

































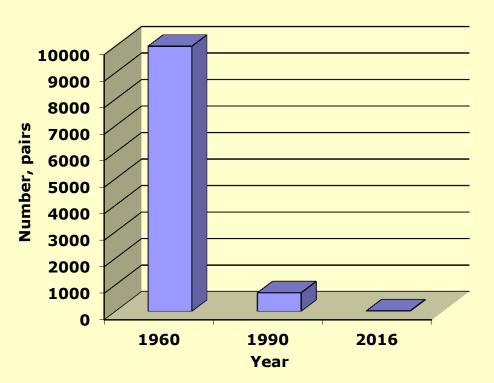


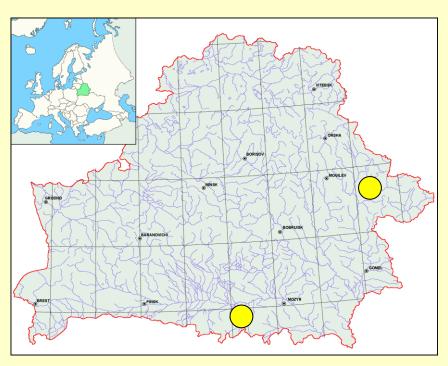






The Roller population in Belarus is estimated no more than 20 breeding pairs





Reduction of a population of European Roller more than in 200 times during last 40 years in Belarus

















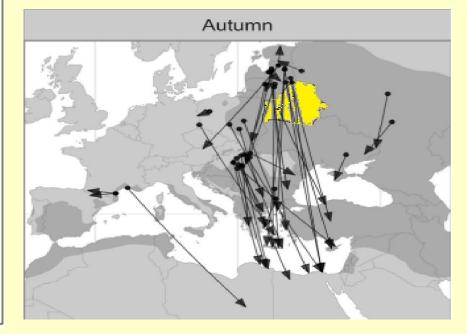




Range states	Breeding	Migration	Wintering
Albania	yes	No	no
Armenia	yes	No	no
Austria	yes	Yes	no
Azerbaijan	yes	No	no
Belarus	yes	-No Yes	no
Bosnia and Herzegovina	yes	No	no
Bulgaria	yes	Yes	no
Croatia	yes	No	no
Cyprus	yes	Yes	no
Czech Republic	extinct	No	no
Estonia	extinct	No	no
France	yes	Yes	no
Georgia	yes	No	no
Greece	yes	Yes	no
Hungary	yes	Yes	no
Italy	yes	No	no
Latvia	yes	Yes	no
Lithuania	yes	No	no
Macedonia, the former Yugoslav Republic of	yes	No	no
Montenegro	yes	No	no
Moldova	yes	Yes	no
Poland	yes	Yes	no
Portugal	yes	Yes	no
Romania	yes	Yes	no
Russia (European)	yes	No	no
Serbia	yes	Yes	no
Slovakia	yes	Yes	no
Slovenia	extinct	No	no
Spain	yes	Yes	no
Turkey	yes	Yes	no
Ukraine	ves	Yes	no

Table 1. European range states of the European Roller. Member states of the EU in bold (BirdLife International 2008).

The Roller not only breeding species in Belarus. Part of Latvians birds migrate across Belarus



T. Finch at all, 2016



SZALAKÓTA védelmi program www.rollerproject.eu













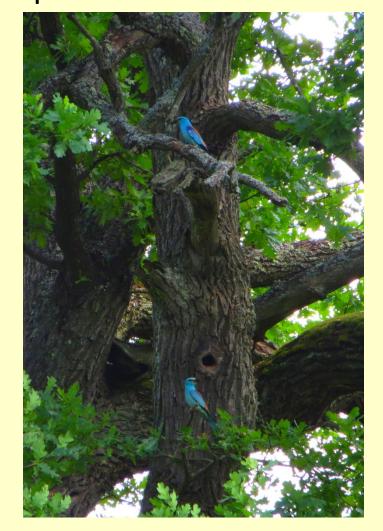






Country	Breeding pairs.	Quality	Year(s) of the latest estimate	Breeding Population trend in the last 15 years (= 3 generations)	Quality
Albania	10-50	М	2002	decline	Р
Armenia	300-650	M	2000-2002	stable	М
Austria	10-18	G	2001-2008	stable	G
Azerbaijan	1000-5000	Р	1996-2000	stable	Р
Belarus	(20-50) -10-20	M	2016	large decline	M
Bulgaria	2.5-5.5	M	1990-2005	small increase	М
Croatia	0-5	М	2002	large decline	Р
Cyprus	2000-4000	Р	1994-2000	small increase	Р
Czech Republic	0	G	2000	extinct	
Estonia	1-5	G	2003-2007	moderate decline	М
France	800-1000	М	2007	moderate increase	М
Georgia	present				
Greece	200-300	Р	1995-2000	small decline	Р
Hungary	1000	G	2007	stable	G
Italy	300-400	Р	2003	stable	Р
Latvia	20-30	G	2005	large decline	М
Lithuania	35-50	G	2007	large decline	G
Macedonia, the Former Republic of Yugoslav	300-1000	Р		moderate decline	Р
Moldova	50-80	М		large decline	Р
Poland	60-80	G	2007	moderate decline	М
Portugal	80-150	М	2001-2005	moderate decline	Р
Romania	4600-6500	Р	2002	small decline	Р
Russia (European)	6000-6500	Р	1990-2000	moderate decline	М
Serbia	70-120	M	2007-2008	small increase	М
Slovakia	1-20	Р	2008	large decline	Р
Slovenia	0	M	2008	possibly extinct	М
Spain	2000-6000	М	2006	moderate decline	Р
Turkey	30 000-60 000	Р	2001	moderate decline	Р
Ukraine	4000-5000	М	1990-2000	large decline	G
Total EU (27)	13,000 – 25,000			decline	
Total Europe	55,000 – 117,000			decline	

Only 10-20 breeding pairs in 2016























The main threats for Rollers in Belarus

High

- Decline of forage area because of intensification of agriculture
- Decline of nest places by felling of mature forest

Medium

Possible decline number of large insects by next reasons:

Clearing of felling areas, uprooting of tree stumps and burning of forest residues

Stabling cows (versus the grazing on the pasture)

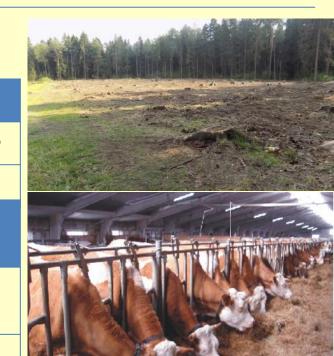
Wide pesticides use

Long term threats that have no solution yet

Decline of forage area of the Roller

Threats that started fairly recently

Critically low numbers Roller. Any mortality during migration and wintering could lead to the disappearance of the Roller from avifauna of Belarus.

























What has become better since 2008?



All known breeding territories of the Roller are protected at present.



Part of forestry enterprises are pass to FSC certification



Reducing lack of hollows and create nesting sites for Roller by installing nest-boxes.

























Our short-term task is to stop the reducing of number of Roller and save it in ornitophauna of Belarus.

What we do:

- Protecting of the Rollers breeding territory
- Constructed and installed 80 nest boxes for Roller
- The trees with Rollers nest hollows have been protected from Marten by plastic rings.

























• Piles of manure and sawdust were placement on nesting territories of Roller





Forage points on Roller nesting territory



Increasing of public awareness

















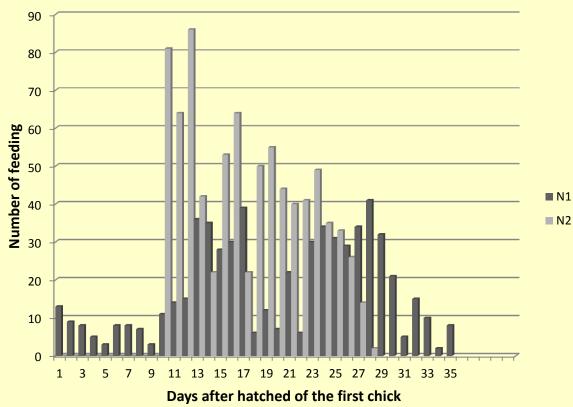






Activity of the Rollers near nests





The frequency of feeding chicks 2,1 - 3 times less than the data obtained in other parts of the species area.













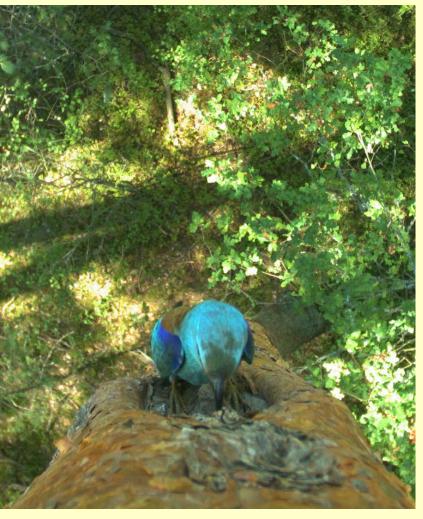


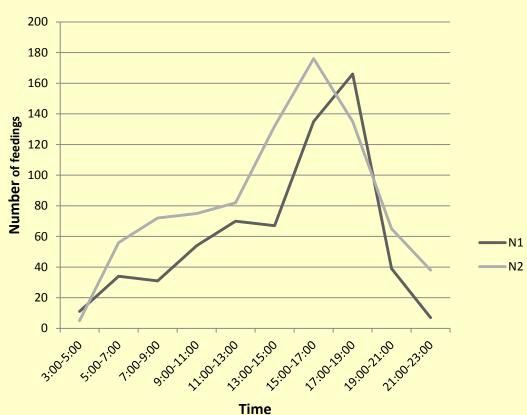






Dependence the frequency of feeding chicks from time of day





Rollers tend to be most active from 15 to 19 hours during the day.

Rufford















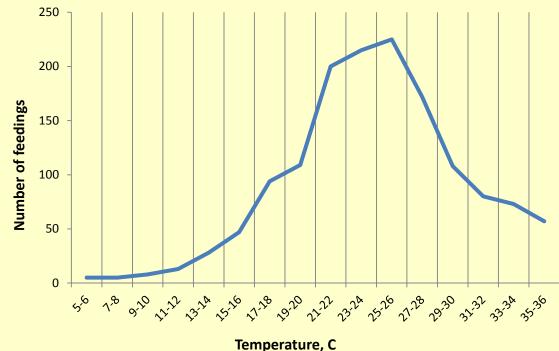






Dependence the frequency of feeding chicks from temperature





The maximum number of feedings of Rollers chicks was recorded when the temperature varied from 21 to 27 degrees Celsius.















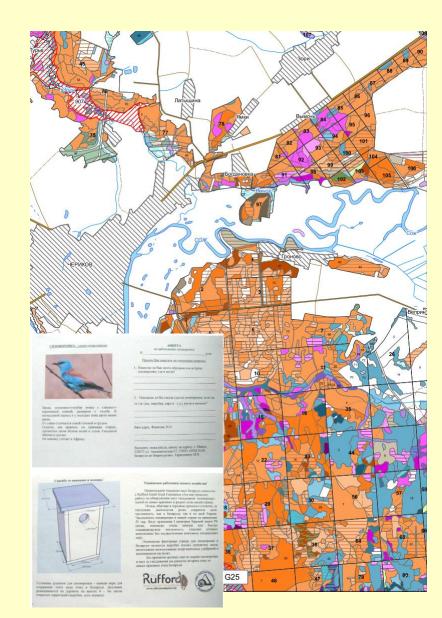






Our monitoring methods.

- We use digital recording of Roller voice for survey potential habitat of species and monitoring known nesting sites.
- Search all nests in habitats of the Roller
- Distribution of questionnaire forms to forest enterprises with question about meeting of the Roller during breeding season





shortage of nest sites.



















The goals and actions from the last ISAP (2008) that are now considered complete.

	are now considered complete.	
1.1.1	Develop national species action plans	
1.1.2	Legally protect under national legislation the priority areas	
1.1.3	Develop site management plans for Roller priority areas or include Roller conservation measures in existing ones	Recent Controls
1.2.1	Develop monitoring schemes and implement annual monitoring	Security addigations "Ricevoe"
1.2.2	Fill critical knowledge gaps	Полим действой по сеориенное радом и назадащиеся по рукой меситенноми выдо деясе внастных или депорастрици расствой
1.2.5	Design and promote best practice forestry measures	
1.2.6	Develop best practice guide for nest box placement	
1.3.1	Raise the awareness about the value and conservation status of the Roller	Сизоворонка Coracius garrulus
1.3.2	Ensure that state, regional and local nature conservation agencies are aware of Roller priority areas	
2.2.1	Ensure that old cavity trees are not cut by forestry operations.	
2.2.6	Install nest boxes including in areas with healthy populations but with likely	





















New objectives that should be incorporated in the new ISAP.

- Increasing the responsibility of forestry enterprises for the violation is part of the general measure of the Action plan
- Translocation of Roller

























