Meyburg, B.-U. & R. D. Chancellor eds. 1996 Eagle Studies World Working Group on Birds of Prey (WWGBP) Berlin, London & Paris

# The White-tailed Sea Eagle Haliaeetus albicilla in Kola Peninsula

## S. Ganusevich

Our study of the Sea Eagle population of Kola Peninsula was started in 1976, when the first two pairs were found. Since then we have every year monitored known territories and searched out new ones.

#### Study area

Aerial, boat and foot surveys of different parts of Kola showed a very local distribution of the main part of the population in the basin of the upper and middle courses of the River Ponoy. This area is the Ponoy depression, characterised by large bogs and many large and small lakes, rivers and hills with old pine forest. An abundance of food, suitable nesting habitats, and practically complete absence of human activities make optimum breeding conditions for the White-tailed Sea Eagle.

#### Status and structure of the population

The number of known nesting territories has increased from two in 1976 to 13 in 1990, due to more thorough inspection. All nesting territories are very old. During the period of our investigations the population was very stable, and there were practically no cases of unoccupied territories. The greater part of the Ponoy depression is used by territorial pairs. The majority of territories are clearly defined. The borders remain stable for years. The average distance between nests is 7.9 km (minimum 4.5 km.). The size of individual territories varies from 37 km<sup>2</sup> to 115 km<sup>2</sup> (on average 70 km<sup>2</sup>) because of different habitat conditions (Fig.1).

Different forms of territorial behaviour play the main role in the structure of the population. Observations of non-territorial adult birds are simpler. Immature birds make up 20-30% of the total population. Generally, non-territorial birds occupy habitats outside the nesting area, often move about and concentrate in places rich with food. But when there are feathered young in the nest already and the territorial aggression of adult birds decreases, immature birds can live quite near the nest. Sometimes this can happen earlier. The fact that new nesting territories do not appear speaks, perhaps, for the stability of the population structure and occupation of all suitable habitats.

#### **Breeding success**

Data for Sea Eagle productivity in Kola in the years 1976-1991 are shown in Table 1.

160	e.	11	6	9.2	0	1.11	77
0 19				2002		7 1.	5 0.
199	13	12	00 00	61.	11	1.3	0.8,
1989	12	10 12	×	66.7	11	1.37	0.92
1988	12	œ	œ	66.7	9 4 13 11 11 10	1.28 2.0 1.62 1.37 1.37	1.08
1987	11	Ś	7	18.2	4	2.0	0.36
1986	11	٢	7 2	63.6	6	1.28	0.82
1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 19891990 1991	5 7 8 7 9 11 10 11 11 11 12 12 13 13	6	9	37.5 85.7 33.3 36.4 50.0 54.5 63.6 18.2 66.7 66.7 61.5 69.2	٢	1.17	0.75 1.0 0.33 0.36 0.8 0.64 0.82 0.36 1.08 0.92 0.85 0.77
1984	10	Ś	4 5 6	50.0	œ	2.0 1.17 1.0 1.0 1.6	0.8
1983	11	S	4	36.4	6 6 7 3 4	1.0	0.36
1982	6	ŝ	ŝ	33.3	3	1.0	0.33
1981	٢	9		85.7	٢	1.17	1.0
1980	×	3 6	4 3 6	37.5	9	2.0	0.75
1979	٢	S	4				
1978	5	ŝ	1 3		3		
1977	4	-	1		-		
1976	7	7	7		7		
	1. No. of occupied Territories	2. No. of active nests	3. No of successful nests	4. % pairs producing fledged young (3:1)	5. No. of fledged young	<ol> <li>No. of fledged young/ successful nest</li> </ol>	7. No. of fledged young/ occupied territory

Table 1. Productivity of known White-tailed Sea Eagle territories in Kola, 1976-1991.

Figure 1. Distribution of the territories of different White-tailed Sea Eagle pairs in the Ponoy depression.



The results indicate the high productivity of the population in 1984-1991 (excluding 1987), when breeding success ranged from 50% to 69%. The decrease in 1987 to 18% was probably linked with the late spring. During 1976-1991 the percentage of eggs producing nestlings was 81% and the percentage of dead nestlings 7.9%, the average numbers of eggs per breeding pair being 1.48.

## Food

The spectrum of Sea Eagle food, obtained by analysis of the fullest collections of food remains from the nests and below them (No. of examples - 839) consists of: fish - 71.6% (*Leuciscus idus* - 49.1%, *Esox lucius* - 16.7%); birds - 20.3% (waterfowl - 11.4%); mammals - 4.9%; carrion - 3.2%.

*Leuciscus idus* is the main food of all Sea Eagle pairs. This species is the most numerous and survives well during freezing of the shallow lakes of the Ponoy depression. Due to this food supply the conditions of the population are very favourable and stable.

### The Sea Eagle Colour Ringing Programme

We have been taking part in colour ringing of Sea Eagle nestlings since 1988. So far we have ringed 40 birds. We now have information about six birds from Kola observed in Finland and Sweden during winter.

# CONCLUSION

In our study area human activity is very low and there are practically no negative factors affecting the Sea Eagle population such as loss of breeding habitat, persecution, human disturbance. So we can say that the population in Kola enjoys habitat conditions close to the natural, and gives us a rare opportunity to observe its pristine way of life. So long as the population maintains a high level of productivity we do not plan any management measures in this area.

S. Ganusevich Institute of Nature Conservation & Reserves (VNII Priroda) Moscow Russia