Aythya marila

English name: Greater Scaup	Scientific name: Aythya marila	
Taxonomical group:	Species authority:	
Class: Aves	Linnaeus, 1761	
Order: Anseriformes		
Family: Anatidae		
Subspecies, Variations, Synonyms: –	Generation length: 5 years	
Past and current threats (Habitats Directive	Future threats (Habitats Directive article 17	
article 17 codes):	codes):	
Bycatch (F03.02.05), Alien species (I01),	Bycatch (F03.02.05), Alien species (I01),	
Competition and predation (IO2), Oil spills	Competition and predation (IO2), Oil spills	
(H03.01), Extra-regional threats (XO), Hunting	(H03.01), Extra-regional threats (XO), Hunting	
(F03.01)	(F03.01)	
IUCN Criteria:	HELCOM Red List	VU
A2bcd	Category:	Vulnerable
Global / European IUCN Red List Category	Annex I EU Birds Directive: no	
(BirdLife International 2004)	Annex II EU Birds Directive: II B (BE, DK, DE, EL, FR,	
LC / EN (A2b)	IE, LV, NL, RO, UK)	
Red List status in HELCOM countries:		
Denmark: NA, Estonia: CR, Finland: EN, Germany: R (Extremely rare), Latvia: –, Lithuania: –, Poland: –,		
Russia: –, Sweden: VU		

Range description and general trends

The greater scaup breeds at high latitudes across northern Eurasia and North America. The nominate subspecies occurs in western Eurasia where it breeds in Iceland, Scandinavia and northern Russia east to the Lena River, and along the Baltic coasts in Sweden, Finland, and Estonia. This European breeding population constitutes 25–49% of the global population.

The EU breeding population counts 1 400-2 400 pairs and is small compared to the European population (180 000–190 000 pairs). The European winter population amounts >120 000.

The breeding population in Europe and the EU underwent a large decline during 1970–2000. Between 1990 and 2000, the key winter populations in Europe underwent a very large decline (>50%), and the scaup is now evaluated as "endangered" (European Commission 2009).



Aythya marila. Photo by Christopher Plummer.



Distribution and status in the Baltic Sea region

The Swedish and Finnish breeding populations count about 1 400–2 400 bp, of which 650–700 are breeding in Baltic coastal areas and the remainder in mountain areas of north-western Sweden and in Finnish Lapland. The population has been declining since at least 1970.

Sweden hosts a population of 900–1 900 bp. The birds are mainly found in the north-west on mountain lakes surrounded by birch forest. About 200 pairs (Ottosson *et al.* 2012) breed along the coast of the Baltic Sea from Gotland northwards with a concentration at the Quark (county of Västerbotten; Haldin 1997, Tjernberg & Svensson 2007). The Swedish population has been declining strongly over the last 100 years, particularly in the southern part of its range (SOF 1990). In the Stockholm archipelago, a 50% reduction in breeding numbers was observed between 1937–38 and 1974–76. In 1974–76, the population counted still 100 bp, but now it is completely extinct (Eklund 2009). Tjernberg & Svensson (2007) estimate the recent decline of the Swedish population to at least 10% during the last 20 years.

In **Finland**, the greater scaup breeds mainly along the Baltic coast; the northernmost Lapland holds only about 50 pairs. The bulk of the population nests in a relatively small area immediately south of the Quark, Bothnian Bay, one of the few regions with densities comparable to the main breeding areas in the Russian tundra (Haldin 1997). The Finnish breeding population was still 900–1 100 bp during 1995–98, but was estimated at only 500 bp in 2009. The smaller local populations in the southern Bay of Bothnia have undergone large declines during the last ten years, and several were extinct by 2006 (Hario & Rintala 2007). Also the population in the Quark declined by 40% from the 1950s to the 1980s (Hildén *et al.* 1995), but during the 1990s it kept relatively constant. An up-to-date inventory in the Quark is urgently needed. In all, the recent decline of the Finnish population has been estimated at 47% in 10 years.

The **St. Petersburg Region of Russia** hosts a small population of 1–5 bp, whereas in the Kaliningrad region the greater scaup is not a breeding bird. The greater scaup has been a regular breeder since the 1950s in **Estonia** with a small population of some 50 pairs in the 1990s (Haldin 1997, Snow & Perrins 1998, BirdLife International 2006). This population declined strongly during the periods 1971–1991 and 1991–2008 (decline >50% in each period) to only 1–10 bp in 2003–2008 (Elts *et al.* 2009).

In Poland, the greater scaup is only an exceptional breeder (Tomiałojć & Stawarczyk 2003).

A small population has recently established in **Germany / Schleswig-Holstein**. The first breeding record dates to 1981 from the Hauke-Haien-Koog/North Sea. The first breeding at the Baltic Sea was recorded in 1990 (Oehe-Schleimünde). During the 1990s, the breeding pair number was about 5, of which the majority bred at the North Sea (Berndt *et al.* 2002). In more recent times, single pairs have been observed occasionally (Knief *et al.* 2010). In 2011, a female with pulli has been seen in the Plön lake area

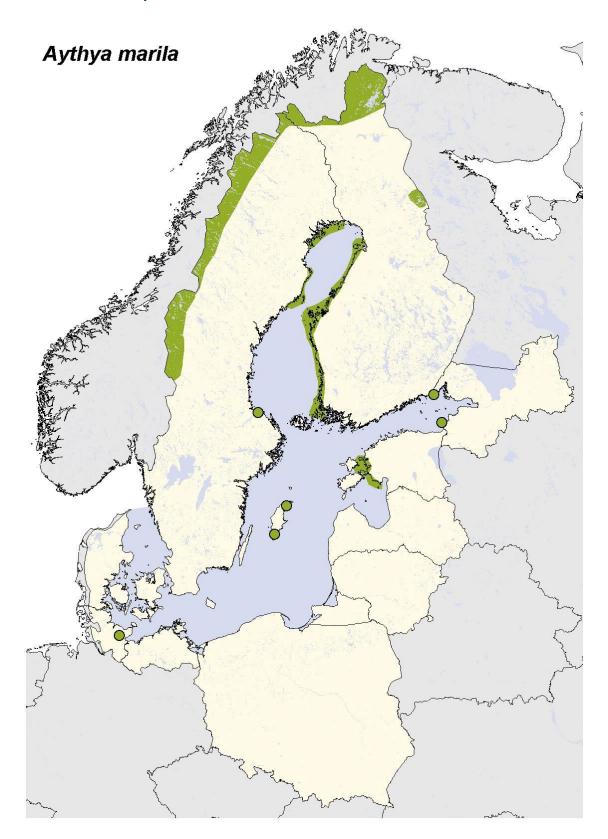
From Denmark, single broods have been reported starting from 1988 (Grell 1998).

Table 1: Population numbers of the greater scaup in the Baltic Sea area. For population trends 0=stable, -=decreasing, --=strongly decreasing.

Population size Short-term Long-term Country population trend population trend **Breeding pairs** year (10 years) (50 years) 900-1900 Sweden 2010 Finland 500 2009 ----Russia, PET 1-5 2009 0 0 Estonia 2003-2008 1-10 Poland Sporadic, single pairs End of the 1990s Germany, SH Sporadic, single pairs Since 1981 Denmark Sporadic, single pairs Since 1988 **Baltic Sea** 1 400-2 400



Distribution Map





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Habitat and Ecology

In Fennoscandia, greater scaups breed in two rather different habitats: on mountain lakes in the upland birch region (Haapanen & Nilsson 1979), and on small islands and skerries in the outer archipelago of the Baltic Sea. In Finland it almost exclusively breeds on small islands along the Baltic coast. The greater scaup is not colonial, but in dense breeding areas nests are sometimes within distances of c. 1 m (Snow & Perrins 1998).

Description of major threats

The reasons for the decline are not well known, but several possible factors have been identified. Drowning in fishing nets is a problem both in breeding and wintering areas. In the wintering areas, degradation of feeding opportunities through intensive shell fisheries, offshore sand and gravel extraction, and contamination in connection with oil pollution are believed to be important. The hunting take-off within the EU constitutes only 2% of the European wintering population (European Commission 2009). However, according to ring recoveries, hunting affects the tiny Baltic breeding population. A further cut of unknown magnitude may be the share of scaups bagged as Tufted Ducks in countries with no open season for the species. Fledgling production is currently low, leading to insufficient recruitment rates. In Finland, especially the predation on ducklings by large gulls has been identified as a major problem.

Assessment justification

Since the data for the population development in Sweden are of rather low quality, the Red List assessment of the greater scaup in the Baltic Sea area includes a certain level of uncertainty. However, it is likely that the population size reduction exceeds 30% over the last 15 years. The factors responsible for the negative trend have not ceased. It is expected that the number of reproductive individuals remains low and the greater scaup is assessed as Vulnerable (VU) according to criterion A2bcd.

If only the breeding population of the Baltic coastal areas is considered, the species fulfils the criteria for Endangered (EN) according to criteria A2bcd; C1.

Recommendations for actions to conserve the species

Studies of the Baltic Sea breeding grounds should be intensified in order to reveal the current per capita fledging rate. Control programmes on predatory mammals are needed to secure breeding success. Hunting is likely to affect the population. Hence, the species should be deleted from annex II of the Bird's Directive. It also should be banned in Russia. By-catches in gillnet fisheries are high in both wintering and staging areas along the migration routes. Beside other mitigation measures, a seasonal ban of gillnet fisheries in the most important staging and wintering areas should be taken into consideration. The conservation strategies should also focus on actions to minimise the effects of oil and gas exploration and extraction of sand and gravel and to reduce the shellfish fisheries in the Wadden Sea.

Common names

Denmark: Taffeland, Estonia: Merivart, Finland: lapasotka, Germany: Bergente, Latvia: Ķerra, Lithuania: Baltakaktė antis, Žiloji antis, Poland: Ogorzałka, Russia: Морская чернеть, Sweden: Bergand



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