

THE MAMMAL FAUNA OF SWEDEN

LENNART HANSSON (*>>AND KARL FREDGA (**)

(*) *Department of Wildlife Ecology, Swedish University of Agricultural Sciences, P. O. Box 7002, S - 750 07 Uppsala, Sweden.*

(**) *Department of Genetics, Uppsala University, P. O. Box 7003, S - 750 07 Uppsala, Sweden.*

ABSTRACT – The Swedish mammal fauna consists of 68 species but contains no real endemics. Two species have gone extinct during the last 100 years or so. Nine species have been introduced, reintroduced or have invaded Sweden during historic time. There are three endangered, nine vulnerable, five rare and five indeterminate species in the Swedish mammal fauna.

Key words: Distribution, Mammals, Colonization, P, Sweden

TOTAL NUMBER AND ENDEMIC AND EXTINCT SPECIES

The total number of Swedish mammals consisted originally of 68 species, one of which is a cetacean (*Phocoena phocoena*), and two species have gone extinct (*Rattus rattus* and *Rangifer tarandus*). The Swedish mammal fauna has colonized the Scandinavian peninsula since the Pleistocene from both Southwest and Northeast. It is thus to a large extent less than 10,000 years old and may be considered fairly depauperate in comparison with east, central and south European faunas. The invasion of the Scandinavian peninsula by mammals has been a gradual process and new species are still arriving from the Northeast. In addition, there have been extensive and deliberate introductions, especially of game species.

There is no species endemic to Sweden only but *Lemmus lemmus* is endemic to the Scandinavian peninsula including the Kola subpeninsula.

The last breeding population of *R. rattus* was observed in central Sweden in 1951. It had been declining continuously since the nineteenth century but permanent populations were observed locally in southwest Sweden as late as in the 1940s.

R. tarandus ceased to exist as wild populations in Sweden around 1880. However, the reindeer remains as domestic stock. There are now feral reindeer in Sweden but they are legally still considered as domestic animals.

INTRODUCED, REINTRODUCED AND NATURALLY INVADING SPECIES

Lepus europaeus has been introduced as a game species in several places in southern Sweden, starting in 1858. It is now a well established species in the southern half of Sweden, an important game species but has declined during recent years.

Oryctolagus cuniculus was also introduced as a game species in several places at the turn of the nineteenth century, and its populations developed to pest numbers in at least two large areas in southern Sweden. Its numbers are now on a more

reasonable level since the myxomatosis epizootic in the 1960s.

Castor fiber went extinct in Sweden around 1875 due to over-hunting. It was reintroduced from southern Norway from 1922 onwards. The new population has expanded over most of northern Sweden and this species is now locally considered as a pest in forestry so hunting is permitted.

Ondatra zibethicus has invaded Sweden from the Northeast, from introductions of American animals into Finland and Russia. It arrived around 1950 and is now distributed over roughly the northern third of Sweden, particularly along the Baltic coast. It is locally common and sometimes hunted.

Micronys minutus was first discovered in Sweden in 1985 and has a limited distribution west of lake Vänern. It may recently have been introduced by man to some localities within the present distribution area, possibly from Denmark, but details are not known.

Nyctereutes procyonoides was observed in a few places in northern Sweden in the 1940s and later also in central Sweden. This species may have come from northern Finland or escaped from Swedish fur farms. However, the observations have remained few and there is no similarity in Sweden to the population explosion observed in Finland during recent decades.

Sus scrofa went extinct around 1700. It escaped from game parks in the 1940s but was then soon exterminated again. New escapees have, however, founded several vigorous populations in southern and eastern Sweden up to the Malar lake region in the 1980s and 1990s. The total wild population is now estimated at five to eight thousand animals. The wild boar is now considered an accepted member of the Swedish fauna and a future game species.

Cervus dama was introduced as a game animal in Sweden during medieval times. It is now distributed over most of southern Sweden with many local populations and is an appreciated game species.

Ovibos moschatus was successfully introduced into Norway around 1950. Five animals moved to west-central Sweden in 1971 and later reproduced there. There have been at least 29 musk oxen in one year in Sweden but they have recently declined in number. They also move between Sweden and Norway.

RED LIST SPECIES

A red list for all Swedish vertebrates has been compiled (in Swedish) by Ahlén and Tjernberg (1992). We here list the mammal species considered endangered, vulnerable and rare (where we add a shrew species) and comment on present population development. Ahlén and Tjernberg (1992) also have a category considered 'in need of care' and here reported as 'indeterminate'

Endangered:

Myotis bechsteinii - Probably 10-100 individuals in southernmost Sweden, declining on wintering localities.

Myotis dasycneme - Local observations in southern and central Sweden but only one breeding colony (some 60 bats) has been discovered.

Canis lupus - There is a maximum of 25 wolves in central Sweden, with some 1-3 females breeding per year.

Vulnerable:

Myotis nattereri - Total numbers supposed to be within 100-1000 individuals in southern Sweden.

Barbastella barbastellus - Probably 100-1000 individuals in southern Sweden.

Alopex lagopus - The Arctic fox is extremely variable in its numbers but has generally declined since the turn of the century. In low years probably only 50-100 individuals occur in northern Sweden.

Gulo gulo - The wolverine population is probably in decline with the total number estimated to 100-150 individuals, all in mountain areas of northern Sweden.

Lutra lutra - The otter has demonstrated a precipitous decline since the 1950s, the total number now being estimated at 500-1000 individuals. However, there may only be some 50 individuals in southern Sweden.

Lynx lynx - The lynx has declined during recent decades due to hunting and disease outbreaks. The total number may now only consist of some hundreds of individuals with hardly any breeding in the southern part of Sweden.

Phoca hispida (botnica) - Has declined strongly since the turn of the century, at least partly due to pollution of the Baltic with organochlorine substances, causing reproductive deficiencies. There may at present be some 5000 animals in the Swedish part of the Baltic.

Halichoerus grypus - Has declined since the early twentieth century due to hunting and pollution affecting reproduction. The population development is now variable in different coastal districts but total numbers in Swedish waters are estimated at 1700-2100 animals.

Phocoena phocoena - This Baltic cetacean has declined since the 1950s but there are no good estimates of present numbers. At least some five specimens are killed annually in fishing gear.

Rare:

Sorex isodon - Has been found in one limited area in central Sweden only (4 specimens).

Pipistrellus nathusii - 100-1000 individuals in southern and central Sweden.

Eptesicus serotinus - 100-1000 individuals in southernmost Sweden.

Micromys minutus - Locally distributed in south-west Sweden, possibly recently introduced by man.

Sicista betulina - Three distributional areas, in south, south-central and northern Sweden. Not observed every year in any of these locations.

Indeterminate:

Erinaceus europaeus

Nyctalus noctula

Muscardinus avellanarius

Ursus arctos

Phoca vitulina

REFERENCE

Ahlén, I. and Tjernberg, M., 1992. Artfakta. Sveriges hotade och sällsynta ryggradsdjur 1992. SLU Info/Försäljning, Uppsala, 346