAAA 010-012

In total there are **30** species of vascular plants recorded in this area. The flora is mainly represented by juniper woodland, steppe, bushes species and the species of riparian zone. The full list of the flora is presented in Table 280.

**Table 281. List of plants recorded during July**

Date	Route #	Species name English
8/1/2021	FSP 012, 014, 016, 018	<i>Asplenium septentrionale</i> (L.) Hoffm. - Ասպլեն հյուսիսային
8/1/2021	FSP 014, 019	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
8/1/2021	FSP 014, 019	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
8/1/2021	FSP 012, 013, 019	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Մարի չամիչ բարձր
8/1/2021	FSP 012, 014, 016, 018	<i>Acer campestre</i> L. - Թխկի դաշտային
8/1/2021	FSP 012, 014, 016, 018	<i>Acer ibericum</i> Bieb. - Թխկի իբերիական
8/1/2021	FSP 013, 015, 017, 019	<i>Cotinus coggygria</i> Scop. - Դրախտածառ սովորական
8/1/2021	FSP 013, 015, 017, 019	<i>Astrodaucus orientalis</i> (L.) Drude - Աստղագազար արևելյան
8/1/2021	FSP 013, 015, 017, 019	<i>Prangos ferulacea</i> (L.) Lindl. - Պրանգոս նարդեսանման
8/1/2021	FSP 012, 014, 016, 018	<i>Asparagus persicus</i> Baker - Ջներեկ, Օնեփակ պարսկական
8/1/2021	FSP 013, 015, 017, 019	<i>Cichorium intybus</i> L. - Եղերդակ, Ճարձատուկ սովորական
8/1/2021	FSP 012, 013, 014, 015, 016, 017, 019	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
8/1/2021	FSP 013, 014, 015, 017, 019	<i>Lonicera iberica</i> Bieb. - Յախակեռաս վրացական
8/1/2021	FSP 013, 015, 017, 019	<i>Viburnum lantana</i> L. - Գերինաստի
8/1/2021	FSP 012, 014, 016, 018	<i>Sedum caucasicum</i> (Grossh.) A. Bor. - Թանթոնիկ կովկասյան
8/1/2021	FSP 013, 015, 017, 019	<i>Lotus caucasicus</i> Kuprian. ex Juz. - Եղջերատվույտ կովկասյան
8/1/2021	FSP 012, 014, 016, 018	<i>Trifolium trichocephalum</i> Bieb. - Երեքնուկ մազագոտազուլիս
8/1/2021	FSP 013, 014, 015, 016, 017, 018, 019	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
8/1/2021	FSP 012, 014, 016, 018	<i>Hypericum perforatum</i> L. - Սրոհունդ
8/1/2021	FSP 012, 014, 016, 018	<i>Betonica macrantha</i> K. Koch - Թթվիճ խոշորածաղիկ
8/1/2021	FSP 013, 014, 015, 016, 017, 018, 019	<i>Thymus collinus</i> Bieb. - Ուրց բլրակային
8/1/2021	FSP 013, 015, 019	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
8/1/2021	FSP 013, 015, 017, 019	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր
8/1/2021	FSP 013, 015, 017, 019	<i>Amygdalus fenzliana</i> (Fritsch) Lipsky - Նշենի Ֆենցլի
8/1/2021	FSP 013, 015, 017, 019	<i>Crataegus orientalis</i> Pall. ex Bieb. - Ալոճ, Սզնի արևելյան
8/1/2021	FSP 013, 015, 017, 019	<i>Prunus spinosa</i> L. - Մալոր փշավոր
8/1/2021	FSP 012, 014, 016, 018	<i>Rubus armeniacus</i> Focke. - Մոշենի հայկական
8/1/2021	FSP 013, 015, 017, 019	<i>Sorbus graeca</i> (Spach) Hedl. - Ասպար, Արոսի հունական

8/1/2021	FSP 013, 015, 017, 019	<i>Celtis caucasica</i> Willd. - Փռչնի կովկասյան
8/1/2021	FSP 013, 015, 017, 019	<i>Ulmus minor</i> Mill. - Թեղի փոքր
<b>Total</b>		<b>30</b>

## EAAA 013

In total there are **36** species of vascular plants recorded in this area. The flora is mainly represented by forest, bushes and steppe species. The full list of the flora is presented in Table 281.

**Table 282. List of plants recorded during July**

Date	Route #	Species name English
8/2/2021	FSP 020, 021	<i>Juniperus foetidissima</i> Willd. - Ցրտնենի, Գիհի գարշահոտ
8/2/2021	FSP 020, 021	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
8/2/2021	FSP 020, 021	<i>Juniperus polycarpos</i> K. Koch. - Գիհի բազմապտուղ
8/2/2021	FSP 020, 021	<i>Pinus sylvestris</i> L. - Սոճի սովորական
8/2/2021	FSP 020, 021	<i>Acer ibericum</i> Bieb. - Թխկի իբերիական
8/2/2021	FSP 020, 021	<i>Vincetoxicum amplifolium</i> K. Koch - Թունաթափ լայնատերև
8/2/2021	FSP 021	<i>Artemisia fragrans</i> Willd. - Օշինդր բուրավետ
8/2/2021	FSP 020, 021	<i>Echinops pungens</i> Trautv. - Թոփփուշ, Ոգնագլխիկ փշոտ
8/2/2021	FSP 020	<i>Inula helenium</i> L. - Կղմուխ մեծ
8/2/2021	FSP 020	<i>Xeranthemum squarrosum</i> Boiss. - Չորաբույս, Անմեռուկ չոված
8/2/2021	FSP 020, 021	<i>Campanula glomerata</i> L. - Ջանգակ խմբված
8/2/2021	FSP 020	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
8/2/2021	FSP 021	<i>Silene ruprechtii</i> Schischk. - Ծվծվուկ Ռուպրեխտի
8/2/2021	FSP 020, 021	<i>Swida australis</i> (C.A. Mey.) Pojark. ex Grossh. - Ճապկի հարավի
8/2/2021	FSP 020, 021	<i>Juglans regia</i> L. - Ընկուզենի սովորական
8/2/2021	FSP 020, 021	<i>Teucrium polium</i> L. - Լերդախոտ պեղեղ
8/2/2021	FSP 021	<i>Linum nervosum</i> Waldst. et Kit. - Վուշ ջղավոր
8/2/2021	FSP 020, 021	<i>Malva sylvestris</i> L. - Փիփերթ անտառային
8/2/2021	FSP 020, 021	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
8/2/2021	FSP 021	<i>Plantago major</i> L. - Ջղախոտ, Եզան լեզու մեծ
8/2/2021	FSP 020, 021	<i>Dactylis glomerata</i> L. - Ոգնախոտ հավաքված
8/2/2021	FSP 021	<i>Hordeum bulbosum</i> L. - Գարի սոխուկավոր
8/2/2021	FSP 020, 021	<i>Sorghum halepense</i> (L.) Pers. - Սորգո հալեպյան, Ջոնսոնյան խոտ
8/2/2021	FSP 020	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
8/2/2021	FSP 020, 021	<i>Paliurus spina-christ</i> (Mill) A.C. Sch. - Ժանտափուշ, Ցաքի փշոտ
8/2/2021	FSP 021	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
8/2/2021	FSP 021	<i>Filipendula ulmaria</i> (L.) Maxim. - Փրփրուկ թեղանման
8/2/2021	FSP 020, 021	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
8/2/2021	FSP 020, 021	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
8/2/2021	FSP 020, 021	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռենատերև
8/2/2021	FSP 020	<i>Rubus armeniacus</i> Focke. - Սոչենի հայկական
8/2/2021	FSP 020, 021	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
8/2/2021	FSP 020, 021	<i>Sambucus ebulus</i> L. - Կտտկենի խոտային
8/2/2021	FSP 020, 021	<i>Celtis caucasica</i> Willd. - Փռչնի կովկասյան
8/2/2021	FSP 021	<i>Ulmus minor</i> Mill. - Թեղի փոքր
8/2/2021	FSP 021	<i>Urtica dioica</i> L. - Եղինջ երկտուն
<b>Total</b>		<b>36</b>

EAAA 014-015

In total there are **48** species of vascular plants recorded in this area. The flora is mainly represented by juniper woodland, bushes, steppe species and the species of riparian zone. The full list of the flora is presented in Table 282.

**Table 283. List of plants recorded during July**

Date	Route #	Species name English
8/2/2021	FSP 023, 025	<i>Ceterach officinarum</i> W. - Շետերակ դեղատու
8/2/2021	FSP 022, 024	<i>Juniperus foetidissima</i> Willd. - Ցրտնենի, Գիհի գարշահոտ
8/2/2021	FSP 023, 025	<i>Amaranthus retroflexus</i> L. - Հավակատար սովորական
8/2/2021	FSP 023, 025	<i>Cotinus coggygria</i> Scop. - Դրախտաձառ սովորական
8/2/2021	FSP 022, 023, 024	<i>Hippomarathrum microcarpum</i> (Bieb.) V. Petrov - Բոխի մանրապտուղ
8/2/2021	FSP 022, 025	<i>Vinca herbacea</i> W. K. - Կուսածաղիկ խոտային
8/2/2021	FSP 023, 025	<i>Asparagus verticillatus</i> L. - Ձնեբեկ, Օնեփակ օղակավոր
8/2/2021	FSP 023, 025	<i>Achillea millefolium</i> L. - Հազարատերևուկ սովորական
8/2/2021	FSP 022, 023, 024, 025	<i>Cichorium intybus</i> L. - Եղերդակ, Ճարճատուկ սովորական
8/2/2021	FSP 022, 024	<i>Xanthium strumarium</i> L. - Դառնափուշ, Դառնուկ խափպածև
8/2/2021	FSP 025	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
8/2/2021	FSP 023, 025	<i>Carpinus betulus</i> L. - Բոխի սովորական
8/2/2021	FSP 023, 025	<i>Corylus avellana</i> L. - Տիլենի սովորական
8/2/2021	FSP 022, 023, 024	<i>Lappula squarrosa</i> (Retz.) Dumort. - Կպչուկ չրված
8/2/2021	FSP 022, 024	<i>Hesperis matronalis</i> L. - Գիշերային մանուշակ
8/2/2021	FSP 022, 024	<i>Campanula glomerata</i> L. - Զանգակ խմբված
8/2/2021	FSP 022, 023, 024	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
8/2/2021	FSP 023, 025	<i>Sambucus ebulus</i> L. - Կտտկենի խոտային
8/2/2021	FSP 025	<i>Euonymus latifolia</i> (L.) Mill. - Իլենի լայնատերև
8/2/2021	FSP 022, 024	<i>Chenopodium botrys</i> L. - Թելուկ հոտավետ
8/2/2021	FSP 022, 024	<i>Cornus mas</i> L. - Հոն սովորական
8/2/2021	FSP 022, 024	<i>Scabiosa caucasica</i> Bieb. - Քոսքոսկ կովկասյան
8/2/2021	FSP 023, 025	<i>Hippophae rhamnoides</i> L. - Չիչխան դժնիկանման
8/2/2021	FSP 023, 025	<i>Alhagi pseudalhagi</i> (Bieb.) Desv. - Ուղտափուշ սովորական
8/2/2021	FSP 022, 023, 024	<i>Astragalus microcephalus</i> Willd. - Գազ մանրագլխիկ
8/2/2021	FSP 023, 025	<i>Genista tinctoria</i> L. - Օրոճ, Դեղնածաղիկ ներկատու
8/2/2021	FSP 023, 025	<i>Onobrychis cornuta</i> (L.) Desv. - Կորնգան եղջրավոր
8/2/2021	FSP 023, 025	<i>Robinia pseudoacacia</i> L. - Ռոբինիա կեղծ ակացիա
8/2/2021	FSP 022, 023, 024	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
8/2/2021	FSP 022, 023, 024	<i>Nepeta mussinii</i> Spreng. - Կատվադաղճ Մուսինի
8/2/2021	FSP 023, 024	<i>Teucrium polium</i> L. - Լերդախոտ ալեհեր
8/2/2021	FSP 022, 023, 024	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
8/2/2021	FSP 023, 024	<i>Jasminum fruticans</i> L. - Հասմիկ թփուտային
8/2/2021	FSP 022, 023, 024	<i>Festuca ruprechtii</i> (Boiss.) V. Krecz. Et Bobr. - Շյուղախոտ Ռուպրեխտի
8/2/2021	FSP 023, 024	<i>Polygonum aviculare</i> L. - Մատիտեղ ճնճղուկի
8/2/2021	FSP 023, 024	<i>Rumex crispus</i> L. - Ավելուկ գանգուր
8/2/2021	FSP 022, 023, 024	<i>Primula macracalyx</i> Bunge - Գևարբուկ խոշորաբաժակ
8/2/2021	FSP 023, 025	<i>Reseda lutea</i> L. - Հափուկ դեղին
8/2/2021	FSP 022, 023, 024	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր
8/2/2021	FSP 022, 023, 024	<i>Cerasus incana</i> (Pall.) Spach - Կեռասենի ալեհեր
8/2/2021	FSP 025	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռենատերև
8/2/2021	FSP 025	<i>Rubus caesius</i> L. - Մոշենի գեղիոս
8/2/2021	FSP 022, 024	<i>Spiraea hypericifolia</i> L. - Ասպիրակ արևքուրիկատերև

8/2/2021	FSP 022, 023, 024	<i>Salix caprea</i> L. - Այծուռենի, Որձուռի
8/2/2021	FSP 023, 025	<i>Hyoscyamus niger</i> L. - Բանգի սև
8/2/2021	FSP 023, 025	<i>Celtis caucasica</i> Willd. - Փռչնի կովկասյան
8/2/2021	FSP 023, 025	<i>Ulmus minor</i> Mill. - Թեղի փոքր
8/2/2021	FSP 023, 025	<i>Urtica dioica</i> L. - Եղինջ երկտուն
<b>Total</b>		<b>48</b>

### Results for November

EAAA 001

In total there are **23** species of vascular plants recorded in **November** in this area. The flora is mainly represented by steppe (FSP 001) and riparian (FSP 002) zone. The full list of the flora is presented in Table 283.

**Table 284. List of plants recorded during November**

Date	Plot #	Species name Latin and Arm
11/29/2021	FSP 001, 002	<i>Solanum tuberosum</i> L. – Կարտոֆիլ (gardens)
11/29/2021	FSP 001	<i>Brassica oleracea</i> L. - Կաղամբ բանջարանցային (gardens)
11/29/2021	FSP 001	<i>Triticum aestivum</i> L. – Ցորեն վշակովի (field)
11/29/2021	FSP 002	<i>Salix elbursensis</i> Boiss. - Ուռենի էլբուրսյան
11/29/2021	FSP 002	<i>Salix triandra</i> L. - Ուռենի եռառէջ
11/29/2021	FSP 001	<i>Prangos ferulacea</i> (L.) Lindl. - Պրանգոս նարդեանման
11/29/2021	FSP 001	<i>Artemisia vulgaris</i> L. - Օշինդր սովորական
11/29/2021	FSP 001, 002	<i>Cichorium intybus</i> L. - Եղերդակ, Ճարճատուկ սովորական
11/29/2021	FSP 002	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
11/29/2021	FSP 001	<i>Crambe orientalis</i> L. - Ծովակաղամբ արևելյան
11/29/2021	FSP 002	<i>Nasturtium officinale</i> R. Br. - Ջրկոտեմ դեղատու
11/29/2021	FSP 001	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմակ անդրկովկասյան
11/29/2021	FSP 002	<i>Elaeagnus angustifolia</i> L. - Փշատ նեղատերև
11/29/2021	FSP 001	<i>Melilotus officinalis</i> (L.) Pall. - Իշապուրյտ դեղատու
11/29/2021	FSP 001, 002	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
11/29/2021	FSP 001	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
11/29/2021	FSP 002	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
11/29/2021	FSP 002	<i>Phragmites australis</i> (Cav.) Trin ex Steud. - Եղեգնատունկ, Եղեգ հարավային
11/29/2021	FSP 001	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ վշակո՞ր
11/29/2021	FSP 001	<i>Cerasus incana</i> (Pall.) Spach - Կեռասենի պեղեր
11/29/2021	FSP 002	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
11/29/2021	FSP 002	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
11/29/2021	FSP 002	<i>Ulmus minor</i> Mill. - Թեղի փոքր
<b>Total</b>		<b>23</b> species

EAAA 002-003

In total there are **36** species of vascular plants recorded in **November** in this area. The flora is mainly represented by steppe species and the species of riparian zone. The full list of the flora is presented in Table 284. Among steppe patches of diatomaceous clay areas, the *Iris lineolata* was detected.

**Table 285. List of plants recorded during November**

Date	Route #	Species name English
11/29/2021	FSP 004	<i>Populus nigra</i> L. - Բարդի սև

11/29/2021	FSP 004	<b>Salix excelsa S. G. Gmel. - Ուռենի բարձր</b>
11/29/2021	FSP 004, 005	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
11/29/2021	FSP 005	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
11/29/2021	FSP 004	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Մարի չամիչ բարձր
11/29/2021	FSP 005	<i>Acer campestre</i> L. - Թխկի դաշտային
11/29/2021	FSP 003	<i>Prangos ferulacea</i> (L.) Lindl. - Պրանգոս նարդեասնման
11/29/2021	FSP 004	<i>Artemisia fragrans</i> Willd. - Օշինդր բուրավետ
11/29/2021	FSP 003, 004, 005	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
11/29/2021	FSP 005	<i>Lonicera caucasica</i> Pall. - Ցախակեռաս կովկասյան
11/29/2021	FSP 004	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
11/29/2021	FSP 004	<i>Salsola dendroides</i> Pall. - Օշան ծառանման
11/29/2021	FSP 003	<i>Elaeagnus angustifolia</i> L. - Փշատ նեղատերև
11/29/2021	FSP 005	<i>Hippophae rhamnoides</i> L. - Չիչխան դժնիկանման
11/29/2021	FSP 004	<i>Astragalus microcephalus</i> Willd. - Գազ մանրագլխիկ
11/29/2021	FSP 004, 005	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
11/29/2021	FSP 003, 004, 005	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
11/29/2021	FSP 004	<i>Juglans regia</i> L. - Ընկուզենի սովորական
11/29/2021	FSP 003, 004	<i>Thymus transcaucasicus</i> Ronn. - Ուրց անդրկովկասյան
11/29/2021	FSP 005	<i>Arceuthobium oxycedri</i> (DC.) Bieb. - Արցեութոբիում գիհու
11/29/2021	FSP 003, 004	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
11/29/2021	FSP 003	<i>Phragmites australis</i> (Cav.) Trin ex Steud. - Եղեգնատունկ, Եղեգ հարավային
11/29/2021	FSP 003	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
11/29/2021	FSP 004	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
11/29/2021	FSP 004	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր
11/29/2021	FSP 004	<i>Amygdalus fenzliana</i> (Fritsch) Lipsky - Նշենի Ֆենցլի
11/29/2021	FSP 004	<i>Cerasus mahaleb</i> (L.) Mill. - Բալենի մահալեբի
11/29/2021	FSP 004	<i>Cotoneaster integerrimus</i> Medik. - Չսենի ամբողջաեզր
11/29/2021	FSP 004	<i>Crataegus monogyna</i> Jacq. - Ալոճ, Սզնի միասունակ
11/29/2021	FSP 004	<i>Prunus divaricata</i> Ldb. - Մալոր, Շոր
11/29/2021	FSP 004	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռենատերև
11/29/2021	FSP 004	<i>Rosa spinosissima</i> L. - Մասրենի առատափուշ
11/29/2021	FSP 004	<i>Spiraea hypericifolia</i> L. - Ասպիրակ արեքուրիկատերև
11/29/2021	FSP 004, 005	<i>Salix elbursensis</i> Boiss. - Ուռենի էլբուրյան
11/29/2021	FSP 005	<i>Salix triandra</i> L. - Ուռենի եռատեղ
11/29/2021	FSP 004, 005	<i>Ulmus minor</i> Mill. - Թեղի փոքր
<b>Total</b>		<b>36 species</b>

EAAA 004

In total there are **22 species** of vascular plants recorded in **November** in this area. The flora is mainly represented by steppe species and the species of riparian zone. The full list of the flora is presented in Table 285.

**Table 286. List of plants recorded during November**

Date	Route #	Species name English
11/30/2021	FSP 026	<b>Salix elbursensis Boiss. - Ուռենի էլբուրյան</b>
11/30/2021	FSP 026	<b>Sorbus aucuparia L. - Ծախիսնձոր, Արոսի սովորական</b>
11/30/2021	FSP 026	<i>Dryopteris filix-mas</i> (L.) Shott. - Վահանապտեր արական
11/30/2021	FSP 026	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
11/30/2021	FSP 026	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ

11/30/2021	FSP 026	<i>Acer campestre</i> L. - Թխկի դաշտային
11/30/2021	FSP 026	<i>Artemisia absinthium</i> L. - Օշինդր դառը
11/30/2021	FSP 026	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
11/30/2021	FSP 026	<i>Lonicera caucasica</i> Pall. - Ցախակեռաս կովկասյան
11/30/2021	FSP 026	<i>Viburnum lantana</i> L. - Գերիմաստի
11/30/2021	FSP 026	<i>Hippophae rhamnoides</i> L. - Չիչխան դժնիկանման
11/30/2021	FSP 026	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
11/30/2021	FSP 026	<i>Cotoneaster saxatilis</i> Pojark. - Չմենի ժայռային
11/30/2021	FSP 026	<i>Crataegus orientalis</i> Pall. ex Bieb. - Ալոճ, Սզնի արևելյան
11/30/2021	FSP 026	<i>Prunus divaricata</i> Ldb. - Մալոբ, Շլոբ
11/30/2021	FSP 026	<i>Pyrus caucasica</i> Fed. - Տանձենի կովկասյան
11/30/2021	FSP 026	<i>Rosa canina</i> L. - Մասրենի շան
11/30/2021	FSP 026	<i>Rosa spinosissima</i> L. - Մասրենի առաստափուշ
11/30/2021	FSP 026	<i>Populus nigra</i> L. - Բարդի սև
11/30/2021	FSP 026	<i>Salix caprea</i> L. - Այծուռենի, Որձուռի
11/30/2021	FSP 026	<i>Salix triandra</i> L. - Ուռենի եռաբլիթ
11/30/2021	FSP 026	<i>Ulmus minor</i> Mill. - Թեղի փոքր
<b>Total</b>		<b>22 species</b>

EAAA 005

In total there are **13 species** of vascular plants recorded in **November** in this area. The flora is mainly represented by forest, steppemeadow, and subalpine species. The full list of the flora is presented in Table 286.

Table 287. List of plants recorded during November

Date	Route #	Species name English
<b>11/30/2021</b>	<b>Steppemeadow and Subalpine</b>	<b><i>Salix caprea</i> L. - Այծուռենի, Որձուռի</b>
11/30/2021	Steppemeadow and Subalpine	<i>Juniperus depressa</i> Stev. - Գիհի ցածր
11/30/2021	Steppemeadow and Subalpine	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարաստերև
11/30/2021	Steppemeadow and Subalpine	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
11/30/2021	Steppemeadow and Subalpine	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Մարի չամիչ բարձր
11/30/2021	Steppemeadow and Subalpine	<i>Asparagus officinalis</i> L. - Չնեբեկ, Ծնեփակ դեղատու
11/30/2021	Steppemeadow and Subalpine	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
11/30/2021	Steppemeadow and Subalpine	<i>Thymus collinus</i> Bieb. - Ուրց բլրակային
11/30/2021	Steppemeadow and Subalpine	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
11/30/2021	Steppemeadow and Subalpine	<i>Prunus divaricata</i> Ldb. - Մալոբ, Շլոբ
11/30/2021	Steppemeadow and Subalpine	<i>Rosa spinosissima</i> L. - Մասրենի առաստափուշ
11/30/2021	Steppemeadow and Subalpine	<i>Spiraea hypericifolia</i> L. - Սսպիրակ արևբուրդիկաստերև
11/30/2021	Steppemeadow and Subalpine	<i>Salix elbursensis</i> Boiss. - Ուռենի էլբուրսյան
<b>Total</b>		<b>13 species</b>

EAAA 006

In total there are **17 species** of vascular plants recorded in **November** in this area. The flora is mainly represented by bushes, steppemeadow species and the species of riparian zone. The full list of the flora is presented in Table 287.

Table 288. List of plants recorded during November

Date	Route #	Species name English
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11/26/2021	FSP 006, 007	<i>Salix triandra</i> L. - Ուռենի եռաւեջ
11/26/2021	FSP 006, 007	<i>Crataegus orientalis</i> Bieb. - Ալոճ, Սզնի արևելյան
11/26/2021	FSP 006, 007	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
11/26/2021	FSP 006, 007	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
11/26/2021	FSP 006, 007	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
11/26/2021	FSP 007	<i>Nasturtium officinale</i> R. Br. - Ջրկոտեմ դեղատու
11/26/2021	FSP 006	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմանկ անդրկովկասյան
11/26/2021	FSP 006, 007	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
11/26/2021	FSP 006, 007	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
11/26/2021	FSP 007	<i>Briza elatior</i> L. - Դողդողուն բարձր
11/26/2021	FSP 006	<i>Phragmites australis</i> (Cav.) Trin ex Steud. - Եղեգնատունկ, Եղեգ հարավային
11/26/2021	FSP 007	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
11/26/2021	FSP 007	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
11/26/2021	FSP 006, 007	<i>Pyrus zangezura</i> Maleev - Տանձենի զանգեզուրի
11/26/2021	FSP 006	<i>Rosa spinosissima</i> L. - Մասրենի առատափուշ
11/26/2021	FSP 006, 007	<i>Salix caprea</i> L. - Այծուռենի, Որձուռի
11/26/2021	FSP 006	<i>Salix elbursensis</i> Boiss. - Ուռենի էլբուրսյան
<b>Total</b>		<b>17 species</b>

EAAA 008

In total there are **25 species** of vascular plants recorded in **November** in this area. The flora is mainly represented by forest, bushes, steppe and riparian species. The full list of the flora is presented in Table 288.

Table 289. List of plants recorded during November

Date	Route #	Species name English
11/26/2021	FSP 008, 009, 010	<i>Urtica dioica</i> L. - Եղինջ երկտուն
11/26/2021	FSP 008, 009	<i>Juniperus depressa</i> Stev. - Գիհի ցածր
11/26/2021	FSP 008, 009	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
11/26/2021	FSP 008, 010	<i>Crataegus orientalis</i> Pall. ex Bieb. - Ալոճ, Սզնի արևելյան
11/26/2021	FSP 009, 011	<i>Salix elbursensis</i> Boiss. - Ուռենի էլբուրսյան
11/26/2021	FSP 009, 011	<i>Acer campestre</i> L. - Թխկի դաշտային
11/26/2021	FSP 011	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
11/26/2021	FSP 011	<i>Tussilago farfara</i> L. - Տատրակ սովորական, Խոճկորիկ
11/26/2021	FSP 008, 009, 010, 011	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
11/26/2021	FSP 008, 009, 010, 011	<i>Sedum caucasicum</i> (Grossh.) A. Bor. - Թանթոնիկ կովկասյան
11/26/2021	FSP 008, 010	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմանկ անդրկովկասյան
11/26/2021	FSP 008, 009, 010, 011	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
11/26/2021	FSP 008, 010	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
11/26/2021	FSP 008, 010	<i>Ziziphora rigida</i> (Boiss.) Stapf - Ուրցադաղձ կոշտ
11/26/2021	FSP 008	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
11/26/2021	FSP 008, 010	<i>Rumex obtusifolius</i> L. - Ավելուկ բթատերև
11/26/2021	FSP 008, 010	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
11/26/2021	FSP 008, 010	<i>Cerasus mahaleb</i> (L.) Mill. - Բալենի մահալեբի
11/26/2021	FSP 008	<i>Cotoneaster integerrimus</i> Medik. - Չմենի ամբողջատեր
11/26/2021	FSP 008, 009	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
11/26/2021	FSP 008, 009	<i>Pyrus zangezura</i> Maleev - Տանձենի զանգեզուրի
11/26/2021	FSP 008, 010	<i>Rosa spinosissima</i> L. - Մասրենի առատափուշ
11/26/2021	FSP 008, 010	<i>Sorbus aucuparia</i> L. - Ծոխիսնձոր, Արոսի սովորական
11/26/2021	FSP 008, 010	<i>Populus italica</i> (Dur.) Moench - Բարդի բրզաձև իտալական

11/26/2021	FSP 008, 010	<i>Salix triandra</i> L. - Ուռենի եռառէջ
<b>Total</b>		<b>25 species</b>

EAAA 013

In total there are **35 species** of vascular plants recorded in **November** in this area. The flora is mainly represented by forest, bushes and steppe species. The full list of the flora is presented in Table 289.

**Table 290. List of plants recorded during November**

Date	Route #	Species name English
11/27/2021	FSP 020	<i>Cotoneaster integerrimus</i> Medik. - Չմենի ամբողջաեզր
11/27/2021	FSP 020, 021	<i>Cotoneaster saxatilis</i> Pojark. - Չմենի ժայռային
11/27/2021	FSP 020, 021	<i>Acer hyrcanum</i> Fisch. et C.A. Mey. - Թխկի հիրկանյան
11/27/2021	FSP 020, 021	<i>Crataegus orientalis</i> Bieb. - Ալոճ, Սզնի արևելյան
11/27/2021	FSP 021	<i>Pyrus caucasica</i> Fed. - Տանձենի կովկասյան
11/27/2021	FSP 020, 021	<i>Rosa spinosissima</i> L. - Մասրենի անտառափուռ
11/27/2021	FSP 020, 021	<i>Salix triandra</i> L. - Ուռենի եռառէջ
11/27/2021	FSP 021	<i>Salix elbursensis</i> Boiss. - Ուռենի էլբուրսյան
11/27/2021	FSP 020, 021	<i>Juniperus foetidissima</i> Willd. - Ցրտնենի, Գիհի գարշահոտ
11/27/2021	FSP 020, 021	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
11/27/2021	FSP 020, 021	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
11/27/2021	FSP 020, 021	<i>Pinus sylvestris</i> L. - Մոճի սովորական
11/27/2021	FSP 020, 021	<i>Acer ibericum</i> Bieb. - Թխկի իբերիական
11/27/2021	FSP 021	<i>Artemisia fragrans</i> Willd. - Օշինդր բուրավետ
11/27/2021	FSP 020, 021	<i>Echinops pungens</i> Trautv. - Թոփփուռ, Ոգնազլիսիկ փշոտ
11/27/2021	FSP 020	<i>Inula helenium</i> L. - Կղմուխ մեծ
11/27/2021	FSP 020	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
11/27/2021	FSP 021	<i>Silene ruprechtii</i> Schischk. - Ծվծվուկ Ռուպրեխտի
11/27/2021	FSP 020, 021	<i>Swida australis</i> (C.A. Mey.) Pojark. ex Grossh. - Ճապկի հարավի
11/27/2021	FSP 020, 021	<i>Juglans regia</i> L. - Ընկուզենի սովորական
11/27/2021	FSP 020, 021	<i>Malva sylvestris</i> L. - Փիփերթ անտառային
11/27/2021	FSP 020, 021	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
11/27/2021	FSP 021	<i>Plantago major</i> L. - Ջղախոտ, Եզան լեզու մեծ
11/27/2021	FSP 021	<i>Hordeum bulbosum</i> L. - Գարի սոխուկավոր
11/27/2021	FSP 020	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
11/27/2021	FSP 020, 021	<i>Paliurus spina-christ</i> (Mill) A.C. Sch. - Ժանտափուռ, Ցաքի փշոտ
11/27/2021	FSP 021	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
11/27/2021	FSP 020, 021	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
11/27/2021	FSP 020, 021	<i>Prunus divaricata</i> Ldb. - Մալոր, Շլոր
11/27/2021	FSP 020, 021	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռենատերև
11/27/2021	FSP 020	<i>Rubus armeniacus</i> Focke. - Մոշենի հայկական
11/27/2021	FSP 020, 021	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
11/27/2021	FSP 020, 021	<i>Sambucus ebulus</i> L. - Կտտկենի խտտային
11/27/2021	FSP 020, 021	<i>Celtis caucasica</i> Willd. - Փռչնի կովկասյան
11/27/2021	FSP 021	<i>Ulmus minor</i> Mill. - Թեղի փոքր
<b>Total</b>		<b>35 species</b>

EAAA 014

In total there are **47 species** of vascular plants recorded in **November** in this area. The flora is mainly represented by juniper woodland, bushes, steppe species and the species of riparian zone. The full list of the flora is presented in Table 290.

**Table 291. List of plants recorded during November**

Date	Route #	Species name English
11/27/2021	FSP 023, 025	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմասյտուղ
11/27/2021	FSP 022, 023, 024	<i>Pinus sylvestris</i> L. - Մոճի սովորական
11/27/2021	FSP 023, 025	<i>Acer campestre</i> L. - Թխլի դաշտային
11/27/2021	FSP 022, 023, 024, 025	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
11/27/2021	FSP 022, 023, 024	<i>Cotoneaster saxatilis</i> Pojark. - Չմենի ժայռային
11/27/2021	FSP 022, 024	<i>Crataegus kyrtostyla</i> Fingerh - Ալոճ, Սզնի կեռասունակ
11/27/2021	FSP 022, 024	<i>Crataegus orientalis</i> Bieb. - Ալոճ, Սզնի արևելյան
11/27/2021	FSP 022, 024	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
11/27/2021	FSP 023, 024	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
11/27/2021	FSP 022, 023, 024	<i>Sorbus graeca</i> (Spach) Hedl. - Ասպար, Արոսի հունական
11/27/2021	FSP 023, 024	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
11/27/2021	FSP 022, 023, 024	<i>Salix triandra</i> L. - Ուռենի եռամեջ
11/27/2021	FSP 023, 025	<i>Typha latifolia</i> L. - Որձախոտ, Կեռն լայնատերև
11/27/2021	FSP 023, 025	<i>Ceterach officinarum</i> W. - Շեւերակ դեղատու
11/27/2021	FSP 022, 024	<i>Juniperus foetidissima</i> Willd. - Ցրտնենի, Գիհի գարշահոտ
11/27/2021	FSP 023, 025	<i>Cotinus coggygria</i> Scop. - Դրախտաձառ սովորական
11/27/2021	FSP 022, 025	<i>Vinca herbacea</i> W. K. - Կուսածաղիկ խոտային
11/27/2021	FSP 023, 025	<i>Asparagus verticillatus</i> L. - Չներեկ, Օնեփակ օղակավոր
11/27/2021	FSP 022, 024	<i>Xanthium strumarium</i> L. - Դառնափուշ, Դառնուկ խալիպաձև
11/27/2021	FSP 025	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
11/27/2021	FSP 023, 025	<i>Carpinus betulus</i> L. - Բոխի սովորական
11/27/2021	FSP 023, 025	<i>Corylus avellana</i> L. - Տխլենի սովորական
11/27/2021	FSP 022, 023, 024	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
11/27/2021	FSP 023, 025	<i>Sambucus ebulus</i> L. - Կտտկենի խոտային
11/27/2021	FSP 025	<i>Euonymus latifolia</i> (L.) Mill. - Իլենի լայնատերև
11/27/2021	FSP 022, 024	<i>Chenopodium botrys</i> L. - Թելուկ հոտավետ
11/27/2021	FSP 022, 024	<i>Cornus mas</i> L. - Հոն սովորական
11/27/2021	FSP 023, 025	<i>Hippophae rhamnoides</i> L. - Չիչխան դժնիկանման
11/27/2021	FSP 023, 025	<i>Alhagi pseudalhagi</i> (Bieb.) Desv. - Ուղտափուշ սովորական
11/27/2021	FSP 022, 023, 024	<i>Astragalus microcephalus</i> Willd. - Գազ մանրագլխիկ
11/27/2021	FSP 023, 025	<i>Genista tinctoria</i> L. - Օրոճ, Դեղնածաղիկ ներկատու
11/27/2021	FSP 023, 025	<i>Onobrychis cornuta</i> (L.) Desv. - Կորնգան եղջրավոր
11/27/2021	FSP 023, 025	<i>Robinia pseudoacacia</i> L. - Ռոբինիա կեղծ ակացիա
11/27/2021	FSP 022, 023, 024	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
11/27/2021	FSP 022, 023, 024	<i>Nepeta mussinii</i> Spreng. - Կատվադաղձ Մուսինի
11/27/2021	FSP 022, 023, 024	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
11/27/2021	FSP 023, 024	<i>Jasminum fruticans</i> L. - Հասմիկ թփուտային
11/27/2021	FSP 023, 024	<i>Polygonum aviculare</i> L. - Մատիսեղ ճնճուկի
11/27/2021	FSP 022, 023, 024	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր
11/27/2021	FSP 022, 023, 024	<i>Cerasus incana</i> (Pall.) Spach - Կեռասենի պեկեր
11/27/2021	FSP 025	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռնատերև
11/27/2021	FSP 025	<i>Rubus caesius</i> L. - Մոշենի գեղիուս
11/27/2021	FSP 022, 024	<i>Spiraea hypericifolia</i> L. - Ասպիրակ արևքուրիկատերև

11/27/2021	FSP 022, 023, 024	<i>Salix caprea</i> L. - Այծուռենի, Որձուռի
11/27/2021	FSP 023, 025	<i>Hyoscyamus niger</i> L. - Բանգի սև
11/27/2021	FSP 023, 025	<i>Celtis caucasica</i> Willd. - Փռչնի կովկասյան
11/27/2021	FSP 023, 025	<i>Ulmus minor</i> Mill. - Թեղի փոքր
<b>Total</b>		<b>47 species</b>

EAAA 016

In total there are **44 species** of vascular plants recorded in **November** in this area. The flora is mainly represented by juniper woodland, bushes, steppe species and the species of riparian zone. The full list of the flora is presented in Table 291.

**Table 292. List of plants recorded during November**

Date	Route #	Species name English
11/28/2021	FSP 023, 025	<i>Acer hyrcanum</i> Fisch. et C.A. Mey. - Թխկի հիբրկանյան
11/28/2021	FSP 022, 023, 024	<i>Acer campestre</i> L. - Թխկի դաշտային
11/28/2021	FSP 022, 025	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
11/28/2021	FSP 023, 025	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
11/28/2021	FSP 023, 025	<i>Lonicera caucasica</i> Pall) - Ցախակեռաս արևելյան
11/28/2021	FSP 022, 023, 024	<i>Viburnum lantana</i> L. - Գերիմաստի
11/28/2021	FSP 022, 024	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
11/28/2021	FSP 022, 024	<i>Cotoneaster integerrimus</i> Medik. - Չմենի ամբողջաեզր
11/28/2021	FSP 022, 024	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
11/28/2021	FSP 023, 025	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
11/28/2021	FSP 022, 023, 024	<i>Populus italica</i> (Dur.) Moench - Բարդի բրգաձև խտալական
11/28/2021	FSP 023, 024	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
11/28/2021	FSP 022, 023, 024	<i>Pyrus caucasica</i> Fed. - Տանձենի կովկասյան
11/28/2021	FSP 023, 024	<i>Rosa spinosissima</i> L. - Մասրենի առատափուշ
11/28/2021	FSP 023, 025	<i>Ceterach officinarum</i> W. - Շետերակ դեղատու
11/28/2021	FSP 022, 024	<i>Juniperus foetidissima</i> Willd. - Ցրտենի, Գիհի գարշահոտ
11/28/2021	FSP 023, 025	<i>Cotinus coggygria</i> Scop. - Դրախտածառ սովորական
11/28/2021	FSP 022, 024	<i>Xanthium strumarium</i> L. - Դառնափուշ, Դառնուկ խալիպաձև
11/28/2021	FSP 025	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
11/28/2021	FSP 023, 025	<i>Carpinus betulus</i> L. - Բոխի սովորական
11/28/2021	FSP 023, 025	<i>Corylus avellana</i> L. - Տխլենի սովորական
11/28/2021	FSP 022, 023, 024	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
11/28/2021	FSP 023, 025	<i>Sambucus ebulus</i> L. - Կտտկենի խոտային
11/28/2021	FSP 025	<i>Euonymus latifolia</i> (L.) Mill. - Իլենի լայնատերև
11/28/2021	FSP 022, 024	<i>Chenopodium botrys</i> L. - Թելուկ հոտավետ
11/28/2021	FSP 022, 024	<i>Cornus mas</i> L. - Հոն սովորական
11/28/2021	FSP 023, 025	<i>Hippophae rhamnoides</i> L. - Չիչխան դժնիկանման
11/28/2021	FSP 022, 023, 024	<i>Astragalus microcephalus</i> Willd. - Գազ մանրագլխիկ
11/28/2021	FSP 023, 025	<i>Genista tinctoria</i> L. - Օրոճ, Դեղնածաղիկ ներկատու
11/28/2021	FSP 023, 025	<i>Onobrychis cornuta</i> (L.) Desv. - Կորնգան եղջրավոր
11/28/2021	FSP 023, 025	<i>Robinia pseudoacacia</i> L. - Ռոբինիա կեղծ սկազիա
11/28/2021	FSP 022, 023, 024	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
11/28/2021	FSP 022, 023, 024	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
11/28/2021	FSP 023, 024	<i>Jasminum fruticans</i> L. - Հաավիկ թփուտային
11/28/2021	FSP 023, 024	<i>Rumex crispus</i> L. - Ավելուկ գանգուր
11/28/2021	FSP 022, 023, 024	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր

11/28/2021	FSP 022, 023, 024	<i>Cerasus incana (Pall.) Spach</i> - Կեռասենի պլեհեր
11/28/2021	FSP 025	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռենաստերն
11/28/2021	FSP 025	<i>Rubus caesius</i> L. - Մոշենի ցեղիուս
11/28/2021	FSP 022, 024	<i>Spiraea hypericifolia</i> L. - Ասպիրակ արևքուրիկատերն
11/28/2021	FSP 022, 023, 024	<i>Salix caprea</i> L. - Այծուռենի, Որձուռի
11/28/2021	FSP 023, 025	<i>Celtis caucasica</i> Willd. - Փռչնի կովկասյան
11/28/2021	FSP 023, 025	<i>Ulmus minor</i> Mill. - Թեղի փոքր
11/28/2021	FSP 023, 025	<i>Urtica dioica</i> L. - Եղինջ երկտուն
<b>Total</b>		<b>44 species</b>

### Results for May-June 2022

Dates: 26-30 Nov 2021

EAAA 001

In total there are **95** species of vascular plants recorded in this area. The flora is mainly represented by steppe (FSP 001) and riparian (FSP 002) zone. The full list of the flora is presented in Table 292.

**Table 293. List of plants recorded during 2021-2022**

Date	Plot #	Species name Latin and Arm
6/18/2021	FSP 002	<i>Acer negundo</i> L. - Թխկի հացենիատերն
6/18/2021	FSP 001, 002	<i>Amaranthus retroflexus</i> L. - Հավակատար սովորական
6/18/2021	FSP 001, 002	<i>Astrodaucus orientalis</i> (L.) Drude - Աստղագազար արևելյան
6/18/2021	FSP 001, 002	<i>Daucus carota</i> L. - Գազար վայրի
6/18/2021	FSP 001, 002	<i>Falcaria vulgaris</i> Bernh. - Սիբեյս սովորական
6/18/2021	FSP 001	<i>Prangos ferulacea</i> (L.) Lindl. - Պրանգոս նարդեսանման
6/18/2021	FSP 001	<i>Eremurus spectabilis</i> N. Bieb. - Շրեշ ուշագրավ
6/18/2021	FSP 001, 002	<i>Achillea millefolium</i> L. - Հազարատերևուկ սովորական
6/18/2021	FSP 001	<i>Artemisia annua</i> L. - Օշինդր միամյա
6/18/2021	FSP 001, 002	<i>Artemisia vulgaris</i> L. - Օշինդր սովորական
6/18/2021	FSP 001	<i>Chondrilla juncea</i> L. - Ծամանիկ, Խիժաճարճատուկ կնյունանման
6/18/2021	FSP 001, 002	<i>Cichorium intybus</i> L. - Եղերդակ, Ճարճատուկ սովորական
5/07/2022	FSP 001	<i>Cnicus benedictus</i> L. - Լայնատերևուկ օրհնված
6/18/2021	FSP 001, 002	<i>Lactuca serriola</i> L. - Մառոլ, Հազար, Կաթնուկ կողմնացույց
6/18/2021	FSP 001, 002	<i>Taraxacum officinale</i> Wigg. - Խատուտիկ դեղատու
6/18/2021	FSP 001, 002	<i>Xanthium italicum</i> Moretti - Դառնափուշ, Դառնուկ իտալական
6/18/2021	FSP 001	<i>Xeranthemum squarrosum</i> Boiss. - Չորաբույս, Անմեռուկ չոված
6/18/2021	FSP 002	<i>Berberis vulgaris</i> L. - Կճոխուր սովորական
6/18/2021	FSP 001	<i>Echium vulgare</i> L. - Իժախտ սովորական
6/18/2021	FSP 001, 002	<i>Myosotis arvensis</i> (L.) Hill. - Անմռուկ դաշտային
6/18/2021	FSP 001, 002	<i>Symphytum asperum</i> Lepech. - Քարխտո կոշտ
6/18/2021	FSP 001	<i>Alyssum desertorum</i> Stapf. - Վառվռուկ անապատային
6/18/2021	FSP 001, 002	<i>Capsella bursa-pastoris</i> (L.) Medik. - Ծոսպաշար, Հովվամաղախ
6/18/2021	FSP 001	<i>Crambe orientalis</i> L. - Ծովակաղամբ արևելյան
6/18/2021	FSP 001, 002	<i>Lepidium campestre</i> (L.) R. Br. - Կոտեմ դաշտային
6/18/2021	FSP 002	<i>Nasturtium officinale</i> R. Br. - Ջրկոտեմ դեղատու
6/18/2021	FSP 001	<i>Michauxia laevigata</i> Vent. - Միշոքսիա հարթ
6/18/2021	FSP 001	<i>Dianthus cretaceus</i> Adams - Մեխակ կավճային
6/18/2021	FSP 001, 002	<i>Ceratocarpus arenarius</i> L. - Եզնաբզեզ ավազուտային
6/18/2021	FSP 001	<i>Chenopodium foliosum</i> Aschers. - Թելուկ բազմատերև

6/18/2021	FSP 001, 002	<i>Convolvulus arvensis</i> L. - Պատաստուկ դաշտային
5/07/2022	FSP 002	<i>Sedum caucasicum</i> (Grossh.) A. Bor. - Թանթոնիկ կովկասյան
6/18/2021	FSP 001	<i>Sempervivum transcasicum</i> Muirhead - Գառանդման անդրկովկասյան
6/18/2021	FSP 002	<i>Elaeagnus angustifolia</i> L. - Փշատ նեղատերև
6/18/2021	FSP 001	<i>Euphorbia sequierana</i> Neck. - Բշակաթնուկ Սեզիերի
6/18/2021	FSP 001	<i>Astragalus xiphidium</i> Bunge - Գազ թրածև
6/18/2021	FSP 001, 002	<i>Medicago coerulea</i> Less. ex Ledeb. - Առվույտ երկնագույն
6/18/2021	FSP 001	<i>Medicago rigidula</i> (L.) Desr. - Առվույտ կոշտավուն
6/18/2021	FSP 001, 002	<i>Melilotus officinalis</i> (L.) Pall. - Բշտովույտ դեղատու
6/18/2021	FSP 001, 002	<i>Fumaria officinalis</i> L. - Ծխաբույս, Տերուկ դեղատու
6/18/2021	FSP 001, 002	<i>Erodium cicutarium</i> (L.) L'Her. - Ճայկտուց խնդամուկային
6/18/2021	FSP 001	<i>Ornithogalum montanum</i> Cirillo - Սպիտակ բանջար, Աստղաշուշան լեռնային
6/18/2021	FSP 001, 002	<i>Hypericum perforatum</i> L. - Սրոնունդ խոցված
6/18/2021	FSP 001	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
6/18/2021	FSP 001	<i>Iris lineolata</i> (Trautv.) Grossh. - Հիրիկ նեղգծային
5/07/2022	FSP 001	<i>Iris reticulata</i> M. Bieb. - Հիրիկ ցանցավոր
6/18/2021	FSP 001	<i>Ajuga chia</i> Schreb. - Ճանկխոտ հիոսական
6/18/2021	FSP 002	<i>Mentha longifolia</i> (L.) Huds. - Անանուխ, Դադ երկարատերև
6/18/2021	FSP 001	<i>Thymus collinus</i> Bieb. - Ուրց բլրակային
6/18/2021	FSP 001	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
6/18/2021	FSP 001	<i>Thymus transcasicus</i> Ronn. - Ուրց անդրկովկասյան
6/18/2021	FSP 001, 002	<i>Gagea bulbifera</i> (Pall.) Salisb. - Սագասոխուկ սոխուկակիր
6/18/2021	FSP 002	<i>Alcea rugosa</i> Alef. - Տուղտավարդ կնճոտ
6/18/2021	FSP 001, 002	<i>Malva neglecta</i> Wallr. - Մոլոր, Փիփերթ արհամարհված
6/18/2021	FSP 002	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
6/18/2021	FSP 001, 002	<i>Papaver commutatum</i> Fisch. et C.A. Mey. - Կակաչ խճճված
6/18/2021	FSP 001, 002	<i>Papaver fugax</i> Poir. - Կակաչ թռչող
6/18/2021	FSP 001, 002	<i>Papaver macrostomum</i> Boiss. et Huet - Կակաչ խոշորատուփիկ
6/18/2021	FSP 001, 002	<i>Plantago major</i> L. - Ջղախոտ, Եզան լեզու մեծ
6/18/2021	FSP 001, 002	<i>Plantago media</i> L. - Ջղախոտ, Եզան լեզու միջին
6/18/2021	FSP 001	<i>Acantholimon bracteatum</i> (Girard) Boiss. - Ոգնաթուփ ծաղկակիրցային
6/18/2021	FSP 001	<i>Aegilops cylindrica</i> Host - Այծակն գլանաձև
6/18/2021	FSP 001	<i>Aegilops tauschii</i> Coss. - Այծակն Թաուշի
6/18/2021	FSP 001	<i>Avena fatua</i> L. - Խրբուկ, Վարսակ դատարկ, Վ. պոչուկ
5/07/2022	FSP 002	<i>Cynodon dactylon</i> (L.) Pers. - Արվանտակ մատնաձև, Բերմուդյան խոտ
6/18/2021	FSP 001, 002	<i>Dactylis glomerata</i> L. - Ոգնախոտ հավաքված
6/18/2021	FSP 001	<i>Hordeum bulbosum</i> L. - Գարի սոխուկավոր
5/07/2022	FSP 001	<i>Hordeum murinum</i> L. - Գարի մկնային, Մկնագարի
6/18/2021	FSP 002	<i>Phragmites australis</i> (Cav.) Trin ex Steud. - Եղեգնատունկ, Եղեգ հարավային
6/18/2021	FSP 001, 002	<i>Poa bulbosa</i> L. - Արոտածիլ, Հուրանախոտ, Դաշտավուն սոխուկավոր
5/07/2022	FSP 001	<i>Triticum aestivum</i> L. - Ցորեն մշակովի
6/18/2021	FSP 001	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
6/18/2021	FSP 002	<i>Polygonum aviculare</i> L. - Մատիտեղ ճնճուկի
6/18/2021	FSP 001, 002	<i>Rumex crispus</i> L. - Ավելուկ գանգուր
6/18/2021	FSP 001, 002	<i>Portulaca oleracea</i> L. - Դանդուր սովորական
6/18/2021	FSP 002	<i>Primula macrocalyx</i> Bunge - Գևարբուկ խոշորաբաժակ
5/07/2022	FSP 001, 002	<i>Ceratocephalus falcatus</i> (L.) Pers. - Եղջրագլխիկ մանգաղանման
6/18/2021	FSP 002	<i>Rhamnus spathulifolia</i> Fisch et C.A. Mey. - Դժնիկ թխատերև
6/18/2021	FSP 002	<i>Armeniaca vulgaris</i> Lam. - Ծիրան սովորական

6/18/2021	FSP 001	<i>Cerasus incana (Pall.) Spach</i> - Կեռասենի ալեհեր
6/18/2021	FSP 002	<i>Cerasus vulgaris Mill.</i> - Բալենի սովորական
6/18/2021	FSP 001, 002	<i>Geum urbanum L.</i> - Շահոքրաւ սովորական
6/18/2021	FSP 001, 002	<i>Malus domestica Borkh.</i> - Խնձորենի սովորական
6/18/2021	FSP 002	<i>Prunus divaricata Ldb.</i> - Սալոր, Շլոր
6/18/2021	FSP 001, 002	<i>Pyrus communis L.</i> - Տանձենի սովորական
6/18/2021	FSP 001, 002	<i>Galium aparine L.</i> - Մակարդախոտ կաշուն
6/18/2021	FSP 002	<i>Populus bolleana Lauche</i> - Բարդի Բոլլեի, Բ. Սամարդանդի
6/18/2021	FSP 002	<i>Populus nigra L.</i> - Բարդի սև
5/07/2022	FSP 002	<i>Salix elbursensis Boiss.</i> - Ուռենի էլբուրայան
6/18/2021	FSP 002	<i>Salix excelsa S. G. Gmel.</i> - Ուռենի բարձր
6/18/2021	FSP 001, 002	<i>Datura stramonium L.</i> - Արջընկույզ սովորական
6/18/2021	FSP 001, 002	<i>Hyoscyamus niger L.</i> - Բանգի սև
5/07/2022	FSP 001, 002	<i>Solanum tuberosum L.</i> - Կարտոֆիլ
6/18/2021	FSP 002	<i>Ulmus minor Mill.</i> - Թեղի փոքր
5/07/2022	FSP 002	<i>Zygophyllum fabago L.</i> - Չուգաստերն սովորական
<b>Total</b>		<b>95</b>

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In total there are **150** species of vascular plants recorded in this area. The flora is mainly represented by steppe species and the species of riparian zone. The full list of the flora is presented in Table 293. Among steppe patches of diatomaceous clay areas, the *Iris lineolata* was detected.

**Table 294. List of plants recorded during 2021-2022**

Date	Route #	Species name English
6/18/2021	FSP 003, 005	<i>Equisetum arvense L.</i> - Չիաձետ դաշտային
5/07/2022	FSP 005	<i>Ceterach officinarum W.</i> - Շետերակ դեղատու
6/18/2021	FSP 004	<i>Juniperus oblonga Bieb.</i> - Գիհի երկարատերև
6/18/2021	FSP 004	<i>Juniperus polycarpus K. Koch.</i> - Գիհի բազմապտուղ
6/18/2021	FSP 004	<i>Ephedra procera Fisch. et C.A. Mey.</i> - Մարի չամիչ բարձր
6/18/2021	FSP 003	<i>Acer campestre L.</i> - Թխկի դաշտային
6/18/2021	FSP 003	<i>Acer hyrcanum Fisch. et C.A. Mey.</i> - Թխկի հիրկանյան
6/18/2021	FSP 003	<i>Acer negundo L.</i> - Թխկի հսգենիատերև
5/07/2022	FSP 004	<i>Alisma plantago-aquatica L.</i> - Հովվափող սովորական
6/18/2021	FSP 003, 004	<i>Amaranthus retroflexus L.</i> - Հավակատար սովորական
6/18/2021	FSP 004	<i>Astrodaucus orientalis (L.) Drude</i> - Աստղագազար արևելյան
6/18/2021	FSP 003, 004, 005	<i>Daucus carota L.</i> - Գազար վայրի
5/07/2022	FSP 003, 004, 005	<i>Falcaria vulgaris Bernh.</i> - Միրելի սովորական
6/18/2021	FSP 003, 005	<i>Heracleum sosnowskyi Manden.</i> - Բալդրդան Սոսնովկու
6/18/2021	FSP 004	<i>Prangos ferulacea (L.) Lindl.</i> - Պրանգոս նարդեսանման
6/18/2021	FSP 004	<i>Vinca herbacea W. K.</i> - Գուսածաղիկ խոտային
6/18/2021	FSP 003, 004, 005	<i>Cynanchum acutum L.</i> - Շնախոտ սուր
6/18/2021	FSP 003, 005	<i>Asparagus officinalis L.</i> - Չներբեկ, Ծնեփակ դեղատու
5/07/2022	FSP 003	<i>Asparagus verticillatus L.</i> - Չներբեկ, Ծնեփակ օղակավոր
6/18/2021	FSP 004	<i>Eremurus spectabilis N. Bieb.</i> - Շրեշ ուշագրավ
6/18/2021	FSP 003, 004, 005	<i>Achillea millefolium L.</i> - Հագարատերևուկ սովորական
6/18/2021	FSP 003, 005	<i>Arctium lappa L.</i> - Կոծոծ, Կոստուկ երեսնակ
6/18/2021	FSP 003, 004, 005	<i>Artemisia annua L.</i> - Օշինդր միամյա

6/18/2021	FSP 004	<i>Artemisia fragrans</i> Willd. - <i>Օշինդր բուրավետ</i>
6/18/2021	FSP 003, 005	<i>Artemisia vulgaris</i> L. - <i>Օշինդր սովորական</i>
5/07/2022	FSP 004	<i>Bidens tripartita</i> L. - <i>Կատվալեզու եռաբաժան</i>
5/07/2022	FSP 003	<i>Centaurea cyanus</i> L. - <i>Տերեփուկ կապույտ</i>
6/18/2021	FSP 003, 004, 005	<i>Chondrilla juncea</i> L. - <i>Ծամանիկ, Խիժաճարճատուկ կնյունանման</i>
6/18/2021	FSP 003, 004, 005	<i>Cichorium intybus</i> L. - <i>Եղերդակ, Ճարճատուկ սովորական</i>
6/18/2021	FSP 003, 004, 005	<i>Lactuca serriola</i> L. - <i>Մառռլ, Հազար, Կաթնուկ կողմնացույց</i>
5/07/2022	FSP 004	<i>Tanacetum chiliophyllum</i> (Fisch. et C.A. Mey. ex DC.) Sch. Bip. - <i>Տարկավան, Լվածադիկ հազարատերև</i>
6/18/2021	FSP 003, 004, 005	<i>Taraxacum officinale</i> Wigg. - <i>Խատուտիկ դեղատու</i>
5/07/2022	FSP 005	<i>Tussilago farfara</i> L. - <i>Տատրակ սովորական, Խոճկորիկ</i>
6/18/2021	FSP 003, 004, 005	<i>Xanthium italicum</i> Moretti - <i>Դառնափուռ, Դառնուկ խաղաղական</i>
6/18/2021	FSP 004	<i>Xeranthemum squarrosum</i> Boiss. - <i>Չորաբույս, Անմեռուկ չոված</i>
6/18/2021	FSP 003, 005	<i>Berberis vulgaris</i> L. - <i>Կծոխուր սովորական</i>
6/18/2021	FSP 004	<i>Echium vulgare</i> L. - <i>Իժախտ սովորական</i>
6/18/2021	FSP 003, 004, 005	<i>Myosotis arvensis</i> (L.) Hill. - <i>Անմռռուկ դաշտային</i>
6/18/2021	FSP 003, 005	<i>Symphytum asperum</i> Lepech. - <i>Քարխտու կոշտ</i>
5/07/2022	FSP 003	<i>Brassica oleracea</i> L. - <i>Կաղամբ բանջարանոցային</i>
6/18/2021	FSP 003, 004, 005	<i>Capsella bursa-pastoris</i> (L.) Medik. - <i>Ծոսպաշար, Հովվամաղախ</i>
6/18/2021	FSP 004	<i>Crambe orientalis</i> L. - <i>Ծովակաղամբ արևելյան</i>
6/18/2021	FSP 003, 004, 005	<i>Lepidium campestre</i> (L.) R. Br. - <i>Կոտեմ դաշտային</i>
5/07/2022	FSP 003	<i>Lepidium latifolium</i> L. - <i>Նվարդակ լայնատերև</i>
6/18/2021	FSP 003, 004, 005	<i>Thlaspi perfoliatum</i> L. - <i>Շնկոտեմ թափանցված</i>
5/07/2022	FSP 005	<i>Turritis glabra</i> L. - <i>Տուրիտիս հարթ</i>
6/18/2021	FSP 004	<i>Michauxia laevigata</i> Vent. - <i>Միշոքսիա հարթ</i>
6/18/2021	FSP 003, 005	<i>Lonicera caucasica</i> Pall. - <i>Ցախակեռաս կովկասյան</i>
6/18/2021	FSP 004, 005	<i>Lonicera iberica</i> Bieb. - <i>Ցախակեռաս վրացական</i>
6/18/2021	FSP 004	<i>Dianthus cretaceus</i> Adams - <i>Մեխակ կավճային</i>
6/18/2021	FSP 003, 004, 005	<i>Chenopodium foliosum</i> Aschers. - <i>Թելուկ բազմատերև</i>
6/18/2021	FSP 004	<i>Salsola dendroides</i> Pall. - <i>Օշան ծառանման</i>
6/18/2021	FSP 004	<i>Rosularia sempervivum</i> (Bieb.) Berger - <i>Վարդակուկ մշտադալար</i>
6/18/2021	FSP 004	<i>Sedum caucasicum</i> (Grossh.) A. Bor. - <i>Թանթոնիկ կովկասյան</i>
6/18/2021	FSP 004	<i>Sedum oppositifolium</i> Sims. - <i>Թանթոնիկ հակադրատերև</i>
6/18/2021	FSP 004	<i>Sempervivum transcaucasicum</i> Muirhead - <i>Գառանդակ անդրկովկասյան</i>
6/18/2021	FSP 003, 004, 005	<i>Cuscuta cesattiana</i> Bertol. - <i>Գայլխոտ, Գաղձ ձեզատի</i>
6/18/2021	FSP 004	<i>Scabiosa caucasica</i> Bieb. - <i>Քոսքսուկ կովկասյան</i>
6/18/2021	FSP 003, 005	<i>Elaeagnus angustifolia</i> L. - <i>Փշատ նեղատերև</i>
5/07/2022	FSP 005	<i>Hippophae rhamnoides</i> L. - <i>Չիչխան դժնիկանման</i>
6/18/2021	FSP 003, 004, 005	<i>Euphorbia sequierana</i> Neck. - <i>Իշակաթնուկ Սեզիերի</i>
6/18/2021	FSP 004	<i>Astragalus microcephalus</i> Willd. - <i>Գազ մանրագլխիկ</i>
6/18/2021	FSP 004	<i>Astragalus xiphidium</i> Bunge - <i>Գազ թրածն</i>
5/07/2022	FSP 003	<i>Medicago lupulina</i> L. - <i>Աովույտ գայլուկանման</i>
5/07/2022	FSP 005	<i>Medicago minima</i> (L.) Bartalini - <i>Աովույտ փոքրիկ</i>
6/18/2021	FSP 003, 004, 005	<i>Melilotus officinalis</i> (L.) Pall. - <i>Իշատույտ դեղատու</i>
6/18/2021	FSP 003, 004, 005	<i>Trifolium campestre</i> Schreb. - <i>Երեքնուկ դաշտային</i>
6/18/2021	FSP 003, 004, 005	<i>Quercus macranthera</i> F. et M. ex Hohen. - <i>Կաղնի արևելյան</i>
5/07/2022	FSP 005	<i>Corydalis angustifolia</i> (Bieb.) DC. - <i>Պոպուլիկ նեղատերև</i>
6/18/2021	FSP 003, 004, 005	<i>Fumaria officinalis</i> L. - <i>Ծխաբույս, Տերուկ դեղատու</i>
6/18/2021	FSP 003, 004, 005	<i>Erodium cicutarium</i> (L.) L'Her. - <i>Ճայկոուց խնդամուղային</i>

6/18/2021	FSP 003, 004, 005	<i>Ornithogalum montanum</i> Cirillo - Սպիտակ բանջար, Աստղաշուշան լեռնային
6/18/2021	FSP 003, 004, 005	<i>Hypericum perforatum</i> L. - Սրտհունդ խոցված
6/18/2021	FSP 004	<i>Gladiolus hajastanicus</i> Gabrielian - Թրաշուշան հայաստանյան
6/18/2021	FSP 003, 004, 005	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
6/18/2021	FSP 004	<i>Iris lineolata</i> (Trautv.) Grossh. - Հիրիկ նեղզային
6/18/2021	FSP 003, 005	<i>Juglans regia</i> L. - Ընկուզենի սովորական
6/18/2021	FSP 003, 005	<i>Juncus inflexus</i> L. - Կնյուն կռացած
6/18/2021	FSP 003, 005	<i>Mentha longifolia</i> (L.) Huds. - Անանուխ, Դադձ երկարատերև
6/18/2021	FSP 004	<i>Nepeta mussinii</i> Spreng. - Կատվադադձ Մուսինի
6/18/2021	FSP 003, 004, 005	<i>Origanum vulgare</i> L. - Խնկածաղիկ սովորական
6/18/2021	FSP 003, 004, 005	<i>Teucrium polium</i> L. - Լերդախոտ ալեհեր
6/18/2021	FSP 004	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
6/18/2021	FSP 004	<i>Ziziphora rigida</i> (Boiss.) Stapf - Ուրցադադձ կոշտ
5/07/2022	FSP 004	<i>Lemna minor</i> L. - Ջրուսպ փոքր
6/18/2021	FSP 003, 004, 005	<i>Arceuthobium oxycedri</i> (DC.) Bieb. - Արցեութորիում գիհու
6/18/2021	FSP 003, 004, 005	<i>Alcea rugosa</i> Alef. - Տուղտավարդ կնճռոտ
6/18/2021	FSP 003, 005	<i>Morus alba</i> - Թթենի սպիտակ
6/18/2021	FSP 003, 005	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
6/18/2021	FSP 003, 005	<i>Epilobium hirsutum</i> L. - Ապուզան թավոտ
6/18/2021	FSP 003, 005	<i>Orchis mascula</i> (L.) L. - Խոլորձ արական
6/18/2021	FSP 003, 004, 005	<i>Papaver fugax</i> Poir. - Կակաչ թռչող
5/07/2022	FSP 003	<i>Papaver hybridum</i> L. - Կակաչ հիբրիդային
6/18/2021	FSP 003, 004, 005	<i>Papaver macrostomum</i> Boiss. et Huet - Կակաչ խոշորատուփիկ
6/18/2021	FSP 004	<i>Acantholimon bracteatum</i> (Girard) Boiss. - Ոգնաթուփ ծաղկակիցային
6/18/2021	FSP 004	<i>Aegilops cylindrica</i> Host - Այծակն գլանաձև
6/18/2021	FSP 004	<i>Aegilops tauschii</i> Coss. - Այծակն Թաուշի
6/18/2021	FSP 004	<i>Avena fatua</i> L. - Խրբուկ, Վարսակ դասարկ, Վ. պոչուկ
5/07/2022	FSP 004	<i>Catabrosa aquatica</i> (L.) P. Beauv. - Կատարրոզա ջրային, Ջրագնկոր
6/18/2021	FSP 003, 004, 005	<i>Dactylis glomerata</i> L. - Ոգնախոտ հավաքված
6/18/2021	FSP 004	<i>Festuca chalcophaea</i> V. I. Krecz. et Bobrov - Շյուդախոտ պղնձագորշ
6/18/2021	FSP 003, 004, 005	<i>Hordeum bulbosum</i> L. - Գարի սոխուկավոր
5/07/2022	FSP 005	<i>Hordeum geniculatum</i> All. - Գարի ծնկաձև
6/18/2021	FSP 003, 005	<i>Phragmites australis</i> (Cav.) Trin ex Steud. - Եղեգնատունկ, Եղեգ հարավային
6/18/2021	FSP 003, 004, 005	<i>Poa bulbosa</i> L. - Արոտածիլ, Հուրանախոտ, Դաշտավլուկ սոխուկավոր
6/18/2021	FSP 004	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
5/07/2022	FSP 003	<i>Rumex acetosa</i> L. - Ավելուկ սովորական
6/18/2021	FSP 003, 004, 005	<i>Rumex crispus</i> L. - Ավելուկ գանգուր
6/18/2021	FSP 003, 004, 005	<i>Portulaca oleracea</i> L. - Դանդուտ սովորական
6/18/2021	FSP 003, 004, 005	<i>Primula macracalyx</i> Bunge - Գնարբուկ խոշորաբաժակ
5/07/2022	FSP 003, 004, 005	<i>Ceratocephalus falcatus</i> (L.) Pers. - Եղջրագլխիկ մանգաղանման
5/07/2022	FSP 005	<i>Delphinium orientale</i> J. Gay - Ոջլախոտ արևելյան
6/18/2021	FSP 003, 005	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
6/18/2021	FSP 004	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր
6/18/2021	FSP 003, 005	<i>Rhamnus spathulifolia</i> Fisch et C.A. Mey. - Դժնիկ թիասերև
6/18/2021	FSP 004	<i>Amygdalus fenzliana</i> (Fritsch) Lipsky - Նշենի Ֆենցլի
6/18/2021	FSP 003, 004, 005	<i>Armeniaca vulgaris</i> Lam. - Ծիրան սովորական
6/18/2021	FSP 003, 004, 005	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
5/07/2022	FSP 003, 004, 005	<i>Cerasus incana</i> (Pall.) Spach - Կեռասենի ալեհեր
6/18/2021	FSP 003, 004, 005	<i>Cerasus vulgaris</i> Mill. - Բալենի սովորական

6/18/2021	FSP 003, 005	<i>Cerasus mahaleb</i> (L.) Mill. - Բալենի մահալեբի
6/18/2021	FSP 004, 005	<i>Cotoneaster integerrimus</i> Medik. - Չսենի սաբրողաեզր
6/18/2021	FSP 003, 004, 005	<i>Crataegus monogyna</i> Jacq. - Ալոճ, Սգնի միաստնակ
6/18/2021	FSP 003, 004, 005	<i>Cydonia oblonga</i> Mill. - Սերկնիլ սովորական
6/18/2021	FSP 003, 004, 005	<i>Fragaria viridis</i> (Duch.) Weston - Ելակ կանաչ
6/18/2021	FSP 003, 004, 005	<i>Geum urbanum</i> L. - Շահոքրամ սովորական
6/18/2021	FSP 003, 004, 005	<i>Malus domestica</i> Borkh. - Խնձորենի սովորական
5/07/2022	FSP 005	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
6/18/2021	FSP 003, 004, 005	<i>Persica vulgaris</i> Mill. - Ղեղձենի սովորական
6/18/2021	FSP 003, 004, 005	<i>Prunus divaricata</i> Ldb. - Մալոբ, Շլոբ
6/18/2021	FSP 003, 005	<i>Prunus domestica</i> L. - Դամբուլ
6/18/2021	FSP 003, 004, 005	<i>Pyrus caucasica</i> Fed. - Տանձենի կովկասյան
6/18/2021	FSP 003, 004, 005	<i>Pyrus communis</i> L. - Տանձենի սովորական
6/18/2021	FSP 004	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռենաստերն
6/18/2021	FSP 003, 004, 005	<i>Rosa iberica</i> Stev. ex Bieb. - Մասրենի վրացական
6/18/2021	FSP 003, 004, 005	<i>Rosa spinosissima</i> L. - Մասրենի առատափուշ
6/18/2021	FSP 003, 004, 005	<i>Spiraea crenata</i> L. - Սսպիրակ աղեղնեզր
6/18/2021	FSP 003, 004, 005	<i>Spiraea hypericifolia</i> L. - Սսպիրակ արևքուրիկատերն
6/18/2021	FSP 003, 004, 005	<i>Galium aparine</i> L. - Մակարդախոտ կաչուն
6/18/2021	FSP 003, 004, 005	<i>Galium verum</i> Scop. - Մակարդախոտ գարնանային
6/18/2021	FSP 003, 005	<i>Populus bolleana</i> Lauche - Բարդի Բոլլեի, Բ. սամարղանդի
6/18/2021	FSP 003, 005	<i>Populus nigra</i> L. - Բարդի սև
6/18/2021	FSP 003, 005	<i>Salix elbursensis</i> Boiss. - Ուռենի էլբուրսյան
6/18/2021	FSP 003, 005	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
6/18/2021	FSP 003, 005	<i>Salix triandra</i> L. - Ուռենի եռատեջ
5/07/2022	FSP 004	<i>Veronica anagallis-aquatica</i> L. - Բերենիկե աղբյուրային
6/18/2021	FSP 004	<i>Datura stramonium</i> L. - Արջընկույզ սովորական
6/18/2021	FSP 003, 005	<i>Typha latifolia</i> L. - Որձախոտ, Կեռոն լայնատերն
6/18/2021	FSP 003, 005	<i>Ulmus minor</i> Mill. - Թեղի փոքր
<b>Total</b>		<b>150</b>

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In total there are **85** species of vascular plants recorded in this area. The flora is mainly represented by steppe species and the species of riparian zone. The full list of the flora is presented in Table 294.

**Table 295. List of plants recorded during 2021-2022**

Date	Route #	Species name English
5/07/2022	FSP 026	<i>Asplenium septentrionale</i> (L.) Hoffm. - Սսպլեն հյուսիսային
6/18/2021	FSP 026	<i>Dryopteris filix-mas</i> (L.) Shott. - Վահանապտեր արական
6/18/2021	FSP 026	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերն
6/18/2021	FSP 026	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
6/18/2021	FSP 026	<i>Acer campestre</i> L. - Թխկի դաշտային
6/18/2021	FSP 026	<i>Allium fuscoviolaceum</i> Fomin - Սոխ գորշ մանուշակագույն
6/18/2021	FSP 026	<i>Allium szovitsii</i> Regel - Սոխ Շովիցի
6/18/2021	FSP 026	<i>Chaerophyllum macrospermum</i> (Willd. ex Spreng.) Fisch. et C.A. Mey. - Շուշանաբանջար խոշորապտուղ
6/18/2021	FSP 026	<i>Eryngium caucasicum</i> Trautv. - Երնջնակ կովկասյան
5/07/2022	FSP 026	<i>Falcaria vulgaris</i> Bernh. - Սիբեյս սովորական
6/18/2021	FSP 026	<i>Heracleum trachyloma</i> Fisch. et C.A. Mey. - Բաղդրդան թավոտ

6/18/2021	FSP 026	<i>Vinca herbacea</i> W. K. - Կուսածաղիկ խոտային
6/18/2021	FSP 026	<i>Vincetoxicum amplifolium</i> K. Koch - Թունաթափ լայնատերև
6/18/2021	FSP 026	<i>Eremurus spectabilis</i> N. Bieb. - Շրեշ ուշագրավ
6/18/2021	FSP 026	<i>Artemisia absinthium</i> L. - Օշինդր դառը
6/18/2021	FSP 026	<i>Artemisia incana</i> (L.) Druce - Օշինդր պլեհեր
5/07/2022	FSP 026	<i>Tanacetum zangezuristicum</i> Chandjian - Տարկավան, Լվածաղիկ զանգեզուրի
5/07/2022	FSP 026	<i>Taraxacum bessarabicum</i> (Hornem.) Hand.-Mazz. - Խատուտիկ բեսարաբիական
5/07/2022	FSP 026	<i>Taraxacum montanum</i> (C.A. Mey.) DC. - Խատուտիկ լեռնային
5/07/2022	FSP 026	<i>Taraxacum officinale</i> Wigg. - Խատուտիկ դեղատու
6/18/2021	FSP 026	<i>Tussilago farfara</i> L. - Տատրակ սովորական, Խոճկորիկ
6/18/2021	FSP 026	<i>Berberis vulgaris</i> L. - Կծիխուր սովորական
5/07/2022	FSP 026	<i>Arabis caucasica</i> Schlecht. - Արաբախոտ կովկասյան
5/07/2022	FSP 026	<i>Thlaspi arvense</i> L. - Շնկոտեմ դաշտային
6/18/2021	FSP 026	<i>Cleome ornithopodioides</i> L. - Թռչնաթափ թռչնաթափանման
6/18/2021	FSP 026	<i>Lonicera caucasica</i> Pall. - Ցախակեռաս կովկասյան
6/18/2021	FSP 026	<i>Viburnum lantana</i> L. - Գերիմաստի
6/18/2021	FSP 026	<i>Petrorhagia alpina</i> (Habl.) P.W.Ball et Heywood
6/18/2021	FSP 026	<i>Silene ruprechtii</i> Schischk. - Օվձվուկ Ռուպրեխտի
6/18/2021	FSP 026	<i>Colchicum speciosum</i> Steven - Շնդեղ հրաշալի
6/18/2021	FSP 026	<i>Convolvulus arvensis</i> L. - Պատատուկ դաշտային
6/18/2021	FSP 026	<i>Hippophae rhamnoides</i> L. - Չիչխան դժնիկանման
6/18/2021	FSP 026	<i>Trifolium trichocephalum</i> Bieb. - Երեքնուկ մազագոտագլուխ
6/18/2021	FSP 026	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
5/07/2022	FSP 026	<i>Corydalis angustifolia</i> (Bieb.) DC. - Պոպուլիկ նեղատերև
5/07/2022	FSP 026	<i>Gentiana septemfida</i> Pall. - Օձի դեղ, Բոզ յոթաբաժան
5/07/2022	FSP 026	<i>Ornithogalum sigmoideum</i> Freyn et Sint. - Սպիտակ բանջար, Աստղաշուշան սիգմաձև
5/07/2022	FSP 026	<i>Puschkinia scilloides</i> Adam - Պուշկինիա մկնաստիանման
5/07/2022	FSP 026	<i>Scilla armena</i> Grossh. - Մկնաստիս հայկական
6/18/2021	FSP 026	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
6/18/2021	FSP 026	<i>Juglans regia</i> L. - Ընկուզենի սովորական
6/18/2021	FSP 026	<i>Lamium album</i> L. - Խուլ եղինջ սպիտակ
6/18/2021	FSP 026	<i>Leonurus cardiaca</i> L. - Աղուծագի սովորական
5/07/2022	FSP 026	<i>Gagea anisanthos</i> K. Koch - Սագաստիուկ անհավասարածաղիկ
6/18/2021	FSP 026	<i>Chamaenerion angustifolium</i> (L.) Scop. - Նեղտերևի նեղատերև
6/18/2021	FSP 026	<i>Papaver fugax</i> Poir. - Կակաչ թռչող
6/18/2021	FSP 026	<i>Hordeum violaceum</i> Boiss. et Huet - Գարի մանուշակագույն
6/18/2021	FSP 026	<i>Rumex acetosa</i> L. - Ավելուկ սովորական
6/18/2021	FSP 026	<i>Rumex acetoselloides</i> Bal. - Ավելուկ ավելուկանման
6/18/2021	FSP 026	<i>Rumex crispus</i> L. - Ավելուկ զանգուր
5/07/2022	FSP 026	<i>Adonis aestivalis</i> L. - Կուժկոտրուկ ամառային
5/07/2022	FSP 026	<i>Anemone caucasica</i> Willd. - Հողմածաղիկ կովկասյան
5/07/2022	FSP 026	<i>Ceratocephalus falcatus</i> (L.) Pers. - Եղջրագլխիկ մանգաղանման
5/07/2022	FSP 026	<i>Ficaria ficarioides</i> (Bory & Chaub.) Halacsy
5/07/2022	FSP 026	<i>Ranunculus grandiflorus</i> L. - Գորտնուկ
5/07/2022	FSP 026	<i>Ranunculus szowitsianus</i> Boiss. (ERE sinonim=R. merovensis Grossh.) - Գորտնուկ Շովիցի
6/18/2021	FSP 026	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
6/18/2021	FSP 026	<i>Cerasus vulgaris</i> Mill. - Բալենի սովորական
6/18/2021	FSP 026	<i>Cotoneaster saxatilis</i> Pojark. - Չմենի ժայռային

6/18/2021	FSP 026	<i>Crataegus orientalis</i> Pall. ex Bieb. - Արճ, Սզնի արևելյան
6/18/2021	FSP 026	<i>Fragaria viridis</i> (Duch.) Weston - Ելակ կանաչ
6/18/2021	FSP 026	<i>Malus domestica</i> Borkh. - Խնձորենի սովորական
6/18/2021	FSP 026	<i>Persica vulgaris</i> Mill. - Դեղձենի սովորական
6/18/2021	FSP 026	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
6/18/2021	FSP 026	<i>Prunus domestica</i> L. - Դալբուլ
6/18/2021	FSP 026	<i>Pyrus caucasica</i> Fed. - Տանձենի կովկասյան
6/18/2021	FSP 026	<i>Pyrus communis</i> L. - Տանձենի սովորական
6/18/2021	FSP 026	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռենաստերև
6/18/2021	FSP 026	<i>Rosa canina</i> L. - Մաարենի շան
6/18/2021	FSP 026	<i>Rosa iberica</i> Stev. ex Bieb. - Մաարենի վրացական
6/18/2021	FSP 026	<i>Rosa spinosissima</i> L. - Մաարենի առաստափուշ
5/07/2022	FSP 026	<i>Rubus idaeus</i> L. - Մորենի, Սզնվամորի
5/07/2022	FSP 026	<i>Sorbus aucuparia</i> L. - Ծոփխնձոր, Արոսի սովորական
6/18/2021	FSP 026	<i>Spiraea hypericifolia</i> L. - Սսպիրակ արևքուրիկաստերև
5/07/2022	FSP 026	<i>Galium cruciata</i> (L.) Scop. - Մակարդախոտ խաչանման
6/18/2021	FSP 026	<i>Populus nigra</i> L. - Բարդի սև
6/18/2021	FSP 026	<i>Salix caprea</i> L. - Այծուռենի, Որձուռի
6/18/2021	FSP 026	<i>Salix elbursensis</i> Boiss. - Ուռենի էլբուրյան
6/18/2021	FSP 026	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
6/18/2021	FSP 026	<i>Salix triandra</i> L. - Ուռենի եռատեղ
5/07/2022	FSP 026	<i>Scrophularia chrysantha</i> Jaub. et Spach - Խլածաղիկ ոսկեծաղկալին
6/18/2021	FSP 026	<i>Ulmus minor</i> Mill. - Թեղի փոքր
6/18/2021	FSP 026	<i>Urtica dioica</i> L. - Եղինջ երկտուն
6/18/2021	FSP 026	<i>Valeriana alliariifolia</i> Adams - Կատվախոտ սխտորուկաստերև
6/18/2021	FSP 026	<i>Viola odorata</i> L. - Մանուշակ բուրավետ
<b>Total</b>		<b>85</b>

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In total there are **55** species of vascular plants recorded in this area. The flora is mainly represented by forest, steppemeadow, and subalpine species. The full list of the flora is presented in Table 295.

**Table 296. List of plants recorded during 2021-2022**

Date	Route #	Species name English
5/07/2022	Steppemeadow and Subalpine	<i>Athyrium filix-femina</i> (L.) Roth - Ձարխոտ իգական
5/07/2022	Steppemeadow and Subalpine	<i>Botrychium lunaria</i> (L.) Sw. - Ողկուզապտեր կիսալուսնաձև
5/07/2022	Steppemeadow and Subalpine	<i>Cystopteris fragilis</i> (L.) Bernh. - Պայթակենի դյուրաբեկ
5/07/2022	Steppemeadow and Subalpine	<i>Woodsia alpina</i> (Bolton) A. Gray. - Վուդսիա ալպիական
6/18/2021	Steppemeadow and Subalpine	<i>Juniperus depressa</i> Stev. - Գիհի ցածր
6/18/2021	Steppemeadow and Subalpine	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/18/2021	Steppemeadow and Subalpine	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
6/18/2021	Steppemeadow and Subalpine	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Մարի չամիչ բարձր
5/07/2022	Steppemeadow and Subalpine	<i>Allium schoenoprasum</i> L. var <i>alpinum</i> Lam. - Մոխուկ ալպիական
6/18/2021	Steppemeadow and Subalpine	<i>Asparagus officinalis</i> L. - Չնեբեկ, Ծնեփակ դեղատու
6/18/2021	Steppemeadow and Subalpine	<i>Grossheimia macrocephala</i> (Muss.-Puschk. ex Willd.) Sosn. et Takht. - Գրոսհեյմիա խոշորագլուխ
5/07/2022	Steppemeadow and Subalpine	<i>Taraxacum bessarabicum</i> (Hornem.) Hand.-Mazz. - Խատուտիկ բեսարաբիական

5/07/2022	Steppemeadow and Subalpine	<i>Tussilago farfara</i> L. - Տատրակ սովորական, Խոճկորիկ
5/07/2022	Steppemeadow and Subalpine	<i>Arabis caucasica</i> Schlecht. - Արաբախոտ կովկասյան
6/18/2021	Steppemeadow and Subalpine	<i>Sedum oppositifolium</i> Sims. - Թանթոնիկ հակադրատերև
6/18/2021	Steppemeadow and Subalpine	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմակ անդրկովկասյան
6/18/2021	Steppemeadow and Subalpine	<i>Bryonia alba</i> L. - Լոշտակ սպիտակ
6/18/2021	Steppemeadow and Subalpine	<i>Euphorbia iberica</i> Boiss. - Իշակաթնուկ վրացական /իբերիական/
6/18/2021	Steppemeadow and Subalpine	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
5/07/2022	Steppemeadow and Subalpine	<i>Corydalis alpestris</i> C. A. Mey. - Պոպուլիկ ալպիական
5/07/2022	Steppemeadow and Subalpine	<i>Corydalis angustifolia</i> (Bieb.) DC. - Պոպուլիկ նեղատերև
5/07/2022	Steppemeadow and Subalpine	<i>Gentiana cruciata</i> L. - Օձի դեղ, Բոգ խաչածաղիկ
5/07/2022	Steppemeadow and Subalpine	<i>Gentiana septemfida</i> Pall. - Օձի դեղ, Բոգ յոթաբաժան
5/07/2022	Steppemeadow and Subalpine	<i>Muscari szovitsianum</i> Baker - Պապլոր Շովիցի
5/07/2022	Steppemeadow and Subalpine	<i>Ornithogalum sigmoideum</i> Freyn et Sint. - Սպիտակ բանջար, Աստղաշուշան սիգմաձև
5/07/2022	Steppemeadow and Subalpine	<i>Puschkinia scilloides</i> Adam - Պուշկինիա մկնաստիանման
5/07/2022	Steppemeadow and Subalpine	<i>Scilla armena</i> Grossh. - Մկնաստի հայկական
6/18/2021	Steppemeadow and Subalpine	<i>Hypericum perforatum</i> L. - Սրոհունդ խոցված
5/07/2022	Steppemeadow and Subalpine	<i>Ajuga genevensis</i> L. - Ճանկխոտ ժնկյան
6/18/2021	Steppemeadow and Subalpine	<i>Origanum vulgare</i> L. - Խնկածաղիկ սովորական
6/18/2021	Steppemeadow and Subalpine	<i>Thymus collinus</i> Bieb. - Ուրց բլրակային
5/07/2022	Steppemeadow and Subalpine	<i>Fritillaria armena</i> Boiss. - Արքայածաղիկ հայկական
5/07/2022	Steppemeadow and Subalpine	<i>Gagea glacialis</i> K. Koch - Սագաստիսուկ սառցադաշտային
5/07/2022	Steppemeadow and Subalpine	<i>Chamaenerion angustifolium</i> (L.) Scop. - Նեղտերևի նեղատերև
6/18/2021	Steppemeadow and Subalpine	<i>Papaver fugax</i> Poir. - Կակաչ թռչող
6/18/2021	Steppemeadow and Subalpine	<i>Papaver orientale</i> L. - Կակաչ արևելյան
6/18/2021	Steppemeadow and Subalpine	<i>Hordeum violaceum</i> Boiss. et Huet - Գարի մանուշակագույն
5/07/2022	Steppemeadow and Subalpine	<i>Koeleria albovii</i> Domin subsp. <i>albovii</i> - Բարակոտնուկ
6/18/2021	Steppemeadow and Subalpine	<i>Secale vavilovii</i> Grossh. - Տարեկան, Աշորա Վավիլովի, Ա. Վայրի միամյա,
5/07/2022	Steppemeadow and Subalpine	<i>Primula macrocalyx</i> Bunge - Գնարբուկ խոշորաբաժակ
5/07/2022	Steppemeadow and Subalpine	<i>Ceratocephalus falcatus</i> (L.) Pers. - Եղջրագլխիկ մանգաղանման
5/07/2022	Steppemeadow and Subalpine	<i>Ficaria ficarioides</i> (Bory & Chaub.) Halacsy
5/07/2022	Steppemeadow and Subalpine	<i>Ranunculus grandiflorus</i> L. - Գորտնուկ
5/07/2022	Steppemeadow and Subalpine	<i>Geum rivale</i> L. - Շահոքրամ գետային
6/18/2021	Steppemeadow and Subalpine	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
6/18/2021	Steppemeadow and Subalpine	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
6/18/2021	Steppemeadow and Subalpine	<i>Rosa spinosissima</i> L. - Մապրենի առատափուշ
5/07/2022	Steppemeadow and Subalpine	<i>Rubus idaeus</i> L. - Մորենի, Ազնվամորի
6/18/2021	Steppemeadow and Subalpine	<i>Spiraea hypericifolia</i> L. - Ասպիրակ արևբուրիկատերև
5/07/2022	Steppemeadow and Subalpine	<i>Galium cruciata</i> (L.) Scop. - Մակարդախոտ խաչանման
5/07/2022	Steppemeadow and Subalpine	<i>Salix caprea</i> L. - Այծուռենի, Որձուռի
6/18/2021	Steppemeadow and Subalpine	<i>Salix elbursensis</i> Boiss. - Ուռենի
5/07/2022	Steppemeadow and Subalpine	<i>Pedicularis wilhelmsiana</i> Fisch. ex Bieb. - Ոջլադեղ Վիլհելմսի
5/07/2022	Steppemeadow and Subalpine	<i>Scrophularia chrysantha</i> Jaub. et Spach - Խլածաղիկ ոսկեծաղկային
5/07/2022	Steppemeadow and Subalpine	<i>Veronica gentianoides</i> Vahl - Բերենիկե բոգային
<b>Total</b>		<b>55</b>

In total there are **76** species of vascular plants recorded in this area. The flora is mainly represented by bushes, steppemeadow species and the species of riparian zone. The full list of the flora is presented in Table 296.

**Table 297. List of plants recorded during 2021-2022**

Date	Route #	Species name English
5/08/2022	FSP 006	<i>Fontinalis antipyretica</i> Hedw. - Ֆոնտինալիս
6/19/2021	FSP 006	<i>Asplenium septentrionale</i> (L.) Hoffm. - Ասպլեն հյուսիսային
5/08/2022	FSP 006, 007	<i>Juniperus foetidissima</i> Willd. - Ցրունենի, Գիհի գարշահոտ
6/19/2021	FSP 006	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/19/2021	FSP 006	<i>Juniperus polycarpos</i> K. Koch. - Գիհի բազմապտուղ
6/19/2021	FSP 006	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Մարի չամիչ բարձր
5/08/2022	FSP 006	<i>Acer campestre</i> L. - Թխկի դաշտային
6/19/2021	FSP 006, 007	<i>Daucus carota</i> L. - Գազար վայրի
6/19/2021	FSP 006	<i>Eryngium billardieri</i> Delaroché - Երնջնակ Բիլարդեի
6/19/2021	FSP 006, 007	<i>Asparagus persicus</i> Baker - Չներեկ, Ծնեփակ պարսկական
5/08/2022	FSP 006, 007	<i>Eremurus spectabilis</i> N. Bieb. - Շրեշ ուշագրավ
6/19/2021	FSP 006	<i>Artemisia incana</i> (L.) Druce - Օշինոր ալեհեր
5/08/2022	FSP 006	<i>Tanacetum abrotanifolium</i> (L.) Druce - Տարկավան, Լվածաղիկ աբրոտանատերև
6/19/2021	FSP 006, 007	<i>Tanacetum vulgare</i> L. - Տարկավան, Լվածաղիկ սովորական
5/08/2022	FSP 006, 007	<i>Taraxacum bessarabicum</i> (Hornem.) Hand.-Mazz. - Խատուտիկ բեսարաբիական
5/08/2022	FSP 006	<i>Taraxacum officinale</i> Wigg. - Խատուտիկ դեղատու
6/19/2021	FSP 006	<i>Tussilago farfara</i> L. - Տատրակ սովորական, Խոճկորիկ
6/19/2021	FSP 007	<i>Berberis vulgaris</i> L. - Կոնյուր սովորական
5/08/2022	FSP 006, 007	<i>Solenanthes stamineus</i> (Desf.) Wettst. - Փողածաղիկ անէջավոր
6/19/2021	FSP 006	<i>Aethionema arabicum</i> (L.) Lipsky - Բոցաթելուկ արաբական
6/19/2021	FSP 006	<i>Alyssum tortuosum</i> Waldst. et Kit. ex Willd. - Վառվռուկ, Փարս-փարս-ավել
5/08/2022	FSP 007	<i>Capsella bursa-pastoris</i> (L.) Medik. - Ծոռապաշար, Հովվամաղախ
6/19/2021	FSP 007	<i>Nasturtium officinale</i> R. Br. - Ջրկոտեն դեղատու
6/19/2021	FSP 006, 007	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
6/19/2021	FSP 006	<i>Petrorhagia alpina</i> (Habl.) P.W.Ball et Heywood
5/08/2022	FSP 006	<i>Swida australis</i> (C.A. Mey.) Pojark. ex Grossh. - Ճապկի հարավի
6/19/2021	FSP 006	<i>Sedum caucasicum</i> (Grossh.) A. Bor. - Թանթոնիկ կովկասյան
5/08/2022	FSP 007	<i>Sedum oppositifolium</i> Sims. - Թանթոնիկ հակադրատերև
6/19/2021	FSP 006	<i>Sempervivum transcaucasicum</i> Muirhead - Գառանդմակ անդրկովկասյան
5/08/2022	FSP 006	<i>Bryonia alba</i> L. - Լոշտակ սպիտակ
6/19/2021	FSP 006	<i>Trifolium alpestre</i> L. - Երեքնուկ ալպյան
6/19/2021	FSP 006	<i>Trifolium trichocephalum</i> Bieb. - Երեքնուկ մազվզոտագլուխ
6/19/2021	FSP 006, 007	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արնեյյան
5/08/2022	FSP 006	<i>Gentiana septemfida</i> Pall. - Օձի դեղ, Բոց յոթաբաժան
5/08/2022	FSP 006	<i>Muscari szovitsianum</i> Baker - Պապուր Շովիցի
5/08/2022	FSP 006, 007	<i>Ornithogalum sigmoideum</i> Freyn et Sint. - Սպիտակ բանջար, Աստղաշուշան սիգմաձև
5/08/2022	FSP 007	<i>Puschkinia scilloides</i> Adam - Պուշկինիա մկնաստիսանման
5/08/2022	FSP 007	<i>Scilla armena</i> Grossh. - Մկնաստիս հայկական
6/19/2021	FSP 006, 007	<i>Hypericum perforatum</i> L. - Մրոհունդ խոցված
6/19/2021	FSP 006	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային

5/08/2022	FSP 007	<i>Ajuga genevensis</i> L. - Ճանկխոտ ժնկյան
6/19/2021	FSP 006	<i>Betonica macrantha</i> K. Koch - Թթվիճ խոշորածաղիկ
5/08/2022	FSP 006	<i>Lamium purpureum</i> L. - Խուլ եղինջ մուգ կարմիր
6/19/2021	FSP 007	<i>Nasturtium officinale</i> R. Br. - Ջրկոտեմ դեղատու
5/08/2022	FSP 006, 007	<i>Origanum vulgare</i> L. - Խնկածաղիկ սովորական
5/08/2022	FSP 006, 007	<i>Teucrium polium</i> L. - Լերդախոտ պեհեր
5/08/2022	FSP 007	<i>Thymus collinus</i> Bieb. - Ուրց բլրակային
6/19/2021	FSP 006	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
6/19/2021	FSP 006	<i>Thymus transcaucasicus</i> Ronn. - Ուրց անդրկովկասյան
6/19/2021	FSP 006	<i>Ziziphora rigida</i> (Boiss.) Stapf - Ուրցադաղձ կոշտ
5/08/2022	FSP 006, 007	<i>Fritillaria armena</i> Boiss. - Արքայածաղիկ հայկական
5/08/2022	FSP 006, 007	<i>Gagea glacialis</i> K. Koch - Սագասոխուկ սառցադաշտային
5/08/2022	FSP 006, 007	<i>Papaver orientale</i> L. - Կակաչ արևելյան
6/19/2021	FSP 006	<i>Briza elatior</i> L. - Դողդողուն բարձր
5/08/2022	FSP 006, 007	<i>Hordeum violaceum</i> Boiss. et Huet - Գարի մանուշակագույն
6/19/2021	FSP 007	<i>Phragmites australis</i> (Cav.) Trin ex Steud. - Եղեգնատունկ, Եղեգ հարավային
6/19/2021	FSP 006, 007	<i>Rumex acetosa</i> L. - Ավելուկ սովորական
5/08/2022	FSP 007	<i>Rumex acetoselloides</i> Bal. - Ավելուկ ավելուկանման
5/08/2022	FSP 006	<i>Rumex alpinus</i> L. - Ավելուկ ալպիական
5/08/2022	FSP 006	<i>Primula macrocalyx</i> Bunge - Գնարբուկ խոշորաբաժակ
5/08/2022	FSP 006, 007	<i>Ceratocephalus falcatus</i> (L.) Pers. - Եղջրագլխիկ մանգաղանման
5/08/2022	FSP 006	<i>Ranunculus grandiflorus</i> L. - Գորտնուկ
5/08/2022	FSP 006	<i>Cerasus microcarpa</i> (C. A. Mey.) Boiss. - Կեռասենի մանրապտուղ
5/08/2022	FSP 006, 007	<i>Crataegus orientalis</i> Pall. ex Bieb. - Ալոճ, Սզնի արևելյան
6/19/2021	FSP 006, 007	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
6/19/2021	FSP 006, 007	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
6/19/2021	FSP 006, 007	<i>Pyrus zangezura</i> Maleev - Տանձենի զանգեզուրի
6/19/2021	FSP 006	<i>Rosa spinosissima</i> L. - Մասրենի առատափուշ
5/08/2022	FSP 006	<i>Galium cruciata</i> (L.) Scop. - Մակարդախոտ խաչանման
6/19/2021	FSP 007	<i>Salix caprea</i> L. - Այծուռենի, Որձուռի
6/19/2021	FSP 007	<i>Salix elbursensis</i> Boiss. - Ուռենի Էլբուրսյան
6/19/2021	FSP 007	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր
5/08/2022	FSP 006, 007	<i>Salix triandra</i> L. - Ուռենի եռառեղջ
5/08/2022	FSP 007	<i>Scrophularia chrysantha</i> Jaub. et Spach - Խլածաղիկ ոսկեծաղկային
5/08/2022	FSP 006	<i>Veronica gentianoides</i> Vahl - Բերենիկե բոգային
5/08/2022	FSP 006	<i>Viola arvensis</i> Murr. - Մանուշակ դաշտային
<b>Total</b>		<b>76</b>

EAAA 007-009

In total there are **79** species of vascular plants recorded in this area. The flora is mainly represented by forest, bushes, steppe and riparian species. The full list of the flora is presented in Table 297.

**Table 298. List of plants recorded during 2021-2022**

Date	Route #	Species name English
6/19/2021	FSP 008, 009	<i>Asplenium septentrionale</i> (L.) Hoffm. - Ասպլեն հյուսիսային
5/08/2022	FSP 008, 009	<i>Juniperus depressa</i> Stev. - Գիհի ցածր
6/19/2021	FSP 009, 010, 011	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/19/2021	FSP 009, 010	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
6/19/2021	FSP 008, 009	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Սարի չամիչ բարձր

6/19/2021	FSP 009, 010, 011	<i>Acer campestre L.</i> - Թխկի դաշտային
6/19/2021	FSP 009, 010, 011	<i>Acer ibericum Bieb.</i> - Թխկի իբերիական
5/08/2022	FSP 011	<i>Allium leucanthum K. Koch</i> - Մոխ սպիտակաձաղիկ
6/19/2021	FSP 008, 009, 010	<i>Daucus carota L.</i> - Գազար վայրի
5/08/2022	FSP 010, 011	<i>Prangos ferulacea (L.) Lindl.</i> - Պրանգոս նարդեասնման
6/19/2021	FSP 009, 010, 011	<i>Asparagus persicus Baker</i> - Ձեռքեկ, Ծնեփակ պարսկական
5/08/2022	FSP 008, 009, 010, 011	<i>Eremurus spectabilis N. Bieb.</i> - Շրեշ ուշագրավ
6/19/2021	FSP 008, 009	<i>Artemisia absinthium L.</i> - Օշինդր դառը
6/19/2021	FSP 008, 009	<i>Grossheimia macrocephala (Muss.-Puschk. ex Willd.) Sosn. et Takht.</i> - Գրոսհեյմիա խոշորագլուխ
5/08/2022	FSP 008, 009	<i>Taraxacum bessarabicum (Hornem.) Hand.-Mazz.</i> - Խատուտիկ բեսարաբիական
5/08/2022	FSP 008, 009, 010, 011	<i>Taraxacum officinale Wigg.</i> - Խատուտիկ դեղատու
6/19/2021	FSP 008, 009, 010	<i>Tussilago farfara L.</i> - Տատրակ սովորական, Խոճկորիկ
6/19/2021	FSP 009, 010, 011	<i>Berberis vulgaris L.</i> - Կծոխուր
5/08/2022	FSP 011	<i>Cerintho minor L.</i> - Մոմախոտ փոքր
6/19/2021	FSP 008,	<i>Aethionema arabicum (L.) Lipsky</i> - Բոցաթելուկ արաբական
6/19/2021	FSP 008, 009	<i>Alyssum tortuosum Waldst. et Kit. ex Willd.</i> - Վառվռուկ, Փարա-փարա-ավել
5/08/2022	FSP 008	<i>Capsella bursa-pastoris (L.) Medik.</i> - Ծոռապաշար, Հովվամաղախ
5/08/2022	FSP 010	<i>Draba bruniifolia Stev.</i> - Ճարտարուկ ծործորակատերև
6/19/2021	FSP 009, 011	<i>Lonicera iberica Bieb.</i> - Ցախակեռաս վրացական
6/19/2021	FSP 008, 009	<i>Sedum caucasicum (Grossh.) A. Bor.</i> - Թանթոնիկ կովկասյան
6/19/2021	FSP 008	<i>Sempervivum transcaucasicum Muirhead</i> - Գառանդմակ անդրկովկասյան
6/19/2021	FSP 008, 009	<i>Trifolium alpestre L.</i> - Երեքնուկ ալպյան
6/19/2021	FSP 008	<i>Trifolium trichocephalum Bieb.</i> - Երեքնուկ մազագոտագլուխ
6/19/2021	FSP 010, 011	<i>Quercus macranthera F. et M. ex Hohen.</i> - Կաղնի արևելյան
5/08/2022	FSP 008	<i>Muscari szovitsianum Baker</i> - Պապլոթ Շովիցի
5/08/2022	FSP 008, 011	<i>Ornithogalum sigmoideum Freyn et Sint.</i> - Սպիտակ բանջար, Աստղաշուշան սիգմաձև
5/08/2022	FSP 008	<i>Puschkinia scilloides Adam</i> - Պուշկինիա մկնաստիսանման
5/08/2022	FSP 008, 010	<i>Scilla armena Grossh.</i> - Մկնաստիս հայկական
6/19/2021	FSP 008, 009, 010, 011	<i>Hypericum perforatum L.</i> - Մրոհունդ խոցված
5/08/2022	FSP 011	<i>Iris caucasica Hoffm.</i> - Հիրիկ կովկասյան
6/19/2021	FSP 008, 009, 010	<i>Iris imbricata Lindl.</i> - Հիրիկ կղմինդրային
6/19/2021	FSP 008	<i>Betonica macrantha K. Koch</i> - Թթվիճ խոշորաձաղիկ
5/08/2022	FSP 011	<i>Origanum vulgare L.</i> - Խնկաձաղիկ սովորական
6/19/2021	FSP 008, 009	<i>Thymus collinus Bieb.</i> - Ուրց բլրակային
6/19/2021	FSP 008, 009	<i>Thymus kotschyanus Boiss. et Hohen.</i> - Ուրց Կոչիի
6/19/2021	FSP 008, 009	<i>Ziziphora rigida (Boiss.) Stapf</i> - Ուրցադաղձ կոշտ
5/08/2022	FSP 010	<i>Fritillaria kurdica Boiss. et Noe</i> - Արքայաձաղիկ քրդական
5/08/2022	FSP 011	<i>Tulipa florenskyi Woronow</i> - Վարդակակաչ Ֆլորենսկու
5/08/2022	FSP 010	<i>Tulipa sosnowskyi Achv. et Mirzoeva</i> - Վարդակակաչ Սոսնովսկու
6/19/2021	FSP 010, 011	<i>Fraxinus excelsior L.</i> - Հացենի սովորական
5/08/2022	FSP 011	<i>Orobanche colorata K. Koch</i> - Ճրագախոտ գունավորված
5/08/2022	FSP 008	<i>Papaver persicum Lindl.</i> - Կակաչ պարսկական
6/19/2021	FSP 008, 009, 010, 011	<i>Dactylis glomerata L.</i> - Ոգնախոտ հավաքված
5/08/2022	FSP 009	<i>Phragmites australis (Cav.) Trin. ex Steud.</i> - Եղեգնաստուն, Եղեգ հարավային, Եղեգ սովորական

5/08/2022	FSP 009	<i>Rumex acetosa</i> L. - Ավելուկ սովորական
6/19/2021	FSP 009, 010	<i>Rumex obtusifolius</i> L. - Ավելուկ բթաստերն
5/08/2022	FSP 010, 011	<i>Caltha palustris</i> L. - Ոսկեծաղիկ ճահճային
5/08/2022	FSP 008, 009, 010, 011	<i>Ceratocephalus falcatus</i> (L.) Pers. - Եղջրագլխիկ մանգաղանման
5/08/2022	FSP 009	<i>Ranunculus szowitsianus</i> Boiss. (ERE sinonim=R. merovenis Grossh.) - Գորտնուկ Շովիցի
6/19/2021	FSP 009, 010, 011	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
6/19/2021	FSP 009	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր
6/19/2021	FSP 009	<i>Amygdalus fenzliana</i> (Fritsch) Lipsky - Նշենի Ֆենցլի
6/19/2021	FSP 010, 011	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
6/19/2021	FSP 011	<i>Cerasus mahaleb</i> (L.) Mill. - Բալենի մահալեբի
6/19/2021	FSP 008, 009	<i>Cotoneaster integerrimus</i> Medik. - Չմենի ամբողջաեզր
6/19/2021	FSP 008, 009	<i>Cotoneaster saxatilis</i> Pojark. - Չմենի ժայռային
5/08/2022	FSP 008, 010	<i>Crataegus orientalis</i> Pall. ex Bieb. - Ալոճ, Սգնի արևելյան
6/19/2021	FSP 008, 009, 010, 011	<i>Fragaria viridis</i> (Duch.) Weston - Ելակ կանաչ
6/19/2021	FSP 008, 009, 010, 011	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
6/19/2021	FSP 010, 011	<i>Pyrus zangezura</i> Maleev - Տանձենի զանգեզուրի
6/19/2021	FSP 008, 009, 010	<i>Rosa spinosissima</i> L. - Մասրենի առատափուշ
6/19/2021	FSP 009, 010, 011	<i>Rubus armeniacus</i> Focke. - Մոշենի հայկական
6/19/2021	FSP 010, 011	<i>Sorbus aucuparia</i> L. - Ծոխիսնձոր, Արոսի սովորական
5/08/2022	FSP 009, 010	<i>Galium cruciata</i> (L.) Scop. - Մակարդախոտ խաչանման
6/19/2021	FSP 011	<i>Populus italica</i> (Dur.) Moench - Բարդի բրգաձև իտալական
6/19/2021	FSP 011	<i>Populus nigra</i> L. - Բարդի սև
5/08/2022	FSP 009	<i>Salix caprea</i> L. - Այծուտենի, Որձուռի
5/08/2022	FSP 009, 011	<i>Salix elbursensis</i> Boiss. - Ուտենի էլբուրյան
6/19/2021	FSP 011	<i>Salix excelsa</i> S. G. Gmel. - Ուտենի բարձր
6/19/2021	FSP 011	<i>Salix triandra</i> L. - Ուտենի եռառէջ
5/08/2022	FSP 008, 009, 010, 011	<i>Verbascum pyramidatum</i> Bieb. - Խոնդատ բրգաձև
6/19/2021	FSP 011	<i>Typha latifolia</i> L. - Որձախոտ, Կեռոն լայնատերև
6/19/2021	FSP 009, 011	<i>Parietaria judaica</i> Strand. - Կովինջ հուղայի
6/19/2021	FSP 008, 009, 010, 011	<i>Urtica dioica</i> L. - Եղինջ երկտուն
<b>Total</b>		<b>79</b>

## EAAA 010-012

In total there are **84** species of vascular plants recorded in this area. The flora is mainly represented by juniper woodland, steppe, bushes species and the species of riparian zone. The full list of the flora is presented in Table 298.

**Table 299. List of plants recorded during 2021-2022**

Date	Route #	Species name English
6/19/2021	FSP 014, 019	<i>Asplenium septentrionale</i> (L.) Hoffm. - Ասպլեն հյուսիսային
6/19/2021	FSP 014, 019	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/19/2021	FSP 014, 019	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
5/08/2022	FSP 012, 013	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Մարի չամիչ բարձր
6/19/2021	FSP 012, 013, 019	<i>Acer campestre</i> L. - Թխկի դաշտային
6/19/2021	FSP 012, 013, 014, 019	<i>Acer ibericum</i> Bieb. - Թխկի իբերիական
6/19/2021	FSP 012, 013, 019	<i>Cotinus coggygria</i> Scop. - Դրախտաձառ սովորական
6/19/2021	FSP 012, 013, 014, 015, 016, 017, 018, 019	<i>Astrodaucus orientalis</i> (L.) Drude - Աստղագագար արևելյան

6/19/2021	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Daucus carota L.</i> - Գազար վայրի
6/19/2021	FSP 013, 014, 015, 016. 017, 018, 019	<i>Prangos ferulacea (L.) Lindl.</i> - Պրանգոս նարդեասնման
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Asparagus persicus Baker</i> - Ձնեբեկ, Ծնեփակ պարսկական
5/08/2022	017	<i>Asparagus verticillatus L.</i> - Ձնեբեկ, Ծնեփակ օղակավոր
5/08/2022	FSP 015, 016. 017	<i>Eremurus spectabilis N. Bieb.</i> - Շրեշ ուշագրավ
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Achillea millefolium L.</i> - Հազարատերևուկ սովորական
5/08/2022	FSP 017	<i>Centaurea cyanus L.</i> - Տերեփուկ կապույտ
6/19/2021	FSP 012, 0114, 015, 016. 017, 019	<i>Cichorium intybus L.</i> - Եղերդակ, Ճարճատուկ սովորական
5/08/2022	FSP 019	<i>Psephellus zangezuri Sosn.</i> - Պսեֆելուս զանգեզուրի
5/08/2022	FSP 013	<i>Tanacetum zangezuricum Chandjian</i> - Տարկավան, Լվածադիկ զանգեզուրի
5/08/2022	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Taraxacum officinale Wigg.</i> - Խատուտիկ դեղատու
6/19/2021	FSP 013, 014, 015, 017, 019	<i>Tussilago farfara L.</i> - Տատրակ սովորական, Խոճկորիկ
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 019	<i>Berberis vulgaris L.</i> - Կծոխուր սովորական
5/08/2022	FSP 012	<i>Aethionema arabicum (L.) Lipsky</i> - Բոցաթելուկ արաբական
6/19/2021	FSP 013, 014, 015, 016. 017, 018, 019	<i>Alyssum persicum Boiss.</i> - Վասվուրուկ պարսկական
5/08/2022	FSP 013	<i>Capsella bursa-pastoris (L.) Medik.</i> - Ծոռապաշար, Հովվամաղախ
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 019	<i>Lonicera iberica Bieb.</i> - Ցախակեռաս վրացական
6/19/2021	FSP 012, 013, 014, 019	<i>Viburnum lantana L.</i> - Գերիմաստի
6/19/2021	FSP 013, 014, 015, 016. 017, 018, 019	<i>Merendera trigyna (Steven ex Adam) Stapf</i> - Խլոպուզ, Ձնծաղիկ եռավարսանդ
6/19/2021	FSP 013, 014, 015, 016. 017, 018, 019	<i>Sedum caucasicum (Grossh.) A. Bor.</i> - Թանթոնիկ կովկասյան
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 019	<i>Lotus caucasicus Kuprian. ex Juz.</i> - Եղջերատվույտ կովկասյան
5/08/2022	FSP 017, 018	<i>Onobrychis cornuta (L.) Desv.</i> - Կորնգան եղջրավոր
5/08/2022	FSP 012	<i>Trifolium alpestre L.</i> - Երեքնուկ ալպյան
6/19/2021	FSP 013, 014, 015, 016. 017, 018, 019	<i>Trifolium trichocephalum Bieb.</i> - Երեքնուկ մազմզոտազլուխ
6/19/2021	FSP 013, 014, 019	<i>Quercus macranthera F. et M. ex Hohen.</i> - Կաղնի արևելյան
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Hypericum perforatum L.</i> - Մրռուկ խոցված
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Iris imbricata Lindl.</i> - Հիրիկ կղմինդրային
5/08/2022	FSP 017	<i>Iris paradoxa Steven</i> - Հիրիկ տարօրինակ
5/08/2022	FSP 017, 018	<i>Iris reticulata M. Bieb.</i> - Հիրիկ ցանցավոր
6/19/2021	FSP 013, 014, 015, 016. 017, 019	<i>Betonica macrantha K. Koch</i> - Թթվիճ խոշորածաղիկ
6/19/2021	FSP 012, 013, 014, 015, 016. 017, 019	<i>Lamium album L.</i> - Խուլ եղինջ սպիտակ
5/08/2022	FSP 012, 013, 014, 015, 016. 017, 018, 019	<i>Mentha longifolia (L.) Huds.</i> - Անանուխ, Դաղձ երկարատերև
6/19/2021	FSP 013, 014, 015, 016. 017, 018, 019	<i>Sideritis montana L.</i> - Երնջա լեռնային

6/19/2021	FSP 012, 014, 015, 016, 017, 018, 019	<i>Thymus collinus</i> Bieb. - Ուրց բլրակային
5/08/2022	FSP 013	<i>Ziziphora rigida</i> (Boiss.) Stapf (ERE= <i>Ziziphora fasciculata</i> C. Koch. ex Grossh.) - Ուրցադաղձ կոշտ
5/08/2022	FSP 015, 016, 017	<i>Fritillaria armena</i> Boiss. - Արքայածաղիկ հայկական
5/08/2022	FSP 012, 017	<i>Fritillaria kurdica</i> Boiss. et Noe - Արքայածաղիկ քրդական
5/08/2022	FSP 012	<i>Gagea anisanthos</i> K. Koch - Սագասոխուկ անհավասարածաղիկ
5/08/2022	FSP 016	<i>Tulipa florenskyi</i> Woronow - Վարդակակաչ Ֆլորենսկու
6/19/2021	FSP 012, 013, 014, 019	<i>Tulipa sosnowskyi</i> Achv. et Mirzoeva - Վարդակակաչ Սոսնովսկու
6/19/2021	FSP 013	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
5/08/2022	FSP 017	<i>Orchis punctulata</i> Steven. et Lindl. - Խոլորձ կետավոր
5/08/2022	FSP 017	<i>Orobanche colorata</i> K. Koch - Ճրագախոտ գունավորված
6/19/2021	FSP 012, 014, 015, 016, 017, 018, 019	<i>Papaver orientale</i> L. - Կակաչ արևելյան
5/08/2022	FSP 017	<i>Roemeria refracta</i> (Stev.) DC. - Ռեմերիա ծոված
6/19/2021	FSP 018	<i>Peganum harmala</i> L. - Սպանդ սովորական
5/08/2022	FSP 012	<i>Plantago lanceolata</i> L. - Ջղախոտ, Եզան լեզու նշտարատերև
6/19/2021	FSP 012, 014, 015, 016, 017, 018, 019	<i>Hordeum bulbosum</i> L. - Գարի սխուկավոր
6/19/2021	FSP 012, 014, 015, 016, 017, 018, 019	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
6/19/2021	FSP 012, 013, 014, 015, 016, 017, 019	<i>Primula macracalyx</i> Bunge - Գևարբուկ խոշորաբաժակ
5/08/2022	FSP 017, 018	<i>Adonis aestivalis</i> L. - Կուժկոտրուկ ամառային
5/08/2022	FSP 017	<i>Anemone caucasica</i> Willd. - Հողմածաղիկ կովկասյան
5/08/2022	FSP 012, 013, 014, 015, 016, 017, 018, 019	<i>Ceratocephalus falcatus</i> (L.) Pers. - Եղջրագլխիկ սանգադանման
5/08/2022	FSP 013	<i>Ranunculus elegans</i> K. Koch - Գորտնուկ նրբագեղ
6/19/2021	FSP 012, 013, 014, 015, 016, 017, 019	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
6/19/2021	FSP 014, 015, 016, 017, 018, 019	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր
5/08/2022	FSP 012	<i>Agrimonia eupatoria</i> L. - Երեսնակ սովորական
6/19/2021	FSP 012, 014, 015, 016, 017, 018, 019	<i>Amygdalus fenzliana</i> (Fritsch) Lipsky - Նշենի Ֆենցլի
6/19/2021	FSP 013	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
6/19/2021	FSP 012, 014, 015, 016, 017, 019	<i>Cotoneaster integerrimus</i> Medik. - Չմենի ամբողջաեզր
6/19/2021	FSP 012, 014, 015, 016, 017, 019	<i>Cotoneaster saxatilis</i> Pojark. - Չմենի ժայռային
5/08/2022	FSP 012	<i>Crataegus atosanguinea</i> Pojark. - Ալոճ, Սզնի մուգ արնագույն
6/19/2021	FSP 012, 014, 015, 016, 017, 019	<i>Crataegus orientalis</i> Pall. ex Bieb. - Ալոճ, Սզնի արևելյան
5/08/2022	FSP 012, 015	<i>Fragaria vesca</i> L. - Ելակ անտառային
5/08/2022	FSP 014	<i>Potentilla reptans</i> L. - Մասնունի սողացող
6/19/2021	FSP 012, 013, 015, 016, 017, 019	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
6/19/2021	FSP 012, 013, 015, 016, 017	<i>Prunus spinosa</i> L. - Սալոր փշավոր
6/19/2021	FSP 013, 019	<i>Rubus armeniacus</i> Focke. - Մոշենի հայկական
6/19/2021	FSP 013, 019	<i>Sorbus graeca</i> (Spach) Hedl. - Ասպար, Արոսի հունական
5/08/2022	FSP 017	<i>Salix excelsa</i> S. G. Gmel. - Ուտենի բարձր

5/08/2022	FSP 014	<i>Rhinanthus rumelicus</i> Velen. - Աբլորաբբուկ բուսակալան
5/08/2022	FSP 017	<i>Typha domingensis</i> (Pers.) Poir. ex Steud. - Որճախոտ, Կեռնն դոմինիկյան
6/19/2021	FSP 012, 013, 014, 015, 016, 017, 019	<i>Celtis caucasica</i> Willd. - Փռննի կովկասյան
5/08/2022	FSP 012	<i>Ulmus glabra</i> Huds. (ERE=glabrata Huds. - Թեղի մերկ
6/19/2021	FSP 013	<i>Ulmus minor</i> Mill. - Թեղի փոքր
5/08/2022	FSP 017	<i>Parietaria judaica</i> Strand. - Կովինչ հուդայի
<b>Total</b>		<b>84</b>

EAAA 013

In total there are **80** species of vascular plants recorded in this area. The flora is mainly represented by forest, bushes and steppe species. The full list of the flora is presented in Table 299.

**Table 300. List of plants recorded during 2021-2022**

Date	Route #	Species name English
6/19/2021	FSP 021	<i>Equisetum ramosissimum</i> Dsf. - Ձիածես ճյուղավոր
6/19/2021	FSP 020, 021	<i>Juniperus foetidissima</i> Willd. - Յրտնենի, Գիհի գարշահոտ
6/19/2021	FSP 020, 021	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/19/2021	FSP 020, 021	<i>Juniperus polycarpos</i> K. Koch. - Գիհի բազմապտուղ
6/19/2021	FSP 020, 021	<i>Pinus sylvestris</i> L. - Մոճի սովորական
6/19/2021	FSP 021	<i>Acer campestre</i> L. - Թխկի դաշտային
5/08/2022	FSP 020, 021	<i>Acer hyrcanum</i> Fisch. et C.A. Mey. - Թխկի հիրկանյան
6/19/2021	FSP 021	<i>Acer ibericum</i> Bieb. - Թխկի իբերիական
5/08/2022	FSP 021	<i>Vinca herbacea</i> W. K. - Կուսածաղիկ խոտային
6/19/2021	FSP 020, 021	<i>Vincetoxicum amplifolium</i> K. Koch - Թունաթափ լայնատերև
6/19/2021	FSP 020	<i>Artemisia fragrans</i> Willd. - Օշինդր բուրավետ
6/19/2021	FSP 020	<i>Echinops pungens</i> Trautv. - Թուփուռ, Ոգնագլխիկ փշոտ
6/19/2021	FSP 020, 021	<i>Inula helenium</i> L. - Կղմուխ մեծ
5/08/2022	FSP 020, 021	<i>Taraxacum officinale</i> Wigg. - Խատուտիկ դեղատու
5/08/2022	FSP 020	<i>Tragopogon coloratus</i> C.A. Mey. - Այծեմորուս, Մինձ ներկված
6/19/2021	FSP 020	<i>Xeranthemum squarrosum</i> Boiss. - Չորաբույս, Անմեռուկ չուված
5/08/2022	FSP 020, 021	<i>Berberis vulgaris</i> L. - Կծիխուր սովորական
6/19/2021	FSP 021	<i>Anchusa azurea</i> Mill. - Կավաժիպակ լազուր
6/19/2021	FSP 020, 021	<i>Myosotis sylvatica</i> Ehrh. ex Hoffm. - Անմեռուկ անտառային
6/19/2021	FSP 020, 021	<i>Capsella bursa-pastoris</i> (L.) Medik. - Ծոսապաշար, Հովվամաղախ
5/08/2022	FSP 021	<i>Thlaspi perfoliatum</i> L. - Շնկոտեմ թափանցված
6/19/2021	FSP 020, 021	<i>Campanula glomerata</i> L. - Չանգակ խմբված
6/19/2021	FSP 021	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
6/19/2021	FSP 020, 021	<i>Sambucus ebulus</i> L. - Կտակենի խոտային
5/08/2022	FSP 021	<i>Viburnum lantana</i> L. - Գերինաստի
6/19/2021	FSP 020, 021	<i>Sagina procumbens</i> L. - Մազին պտկված
6/19/2021	FSP 020, 021	<i>Silene ruprechtii</i> Schischk. - Ծվծվուկ Ռուպրեխտի
6/19/2021	FSP 021	<i>Swida australis</i> (C.A. Mey.) Pojark. ex Grossh. - Ճապկի հարավի
5/08/2022	FSP 021	<i>Sedum caucasicum</i> (Grossh.) A. Bor. - Թանթոնիկ կովկասյան
5/08/2022	FSP 021	<i>Euphorbia condylocarpa</i> Bieb. - Բշակաթնուկ հատվածապտուղ
5/08/2022	FSP 021	<i>Geranium linearilobum</i> DC. - Խորդենի գծաբլթակավոր
5/08/2022	FSP 020, 021	<i>Geranium tuberosum</i> L. - Խորդենի արմատային
5/08/2022	FSP 021	<i>Scilla armena</i> Grossh. - Մկնաստիս հայկական

6/19/2021	FSP 020, 021	<i>Hypericum perforatum</i> L. - <i>Մրոհունդ խոզված</i>
6/19/2021	FSP 021	<i>Juglans regia</i> L. - <i>Ընկուզենի սովորական</i>
5/08/2022	FSP 021	<i>Nepeta mussinii</i> Spreng. - <i>Կատվադադ Մուսինի</i>
5/08/2022	FSP 020, 021	<i>Origanum vulgare</i> L. - <i>Խնկածաղիկ սովորական</i>
6/19/2021	FSP 020, 021	<i>Teucrium polium</i> L. - <i>Լերդախոտ պղեհեր</i>
6/19/2021	FSP 020	<i>Thymus kotschyanus</i> Boiss. et Hohen. - <i>Ուրց Կոչիի</i>
5/08/2022	FSP 021	<i>Tulipa sosnowskyi</i> Achv. et Mirzoeva - <i>Վարդակակաչ Սոսնովսկու</i>
6/19/2021	FSP 020, 021	<i>Linum nervosum</i> Waldst. et Kit. - <i>Վուշ ջղավոր</i>
6/19/2021	FSP 021	<i>Malva sylvestris</i> L. - <i>Փիփերթ անտառային</i>
6/19/2021	FSP 021	<i>Fraxinus excelsior</i> L. - <i>Հացենի սովորական</i>
5/08/2022	FSP 021	<i>Dactylorhiza flavescens</i> (K. Koch) Holub - <i>Դակտիլորիզ դեղնավուն</i>
6/19/2021	FSP 020, 021	<i>Plantago major</i> L. - <i>Ջղախոտ, Եզան լեզու մեծ</i>
6/19/2021	FSP 020, 021	<i>Dactylis glomerata</i> L. - <i>Ոգնախոտ հավաքված</i>
6/19/2021	FSP 020, 021	<i>Hordeum bulbosum</i> L. - <i>Գարի սոխուկավոր</i>
6/19/2021	FSP 020	<i>Sorghum halepense</i> (L.) Pers. - <i>Սորգո հայկական, Ջոնսոնյան խոտ</i>
6/19/2021	FSP 020, 021	<i>Atraphaxis spinosa</i> L. - <i>Փշամանդիկ փշավոր</i>
6/19/2021	FSP 020, 021	<i>Primula macrocalyx</i> Bunge - <i>Գնարբուկ խոշորաբաժակ</i>
5/08/2022	FSP 020, 021	<i>Ceratocephalus falcatus</i> (L.) Pers. - <i>Եղջրագլխիկ մանգաղանման</i>
6/19/2021	FSP 020, 021	<i>Paliurus spina-christ</i> (Mill) A.C. Sch. - <i>Ժանտափուշ, Յարի փշոտ</i>
5/08/2022	FSP 021	<i>Rhamnus cathartica</i> L. - <i>Դժնիկ լուծողական</i>
6/19/2021	FSP 021	<i>Cerasus avium</i> (L.) Moench - <i>Կեռասենի անտառային</i>
5/08/2022	FSP 021	<i>Cerasus microcarpa</i> (C. A. Mey.) Boiss. - <i>Կեռասենի մանրապտուղ</i>
5/08/2022	FSP 021	<i>Cotoneaster integerrimus</i> Medik. - <i>Չմենի ամրողջակեր</i>
5/08/2022	FSP 020, 021	<i>Cotoneaster saxatilis</i> Pojark. - <i>Չմենի ժայռային</i>
5/08/2022	FSP 020	<i>Crataegus orientalis</i> Pall. ex Bieb. - <i>Ալոճ, Ազնի արևելյան</i>
6/19/2021	FSP 021	<i>Filipendula ulmaria</i> (L.) Maxim. - <i>Փրփրուկ թեղանման</i>
6/19/2021	FSP 021	<i>Malus orientalis</i> Uglitzk. - <i>Խնձորենի արևելյան</i>
6/19/2021	FSP 020, 021	<i>Prunus divaricata</i> Ldb. - <i>Սալոր, Շլոր</i>
5/08/2022	FSP 021	<i>Prunus spinosa</i> L. - <i>Սալոր փշավոր</i>
5/08/2022	FSP 021	<i>Pyrus caucasica</i> Fed. - <i>Տանձենի կովկասյան</i>
6/19/2021	FSP 020, 021	<i>Pyrus salicifolia</i> Pall. - <i>Տանձենի ուռենաստերև</i>
5/08/2022	FSP 020, 021	<i>Rosa spinosissima</i> L. - <i>Մաքենի առատափուշ</i>
6/19/2021	FSP 021	<i>Rubus armeniacus</i> Focke. - <i>Մոշենի հայկական</i>
5/08/2022	FSP 020	<i>Sanguisorba officinalis</i> L. - <i>Արյունաքամ դեղատու</i>
5/08/2022	FSP 021	<i>Sorbus persica</i> Hedl. - <i>Արնուի պարսկական</i>
5/08/2022	FSP 021	<i>Asperula glomerata</i> (Bieb.) Griseb. - <i>Գետնաստղ խմբված</i>
5/08/2022	FSP 020, 021	<i>Galium coronatum</i> Sibth. et Smith - <i>Մակարդախոտ պսակային</i>
5/08/2022	FSP 021	<i>Salix elbursensis</i> Boiss. - <i>Ուռենի էրբուրյան</i>
6/19/2021	FSP 021	<i>Salix excelsa</i> S. G. Gmel. - <i>Ուռենի բարձր</i>
6/19/2021	FSP 021	<i>Salix triandra</i> L. - <i>Ուռենի եռառէջ</i>
5/08/2022	FSP 021	<i>Pedicularis wilhelmsiana</i> Fisch. ex Bieb. - <i>Ոջլադեղ Վիլհելմսի</i>
5/08/2022	FSP 021	<i>Veronica persica</i> Poir. - <i>Բերենիկե պարսկական</i>
5/08/2022	FSP 021	<i>Hyoscyamus niger</i> L. - <i>Բանգի սև</i>
6/19/2021	FSP 020, 021	<i>Celtis caucasica</i> Willd. - <i>Փռչնի կովկասյան</i>
6/19/2021	FSP 021	<i>Ulmus minor</i> Mill. - <i>Թեղի փոքր</i>
6/19/2021	FSP 020, 021	<i>Urtica dioica</i> L. - <i>Եղինջ երկտուն</i>
5/08/2022	FSP 021	<i>Valerianella cymbocarpa</i> C.A. Mey. - <i>Աղբաղբուկիկ նավակապտուղ</i>
<b>Total</b>		<b>80</b>

In total there are **196** species of vascular plants recorded in this area. The flora is mainly represented by juniper woodland, bushes, steppe species and the species of riparian zone. The full list of the flora is presented in Table 300.

**Table 301. List of plants recorded during 2021-2022**

Date	Route #	Species name English
6/19/2021	FSP 024	<i>Equisetum ramosissimum</i> Dsf. - Չիաձետ ճյուղավոր
6/19/2021	FSP 022, 023, 024	<i>Ceterach officinarum</i> W. - Շետերակ դեղատու
6/19/2021	FSP 022	<i>Juniperus foetidissima</i> Willd. - Յրտնենի, Գիհի գարշահոտ
6/19/2021	FSP 022	<i>Juniperus oblonga</i> Bieb. - Գիհի երկարատերև
6/19/2021	FSP 022	<i>Juniperus polycarpus</i> K. Koch. - Գիհի բազմապտուղ
6/19/2021	FSP 022, 023, 024	<i>Ephedra procera</i> Fisch. et C.A. Mey. - Սարի չամիչ բարձր
5/08/2022	FSP 022, 023, 024	<i>Pinus sylvestris</i> L. - Մոճի անտառային
6/19/2021	FSP 022, 025	<i>Acer campestre</i> L. - Թխկի դաշտային
5/08/2022	FSP 023, 025	<i>Acer hyrcanum</i> Fisch. et C.A. Mey. - Թխկի հիրկանյան
6/19/2021	FSP 022, 025	<i>Acer ibericum</i> Bieb. - Թխկի իբերիական
6/19/2021	FSP 022, 023, 024	<i>Allium flavum</i> L. - Մոխ դեղին
6/19/2021	FSP 022, 023, 024, 025	<i>Amaranthus retroflexus</i> L. - Հավակատար սովորական
6/19/2021	FSP 022, 025	<i>Cotinus coggygria</i> Scop. - Դրախտածառ սովորական
6/19/2021	FSP 025	<i>Astrantia maxima</i> Pall. - Աստղաբույս ամենամեծ
6/19/2021	FSP 022, 023, 024, 025	<i>Astrodaucus orientalis</i> (L.) Drude - Աստղագազար արևելյան
6/19/2021	FSP 022, 025	<i>Chaerophyllum aureum</i> L. - Շուշանարանջար ոսկեզոծ
6/19/2021	FSP 022, 023, 024	<i>Daucus carota</i> L. - Գազար վայրի
6/19/2021	FSP 022, 023, 024	<i>Falcaria vulgaris</i> Bernh. - Սիբեխ սովորական
6/19/2021	FSP 022, 023, 024	<i>Hippomarathrum microcarpum</i> (Bieb.) V. Petrov - Բոխի մանրապտուղ
6/19/2021	FSP 022, 023, 024	<i>Prangos ferulacea</i> (L.) Lindl. - Պրանգոս նարդեասնման
6/19/2021	FSP 022, 023, 024	<i>Vinca herbacea</i> W. K. - Կուսածաղիկ խոտային
6/19/2021	FSP 025	<i>Arum orientale</i> M. Bieb. - Նվիկ արևելյան
6/19/2021	FSP 022, 024, 025	<i>Vincetoxicum amplifolium</i> K. Koch - Թունաթափ լայնատերև
6/19/2021	FSP 022, 023, 024	<i>Asparagus officinalis</i> L. - Չներեկ, Ծնեփակ դեղատու
6/19/2021	FSP 022, 023, 024	<i>Asparagus verticillatus</i> L. - Չներեկ, Ծնեփակ օղակավոր
6/19/2021	FSP 023, 024	<i>Eremurus spectabilis</i> N. Bieb. - Շրեշ ուշագրավ
6/19/2021	FSP 022, 023, 024	<i>Achillea millefolium</i> L. - Հազարատերևուկ սովորական
6/19/2021	FSP 022, 023, 024	<i>Artemisia fragrans</i> Willd. - Օշինդր բուրավետ
5/08/2022	FSP 022	<i>Artemisia incana</i> (L.) Druce - Օշինդր ալեհեր
6/19/2021	FSP 022, 023, 024	<i>Artemisia vulgaris</i> L. - Օշինդր սովորական
6/19/2021	FSP 023, 024	<i>Chondrilla juncea</i> L. - Ծամանիկ, Խիժաճարճատուկ կնյունանման
6/19/2021	FSP 022, 023, 024	<i>Cichorium intybus</i> L. - Եղերդակ, Ճարճատուկ սովորական
6/19/2021	FSP 022, 023, 024	<i>Cirsium esculentum</i> (Siev.) C.A. Mey. - Գեղավեր, Տատասկ ուտվող
6/19/2021	FSP 022, 023, 024	<i>Conyza canadensis</i> (L.) Cronq. - Կոնիզա կանադական
6/19/2021	FSP 023, 024	<i>Galinsoga parviflora</i> Cav. - Գալինսոգա մանրածաղիկ
6/19/2021	FSP 022, 023, 024	<i>Hieracium piloselloides</i> Vill. - Ճուռակախոտ մագոտանման
6/19/2021	FSP 023, 024	<i>Inula germanica</i> L. - Կղմուխ գերմանական
6/19/2021	FSP 022, 023, 024	<i>Tanacetum canescens</i> DC. - Տարկավան, Լվածաղիկ ալեհեր
6/19/2021	FSP 023, 024	<i>Tanacetum chiliophyllum</i> (Fisch. et C.A. Mey. ex DC.) Sch. Bip. - Տարկավան, Լվածաղիկ հազարատերև
6/19/2021	FSP 023, 024	<i>Tanacetum vulgare</i> L. - Տարկավան, Լվածաղիկ սովորական
5/08/2022	FSP 022, 023, 024, 025	<i>Taraxacum officinale</i> Wigg. - Խատուտիկ դեղատու
6/19/2021	FSP 022, 023, 024	<i>Tripleurospermum disciforme</i> (C.A. Mey) Sch. Bip. - Եռակողասերմիկ սկավառակաձև

6/19/2021	FSP 023, 024	<i>Tussilago farfara</i> L. - Տատրակ սովորական, Խոճկորիկ
6/19/2021	FSP 022, 023, 024	<i>Xanthium strumarium</i> L. - Դառնափուշ, Դառնուկ խաչիպաձև
5/08/2022	FSP 024	<i>Berberis crataegina</i> DC. - Կծոխուր սզնային
6/19/2021	FSP 022, 023, 024	<i>Berberis vulgaris</i> L. - Կծոխուր սովորական
6/19/2021	FSP 025	<i>Carpinus betulus</i> L. - Բոխի սովորական
6/19/2021	FSP 025	<i>Corylus avellana</i> L. - Տիլենի սովորական
6/19/2021	FSP 022, 023	<i>Cerinthe minor</i> L. - Մումախոտ փոքր
6/19/2021	FSP 022, 023, 024	<i>Lappula squarrosa</i> (Retz.) Dumort. - Կաչուկ չոված
5/08/2022	FSP 022, 023, 024	<i>Aethionema grandiflorum</i> Boiss. et Hohen. - Բոցաթելուկ մեծածաղիկ
6/19/2021	FSP 023, 024	<i>Alyssum desertorum</i> Stapf. - Վառվռուկ անապատային
6/19/2021	FSP 022, 023, 024, 025	<i>Capsella bursa-pastoris</i> (L.) Medik. - Ծոտապաշար, Հովվամաղախ
6/19/2021	FSP 022, 025	<i>Hesperis matronalis</i> L. - Գիշերային մանուշակ
5/08/2022	FSP 022	<i>Thlaspi perfoliatum</i> L. - Շնկոտեմ թափանցված
6/19/2021	FSP 022, 023, 024	<i>Campanula glomerata</i> L. - Զանգակ խմբված
6/19/2021	FSP 023, 024	<i>Michauxia laevigata</i> Vent. - Միշոքսիա հարթ
5/08/2022	FSP 023, 025	<i>Lonicera caucasica</i> Pall. - Ցախակեռաս կովկասյան
6/19/2021	FSP 022, 024	<i>Lonicera iberica</i> Bieb. - Ցախակեռաս վրացական
6/19/2021	FSP 023, 024	<i>Sambucus ebulus</i> L. - Կոտկենի խոտային
5/08/2022	FSP 022, 023, 024	<i>Viburnum lantana</i> L. - Գերինաստի
6/19/2021	FSP 023, 024	<i>Dianthus cretaceus</i> Adams - Մեխակ կավճային
6/19/2021	FSP 023, 024	<i>Dianthus crinitus</i> Smith - Մեխակ խավավոր
6/19/2021	FSP 023, 024	<i>Silene ruprechtii</i> Schischk. - Ծվծվուկ Ռուպրեխտի
6/19/2021	FSP 025	<i>Euonymus latifolia</i> (L.) Mill. - Իլենի լայնատերև
6/19/2021	FSP 022, 024	<i>Atriplex tatarica</i> L. - Թալ թաթարական
6/19/2021	FSP 022, 023, 024	<i>Ceratocarpus arenarius</i> L. - Եզնաբզեզ ավազուտային
6/19/2021	FSP 022, 023, 024	<i>Chenopodium album</i> L. - Թելուկ սպիտակ /կամ սովորական/
6/19/2021	FSP 022, 023, 024	<i>Chenopodium botrys</i> L. - Թելուկ հոտավետ
6/19/2021	FSP 022, 024	<i>Colchicum speciosum</i> Steven - Շնդեղ հրաշալի
6/19/2021	FSP 025	<i>Polygonatum verticillatum</i> (L.) All. - Մինդրիկ օղակավոր
6/19/2021	FSP 023025	<i>Cornus mas</i> L. - Հոն սովորական
6/19/2021	FSP 022, 025	<i>Swida australis</i> (C.A. Mey.) Pojark. ex Grossh. - Ճապկի հարավի
6/19/2021	FSP 022, 024	<i>Sedum sempervivoides</i> Fisch. - Թանթոնիկ դիմացկուն
6/19/2021	FSP 022, 024	<i>Bryonia alba</i> L. - Լոշտակ սպիտակ
6/19/2021	FSP 022, 023, 024	<i>Cuscuta cesattiana</i> Bertol. - Գայլխոտ, Գաղձ Յեզատի
6/19/2021	FSP 023	<i>Carex caucasica</i> Stev. - Բոշխ կովկասյան
6/19/2021	FSP 023, 024	<i>Dipsacus laciniatus</i> L. - Ակքան կտրտված
6/19/2021	FSP 022, 024	<i>Scabiosa caucasica</i> Bieb. - Քոսքոսկ կովկասյան
6/19/2021	FSP 023	<i>Hippophae rhamnoides</i> L. - Չիչխան դժնիկանման
5/08/2022	FSP 023, 024, 025	<i>Euphorbia helioscopia</i> L. - Իշակաթնուկ արևատես
6/19/2021	FSP 022, 023, 024	<i>Alhagi pseudalhagi</i> (Bieb.) Desv. - Ուղտափուշ սովորական
6/19/2021	FSP 023, 024	<i>Astragalus microcephalus</i> Willd. - Գազ մանրագլխիկ
6/19/2021	FSP 022, 023, 024	<i>Genista tinctoria</i> L. - Օրոճ, Դեղնածաղիկ ներկատու
5/08/2022	FSP 024	<i>Lathyrus roseus</i> Stev. - Տափուլոռ վարդագույն
6/19/2021	FSP 023, 024	<i>Medicago coerulea</i> Less. ex Ledeb. - Առվույտ երկնագույն
5/08/2022	FSP 025	<i>Medicago lupulina</i> L. - Առվույտ գայլուկանման
5/08/2022	FSP 023	<i>Medicago minima</i> (L.) Bartalini - Առվույտ փոքրիկ
6/19/2021	FSP 022, 023, 024, 025	<i>Melilotus officinalis</i> (L.) Pall. - Իշառվույտ դեղատու
6/19/2021	FSP 022, 023, 024	<i>Onobrychis cornuta</i> (L.) Desv. - Կորնգան եղջրավոր
6/19/2021	FSP 023, 025	<i>Robinia pseudoacacia</i> L. - Ռորինիա կեղծ ակացիա

6/19/2021	FSP 023, 024	<i>Trifolium arvense</i> L. - Երեքնուկ վարելահողային
6/19/2021	FSP 023, 024	<i>Trifolium pratense</i> L. var <i>geniculatum</i> R. et F. - Երեքնուկ մարգագետնային
5/08/2022	FSP 024	<i>Vicia narbonensis</i> L. - Գյուլուլ, Վիկ նարբոնական
5/08/2022	FSP 022	<i>Quercus iberica</i> Stev. - Կաղնի վրացական
6/19/2021	FSP 025	<i>Quercus macranthera</i> F. et M. ex Hohen. - Կաղնի արևելյան
5/08/2022	FSP 024, 025	<i>Corydalis angustifolia</i> (Bieb.) DC. - Պոպուլիկ նեղատերև
5/08/2022	FSP 025	<i>Fumaria schleicheri</i> Soy.-Willem. - Ծխաբույս, Տերուկ Շլեյստերի
6/19/2021	FSP 022, 024	<i>Erodium cicutarium</i> (L.) L'Her. - Ճայկտուց խնդամոլային
6/19/2021	FSP 022, 025	<i>Geranium sylvaticum</i> L. - Խորդենի անտառային
5/08/2022	FSP 022	<i>Geranium tuberosum</i> L. - Խորդենի արմատային
6/19/2021	FSP 022, 023, 024	<i>Ornithogalum montanum</i> Cirillo - Սպիտակ բանջար, Աստղաշուշան լեռնային
6/19/2021	FSP 022, 023, 024	<i>Iris imbricata</i> Lindl. - Հիրիկ կղմինդրային
6/19/2021	FSP 025	<i>Juglans regia</i> L. - Ընկուզենի սովորական
6/19/2021	FSP 023	<i>Mentha longifolia</i> (L.) Huds. - Անանուխ, Դաղձ երկարատերև
6/19/2021	FSP 022, 023, 024	<i>Nepeta mussinii</i> Spreng. - Կատվադաղձ Մուսինի
5/08/2022	FSP 022	<i>Origanum vulgare</i> L. - Խնկածաղիկ սովորական
6/19/2021	FSP 022, 023, 024	<i>Scutellaria orientalis</i> L. - Սաղավարտուկ արևելյան
6/19/2021	FSP 022, 023, 024	<i>Teucrium polium</i> L. - Լերդախոտ ալեհեր
6/19/2021	FSP 024	<i>Thymus kotschyanus</i> Boiss. et Hohen. - Ուրց Կոչիի
5/08/2022	FSP 022	<i>Lemna minor</i> L. - Ջրոսպ փոքր
5/08/2022	FSP 022, 023, 025	<i>Tulipa florenskyi</i> Woronow - Վարդակակաչ Ֆլորենսկու
6/19/2021	FSP 022, 023, 024, 025	<i>Tulipa sosnowskyi</i> Achv. et Mirzoeva - Վարդակակաչ Մոսնովսկու
6/19/2021	FSP 022, 023, 024	<i>Linum nervosum</i> Waldst. et Kit. - Վուշ ջղավոր
6/19/2021	FSP 022, 023, 024	<i>Alcea rugosa</i> Alef. - Տուղտավարդ կնճռոտ
5/08/2022	FSP 022	<i>Malva sylvestris</i> L. - Փիփերթ անտառային
6/19/2021	FSP 023, 025	<i>Morus alba</i> - Թռեռի սպիտակ
6/19/2021	FSP 023, 025	<i>Fraxinus excelsior</i> L. - Հացենի սովորական
6/19/2021	FSP 022, 023, 024	<i>Jasminum fruticans</i> L. - Հասմիկ թփուտային
6/19/2021	FSP 022, 023, 025	<i>Ligustrum vulgare</i> L. - Կիպրոս սովորական
5/08/2022	FSP 023	<i>Cephalanthera rubra</i> (L.) Rich. - Առջագլխիկ, Եղբորոսին կարմիր
5/08/2022	FSP 022	<i>Dactylorhiza flavescens</i> (K. Koch) Holub - Դակտիլորիզ դեղնավուն
6/19/2021	FSP 022, 023, 024	<i>Diphelipaea coccinea</i> (Bieb.) Nicolson - Եղբայրարյուն կարմիր
6/19/2021	FSP 023, 024	<i>Papaver commutatum</i> Fisch. et C.A. Mey. - Կակաչ խճճված
6/19/2021	FSP 022, 023, 024	<i>Papaver fugax</i> Poir. - Կակաչ թռչող
6/19/2021	FSP 022, 023, 024	<i>Plantago media</i> L. - Ջղախոտ, Եզան լեզու միջին
6/19/2021	FSP 022, 024	<i>Aegilops cylindrica</i> Host - Այծակն գլանաձև
6/19/2021	FSP 022, 024	<i>Aegilops tauschii</i> Coss. - Այծակն Թաուշի
6/19/2021	FSP 022, 023, 024	<i>Avena fatua</i> L. - Խրբուկ, Վարսակ դատարկ, Վ. պոչուկ
6/19/2021	FSP 022, 023, 024	<i>Bromus japonicus</i> Thunb. - Ցորնուկ ճապոնական
5/08/2022	FSP 023	<i>Cynodon dactylon</i> (L.) Pers. - Շնատակ, Արվանտակ մատնաձև, Բերմուդյան խոտ
6/19/2021	FSP 022, 023, 024, 025	<i>Dactylis glomerata</i> L. - Ոգնախոտ հավաքված
5/08/2022	FSP 022, 023, 024	<i>Festuca ruprechtii</i> (Boiss.) V. Krecz. Et Bobr. (ERE=Festuca ovina L. Subsp. Ruprechtii (Boiss.) Tzvel.) - Շյուդախոտ Ռուպրեխտի
6/19/2021	FSP 022, 024	<i>Hordeum bulbosum</i> L. - Գարի սխուկավոր
5/08/2022	FSP 025	<i>Hordeum murinum</i> L. - Գարի մկնային, Մկնագարի
6/19/2021	FSP 022, 023, 024, 025	<i>Poa bulbosa</i> L. - Արոտածիլ, Հուրանախոտ, Դաշտավլուկ սխուկավոր

5/08/2022	FSP 025	<i>Polygala transcaucasica</i> Tamamsch. - Կաթնախոտ անդրկովկասյան
6/19/2021	FSP 022, 023, 024	<i>Atraphaxis spinosa</i> L. - Փշամանդիկ փշավոր
6/19/2021	FSP 022, 023	<i>Polygonum aviculare</i> L. - Մատիտեղ ճնճղուկի
6/19/2021	FSP 022, 023, 024	<i>Rumex crispus</i> L. - Ավելուկ գանգուր
6/19/2021	FSP 023	<i>Portulaca oleracea</i> L. - Դանդուտ սովորական
6/19/2021	FSP 022, 023, 024, 025	<i>Primula macrocalyx</i> Bunge - Գնարբուկ խոշորաբաժակ
5/08/2022	FSP 022, 023, 024, 025	<i>Ceratocephalus falcatus</i> (L.) Pers. - Եղջրագլխիկ մանգաղանման
5/08/2022	FSP 023	<i>Ranunculus sceleratus</i> L. - Գորտնուկ թունավոր
5/08/2022	FSP 025	<i>Thalictrum foetidum</i> L. - Քնձմնձուկ գարշահոտ
6/19/2021	FSP 023, 024	<i>Reseda lutea</i> L. - Հափուկ դեղին
6/19/2021	FSP 022, 024	<i>Paliurus spina-christ</i> (Mill) A.C. Sch. - Ժանտափուռ, Ցաքի փշոտ
6/19/2021	FSP 022, 023, 025	<i>Rhamnus cathartica</i> L. - Դժնիկ լուծողական
6/19/2021	FSP 022, 023, 024	<i>Rhamnus pallasii</i> Fisch. et C.A. Mey. - Դժնիկ քաղցր
6/19/2021	FSP 022, 023, 024	<i>Amygdalus fenzliana</i> (Fritsch) Lipsky - Նշենի Ֆենցլի
6/19/2021	FSP 023, 025	<i>Cerasus avium</i> (L.) Moench - Կեռասենի անտառային
6/19/2021	FSP 023, 024	<i>Cerasus incana</i> (Pall.) Spach - Կեռասենի ալեհեր
6/19/2021	FSP 022, 023	<i>Cerasus vulgaris</i> Mill. - Բալենի սովորական
6/19/2021	FSP 022, 023,	<i>Cerasus mahaleb</i> (L.) Mill. - Բալենի մահալերի
5/08/2022	FSP 022, 024	<i>Cotoneaster integerrimus</i> Medik. - Չմենի ամբողջաեզր
6/19/2021	FSP 022, 023, 024	<i>Cotoneaster saxatilis</i> Pojark. - Չմենի ժայռային
5/08/2022	FSP 022, 024	<i>Crataegus kyrtostyla</i> Fingerh - Արճ, Սզնի կեռաստնակ
6/19/2021	FSP 022, 023, 024	<i>Crataegus orientalis</i> Pall. ex Bieb. - Ալճ, Սզնի արևելյան
6/19/2021	FSP 023, 024	<i>Cydonia oblonga</i> Mill. - Սերկնիլ սովորական
6/19/2021	FSP 022, 023, 024	<i>Fragaria viridis</i> (Duch.) Weston - Ելակ կանաչ
6/19/2021	FSP 022, 023, 024	<i>Geum urbanum</i> L. - Շահոքրամ սովորական
6/19/2021	FSP 023, 024, 025	<i>Malus domestica</i> Borkh. - Խնձորենի սովորական
6/19/2021	FSP 022, 025	<i>Malus orientalis</i> Uglitzk. - Խնձորենի արևելյան
5/08/2022	FSP 025	<i>Poterium polygamum</i> Waldst. et Kit. - Սևագլխիկ բազմակող
6/19/2021	FSP 022, 023, 024	<i>Prunus divaricata</i> Ldb. - Սալոր, Շլոր
6/19/2021	FSP 023, 025	<i>Prunus domestica</i> L. - Դամբուլ
6/19/2021	FSP 022, 023, 024	<i>Prunus spinosa</i> L. - Սալոր փշավոր
5/08/2022	FSP 022, 023, 024	<i>Pyrus caucasica</i> Fed. - Տանձենի կովկասյան
6/19/2021	FSP 022, 023, 025	<i>Pyrus communis</i> L. - Տանձենի սովորական
6/19/2021	FSP 022, 023, 024	<i>Pyrus salicifolia</i> Pall. - Տանձենի ուռենատերև
6/19/2021	FSP 022, 023, 024	<i>Rosa iberica</i> Stev. ex Bieb. - Մասրենի վրացական
6/19/2021	FSP 022, 023, 024	<i>Rosa spinosissima</i> L. - Մասրենի առատափուռ
5/08/2022	FSP 024	<i>Rubus armeniacus</i> Focke. - Մոշենի հայկական
6/19/2021	FSP 023	<i>Rubus caesius</i> L. - Մոշենի գեղիոս
6/19/2021	FSP 023, 025	<i>Sorbus graeca</i> (Spach) Hedl. - Ասպար, Արոսի հունական
6/19/2021	FSP 022, 023, 024	<i>Spiraea crenata</i> L. - Ասպիրակ աղեղնեզր
6/19/2021	FSP 022, 023, 024	<i>Spiraea hypericifolia</i> L. - Ասպիրակ արևբուրիկատերև
6/19/2021	FSP 022, 023, 024	<i>Galium aparine</i> L. - Մակարդախոտ կալյուն
5/08/2022	FSP 022	<i>Galium coronatum</i> Sibth. et Smith - Մակարդախոտ պսակային
5/08/2022	FSP 022	<i>Dictamnus albus</i> ssp. <i>caucasicus</i> Fisch. Et C.A. Mey. - D. <i>caucasicus</i> - Ողիուզակ, Խնդակ կովկասյան
5/08/2022	FSP 024	<i>Populus deltoides</i> Marsch. - Բարդի կանադական
6/19/2021	FSP 023	<i>Populus italica</i> (Dur.) Moench - Բարդի բրգաձև իտալական
6/19/2021	FSP 023	<i>Salix caprea</i> L. - Սլճուռենի, Որճուռի
6/19/2021	FSP 023	<i>Salix excelsa</i> S. G. Gmel. - Ուռենի բարձր

6/19/2021	FSP 023	<i>Salix triandra</i> L. - Ուռենի եռառեղ
6/19/2021	FSP 023, 024	<i>Sambucus ebulus</i> L. - Կտտկենի խոտային
6/19/2021	FSP 023, 024	<i>Bungea trifida</i> (Vahl) C. A. Mey. - Բունգեա եռաբաժան
5/08/2022	FSP 022	<i>Veronica anagallis-aquatica</i> L. - Բերենիկե աղբյուրային
6/19/2021	FSP 023	<i>Ailanthus altissima</i> (Mill.) Swingle - Երկնածառ բարձրավուն
6/19/2021	FSP 022, 023, 024	<i>Hyoscyamus niger</i> L. - Բանգի սև
5/08/2022	FSP 023, 025	<i>Typha latifolia</i> L. - Որձախոտ, Կեռոն լայնատերև
6/19/2021	FSP 022, 023, 025	<i>Celtis caucasica</i> Willd. - Փռչնի կովկասյան
6/19/2021	FSP 022, 023, 025	<i>Ulmus minor</i> Mill. - Թեղի փոքր
6/19/2021	FSP 022, 023, 024, 025	<i>Urtica dioica</i> L. - Եղինջ երկտուն
6/19/2021	FSP 022, 023, 025	<i>Valeriana officinalis</i> L. - Կատվախոտ դեղատու
6/19/2021	FSP 022, 023, 024, 025	<i>Viola odorata</i> L. - Մանուշակ բուրավետ
6/19/2021	FSP 024	<i>Tribulus terrestris</i> L. - Տատաշ փոփող
<b>Total</b>		<b>196</b>

**Priority species**

Before 2022 In total there are 4 priority species recorded in the study area. Those are: *Iris lineolata*, *Gladiolus hajastanicus*, *Astragalus xiphidium*, and *Tulipa sosnowskyi*. The spots, where those species have been recorded are shown on Figure 44.

In 2022 there are additional 4 priority species recorded in the study area. Those are: *Swida iberica*, *Tulipa florenskyi*, *Orchis punctulata* and *Tanacetum zangezuricum*.

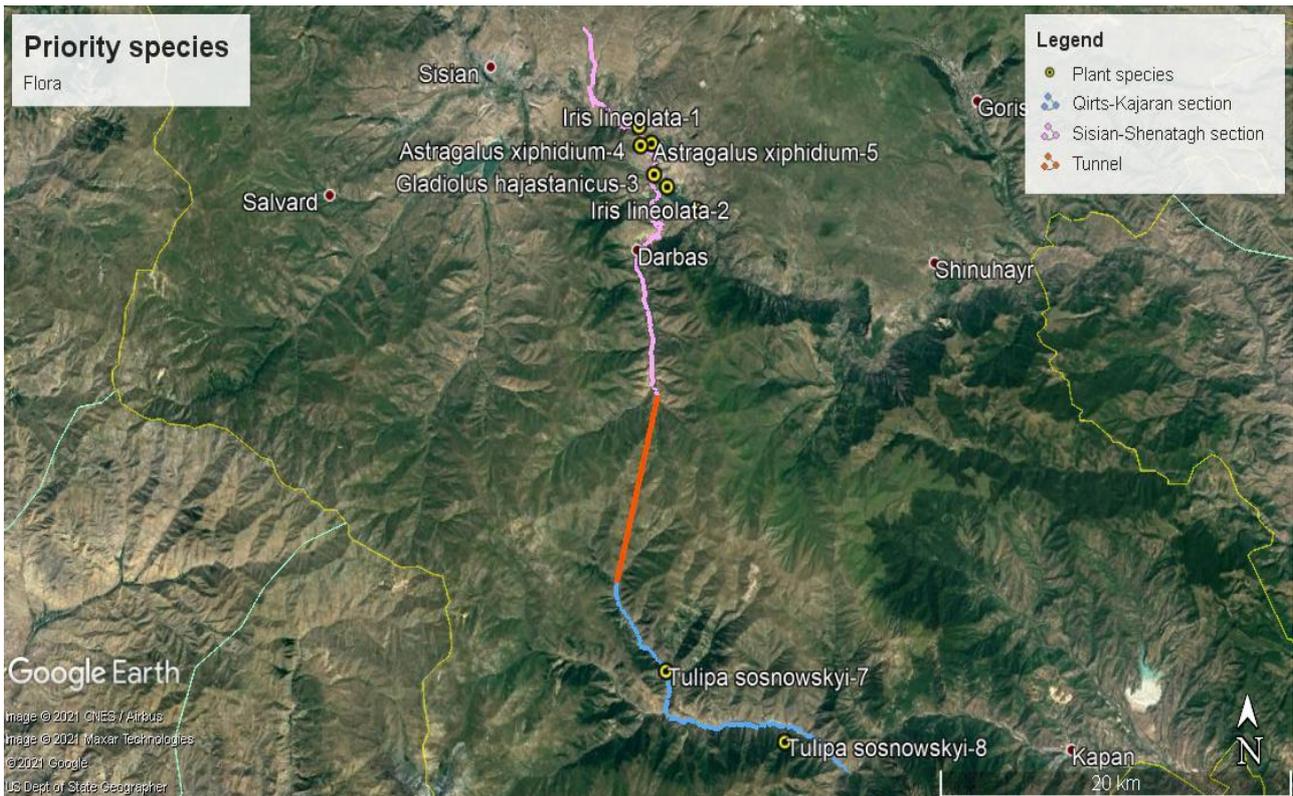


Figure 44. Distribution spots of the priority flora species

### Potential flora's biodiversity priority features

Below is presented the preliminary list of the potential birds' biodiversity priority features in the study area. This list have been updated through the ESIA process, following the different fieldwork sessions and maps have been realized presenting the observations, habitats use of the Biodiversity priority species.

In 2022 there are additional 4 priority species recorded in the study area. Those are: *Swida iberica*, *Tulipa florenskyi*, *Orchis punctulata* and *Tanacetum zangezuricum*.

**Table 302. Synthetic table of flora's biodiversity priority features in the study area**

N°	Family	Species			Status			Restricted-range/endemism	Site use	Potential location/distribution in the study area
		Species name	Scientific name	Armenian name	IUCN Redlist Status	National Red data book Status	EU Bird Directive			
1	Botrychiaceae		<i>Botrychium lunaria</i>	Ողկուզապտեր կիսալուսնաձև	-	VU* B	-	-	Medicine, Decorative	Meadows
2	Alliaceae		<i>Allium derderanum</i>	Սոխ Դերդերիանի	-	EN B		-	Decorative	Steppe, bushes
3	Apiaceae		<i>Bupleurum pauciradiatum</i>	Եզնակող սակավաճաճանչ	-	VU* B		-	Medicine	Bushes
4	Araceae		<i>Arum conophalloides</i>	Նվիկ կոնոֆալոսային	-	EN B		-	Decorative	Steppe
5	Asteraceae		<i>Centaurea elbrusensis</i>	Տերեփուկ էլբրուսյան	-	EN B		-	Decorative	Subalpine and alpine meadows
6	Asteraceae		<i>Centaurea rhizocalathium</i>	Տերեփուկ արմատազամբյուղային	-	EN B		-	Decorative	Steppe
7	Asteraceae		<i>Cousinia gabrielianae</i>	Խոզանափուշ Գաբրիելյանի	-	EN B		-	Decorative	Bushes
8	Asteraceae		<i>Psephellus zangezuri</i>	Պսեֆելլուս զանգեզուրի	-	EN B		Endem	Decorative	Steppe
9	Asteraceae		<i>Tanacetum zangezuricum</i>	Լվածաղիկ զանգեզուրի	-	EN B		Endem	Decorative	Alpine meadows
10	Asteraceae		<i>Tragopogon tuberosus</i>	Սինձ պալարակիր	-	VU* B		-	Medicine	Steppe, meadows
11	Asteraceae		<i>Physoptychis caspica</i>	Գնդապտուղ կասպիական	-	EN B		-	Decorative	Alpine meadows

N°	Family	Species			Status			Restricted-range/endemism	Site use	Potential location/distribution in the study area
		Species name	Scientific name	Armenian name	IUCN Redlist Status	National Red data book Status	EU Bird Directive			
12	Asteraceae		<i>Thlaspi zangezuricum</i>	Շնկոտեմ գանգեզուրի	-	EN B		Endem	Fodder	Subalpine and alpine meadows
13	Caryophyllaceae		<i>Gypsophila aretioides</i>	Սապնարմատ արեցանման	-	EN B		-	Decorative	Rocky steppes
14	Fabaceae		<i>Astragalus agasii</i>	Գազ Աղասու	-	CR B		Endem	Fodder	Alpine meadows
15	Fabaceae		<i>Astragalus humilis</i>	Գազ ցածր	-	CR B		-	Fodder	Steppe, meadows
16	Fabaceae		<i>Astragalus kirpicznikovii</i>	Գազ Կիրպիչնիկովի	-	EN B		-	Fodder	Steppe, light forests
17	Fabaceae		<i>Astragalus prilipkoanus</i>	Գազ Պրիլիպկովի	-	EN B		Endem	Fodder	Steppe, light forests
18	Fabaceae		<i>Astragalus xiphidium</i>	Գազ թրածև	-	EN B		-	Fodder	EAAA 002-003; Steppe
19	Fabaceae		<i>Onobrychis meschetica</i>	Կորնգան մծիխեթի	-	CR B		-	Fodder	Bushes
20	Gentianaceae		<i>Lomatogonium carinthiacum</i>	Լոմատոգոնիում կարինտյան	-	VU* B		-	Decorative	Alpine meadows
21	Hypericaceae		<i>Hypericum armenum</i>	Սրոհունդ հայկական	-	CR B		-	Decorative	Steppe
22	Iridaceae		<i>Gladiolus hajastanicus</i>	Թրաշուշան հայաստանյան	-	EN B		Endemic of Armenia	Decorative	EAAA 002-003; Steppe, meadows
23	Iridaceae		<i>Iris lineolata</i>	Հիրիկ նեղգծային	-	EN B		-	Decorative	EAAA 002-003; Steppe
24	Lamiaceae		<i>Dracocephalum botryoides</i>	Վիշապագլուխ ողկույզային	-	EN B		-	Medicine, Decorative	Alpine meadows
25	Lamiaceae		<i>Teucrium hyrcanicum</i>	Լերդախոտ հիրկանյան	-	VU* B		-	Medicine, Decorative	Steppe, bushes

N°	Family	Species			Status			Restricted-range/endemism	Site use	Potential location/distribution in the study area
		Species name	Scientific name	Armenian name	IUCN Redlist Status	National Red data book Status	EU Bird Directive			
26	Orchidaceae		Ophrys apifera	Սարդակի մեղվակի	CITES	CR B		-	Decorative	Light forests
27	Orchidaceae		Steveniella satyroides	Ստենիելա սատիրանման	CITES	EN B		-	Decorative	Light forests
28	Orchidaceae		Orchis punctulata	Խոլորձ կետավոր		VU B		-	Decorative	EAAA 011; Light forests
29	Paeoniaceae		Paeonia tenuifolia	Քաջվարդ նեղատերև	Bern convention	CR B		-	Decorative	Light forests
30	Poaceae		Bromopsis zangezura	Բրոմոպսիս զանգեզուրի	-	EN B		Endem	Fodder	Steppe, alpine meadows
31	Poaceae		Sclerochloa woronowii	Վարձրախոտ Վորոնովի	-	EN B		-	Fodder	Steppe
32	Ranunculaceae		Ranunculus cicutarius	Գորտնուկ մոլեխինդային	-	EN B		-	Medicine,	Forests, bushes
33	Rosaceae		Crataegus zangezura	Սզնի զանգեզուրի	-	EN B		Endem	Food, medicine, melliferous	Light forests
34	Rosaceae		Potentilla cryptophila	Մատնունի	-	EN B		-	Decorative	Alpine meadows
35	Rosaceae		Pyrus grossheimii	Տանձենի Գրոսհեյմի	-	EN B		-	Food, medicine, melliferous	Light forests
36	Rosaceae		Pyrus voronovii	Տանձենի Վորոնովի	-	EN B		Endem	Food, medicine, melliferous	Forests
37	Rosaceae		Rubus zangezurus	Մոշենի Ջանգեզուրի	-	EN B		-	Food, medicine, melliferous	Forests, bushes
38	Liliaceae		Tulipa sosnowskyi	Վարդակակաչ Սոսնովսկու	-	EN B		Endemic of South Transcaucasia	Decorative	EAAA 010-012; EAAA 014-015;

N°	Family	Species			Status			Restricted-range/endemism	Site use	Potential location/distribution in the study area
		Species name	Scientific name	Armenian name	IUCN Redlist Status	National Red data book Status	EU Bird Directive			
										Steppe, bushes

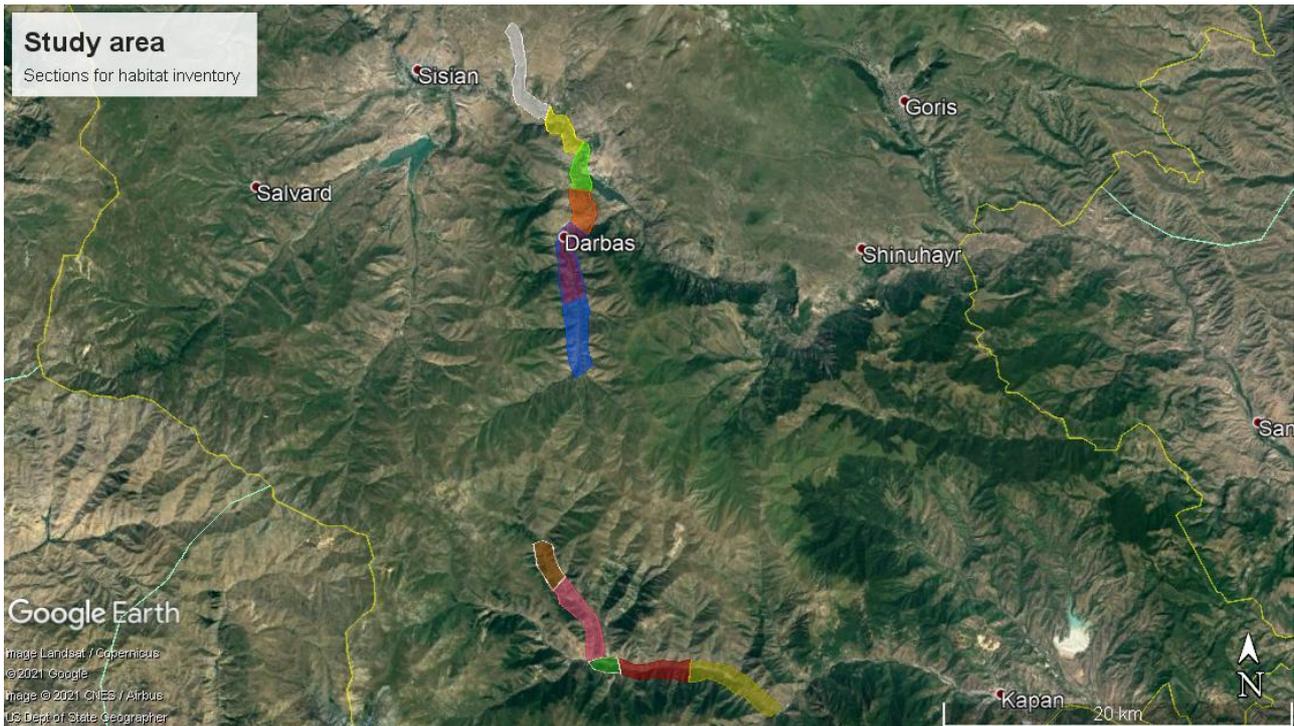
## Habitats

### Protocols

#### Investigation area:

The habitats characterisation has been realized through the following process:

1. Preparation of a land-use map in a buffer of 500m on each side of the road's project
2. Selection of sampling sites for ground-truthing within the 11 sections of the road (see Figure 45)
3. Crossing of datas of ground-truthing with land use map to realize a habitat map using the EUNIS typology and extrapolating on the whole road's project buffer (500m on each side of the road)



**Figure 45. The main sections for which, the preliminary inventory of the habitats was conducted and where the ground truthing have been implemented**

#### Survey methods:

Within each of 11 sections we will select 3-5 points, for checking the types of vegetation, its classification under EUNIS categories of the habitats and comparison with the GIS shape files and proper renaming of the shape files if needed. In case we obtain some inconsistencies, the GIS shape files have been corrected.

#### Time and effort of investigation<sup>4</sup> :

We anticipate implementation of this effort during June and early July.

#### Investigation tools:

For fixing the coordinates we will use GPS Garmin and for data collection we will use the standardized protocols.

## Results

EAAA 001

<sup>4</sup> Yearly (e.g. end of June/July) and during the day (e.g. at dusk and night after rain)

In total there following types of habitats were recorded.

**Table 303. List of habitats recorded within the current EAAA**

Date	Sampling Plot #	Habitat name EUNIS	Habitat name
6/17/2021	FSP 001	E1. Dry grasslands	<i>Steppe</i>
6/17/2021	FSP 002	G1.11. Riverine willow woodland	<i>Riparian</i>
6/17/2021	FSP 002	C2. Surface running waters	<i>Riparian</i>

EAAA 002-003

In total there following types of habitats were recorded.

**Table 304. List of habitats recorded within the current EAAA**

Date	Sampling Plot #	Habitat name EUNIS	Habitat name
6/17/2021	FSP 003	G1.11. Riverine willow woodland	<i>Riparian</i>
6/17/2021	FSP 003	E1. Dry grasslands	<i>Steppe</i>
6/17/2021	FSP 004	G1.11. Riverine willow woodland	<i>Riparian</i>
6/17/2021	FSP 005	G1.11. Riverine willow woodland	<i>Riparian</i>
6/17/2021	FSP 005	C2. Surface running waters	<i>Riparian</i>

EAAA 004

In total there following types of habitats were recorded.

**Table 305. List of habitats recorded within the current EAAA**

Date	Sampling Plot #	Habitat name EUNIS	Habitat name
6/18/2021	FSP 026	E1. Dry grasslands	<i>Steppe</i>
6/18/2021	FSP 026	G1.11. Riverine willow woodland	<i>Riparian</i>

EAAA 005

In total there following types of habitats were recorded.

**Table 306. List of habitats recorded within the current EAAA**

Date	Sampling Plot #	Habitat name EUNIS	Habitat name
6/18/2021	FSP 027	G1. Broadleaved deciduous woodland	<i>Forest</i>
6/18/2021	FSP 027	E2. Mesic grasslands	<i>Steppemeadow</i>
6/18/2021	FSP 027	E4. Alpine and subalpine grasslands	<i>Subalpine</i>

EAAA 006

In total there following types of habitats were recorded.

**Table 307. List of habitats recorded within the current EAAA**

Date	Sampling Plot #	Habitat name EUNIS	Habitat name
6/19/2021	FSP 006	F3.1. Temperate thickets and scrub	<i>Bushes</i>
6/19/2021	FSP 006	E2. Mesic grasslands	<i>Steppemeadow</i>
6/19/2021	FSP 007	G1.11. Riverine willow woodland	<i>Riparian</i>

6/19/2021	FSP 007	C2. Surface running waters	<i>Riparian</i>
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EAAA 007-009

In total there following types of habitats were recorded.

**Table 308. List of habitats recorded within the current EAAA**

Date	Sampling Plot #	Habitat name EUNIS	Habitat name
6/19/2021	FSP 008	F3.1. Temperate thickets and scrub	<i>Bushes</i>
6/19/2021	FSP 008	E1. Dry grasslands	<i>Steppe</i>
6/19/2021	FSP 009	G1.11. Riverine willow woodland	<i>Riparian</i>
6/19/2021	FSP 010	G1. Broadleaved deciduous woodland	<i>Forest</i>
6/19/2021	FSP 011	G1. Broadleaved deciduous woodland	<i>Forest</i>

EAAA 010-012

In total there following types of habitats were recorded.

**Table 309. List of habitats recorded within the current EAAA**

Date	Sampling Plot #	Habitat name EUNIS	Habitat name
6/20/2021	FSP 012	G1.11. Riverine willow woodland	<i>Riparian</i>
6/20/2021	FSP 012	F3.1. Temperate thickets and scrub	<i>Bushes</i>
6/20/2021	FSP 013	G1.11. Riverine willow woodland	<i>Riparian</i>
6/20/2021	FSP 014	G3.9. Coniferous woodland dominated by Cupressaceae	<i>Juniper woodland</i>
6/20/2021	FSP 015	E1. Dry grasslands	<i>Steppe</i>
6/20/2021	FSP 015	F3.1. Temperate thickets and scrub	<i>Bushes</i>
6/20/2021	FSP 016	G3.9. Coniferous woodland dominated by Cupressaceae	<i>Juniper woodland</i>
6/20/2021	FSP 017	F3.1. Temperate thickets and scrub	<i>Bushes</i>
6/20/2021	FSP 017	G3.9. Coniferous woodland dominated by Cupressaceae	<i>Juniper woodland</i>
6/20/2021	FSP 018	F3.1. Temperate thickets and scrub	<i>Bushes</i>
6/20/2021	FSP 018	G3.9. Coniferous woodland dominated by Cupressaceae	<i>Juniper woodland</i>
6/20/2021	FSP 019	G1.11. Riverine willow woodland	<i>Riparian</i>

EAAA 013

In total there following types of habitats were recorded.

**Table 310. List of habitats recorded within the current EAAA**

Date	Sampling Plot #	Habitat name EUNIS	Habitat name
6/20/2021	FSP 020	E1. Dry grasslands	<i>Steppe</i>
6/20/2021	FSP 020	F3.1. Temperate thickets and scrub	<i>Bushes</i>
6/20/2021	FSP 021	G1. Broadleaved deciduous woodland	<i>Forest</i>
6/20/2021	FSP 021	F3.1. Temperate thickets and scrub	<i>Bushes</i>

EAAA 014-015

In total there following types of habitats were recorded.

**Table 311. List of habitats recorded within the current EAAA**

Date	Sampling Plot #	Habitat name EUNIS	Habitat name
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6/20/2021	FSP 022	G3.9. Coniferous woodland dominated by Cupressaceae	<i>Juniper woodland</i>
6/20/2021	FSP 023	G1.11. Riverine willow woodland	<i>Riparian</i>
6/20/2021	FSP 024	G1.11. Riverine willow woodland	<i>Riparian</i>
6/20/2021	FSP 025	E1. Dry grasslands	<i>Steppe</i>
6/20/2021	FSP 025	F3.1. Temperate thickets and scrub	<i>Bushes</i>

During the field work three other types of habitats (beside the ones listed in Table 302) have been identified. Those are:

- G1.11. Riverine willow woodland
- F3.1. Temperate thickets and scrub
- E4. Alpine and subalpine grasslands

### Potential habitats biodiversity priority features

Below is presented the preliminary list of the potential habitats biodiversity priority features in the study area. This list have been updated through the ESIA process, following the different fieldwork sessions and maps have been realized presenting the ground truthing of habitat map.

**Table 312. Synthetic table of habitats biodiversity priority features in the study area**

N°	Habitat name	Type <sup>5</sup>	EU Habitat Directive (Annex I)	Code EUNIS	Area <sup>6</sup> (ha)	Potential location/distribution	Comments
1	Noravan-1	C. Inland surface waters		C2. Surface running waters	10	Noravan	
	Noravan-2	E. Grasslands		E1. Dry grasslands	220	Noravan	
	Noravan-3	G. Woodland, forest and other wooded land		G1. Broadleaved deciduous woodland	20	Noravan	
	Noravan-4	I. Agricultural, horticultural or domestic habitats		I1. Arable land and market gardens	240	Noravan	
2	Vaghatin - Vorotan-1	C. Inland surface waters		C2. Surface running waters	8	Vaghatin - Vorotan	
	Vaghatin - Vorotan-2	E. Grasslands		E1. Dry grasslands	200	Vaghatin - Vorotan	
	Vaghatin - Vorotan -3	G. Woodland, forest and other wooded land		G1. Broadleaved deciduous woodland	40	Vaghatin - Vorotan	
	Vaghatin - Vorotan -4	I. Agricultural, horticultural or domestic habitats		I1. Arable land and market gardens	10	Vaghatin - Vorotan	
3	Vorotan – Shamb - 1	C. Inland surface waters		C2. Surface running waters	6	Vorotan – Shamb	
	Vorotan – Shamb - 2	E. Grasslands		E1. Dry grasslands	150	Vorotan – Shamb	
	Vorotan – Shamb - 3	G. Woodland, forest and other wooded land		G1. Broadleaved deciduous woodland	20	Vorotan – Shamb	
	Vorotan – Shamb - 4	I. Agricultural, horticultural or domestic habitats		I1. Arable land and market gardens	30	Vorotan – Shamb	
	Vorotan – Shamb - 5	J. Constructed, industrial and other artificial habitats		J1. Buildings	2	Vorotan – Shamb	Shamb power station

<sup>5</sup> **Natural/modified** as per PR6 standard

<sup>6</sup> In the buffer of 500m on each side of the road's project

N°	Habitat name	Type <sup>5</sup>	EU Habitat Directive (Annex I)	Code EUNIS	Area <sup>6</sup> (ha)	Potential location/distribution	Comments
	Vorotan – Shamb - 5	J. Constructed, industrial and other artificial habitats		J5. Highly artificial man-made waters and associated structures	3	Vorotan – Shamb	Part of Shamb pond
4	Shamb - Darbas - 1	C. Inland surface waters		C2. Surface running waters	1	Shamb - Darbas	
	Shamb - Darbas - 2	E. Grasslands		E1. Dry grasslands	230	Shamb - Darbas	
	Shamb - Darbas - 3	G. Woodland, forest and other wooded land		G1. Broadleaved deciduous woodland	12	Shamb - Darbas	
	Shamb - Darbas - 4	I. Agricultural, horticultural or domestic habitats		I1. Arable land and market gardens	25	Shamb - Darbas	
5	Darbas – Lor - 1	C. Inland surface waters		C2. Surface running waters	10	Darbas – Lor	
	Darbas - Lor - 2	E. Grasslands		E1. Dry grasslands	250	Darbas – Lor	
	Darbas - Lor - 3	G. Woodland, forest and other wooded land		G1. Broadleaved deciduous woodland	8	Darbas – Lor	
	Darbas - Lor - 4	I. Agricultural, horticultural or domestic habitats		I1. Arable land and market gardens	35	Darbas – Lor	
6	Lor - Shenatagh - 1	C. Inland surface waters		C2. Surface running waters	7	Lor - Shenatagh	
	Lor - Shenatagh - 2	E. Grasslands		E2. Mesic grasslands	440	Lor - Shenatagh	
	Lor - Shenatagh - 3	G. Woodland, forest and other wooded land		G1. Broadleaved deciduous woodland	14	Lor - Shenatagh	
	Lor - Shenatagh - 4	I. Agricultural, horticultural or domestic habitats		I1. Arable land and market gardens	24	Lor - Shenatagh	
7	Kitsk - Karut - 1	C. Inland surface waters		C2. Surface running waters	6	Kitsk - Karut	
	Kitsk - Karut - 2	E. Grasslands		E2. Mesic grasslands	200	Kitsk - Karut	
	Kitsk - Karut - 3	G. Woodland, forest and other wooded land		G1. Broadleaved deciduous woodland	22	Kitsk - Karut	
	Kitsk - Karut - 4	I. Agricultural, horticultural or domestic habitats		I1. Arable land and market gardens	2	Kitsk - Karut	
8	Karut - Astghaberd - 1	C. Inland surface waters		C2. Surface running waters	12	Karut - Astghaberd	
	Karut - Astghaberd - 2	E. Grasslands		E1. Dry grasslands	220	Karut - Astghaberd	
	Karut - Astghaberd - 3	G. Woodland, forest and other wooded land		G1. Broadleaved deciduous woodland	200	Karut - Astghaberd	
	Karut - Astghaberd - 4	I. Agricultural, horticultural or domestic habitats		I1. Arable land and market gardens	1	Karut - Astghaberd	

N°	Habitat name	Type <sup>5</sup>	EU Habitat Directive (Annex I)	Code EUNIS	Area <sup>6</sup> (ha)	Potential location/distribution	Comments
9	Astghaberd - Geghi - 1	C. Inland surface waters		C2. Surface running waters	4	Astghaberd - Geghi	
	Astghaberd - Geghi - 2	E. Grasslands		E1. Dry grasslands	70	Astghaberd - Geghi	
	Astghaberd - Geghi - 3	G. Woodland, forest and other wooded land		G1. Broadleaved deciduous woodland	20	Astghaberd - Geghi	
	Astghaberd - Geghi - 4	I. Agricultural, horticultural or domestic habitats		I1. Arable land and market gardens	23	Astghaberd - Geghi	
10	Geghi - Geghavanq - 1	C. Inland surface waters		C2. Surface running waters	9	Geghi - Geghavanq	
	Geghi - Geghavanq - 2	E. Grasslands		E1. Dry grasslands	130	Geghi - Geghavanq	
	Geghi - Geghavanq - 3	G. Woodland, forest and other wooded land		G1. Broadleaved deciduous woodland	180	Geghi - Geghavanq	
	Geghi - Geghavanq - 4	I. Agricultural, horticultural or domestic habitats		I1. Arable land and market gardens	17	Geghi - Geghavanq	
11	Geghavanq – Kapan Qajaran Road - 1	C. Inland surface waters		C2. Surface running waters	12	Geghavanq – Kapan Qajaran Road	
	Geghavanq – Kapan Qajaran Road - 2	E. Grasslands		E1. Dry grasslands	280	Geghavanq – Kapan Qajaran Road	
	Geghavanq – Kapan Qajaran Road - 3	G. Woodland, forest and other wooded land		G1. Broadleaved deciduous woodland	320	Geghavanq – Kapan Qajaran Road	
	Geghavanq – Kapan Qajaran Road - 4	I. Agricultural, horticultural or domestic habitats		I1. Arable land and market gardens	10	Geghavanq – Kapan Qajaran Road	
	Geghavanq – Kapan Qajaran Road - 5	J. Constructed, industrial and other artificial habitats		J5. Highly artificial man-made waters and associated structures	30	Geghavanq – Kapan Qajaran Road	Geghi pond

During analytical part of the work, the Table will be supplemented with the newly defined habitats: G1.11. Riverine willow woodland, F3.1. Temperate thickets and scrub, E4. Alpine and subalpine grasslands.

## Butterflies

### Protocols

#### Investigation area:

The data on Butterflies was collected opportunistically along the routes planned for the birds, as shown on the Figure 46.

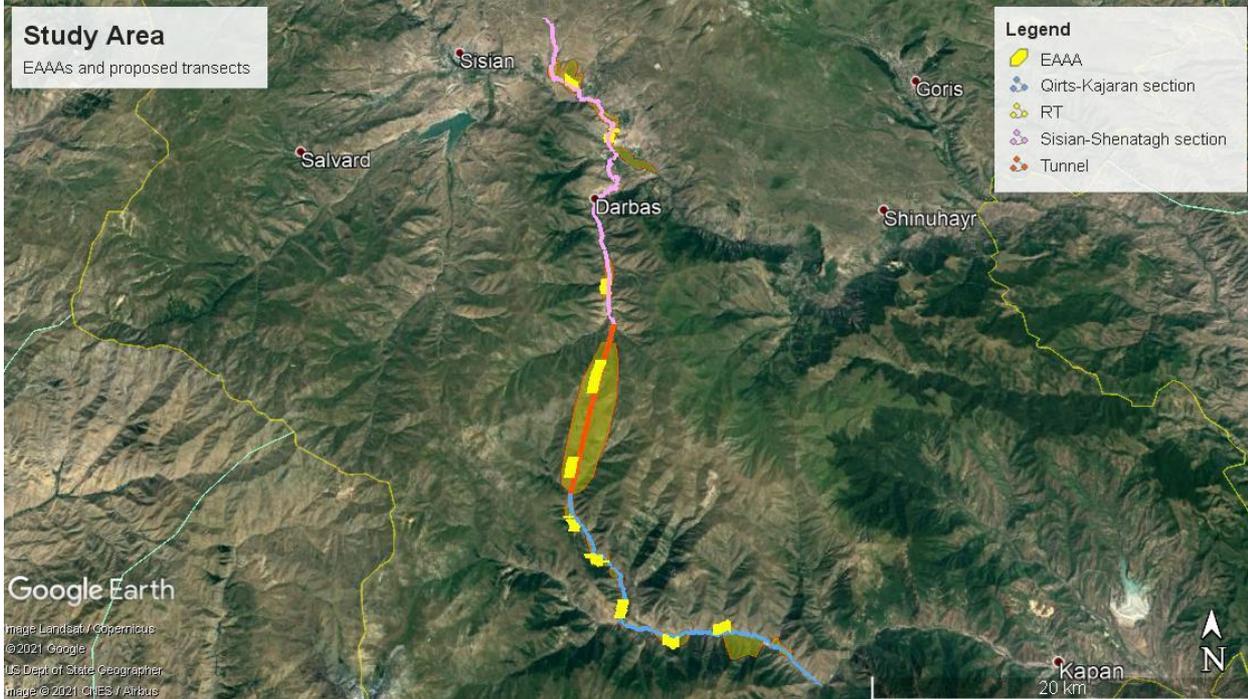


Figure 46. The preliminary EAAAs and the survey sites

#### Survey methods:

The data on butterfly species diversity was collected via direct observation of the species flying around along the bird transect, and in the early mornings at their roosting sites.

#### Time and effort of investigation<sup>7</sup> :

In total this opportunistic butterfly survey took about 12 hours (3 hours per day in average).

### Results for June

In total the following butterfly species have been recorded in the study area (Table 312):

Table 313. List of butterfly species, recorded in the study area in June

#	Family	Species	Status in RDB AM	Status in IUCN Red List
1	Hesperiidae	<i>Erynnis tages</i>		
2	Hesperiidae	<i>Erynnis marloyi</i>		
3	Hesperiidae	<i>Carcharodus alceae</i>		
4	Hesperiidae	<i>Carcharodus lavatherae</i>		
5	Hesperiidae	<i>Carcharodus flocciferus</i>		
6	Hesperiidae	<i>Carcharodus stauderi</i>		
7	Hesperiidae	<i>Spialia orbifer</i>		

<sup>7</sup> Yearly (e.g. end of June/July) and during the day (e.g. at dusk and night after rain)

#	Family	Species	Status in RDB AM	Status in IUCN Red List
8	Hesperiidae	<i>Pyrgus sidae</i>		
9	Hesperiidae	<i>Pyrgus serratulae</i>		
10	Hesperiidae	<i>Thymelicus lineola</i>		
11	Hesperiidae	<i>Thymelicus sylvestris</i>		
12	Hesperiidae	<i>Ochlodes sylvanus</i>		
13	Hesperiidae	<i>Hesperia comma</i>		
14	Papilionidae	<i>Parnassius apollo</i>	VU	NT
15	Papilionidae	<i>Iphiclides podalirius</i>		
16	Papilionidae	<i>Papilio machaon</i>		
17	Pieridae	<i>Leptidea sinapis</i>		
18	Pieridae	<i>Anthocharis cardamines</i>		
19	Pieridae	<i>Euchloe ausonia</i>		
20	Pieridae	<i>Aporia crataegi</i>		
21	Pieridae	<i>Pontia daplidice</i>		
22	Pieridae	<i>Pieris pseudorapae</i>		
23	Pieridae	<i>Pieris rapae</i>		
24	Pieridae	<i>Pieris brassicae</i>		
25	Pieridae	<i>Colias sareptensis</i>		
26	Pieridae	<i>Colias crocea</i>		
27	Pieridae	<i>Gonepteryx rhamni</i>		
28	Lycaenidae	<i>Nordmannia spini</i>		
29	Lycaenidae	<i>Lycaena phlaeas</i>		
30	Lycaenidae	<i>Heodes tityrus</i>		
31	Lycaenidae	<i>Heodes candens</i>		
32	Lycaenidae	<i>Thersamonolycaena alciphron</i>		
33	Lycaenidae	<i>Thersamonia kurdistanica</i>		
34	Lycaenidae	<i>Cupido osiris</i>		
35	Lycaenidae	<i>Celastrina argiolus</i>		
36	Lycaenidae	<i>Pseudophilotes vicrama</i>		
37	Lycaenidae	<i>Plebeius argus</i>		
38	Lycaenidae	<i>Aricia agestis</i>		
39	Lycaenidae	<i>Ultraaricia crassipuncta</i>		
40	Lycaenidae	<i>Cyaniris bellis</i>		
41	Lycaenidae	<i>Kretania eurypilus</i>		
42	Lycaenidae	<i>Lysandra bellargus</i>		
43	Lycaenidae	<i>Polyommatus (icarus) icarus</i>		
44	Lycaenidae	<i>Polyommatus amandus</i>		
45	Lycaenidae	<i>Polyommatus thersites</i>		
46	Nymphalidae	<i>Pararge aegeria</i>		
47	Nymphalidae	<i>Lasiommata megera</i>		
48	Nymphalidae	<i>Lasiommata maera</i>		
49	Nymphalidae	<i>Melanargia russiae</i>		
50	Nymphalidae	<i>Coenonympha pamphilus</i>		
51	Nymphalidae	<i>Coenonympha arcania</i>		
52	Nymphalidae	<i>Coenonympha leander</i>		
53	Nymphalidae	<i>Erebia medusa</i>		
54	Nymphalidae	<i>Hyponephele lycaon</i>		
55	Nymphalidae	<i>Maniola jurtina</i>		
56	Nymphalidae	<i>Brintesia circe</i>		
57	Nymphalidae	<i>Arethusana arethusana</i>		
58	Nymphalidae	<i>Pseudochazara pelopea</i>		
59	Nymphalidae	<i>Chazara briseis</i>		

#	Family	Species	Status in RDB AM	Status in IUCN Red List
60	Nymphalidae	<i>Limenitis reducta</i>		
61	Nymphalidae	<i>Neptis rivularis</i>		
62	Nymphalidae	<i>Vanessa atalanta</i>		
63	Nymphalidae	<i>Vanessa cardui</i>		
64	Nymphalidae	<i>Inachis io</i>		
65	Nymphalidae	<i>Polygonia c-album</i>		
66	Nymphalidae	<i>Aglais urticae</i>		
67	Nymphalidae	<i>Argynnis paphia</i>		
68	Nymphalidae	<i>Argynnis pandora</i>		
69	Nymphalidae	<i>Argynnis aglaja</i>		
70	Nymphalidae	<i>Issoria lathonia</i>		
71	Nymphalidae	<i>Brenthis hecate</i>		
72	Nymphalidae	<i>Brenthis ino</i>		VU
73	Nymphalidae	<i>Euphydryas aurinia</i>		
74	Nymphalidae	<i>Melitaea didyma</i>		
75	Nymphalidae	<i>Melitaea cinxia</i>		

### Results for July

Dates: 30 Jul – 31 Aug

EAAA 001

In total there are 40 species of butterflies recorded in this area. The butterfly fauna is mainly represented by steppe and meadow species. The full list of the birds is presented in Table 313.

**Table 314. List of butterfly species, recorded during end of July beginning of August**

#	Family	Species	Status in RDB AM	Status in IUCN Red List
1	Hesperiidae	<i>Erynnis tages</i>		
2	Hesperiidae	<i>Carcharodus alceae</i>		
3	Hesperiidae	<i>Carcharodus lavatherae</i>		
4	Hesperiidae	<i>Spialia orbifer</i>		
5	Hesperiidae	<i>Pyrgus serratulae</i>		
6	Hesperiidae	<i>Ochlodes sylvanus</i>		
7	Papilionidae	<i>Iphiclides podalirius</i>		
8	Papilionidae	<i>Papilio machaon</i>		
9	Pieridae	<i>Pontia daplidice</i>		
10	Pieridae	<i>Pieris pseudorapae</i>		
11	Pieridae	<i>Pieris rapae</i>		
12	Pieridae	<i>Pieris brassicae</i>		
13	Pieridae	<i>Colias sareptensis</i>		
14	Pieridae	<i>Colias erate</i>		
15	Pieridae	<i>Gonepteryx rhamni</i>		
16	Satyridae	<i>Lasiommata megera</i>		
17	Satyridae	<i>Melanargia galathea</i>		
18	Satyridae	<i>Coenonympha pamphilus</i>		
19	Satyridae	<i>Hyponphele lycaon</i>		
20	Satyridae	<i>Maniola jurtina</i>		
21	Satyridae	<i>Pseudochazara pelopea</i>		
22	Satyridae	<i>Chazara briseis</i>		
23	Satyridae	<i>Chazara persephone</i>		
24	Nymphalidae	<i>Limenitis reducta</i>		
25	Nymphalidae	<i>Neptis rivularis</i>		
26	Nymphalidae	<i>Vanessa atalanta</i>		

#	Family	Species	Status in RDB AM	Status in IUCN Red List
27	Nymphalidae	<i>Vanessa cardui</i>		
28	Nymphalidae	<i>Aglais urticae</i>		
29	Nymphalidae	<i>Argynnis pandora</i>		
30	Nymphalidae	<i>Issoria lathonia</i>		
31	Nymphalidae	<i>Euphydryas aurinia</i>		
32	Nymphalidae	<i>Melitaea didyma</i>		
33	Lycaenidae	<i>Lycaena phlaeas</i>		
34	Lycaenidae	<i>Thersamonia kurdistanica</i>		
35	Lycaenidae	<i>Celastrina argiolus</i>		
36	Lycaenidae	<i>Pseudophilotes vicrama</i>		
37	Lycaenidae	<i>Plebeius argus</i>		
38	Lycaenidae	<i>Aricia agestis</i>		
39	Lycaenidae	<i>Meleageria daphnis</i>		
40	Lycaenidae	<i>Polyommatus (icarus) icarus</i>		

EAAA 002-003

In total there are 49 species of butterflies recorded in this area. The butterfly fauna is mainly represented by meadow species. The full list of the butterflies is presented in Table 314.

**Table 315. List of butterfly species, recorded during end of July beginning of August**

#	Family	Species	Status in RDB AM	Status in IUCN Red List
1	Hesperiidae	<i>Erynnis tages</i>		
2	Hesperiidae	<i>Carcharodus alceae</i>		
3	Hesperiidae	<i>Spialia orbifer</i>		
4	Hesperiidae	<i>Pyrgus sidae</i>		
5	Hesperiidae	<i>Pyrgus serratulae</i>		
6	Hesperiidae	<i>Thymelicus lineola</i>		
7	Hesperiidae	<i>Thymelicus sylvestris</i>		
8	Hesperiidae	<i>Ochlodes sylvanus</i>		
9	Papilionidae	<i>Iphiclides podalirius</i>		
10	Papilionidae	<i>Papilio machaon</i>		
11	Pieridae	<i>Aporia crataegi</i>		
12	Pieridae	<i>Pontia daplidice</i>		
13	Pieridae	<i>Pieris pseudorapae</i>		
14	Pieridae	<i>Pieris rapae</i>		
15	Pieridae	<i>Pieris brassicae</i>		
16	Pieridae	<i>Colias sareptensis</i>		
17	Pieridae	<i>Colias crocea</i>		
18	Satyridae	<i>Lasiommata megera</i>		
19	Satyridae	<i>Lasiommata maera</i>		
20	Satyridae	<i>Coenonympha pamphilus</i>		
21	Satyridae	<i>Hyponephele lycaon</i>		
22	Satyridae	<i>Maniola jurtina</i>		
23	Satyridae	<i>Hipparchia pellucida</i>		
24	Satyridae	<i>Hipparchia syriaca</i>		
25	Satyridae	<i>Hipparchia statilinus</i>		
26	Satyridae	<i>Brintesia circe</i>		
27	Satyridae	<i>Arethusana arethusana</i>		
28	Satyridae	<i>Chazara briseis</i>		
29	Satyridae	<i>Chazara persephone</i>		
30	Satyridae	<i>Chazara bischoffi</i>		
31	Nymphalidae	<i>Vanessa atalanta</i>		

#	Family	Species	Status in RDB AM	Status in IUCN Red List
32	Nymphalidae	<i>Vanessa cardui</i>		
33	Nymphalidae	<i>Aglais urticae</i>		
34	Nymphalidae	<i>Argynnis pandora</i>		
35	Nymphalidae	<i>Issoria lathonia</i>		
36	Nymphalidae	<i>Melitaea didyma</i>		
37	Lycaenidae	<i>Lycaena phlaeas</i>		
38	Lycaenidae	<i>Heodes tityrus</i>		
39	Lycaenidae	<i>Thersamonia kurdistanica</i>		
40	Lycaenidae	<i>Celastrina argiolus</i>		
41	Lycaenidae	<i>Plebeius argus</i>		
42	Lycaenidae	<i>Aricia agestis</i>		
43	Lycaenidae	<i>Lysandra bellargus</i>		
44	Lycaenidae	<i>Lysandra corydonius</i>		
45	Lycaenidae	<i>Meleageria daphnis</i>		
46	Lycaenidae	<i>Polyommatus (icarus) icarus</i>		
47	Lycaenidae	<i>Polyommatus thersites</i>		
48	Lycaenidae	<i>Agrodiaetus ripartii</i>		
49	Lycaenidae	<i>Agrodiaetus demavendi</i>		

EAAA 004

In total there are 34 species of butterflies recorded in this area. The butterfly fauna is mainly represented by steppe and meadow species. The full list of the butterflies is presented in the Table 315.

**Table 316. List of butterfly species, recorded during end of July beginning of August**

#	Family	Species	Status in RDB AM	Status in IUCN Red List
1	Hesperiidae	<i>Erynnis tages</i>		
2	Hesperiidae	<i>Carcharodus alceae</i>		
3	Hesperiidae	<i>Spialia orbifer</i>		
4	Hesperiidae	<i>Pyrgus sidae</i>		
5	Papilionidae	<i>Iphiclides podalirius</i>		
6	Pieridae	<i>Pontia daplidice</i>		
7	Pieridae	<i>Pieris pseudorapae</i>		
8	Pieridae	<i>Pieris brassicae</i>		
9	Pieridae	<i>Colias sareptensis</i>		
10	Pieridae	<i>Colias crocea</i>		
11	Satyridae	<i>Coenonympha pamphilus</i>		
12	Satyridae	<i>Hyponephele lycaon</i>		
13	Satyridae	<i>Maniola jurtina</i>		
14	Satyridae	<i>Brintesia circe</i>		
15	Satyridae	<i>Arethusana arethusa</i>		
16	Nymphalidae	<i>Vanessa atalanta</i>		
17	Nymphalidae	<i>Vanessa cardui</i>		
18	Nymphalidae	<i>Polygonia c-album</i>		
19	Nymphalidae	<i>Aglais urticae</i>		
20	Nymphalidae	<i>Argynnis paphia</i>		
21	Nymphalidae	<i>Argynnis pandora</i>		
22	Nymphalidae	<i>Melitaea didyma</i>		
23	Lycaenidae	<i>Lycaena phlaeas</i>		
24	Lycaenidae	<i>Heodes tityrus</i>		
25	Lycaenidae	<i>Celastrina argiolus</i>		
26	Lycaenidae	<i>Pseudophilotes vicrama</i>		
27	Lycaenidae	<i>Plebeius argus</i>		

#	Family	Species	Status in RDB AM	Status in IUCN Red List
28	Lycaenidae	<i>Aricia agestis</i>		
29	Lycaenidae	<i>Ultraaricia crassipuncta</i>		
30	Lycaenidae	<i>Lysandra bellargus</i>		
31	Lycaenidae	<i>Lysandra corydonius</i>		
32	Lycaenidae	<i>Meleageria daphnis</i>		
33	Lycaenidae	<i>Polyommatus (icarus) icarus</i>		
34	Lycaenidae	<i>Agrodiaetus damon</i>		

## EAAA 005

In total there are 37 species of butterflies recorded in this area. The butterfly fauna is mainly represented by forest, meadow, and subalpine species. The full list of the butterflies is presented in Table 316. Among priority species there is the country endemic *Agrodiaetus aserbeidschanus*, which is being assessed now for the next issue of the Red Book of Animals of Armenia and preliminary deserves a status of Endangered

**Table 317. List of butterfly species, recorded during end of July beginning of August.**

#	Family	Species	Status in RDB AM	Status in IUCN Red List
1	Hesperiidae	<i>Erynnis tages</i>		
2	Hesperiidae	<i>Carcharodus alceae</i>		
3	Hesperiidae	<i>Spialia orbifer</i>		
4	Hesperiidae	<i>Pyrgus sidae</i>		
5	Hesperiidae	<i>Hesperia comma</i>		
6	Papilionidae	<i>Iphiclides podalirius</i>		
7	Pieridae	<i>Pontia daplidice</i>		
8	Pieridae	<i>Pieris pseudorapae</i>		
9	Pieridae	<i>Pieris brassicae</i>		
10	Pieridae	<i>Colias sareptensis</i>		
11	Pieridae	<i>Colias crocea</i>		
12	Satyridae	<i>Pararge aegeria</i>		
13	Satyridae	<i>Coenonympha pamphilus</i>		
14	Satyridae	<i>Hyponephele lycaon</i>		
15	Satyridae	<i>Maniola jurtina</i>		
16	Satyridae	<i>Brintesia circe</i>		
17	Satyridae	<i>Arethusana arethusana</i>		
18	Nymphalidae	<i>Vanessa atalanta</i>		
19	Nymphalidae	<i>Vanessa cardui</i>		
20	Nymphalidae	<i>Polygonia c-album</i>		
21	Nymphalidae	<i>Aglais urticae</i>		
22	Nymphalidae	<i>Argynnis paphia</i>		
23	Nymphalidae	<i>Argynnis pandora</i>		
24	Nymphalidae	<i>Melitaea didyma</i>		
25	Lycaenidae	<i>Lycaena phlaeas</i>		
26	Lycaenidae	<i>Heodes tityrus</i>		
27	Lycaenidae	<i>Celastrina argiolus</i>		
28	Lycaenidae	<i>Pseudophilotes vicrama</i>		
29	Lycaenidae	<i>Plebeius argus</i>		
30	Lycaenidae	<i>Aricia agestis</i>		
31	Lycaenidae	<i>Ultraaricia crassipuncta</i>		
32	Lycaenidae	<i>Lysandra bellargus</i>		
33	Lycaenidae	<i>Lysandra corydonius</i>		
34	Lycaenidae	<i>Meleageria daphnis</i>		
35	Lycaenidae	<i>Polyommatus (icarus) icarus</i>		
36	Lycaenidae	<i>Agrodiaetus damon</i>		

37	Lycaenidae	<i>Agrodiaetus aserbeidschanus</i>		
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EAAA 006

In total there are 46 species of butterflies recorded in this area. The butterfly fauna is mainly represented by forest and meadow species. The full list of the butterflies is presented in Table 317. Among priority species there is the country endemic *Agrodiaetus aserbeidschanus*, which is being assessed now for the next issue of the Red Book of Animals of Armenia and preliminary deserves a status of Endangered.

**Table 318. List of butterfly species, recorded during end of July beginning of August.**

#	Family	Species	Status in RDB AM	Status in IUCN Red List
1	Hesperiidae	<i>Erynnis tages</i>		
2	Hesperiidae	<i>Carcharodus alceae</i>		
3	Hesperiidae	<i>Spialia orbifer</i>		
4	Hesperiidae	<i>Pyrgus sidae</i>		
5	Hesperiidae	<i>Pyrgus serratulae</i>		
6	Hesperiidae	<i>Thymelicus lineola</i>		
7	Hesperiidae	<i>Thymelicus sylvestris</i>		
8	Hesperiidae	<i>Ochlodes sylvanus</i>		
9	Papilionidae	<i>Iphiclides podalirius</i>		
10	Papilionidae	<i>Papilio machaon</i>		
11	Pieridae	<i>Pontia daplidice</i>		
12	Pieridae	<i>Pieris pseudorapae</i>		
13	Pieridae	<i>Pieris brassicae</i>		
14	Pieridae	<i>Colias sareptensis</i>		
15	Pieridae	<i>Colias crocea</i>		
16	Satyridae	<i>Pararge aegeria</i>		
17	Satyridae	<i>Lasiommata megera</i>		
18	Satyridae	<i>Lasiommata maera</i>		
19	Satyridae	<i>Coenonympha pamphilus</i>		
20	Satyridae	<i>Hyponephele lycaon</i>		
21	Satyridae	<i>Maniola jurtina</i>		
22	Satyridae	<i>Hipparchia statilinus</i>		
23	Satyridae	<i>Brintesia circe</i>		
24	Satyridae	<i>Arethusana arethusana</i>		
25	Nymphalidae	<i>Limenitis reducta</i>		
26	Nymphalidae	<i>Vanessa atalanta</i>		
27	Nymphalidae	<i>Vanessa cardui</i>		
28	Nymphalidae	<i>Polygonia c-album</i>		
29	Nymphalidae	<i>Aglais urticae</i>		
30	Nymphalidae	<i>Argynnis paphia</i>		
31	Nymphalidae	<i>Argynnis pandora</i>		
32	Nymphalidae	<i>Euphydryas aurinia</i>		
33	Nymphalidae	<i>Melitaea didyma</i>		
34	Lycaenidae	<i>Lycaena phlaeas</i>		
35	Lycaenidae	<i>Pseudophilotes vicrama</i>		
36	Lycaenidae	<i>Plebeius argus</i>		
37	Lycaenidae	<i>Aricia agestis</i>		
38	Lycaenidae	<i>Ultraaricia crassipuncta</i>		
39	Lycaenidae	<i>Lysandra bellargus</i>		
40	Lycaenidae	<i>Lysandra corydonius</i>		
41	Lycaenidae	<i>Meleageria daphnis</i>		
42	Lycaenidae	<i>Polyommatus (icarus) icarus</i>		
43	Lycaenidae	<i>Polyommatus thersites</i>		

#	Family	Species	Status in RDB AM	Status in IUCN Red List
44	Lycaenidae	<i>Agrodiaetus ripartii</i>		
45	Lycaenidae	<i>Agrodiaetus damon</i>		
46	Lycaenidae	<i>Agrodiaetus aserbeidschanus</i>		

EAAA 007-009

In total there are 37 species of butterflies recorded in this area. The butterfly fauna is mainly represented by forest and steppe species. The full list of the butterflies is presented in Table 318.

**Table 319. List of butterfly species, recorded during end of July beginning of August**

#	Family	Species	Status in RDB AM	Status in IUCN Red List
1	Hesperiidae	<i>Carcharodus alceae</i>		
2	Hesperiidae	<i>Spialia orbifer</i>		
3	Hesperiidae	<i>Ochlodes sylvanus</i>		
4	Papilionidae	<i>Iphiclides podalirius</i>		
5	Pieridae	<i>Pontia daplidice</i>		
6	Pieridae	<i>Pieris pseudorapae</i>		
7	Pieridae	<i>Pieris brassicae</i>		
8	Pieridae	<i>Colias sareptensis</i>		
9	Pieridae	<i>Colias crocea</i>		
10	Satyridae	<i>Melanargia galathea</i>		
11	Satyridae	<i>Melanargia larissa</i>		
12	Satyridae	<i>Coenonympha pamphilus</i>		
13	Satyridae	<i>Hyponphele lycaon</i>		
14	Satyridae	<i>Maniola jurtina</i>		
15	Satyridae	<i>Hipparchia pellucida</i>		
16	Satyridae	<i>Hipparchia syriaca</i>		
17	Satyridae	<i>Hipparchia statilinus</i>		
18	Satyridae	<i>Brintesia circe</i>		
19	Satyridae	<i>Chazara briseis</i>		
20	Satyridae	<i>Chazara persephone</i>		
21	Satyridae	<i>Chazara bischoffi</i>		
22	Nymphalidae	<i>Limenitis reducta</i>		
23	Nymphalidae	<i>Vanessa cardui</i>		
24	Nymphalidae	<i>Polygonia c-album</i>		
25	Nymphalidae	<i>Aglais urticae</i>		
26	Nymphalidae	<i>Argynnis paphia</i>		
27	Nymphalidae	<i>Argynnis pandora</i>		
28	Nymphalidae	<i>Melitaea didyma</i>		
29	Lycaenidae	<i>Lycaena phlaeas</i>		
30	Lycaenidae	<i>Thersamonia kurdistanica</i>		
31	Lycaenidae	<i>Celastrina argiolus</i>		
32	Lycaenidae	<i>Plebeius argus</i>		
33	Lycaenidae	<i>Aricia agestis</i>		
34	Lycaenidae	<i>Lysandra bellargus</i>		
35	Lycaenidae	<i>Lysandra corydonius</i>		
36	Lycaenidae	<i>Meleageria daphnis</i>		
37	Lycaenidae	<i>Polyommatus (icarus) icarus</i>		

EAAA 010-012

In total there are 37 species of butterflies recorded in this area. The butterfly fauna is mainly represented by juniper woodland species and the species of riparian zone. The full list of the butterflies is presented in Table 319.

**Table 320. List of butterfly species, recorded during end of July beginning of August**

#	Family	Species	Status in RDB AM	Status in IUCN Red List
1	Hesperiidae	<i>Carcharodus alceae</i>		
2	Hesperiidae	<i>Spialia orbifer</i>		
3	Hesperiidae	<i>Ochlodes sylvanus</i>		
4	Papilionidae	<i>Iphiclides podalirius</i>		
5	Papilionidae	<i>Papilio machaon</i>		
6	Pieridae	<i>Pontia daplidice</i>		
7	Pieridae	<i>Pieris pseudorapae</i>		
8	Pieridae	<i>Pieris brassicae</i>		
9	Pieridae	<i>Colias sareptensis</i>		
10	Pieridae	<i>Colias crocea</i>		
11	Satyridae	<i>Melanargia larissa</i>		
12	Satyridae	<i>Coenonympha pamphilus</i>		
13	Satyridae	<i>Maniola jurtina</i>		
14	Satyridae	<i>Hipparchia pellucida</i>		
15	Satyridae	<i>Hipparchia statilinus</i>		
16	Satyridae	<i>Brintesia circe</i>		
17	Satyridae	<i>Chazara briseis</i>		
18	Satyridae	<i>Chazara persephone</i>		
19	Satyridae	<i>Chazara bischoffi</i>		
20	Nymphalidae	<i>Limenitis reducta</i>		
21	Nymphalidae	<i>Vanessa cardui</i>		
22	Nymphalidae	<i>Aglais urticae</i>		
23	Nymphalidae	<i>Argynnis pandora</i>		
24	Nymphalidae	<i>Melitaea didyma</i>		
25	Lycaenidae	<i>Lycaena phlaeas</i>		
26	Lycaenidae	<i>Thersamonia kurdistanica</i>		
27	Lycaenidae	<i>Celastrina argiolus</i>		
28	Lycaenidae	<i>Plebeius argus</i>		
29	Lycaenidae	<i>Aricia agestis</i>		
30	Lycaenidae	<i>Lysandra bellargus</i>		
31	Lycaenidae	<i>Lysandra corydonius</i>		
32	Lycaenidae	<i>Meleageria daphnis</i>		
33	Lycaenidae	<i>Polyommatus (icarus) icarus</i>		

EAAA 013

In total there are 27 species of butterflies recorded in this area. The butterfly fauna is mainly represented by juniper woodland species and the species of riparian zone. The full list of the butterflies is presented in Table 320.

**Table 321. List of butterfly species, recorded during end of July beginning of August**

#	Family	Species	Status in RDB AM	Status in IUCN Red List
1	Hesperiidae	<i>Carcharodus alceae</i>		
2	Hesperiidae	<i>Spialia orbifer</i>		
3	Hesperiidae	<i>Ochlodes sylvanus</i>		
4	Papilionidae	<i>Iphiclides podalirius</i>		
5	Papilionidae	<i>Papilio machaon</i>		
6	Pieridae	<i>Pontia daplidice</i>		

#	Family	Species	Status in RDB AM	Status in IUCN Red List
7	Pieridae	<i>Pieris pseudorapae</i>		
8	Pieridae	<i>Pieris brassicae</i>		
9	Pieridae	<i>Colias sareptensis</i>		
10	Pieridae	<i>Colias crocea</i>		
11	Satyridae	<i>Maniola jurtina</i>		
12	Satyridae	<i>Hipparchia pellucida</i>		
13	Satyridae	<i>Brintesia circe</i>		
14	Satyridae	<i>Chazara briseis</i>		
15	Satyridae	<i>Chazara persephone</i>		
16	Nymphalidae	<i>Limenitis reducta</i>		
17	Nymphalidae	<i>Vanessa cardui</i>		
18	Nymphalidae	<i>Aglais urticae</i>		
19	Nymphalidae	<i>Argynnis pandora</i>		
20	Lycaenidae	<i>Lycaena phlaeas</i>		
21	Lycaenidae	<i>Thersamonia kurdistanica</i>		
22	Lycaenidae	<i>Celastrina argiolus</i>		
23	Lycaenidae	<i>Plebeius argus</i>		
24	Lycaenidae	<i>Aricia agestis</i>		
25	Lycaenidae	<i>Lysandra bellargus</i>		
26	Lycaenidae	<i>Meleageria daphnis</i>		
27	Lycaenidae	<i>Polyommatus (icarus) icarus</i>		

EAAA 014-015

In total there are 25 species of butterflies recorded in this area. The butterfly fauna is mainly represented by juniper woodland species and the species of riparian zone. The full list of the butterflies is presented in Table 321.

**Table 322. List of butterfly species, recorded during end of July beginning of August**

#	Family	Species	Status in RDB AM	Status in IUCN Red List
1	Hesperiidae	<i>Carcharodus alceae</i>		
2	Hesperiidae	<i>Spialia orbifer</i>		
3	Papilionidae	<i>Papilio machaon</i>		
4	Pieridae	<i>Pontia daplidice</i>		
5	Pieridae	<i>Pieris pseudorapae</i>		
6	Pieridae	<i>Pieris brassicae</i>		
7	Pieridae	<i>Colias sareptensis</i>		
8	Pieridae	<i>Colias crocea</i>		
9	Satyridae	<i>Maniola jurtina</i>		
10	Satyridae	<i>Hipparchia pellucida</i>		
11	Satyridae	<i>Brintesia circe</i>		
12	Satyridae	<i>Chazara briseis</i>		
13	Satyridae	<i>Chazara persephone</i>		
14	Nymphalidae	<i>Limenitis reducta</i>		
15	Nymphalidae	<i>Vanessa cardui</i>		
16	Nymphalidae	<i>Aglais urticae</i>		
17	Nymphalidae	<i>Argynnis pandora</i>		
18	Lycaenidae	<i>Lycaena phlaeas</i>		
19	Lycaenidae	<i>Thersamonia kurdistanica</i>		
20	Lycaenidae	<i>Celastrina argiolus</i>		
21	Lycaenidae	<i>Plebeius argus</i>		
22	Lycaenidae	<i>Aricia agestis</i>		
23	Lycaenidae	<i>Lysandra bellargus</i>		

#	Family	Species	Status in RDB AM	Status in IUCN Red List
24	Lycaenidae	<i>Meleageria daphnis</i>		
25	Lycaenidae	<i>Polyommatus (icarus) icarus</i>		

### Priority species

In total there are 3 priority species recorded in the study area. Those are: *Parnassius apollo*, *Brenthis ino*, and *Agrodiaetus aserbeidschanus*. The spots, where those species have been recorded are shown in Figure 47.



Figure 47. Distribution spots of the priority butterfly species

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