SPECIES INFORMATION SHEET — *Melanitta nigra* (wintering)

English name: **Common scoter**	Scientific name: ***Melanitta nigra* (wintering population)**	
Taxonomical group: Class: Aves Order: Anseriformes Family: Anatidae	Species authority: Linnaeus, 1758	
Subspecies, Variations, Synonyms: –	Generation length: 7 years	
Past and current threats (Habitats Directive article 17 codes): Breeding: Competition and predation (K03.04) Wintering: Oil spills (H03.01), Bycatch (F03.02.05), Hunting (F03.01), Extra-regional threats (overfishing of bivalves in North Sea, XO), Mining and quarrying (C01.01), Construction (C03.03, D03.03), Water traffic (D03.02)	Future threats (Habitats Directive article 17 codes): Breeding: Competition and predation (K03.04) Wintering: Oil spills (H03.01), Bycatch (F03.02.05), Hunting (F03.01), Extra-regional threats (overfishing of bivalves in North Sea, XO), Mining and quarrying (C01.01), Construction (C03.03, D03.03), Water traffic (D03.02)	
IUCN Criteria: **A2b**	**HELCOM Red List Category:**	**EN Endangered**
Global / European IUCN Red List Category LC / LC	EU Birds Directive: Annex II B (DK, DE, EE, FR, IE, LV, FI, SE, UK), Annex III B	
Protection and Red List status in HELCOM countries: *Hunting not allowed in all EU Member States (Annex II B).* Denmark: – (on the 1997 Danish Amber List as a species of national responsibility outside the breeding season), Estonia: NA, Finland: LC (listed as "Threatened Species" in the Nature Conservation Decree Annex 4), Germany: "particularly protected" under Federal Species Protection Decree (Bundesartenschutzverordnung)/–, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: LC (breeding)		

Range description and general trends

The common scoter breeds from Iceland and the UK / Ireland through northern Eurasia to East Siberia. The species was recently split from *Melanitta americana*, which breeds further eastward and in North America (Bauer et al. 2005). The breeding population in Europe is estimated at 100 000 to 130 000 pairs, with highest numbers in Russia, Norway, Sweden and Finland (BirdLife International 2004). Since the 1960s, the overall population in Europe has been largely stable, but the species has suffered from minor regional losses along the southern edge of its distribution. Numbers breeding in Finland appear to have been stable or increasing slightly since the 1990s, and the same trend was observed in Sweden since the 1970s. The most important wintering areas are situated in the Baltic Sea, the Wadden Sea and along the Atlantic coast from Norway down to North Africa (Mendel et al. 2008).

Distribution and status in the Baltic Sea region

Common scoters are regular and common winter and migration visitors in the Baltic Sea from October to May. Besides, the Pomeranian Bight and the Kattegat are important moulting areas from June to September. Thus, common scoters can be found in the Baltic Sea year-round (Sonntag et al. 2006, Mendel et al. 2008). The most important wintering area is the north-western part of the Kattegat, which comprises the largest number of common scoters in Europe. Other important areas are the Pomeranian Bay, Kiel Bay and the northwestern Gulf of Riga, but the species also occurs along the entire mainland coast (Fig. 2). The results of the Baltic coordinated survey in 2007 to 2009 indicate that the winter population of common scoters has declined markedly from 783 310 birds in 1988–1993 to 412 000 birds in 2007–2009, equivalent to 47% over 16 years. A slight relocation of wintering birds to the north was

observed between the two surveys. While numbers decreased in the Kattegat, Kiel Bay and the Pomeranian Bay, numbers increased in the Gulf of Gdansk, in parts of Sweden, along the mainland coasts of Latvia and Lithuania and in the Gulf of Riga (Skov et al. 2011).

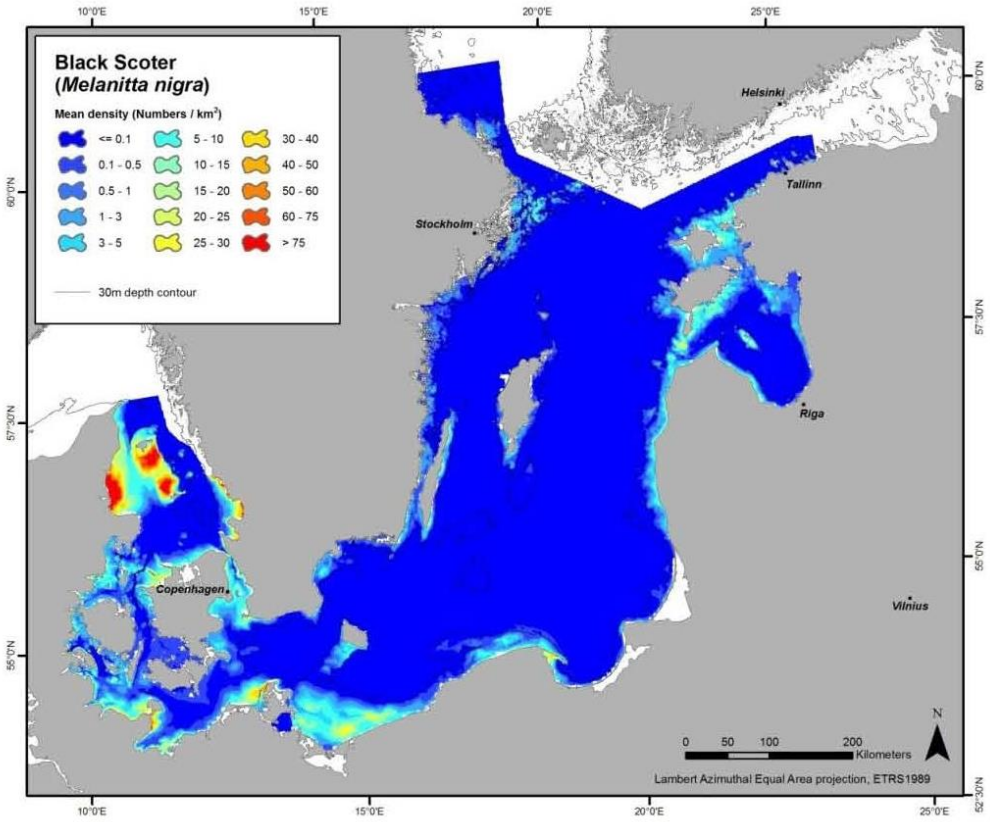

Fig. 2. Distribution and density of wintering common scoter *Melanitta nigra* in the Baltic Sea, 2007–2009. From Skov et al. (2011).

Habitat and Ecology

Common scoters breed in the Tundra region up to the high mountains, where they use various habitats like dwarf shrub heath and low banks along forest and high moor lakes and slow-flowing rivers, with ample shrubs and herbaceous vegetation for nesting cover. During the non-breeding season, common scoters are gregarious and restricted to brackish and marine areas, where they occur in shallow waters along the coast and on shallow offshore banks (Mendel et al. 2008, BirdLife International 2012). In the Baltic Sea, common scoters show a preference for areas with water depths between 5 and 15 m (Skov et al. 2011). During the breeding season, common scoters feed on a variety of organisms, including molluscs, crustaceans, insect larvae, small fish, fish spawn and plant material (BirdLife International 2012). In the wintering areas the diet consists largely of marine bivalves, which are harvested on or up to three centimeters below the surface. Thereby, common scoters are assumed to choose their diet according to abundance, availability and energetic content of prey items rather than being restricted to certain prey species (Fox 2003).

Description of major threats

Common scoters migrate between their breeding grounds in the Tundra and the wintering sites in temperate areas and are thus exposed to threats in both ecosystems. Furthermore, common scoters use the Baltic Sea area for moulting, a phase in which they are flightless and particular sensitive to

disturbance. Although the reasons for the dramatic decline of the Baltic Sea winter population are not yet understood, various pressures were identified that have possibly caused or at least contributed to the observed declines.

As ground breeding species, common scoters are threatened by **predation** from mammalian or bird predator species. Although their breeding range is less restricted to Arctic Tundra regions, common scoters are likely to be negatively affected by the current changes in predator-prey interactions in the Arctic Tundra and increasing predation by snowy owl, arctic fox or skua due to the failure of the regular lemming cycle as a consequence of global warming (Bellebaum et al. 2012), as has been reported for e.g. long-tailed ducks and Steller´s eiders (Hario et al. 2009). As common scoters are listed under Annex II of the European Birds Directive, **hunting** is allowed in certain EU countries. Several thousand birds are probably shot in Denmark each year (Bregnballe et al. 2006). Seaducks are among the species most seriously affected by **mortality in gillnets**, as the nets are mainly set in coastal areas and on shallow offshore banks, which are also the most important habitats for species like common scoters. More than 73 000 birds are annually caught in gill nets in the Baltic Sea, with sea ducks forming the majority of victims. High mortality of common scoters has been reported from the south-western parts of the Baltic Sea, especially from Germany and Poland (Žydelis et al. 2009). Common scoters spend large amounts of time swimming on the water and usually form large flocks and concentrate in certain sea areas. Thus, they are highly vulnerable to **oil pollution**. Oiling has been identified as one of the most important threats to seabirds and waterbirds in several Baltic Sea countries and wintering and moulting sea ducks are among the species most seriously affected (Žydelis & Dagys 1997, Mendel et al. 2008). Common scoters mainly feed on benthic molluscs and thus depend on areas where bivalves are abundant and accessible to them. Many important habitats of common scoters have already been affected by activities that lead to a **reduction of food supply**, e.g. sand and gravel extraction or sediment dredging. Besides, increasing winter water temperatures and changes in phytoplankton communities due to climate change effects or decreasing nutrient levels can lead to a lower quality of bivalves and thus to food shortage for common scoters (Mendel et al. 2008). Common scoters have a very large flight distance with regard to vessels and usually take flight when a ship is approaching (Garthe et al. 2004, Bellebaum et al. 2006). Thus they are very sensitive to **disturbance by ship traffic**. A study in the southern Baltic Sea revealed that the duration of temporary habitat loss due to approaching ships is longest for common scoters among sea ducks, and no clear habituation to channeled ship traffic was found (Schwemmer et al. 2011). In the Irish Sea, common scoters occurred in lowest numbers or were absent from areas in which shipping activity was relatively intense, even when these areas held a high prey biomass (Kaiser et al. 2006). This pronounced sensitivity to shipping movements may cause common scoters to avoid busy shipping lanes and thus leading to permanent habitat loss, as has been observed in the North Sea (Hüppop et al. 1994). Common scoters move frequently between different wintering sites, migrate mainly at night and have only moderate flight manoeuvrability. Hence, they are particularly at risk of colliding with **offshore wind turbines and other obstacles** (Garthe & Hüppop 2006). Barrier effects and habitat loss for common scoters due to wind farms have been documented for the North and Baltic Seas (summarized in Dierschke & Garthe 2006). Recent studies, however, suggest that common scoters may occur in high densities in wind farm areas, but only a number of years after initial construction (Petersen & Fox 2007).

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Assessment justification

The species has a very large range and a large population size and hence it does not approach the thresholds for a Red List Category under criteria B, C and D. However, the two comprehensive Baltic Sea surveys indicated that the winter population of common scoters has undergone a dramatic decline from ca. 783 000 birds in 1988–1993 to 412 000 birds in 2007–2009, corresponding to 57% over three generations (1993–2014, 21 years; GL = 7, M. Tjernberg, written). Hence, the species is classified as *Endangered* (EN) according to criterion A2b, as the causes of the reduction are not yet understood and the reduction may not have ceased.

Recommendations for actions to conserve the species

In the Tundra and high mountain breeding areas, management options are very limited. Thus, protection measures at the wintering sites are essential to stop the population decline of common scoters. As probably only the cumulative effects of the various threat factors eventually drive the dramatic decline, various management measures need to be considered. Reducing bycatch in fishing gear, the prevention of accidental and chronic oil pollution, preservation of feeding grounds, ship traffic regulations and hunting regulations are some options that are likely to support the recovery of this species.

Common names

Denmark: sortand, Estonia: mustvaeras, Finland: mustalintu, Germany: Trauerente, Latvia: jūras teteris, Lithuania: juodoji antis, Poland: markaczka, Russia: Синьга, Sweden: sjöorre

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