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Non-detriment finding for Eurasian lynx (*Lynx lynx*)

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Competing interests: The authors declare no competing interests in relation to this NDF.

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Scientific name: *Lynx lynx* (Linnaeus, 1758)

Common name: Eurasian lynx

Norwegian name: Gaupe

Type of permit: CITES Appendix II (Norwegian CITES Regulation Annex I, List A).

Country of Export: Norway (NO)

Country of Import: Belgium (BE)

Purpose and source: The proposal concerns the export (purpose-of-transaction code P) from Norway to Belgium of one skin of an adult male (estimated age 2 years) in winter coat (source code W), killed under conflict reducing measures on 18.02.2018 in Bindal, Norway (Rovbase ID-number M494990).

For species in Annex 1, list A in the Norwegian Cites Regulation (Lovdata, 2018), it is required to establish that "the export or re-export does not have a harmful effect on the conservation status of the species". The criteria for export from Norway are described in the Norwegian CITES regulation Chapter 2, Section 4.

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

VKM concludes that the export of one wild caught male *Lynx lynx* for personal purposes will not be harmful to the future survival of the wild population.

The application concerns export of the skin of an adult male lynx killed legally in Norway (source code W) to Belgium as a gift (purpose-of-transaction code P). *Lynx lynx* is listed as Endangered on the Norwegian Red List from 2021 due to its low number of reproducing individuals, the export of an adult male could as such have a harmful effect on the conservation status of the species. The animal in question was, however, legally shot during the course of applying conflict reducing measures by the Nature Inspectorate.

1. Biological information

Distribution

Lynx lynx is widely distributed in Eurasia. It has a continuous range from Scandinavia to the eastern coast of Russia, including on Kamchatka. Further south the species is found throughout Central Asia and on the Tibetan plateau. Smaller subpopulations occur in southern and eastern Europe and southwest Asia. The species was largely extirpated from West- and Central Europe, but has been reintroduced to several countries (Breitenmoser et al., 2015).

Life history

Litter size in Scandinavia is mean 2.10 sd 0.17 (Nilsen et al., 2012) The abundance of lynx may fluctuate with prey density in parts of its range (Sunquist & Sunquist, 2009). Dispersal in Eurasian lynx seems to be male-biased, however, displays large variation (Samelius et al., 2012).

Role in the ecosystem

In its stronghold in the boreal forest *L. lynx* is mainly a predator of ungulates, but the selection of prey varies geographically, and individuals can be specialized to hunting different prey (Sunquist & Sunquist, 2009).

2. Population trend

The current population trend is stable overall, but varies over the distribution range (Breitenmoser et al., 2015). Data on population size and trends are missing from most range states (Breitenmoser et al., 2015).

In the latest report, the Norwegian population is estimated to about 421 lynxes (95% CI = 351–491). The national population target for lynx in Norway has been set to 65 family groups and in 2023, 71.5 family groups have been registered before the hunting season, indicating an increase compared to the previous year with 58.5 family groups recorded (Brøseth et al., 2022; Tovmo et al., 2023). In 2018, 55 individuals were killed, seven due to conflict reducing measures and 42 as part of governmental population control, the rest were dead recoveries from traffic accidents (source Rovbase, 11.02.2024). For comparison, in 2023, twelve lynxes were killed due to conflict resolution and 36 for population control, and 15 were dead recoveries from accidents or died of unknown reasons.

3. Conservation status

Lynx lynx is listed as Least Concern (LC) on both the global (assessed 2014) and European (assessed 2018) version of the IUCN Red List of Threatened Species (Breitenmoser et al., 2015; von Arx, 2020). *Lynx lynx* is listed as Endangered (EN) on the Norwegian Red List for species, 2021, due to its low number of reproducing individuals (Eldegard et al., 2021).

4. Threats

The main threat to *L. lynx* is conflicts with humans over game and livestock and in parts of the range habitat degradation is a major threat (Breitenmoser et al., 2015). In the Norwegian Red List assessment, it is stated that a reduced hunting quota could lead to increasing population size (Eldegard et al., 2021). Poaching is known to be an important source of mortality of *L. lynx*, but it is not believed to be linked to illegal trade (AC24 Doc. 10.3). Low genetic diversity and elevated inbreeding levels is

considered a threat in reintroduced populations in central and western Europe (Mueller et al., 2022).

5. Conservation and Management measures:

International legislation

Lynx lynx is listed on the EU Wildlife Trade Regulations, Annex A (since 1997). It is listed on the Bern Convention on the Conservation of European Wildlife and Natural Habitats, Appendix III (protected fauna species).

National legislation

In most range states hunting is prohibited. In Finland, Sweden, and Romania some animals are killed under derogation. In Estonia, Norway and parts of Russia, lynx is subject to seasonal hunting. *Lynx lynx* is listed in Annex 1, list A in the Norwegian Cites Regulation and is regulated by national legislation (see Lovdata 2015, Forskrift om forvaltning av rovvilt: FOR-2023-12-18-2258 from 01.01.2024). EU has a negative decision regarding import of *L. lynx* hunting trophies (H) under source code W from the Russian Federation (SRG 77 Soc).

Conservation measures

During the period between 1971 and 2006, lynx have been reintroduced and translocated to restore populations in central and western Europe. Genetic monitoring and translocation programs to prevent negative effects of inbreeding and habitat fragmentation are in place in parts of Europe and Asia (Breitenmoser et al., 2015). The latest assessments, however, showed that all introduced populations suffer from lower genetic diversity and increased levels of inbreeding compared to their source populations and other natural populations (Mueller et al., 2022).

6. Trade/use

Legal

The species was previously important in the fur market, and the Russian Federation had until 2008 annual quotas for export of thousands of skins, and Romania for much smaller volumes up until 2014 (Species+). There are currently no CITES quotas in place for *L. lynx*. In the CITES Trade Database, the transactions of skins over the last ten years have predominantly involved Canada, the Russian Federation (country of origin) and the United States of America.

Illegal

In-depth analysis of poaching of *L. lynx* in Sweden suggested that animals were killed because they are predators, not for their pelts (AC24 Doc. 10.3). Illegal trade of skins and trophies from the Russia to the EU has been documented (AC24 Doc. 10.3). No recent documentation of illegal trade was found.

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