

**LIFE project**  
Coordinated Efforts for International Species Recovery  
EuroSAP  
(LIFE14 PRE UK 002)

Species Status Report for Velvet Scoter *Melanitta fusca*

Western Siberia & Northern Europe/NW Europe population



Photo: Gediminas Gražulevičius



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**List of abbreviations**

AEWA – African-Eurasian Migratory Waterbird Agreement

CFP – EU Common Fisheries Policy

EEZ – Exclusive Economic Zone

EU Birds Directive – Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds

GES – Good Environmental Status (according to MSFD – see below)

IBA – Important Bird Area

IWC – International Waterbird Census

LIFE EuroSAP – EU funded LIFE project "Coordinated Efforts for International Species Recovery (EuroSAP) (LIFE14PRE UK 002)"

MSFD – EU Marine Strategy Framework Directive

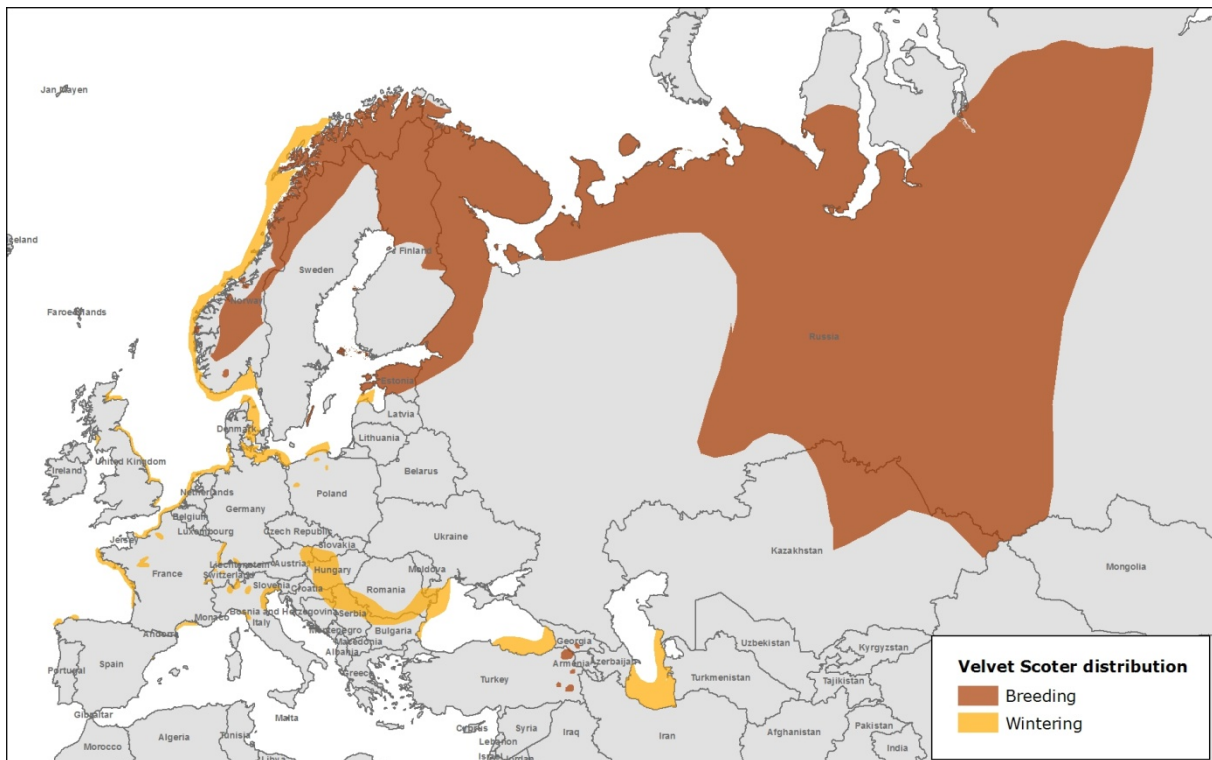
SPA – Special Protection Area

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## Geographic scope of the report

There are two recognised distinct biogeographic populations of the Velvet Scoter: 1) Western Siberia & Northern Europe/NW Europe and 2) Black Sea & Caspian (Wetlands International 2016). The Velvet Scoter species action plan to be prepared during the LIFE EuroSAP project will deal only with the Western Siberia & Northern Europe/NW Europe biogeographic population, therefore the main focus in this report will be on this population.



**Figure 1.** Map of breeding and wintering distribution of the Velvet Scoter (BirdLife International & NatureServe 2014).

It is worth mentioning the current distribution map data for breeding and wintering Velvet Scoters, available from the BirdLife & NatureServe, has quite a few inaccuracies, such as, e.g. complete absence of internationally important wintering areas in the eastern and south-eastern Baltic Sea (coastal areas of Latvia, Lithuania, Russia and Poland, waters of Eastern Estonian Archipelago), whereas areas holding only small numbers or occasional occurrences are clearly depicted. Therefore, it would be very useful to make a concerted attempt to improve both breeding and non-breeding distribution maps of the Velvet Scoter during the development of the Velvet Scoter Species Action Plan.

**Table 1.** Range states for the Velvet Scoter (Western Siberia & Northern Europe/NW Europe population only). Principal range states – **in bold**; occasional records – *in italics*.

Breeding	Migration	Wintering
<b>Russia</b>	<b>Finland</b>	<b>Finland</b>
<b>Norway</b>	<b>Sweden</b>	<b>Sweden</b>
<b>Finland</b>	<b>Estonia</b>	<b>Estonia</b>
<b>Sweden</b>	<b>Latvia</b>	<b>Latvia</b>
<b>Estonia</b>	<b>Lithuania</b>	<b>Lithuania</b>
	<b>Russia</b>	<b>Russia</b>
	<b>Poland</b>	<b>Poland</b>
	<b>Germany</b>	<b>Germany</b>
	<b>Denmark</b>	<b>Denmark</b>
	<b>Norway</b>	<b>Norway</b>
		UK
		Netherlands
		Belgium
		France
		<i>Ireland</i>
		<i>Slovenia</i>
		<i>Switzerland</i>
		<i>Albania</i>
		<i>Bulgaria</i>
		<i>Croatia</i>
		<i>Czech Republic</i>
		<i>Greece</i>
		<i>Hungary</i>
		<i>Italy</i>
		<i>Macedonia</i>
		<i>Montenegro</i>
		<i>Serbia</i>
		<i>Spain</i>

## **0 - INTRODUCTION**

In 2015, BirdLife International with partners launched the EU funded LIFE project "Coordinated Efforts for International Species Recovery (EuroSAP) (LIFE14PRE UK 002)", the aim of which is to develop new or update existing species action plans for 16 threatened species. The EU Management Plan for the Velvet Scoter *Melanitta fusca* was prepared in 2006 and adopted for the period 2007–2009. As major declines of the species have been detected during and after this period, there is an obvious need for the review of the conservation strategy and the implementation of already foreseen and new conservation measures for this species at a flyway scale. The Velvet Scoter Species Action Plan to be developed during the LIFE EuroSAP project will be developed with the cooperation and support of AEWA.

This Species Status Report for the Velvet Scoter has been compiled from the information supplied by national species experts (listed in the List of contributors above) representing all the principal range states of the species as well as some other range countries via a special questionnaire. It collated current knowledge and information on the species numbers and recent trends in breeding and non-breeding areas, conservation status and actions, coverage by protected area networks, monitoring schemes and threat assessment. The report will feed into to the development of the Velvet Scoter Species Action Plan.

## **1 - BIOLOGICAL ASSESSMENT**

### **Taxonomy and biogeographic populations**

Velvet Scoter (*Melanitta fusca*) is a waterbird species, attributed to the group of seaducks (Mergini), which are ducks that primarily nest inland, usually on or near freshwater water bodies, but spend most of their time outside the breeding season in marine waters.

Previously, Velvet Scoter was considered a polytypic species with three distinct subspecies – *M. f. fusca*, breeding in NW Asia (Siberia) and Northern Europe, *M. f. stejnegeri*, breeding in NE Asia, and *M. f. deglandi*, breeding in North America (Collinson *et al.* 2006). However, recently each of these subspecies was granted the status of an independent species – Velvet Scoter (*Melanitta fusca*), Siberian Scoter (*Melanitta stejnegeri*) and White-winged Scoter (*Melanitta deglandi*), respectively (Collinson *et al.* 2006). This species status assessment deals only with the Velvet Scoter (*Melanitta fusca*).

There are two recognised distinct biogeographic populations of the Velvet Scoter: 1) Western Siberia & Northern Europe/NW Europe and 2) Black Sea & Caspian (Wetlands International 2016). The Velvet Scoter Species Action Plan to be prepared during the LIFE EuroSAP project will deal only with the Western Siberia & Northern Europe/NW Europe biogeographic population, therefore the main focus in this report will be on this population.

The Black Sea & Caspian population is a very small and little studied isolated population breeding in Turkey, Armenia and Georgia, and wintering probably mostly in the Black and Caspian Seas. Very fragmented data suggest that the population consists of no more than 1500 individuals, with even further steep decline suspected in recent years (Wetlands International 2016). However, recent data on numbers, distribution, breeding ecology as well as possible threats are lacking, and there is an obvious need for special efforts to investigate this secluded and likely steeply declining population of the Velvet Scoter. Recent data from Turkey suggest only some 60–90 breeding pairs in East Anatolia region, scattered among eight high-altitude lakes (I. L. Erkol, pers. comm.).

The breeding area of the Western Siberia & Northern Europe/NW Europe biogeographic population of the Velvet Scoter reaches Yenisei and Khatanga Rivers and southern part of Taimyr Peninsula in the East, stretching west along the Arctic Russia all the way to Scandinavia, where breeding areas reach southern Norway and Sweden as well as Estonia. It is noteworthy, that birds in Western Europe breed either along the Baltic Sea coast (in Sweden, Finland and Estonia) or in inland highland regions (in Finland, Sweden and Norway).

### **Distribution throughout the annual cycle**

Breeding in northern regions, this species has a short reproductive period. Northward migration of birds breeding in the Arctic from the Baltic Sea to Barents Sea takes place in mid-May to early June, while the autumn migration of breeding females and juveniles starts in August and peaks in September and October. Males move to moulting areas much earlier, sometimes as early as June, as soon as females start incubating. Moulting areas are mainly located along the northern coasts of Russia – in Pechora and White Seas, although moulting aggregations have also been observed in northern Baltic Sea (Anker-Nilssen *et al.* 2000, Luigujoe & Kuresoo 2000).

The main wintering grounds of the Velvet Scoter are located in the Baltic Sea, primarily along the eastern and south-eastern coasts. The highest numbers of birds aggregate in Riga Bay, Latvian,



Lithuanian, Russian (Kaliningrad) and Polish exposed coasts and Pomeranian Bay (Skov et al. 2011). Satellite tracking of eight Velvet Scoters, tagged in Lithuanian waters, showed that throughout the wintering period birds were not very mobile, but tend to use several wintering home ranges (mean 50% core area – 72 km<sup>2</sup> (23–132 km<sup>2</sup>) for prolonged periods of time, and clearly preferred depths of up to 30 m, with no major shifts between day and night-time (unpublished telemetry data).

Prior to spring migration to breeding grounds, high numbers of Velvet Scoters aggregate in north-eastern part of the Baltic Sea – Riga Bay, waters of West Estonian Archipelago, from where the main migration route to the Arctic breeding grounds lies through the Gulf of Finland, north east through the White Sea and eventually to Barents and Kara Seas, where birds spend some time in marine waters before dispersing into inland nesting locations (Skov et al. 2011, unpublished telemetry data). Average altitude of migrating Velvet Scoters above Western Estonia in the daytime was 128 m, however most intensive migration took place during the night and at considerably higher altitudes, particularly above the land (Kahlert et al. 2012).

### **Habitat requirements**

On northern breeding grounds, Velvet Scoter breeds mainly inland, near freshwater lakes and streams in forested or open tundra. In Fennoscandia and Estonia, the species breeds either on forested or more open islands in the archipelagos of the Baltic Sea or in mountain regions on open montane lakes, usually above the tree limit, only sometimes in forested areas (in Norway, Sweden and Finland) (del Hoyo et al. 1992, Anker-Nilssen et al. 2000, L. Nilsson, pers. comm.). Nests are usually well concealed and located close to water, only occasionally in the proximity of other conspecifics, but may associate with gulls and terns (Cramp & Simmons 1977). Diet during the breeding season is poorly studied, but 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 (Anker-Nilssen et al. 2000).

Outside the breeding season Velvet Scoter stays mostly in marine waters. It has high preference for sandy areas where it feeds on infaunal or epifaunal species – mainly bivalve molluscs (up to 95% by count and 80% by volume) and, to a lesser extent, gastropods, crustaceans, annelids and even fish (Žydelis 2002, Fox 2003). Diet also varies considerably between regions and wintering sites. In the Baltic Sea Velvet Scoters prefer marine areas with a depth of 10–30 m (Skov et al. 2011).

### **Survival and productivity**

Data and studies on Velvet Scoter survival are few. Koskimies (1975) estimated 72% survival rates for coastal breeding birds in Finland (recalculated in Brown & Houston 1982), whereas survival rates in closely related White-winged Scoter (formerly treated as a subspecies of the Velvet Scoter), breeding in Saskatchewan and undertaking long-distance overland migrations similar to Velvet Scoters breeding in the Arctic, were lower, but still relatively high for a waterbird species – ca. 64% (Brown & Houston 1982). 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 (Cramp & Simmons 1977).

Population growth in Velvet Scoter may be influenced by density dependence mechanisms (possibly brought about by intraspecific competition for food) at the breeding sites – high breeding density may result in suppression of the overall breeding success (Hartman et al. 2013). Winter weather conditions may influence population dynamics indirectly through the effect on the condition of

breeding birds as well as directly through increased juvenile (first-year) mortality in severe winters (Hartman et al. 2013).

### **Population size and trend**

Following a Baltic Sea wide survey of wintering waterbirds in the early 1990s, wintering population size of the Western Siberia & Northern Europe/NW Europe biogeographic Velvet Scoter population was estimated at around 1000000 individuals (Durinck et al. 1994, Delany & Scott 2006). The next detailed assessment of populations of waterbirds wintering in the Baltic Sea took place some 15 years later – it was based on data of comprehensive surveys carried out in 2007–2009. The assessment, done within the framework of SOWBAS (Status of wintering Waterbird populations in the Baltic Sea) project, identified a dramatic decline in the abundance of wintering Velvet Scoters in the Baltic Sea by about 60% or 3.6% per year (Skov et al. 2011), which led to an updated estimate of 450000–500000 individuals of the entire Western Siberia & Northern Europe/NW Europe biogeographic population (Wetlands International 2016) and listing of this species as globally Endangered (EN) in 2012. Subsequent re-evaluation of newly compiled data by BirdLife International (2015), resulted in downlisting of this species to globally Vulnerable (VU).

A new coordinated survey of marine waterbirds wintering in the Baltic Sea, informally arranged by authorities/NGOs/research organisations in Germany, Poland, Lithuania, Latvia, Estonia, Finland, Sweden and Denmark, was carried out in the winter of 2015/2016. Final results of this survey will be available after a joint analysis of the collected data.

Current information on the numbers and trends of wintering Velvet Scoters in the principal range states is provided in Table 2. This summary suggests wintering numbers of Velvet Scoters between 140000 and 340000 individuals. However, it must be noted that data (number estimates) from some countries holding potentially large numbers of wintering birds are missing (Poland, Russia), while large ranges of number estimates in some countries reflect annual fluctuations (e.g. weather-driven), therefore the total should be considered only as a very rough estimate. Reliable estimates of the total wintering population are expected to be derived from the results of the above-mentioned coordinated survey. The reported trends differ from country to country, with pronounced declines reported only for the UK, Estonia and Kaliningrad Region of Russia, with numbers fluctuating or stable in most other countries.

Information on 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 just over 18000 breeding pairs (Table 2). Worryingly, all these countries also reported declines in breeding numbers of Velvet Scoters, most of them by 50% or more (Table 2).

**Table 2.** Velvet Scoter population size and trend by country (data provided by national experts for the purpose of this report).

Country	Breeding numbers (pairs)	Quality	Year(s) of the estimate	Breeding population trend in the last 10 years (or 3 generations)	Quality	Non-breeding population	Quality	Year(s) of the estimate	Non-breeding population trend	Quality
Denmark	0	G(O)	–	–		6804*	G(O)	2013	Unknown	P(S)
Estonia	150–300	M(E)	2008–2012	Decreasing (-50%; annual decline -7.6%)	M(E)	20000–200000	P(S)	2008–2012	Declining (-50%)	P(S)
Finland	3600–11800	G(E)	2006–2012	Decreasing (-85%)	G(E)	100–1000	G(O)**	2000–2015	Increasing	P(S)
Germany	0	G(O)	2000–2015	–	–	39000	M(E)	2001–2005	Fluctuating	M(E)
Latvia	0	G(O)	1980–2016	–	–	20000	M(E)	2000–2012	Stable	M(E)
Lithuania	0	G(O)	1988–2016	–	–	up to 30000	G(E)	2010–2013	Fluctuating	G(E)
Norway	400–650	M(E)	2015	Probably decreasing	M(E)	20000–30000	M(E)	2006	Stable (+1.55%/y)	G(O)
Poland	0	G(O)	–	–	–	Data not available yet	G(O)	2011–2016	Stable	G(O)
Russia	60000–70000 <sup>1</sup>	M <sup>1</sup>	2000–2002 <sup>1</sup>	?	?	Densities: up to 14.3–62.5 ind./km <sup>2</sup>	G(O)	2004–2015	Decreasing	G(O)
Sweden	7981–12205	M(E)	2008	Decreasing (-30–50%)	G(E)	2700–8000	G(O)	2009–2011	Fluctuating	G(E)
UK	0	G(O)	–	–	–	800–2500	M(E)	2005–2009	Declining (-77%)	M(E)

\*– actually observed birds during aerial surveys, may represent more than 70000 birds; final numbers will be established through distance sampling estimation and spatial modelling (I.K.Petersen, pers. comm.).

\*\*– based on data from four census routes in Åland Islands only.

<sup>1</sup> – data from European Red List of Birds (BirdLife International 2015)

Notes

- ✓ Quality: **Good (Observed) [G(O)]** = based on reliable or representative quantitative data derived from complete counts or comprehensive measurements.  
**Good (Estimated) [G(E)]** = based on reliable or representative quantitative data derived from sampling or interpolation.  
**Medium (Estimated) [M(E)]** = based on incomplete quantitative data derived from sampling or interpolation.  
**Medium (Inferred) [M(I)]** = based on incomplete or poor quantitative data derived from indirect evidence.  
**Poor (Suspected) [P(S)]** = based on no quantitative data, but guesses derived from circumstantial evidence.

## **2 - THREATS**

### **General overview**

The assessment of threats and limiting factors for the Velvet Scoter population used threats identified during the previous Management Plan as a starting point. These threats were re-evaluated by species experts using the following definitions of threat levels:

- Critical: a factor causing or likely to cause very rapid declines and/or extinction;
- High: a factor causing or likely to cause rapid decline leading to depletion;
- Medium: a factor causing or likely to cause relatively slow, but significant, declines;
- Low: a factor causing or likely to cause fluctuations;
- Not relevant: a factor not relevant for the area and/or season and not likely to have any effect on population.

National assessments of each threat, initially identified in the 2007 EU Management Plan for Velvet Scoter, are summarised in Table 3. It is worth mentioning that none of the threats in any of the countries have been assessed as being of critical importance. On wintering grounds, by-catch of Velvet Scoters in fishing gear was overall considered the most important threat, followed by habitat loss/degradation and marine pollution. Negative impact from disturbance was perceived as a threat of medium importance in some areas of intensive shipping traffic. On the other hand, human disturbance was identified as a medium-importance threat for breeding birds in all countries within the breeding range (except Russia, for which no data from breeding areas has been received so far). Habitat loss/degradation was also an issue in some breeding areas (e.g. overgrowing of breeding habitats in Estonia). In addition to threats listed in the 2007 EU Management Plan for Velvet Scoter, only viral diseases in nestlings and predation by mink were identified as novel local threats in Finland, while egg collection – as a low severity threat in Estonia.

Climate change is thought to have a potential to affect waterbird populations in a variety of ways and through a number of different mechanisms, some of which may have negative, while others – positive outcomes for the species in question (summarised in Fox et al. 2015). It is known to affect migration timing as well as migration distances in some species, which, consequently, may result in changes of seasonal distribution (e.g. wintering sites). However, such effects are not uniform – they may differ among species with different ecological requirements and across regions. Change in climatic conditions may also affect survival of waterbirds both in positive (e.g. due to milder winter conditions) and negative (e.g. more frequent extreme weather events) ways. Climate-induced phenological shifts may also result in mismatch between the food availability and its highest demand (e.g. during chick rearing) thus affecting the reproductive output. There may also be more complex interactions between the climate change and waterbird habitats and food availability both in their wintering and breeding areas (for more detail see Fox et al. 2015 and references therein). However, very little information is available on climate change effects on the Velvet Scoter in particular, so the exact ways in which climate change is likely to affect this species is mostly unknown so far.

### **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 (e.g. Sonntag et al. 2012, Bellebaum et al. 2013). Being benthivorous, Velvet Scoters feed by diving to the sea bottom, which greatly increases their chances of encountering and getting entangled in gill nets set at a wide range of depths. While somewhat

less susceptible to getting entangled in set gillnets than ichthyophagous pursuit divers (e.g. divers, grebes, alcids), Velvet Scoters rank among the most common victims of fisheries by-catch in the Baltic Sea (Dagys & Žydelis 2002, Žydelis et al. 2009, <https://seabirdbycatch.com>). A variety of fishing gear, posing threat to diving birds, is widely used in wintering areas of the Velvet Scoter – gillnets, trammel nets, other entangling gears. The potential for entanglement is present whenever Velvet Scoter wintering sites overlap with areas of intensive fishing with the above-mentioned fishing gear. The importance of this threat to marine birds has been widely recognised in recent years and even declines of some marine bird populations have been at least partly attributed to it (Žydelis et al. 2009, 2013, Fox et al. 2015). The effect of this threat varies between sites, species affected, fishing techniques and gear types used in the fishery (Dagys & Žydelis 2002, Žydelis et al. 2009, Shester & Micheli 2011). Development of mitigation measures for reducing by-catch of seabirds in gillnets is underway, using a variety of methods tailored for the specifics of bird senses, but in most cases is yet to yield conclusive results and measures ready for implementation on a wide scale (Martin & Crawford 2015, Wiedenfeld et al. 2015).

### **Habitat loss/degradation**

Habitat loss/degradation as a potential threat to breeding Velvet Scoters has been identified in Estonia (high threat level) and Norway (medium threat level). In Estonia, habitat loss on breeding grounds occurs through the overgrowing of breeding habitats by junipers and other vegetation, which is brought about by the lack of appropriate management/land use (L. Luigujõe, pers. comm.). Habitat loss/degradation on wintering grounds has been identified as a medium- to high-level threat in more than half of the principal wintering range states (Table 3). Actual causes of habitat loss/degradation may be country specific and arise from sea bottom modification (e.g. sand extraction, dumping), installation of wind power plants that cause avoidance of former feeding areas by birds (e.g. Krijgsveld 2014, Dierschke et al. 2016). To a lesser extent, wind power plants may also cause a threat of direct mortality, particularly to migrating waterbirds, but this threat is rather difficult to quantify and more high precision flight data are needed for that. Bottom trawling fishery may also have a negative effect on this species as soft bottom habitats, preferred by wintering Velvet Scoters, are also most suitable for bottom trawlers that avoid stony bottom habitats. Some studies in Lithuania have shown, that there is a dietary overlap between the Velvet Scoter and the invasive Round Goby also on sandy bottom habitats, which could lead to exploitation competition. Significant declines of the Long-tailed Duck on stony bottom habitats in Lithuania have been at least partly attributed to the impact of the Round Goby, which is particularly abundant in such habitats.

### **Marine pollution**

Marine oil pollution, arising either from operational discharges from oil installations or ships (unintentional or otherwise) – 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 activities. Just as other species of waterbirds, that spend most of their time on sea surface and feed by diving, Velvet Scoters are particularly vulnerable to oil slicks on sea surface. Oiled birds may suffer various consequences, depending on the degree and nature of oiling – from direct mortality through drowning, hypothermia caused by disruption of insulating layer of feathers or poisoning through the ingestion of oil while preening feathers, to various indirect or sub-

lethal effects, ranging from decrease in body condition and reduced survival to behavioural effects and changes in breeding success.

### 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 (Mikola et al. 1994). In Estonia, disturbance on breeding grounds is unintentional, caused by the overlap in late breeding season of the Velvet Scoter with recreational season and increasing marine recreational activities (increasing recreational fleet).

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. However, for example in Germany, Velvet Scoters are mainly found in the EEZ of the Pomeranian Bay, where they may be affected by disturbance from shipping traffic. In this area shipping traffic has significantly increased, in some parts doubled since 2006. One important reason is increased traffic to Szczecin and Świnoujście ports (PL), which is promoted by deepening the shipping routes in the Pomeranian Bay and Świnoujście roads. Large scale avoidance of shipping lanes has also been observed in Lithuania (Žydelis 2002).

**Table 3.** Assessment of threats for Velvet Scoter by country (threat level identified in 2007 is provided in brackets after the threat name).

Country	Habitat loss/degradation – breeding (low/medium)	Habitat loss/degradation – wintering (low/medium)	Harvesting (local)	By-catch in fishing gear (unknown/medium)	Pollution– breeding (unknown)	Pollution – wintering (medium)	Human disturbance– breeding (medium)	Human disturbance – wintering (low/local)
Denmark	Not relevant	Medium/Low	Low	Low	Not relevant	–	Not relevant	Medium
Estonia	High	Medium	Not relevant	Medium	Low	High	Medium	Low
Finland	Low	Not relevant	Not relevant	Low	Low	Not relevant	Medium	Not relevant
Germany	Not relevant	Medium	Not relevant	High/Medium	Not relevant	Low	Not relevant	Medium
Latvia	Not relevant	High	Low	Medium	Not relevant	Medium	Not relevant	Low
Lithuania	Not relevant	Medium/Low	Not relevant	High	Not relevant	Medium	Not relevant	Low
Norway	Medium/Low	Low	Low	Low	Low	Medium/Low	Medium/Low	Low
Poland	Not relevant	Low	Not relevant	High	Not relevant	Low	Not relevant	Low
Russia (wintering)	Not relevant	Medium	Unknown	Low	Not relevant	Medium	Not relevant	Low
Sweden	Low	Medium/Low	Not relevant	Low	–	–	Medium	Low
UK	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant	Low	Not relevant	Low

### **3 - POLICIES AND LEGISLATION RELEVANT FOR MANAGEMENT**

#### **International conservation and legal status of the species**

**IUCN Global Red List Status** – Vulnerable (A2abcde+3cde+4bcde); previously assessed as Endangered (2012, 2013).

**African-Eurasian Migratory Waterbird Agreement** – column A (1b).

**Bonn Convention** – Appendix II (1979).

**Convention on International Trade in Endangered Species (CITES)** – Not listed.

**Bern Convention** – Appendix III

**European Red List Status** – Vulnerable (VU) (BirdLife 2015)

**European regional assessment** – Vulnerable (VU)

**EU27 regional assessment** – Vulnerable (VU)

**HELCOM Red List of Baltic Sea species in danger of becoming extinct:** breeding – Vulnerable (VU; A2b); wintering – Endangered (EN, A2b) (HELCOM 2013).

#### **EU Policies that have direct or indirect impact on the species**

Velvet Scoter is listed in Annex II Part B of the **EU Birds Directive** for Denmark, Germany, France, Ireland, Latvia, Finland, Sweden and United Kingdom, making this species a potential game species in these countries (see below and Table 4 for more details).

EU fisheries may have an indirect effect on wintering Velvet Scoters especially through the management of and regulation against incidental catches in gillnets. 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 to minimise the impact of EU fisheries to the wider environment. In order to achieve these objectives, the European Commission proposed in July 2015 to revise the Data Collection Framework Regulation in order to align it with the objectives of the CFP. This includes having data collected and reported on the impacts of the fisheries on the ecosystem (e.g. data on levels of seabird incidental catches).

In March 2016, the European Commission also proposed a new legislation on technical conservation measures in an effort to set default actions in each region to tackle the impact of the fisheries to the wider ecosystem including to minimise and, where possible, eliminate incidental catches of seabirds.

Furthermore, in August 2016, the EU adopted a regional multiannual plan to manage the fisheries exploiting cod, herring and sprat in the Baltic Sea. Through this multiannual plan, these fisheries are expected to adopt measures to minimise the impact of the fisheries to the wider environment, including the incidental catches of seabirds.

Hence, the CFP may have direct implications for the management and reduction of the by-catch impact on Velvet Scoters as well as other seabird species.

In 2008, the EU adopted a Marine Strategy Framework Directive (MSFD) with the aim to achieve good environmental status (GES) of the seas by 2020. Seabirds are a component of one of the 11 descriptors (Biodiversity descriptor) that indicates whether the EU has achieved GES. Therefore, all Member States have to adopt monitoring programmes and programmes of measures in order to achieve GES, including for seabirds. Therefore, the MSFD may also have direct implications for the management and reduction of the by-catch impact on Velvet Scoters as well as other seabird species.

In 2014, the Maritime Spatial Planning Directive was adopted in which all EU Member States are required to deliver a national maritime spatial plan by 2021 which will apply an ecosystem based approach. Hence, it is expected that all marine protected areas and their management are accounted for within these plans, as well as all fishing activities. The MSP Directive can therefore also have direct implications for the management and reduction of the by-catch impact on Velvet Scoters as well as other seabird species.

### **National policies, legislation and ongoing activities**

No national species action plans have been adopted in the principal range states of the species. Only France, which holds relatively small wintering numbers of this species, has adopted a National Plan of Action for Velvet Scoter for the period 2015–2020 in 2014 (Girard & Troilliet 2014).

In Germany Velvet Scoter is red-listed as a visitor (non-breeding) species with the highest threat level (1 – severely threatened).

No projects aimed exclusively at the conservation of the Velvet Scoter have been implemented. However it was among the target species in some EU LIFE projects:

- *Baltic MPAs - Marine protected areas in the Eastern Baltic Sea (LIFE05 NAT/LV/000100)*. 2005-2009. Extensive waterbird inventories were carried out in marine waters of Latvia, Lithuania and Estonia, followed by the designation of a number of SPAs, some of them for the protection of Velvet Scoters. By-catch of waterbirds in fishing gear was studied during the project and alternative fishing methods, aimed at reducing the bird by-catch were suggested and tested.
- *DENOFLOT – Inventory of marine species and habitats for development of NATURA 2000 network in the offshore waters of Lithuania (LIFE09 NAT/LT/000234)*. 2010-2015. The project was aimed primarily at the identification of important wintering areas for seabirds and designation of SPAs in offshore waters of the Lithuanian EEZ. One of the newly established marine SPAs has Velvet Scoter as a qualifying species. Velvet Scoters were also tracked throughout their annual cycle by means of implantable satellite transmitters, providing data on their wintering and breeding areas as well as migration.
- *Seabird Task Force project (LOD/Birdlife International )*

### **Regulated use and management of the species**

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, open seasons were reported only for Denmark (1 October – 31 January) and Latvia (2<sup>nd</sup> Saturday of August – 30 November) as well as Russia (2<sup>nd</sup> Saturday of August – 15



November). However, Velvet Scoter has been removed from the list of huntable species in Latvia as of 7 September 2016. Thus, it appears that there may be little interest in Velvet Scoter as a game species in wintering areas, but more information is needed on bag size and hunting in breeding/staging areas in Russia (Table 4).

#### **Coverage of the Velvet Scoter in protected areas**

The summary of Velvet Scoter coverage in protected areas of international networks (IBA, Ramsar, Natura 2000) and national protected areas is presented in Table 5 below.

#### **Monitoring**

There is no special monitoring of wintering Velvet Scoters in any of the range countries, however, in all countries except Russia Velvet Scoters are counted under various waterbird monitoring schemes, with various degrees of coverage. National monitoring schemes and surveys, which include Velvet Scoter, are summarised in Table 6.

**Table 4.** Velvet Scoter national legal protection, species projects and monitoring in principal range states.

Country	Protection	Hunting season	National action plan	National working group	Monitoring
Denmark	Unprotected	1 October – 31 January Annual hunting bag ~3000	No	No	Yes
Estonia	Protected from killing, nest destruction and disturbance	Not huntable	No	No	Yes
Finland	Protected from killing, nest destruction and disturbance	Mainland – No open season (since 1993) Åland – No open season <sup>1</sup> (since 2006)	No	No	Yes
Germany	Protected from killing and disturbance	No open season	No	No	Yes
Latvia	Unprotected	No open season (since 7 September 2016)	No	No	Yes
Lithuania	Protected from killing	Not huntable	No	No	Yes
Norway	Protected from killing and nest destruction	No open season <sup>2</sup>	No	No	Yes
Poland	Protected from killing	Not huntable	No	No	Yes
Russia	Unprotected	2 <sup>nd</sup> Saturday of August – 15 November	No	No	No
Sweden	Protected from killing	No open season <sup>3</sup> (since 2009)	No	No	Yes
UK	Protected from killing and nest destruction	No open season <sup>4</sup>	No	No	Yes

<sup>1</sup> – <http://www.visitaland.com/en/do/hunting/>

<sup>2</sup> – [http://www.face.eu/sites/default/files/norway\\_en.pdf](http://www.face.eu/sites/default/files/norway_en.pdf)

<sup>3</sup> – [http://jagareforbundet.se/jakten/jakttider/#Blekinge län,-1,2016-01-01,2016-12-31,](http://jagareforbundet.se/jakten/jakttider/#Blekinge_län,-1,2016-01-01,2016-12-31)

<sup>4</sup> – [http://jncc.defra.gov.uk/PDF/waca1981\\_schedule2.pdf](http://jncc.defra.gov.uk/PDF/waca1981_schedule2.pdf)

**Table 5.** Coverage of the Velvet Scoter in protected areas and IBAs in the principal range states.

<b>Country</b>	<b>% in IBAs</b>	<b>% in Ramsar sites</b>	<b>% in SPAs</b>	<b>% in national PAs</b>
Denmark	N/A; can be estimated	N/A; can be estimated	46–74%	N/A; can be estimated
Estonia	90–100%	50–90%	90–100%	0–10%
Finland	5–15% (raw estimate)	2–5% (raw estimate)	10–20% (raw estimate)	5–10% (raw estimate)
Germany	50–90%	N/A	80%	80%
Latvia	80–100%	0–10%	80–100%	80–100%
Lithuania	50–80%	0%	70–90%	70–90%
Norway	N/A	N/A	–	N/A
Poland	80–98%	0%	67–97%	N/A
Russia	0–10% (wintering only)	0%	–	0–10% (wintering only)
Sweden	N/A	N/A	N/A	N/A
UK	10–50%	24.3%	24.3%	50–90%

**Table 6.** Monitoring of the Velvet Scoter in the principal range states.

Country	Comments
Denmark	National monitoring program every six summers (for mapping moulting birds) and every three winters for wintering/migrating birds. The surveys are multi-species surveys, not specifically aiming at Velvet Scoter. Many line transect surveys. The monitoring program aims at describing distribution within as well as outside of the Danish SPAs.
Estonia	IWC midwinter counts since 1967. Data since 1990 in the computer. Small Island monitoring scheme will cover nearly all Velvet Scoter islands.
Finland	Species is monitored among other species in archipelago in National Archipelago Bird Monitoring (about 2500 islands included; most protected, but some also non-protected). In northern Finland the species is not adequately monitored. Also in Åland in SW Finland, monitoring is not sufficient.
Germany	A national winter census every 3 years (observer-based aerial survey) is covering the entire German Baltic (EEZ and the territorial waters). Covers offshore SPAs. A survey of the Pomeranian Bay, the main staging area for Velvet Scoter, is conducted every 2 years, including ship-based surveys.
Latvia	The national biodiversity monitoring programme foresees annual mid-winter counts from coast, transect counts from plane in winter covering all territorial and EEZ waters 3 times during 6 year period, transect counts from plane in autumn covering all territorial and EEZ waters 2 times during 6 year period and transect counts from ship in spring for estimating <i>Clangula</i> and <i>Melanitta</i> total numbers, density and demographic parameters every 2 <sup>nd</sup> year. Coastal counts in January 2015 and 2016 and aerial transect counts in February 2016 have already taken place as part of the state monitoring programme.
Lithuania	Monitoring of wintering waterbirds at present carried out only from the coast in two coastal SPAs. Three counts are carried out per wintering season every three years. So far no counts in offshore areas, but foreseen in the future. Midwinter counts, organised by Lithuanian Ornithological Society.
Norway	Monitoring of the wintering population. Annual counts in 10 areas along the Norwegian coast. Some protected areas covered.
Poland	There is a national monitoring of wintering seabirds in Polish Baltic zone, which started in 2011 and was prolonged up to 2018 (it is planned as long-term data collection, but the decision on prolongation is taken every 3 years). This mid-winter ship and coastal survey covers all marine Natura 2000 areas, including almost all wintering sites of Velvet Scoters in Poland. Additionally long-term data collected annually since 1984 are available from the Gulf of Gdańsk area (western part) and from some other sections of the Polish coast.
Russia	There is no official fixed seabird monitoring scheme (ship/plane) in the Kaliningrad region at the present time. Earlier seabird monitoring conducted to evaluate the impact of oil extraction by "Lukoil - Kaliningradmorneft". Currently, these works are not carried out. The database for the study period from 2003 to 2015, is owned by "Lukoil - Kaliningradmorneft". At the present no such surveys are carried out.
Sweden	National monitoring program for coastal breeding birds started in 2015. Inland breeding birds covered by the Swedish monitoring program. Midwinter counts from the ground producing annual midwinter indices, covering the most important wintering sites. Offshore aerial surveys of wintering areas in 2009 and 2016.
UK	Annual count data are predominantly derived from the Wetland Bird Survey and are thus land-based counts that are known to under-estimate the number of seaducks present. There is no national monitoring scheme in the UK using appropriate methods for seaducks such as Velvet Scoter.

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