Project Update: January 2015

The first phase of feather collecting to determine the feasibility of using the method of ptilochronology in evaluating of the effectiveness of roller fledging was conducted during the breeding season in 2014. The essence of ptilochronology is a new method for determining the nutritional condition of birds free-ranging in their natural habitat.

Interesting results were obtained when comparing the feathers of chicks from two different broods. Three chicks hatched from eggs in the nest 4 N14Cg01. Abnormally rainy early summer affected the efficiency of feeding chicks. Elder and most active chick gets most of the feed, allowing him to fully develop. Study the feathers of the chick did not reveal any fault bars. This was confirmed by a full and adequate nutrition for this individual. Younger chick had a significant deficiency in food resources. His survival was made possible thanks to improved weather in the second half of July 2014 and efficiency of foraging by adult birds. His feathers are clearly expressed fault bars in the early stages of their growth in agreement nutritional deficiencies the chick in the first weeks after hatching.

Five eggs in a nest N14Cg03 were found, but only three chicks hatched out. The situation with feeding of chicks in this brood was even more critical than in the described above. One of the chicks died in the first days of life. Second chick's feathers had significant fault bars; despite the fact that he was the more developed of the remaining two chicks and got most of the food. This indicates a lack of nutrition of all the survivors of this brood of chicks.

These data indicate the need for additional research to study and find the possible increase of the limited food resources for Roller in Belarus, which are, as demonstrated above, an additional limiting factor for the successful conservation of the local Roller population.

Nest - N14Cg01

Nest - N14Cg01

Nest – N14Cg03