

VKM assessment:

Non-detriment finding for White-tailed Sea-eagle

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Scientific name: *Haliaeetus albicilla* (Linnaeus, 1758)

Common name (s): White-tailed Sea-eagle, Grey Sea-eagle

Norwegian name: Havørn

Type of permit: CITES Appendix I (liste A)

Purpose and source: The proposal concerns the export of 24 live, wild caught (source code W) White-tailed Sea-eagles from Norway for reintroduction (purpose code N) to Ireland

Conclusion:

VKM has adopted the definition of detriment, jf. Conf. 16.7 (Rev. CoP17) suggested by the U.S. Fish and Wildlife Service Division of Scientific Authority (<https://www.fws.gov/international/pdf/archive/workshop-american-ginseng-cites-non-detriment-findings.pdf>):

1. Harvest that is not sustainable.
2. Harvest that harms the status of the species in the wild.
3. Removal from the wild that results in habitat loss or destruction, or that interferes with recovery efforts for a species.

The White-tailed Sea-eagle population is increasing, both on a global and national Norwegian scale, and the species is listed as "least concern" on the IUCN Red List and the Norwegian Red List for species. The species has been protected in Norway since 1968 and has been subject to extensive conservation measures across large parts of its range, including re-introduction programs. Previous re-introduction of the species to Ireland occurred in the period 2007-2011, during which one hundred young White-tailed Sea-eagles were collected from nests in Norway under license and transported to Ireland. In the second phase of the Irish reintroduction program, 10 White-tailed Sea-eagle chicks were collected in Norway and released in Ireland in 2020. It is important to note that the Norwegian population has been increasing since the 1970s, despite collection of around 300 individuals for reintroduction projects in Scotland and Ireland between 1975 and 2011.

VKM concludes that the export of 24 wild caught White-tailed Sea-eagles nestlings from Norway to Ireland for reintroduction purposes in 2021 is not detrimental to the survival of this species in the wild.

1. Biological Information

Distribution:

The White-tailed Sea-eagle is distributed across most of Europe, the Middle East and parts of Africa and Asia, with a stronghold in Norway and Russia (BirdLife International, 2016).

The species breeds mainly along the Norwegian coastline, on the stretch from Sør-Varanger to Oslo, with strongholds being in the west and in the north of Norway, from Trøndelag to Troms (Heggøy and Øien, 2014). The population has been increasing since the mid-1970s and during the last 40 years the species has reoccupied large parts of its historical range, spreading both south and east into areas where it was absent for large parts of the 1900s (e.g. Hauge 2018). The White-tailed Sea-eagle now breeds again in the Oslo fjord (e.g., Billing 2017; Steen et al. 2018; Tangen et al. 2018; Torp & Kjellesvig 2020). The territorial and reproductive portion of the White-tailed Sea-eagle population is resident in Norway all year round, even in the north (Heggøy and Øien, 2014).

Life history:

White-tailed Sea-eagles reach sexual maturity at 5 years of age (Hailer, 2006) and generation length for the species is 14 years (Bird et al. 2020). The generation time is considered long for being a bird, and individuals have been registered to live to 42 years (in captivity) and 36 years in the wild (Hailer, 2006). Juvenile White-tailed Sea-eagles are mostly vagrant or migratory and may cover large distances (Hailer, 2006; Whitfield et al., 2009). The White-tailed Sea-eagle is mainly migratory in the north and east of its breeding range, wintering in continental Europe and southern Asia, but sedentary elsewhere, including in Norway (Orta et al., 2020). In Norway, adult birds usually stay in the same area year-round, while juveniles typically roam. White-tailed Sea-eagle pairs are usually stable and breed together until one of them dies (Hailer, 2006). These pairs maintain their territories and continue to breed in the same area year after year, with succeeding generation's pairs also often re-using the same old territories and nests (Folkestad, 1994; Hailer, 2006). Nests are mainly placed on ledges of sea cliffs, or high in trees, and breeding pairs often use 2-3 nests alternately (Folkestad, 1994).

Egg-laying dates vary with latitude, ranging from January in the south of the distributional range to April-May in the arctic regions (Orta et al., 2020). Clutch size is usually 2, with the second egg laid 2-3 days after the first (Orta et al., 2020). Like other birds of prey, incubation starts immediately after the first egg is laid, causing the eggs to hatch asynchronously (Newton 1979). White-tailed Sea-eagles usually fledge at 10-12 weeks old but depend on their parents for food for an even longer period post-fledging (Helander, 1985; Balotari-Chiebao et al., 2016). Most pairs manage to raise only a single offspring per clutch (Orta et al., 2020), and the last hatched chick often dies during the offspring dependency period due to shortage of food.

Role in the ecosystem:

Where available, more than 90% of the White-tailed Sea-eagles' summer diet comprises fish and birds, largely seabirds (Hailer, 2006). However, White-tailed Sea-eagles are opportunistic and adaptive feeders, and may eat small mammals, reptiles and other non-aquatic prey when necessary (Hailer, 2006). They may also steal food from other species, and carrion is an important food source in some regions (Hailer, 2006). In Norwegian coastal ecosystems, White-tailed Sea-eagles play an important role as scavengers on prey remains left by Eurasian otters (*Lutra lutra*), northern gannets (*Morus bassanus*), gulls and humans (Folkestad, 1994; Schandy, 2018).

2. Population status and trend

The current overall European population trend is increasing (BirdLife International, 2017). There has been a large increase in the European and Norwegian population sizes since the 1970s (Heggøy and Øien, 2014). In 2000, the Norwegian population was estimated to 1,900-2,200 breeding pairs, and in 2014 to 2,800-4,200 breeding pairs and still increasing in 2014 (Shimmings and Øien, 2015). In Sweden, the population is estimated to around 1,800 individuals and markedly increasing (Green et al. 2020; SLU Artdatabanken 2020). In Finland, the population was estimated at 640-720 individuals in 2011 (Väisänen et al. 2011), and is increasing (Hyvärinen et al. 2019). The Danish population was assessed at 144 individuals in 2015 (Dansk Ornitologisk Forening 2020), and is increasing sharply (Moeslund et al. 2019, Moshøj et al. 2019).

Historically, the White-tailed Sea-eagle was rather abundant across most parts of Europe (Hailer, 2006). Populations in Europe have experienced two major demographic bottlenecks during the last two centuries. First in the 1800s caused by shotguns and competition with humans, and then again in the 1960s largely due to accumulation of harmful chemicals (e.g., DDT and PCB) in the environment that affected reproductive success over most of Europe (Hailer, 2006). In 1975, Norway probably had 400 of the total European population of 500 breeding pairs of White-tailed Sea-eagles (Schandy, 2018; Barth and Gjershaug, 2019).

3. Conservation status

Global IUCN status: Least Concern ver 3.1

This status is based on the facts that the species has an extremely large range, and that the total population appears to be increasing (BirdLife International, 2017).

Norway Red List status: The species is evaluated as "Least Concern" in the most recent Norwegian Red List (Henriksen and Hilmo, 2015), based on an increase of the Norwegian population since the 1970s (see Population status and trend section 2). In the preliminary

assessment for the new Norwegian red list for species 2021, the species is also categorized as "Least Concern", because of its expanding geographic distribution and increasing population size (https://artsdatabanken.no/Pages/310214/Roedlista_for_arter_2021__).

4. Threats

General: The White-tailed Sea-eagle is threatened by habitat loss and degradation of wetlands, human disturbance and persecution, environmental pollution, collision with wind generators and indiscriminate use of poison (BirdLife International, 2016). Because of their habit of feeding on carrion as alternative food, White-tailed Sea-eagles also have a high risk of falling victims of poisons illegally set for other species, such as foxes and crows (e.g., Mee et al., 2016).

Norway: The species has received a lot of attention due to the conflict between birds and wind turbines, in particular at the Smøla windfarm in Møre and Romsdal (Heggøy and Øien, 2014). Results from the BirdWind project showed that windfarms situated in important breeding areas can be a significant mortality factor for White-tailed Sea-eagles. For example, on average, eight White-tailed Sea-eagles mortally collide with wind turbines annually on Smøla (May et al., 2015). <https://www.cedren.no/Prosjekter/BirdWind>, showed that windfarms situated in important breeding areas can be a significant mortality factor for White-tailed Sea-eagles.

5. Conservation and management measures

International legislation

The White-tailed Sea-eagle is listed in CITES Appendix I (commercial trade in specimen is not permitted), and in the Appendices I and II of the Convention on Migratory Species (CMS or Bonn Convention, classified as an endangered migratory species). The species is also listed in Appendix II of the Bern Convention of the Conservation of European Wildlife and Natural habitats as a strictly protected species and on Annex I of the EC Birds Directive, i.e., as a species for which special conservation measures concerning its habitat should be made to ensure species survival and reproduction. Furthermore, it has been listed on Annex A EU Wildlife Trade Regulations since 1996 under the genus listing for *Haliaeetus*.

National legislation

The White-tailed Sea-eagle has been fully protected in Norway since 1968 (Res. om fredning av kongeørn og havørn hele året). The species is on list A of the Norwegian CITES regulation.

Conservation measures

Conservation actions were initiated in many European countries following the second bottleneck in the 1960s (Hailer, 2006), including the ban of some of the harmful chemicals, protection of nest sites, and supplementary winter-feeding to supply the eagles with uncontaminated food (Hailer, 2006). These actions halted the decline and led to a strong population growth from the 1980s across Europe. Local population growth has resulted in recolonization of areas where the species previously was considered extinct (Hailer, 2006).

Reintroduction to Scotland and Ireland

There are reintroduction programs in both Scotland and Ireland, where White-tailed Sea-eagles have been introduced from Norway and have established breeding populations (Green et al., 1996; Evans et al., 2009; Mee et al., 2016).

There have been three reintroductions to Scotland: between 1975 and 1985, 82 individuals were released, between 1993 and 1998, 58 individuals were released (Evans et al., 2009), and finally, between 2007 and 2012, 85 additional individuals were released ([East Scotland Sea Eagle Reintroduction Project | The RSPB](#); Evans et al. 2009).

The Irish White-tailed Sea Eagle (WTSE) Reintroduction Programme is a long-term initiative to re-establish a population in Ireland. A total of 100 birds collected from the Norwegian population were released in Ireland between 2007 and 2011. These releases were effective in establishing a nucleus of a future breeding population, with 26 young fledging since 2013. Losses of birds to mortality factors, especially from poisoning up to 2015, slowed the expansion of the reintroduced population. It is however important to note that there have been no recorded deaths from poisoning after 2015. A local information campaign to reduce fatalities from poisoning has been adopted in Ireland (The White-tailed Sea-eagle Reintroduction project status report, 2020).

Population modelling suggest that a smaller, supplementary release such as 10 birds per year over 3 years or 5 birds per year over 5 years would be sufficient to reinforce the existing Irish population (The White-tailed Sea-eagle Reintroduction project status report, 2020).

In 2020, 10 White-tailed Sea-eagle chicks were collected in Norway and sent by cargo flight to Ireland in late June (Meskell, 2020). The chicks were placed in release cages at two different sites in Ireland and were held and fed at the release cage sites until fully fledged before being released towards the end of August. Following release, the birds' health, adaptation and ability to survive in the wild were monitored and evaluated. In October 2020, one of the released eagle fledglings was found dead. Following veterinarian inspection,

autopsy and toxicological analysis, it is presumed that this eagle chick had an underlying condition that led to its death. Per December 2020, nine of the released Norwegian born eagle fledglings were healthy and thriving in Ireland (Meskell, 2020).

In 2020, for the first time, two Irish White-tailed Sea-eagle chicks were recorded to have hatched and fledged from Irish born parents (Meskell, 2020).

Conservation measures in Norway

A key success factor for the fast recovery (and low human-caused mortality) of the Norwegian population of White-tailed Sea-eagles, has likely been the proactive strategy of involving and informing local people through "Prosjekt Havørn" (Project Sea-eagle) initiated by the Norsk Ornitologisk Forening in 1975 (A.O. Folkestad, quoted in Schandy, 2018). Mitigation of turbine-induced mortality of birds at wind farms has proven to be difficult (May et al. 2015), and post-construction mitigation measures like painting rotor blades to increase visibility, scaring devices and UV-lights have been tested at Smøla, but the effectiveness of these measures is doubtful (Watson et al. 2018 and references therein). Proper siting of wind farms, such as avoiding placement in important breeding area for White-tailed Eagles, is crucial to prevent raptor casualties (Watson et al. 2018). A plan that could reduce bird casualties by repowering the Smøla wind farm with fewer, but larger turbines has been proposed, but not yet effected (Watson et al. 2018).

6. Trade/use

There are no common uses of this species.

7. References

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