# The Status of the Greater Spotted Eagle Aquila clanga and Lesser Spotted Eagle A. pomarina in Estonia

## Veljo Volke

#### GREATER SPOTTED EAGLE

Up to the present the species has been included in the list of Estonian breeding birds. Due to complications in identification we revised all records of this species; generally there was not enough information for positive identification.

To date, the Estonian Rarities Committee has accepted only the following data (eight records):

## Shot or found:

00.00.1911	Essu	N-Estonia; ♀
10.07.1916		N-Estonia;
00.06.1926	Järvselja	SE-Estonia; ad
19.09.1949	Kodavere	SE-Estonia; ♀ juv
20.09.1949	Reku	SE-Estonia; & ad
17.08.1952	Ahja	SE-Estonia; ♀ imm
01.08.1953	Puhja	S-Estonia;

#### Observed:

19.08.1986. Pulgoja SW-Estonia; juv (Mati Kose)

Nesting in Estonia is not confirmed.

#### LESSER SPOTTED EAGLE

The first estimates of numbers were presented by Tiit Randla in 1976:

- -in Estonia a minimum of 50 breeding pairs in the beginning of the 1970s;
- -in Kôrvemaa (N-Estonia) in the 1950s ca. 20 pairs, in the 1960s-1970s a three to fourfold decline.

### Possible reasons for decline:

- the loss of many main feeding places (semi-natural pastures and grasslands); these areas decreased from 14,300 km<sup>2</sup> in 1950 to 4,270 km<sup>2</sup> in 1975, i.e. ca. 3.5-fold (Arold 1991); birds have had to use more cultivated areas for hunting where conditions for capturing prey are worse;
  - the use of pesticides on both wintering and breeding areas.

From 1978 to 1982 material was collected for the Estonian Breeding Bird Atlas (Renno, in press). The territory of Estonia was investigated according to 10x10km squares (N=516). The summarised data (allowing for complications in identification) for Greater and Lesser Spotted Eagles are:

Total		156	squares
possible	breeding i	n 70	squares
probable	breeding i	n 49	squares
confirmed	l breeding i	n 37	squares

Taking into consideration that in some cases the number of pairs per square is more than one (Table 1), the total number of breeding pairs in Estonia can be estimated at 150-200.

Data on the breeding density of Lesser Spotted Eagles were obtained in six plots, two of these with long-term monitoring (Fig. 1, Table 1).

This density varies annually: from 0-0.45 pairs per 100km<sup>2</sup> in Halinga; from 1-3 pairs per 100 km<sup>2</sup> in Laeva.

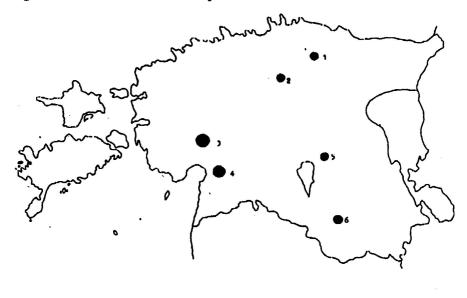
The breeding density varies geographically: in Southern Estonia it is higher than in Northern Estonia.

Breeding on the large islands of West Estonia is not confirmed.

Table 1. Number of breeding pairs of Lesser Spotted Eagles in well-studied plots.

Plot Region Neeruti N-Estonia		<i>Sq km</i> 100	78	79	08	81 8	82	83	Years 84 85	75 55 8	× ,	. ×	∞ , ∞	6 1	Years 78 79 80 81 82 83 84 85 86 87 88 89 90 91	Reference 
Central	Voose Central Estonia 100	100									-	-		-	-	1 1 1 1 the author (unpubl.data)
Halinga SW-Estonia		220			•	1		·			•	-	1	-	-	- 1 1 1 E. Lelov (1991, pers. comm.)
Paikuse SW-Estonia	onia	180													33	R. Endrekson (pers.comm.)
Laeva SE-Estonia	nia	100	8	æ	3	7	8	_	_		-	-	-			100 3 3 2 2 1 1 1 1 1 1 1 1 A. Lôhmus, R. Rander, E. Tammur (unpubl.data)
Antsla S-Estonia		100													7	Kim & Kristo Lauk, I. Tsheskidov (pers.comm.)

Figure 1. Location of well-studied plots.



## Breeding Success of Lesser Spotted Eagles in Estonia in 1991

Nests decorated or with eggs	29
No of successful nestings	12
Percentage of successful nestings	41.4
No. of fledged young	12
No. of fledged young per established nesting	0.41

## No. of fleaged young per established nesting 0.41

## **ACKNOWLEDGMENTS**

Many thanks are due to Raivo Endrekson, Kim & Kristo Lauk, Eedi Lelov, Reimo Rander, Asko Lôhmus, Einar Tammur, Igor Tsheskidov and Marek Vahula for providing unpublished data.

## REFERENCES

AROLD, I. 1991. Estonian Landscapes. Tartu (in Est.).

LELOV, E. 1991. Breeding raptors and owls in Halinga, SW Estonia, 1978-89. Orn. Fenn. 68.

RANDLA, T. 1976. Estonian Birds of Prey. Tallinn (in Est. with English summary).

RENNO, O. Estonian Breeding Bird Atlas (in press).

VAHULA, M. The bird fauna of the Necruti Landscape Reserve. Estonian Nature. 5. 1991. (in Est. with English summary).

Veljo Volke Vahtra Street 5 Kuressaare EE 3300 Estonia