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Non-detriment finding for osprey (*Pandion haliaetus*)

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Scientific name: *Pandion haliaetus* (Linnaeus, 1758)

Common name: Osprey

Norwegian name: Fiskeørn

Type of permit: CITES Appendix II export (Norwegian CITES Regulation Annex 1, list B)

Country of Export: Norway (NO)

Country of Import: Ireland (IE)

Purpose and source: The proposal concerns the export of up to 26 live, wild-caught (source code W) osprey (*Pandion haliaetus*) fledglings from Norway for reintroduction (purpose code N) to Ireland. The project is coordinated by the Norwegian Institute for Nature Research in collaboration with the Irish National Parks and Wildlife Service. The application relates to year 4 of a planned 5-year reintroduction programme.

Available data suggest high survival of released birds, both in Ireland and including up to migration and arrival of all tracked individuals in West Africa; however, post-migration survival, return rates, and breeding establishment remain unknown as the released ospreys have not yet remigrated to Ireland within reintroduction programme's short timespan (D. Halley, pers. comm., May 2026).

Collection is proposed from two regions: (1) Trøndelag County, with up to 16 individuals to be taken from a population of approximately 35 breeding pairs, and (2) Akershus and Østfold counties, with up to 10 individuals to be taken from a population of approximately 35 breeding pairs. These local populations form part of a larger Norwegian–Swedish population, estimated at approximately 2,700–4,200 breeding pairs in Sweden and 400–600 breeding pairs in Norway.

Collection of fledglings will be distributed among nests with 2–3 fledgling, ensuring that a minimum of one live fledgling will remain in each nest.

For Appendix II species (Norwegian CITES Regulation Annex 1, list B), it is required to establish that export will not be detrimental to the survival of that species, in compliance with CITES Article IV. In the Norwegian CITES regulation (Lovdata, 2018), the criteria for export from Norway are described in Chapter 2, Section 5, and it is required to establish that the export does not have a harmful effect on the conservation status of the species.

VKM has adopted the definition of detriment, cf. Conf. 16.7 (Rev. CoP17) suggested by the U.S Fish and Wildlife Service Division of Scientific Authority:

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.

Conclusion: *Positive*

VKM concludes that the proposed export of a maximum of 26 live, wild-sourced osprey fledglings for reintroduction purposes will be non-detrimental to the survival of the species and will not adversely affect its conservation status, in accordance with Article IV of the Convention and Chapter 2, Section 5 of the Norwegian CITES Regulation.

This NDF concerns the collection of osprey (*Pandion haliaetus*) nestlings from local populations in Trøndelag, and in Akershus and Østfold counties.

The local population in Trøndelag consists of approximately 35 breeding pairs, with no indication of population decline. The population in Akershus and Østfold consists of approximately 35 breeding pairs and similarly shows no evidence of decline.

These populations form part of a larger Norwegian–Swedish population, estimated at approximately 2,700–4,200 breeding pairs in Sweden and 400–600 breeding pairs in Norway. The continuous Swedish population is the largest in Europe.

1. Biological information

Distribution

Global

The osprey is a cosmopolitan bird species, distributed over all continents except Antarctica (Poole, 1989). Osprey habitats vary greatly, with different requirements between summer breeding habitat and winter non-breeding habitat (Bierregaard et al., 2020). Habitat requirements for breeding include; (i) adequate supply of accessible fish within energetically adequate commuting distance (10-20 km) of nest; (ii) open nest sites free from predators (especially mammalian), for example trees, large rocks, or increasingly, artificial structures such as nest platforms, towers supporting electrical lines etc.; and (iii) ice-free season of sufficient duration to allow fledging of young (Bierregaard et al., 2020).

Northern populations migrate south to overwinter in subtropical and tropical regions. They return north each spring with warmer temperature and more accessibility of fish. A migrating osprey, nesting in the northern region and overwintering in the south, can fly more than 200,000 km during its lifetime (Bierregaard et al., 2020). Birds begin migrating to lower latitudes in August, arrive at wintering grounds by October, and return in March and April (Ferguson-Lees and Christie, 2001). Ospreys are generally solitary and migrate alone but may congregate in small groups in roosting areas or where food is abundant (Ferguson-Lees and Christie, 2001).

Norway

The osprey is mainly distributed in the south-eastern parts of Norway, although small breeding populations are also found in the counties of Rogaland, Innlandet, Finnmark and in Trøndelag. The osprey distribution corresponds to a large extent with the distribution of fish species such as perch (*Perca fluviatilis*), pike (*Esox lucius*), white fish (*Coregonus lavaretus*), grayling (*Thymallus thymallus*), and burbot (*Lota lota*) (Nordbakke, 1994).

Ospreys breeding in northern Europe migrate south through Europe along three main flyways to wintering areas in tropical Africa (Østnes et al., 2019 and references therein). Norwegian birds migrate to Central and West Africa (Østnes et al., 2019). Marked birds from the Finnmark population are also considered part of the shared population with Finland, and these birds have been found further east in Africa than the birds marked in central and south Norway (Bakken et al., 2003 cited in Shimmings and Øien, 2015).

Life history

Ospreys are long-lived birds, with individuals reported to be alive and breeding at 25 years of age (Bierregaard et al., 2020). Reproduction starts at around age three (Bierregaard et al., 2020, and references therein). The species breeds annually; however, studies have found that individuals differ greatly in the production of fledglings; 22% of egg-laying females and 12% of males with egg-laying mates produced no young during their lifetime (Postupalsky, 1989b in Bierregaard et al., 2020). Breeding pairs lay one to four eggs per nest, with three as the average, and one considered rare. There is a clear latitudinal trend with southern populations producing significantly smaller clutches than northern ones (Bierregaard et al., 2020). When

food is limited, older nestlings are often aggressive toward younger siblings, which often starve to death or are killed by the older one(s) (Bierregaard et al., 2020). Ospreys are philopatric, and most birds return to their natal area to breed, although males more so than females (Bierregaard et al., 2020 and references therein).

Role in the ecosystem

Ospreys are predators that feed mainly on live fish (Bierregaard et al., 2020).

2. Population trend

The global population size of ospreys is highly uncertain and has been estimated to somewhere between 100,000 and 1,200,000 individuals (BirdLife International, 2023). The species' total population trend is estimated to be increasing, as is the European population (BirdLife International, 2023).

According to the Norwegian Red List of Species (Stokke et al., 2021), the Norwegian breeding population was estimated at 150-200 breeding pairs in 1991, followed by an increase in population size until 2014. The Norwegian breeding population in 2015 was estimated at 800-1,200 individuals and assessed to be increasing (Shimmings & Øien, 2015). However, Stokke et al. (2021) describe declines in a local population in Buskerud in 2011-2015, and in parts of Telemark in recent years, compared to the 1990s.

3. Conservation status

The osprey is categorized as Least Concern (LC) in the IUCN Red List of Threatened Species due to its large geographical range and seemingly increasing population trend (BirdLife International, 2021a).

The osprey is categorized as Least Concern (LC) in the European Red List of Birds 2021 (BirdLife International, 2021b) with an estimated population size in the range of 19,200-27,100 individuals with 23,000 individuals as best estimate. The population size is assessed to be increasing.

The osprey is classified as Vulnerable VU in the 2021 Norwegian Red List for Species (Stokke et al., 2021), whereas it was classified as Near Threatened (NT) in 2015 and 2010. The reason for the change in category from the Red List 2015, was a revision of the downgrading rules and a documented decline in subpopulations in southern Norway. The Norwegian population is contiguous with the Swedish one, which is estimated at approx. 7000 (5400-8400) reproductive individuals, which appears to be stable (SLU Artdatabanken, 2026).

4. Threats

Historically, human persecution was the main threat to osprey populations (BirdLife International, 2023). Ospreys are vulnerable to acid rain (which has negative impacts on fish populations) and are also easily exposed to agricultural pesticides, fertilisers, and heavy metals in water sources (Heggøy and Øien, 2014), which may affect reproduction (Bierregaard et al., 2020).

Migrating birds are also vulnerable to shooting, for example if they stop at fish farms (Bierregard et al., 2020; Østnes et al., 2019). Moreover, ospreys are highly vulnerable to the effects of wind energy development (Birdlife International, 2023).

Threats to ospreys in Norway include acid rain, pesticide use, illegal killing, collisions with powerlines/electrocutions, collisions with aircrafts, and drowning in fishing nets (Shimmings and Øien, 2015).

5. Conservation and Management measures:

International legislation

In 1979, *P. haliaetus* was included in CITES Appendix II, as a part of the listing of Falconiformes spp. In 1997, it was listed in Annex A of the EU Wildlife Trade Regulations. *P. haliaetus* has been included in Appendix II of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) since 1979. The osprey is also included in Annex I of the EU Birds Directive and is thus considered a priority species for conservation along all of its distributional range.

National legislation

The osprey has been protected by law in Norway since 1962 by a decision made in accordance with the Nature Conservation Act of 1954 and is currently protected under the Wildlife Act (Lovdata, 1981) and the Nature Diversity Act (Lovdata, 2009).

Conservation measures

Reintroduction programmes

Historically, ospreys have been threatened by human persecution, egg collection, and pesticide use, all which led to a significant reduction in numbers and local extinctions in parts of its range (BirdLife International, 2023).

Reintroduction is a common conservation strategy for ospreys and is used to enhance local populations or reintroduce new populations to historical habitat. The reintroduction programmes generally use a technique known as “hacking”, developed for peregrine falcon (*Falco peregrinus*) as well as for other raptors. Nestlings are moved from established populations to an artificial structure in the target area, and food is provided for the young birds as they learn to fly and hunt (Poole 1989a cited in Bierregard et al., 2020).

There are several examples of successful osprey reintroduction programs from several countries: e.g., Great Britain (Leicestershire and Rutland Wildlife Trust and Anglian Water, 2008), USA (Rymon, 1989), Spain (Generalitat Valenciana, 2022), Portugal (Palma et al., 2013), Italy (Monti et al., 2014). There are also ongoing re-introduction projects in Switzerland (Strahm & Landenbergue, 2013, 2022) and France (Duncan Halley & Torgeir Nygård, in an e-mail to the Norwegian Environment Agency, 14.3.2023). These projects have resulted in recolonization of areas where the osprey was once common and abundant, but had been extirpated.

6. Trade/use

Legal

The CITES Trade Database provides the official trade records as reported by Parties to CITES in their annual reports. Focusing on wild-caught osprey specimens (source code W) from all countries, the reported trade in the period 2015-2024 amounts to 141 specimens in total (data as reported by importers). Of these, 124 were traded for reintroduction purposes (purpose-of-transaction code N), 10 for commercial purposes (T), 5 for scientific purposes (S), 1 for educational purposes (E), and 1 for personal purposes (P). The trade term categories comprise live (131), specimens (5), bodies (4), and skins (1).

Illegal

The amount of illegal trade is not known.

References

- Bierregaard, R.O., Poole, A.F., Martell, M.S., Pyle, P., Patten, M.A. (2020). Osprey (*Pandion haliaetus*), version 1.0., in: P. G. Rodewald (Ed.), Birds of the World, Cornell Lab of Ornithology, Ithaca, New York. <https://doi.org/10.2173/bow.osprey.01>
- BirdLife International. (2021a). *Pandion haliaetus*. The IUCN Red List of Threatened Species 2021: e.T22694938A206628879. <https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T22694938A206628879.en>. Accessed on 30 May 2024.
- BirdLife International. (2021b). European Red List of Birds. Luxembourg: Publications Office of the European Union.
- BirdLife International (2023) Species factsheet: *Pandion haliaetus*. Downloaded from <http://www.birdlife.org> on 14/03/2023.
- CIBIO (Centro de Investigação em Biodiversidade e Recursos Genéticos) (2011). Reintroduction of the Osprey (*Pandion haliaetus*) in Portugal. Annual report 2011: 51.
- CITES Wildlife TradeView (2026). UNEP-WCMC and the CITES Secretariat. Available at: TradeView.cites.org. Accessed (18/05/2026).
- del Hoyo, J., Elliott, A., Sargatal, J. (1994). Handbook of the Birds of the World, vol. 2: New World Vultures to Guinea-fowl. Lynx Edicions, Barcelona.
- Ferguson-Lees, J., Christie, D.A. (2001). Raptors of the world. Christopher Helm, London.
- Generalitat Valenciana. (2022). Reintroducció de l'aguila pescadora a la Comunitat Valenciana. *Cròniques de la Pescadora*, 6, 1-18.
- Green, M., Haas, F., Lindström, Å. (2020). Övervakning av fåglarnas populationsutveckling. Årsrapport för 2019. Rapport, Biologiska institutionen, Lunds Universitet. 96 pp.
- Leicestershire and Rutland Wildlife Trust and Anglian Water. (2008). The return of the Osprey. Anglian Water Services Ltd, Cambridgeshire.
- Lovdata (1981). Lov om forvaltning av naturens mangfold (naturmangfoldloven). <https://lovdata.no/dokument/NL/lov/2009-06-19-100>
- Lovdata (2009). Lov om forvaltning av naturens mangfold (naturmangfoldloven). <https://lovdata.no/dokument/NL/lov/2009-06-19-100>

- Lovdata (2018). Forskrift om innførsel, utførsel, besittelse mv. av truede arter av vill fauna og flora (CITES-forskriften) [Regulation on import, export, domestic possession etc. of endangered species of wild fauna and flora].
<https://lovdata.no/dokument/SFE/forskrift/2018-06-15-889>
- Monti, F., Dominici, J.M., Choquet, R., Duriez, O., Sammuri, G., Sforzi, A. (2014). The Osprey reintroduction in Central Italy: dispersal, survival and first breeding data. *Bird Study*, 61(4), 465-473. DOI: 10.1080/00063657.2014.961405.
- Muriel, R., Ferrer, M., Casado, E., Perez Calabuig, C. (2010). First successful breeding of reintroduced ospreys *Pandion haliaetus* in mainland Spain. *Ardeola*, 57(1), 175-180.
- Nordbakke, R. (1994). Fiskeørn *Pandion haliaetus*, in: J. O. Gjershaug, P. G. Thingstad, S. Eldøy and S. Byrkjeland (Eds.) Norsk fugleatlas, Norsk Ornitologisk Forening, Klæbu. pp 126.
- Palma, L., Beja, P., Dias, A., Ferreira, J., Mirinha, M. (2013). Reintroducing the Osprey to Portugal. *Raptors conservation*, 27, 21-31.
- Poole, A. (1989). Ospreys: a natural and unnatural history. Cambridge University Press, Cambridge.
- Rymon, L.M (1989). The Restoration of Ospreys *Pandion haliaetus* to breeding status in Pennsylvania by Hacking (1980-1986), in: B.-U. Meyburg and R. D. Chancellor (Eds.) Raptors in the Modern World. World Working Group on Birds of Prey (WWGBP), Berlin, London & Paris. pp. 359-362.
- Schmidt-Rothmund, D., Dennis, R., Saurola, P. (2014). The osprey in the western palearctic: breeding population size and trends in the early 21st century. *Journal of Raptor Research*, 48(4), 375-386.
- Shimmings, P., Øien, I.J. (2015). Bestandsestimater for norske hekkefugler. NOF-rapport 2015-2. 268 pp.
- SLU Artdatabanken (2020). Rödlistade arter i Sverige 2020. ArtDatabanken.
<https://artfakta.se/naturvard/taxon/vitenskapelig-navn>
- SLU Artdatabanken (2026). *Artfakta: fiskgjuse (Pandion haliaetus)*. <https://artfakta.se/taxa/100096> [2026-05-26]
- Stokke, B.G., Dale, S., Jacobsen, K.-O., Lislevand, T., Solvang, R., Strøm, H. (24.11.2021). Fugler: Vurdering av fiskeørn *Pandion haliaetus* for Norge. Rødlista for arter 2021. Artsdatabanken. <https://www.artsdatabanken.no/lister/rodlisteforarter/2021/5647>
- Strahm, W., Landenbergue, D. (2013). La réintroduction du Balbuzard pêcheur *Pandion haliaetus* en Suisse romande-un projet pour le centenaire de Nos Oiseaux. *Nos Oiseaux*, 60: 123-142.
- Strahm, W., Landenbergue, D. (2022). Réintroduction du Balbuzard pêcheur *Pandion haliaetus* en Suisse: retours et territoires en 2021. *Nos Oiseaux* 69: 71-80.
- Østnes, J. E., Kroglund, R.T., Kleven, O., Nygård, T. (2019) Migratory patterns of Ospreys (*Pandion haliaetus*) from central Norway. *Ornis Fennica*, 96, 101-111.