

Ian Burfield, BirdLife International,

Dear Ian,

Here are comments for the 2012 IUCN Red List update proposal from the Finnish expert group on birds, which did the evaluation for the last national Red List (2010). Our comments concern four duck species: the Scaup *Aythya marila*, Long-tailed duck *Clangula hyemalis*, Velvet scoter *Melanitta fusca* and Common scoter *Melanitta nigra*. We have used Finnish breeding censuses (nest counts and breeding atlas) and migration counts as sources of conclusions. We must point out that the migration count analyses are quite harsh, since there was not enough time for detailed analyses. Nevertheless, we believe that the trends that they show indicate real changes in the population sizes, but we should not put too much weight on the exact magnitude of change especially in the uncommon Scaup and Velvet scoter.

Best wishes,

Antti Below, Finnish Forest and Park Service, Metsähallitus

Martti Hario, Finnish Game and Fisheries Institute

Aleksi Lehikoinen, Finnish Museum of Natural History

Esa Lehikoinen, University of Turku

Markku Mikkola-Roos, Finnish Environment Institute

Jorma Pessa, Centre for Economic Development, Transport and the Environment, Oulu

Ari Rajasärkkä, Finnish Forest and Park Service, Metsähallitus

Teemu Lehtiniemi, BirdLife Finland

Juha Tiainen, Finnish Game and Fisheries Institute

Jari Valkama, Finnish Museum of Natural History

***Aythya marila* (IUCN recommendation NT/VU)**

The Finnish breeding population has been declining since the early 1970s, with an accelerating rate of -47 % in ten years: from 950 pairs in 1998–2002 to 500 pairs in 2006–2009. Also the distribution in 10 x 10 km grids has declined between the latest and the previous atlases, from 301 grids in the 1970s–1980s to 140 grids in the 2000s. This reduction applies both to the coastal and the Lappish populations. The breeding population in the Finnish coastal areas has been declining since the 1970s (Väisänen et al. 1998).

Migration numbers in the eastern Gulf of Finland (Vyborg) have been rather stable during last two decades. Finnish ornithologists have annually monitored migration in Vyborg during spring migration in 1988–2008 (between 5 May and 1 June, altogether 2486 hours; Jari Kontiokorpi, unpublished). In 1988–1994 the density was 14 individuals/observation hour (n = 762 hours), in 1995–1999 density was 11 ind./hour (n = 1061 hours), and in 2000–2008 density was 11 ind./hour (n = 628 hours, total n = 30 000 birds).

There are also small spring migration data from the northern part of the Gulf of Finland, Söderskär station (for a description of the site, see Hario et al. 2009, Scaup numbers are unpublished) during years 1984–2010, where a few hundreds of birds are seen annually (total n = 6500). The main migration route is situated along the southern part of the Gulf of Finland and thus Söderskär is not on the main migration line. Nevertheless, migration numbers in this spot show a declining trend since mid-1980s (Fig. 1).

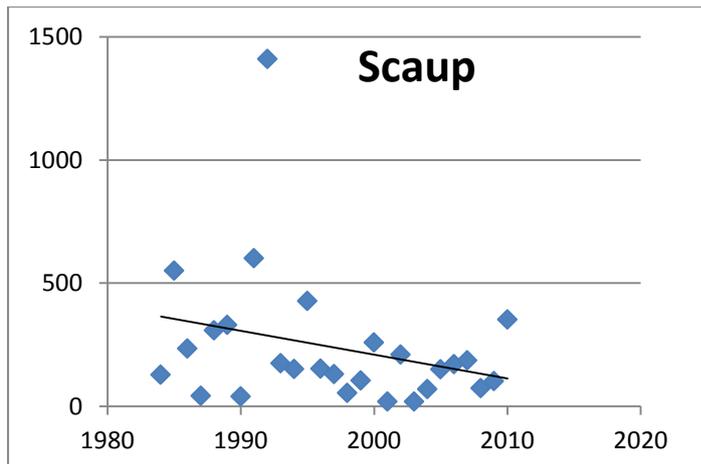


Fig. 1. Spring migration numbers of the Scaup in Söderskär. There is a lot annual fluctuation especially due to wind conditions during the migration season (southern winds push more birds to Söderskär and northern winds decrease the numbers).

Although the breeding population in Finland is small, these rapid changes in distribution and numbers along with the apparent decrease during the migration *support the assessment of unfavourable conservation status* of the species.

References:

Hario, M., Rintala, J. & Nordenswan, G. 2009: Dynamics of wintering long-tailed ducks in the Baltic Sea – the connection with lemming cycles, oil disasters, and hunting. Suomen Riista 55:83–96. (In Finnish with English summary).

Väisänen, R.A., Lammi, E., Koskimies, P. 1998: Distribution, numbers and population changes of Finnish breeding birds. Otava, Keuruu. In Finnish with English summary.

Valkama, J., Vepsäläinen, V. & Lehikoinen, A. 2011: The Third Finnish Breeding Bird Atlas. – Finnish Museum of Natural History and Ministry of Environment.
<http://atlas3.lintuatlas.fi/results/species/scaup>

Clangula hyemalis (IUCN recommendation EN)

The Finnish breeding population is small (1500-2000 pairs in northernmost Lapland) and poorly monitored. Despite the small reduction amount of occupied grids between the 1970s–1980s’ and the 2000s’ atlases (197 and 147 grids, respectively) the Finnish breeding population was classified as LC in 2010.

However, migration numbers along the main migration flyway in the Gulf of Finland have dropped dramatically. Migration numbers from the Söderskär station were already published

(Hario et al. 2009), and they show an initial increase from the 1970s till the early 1990s, and a rapid collapse in numbers after that.

Migrant numbers in the eastern Gulf of Finland (Vyborg) dropped about 57 % during last two decades. Finnish ornithologists have annually monitored migration in Vyborg during spring migration in 1988–2008 (between 5 May and 1 June, altogether 2486 hours; Jari Kontiokorpi, unpublished). In 1988–1994 the density was 2051 individuals/observation hour (n = 762 hours), in 1995–1999 1308 ind./hour (n = 1061 hours), and in 2000–2008 888 ind./hour (n = 628 hours, total n = 3 500 000 birds).

In the western Gulf of Finland, the Hanko Bird Observatory, migration numbers of both spring and autumn have been counted since 1979 using standardized observation methods (e.g. Vähätalo et al. 2004, *Journal of Avian Biology*). The mean densities during spring in Hanko in five years periods are showed below (main spring migration season 29.2.–20.5.)

1979-1985 96 ind./observation day (n = 334 days)
1986-1990 150 ind./obs. day (n = 162 days)
1991-1995 190 ind./obs. day (n = 217 days)
1996-2000 158 ind./obs. day (n = 357 days)
2001-2005 46 ind./obs. day (n = 415 days)
2006-2010 18 ind./obs. day (n = 416 days)

The mean densities during autumn in Hanko in five years periods are showed below (main autumn migration season 29.9.–20.11.).

1979-1985 804 ind./observation day (n = 284 days)
1986-1990 700 ind./obs. day (n = 217 days)
1991-1995 509 ind./obs. day (n = 245 days)
1996-2000 580 ind./obs. day (n = 263 days)
2001-2005 152 ind./obs. day (n = 265 days)
2006-2010 431 ind./obs. day (n = 265 days)

All three Finnish-Russian migration data sets from the Gulf of Finland *support* the recent rapid decline and recommended *EN classification*.

Hario, M., Rintala, J. & Nordenswan, G. 2009: Dynamics of wintering long-tailed ducks in the Baltic Sea – the connection with lemming cycles, oil disasters, and hunting. *Suomen Riista* 55:83–96. (In Finnish with English summary).

Vähätalo, A.V., Rainio, K., Lehtikoinen, A., Lehtikoinen, E. 2004: Spring arrival of birds depends on the North Atlantic Oscillation. *J Avian Biol* 35:210–216

Valkama, J., Vepsäläinen, V. & Lehtikoinen, A. 2011: The Third Finnish Breeding Bird Atlas. – Finnish Museum of Natural History and Ministry of Environment.

<http://atlas3.lintuatlas.fi/results/species/long-tailed%20duck>

Melanitta fusca (IUCN recommendation EN)

The Finnish breeding population along the Baltic coast about halved during 1986–2010 (annual population growth rate 0.96, Hario & Rintala 2011). The total estimated population size in the coastal areas in 2010 was 5200 pairs. There is also a small breeding population (less than 1000 pairs) in northern Finland, but it has not been monitored as well as the coastal one. However, both areas show a decrease in distribution between the 1970s–1980s' and the 2000s' atlases (572 and 471 grids, respectively).

The migration numbers along the migration flyway of the Gulf of Finland have dropped. Migration in the eastern Gulf of Finland (Vyborg) has been declining by about 65% during the last two decades, i.e. from a mean of 130 individuals/observation hour in 1988–1994 (n = 762 hours) to 53 ind./hour in 2000–2008 (n = 628 hours) (total n = 190 000 birds).

The smaller data sets comes from the Söderskär station (site description see Hario et al. 2009, numbers unpublished), which is situated north from the main migration route of Velvet scoters. Nevertheless, numbers have been decreasing since 1980s (Fig. 2).

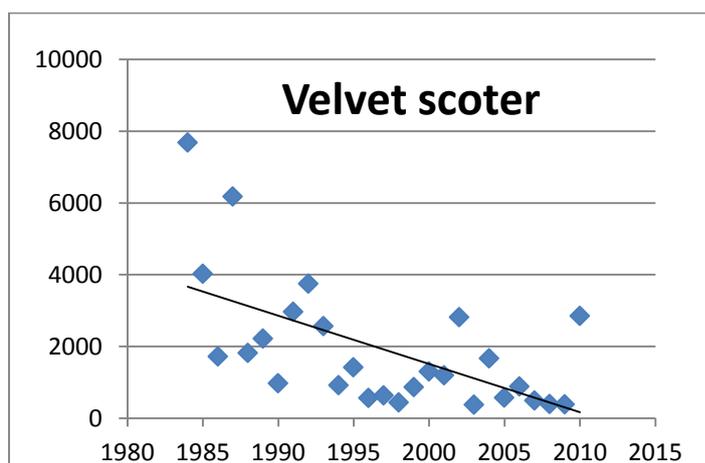


Fig. 2. Spring migration numbers of the Velvet scoter in Söderskär. Like in Scaup the weather conditions affect migration numbers and thus may cause large annual fluctuation.

Both the Finnish breeding data and the Finnish–Russian migration data *support* the declining population trend and *unfavourable population status*.

References:

Hario, M. & Rintala, J. 2011: Population trends of the archipelago birds along the Finnish coasts during 1986-2010. *Linnut-vuosikirja* 2010: 40-51.

Valkama, J., Vepsäläinen, V. & Lehikoinen, A. 2011: The Third Finnish Breeding Bird Atlas. – Finnish Museum of Natural History and Ministry of Environment.

<http://atlas3.lintuatlas.fi/results/species/velvet%20scoter>

Melanitta nigra (IUCN recommendation VU)

The minor Finnish breeding population (1000–2000 pairs in the north) has been stable and possibly slightly expanding. The amount of grid cells was 261 in the atlases of 1970-80s and 330 cells in the latest atlas of 2000s.

Migration numbers in Söderskär, northern part of the Gulf of Finland, increased from the 1970s till to the 1990s and were stable since then (see Hario et al. 2009). Like for the Long-tailed ducks, the Söderskär station is situated in the centre of the flyway, and the annual migration numbers have been around 350 000 birds/year in 2000s.

Migration numbers in the eastern Gulf of Finland (Vyborg) have also been stable during last two decades. Finnish ornithologists have annually monitored migration in Vyborg during the spring migration in 1988–2008 (between 5 May and 1 June, altogether 2486 hours; Jari Kontiokorpi, unpublished). In 1988–1994 the density was 1583 individuals/observation hour (n = 762 hours), in 1995–1999 1457 ind./hour (n = 1061 hours), and in 2000–2008 was 1486 ind./hour (n = 628 hours, total n = 3 700 000 birds).

Neither the Finnish nor the Russian data support a decline either in the breeding areas or along the migration flyway and *these data are thus in contrast with the recommended Vulnerable classification.*

References:

- Hario, M., Rintala, J. & Nordenswan, G. 2009: Dynamics of wintering long-tailed ducks in the Baltic Sea – the connection with lemming cycles, oil disasters, and hunting. Suomen Riista 55:83-96. (In Finnish with English summary).
- Valkama, J., Vepsäläinen, V. & Lehtikoinen, A. 2011: The Third Finnish Breeding Bird Atlas. – Finnish Museum of Natural History and Ministry of Environment.
<http://atlas3.lintuatlas.fi/results/species/common%20scoter>