

BIRD MONITORING REPORT – PARAVANI TRANSMISSION LINE

May 2015

The survey was carried out in May 7-9, 2015.

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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

Date:	Weather conditions:	Visibility:
May 7	Sunny, low nebulosity.	Good
May 8-9	Cloudy, rain	Moderate to bad

All sections where the landform and weather allowed were checked. The width of the studied strip was 50m on each side of the centerline. In the sections where the height difference between the towers is high (section between the towers 70- 75) the width of the control strip was increased from 50 to 100m. Particular attention was paid to the sections where potential risk to birds may exist – such as crossings (rivers, gorges) and ridges. In these sections increased duration on morning and evening observation over migrant species was set.

On May 7 the part of the line from Agara area. The section crossing Tsinubnistskali river gorge up to the hill on the right bank of the gorge was studied (Figure 1).



Figure 1. Tower – Tsinubnistskali River crossing



Figure 2. Section north-east to Sakuneti village

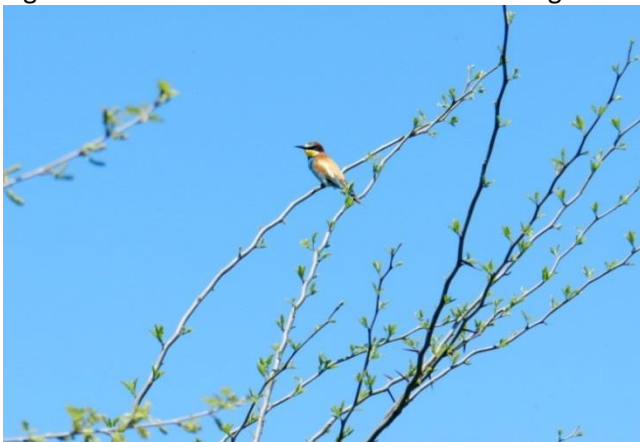


Figure 3. European bee-eater (*Merops apiaster*)

The same date the section from the crossing of Mtkvari river up to the hill north-east to village Sakuneti was surveyed.

The section of the line (towers 76 and 75) parallel to the 500kV line (Figure 2) was checked.

Migration was not intensive. Flocks of European bee-eater (*Merops apiaster*) flying at different heights were registered. Some birds were roosting in the bushes (Figure 3).

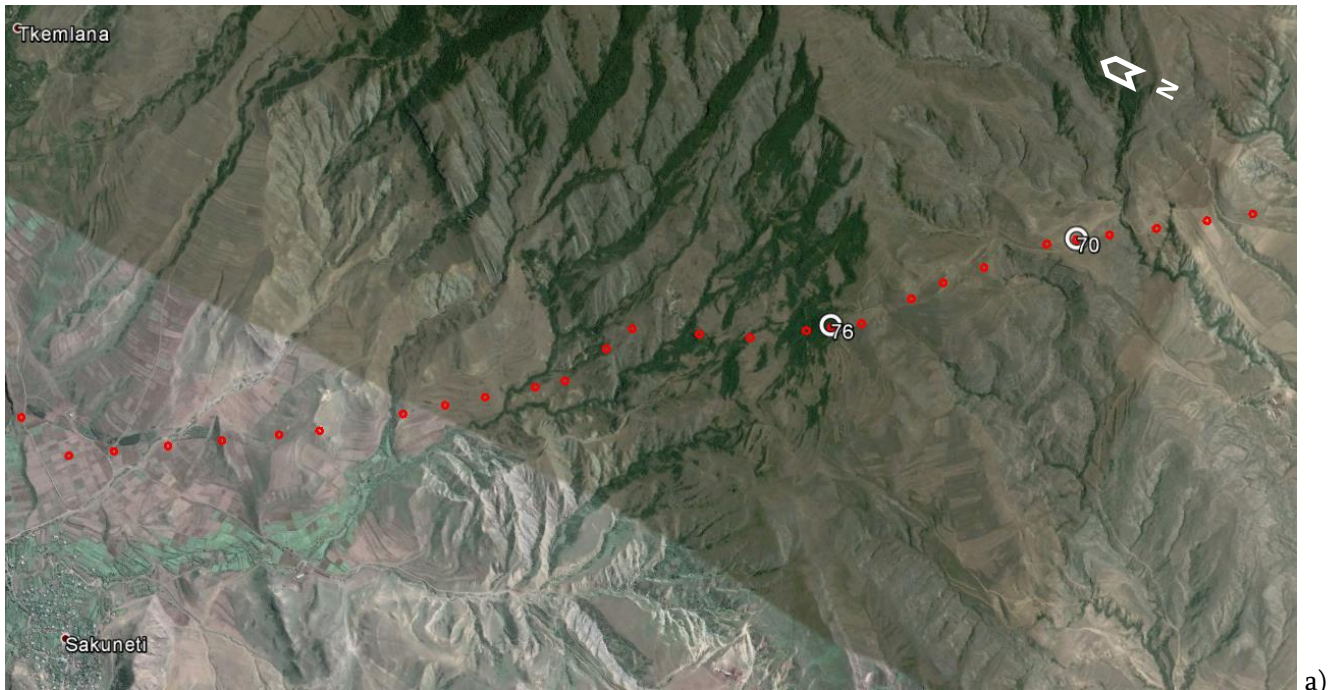


Figure 4. a) Section between the towers 70 and 76; b) section between towers 5 and 6, migration from Tsinda lake toward the HPP site

In the area (tower 75) Meadow pipit (*Anthus pratensis*) roosting on the line (Figure 5) and Booted eagle (*Aquila pennata*) flying over the line (Figure 6) were registered.

On May 8 and 9 migration was more active. Particularly many birds were registered in Paravani River crossing – towers 5 and 6, and adjacent area. Along with typical late migrant species such as European honey buzzard (*Pernis apivorus*), Eurasian hobby (*Falco subbuteo*), Golden oriole (*Oriolus oriolus*) and the species with lengthy period of migration – such as Black kite (*Milvus migrans*), European bee-eater (*Merops apiaster*) the species that are assumed to be early migrants and are not nesting in the OTL corridor - Wild duck (*Anas platyrhynchos*) were registered. (Figure 7). The flock was flying from Tsunda lake direction over the Paravani HPP site.



Figure 5. Meadow pipit (*Anthus pratensis*)



Figure 6. Booted eagle (*Aquila pennata*)



Figure 7. Wild ducks (*Anas platyrhynchos*)

It should be mentioned that majority of migrant birds are moving parallel to the line, along the plateau of the right bank of the Mtkvari river gorge. (along the right slope of the plateau). Migration between towers 6 and 26 is a good example of this fact (see Figures 8 and 9).

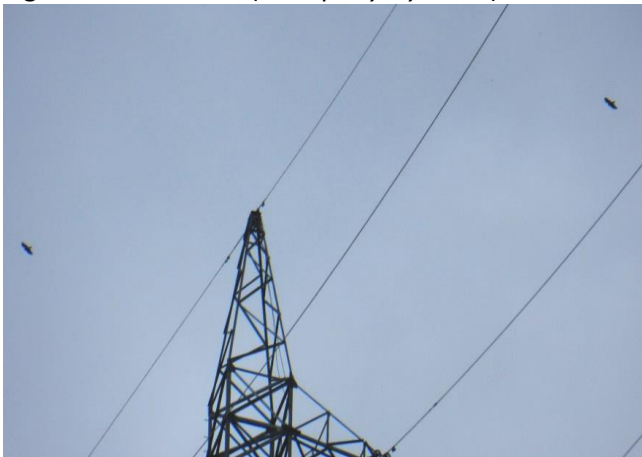


Figure 8. European honey buzzard (*Pernis apivorus*) above the tower 5

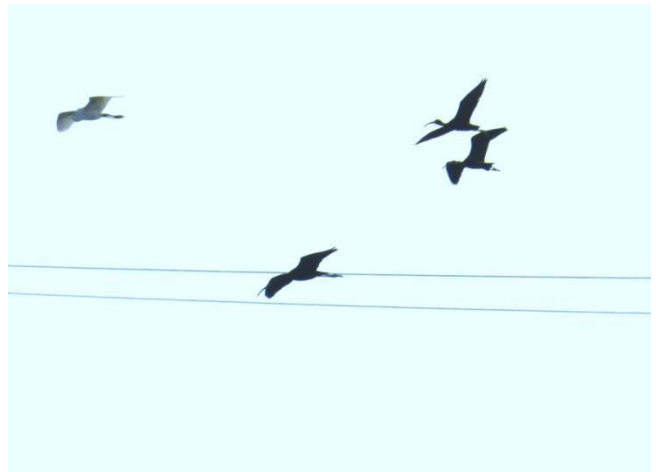


Figure 9. Little egret (*Egretta garzetta*) and Glossy ibis (*Plegadis falcinellus*) flying along the line



Figure 10. European bee-eater (*Pernis apivorus*) dominates among the late migrants



Figure 11. Towers 98-100 and bird migration direction toward Borjomi gorge

Migration along the Paravani River was not registered. The reason can be harsher climate of Javakheti plateau compared to that in the Mtkvari River gorge. In May temperature at Javakheti plain is lower, vegetation is less that creates a kind of ecological barrier to the presence of birds there.

On May 9 migration near village Agara was well expressed. The flocks were moving along the ridge on the left bank of the Mtkvari in direction of Borjomi gorge (towers 98-100). Similarly to that indicated above, European bee-eater (*Merops apiaster*) was dominating (Figure 10).

Within the observation period the species registered along the Paravani OTL included:

Common name	Latin name	Status	
		IUCN	Georgian Red List
Wild duck	<i>Anas platyrhynchos</i>	LC	
Little egretta	<i>Egretta garzetta</i>	LC	
black stork	<i>Ciconia nigra</i>	LC	
glossy ibis	<i>Plegadis falcinellus</i>	LC	
Egyptian vulture*	<i>Neophron percnopterus</i>	EN	VU
Booted eagle	<i>Aquila pennata</i>	LC	
Black kite	<i>Milvus migrans</i>	LC	
European honey buzzard	<i>Pernis apivorus</i>	LC	
Eurasian hobby	<i>Falco subbuteo</i>	LC	
common pratincole	<i>Glareola pratincola</i>	LC	
European turtle dove	<i>Streptopelia turtur</i>	LC	
Cuckoo	<i>Cuculus canoris</i>	LC	
European scops owl	<i>Otus scops</i>	LC	
European nightjar	<i>Caprimulgus europaeus</i>	LC	
Common swift	<i>Apus apus</i>	LC	
Alpine swift	<i>Apus melba</i>	LC	
European bee-eater	<i>Merops apiaster</i>	LC	
European roller	<i>Coracias garrulus</i>	NT	
Sand martin	<i>Riparia riparia</i>	LC	
Barn swallow	<i>Hirundo rustica</i>	LC	
Meadow pipit	<i>Anthus pratensis</i>	LC	
Whinchat	<i>Saxicola rubetra</i>	LC	
Barred warbler	<i>Sylvia nisoria</i>	LC	
Red-breasted flycatcher	<i>Ficedula parva</i>	LC	

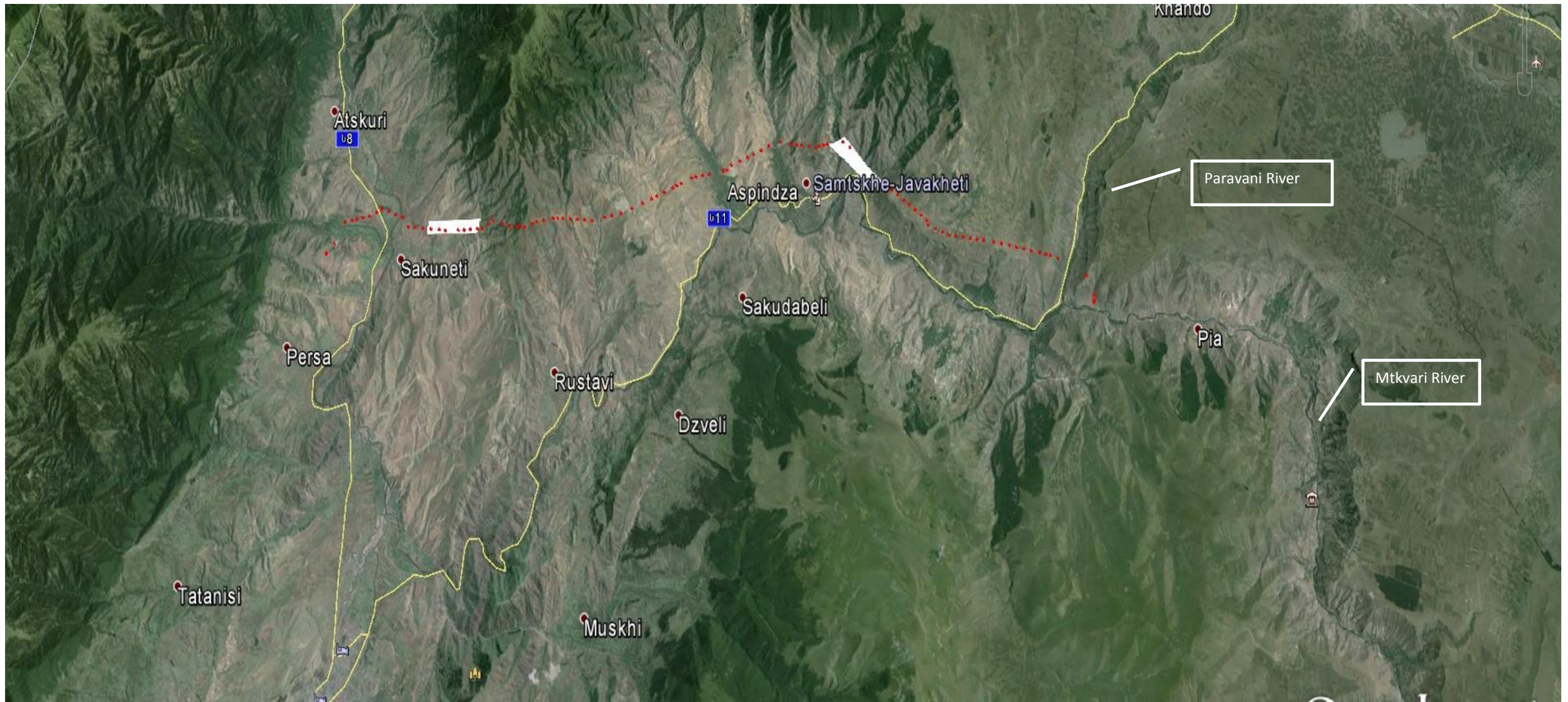
Red-backed shrike	<i>Lanius collurio</i>	LC	
Golden oriole	<i>Oriolus oriolus</i>	LC	
Common rosefinch	<i>Carpodacus erythrinus</i>	LC	

Note: * potentially local individuals nesting near vil.Atskuri;
LC – Least Concern; EN – Endangered; NT- Neatly Threatened


During the May survey the strip along the 79% of the line was controlled. As mentioned above some sections were not accessible because of steepness and weather conditions (see Annex 1).

No cases of bird collision or injury caused by the OTL were registered during the survey.

According to information obtained from the ornithologist (A.Abuladze) responsible for monitoring of the 500kV line, within the section of interest no accidents (injury, collision, electrocution) were registered there either.



Key

 Sections not visited because of poor accessibility and weather

Coordinates of the visited sites

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
15	347333	4613855	79
16	347418	4613475	78
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
53	355565	4604738	39
54	355675	4604457	38
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