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Waterbirds around the world

A global overview of the conservation,
management and research of the
world's waterbird flyways

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Reintroduction of Lesser White-fronted Goose *Anser erythropus* in Swedish Lapland

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The Lesser White-fronted Goose *Anser erythropus* used to be a common breeding bird in the mountainous area of Swedish Lapland but by the late 1970s the Swedish, as well as the whole Fennoscandian, population had declined severely (Norderhaug & Norderhaug 1984, Lorentsen *et al.* 1999). Today, probably less than 5% of the original population remains in the region. The last known and fully verified breeding record of the original breeding population in Sweden is from 1989 (von Essen 1999), and in Finland breeding ceased during the 1990s, but a small population of about 30-45 pairs still breeds in Norway (Øien & Aarvak 2002). The main reasons for the decline are thought to have been hunting pressure and environmental changes in the southeastern wintering areas. In 1981 the Swedish Association for Hunting and Wildlife Management started to reintroduce the Lesser White-fronted Goose to a former breeding area in Swedish Lapland. The aim of this programme was to establish a new population which would migrate to safer and better wintering areas.

A captive stock of Lesser White-fronted Goose has been kept at Öster Malma Wildlife Management School in central Sweden where, just before fledging, young birds are reared and released in Swedish Lapland with Barnacle Geese *Branta leucopsis* as foster parents (von Essen 1996). The goslings are imprinted on the release area and are guided by their foster parents to winter quarters in The Netherlands. In spring, the immature Lesser

White-fronted Geese accompany the Barnacle Geese to central Sweden and then continue alone to the area in Lapland where they were released. All released goslings are individually ringed with leg rings and an observation network has been organized to study migration routes, return rate and breeding success.

During 1981 – 1999, a total of 301 goslings and 47 one-to-two year old geese were released in a well-known former breeding area in the mountainous area of Swedish Lapland. More than 47 breeding attempts have resulted in fledged young (Fig. 1). During the last five years at least 29 broods with a total of 83 immature birds have been recorded in early autumn. The size of the reintroduced population was estimated to be about 100 birds in autumn 2003.

The introduced Lesser White-fronted Geese use the area around Hudiksvall in central Sweden as a stopover site during both spring and autumn, with some geese also moulting there. The Hjälvstaviken Ramsar site, in central Sweden, is used by some geese especially during autumn, but few families show up there. There is no other known regularly used autumn stopover site between Hudiksvall and the North Sea coast of Germany and the Netherlands, indicating that at least some geese make this journey as a non-stop flight. The established geese stay in coastal areas in The Netherlands during winter, where in recent years 60-80 birds have been regularly reported.

Genetic investigations on Lesser White-fronted Geese have confirmed that some of the birds in the Öster Malma stock were contaminated with genes from White-fronted Goose *Anser albifrons* (Tegelström *et al.* 2001). Pending the outcome of genetic studies, the release of birds in Lapland has been temporarily stopped and captive birds found to carry genes from White-fronted Goose have been destroyed. Efforts are now being made to recreate a breeding stock in captivity founded on wild birds.

The project is run by the Swedish Association for Hunting and Wildlife Management in cooperation with the Swedish Environmental Protection Agency, WWF-Sweden and Sveriges Vildnad. It is also supported by The Swedish Wetland Fund, Alvin Fund and Göran Gustafsson Foundation.

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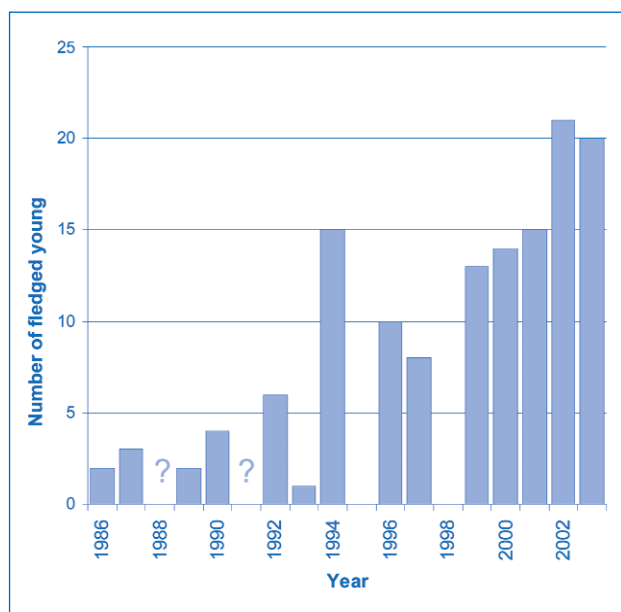


Fig. 1. Number of fledglings recorded from introduced geese or their descendants. In 1995, no breeding took place because of cold weather and in 1998 the ice broke up very late, causing high nest predation.

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A pair of Lesser White-fronted Geese *Anser erythropus* at Valdak Marshes, Northern Norway. Photo: Ingar Jostein Øien.