

Annual meeting report

Some results from long-term monitoring of wintering geese in Oostkustpolders, Flanders, Belgium

Since 1959/60, regular counts of wild geese in the wintering area near Damme have been carried out. Over the past 35 years, several interesting changes have occurred in the numbers and distribution of White-fronted and Pink-footed Geese, breeding in Russia and Svalbard respectively. The Oostkustpolders north of Bruges have developed into one of the southern-most wintering areas for both populations (Meire & Kuijken 1991).

Both species increased from annual maxima of ca.2,000 Whitefronts and ca.300 Pinkfeet between the early 1960s and the mid-1970s (Fig. 1). This may have been the result of several factors:

- The creation of a local shooting-free area for the geese near Damme (from 1960-1968 on a private basis, with official regulation during 1968-1980). Since winter 1980/81, there has been a complete ban on shooting geese in Belgium.
- The hard winter of 1962/63 when almost all the geese of both species in western Europe moved to France, many passing along the Belgian coastal areas with their suitable grassland feeding areas. This coincided with exceptional shooting bans during the cold spell in many countries.
- The loss of wintering grounds at Zeeuws-Vlaanderen (in the province of Zeeland in The Netherlands) due to recreation and agricultural changes.

Before the mid-1970s, most geese remained near Damme; subsequently, both species have occurred in greater numbers elsewhere in the polder region (see Figure 1). Both species increased in overall numbers in western Europe during the period 1960-1975 (50,000-130,000 Whitefronts and 9,000-19,000 Pinkfeet). The hard winter of 1978/79 (again associated with hard-weather shooting bans in several countries) also marked another change in distribution patterns and wintering numbers in Flanders (see Figure 1). Pinkfoot numbers in particular increased dramatically after that winter. As a result of the national goose hunting ban established in 1980/81, geese were able to occupy available feeding areas outside Damme, where formerly the establishment of wintering groups had been disrupted by shoot

ing, although exploratory forays by geese in irregular groups was already occurring in earlier years. It is difficult to assess the influence of the subsequent hard winters of the early 1980s on long term trends: peak numbers in

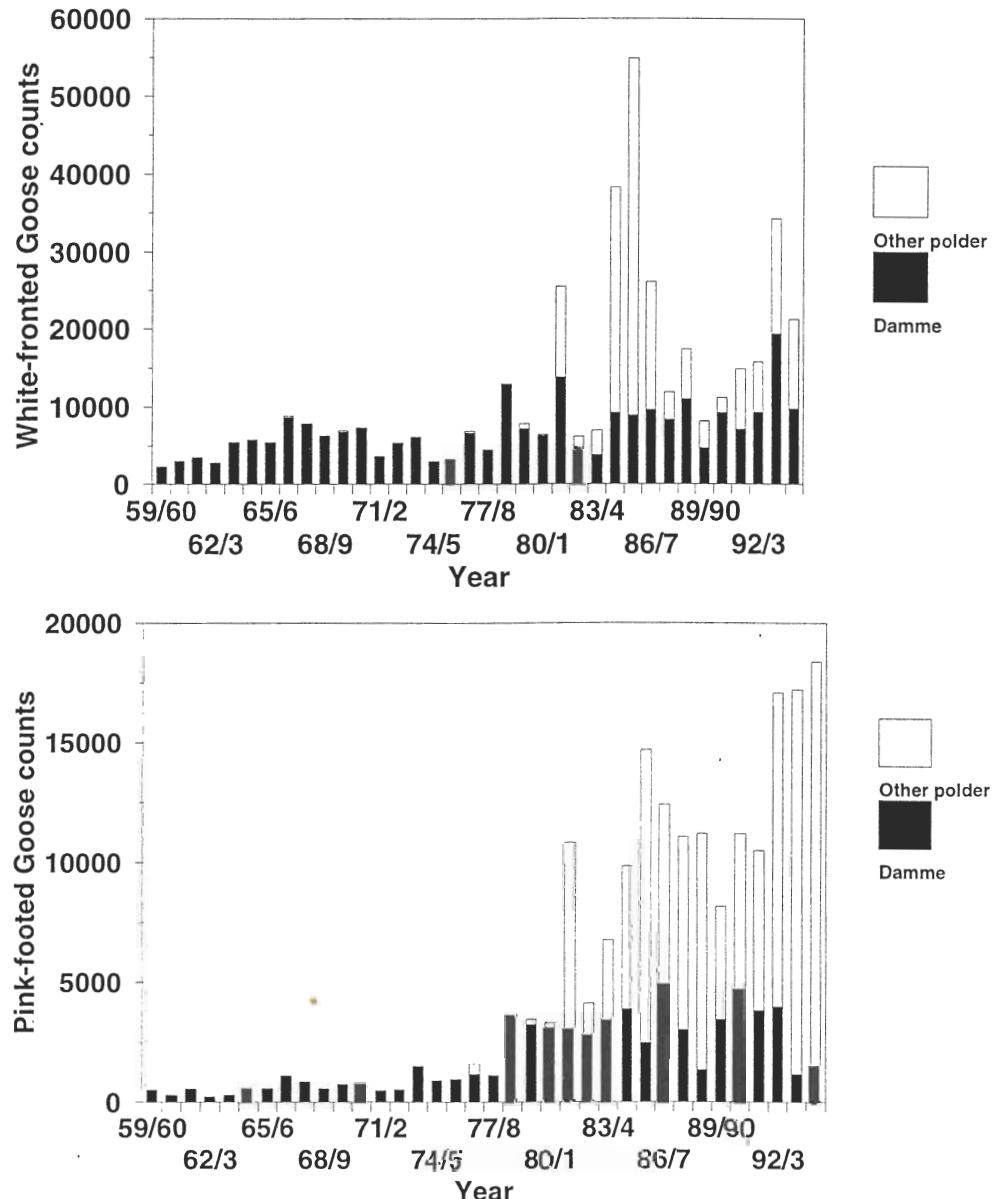


Figure 1. Changes in the numbers of White-fronted Geese (upper) and Pink-footed Geese (lower) wintering in the Damme and other Belgian polder areas, 1959/60 to 1994/95.

1985/86 exceeded 50,000 Whitefronts and 15,000 Pinkfeet. In the last three winters, maxima for both species have been 25,000 and 17,500 respectively.

Despite the sharp increase in numbers and the expansion of feeding grounds into other polder complexes, the number of goose-days spent in Damme has remained almost constant. This suggests that the carrying capacity has been reached and that this traditional haunt cannot sustain higher grazing pressure than is currently the case, not even with increasing numbers of wintering geese. Pinkfeet now arrive earlier and more or less avoid Damme, where Whitefronts predominate and peak in January.

The further increase in Pinkfoot numbers since 1981/82 to over 20,000 birds currently could be the combined effect of the shooting ban and the explorative discovery of the area during the cold winters described, but it has occurred during a period when the total Svalbard population has increased to 35,000 birds. The Oostkustpolders now support well over 50% of the population.

There remains no extensive evidence that all of these birds belong to the Svalbard population (no hunting means virtually no ringing recoveries!). Since a few small flocks of Pinkfeet have been seen flying in off the sea to arrive at the Belgian coast, it is important to present preliminary analyses of resighting data from Danish neck-collared birds in Flanders. Since 1990, J. Madsen (NERI, Denmark) has marked almost 500 geese during spring migration with individually coded blue neck-bands. Intensive efforts to resight

Table 1. Numbers of marked and resighted neck-ringed Pink-footed Geese seen in the Oostkustpolders, Flanders, Belgium, 1990/91-1994/95.

Danish ringing		Number of individuals recorded in Flanders						
Ringing period (number caught)		90/91	91/92	92/93	93/94	94/95	Cumula- tive 90-95	Cumula- tive %
Spring 1990	(98)	27	16	35	28	22	55	56.1
Spring 1991	(165)		50	56	53	66	112	67.9
Spring 1992	(153)			59	52	66	98	64.9
Spring 1993	(3)				1	2	2	52.9
Spring 1994	(99)					43	43	
Totals	518	(518)	27	66	150	134	199	310
								59.8

these birds on the Flemish wintering grounds have resulted in interesting results (Table 1).

If we ignore the biases involved in the methods and observations, and if we do not take into account annual mortality and disappearance of rings, a cumulative average of almost 60% of each of the ringed cohorts from 1990-1994 have been resighted in Flanders. Based on this, we might expect that more than 80% of the Svalbard birds spend at least one winter in Flanders. Up to 40% of birds were resighted there in their first winter after marking, confirming that the winter maxima in Flanders represents just over 50% of the continental Pinkfoot population based on field counts.

There have been occasional observations of neck-banded birds from the Greenlandic/Icelandic population of Pink-footed Geese from mainland Europe and vice versa (J. Madsen and C. Mitchell, pers. comm., and own data). However, the data summarised here suggest that the increase in the continental population does not seem to be the result of major shifts in wintering grounds of birds breeding in Iceland and Greenland (wintering in Britain), a population which now exceeds 200,000 birds. Even if the North Sea proved no impediment to full intermixing of Pink-footed Geese from both breeding areas, together totalling over 250,000 geese, the wintering areas of Flanders would still support about 7% of the world population - in excess of the Ramsar criterion of international importance.

Acknowledgements

The authors wish to thank Christine Verscheure for enthusiastic support and assistance with intensive fieldwork and for coordination of the neck-band record database; many thanks to Jesper Madsen for communication of unpublished information and stimulating discussions.

Eckhart Kuijken and Patrick Meire, Institute of Nature Conservation,
Kliniekstraat 25, B-1070 Brussels, Belgium