

VKM assessment:

Non-detriment finding for *Ursus arctos isabellinus*

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Competing interests: VKM Panel on CITES declares no competing interests in relation to this NDF.

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Scientific name: *Ursus arctos isabellinus* Horsfield, 1826

Common names: Tien-Shan brown bear, red bear, Himalayan brown bear, Isabelline bear, Dzu-teh

Norwegian names: Isabellinabjørn, rødbjørn, himalayabjørn, Tien-Shan-bjørn

Type of permit: CITES Appendix I (Norwegian CITES Regulation Annex 1, List A).

Country of Export: Republic of Tajikistan (TJ)

Country of Import: Norway (NO)

Purpose and source: The proposal concerns the import to Norway from the Republic of Tajikistan of a hunting trophy (skin and skull; purpose-of-transaction code H) from an *Ursus arctos isabellinus* individual, a subspecies of the Eurasian brown bear (*Ursus arctos*), taken from the wild (source code W).

For Appendix I taxa (Norwegian CITES Regulation Annex 1, list A; Lovdata 2018) it is required to establish that imports will not be detrimental to the survival of that taxon, in compliance with CITES Article III. In the Norwegian CITES Regulation, the criteria for import to Norway are described in Chapter 2, Paragraph 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 (<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.

Conclusion

Very little information exists on *Ursus arctos isabellinus* and no science-based estimates of population size and trend are available. Data on brown bears in Tajikistan and/or the specific region are lacking, and the sustainability of harvest is therefore not possible to assess, especially as illegal hunting is known to occur in the region. Based on the CITES export permit and the additional information provided by the Norwegian Environment Agency, the individual originates from the Sangvor District in central Tajikistan. An expert from the IUCN Bear Specialist Group reports that this area might have a thriving bear population, but no data has yet been published. It should also be noted that the exact location of the harvested individual bear is not provided. Published scientific assessments highlight population declines and fragmentation, and other countries in the distribution zone of *Ursus arctos isabellinus* (Pakistan and India) consider it endangered. Further, the EU has currently a negative decision on import of *Ursus arctos isabellinus* hunting trophies from Tajikistan.

In summary, VKM is unable to determine whether the removal of this individual may be detrimental to the survival of the subspecies in the wild.

1. Biological information

Distribution

Ursus arctos isabellinus is a distinct, regional subspecies of the brown bear (*Ursus arctos*). The subspecies can be found in fragmented, partly isolated populations in central Asia, mainly across the western Himalayas including Nepal, Bhutan, west China, northern India, northern Pakistan, Uzbekistan, Tajikistan, Kyrgyzstan and south-east Kazakhstan and Afghanistan (Kitchener et al., 2020). The subspecies prefers pastures and open valleys, and it can occur at altitudes over 5,000 meters above sea level. According to McLellan et al. (2017), *Ursus arctos isabellinus* occurs in large parts of Tajikistan. Based on information provided by a member of the IUCN Bear Specialist Group (Stefan Michel, pers. comm., 23.08.2023) the Sangvor District in central Tajikistan is harboring a “thriving” population of *Ursus arctos isabellinus*. However, there are regions with low densities to no presence of *Ursus arctos isabellinus*, mainly in central and south-western Tajikistan (McLellan et al., 2017; Swenson et al., 2020).

Life history

A characteristic of brown bears is the overwintering in dens or nests and the duration of denning depends on habitat and weather conditions. In Eurasia, it is in the den where the females will give birth usually in late January. The number of cubs is strongly related to the maternal conditions of the female when she enters her den. The male is the dispersing sex while females display philopatric behavior. Depending on habitat, resources and density of individuals, brown bears can disperse across long distances, although not much is known about the ecology and behavior of *Ursus arctos isabellinus*. While brown bears have been reported to live up to 30 years in the wild, the generation time of the species is about ten years (Tallmon et al., 2004).

Role in the ecosystem

As an omnivore predator species, the brown bear can hunt prey, scavenge on carcasses but also consume plants and plant products. Brown bears act as keystone and umbrella species. Conflict with humans may occur, especially predation of livestock and damage of property, when humans and brown bears share the same area (see e.g., Ordiz et al., 2020).

2. Population trend

In central Asia and Tajikistan specifically, population size and trends remain unknown (Swenson et al., 2020). A national action plan from the early 2000s reported a decline in brown bear numbers in Tajikistan (Safarov, 2003).

3. Conservation status

The IUCN Red List of Threatened Species (McLellan et al., 2017) assesses the population in the Karakoram, Pamirs, and Hissaro-Alai Mountains as Vulnerable due to its population size and also a low number of mature individuals (VU; Criterion D1: <1,000 mature individuals). *Ursus arctos isabellinus* is considered Critically Endangered in India (under the Wild Life (Protection) Act from 1972) as well as in Pakistan (Nawaz et al. 2007). Knowledge on the status of the brown bear populations in Asia is notoriously limited and poor. The abundance of brown bears in the Himalayan region seems fragmented. With regard to *Ursus arctos isabellinus* in Tajikistan, the population overall may not be endangered and may for some regions be connected to other populations, but no scientifically based assessment has been conducted or is available (Swenson et al., 2020).

4. Threats

In Tajikistan, poaching and forestry have been reported to be one of the main factors leading to decline in the numbers of *Ursus arctos isabellinus* (Safarov, 2003). Furthermore, major threats in central Asia include changing climate and environment, poaching and illegal hunting as well as retaliatory killings, habitat destruction due to forest logging and fragmentation caused by human-infrastructure development (Swenson et al., 2020; Dar et al., 2023).

5. Conservation and Management measures:

International legislation

The brown bear (*Ursus arctos*) has been listed in CITES Appendix II since 1979 and under the EU Wildlife Trade Regulations Annex A since 1997. Populations in Bhutan, China, Mexico, and Mongolia as well as the subspecies considered here, *Ursus arctos isabellinus*, are listed in CITES Appendix I. Previously, the EU has had a negative decision on import of Tajik hunting trophies from wild caught individuals of *Ursus arctos isabellinus* (09/12/2021, Intersessional decision, EU decision, Species+).

National legislation

Ursus arctos isabellinus is listed as endangered in the Red Data Book of Tajikistan (2017), documenting rare and endangered animal and plant species of animals in the country.

Conservation measures

The presence of *Ursus arctos isabellinus* within protected areas is unknown. Controlled trophy hunting has been implemented to reduce poaching and illegal killing to protect the subspecies (see e.g., Adhikari et al., 2021). However, the effect of the latter cannot be assessed due to the lack of information and data. Hunting licenses, also for bears, are issued before the hunting season (October to March) and ten hunting licenses were issued in 2020 according to the Central Asian Bureau for Analytical Reporting (CABAR, 2020).

6. Trade/use

Legal

Tajikistan has reported export of five wild-caught hunting trophies to the CITES trade database since 2019 (trade.cites.org). Hunting licenses are issued annually based on national or regional hunting quotas and exceptionally in conflict situations, i.e., "in cases of threat to citizens and damage to the national economy" (CABAR, 2020). No CITES export quota for *Ursus arctos isabellinus* exist for Tajikistan.

Illegal

Poaching and forestry as well as retaliatory killings, have been reported as main factors leading to decline in brown bear numbers (Safarov, 2003; Dar et al., 2023).

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