SPECIES: Velvet scoter
(Melanitta fusca)

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**Velvet scoter** (*Melanitta fusca*)

- Adult individuals reach 51-58 cm
- Average weight – 1200 - 2000g
- The males velvet scoters is a dark black bird with a white speculum, white eye markings and wedge shaped head. Yellow and orange bill.
- The females brown black birds, no white eye marking, dark brown eyes. If the wings are opened the white speculum will appear.
• Velvet Scoter is a diving seaduck species that mostly nests inland near fresh water, widely scattered across relatively undisturbed northern breeding grounds as far north as Russian Arctic, with a smaller proportion of birds nesting further south in Fennoscandia and Estonia
• Migrate south-southwest, where they aggregate in high densities for wintering in marine waters, primarily in the Baltic Sea
• Prefer to use sandy sea habitats for wintering
Sea birds, where is the home of them?

3500 – 4000km annual migration from breeding grounds to wintering grounds
• The Baltic Sea is the most important wintering area in the world for this species, holding c.93% of the global population.

• The main wintering grounds are located in the Baltic Sea, primarily along the eastern and south-eastern coasts – in Riga Bay, Latvian, Lithuanian, Russian (Kaliningrad) and Polish exposed coasts and Pomeranian Bay.
Habitat requirements

• On northern breeding grounds, Velvet Scoter breeds mainly inland, near freshwater lakes and streams in forested or open tundra.

• Diet during the breeding season on fresh water bodies is thought to be comprised mostly of insect larvae, primarily Trichoptera in the Arctic, while in coastal marine areas – of molluscs.
Habitat requirements

- Outside the breeding season stays mostly in marine waters. Exhibits high preference for sandy areas where it feeds on infaunal or epifaunal species – mainly bivalve molluscs and, to a lesser extent, gastropods, crustaceans, annelids and even fish.

- In the Baltic Sea marine areas with a depth of 10–30 m are preferred.
Survival and productivity

• Estimated 72% survival rates for coastal breeding birds in Finland

• Similar to Velvet Scoters (White-winged Scoter formerly treated as a subspecies of the Velvet Scoter) were lower – ca. 64%

• Age at first breeding is 2–3 years; clutch size usually 7–9 eggs; incubation lasts 27–28 days; fledging is at 50–55 days
• Global, Regional and sub-regional Red List status
• IUCN Global assessment – Vulnerable (VU)
• IUCN European regional assessment – Vulnerable (VU)
• IUCN EU27 regional assessment – Vulnerable (VU)
• HELCOM/Baltic Sea breeding – Vulnerable (VU)
• HELCOM/Baltic Sea wintering – Endangered (EN)
Population size and trend

• Wintering population of the Western Siberia & Northern Europe/NW Europe population of Velvet Scoter was estimated at around 1000000 individuals in the early 1990s.

• A comprehensive census in 2007–2009 revealed a dramatic decline in the abundance of wintering Velvet Scoters in the Baltic Sea by about 60% or 3.6% per year which led to an updated estimate of 450000–500000 individuals of the entire Western Siberia & Northern Europe/NW Europe biogeographic population.

• Subsequent re-evaluation of newly compiled data by BirdLife International (2015) resulted in downlisting of this species to globally Vulnerable (VU).

• Recent data reports wintering numbers of Velvet Scoters between 320000 and 550000 individuals.

• Breeding numbers of the Velvet Scoter is scarce, particularly from Russia, which accounts for the major part of the breeding population.

• Estonia, Finland, Norway and Sweden in total reported 12000–25000 breeding pairs, with mostly decreasing trends.
• The decline in population of the Velvet Scoter most likely has been brought about by a combination of reduced survival and reduced reproductive output.

• Information on the exact contribution of these two factors to the observed decline is lacking, therefore, it is difficult to accurately prioritise actions necessary to revert the declining trend.
Key threats/limiting factors

- By-catch of wintering birds
- Oil pollution
- Hunting
- Predation by non-native species
- Effects of windfarms and other developments
- Climate change
By-catch in fishing gear

• Wintering Velvet Scoters aggregate in large numbers in shallow marine waters that are also often extensively used by coastal gill net fisheries

• Velvet Scoters rank among the most common victims of fisheries by-catch in the Baltic Sea
Marine protected areas in Lithuania
• Total estimated bycatch is 1000-1500 birds per season are drowning in gillnets each winter. This is ~10-15% of wintering population in inshore area of sea birds counted in IWC Lithuania.
2015-2017 Winters, Seabird Bycatch in Lithuania

- Long-tailed duck: 101
- Velvet scoter: 154
- Great cormorant: 13
- Common scoter: 15
- Creased grebe: 1
- Rednecked grebe: 1
- Grater Scaup: 3
- Razorbill: 3
- Goldeneye: 12
- Common guilemot: 30
- Black-throated diver: 19
- Red throated-diver: 5

Total: 384
• Most of bycatch in Lithuania is from MPA or IBA
• Small scale fishery is the main source of seabirds bycatch

Distribution of seabirds by PPT telemetric tracking
Hunting

• Velvet Scoter is listed in Annex II Part B of the EU Birds Directive as a potentially huntable species in eight EU member states (Denmark, Germany, France, Ireland, Latvia, Finland, Sweden, and United Kingdom)

• However, as of September 2016, when Latvia removed Velvet Scoter from the list of huntable species, **Denmark** remains the only EU member state with an open season for the Velvet Scoter and considerable hunting bag (~3000 birds per year)

• Hunting of Velvet Scoters is also allowed in France, but the numbers hunted are negligible, no more than 20 birds per year

• Hunting bag size of Velvet Scoter in Russia, but some expert estimations suggest ca. 4500 birds hunted annually

• While this Velvet Scoter hunting bag statistics suggests relatively small numbers hunted and represent just over 1.5% of the current population estimate
Oil pollution

- Marine oil pollution, arising either from operational discharges from oil installations or ships, oil products from engine compartments, ballast waters, etc.
- Or from ship traffic and coastal or marine oil installation accidents
- Pose a serious threat to wintering Velvet Scoters that aggregate in high numbers and relatively high densities in marine regions with intensive ship traffic and oil-related activitie
Predation

• While Velvet Scoters may be predated upon by a number of predators, particularly during the breeding season
  • White-tailed Eagles
  • Red and Polar foxes
  • Non-native mammalian predators – American mink and Raccoon dog
Offshore renewable energy

• Increasing demand for renewable energy has resulted in a dramatic increase in utilisation of wind power for the production of electricity

• the number of planned major marine wind power parks has been increasing in the Baltic Sea, including in areas adjacent to important wintering aggregations of the Velvet Scoter

• Collision, displacement from feeding grounds
Disturbance

• Disturbance in breeding areas (e.g. by boats) is known to increase the mortality of ducklings thus reducing the reproductive output of Velvet Scoters (Estonia and Finland)

• On wintering grounds Velvet Scoters may be locally disturbed by artisan fishing boats involved in gillnet fishery, but such disturbances usually have a very limited and local character.

• In Germany, Velvet Scoters are mainly found in the EEZ of the Pomeranian Bay, where they may be affected by disturbance from shipping traffic.

• Large scale avoidance of shipping lanes has also been observed in Lithuania and Poland
Establishing favourable reference values (FRV)

- Historical distribution/population size. What number to reach?
- **933 000** in 1992-1993 (Skov et al. 2011)?
Conservation objectives FRVs

• **Objective 1: Increase survival rates**
  • Develop and test seabird-friendly fishing gear suitable for Velvet Scoter. High priority
  • Apply at key Velvet Scoter sites seabird-friendly gear as mandatory requirement if and when such is available (add a note about the need for other seabirds) High priority
  • Temporarily close the use of gill and trammel nets at key sites for Velvet Scoter during times when they are present unless other effective mitigation measures. High priority
  • Systematically report Velvet Scoter by-catch and fishing effort (under the EU CFP, the EU Action Plan for the seabird by-catch, Maritime Strategy Framework Directive by-catch for the EU MS). High priority
The EU Plan of Action for reducing incidental catches of seabirds in fishing gears has listed several actions, which the European Commission, the EU’s Member States, regional fisheries management organisations, and other bodies, are tasked to do in an effort to mitigate incidental catches of seabirds.

Actions include implementation of the EU Common Fisheries Policy (CFP), adopted in 2013, through further regulations.

The CFP sets out the objectives and tools for managing EU fisheries, including minimising the impact of EU fisheries to the wider environment.

Data Collection Framework Regulation in order to align it with the objectives of the CFP. Data collecting and reporting (e.g. data on levels of seabird incidental catches)

Marine Strategy Framework Directive (MSFD) with the aim to achieve good environmental status (GES) including for seabirds
• **The sustainability of legal hunting is ensured:**

  • Assess the sustainability of hunting of VS and make appropriate recommendations (the WG will propose appropriate actions if the current levels of hunting are assessed to be unsustainable). Applicable to: DK, RU. **High priority**

  • Assess the appropriateness of selective hunting of males and if this is sustainable and can be practically achieved, promote it amongst stakeholders. Applicable to: DK, RU. **Medium priority**

  • Raise awareness amongst hunters and indigenous communities of the Velvet Scoter decline **Medium priority**
• Mortality by accidental oil spills from shipping and oil extraction is minimised and as far as possible avoided:

• Ensure that there are appropriate safeguards in place to minimise the probability of accidental oil spills. **High priority**

• Ensure that there is an effective and well-resourced national oil spill emergency plan in each country. **High priority**

• Encourage all countries in the Velvet Scoter range to adopt requirements for double-hull tankers. **High priority**

• Where possible, encourage modification of shipping lines to avoid Velvet Scoter sites. **Medium priority**
• Predation by non-native carnivores (American mink, raccoon dog) is minimised and eliminated where possible:

• All breeding Range States to develop and implement national control plans for non-native invasive carnivores. Medium priority
• Construction of windfarms in key Velvet Scoter sites is avoided:

• Take full account of Velvet Scoter conservation needs during spatial planning for coastal areas and EEZ. High priority

• Subject all coastal and offshore windfarms to SEA/EIA. High priority

• Develop year-round Velvet Scoter sensitivity maps at different spatial scales. High priority
• A network of protected and managed sites, covering all important sites throughout the Velvet Scoter lifecycle, is designated and maintained:

• Review and update the IBA list. **High priority**

• Evaluate the comprehensiveness and adequacy of SPA and other protected area networks and designate sites as appropriate. **High priority**

• Ensure management plans are in place for the designated sites in the networks. **High priority**
Objective 2: Increase breeding success

• The access to the breeding areas in the Baltic archipelagos is minimised and prevented where possible during the breeding season:

• Revise and adjust the system of protected areas to cover all key breeding sites. High priority

• Extend and enforce the period of access prohibition to the key breeding sites to suit the Velvet Scoter breeding season. High priority
Objective 3: Close knowledge gaps

- Research and monitoring work on priority issues are undertaken:
  - Strengthen and regularly implement a coordinated mid-winter census across the range including sex ratio counts. Essential priority
  - Develop and undertake telemetry studies and surveys to understand movements, identify moulting and staging sites and understand population delineation. High priority
  - Undertake a breeding distribution and habitat mapping study and monitoring of breeding habitat conditions and changes. High priority
  - Undertake an extensive study on foraging ecology and bio-energetics, including limiting factors, in the Baltic. High priority
Thank you for attention