

# BIRD MONITORING REPORT – PARAVANI TRANSMISSION LINE (SPRING 2016)

## 1. Introduction

The survey was carried out in April 14-16 and May 10-13, 2016. Start of migration (March) was not studied because of poor weather (poor visibility and accessibility of the sites). Decision was made to do a survey early April and May to cover entire migration period.

Survey team: Gia Edisherashvili, ornithologist (head of the team);  
Alexander Balakhashvili, assistant;  
Petre Tsintskaladze, driver- assistant.

Objective of the survey:

- Registration of local and migrant species (spring migration) encountered.
- Registration of birds (bird mortality, injury) caused by collision with OTL or electrocution

Weather conditions and visibility:

Date:	Weather conditions:	Visibility:
14 April	cloudy, rain patches	moderate
15-16 April	clear, windy	good
10-13 May	sometimes cloudy	moderate

## 2. Results of the survey

Migration and migratory/local species - Spring migration was studied in the project area. The whole line (100%) was covered by the survey.

OTL impact - The sections except for those not accessible because of complicated relief and poor weather (rainy period/after rain) was studied. 81% of the line (84 towers) was checked. Checked strip width: 50x50m each side from the centreline for most of the line and 100x100m in the sections with significant height difference (towers 70-75, towers 26, 28 and 103). Layout of the line and coordinates of the towers are given in Annex 1.

Particular attention was paid to the river, gully crossings and the crests of the cliffs. These sections are considered as sensitive from the view of the risk of collision with the line. As mentioned earlier (see previous reports) the following locations were focused on:

- the Paravani and Mtkvari river confluence with adjacent plateaux,
- the Mtkvari river crossing including slope near vil.Agara, in particular the left bank of the river are considered as important during spring migration.

Birds are observed mainly in the mentioned locations. In other sections concentration of birds has not been registered.

It total 45 species, of them 5 protected, have been observed (see Annex 2).

Information of registered birds and results of the OTL impact survey are presented below.

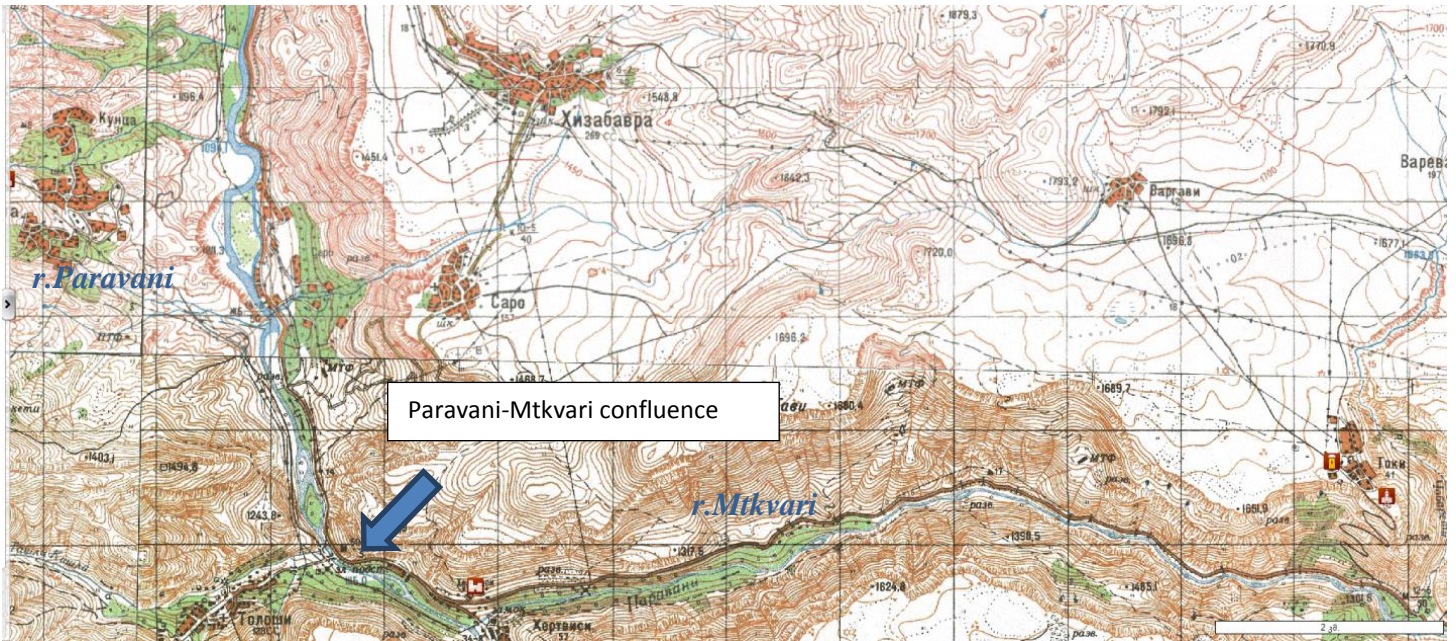


Figure 1. Mtkvari-Paravani confluence area

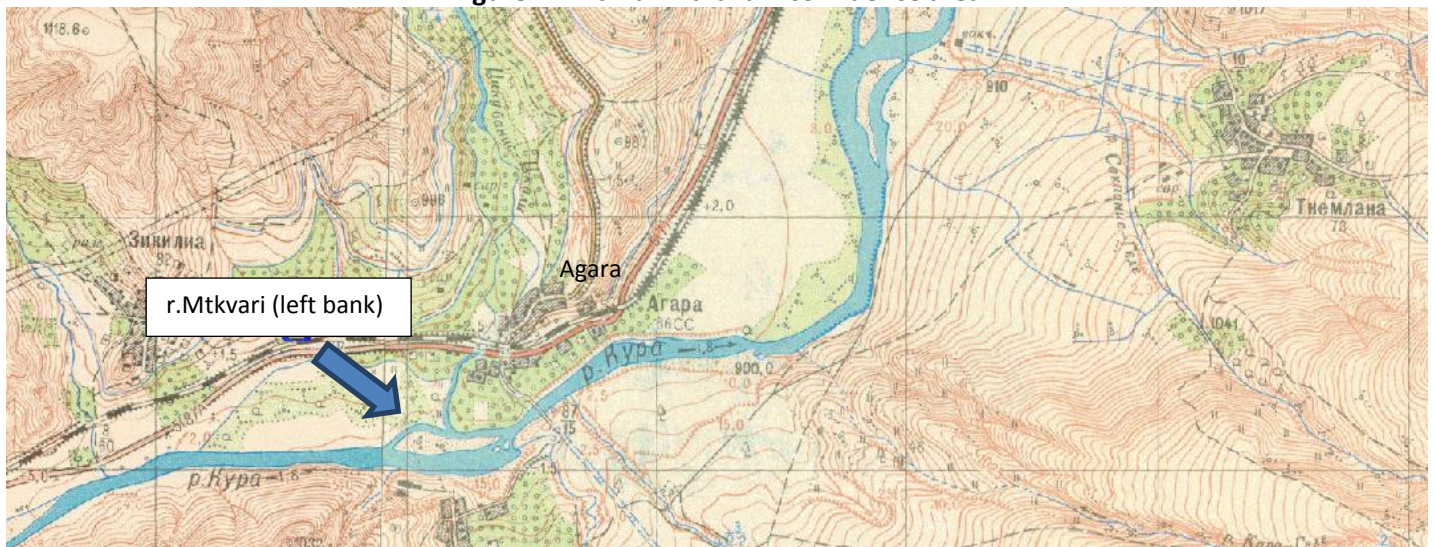


Figure 2. Agara and its environs

## 2.1. April survey – migration study

**Paravani -Mtkvari confluence.** Species registered in the section in April were:

**Raptors** - the Black kite (*Milvus migrans*) (Figure 3) and the Common buzzard (*Buteo buteo*) are particularly numerous. Total number of individuals in some flocks equated 1200-1300. Registered were 7 Lesser Spotted Eagles (*Aquila pomarina*); 4 Short-toed snake eagles (*Cyrcaetus gallicus*), 4 Long-legged buzzard (*Buteo rufinus*), 3 Egyptian vulture (*Neophron percnopterus*). Besides, Griffon vulture (*Gyps fulvus*) was met (Figure 4). Presumably these species live in Vardzia environs (the Mtkvari gorge) where they are often observed. During the survey small flocks (2-4 individuals) of Common kestrel (*Falco tinnunculus*) were registered.

In spring migration period, in the Mtkvari gorge and adjacent plateaux Armenian gulls (*Larus armenicus*), mainly up to 3 years old individuals, not participating in procreation are common. Registered were several individuals of Wild duck (*Anas platyrhynchos*), Grey heron (*Ardea cinerea*) and Little egret (*Egretta garzetta*) moving in non-migration direction.

**Passerines:** Eurasian skylark (*Alauda arvensis*), Greater short-toed lark (*Calandrella brachydactyla*), Water pipit (*Anthus spinoletta*), Common redstart (*Phoenicurus phoenicurus*), Black redstart (*Phoenicurus*)



**Figure 3. Black kite (*Milvus migrans*) flock**



**Figure 4. Griffon vulture (*Gyps fulvus*)**

*ochruros*), Wheatear (*Oenanthe oenanthe*), common chiffchaff (*Phylloscopus collybita*), Green leaf warbler (*Phylloscopus nitidus*), Common linnet (*Carduelis cannabina*) and Corn bunting (*Miliaria calandra*). The largest in number are: Common swift (*Apus apus*), Alpine swift (*Apus melba*), Sand martin (*Riparia riparia*), Barn swallow (*Hirundo rustica*) and Common house martin (*Delichon urbicum*). Thousands of flying high individuals of these species have been registered.

In the **Mtkvari crossing near vil.Agara** situation was similar to mentioned above, except for Griffon vulture (*Gyps fulvus*), Wild duck (*Anas platyrhynchos*), Grey heron (*Ardea cinerea*) and Little egret (*Egretta garzetta*) that were not registered in the area. In addition Eurasian hobby (*Falco subbuteo*), European turtle dove (*Streptopelia turtur*), Common cuckoo (*Cuculus canorus*), Eurasian scops owl (*Otus scops*), nightjar (*Caprimulgus europaeus*) and European roller (*Coracias garrulus*) were also met.

In other sections: Meadow pipit (*Anthus pratensis*), Wheatear (*Oenanthe oenanthe*), Whinchat (*Saxicola rubetra*), Common stonechat (*Saxicola torquatus*) and Red-breasted flycatcher (*Ficedula parva*) have been met.

**Aspindza-Damala section** (Figure 5). Injured Common quail (*Coturnix coturnix*) was found. The cause of the injury most likely was the barbed wire (View of the site is shown in Figure 6). Transmission line is high. No high trees/dense vegetation, forcing birds to fly high.



**Figure 5. Aspindza-Damala area**

## 2.2. May survey – migration study

During the second survey in May 10-13 late migrant birds were observed. This period coincides with the time when leaves are already well developed. The late migrants include such species as Eurasian golden oriole (*Oriolus oriolus*), Barred warbler (*Sylvia nisoria*), Red-backed shrike (*Lanius collurio*) and Common Rosefinch (*Carpodacus erythrinus*) (Figure 7.). Some of the registered species (Black kite (*Milvus migrans*)) have comparatively long migration period which comprises all three spring months.

On May 10-11 migration was weakly expressed. Flocks of European bee-eater (*Merops apiaster*) were observed at various heights. Several birds were perching on bushes and transmission line (Figure 8.).



Figure 6. Barbed wire fenced plot in Dumala area



Figure 7. Common Rosefinch (*Carpodacus erythrinus*)

On May 13 cloudiness increased, in the Mtkvari crossing European honey buzzards (*Pernis apivorus*) flying high towards the north appeared (Figure 9). From 10:00 am to 12:00 am several flocks (flock size from 30-50 to 70-120) flew over one after another. In total 1600-1800 birds. Of raptors this turned to be the most numerous species. In the Mtkvari crossing Egyptian vulture (*Neophron percnopterus*) was registered (Figure 10). We assume that this was not a migrant individual, but one of the several couples nesting near vil.Atskuri. These birds are often registered in the area including Borjomi landfill. Nesting are also Common buzzards (*Buteo buteo*) registered on the plateau near Khizabavra. (Figure 11).



Figure 8. European bee-eater (*Merops apiaster*)



Figure 9. European honey buzzards (*Pernis apivorus*)



**Figure 10. Egyptian vulture (*Neophron percnopterus*)**



**Figure 11. Common buzzard (*Buteo buteo*)**

### **2.3. OTL impact study**

During the study of transmission line impact and tower sites no case on bird injury/death have been registered.

Giorgi Edisherashvili, ornithologist  
June, 2016

# Annex 1



Key  
Sections not visited because of poor accessibility are marked with dotted line

Coordinates of the towers

Points	X	Y	Tower N
1	344173	4619289	103
2	344347	4619102	102
3	344482	4618944	101
4	344647	4618766	100
5	344818	4618569	99
6	345058	4618394	98
7	345266	4618303	97
8	345362	4617987	96
9	345399	4617705	95
10	345464	4617407	94
11	345401	4617250	93
12	345339	4617053	92
13	345471	4616807	91
14	345615	4616515	90
			#80-89
15	347333	4613855	79
16	347418	4613475	78
			#77
17	347618	4613076	76
18	347691	4612924	75
19	347921	4612697	74
20	348067	4612563	73
21	348250	4612371	72
22	348499	4612068	71
23	348589	4611915	70
24	348680	4611746	69
25	348828	4611500	68
26	348973	4611224	67
27	349103	4610987	66
28	349251	4610720	65
29	349592	4610336	64
30	349781	4610139	63
31	350022	4609860	62
32	355890	4604048	61
33	356009	4603933	60
34	356117	4603828	59
35	356147	4601704	58
36	351501	4608660	57
37	351789	4608502	56
38	351914	4608404	55
39	352073	4608284	54
40	352431	4608009	53
41	262547	4607881	52
42	352733	4607677	51

Points	X	Y	Tower N
43	352899	4607498	50
44	353327	4607026	49
45	353405	4606949	48
46	353618	4606863	47
47	353849	4606675	46
48	354357	4606254	45
49	354620	4606074	44
50	354901	4605862	43
51	355216	4604802	41
52	355499	4604899	40
			#41,42
53	355565	4604738	39
54	355675	4604457	38
			#31-37
55	356200	4601198	30
56	356196	4600914	29
57	356182	4600634	28
58	356149	4600334	27
59	356143	4600081	26
60	356131	4599803	25
61	356615	4599536	24
62	356097	4599260	23
63	355986	4599119	22
64	346044	4598833	21
65	356099	4598535	20
66	356147	4598279	19
67	356261	4598029	18
68	356384	4597766	17
69	356499	4597505	16
70	356615	3497255	15
71	356724	4597019	14
72	356884	4596644	13
73	356999	4596361	12
74	357107	4596071	11
75	357204	4595800	10
76	357005	4595525	9
77	357408	4595258	8
78	357532	4594920	7
79	357609	4594702	6
80	357676	4594520	5
81	357782	4594232	4

Note:

Blue highlight – towers/sections where the area 100x100m from the centreline was studied

Green highlight – towers, sections not visited

## Annex 2 \_List of birds registered during the site survey and their status of protection

	Name in English	Name in Georgian	Name in Latin	Status
1	Wild duck	გარეულ იხვსი	Anas platyrhynchos	IUCN_LC
2	Meadow pipit	ველის მწყერჩიტა	Anthus pratensis	IUCN_NT
3	Common swift	ნამგალა	Apus apus	IUCN_LC
4	Lesser Spotted Eagles	მცირე მყივანა არწივი	Aquila pomarina	IUCN_LC
5	Grey heron	რუხი ყანჩა	Ardea cinerea	IUCN_LC
6	Long-legged buzzard	ველის კაკაჩა	Buteo rufinus	IUCN_LC Red list_VU
7	Greater short-toed lark	მცირე ტოროლა	Calandrella brachydactyla	IUCN_LC
8	European roller	ყაპყაპი	Coracias garrulus	IUCN_LC
9	Little egret	პატარა თეთრი ყანჩა	Egretta garzetta	IUCN_LC
10	European honey buzzard	კრაზანაჭამია	Pernis apivorus	IUCN_LC
11	Green leaf warbler	მწვანე ყარანა	Phylloscopus nitidus	-
12	European turtle dove	ჩვ გვრიტი	Streptopelia turtur	IUCN_VU A2bcd+3bcd+4bcd ver 3.1
13	Eurasian skylark	მინდვრის ტოროლა	Alauda arvensis	IUCN_LC
14	Water pipit	მთის მწყერჩიტა	Anthus spinoletta	IUCN_LC
15	Alpine swift	მევირე	Apus melba	IUCN_LC
16	Common buzzard	ჩვეულებრივ კაკაჩა	Buteo buteo	IUCN_LC
17	Nightjar	უფეხურა	Caprimulgus europaeus	IUCN_LC
18	Common linnet	მეკანაფე	Carduelis cannabina	IUCN_LC
19	Common Rosefinch	ჩვეულებრივი კოჭობა	Carpodacus erythrinus	IUCN_LC
20	Common quail	მწყერი	Coturnix coturnix	IUCN_LC
21	Common cuckoo	გუგული	Cuculus canorus	IUCN_LC
22	Short-toed snake eagles	გველიჭამია	Cyrcaetus gallicus	-
23	Common house martin	ქალაქის მერცხალი	Delichon urbicum	IUCN_LC
24	Eurasian hobby	მარჯანი	Falco subbuteo	IUCN_LC
25	Common kestrel	ჩვეულებრივი კირკიტა	Falco tinnunculus	IUCN_LC
26	Red-breasted flycatcher	პატარა მემატლია	Ficedula parva	IUCN_LC
27	Griffon vulture	ორბი	Gyps fulvus	IUCN_LC
28	Barn swallow	სოფლის მერცხალი	Hirundo rustica	IUCN_LC
29	Red-backed shrike	ლაჟო	Lanius collurio	IUCN_LC
30	Armenian gulls	სომხური თოლია	Larus armenicus	IUCN_NT



31	European bee-eater	კვირიონი	Merops apiaster	IUCN_LC
32	Corn bunting	მეფეტვია	Miliaria calandra	IUCN_LC
33	Black kite	ბერა	Milvus migrans	IUCN_LC
34	Egyptian vulture	ფასკუნჯი	Neophron percnopterus	IUCN_EN Red list_VU
35	Wheatear	ჩვეულეზბრივი მელორდია	Oenanthe oenanthe	IUCN_LC
36	Eurasian golden oriole	მოლალური	Oriolus oriolus	IUCN_LC
37	Eurasian scops owl	წყრომი	Otus scops	IUCN_LC
38	Black redstart	შავი ბოლოცეცხლა	Phoenicurus ochrurus	IUCN_LC
39	Common redstart	ჩვ ბოლოცეცხლა	Phoenicurus phoenicurus	-
40	Common chiffchaff	ჭედია ყარანა	Phylloscopus collybita	IUCN_LC
41	Sand martin	მენაპირე მერცხალი	Riparia riparia	IUCN_LC
42	Whinchat	ველის ოვსადი	Saxicola rubetra	IUCN_LC
43	Common stonechat	შავთავა ოვსადი	Saxicola torquatus	IUCN_LC
44	Barred warbler	მიმინოსებრი ასპუჭაკა	Sylvia nisoria	IUCN_LC
45	Long-legged Buzzard	ველის კაკაჩა	Buteo rufinus	IUCN_LC

Note: LC - Least Concern; VU - Vulnerable; NT-Nearly Threatened; CR – Critical; EN-Endangered