Ebbinge, in litt.). Of these, the majority passes through western Estonia during the spring and autumn migrations. Brent Geese stopping to rest during the spring migration in Estonia have been studied since the 1950s. From 1974 onwards, spring counts by aircraft have revealed 70 rest localities.

The numbers of resting Brent Geese have increased during the study period: 18 000–25 000 in the 1970s 37 000 in the early 1980s, and even 41900 on 7 May 1986; at the same time 10 000–15 000 individuals were counted at the rest places on Gotland in the Swedish Baltic. The dynamics of the numbers of resting Brent Geese approximates that of the population at the wintering sites (Ebbinge in litt.).

Resting Brent Geese graze on saline and suprasaline coastal meadows, coastal pastures, cultivated meadows and fields. The geese prefer coastal meadows, where the food consists of the dominant vascular plants, with Festuca sp. and

Juncus gerardii as the preferred species.

Roosting takes place mainly outside the foraging grounds, particularly on small Baltic islands without foxes or human activities (or where no islands are available, in shallow coastal water). The Estonian rest areas are considered important for the geese, enabling them to build up fat reserves for flight to the breeding grounds, and for subsequent breeding. At present 15% of the birds rest within state reserves. An increase of reserve areas is called for.

The Brent Goose is known to have established a small isolated population on Gotland in Sweden in the early 1970s. Later, in 1981, the first Estonian breeding took place in the Matsalu reserve, followed in 1983 by birds on Saaremaa island. By 1986 the population had grown to 8–9 pairs with a total of ca. 60 offspring. During recent springs, offspring of the Gotland birds have been spotted in Estonia.

## Breeding success of the White-tailed Eagle Haliaeetus albicilla in Estonia

## Tiit Randla & Einar Tammur

The Estonian Society of Hunters, Kuristiku St. 7, SU-200010 Tallinn, Estonian SSR.

In a previous paper (Randla 1976, Ornis Fennica 53:125–127) the first author reported that the White-tailed Eagle has shown a decline in fertility in Estonia, and its numbers have been decreasing. In 1945–65 there were records of about 30 different localities where the species nested, and there were some additional, unconfirmed nesting places. In that period, at least 15, perhaps even 20 pairs were breeding each year.

A decline in numbers was observed after the mid-1960s. In the early 1970s the number of breeding pairs was 10–15, and the breeding success had declined. In 1970–76, 0–2 pairs bred successfully each year, and the number of fledged young was 0–2. No young were produced in 1971 or 1975.

In the 1980s the situation has improved (Table 1). In 1986 the number of hatched young was 12, but one chick (in a brood of two) succumbed before fledging. The slight increase in the number of

Table 1. Breeding success of the White-tailed Eagle in Estonia in 1980-86.

	1980	1981	1982	1983	1984	1985	1986
Occupied territories Active nests	?	?	14	13	15	15	17
(decorated or with eggs)	9	9	13	7	10	15	16
Successful nests	4	4	7	5	5	6	7
Fledged young	5	5	7	7	6	12	11
Fledged young/territory	?	?	0.50	0.54	0.40	0.80	0.65

occupied territories is probably mainly due to increased research in the field.

The present population is not evenly distributed in Estonia. Most pairs nest in Western Estonia, though the fewer pairs in southeastern Estonia (between Lake Vörts and Lake Peipus) produce an equal number of young (Table 2). The productivity in western Estonia has markedly improved compared with the 1970s, when the pairs nesting in western Estonia were least successful (Randla 1976).

In 1984 Estonia and Latvia joined the international programme for the protection of the White-tailed Eagle in NW Europe (including Greenland). According to J. Lipsberg (pers.comm.), two pairs out of three nested successfully in Latvia in 1985. Estonian and Latvian eaglets were marked with colour rings in 1984–86; a total of 34 young were ringed.

Table 2. Breeding success of the White-tailed Eagle in two areas in Estonia in 1985–86. In addition, there were two unsuccessful nests in NE Estonia each year.

	Western	Estonia	Southeastern Estonia		
	1985	1986	1985	1986	
Active nests	8	9	5	5	
Successful nests	3	4	3	3	
Fledged young Fledged young/	6	6	6	5	
active nest	0.8	0.7	1.2	1.0	