CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

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Panama City (Panama), 14-25 November 2022

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

This proposal is for the transfer of the Aleutian cackling goose, *Branta canadensis leucopareia*, from Appendix I to Appendix II based on the outcome of the Periodic Review of the Appendices between CoP17 and CoP18 by the Animals Committee at AC29; Geneva 2017 in accordance with Resolution 14.8 (Rev. CoP17). The United States submitted the results of its review to the Thirty-first meeting of the Animals Committee (AC31 Doc. 41.5). At AC31, the Animals Committee supported the results of the U.S. review that the species no longer meets the criteria for inclusion in Appendix I and should be transferred from Appendix I to Appendix II in accordance with Resolution Conf. 9.24 (Rev. CoP17) (AC31 SR – p. 44). The transfer of this subspecies to Appendix II is in accordance with the Precautionary Measures in Annex 4 of CITES Resolution Conf. 9.24 (Rev. CoP17), which indicates that Parties should "adopt measures that are proportionate to the anticipated risks to the species."

The population of *Branta canadensis leucopareia* in the western Aleutian Islands rebounded after extensive conservation measures in the United States, particularly by the U.S. Fish and Wildlife Service. As a result of this recovery, *Branta canadensis leucopareia* fulfill the requirements for the transfer of a taxon from Appendix I to Appendix II: the Aleutian cackling goose no longer meet the criteria under Annex 1 of Conf. 9.24 (Rev. CoP17) for Appendix I, as the sub-species population is not small, is not in decline, and is not restricted in its distribution, as it once was. Further, a precautionary safeguard holds true, as the sub-species is not in demand for the international trade and a transfer from Appendix I to Appendix II would not greatly stimulate such trade nor cause enforcement problems for other species included in Appendix I (on which only one other *Branta* species, the Hawaiian goose *Branta sandvicensis*, is currently included). Most international trade in the CITES Trade Database has been motivated by conservation measures, including the international transport of primarily captive-bred birds for re-introduction efforts or for captive-breeding. Since the sub-species was included under CITES protections in 1975, only three records indicate international trade of wild geese for commercial or trophy purposes (21 geese in total). It is possible that international trade for hunting/commercial purposes could increase modestly in the scenario of Appendix II transfer, but it is not expected to affect the population at large, as the United States (the range country in which the vast majority of the geese reside) enforces state-level harvest restrictions on the geese through hunting permits, bag limits, and hunting seasons.

B. Proponent

The United States of America.[*]

C. Supporting statement

[*] *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

1. Taxonomy

1.1 Class: Aves

1.2 Order: Anseriformes

1.3 Family: Anatidae

1.4 Genus, species or subspecies, including author and year: *Branta canadensis leucopareia* (Brandt, 1836)

The scientific classification and name of this taxon has changed. The sub-species is now called the Aleutian cackling goose, *Branta hutchinsii leucopareia* (previously known as *Branta canadensis leucopareia*). After the Canada goose and the cackling goose were split into two distinct species (*Branta canadensis* and *Branta hutchinsii*, respectively), this taxon was determined to be a sub-species of cackling goose. The CITES standard reference for birds uses *Branta canadensis leucopareia*, however *Branta hutchinsii leucopareia* is considered to be synonymous. We advocate using the newer taxonomy by Banks et al 2004 and follow this new taxonomy for the remainder of the current proposal.

1.5 Synonyms: *Branta hutchinsii leucopareia* (Brandt, 1836)

1.6 Common names: English: Aleutian cackling goose, Aleutian Canada goose, Aleutian goose
French: Bernache des Aléoutiennes, Bernache du Canada aléoute
Spanish: Barnacla de las Aleutianas, Ganso canadiense aleutiana

1.7 Code numbers: The reference number of *Branta canadensis leucopareia* in the CITES Identification Manual is A-212.002.003.003 1984 (1).

2 Overview

Currently included in Appendix I, Aleutian cackling goose (*Branta hutchinsii leucopareia*) is a migratory sub-species that nearly vanished but rebounded in response to conservation efforts (summarized in Mini et al. 2013). Historically, the goose occupied breeding grounds during the summer on dozens of islands across the North Pacific and migrated south for the winter to Japan and the west coast of North America (originally including Canada, Mexico, and the United States; Springer, Byrd, and Woolington 1978; U.S. Fish and Wildlife Service 1999). The booming fur trade in the 19th and 20th centuries as well as overexploitation drove the species towards the brink of extinction. The Aleutian cackling goose suffered severe declines after non-native foxes were released on most of their breeding islands to propagate the fur trade; the foxes consumed geese eggs, goslings, and even molting adults, decimating *Branta hutchinsii leucopareia* (Bailey 1993; Byrd and Springer 1976). By the 1960s, only a few hundred birds remained, found on a handful of fox-free Alaskan islands in the United States (Jones 1963). In addition to predation from invasive species like introduced foxes, overharvest likely kept their numbers suppressed in the wintering grounds (U.S. Fish and Wildlife Service 1990).

In 1973, the Aleutian cackling goose was one of the first species protected by the Endangered Species Act in the United States (U.S. Fish & Wildlife Service 2020a), and in 1975, *Branta hutchinsii leucopareia* were included under Appendix I of CITES (listed as *Branta canadensis leucopareia*). A multitude of recovery efforts, many led by the U.S. Fish and Wildlife Service and its partners, helped the Alaskan population significantly increase in recent decades. Fox eradication, hunting closures, re-introductions, habitat conservation, and other measures enabled the goose to reverse its downward trend. In response to this sub-species' remarkable recovery, the Aleutian cackling goose were down-listed in the U.S. Endangered Species Act to 'threatened' in 1990 and were removed from the list in 2001 (U.S. Fish and Wildlife Service 1990; 2001).

Today, the vast majority of Aleutian cackling goose populations inhabit in the United States, in addition to a small population in Russia and Japan. Three populations or breeding segments exist, and all engage in annual migrations: (1) **Western Aleutian population**: Approximately 160,000 individuals of the Aleutian cackling goose breed during the summer on several western and central islands of the Aleutian Island chain in Alaska. In the fall, the birds migrate to California (and to a lesser extent, Oregon), where they overwinter (Sanders 2017). (2) **Semidi Islands population**: The Semidi Islands segment, which is genetically distinct from the western Aleutian birds, includes only about 300 individuals that breed on the Semidi Islands (eastern islands in the Aleutian Island chain) and overwinter on the Oregon coast (NatureServe 2020; Pierson et al. 2000; Sanders 2017). (3) **Eurasia population**: the Aleutian cackling

goose (both captive-bred and wild-caught from the western Aleutians) were re-introduced to Ekarma Island, part of the Kuril Islands in Russia, in the 1990s-2000s. Today, approximately 1,700 birds are estimated to live in the Kuril Islands during the summer and in Japan during the winter (Japan Ministry of the Environment 2015).

The Aleutian cackling goose continues to face threats including habitat alteration on winter and migration grounds in the western U.S.; low recruitment in the Semidi Islands population segment; and infectious disease risk (U.S. Fish and Wildlife Service 2001). The continued presence of invasive predators, including arctic foxes and Norway rats, could also bar the birds from expanding their breeding range to historic levels on many islands (Bailey 1993), although the U.S. Fish and Wildlife Service suggested that breeding habitat was no longer a strong limiting factor for population growth by the 2000s (U.S. Fish and Wildlife Service 2001). The U.S. Fish and Wildlife Service has secured winter and migratory staging habitat in Oregon and California through public land acquisition and conservation easements with private landowners, such that substantial wintering habitat is now available to the geese (U.S. Fish and Wildlife Service 2001). However, less habitat is available to the geese on the west coast during spring, when the geese cause crop damage in some areas and prompt “hazing” (using tactics to scare off geese) by landowners (Mini et al. 2013).

The recovery of the Aleutian cackling goose often called a “conservation success story,” allowed for the re-opening of hunting in 2001 of this species in the United States. The sub-species is now managed as a game bird in the U.S., where up to 10 of these birds can be harvested per day by permitted hunters during goose season (with bag limits determined at the state level; U.S. Fish and Wildlife Service, 2019). There is a no-hunting closure in north coastal Oregon, however, to protect the much smaller Semidi Islands population segment (U.S. Fish and Wildlife Service 2001), and hunting is also restricted in key breeding areas of the Aleutian Islands (NatureServe 2020). While unsustainable harvest once posed a threat to the Aleutian cackling goose, hunting is now thought to be well managed and regulated in the U.S. Incidental take may occur to some (unknown) extent but is not thought to constitute a major threat (NatureServe 2020). No illegal trade has been reported by U.S. range states (U.S. Fish and Wildlife Service, personal communications, March 20, 2018).

In light of the sub-species recovery, this proposal recommends transferring *Branta hutchinsii leucopareia* to Appendix II. This recommendation is consistent with other proposals seeking to transfer populations to Appendix II due to considerations such as intensive management, lack of trade, and range state support. Current numbers of *Branta hutchinsii leucopareia* in the western Aleutian Islands (~160,000) far exceed the target population set by the U.S. Fish and Wildlife Service of 60,000 birds, as outlined in the U.S. species’ recovery plan (Pacific Flyway Council 2006). In fact, the U.S. now must regulate the size of this sub-species population through harvesting – the first occasion for this kind of management for a species removed from the Endangered Species Act. This is in part because the Aleutian cackling goose often cause crop damage during spring staging in California (Pacific Flyway Council 2006). Further, it is important to note that harvesting in the United States is well regulated by domestic measures, thus, a transfer to Appendix II will not allow international trade to threaten the population.

3 Species characteristics

3.1 Distribution

United States: Most individuals of the Aleutian cackling goose now breed during the summer on 10 (possibly 12) Alaskan islands in the Aleutian and Semidi Island chain and overwinter in the Central Valley of California (Aleutian population segment) or near Pacific City, Oregon (Semidi population segment; NatureServe 2020). Approximately 80% of the geese globally breed on Buldir Island in the western Aleutians (NatureServe 2020; U.S. Fish & Wildlife Service 1991; Sanders 2017).

Russia and Japan: A small population was re-introduced (mostly derived from captive-bred birds) in the Kuril Islands of Russia; these birds winter in northern Japan (U.S. Fish & Wildlife Service 2001).

Mexico: According to Mexico’s CITES Authorities although few records exist, the subspecies has occasionally been recorded in the California peninsula (Baja California and Baja California Sur) and the Colorado River delta based on multiple accounts and monitoring by CONABIO in conjunction with Cornell University and the Audubon Society. Also, it has only been observed in winter season.

3.2 Habitat

Breeding: During the summer, *Branta hutchinsii leucopareia* nest on treeless islands on steep coastal hillsides or sea cliffs vegetated with grasses, sedges, and ferns. The Aleutian and Semidi Islands of Alaska have polar maritime climates characterized by high winds, high humidity, fog, and rain. The birds move farther inland and upland for molting and move to shallow pools or ponds for night roosting on the islands (Jones 1963; U.S. Fish and Wildlife Service 1980; 1999).

Wintering: During the winter, the Aleutian cackling goose in California and Oregon in the United States rely on agricultural lands, including for corn, winter wheat, alfalfa, and irrigated pasture grasses (Dahl 1995). For night roosting, the birds move to inland marshes, shallowly flooded agricultural lands, or coastal islands (NatureServe 2020; U.S. Fish and Wildlife Service 1980; 1999).

3.3 Biological characteristics

United States: In North America, *Branta hutchinsii leucopareia* migrate annually >3800 km from breeding grounds in Alaska to wintering grounds along the western U.S. coast. The two breeding segments show a migratory divide, with western Aleutian Island geese departing for the San Joaquin Valley of California and the Semidi Island geese departing for coastal Oregon (near Woods and Pacific City). However, a small number of western Aleutian Island birds have winter with the Semidi Islands birds since 1996 (NatureServe 2020; U.S. Fish & Wildlife Service 2001).

Russia and Japan: In Eurasia, *Branta hutchinsii leucopareia* migrate annually >1300 km from breeding grounds in the Kuril Islands of Russia to wintering grounds in northern Japan.

Like many geese, the Aleutian cackling goose is omnivorous, eating a variety of vegetation (algae, sedge and grass seeds, berries, marsh plants) and also insects, crustaceans, and mollusks. They also consume grain in winter, especially from agricultural fields (Ehrlich, Dobkin, and Wheye 1992; NatureServe 2020).

3.4 Morphological characteristics

The Cackling goose (*Branta hutchinsii*) appear similar to a small Canada goose (*Branta canadensis*), with a black head and neck, brown wings and back, and white cheek patch. Weighing 1.8 to 2.7 kg (4-6 lbs), The Aleutian cackling goose (*Branta hutchinsii leucopareia*) are significantly smaller than the Canada goose and have a shorter bill. Most also have a white “necklace” or ring at the base of their neck (U.S. Fish and Wildlife Service 1999).

3.5 Role of the species in its ecosystem

Waterfowl in the Anatidae family, including the Aleutian cackling goose, contribute to ecosystem services by dispersing plant seeds, altering community biodiversity, and serving as ‘bioindicators’ (as summarized in Green and Elmberg 2014). Geese in particular also play a role in nutrient cycling, plant community structure and diversity, as well as the stimulation of primary productivity (Green and Elmberg 2014). For example, foraging geese can help maintain the diversity of grassland communities by regulating competition between plant species and thus promoting co-existence of plant taxa (Jasmin, Rochefort, and Gauthier 2008). Interestingly, the elimination of Aleutian cackling geese from many of the Aleutian Islands may have lowered the diversity of plants on the islands, as the plant community was released from grazing pressure (Maron et al. 2006).

4 Status and trends

4.1 Habitat trends

Breeding: As noted in the Overview (section 2), much of the breeding habitat became unlivable for the Aleutian cackling goose due to invasive predators on islands throughout the North Pacific. With fox eradication efforts, breeding habitat was restored on a few dozen islands (see sections 4.5 and 8.1).

Wintering: Loss and alteration of habitat has also affected wintering and migratory staging areas in California and Oregon. The geese now depend on agricultural lands for foraging. Habitat is considered adequate or well-secured for wintering sites in California, owing to protected public lands and public-private conservation easements. However, habitat is less ideal in wintering areas in Oregon and in spring staging areas in northern California, where the birds mostly use private lands and can encounter hazing by landowners (Pacific Flyway Council 2006).

4.2 Population size

Branta hutchinsii leucopareia have been recovering since the 1960s. They now number over 160,000 birds in the western Aleutian breeding segment (Sanders 2017), approximately 300 individuals in the Semidi Islands breeding segment (Sanders 2017), and over 1,700 individuals in Eurasia (Japan Ministry of the Environment 2015). Currently, the cackling goose *Branta hutchinsii* as a whole species is assessed by IUCN as of Least Concern (IUCN 2016). NatureServe assesses the Aleutian cackling goose (*Branta hutchinsii leucopareia*) specifically as a vulnerable sub-species (NatureServe 2020).

4.3 Population structure

The Aleutian cackling goose in the western Aleutian breeding segment are genetically distinct from those further east in the Semidi Islands breeding segment (Pierson et al. 2000).

The Eurasia birds were re-established with geese from captive-breeding programs that originated from Buldir Island (in the Aleutians) and from zoo collections. A small number of wild geese from the original Eurasia population may have also persisted as a remnant colony (see sections 4.5 and 8.4). Thus, it is not well understood the degree to which geese in Russia and Japan are genetically differentiated from North American geese.

4.4 Population trends

Western Aleutian population segment: After the sub-species bottomed out at a few hundred birds in the 1960s, conservation measures enabled the western Aleutian Islands population segment to increase at a modest rate through the 1970s and 1980s (~15%/year) and an accelerated rate in the 1990s and 2000s, reaching 62,800 birds in 2002 (Drut and Trost 2004; NatureServe 2020; U.S. Fish and Wildlife Service 2001). Today, the population in the western Aleutian Islands numbers above 160,000 individuals(Sanders 2017). (Figure 1.)

Semidi Island population segment: As noted above, there has been little increase for the Semidi Island population segment, which has not reached above ~300 birds (Sanders 2017), because of poor juvenile recruitment that is not well studied (NatureServe 2020; U.S. Fish and Wildlife Service 2001).

Eurasia population: the Aleutian cackling goose all but disappeared in Asia, with only a single goose reported in Japan in 1964 and few geese reported throughout the 1970s. In 1983, a recovery program was launched in Japan, supported by the Japanese Association for Wild Geese Protection, Yagiyama Zoo, U.S. Fish and Wildlife Service, and the Russian Academy of Sciences. Captive breeding began with holding pens in Yagiyama Zoo and with birds given from the U.S. Fish and Wildlife Service, with the long-term goal of releasing geese on Ekarma Island, part of the Kuril Island chain – once home to many geese. Another captive breeding program was established in Russia, housed at the Kamchatka Institute of Ecology and Nature Management. In 1995-2010, a total of 551 geese that were captive-bred in Russia were released on Ekarma Island. Very small numbers of geese were reported in the immediate years after the releases started, with 10 geese found wintering in Japan during 1997-1998. The number of wintering geese in Japan increased above 100 in 2010-2011 and rose to over 1,700 individuals in 2014-2015 (Japan Ministry of the Environment 2015).

4.5 Geographic trends

Land use change and habitat alteration have dramatically shrunk the geese's range. Historically, the Aleutian cackling goose was believed to have bred in the Aleutian arc from Kodiak, Alaska westward through the Aleutian Islands of the U.S., the Commander Islands of Russia, and the Kuril Islands of Japan (U.S. Fish & Wildlife Service 1980; 1991). The wintering range likely stretched from British Columbia in Canada to northern Mexico (and also occurred in Japan; Springer et al. 1978).

United States: Only three known remnant breeding sites remained by the 1960s-1980s, on Buldir Island in the western Aleutians, Chagulak Island in the central Aleutians, and Kiliktagik Island farther east in the Semidi Islands (Mini et al. 2013). Eradication efforts of the U.S. Fish and Wildlife Service removed foxes from at least 33 islands by 2001, restoring much available breeding habitat for the geese (U.S. Fish and Wildlife Service 2001). Today geese occupy 10-12 islands of Alaska, and they might be able to re-colonize additional fox-free islands in the future (Pacific Flyway Council 2006).

In the western United States, the geese occupy >30 wintering and staging areas, though they likely had hundreds of such sites historically (NatureServe 2020; U.S. Fish & Wildlife Service 1991). In California (western Aleutian segment), most geese now winter near the San Joaquin River National Wildlife Refuge (protected public lands), on ranches near Modesto, or in the Sacramento-San Joaquin Delta. In Oregon, Semidi Islands geese winter on dairy farms (privately owned in Nestucca Bay National Wildlife Refuge) near Pacific City. Many roost at night in Oregon Islands National Wildlife Refuge. Some individuals of the western Aleutian goose also winter in Oregon (Pacific Flyway Council 2006).

Canada and Mexico: Today, *Branta hutchinsii leucopareia* likely no longer live in Canada. As previously noted the subspecies has occasionally been recorded in the California peninsula (Baja California and Baja California Sur) and the Colorado River delta.

Russia and Japan: As noted previously, *Branta hutchinsii leucopareia* once occupied numerous islands in Russia and in Japan. Largely due to fox introductions, the geese now only breed on Ekarma Island in Russia and winter in northern Japan.

5 Threats

Historically, predation by introduced arctic foxes (*Alopex lagopus*) and to a lesser extent by Norway rats (*Rattus norvegicus*) on breeding islands caused the near-extinction of the Aleutian cackling goose. To meet the high demand for fur, foxes were introduced to many North Pacific Islands starting in the 1750s and intensifying in the early 1900s. By the 1930s, over 450 islands had introduced fox populations (Bailey 1993). The foxes decimated native seabirds and waterfowl, including the Aleutian cackling goose. *Branta hutchinsii leucopareia* numbers plummeted, soon disappearing altogether from many of the breeding islands (U.S. Fish & Wildlife Service 1999). They became “so scarce that the migration is no longer noticeable,” wrote Olaus Murie (Murie 1959), after his 1930s surveys of the Aleutian Islands, where he found only a few pairs remaining. In 1962, USFWS refuge manager Robert “Sea Otter” Jones discovered a remnant population of the Aleutian cackling goose on Buldir Island; foxes had never been introduced there (Jones 1963). The goose was listed as endangered in the United States under the Endangered Species Act in 1973 (U.S. Fish and Wildlife Service 1967). Other remnant populations of *Branta hutchinsii leucopareia* were later found on Kiliktagik Island in 1979 (Semidi Islands population; Hatch and Hatch 1983) and Chagulak Island in 1982 (Bailey and Trapp 1984). Harvest also affected the sub-species, keeping their numbers suppressed after their initial decline (U.S. Fish and Wildlife Service 1990).

Responding to intensive management and conservation efforts, the Aleutian cackling goose dramatically rebounded, and their current threats include habitat alteration in wintering and migration areas, continued predation from invasive species, and infectious disease. Harvest at lows levels is no longer a serious threat, although incidental take may continue to affect population size (NatureServe 2020). The Semidi Island population faces additional threats, reflected in the poor survival rate of young birds; this remains enigmatic and keeps the population from increasing (Sanders 2017).

Urbanization and shifts in agricultural practices affect birds in their wintering and migration habitats in California and Oregon. While protected migration and wintering habitat is currently thought to be sufficient for the geese, these habitats could face changes in the future from climate change, particularly through droughts in California. Such changes could shrink desirable habitat on public lands. As geese have increased, farmers and landowners in northwest California have conflicts with the geese in February and March and sometimes haze the birds (U.S. Fish and Wildlife Service 1991).

Predation by introduced arctic and red foxes continues to limit the re-establishment of the geese across their historic range. Foxes remain on many of the islands (Bailey 1993). Added pressure from Norway rats, introduced around World War II, and bald eagles, may also affect geese (Mini et al. 2013).

Infectious diseases affect many waterfowl species in the Pacific Flyway, and avian cholera in particular can cause massive losses. The Aleutian cackling goose wintering in California experience low and manageable levels of infection from avian cholera, in part because waterfowl managers reduce disease risk by removing dead/dying birds and taking other measures (U.S. Fish & Wildlife Service 2001).

6 Utilization and trade

6.1 National utilization

United States: While fox predation likely caused *Branta hutchinsii leucopareia*'s initial decline, unsustainable levels of harvest kept their numbers low (U.S. Fish & Wildlife Service 1990). Market hunters – who shot waterfowl in massive numbers to sell as wild meat in the 1800s-1900s – took Aleutian cackling geese in wintering grounds, including in central California (Grinnell, Bryant, and Storer 1918; U.S. Fish & Wildlife Service 1990). Harvest continued into the late 20th century for recreational purposes, and to a lesser extent for subsistence, at wintering grounds and migration sites, especially in California (U.S. Fish & Wildlife Service 1990). However, the scale of harvest of the Aleutian cackling goose prior to the 1970s is generally not well documented (Pacific Flyway Council 2006).

After the Aleutian cackling goose was listed under the U.S. Endangered Species Act, hunting of "white-cheeked" geese was prohibited in California in closure areas starting in 1975 and in Oregon in 1982 (Gregg, Eckhardt, and Springer 1988). The hunting closures on key wintering areas in California and Oregon likely explain the initial goose population increases after 1975 (U.S. Fish & Wildlife Service 1990). Evidence for this comes from population estimates of geese in California wintering grounds, where the birds greatly increased during 1975-1989 following hunting closures (U.S. Fish & Wildlife Service 1990). Incidental take at a small scale did still continue to occur (Springer and Lowe 1998). The birds made further population gains as *Branta hutchinsii leucopareia* were re-established on breeding islands where foxes were eradicated (U.S. Fish and Wildlife Service 2001).

The harvest moratoriums were lifted and regulated hunting re-opened in Oregon and California as the geese re-bounded, starting in 2001. Hunting closures remained in place, however, at key wintering sites in Oregon and California and at Alaska breeding sites. At this point, the sub-species population was close to 40,000 individuals. As their numbers rose, the Aleutian cackling goose in their west-coast spring staging areas started to increasingly use private agricultural lands for foraging, becoming a pest to farmers during February-April. Thus, in 2007, hunting was permitted on private lands in the spring to encourage the birds back onto public lands. Further, the hunting season was extended to 100 days during waterfowl season (fall) and 17 days during the late-season hunt (spring), with daily bag limits of 6 individuals of the Aleutian cackling goose on private lands (summarized in Mini et al. 2013).

Today, at 160,000 geese, *Branta hutchinsii leucopareia* number well above their target population goal of 60,000 geese in the western Aleutian breeding segment, and they are now regulated in the United States as migratory game birds (Pacific Flyway Council 2006). The geese are hunted on their wintering grounds and spring staging areas in California and Oregon, where the Aleutian cackling goose is grouped with the Canada goose for combined bag limits. Hunting is not permitted on the wintering grounds of the Semidi Island population in Oregon. In 2019-2020, hunters in California are permitted to take the Aleutian cackling goose along with the Canada goose for a total bag limit of 10 individuals/day during the hunting season (Sept. 28-Oct. 2 and Oct. 19-Jan. 26). In Oregon, hunters are currently restricted to a bag limit of 6 individuals of the Canada goose per day (including the Aleutian cackling goose in this count) in the Northwest Permit Zone (Oct. 19-27; Nov. 23-Jan. 16; and Feb. 8-March 10) or 4 total geese in the Southwest Zone (Oct. 12-27; Nov. 4-Jan. 26; U.S. Fish and Wildlife Service 2019). Additional restrictions on recreational hunting of the sub-species apply for specific habitats. Hunting remains prohibited on San Joaquin River National Wildlife Refuge and some other key public wintering and staging areas (Mini et al. 2013).

Mexico:

There are no known uses for *Branta hutchinsii leucopareia* in the country, outside of birdwatching. (CONABIO, pers. communications, May 27, 2022). While Mexico does not have harvesting information specific to this sub-species, Mexico's CITES Scientific Authority does note that hunting of *Branta canadensis* (Canada goose) – under which this sub-species was formerly grouped – is allowed in accordance with national laws and wildlife management areas (National Commission for the Knowledge and Use of Biodiversity, CONABIO, pers. communications, April 17, 2018). Although the probability that *B. hutchinsii* has been exploited under the name of *B. canadensis* (due to its physical resemblance) has not been ruled out, but it would be very low (CONABIO, pers. communications, May 27, 2022).

6.2 Legal trade

Most legal trade of this sub-species (see Table 1) at the international level has been for captive-breeding and re-introduction efforts, with mostly captive-bred sources. A very limited amount of international trade has also occurred for wild birds for commercial or hunting purposes (21 birds in total since 1975).

According to the CITES Trade Database (Table 1), 131 live *Branta hutchinsii leucopareia* (and 6 eggs) have been traded internationally for captive-breeding programs since 1975, when the goose was first included under Appendix I. The vast majority of these birds were noted as captive-bred, except for 18 that were wild-caught. Most of these international transports were motivated by a longer-term goal of breeding birds in captivity to re-introduce them to additional Aleutian Islands and to Asia, where they once migrated from breeding grounds in Russia to wintering grounds in Japan. Live geese were transported from the U.S. to Russia (38 birds), from the U.S. to Japan (15 birds), and from Japan to Russia (66 birds and 6 eggs). Additionally, some birds were transported for captive-breeding purposes from Canada to Germany (12 birds).

In addition to captive breeding purposes, trade in live geese has occurred for zoological purposes, including 6 live geese transported from Canada to Hong Kong in 1981. Additional trade has been for commercial purposes, including 2 live captive-bred geese moved from Canada to the U.S. in 1995. Trade records also show shipments of 6 additional live geese from the Netherlands to South Africa.

Some wild geese have been transported as hunting trophies, including 19 wild-caught trophies exported from the U.S. to Taiwan in 1996 and 1 wild-caught trophy traded from Canada to the U.S. in 2018. One additional wild-caught goose body was traded from Canada to the U.S. in 2000.

6.3 Parts and derivatives in trade

There have been few records of international trade in parts or derivatives of *Branta hutchinsii leucopareia* in the CITES Trade Database. In 2000, two pre-Convention unspecified parts were transported from the U.S. to France and back to the U.S. for exhibition purposes. In 2010, 4 pre-Convention specimens or parts were transported from France to Switzerland for personal purposes. A wild goose skeleton was traded for scientific purposes from the U.S. to Canada in 2012.

6.4 Illegal trade

To our knowledge, there is no illegal trade of the Aleutian cackling goose. The United States reported the seizure of one feather of *Branta hutchinsii leucopareia* to the U.S. from Mexico in 2007. The U.S. Fish & Wildlife Service Migratory Birds program states that no information is available on illegal or legal trade for this sub-species. Mexico reported no illegal trade information for sub-species *Branta hutchinsii leucopareia* (CONABIO, pers. Comm.; May 27, 2022).

6.5 Actual or potential trade impacts

If *Branta hutchinsii leucopareia* is transferred to CITES Appendix II, it is possible that additional international trade or transport will occur for commercial or hunting purposes. However, most of these geese inhabit the United States where hunting is well regulated by domestic laws, and this provides a safeguard against overharvesting. Thus, we do not anticipate increased risk to the sub-species from international trade as a result of the proposed transfer to Appendix II.

The Mexico Scientific Authority notes that no requests for *Branta hutchinsii leucopareia* export, import, or re-export have been made from 2005-2022 (CONABIO, pers. comm., May 27, 2022).

7 Legal instruments

7.1 National

United States: As noted above, *Branta hutchinsii leucopareia* were delisted from the Endangered Species Act in 2001 (U.S. Fish and Wildlife Service 2001). Currently, the cackling goose (*Branta hutchinsii*), including this sub-species, are protected under the Migratory Bird Treaty Act, which requires any person to have a valid federal permit to hunt, kill, take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such bird listed migratory birds.

The species is presumed to be extirpated in Canada (NatureServe 2020).

Japan, and Mexico: In Mexico, although there are no recorded uses for the subspecies *B. hutchinsii leucopareia*, the species could be used in Mexico (like any other wild species), only in compliance with the General Wildlife Law (DOF 2000), which regulates the use of wildlife. through the UMAs

(Management Units for the Conservation of Wildlife) or PIMVS (Premises or Facilities that Manage Wildlife). The UMA/PIMVS must have prior registration of the species, and a Management Plan that details particular actions for the species of interest (it must contain, among others, monitoring actions of the species to be exploited, conservation actions and improvement of the habitat, internal management, etc.), and that has been approved by the federal authorities. *Branta hutchinsii* is not on the list of threatened species in Mexico (CONABIO, pers. comm., May 27, 2022).

In Japan, hunting of this sub-species (which we believe appears as *Branta canadensis leucopareia*) has not been permitted since 1947 according to the Wildlife Protection, Control, and Hunting Management Act; the sub-species is designated as a "rare wildlife species" under this law, requiring protection nationally and internationally. Further, this sub-species is protected under the Act on Conservation of Endangered Species of Wild Fauna and Flora (ACES), such that hunting, gathering, killing, domestic trade, international trade, display and advertisement for the purpose of sale or distribution is prohibited. However, a few instances of very limited domestic trade for scientific research, education, or museum exhibitions have occurred with oversight from the Ministry of the Environment.

7.2 International

Branta hutchinsii leucopareia (then known as *Branta canadensis leucopareia*) was included in Appendix I of CITES in 1975. This species is also covered by the bilateral, Migratory Bird Treaty Act of 1918 (MBTA) that affords it additional regulatory protection. The MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service.

8 Species management

8.1 Management measures

Historic measures: Fox removal efforts began in the 1940s, and other management measures followed for *Branta hutchinsii leucopareia*. After the sub-species was listed for protection under the U.S. Endangered Species Act (U.S. ESA), the first Aleutian Goose Recovery Plan was developed by six biologists in 1979, with initial efforts focused on securing breeding habitat and re-establishing breeding colonies. As these efforts enabled the goose's recovery, the Pacific Flyway Council released the 1999 *Pacific Flyway Management Plan for the Aleutian Canada Goos*e, which included de-listing criteria under the U.S. ESA. After de-listing of the sub-species in 2001 from the U.S. ESA, the Pacific Flyway Council updated the flyway plan in 2004 and again in 2006 to manage the species as a migratory game animal with a target population of 60,000 geese (Mini et al. 2013). Altogether, the U.S. Fish and Wildlife Service has managed and restored the Aleutian cackling goose populations through (a) fox removal, (b) hunting closures and harvest strategies, (c) management of overwintering and migratory staging areas, (d) disease control, and (e) captive-breeding and re-introductions.

Fox removal: Eliminating arctic foxes from breeding islands has involved poisoning, trapping, and shooting, as well as releasing sterile red foxes onto the islands (summarized in Bailey 1993). The U.S. Fish and Wildlife Service began fox eradication efforts in 1949, specifically to protect the geese on Amchitka Island. Initially, USFWS staff used poisons including strychnine, cyanide, and Compound 1080 – often embedded in bait and air-dropped on fox-inhabited islands. For example, seal blubber embedded with 11,000 strychnine pellets and 130 carcasses of birds, seals, and fish laced with Compound 1080 were dropped on Amchitka Island in 1956. This practice of poisoning, which was quite effective at eliminating foxes, continued on Amchitka, Alaid, Nizki, Agattu, and Kiska Islands until 1972, when these preda-cides were banned. After this change, leg-hold traps (which unfortunately also captured non-target species), shooting with M-44s, and to a lesser extinct, biological control with red foxes were used (Bailey 1993). By 2001, the U.S. Fish and Wildlife Service had removed foxes from a total of 33 islands (U.S. Fish and Wildlife Service 2001), and eradication plans continued on other islands.

Hunting closures and harvest strategies: Hunting closures in key wintering areas largely drove the population increases of the Aleutian cackling goose from 1975-1989 (U.S. Fish and Wildlife Service 1990). While statewide closures on Aleutian cackling goose hunting were lifted in 2001, today many key wintering and migratory staging areas remain closed. (See section 6.1 for additional details).

Management of wintering and migratory staging areas: After breeding sites in Alaska received protections in the Alaska Maritime National Wildlife Refuge, conservationists preserved many of the major wintering and migratory staging areas used by the geese (Mini et al. 2013). In California, some wintering habitats were preserved, such as Butte Sink Wildlife Management Area, acquired in 1980 and closed to the public, and the San Joaquin National Wildlife Refuge, acquired in 1987. Protected habitats were expanded by cooperative agreements between U.S. Fish and Wildlife Service and private landowners near San Joaquin National Wildlife Refuge, with landowners providing additional wetlands and maize (U.S. Fish and Wildlife Service 2006). Roosting and staging sites such as Castle Rock National Wildlife Refuge (established in 1980) and Lake Earl Wildlife Area (managed by the California Department of Fish and Game) were also acquired to protect the Aleutian cackling goose (Mini et al. 2013). In Oregon, wintering habitat used by the Semidi population segment occur mostly in private lands, as well as in Nestucca Bay National Wildlife Refuge, which provides pastures, wetlands, and bogs. Some migration staging areas in Oregon are owned and protected by the Bureau of Land Management. By 2001, the U.S. Fish and Wildlife Service had acquired over 13,409 hectares (7,500 acres) of winter and migration habitat for the Aleutian cackling goose and had achieved perpetual conservation easements for over 40,000 hectares (99,000 acres) on public or private lands to provide additional habitat for the geese (U.S. Fish and Wildlife Service 2001).

Disease control: Because the geese are susceptible to avian cholera and other infectious diseases, the U.S. Fish and Wildlife Service developed a Aleutian Cackling Goose Disease and Contamination Hazard Contingency Plan (U.S. Fish and Wildlife Service 1991), which calls for cooperation between federal and state agencies and outlines management plans particularly for roost sites, to avoid high-density roosting at areas with higher infections risk (NatureServe 2020).

Re-introduced geese: Because geese were eliminated from much of their breeding range, conservationists have tried to re-establish breeding populations in some areas through translocations as well as re-introductions of captive-bred geese. Importantly, since 1992, over 500 geese have been released to re-establish the Eurasian population (Japan Ministry of the Environment 2015; U.S. Fish and Wildlife Service 1999; 2001). The effort has succeeded in this region, where the birds have been seen wintering in Japan since 1997 (NatureServe 2020; U.S. Fish and Wildlife Service 2001). (See section 8.4 for additional details).

Current measures: As the geese rebounded, private landowners have become more concerned about crop depredation in spring staging areas near Crescent City, California in February-April (summarized in Mini et al. 2013). In the 1990s, some landowners started hazing the geese (e.g., with vehicles or other ways to scare them off private lands), and working groups including private landowners and USFWS staff developed plans to limit goose grazing on public lands. The working group's efforts helped lead to habitat enhancement on public lands (using livestock grazing or mowing and replanting and fertilizing to lure the geese away from private lands). Permitted hunting on private lands, including a late-season hunt in spring and bag limits of up to 10 per day, has also been used to shift goose grazing to public lands (Mini et al. 2013; see section 6.1 for more details).

Thus, current management efforts involve continued monitoring surveys, managing a harvest strategy, and addressing complaints from the agricultural community (Pacific Flyway Council 2006). Most recently, the Arctic Goose Joint Venture Technical Committee made recommendations for continued research and management of the Aleutian cackling goose, emphasizing: hunting closures and special management efforts for the Semidi Island geese, research on reproductive limitations of the Semidi Island birds, continued surveys (including direct counts, aerial surveys in spring, and capture-mark-resighting measures), continued harvesting to reach the target of 60,000 birds, continued fox removal, and optimal management of lands to reduce crop losses (Mini et al. 2013).

8.2 Population monitoring

The population size of the Aleutian cackling goose has been monitored in spring in northern California since 1974, using direct count methods and later indirect methods (starting in 1996, based on banding data). Population monitoring continues annually using mark-resighting methods in the wintering grounds. In 2017, the population was estimated to be over 160,000 geese (Sanders 2017).
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8.3 Control measures

8.3.1 International

Included under CITES Appendix I, *Branta hutchinsii leucopareia* in international shipments must have an export permit (including a non-detriment finding) and an import permit. This species is also covered by a bilateral treaty with Canada, the Migratory Bird Treaty Act of 1918 (MBTA). Under the MBTA, it prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service, Therefore, the harvest of this species is regulated (see Section 8.1 management measures).

8.3.2 Domestic

United States: At the federal level, the cackling goose (*Branta hutchinsii*) is protected under the Migratory Bird Treaty Act (U.S. Fish & Wildlife Service 2020b), which prohibits the pursuing, hunting, taking, capturing, killing, possessing, selling, purchasing, bartering, importing, exporting, or transporting of over 1,000 protected species, unless a permit is issued by the U.S. Department of Interior. Therefore, the Aleutian cackling goose can only be removed from the wild in the U.S. under authorized hunting permits, and hunting is regulated through bag limits and hunting season dates.

8.4 Captive breeding and artificial propagation

Captive breeding and re-introductions have occurred on Aleutian Islands where foxes have been eradicated and also on Ekarma Island in Russia. While species managers initially released captive-bred geese onto four fox-free islands in Alaska (2,500 geese released by 1991), re-establishment was difficult because of bald eagle predation and possibly the physical limitations of captive-bred birds unfamiliar with the migration route. Re-introductions became more successful when captive-bred birds were paired with wild-caught birds (from Buldir Island). Geese were eventually re-established in Alaska on Agattu, Nizki-Alaid, and Little Kiska Islands and possibly on Amchitka, Amukta, Skagul, and Yunaska Islands (Mini et al. 2013; Pacific Flyway Council 2006).

In Russia, conservationists have bred geese in captivity at Kamchatka Institute of Ecology and Nature Management. Between 1995 and 2001, 551 captive-bred geese were released on Ekarma Island (part of the Kuril Islands). While the number of geese found to be wintering in Japan was very small initially, the number of geese wintering in Japan increased above 100 in 2010-2011 and rose quickly to over 1,700 in 2014-2015 (Japan Ministry of the Environment 2015).

8.5 Habitat conservation

Habitat conservation is achieved through a variety of national and state conservation programs, as well as through USFWS cooperative agreements with private landowners. In Alaska, all breeding locations are protected through the USFWS National Wildlife Refuge System, in which conserving of the Aleutian cackling goose and their nesting habitats remains a priority. In California, key wintering sites are protected in the San Joaquin National Wildlife Refuge and other federal lands. In Oregon, Nestucca Nay National Wildlife Refuge offers protected wintering habitat for the Semidi Island segment, while other migration staging areas and wintering locations are protected by the Bureau of Land Management or exist on private lands (Mini et al. 2013). (See section 8.1 for more details).

8.6 Safeguards

Management of the Aleutian cackling goose (*Branta hutchinsii leucopareia*) and their habitat in the United States will continue regardless of CITES protection levels. Because *Branta hutchinsii* (the cackling goose) are protected under the Migratory Bird Treaty Act and because the Aleutian cackling goose specifically is managed as a migratory game species, their key wintering, staging, and breeding habitats will remain protected on public lands. Efforts will also continue for population monitoring on an annual basis, managing goose depredation on agricultural lands, and special monitoring and research on the Semidi Islands segment, for which population growth remains slow or stagnant.

9 Information on similar species

The Aleutian cackling goose is one of only two taxa in the *Branta* genus included under CITES Appendix I. The other species is *Branta sandvicensis*, Hawaiian goose – very distinct from the Aleutian cackling goose.

The Aleutian cackling goose (*Branta hutchinsii leucopareia*) looks similar to other sub-species within this species, including the cackling goose (*B. h. minima*) and Taverner's goose (*B.h. taverneri*), as well as the lesser Canada goose (*Branta canadensis parvipes*; Pacific Flyway Council 2006). While no one characteristic easily enables sub-species determination, a collection of traits can indicate the taxon. To highlight features that help distinguish these sub-species: (1) the Aleutian cackling goose almost always has a prominent white ring around the base of their necks, with black feathering at the base of the ring. While other sub-species sometimes have white neck rings, the Aleutian cackling goose have a more prominent, wider, and complete neck ring. (2) the Aleutian cackling goose has short, tapering bills and square-shaped heads in profile. (3) Finally, the Aleutian cackling goose is larger than the cackling goose and smaller than Taverner's goose, although here is some overlap in size (summarized in Pacific Flyway Council 2006).

10 Consultations

For the periodic review on *Branta hutchinsii leucopareia*, we sent consultation letters to Canada and Mexico (as former range countries), as well as to Japan and the Russian Federation (as current range countries). Mexico and Japan responded with information incorporated in this document.

Canada has no comments for this species.

Although few records exist, the subspecies has occasionally been recorded in the California peninsula (Baja California and Baja California Sur) and the Colorado River delta. Mexico's CONABIO provided information on habitat, trade, protections, and management for *Branta hutchinsii leucopareia*.

As a current range country for the Aleutian cackling goose, Japan (Ministry of the Environment) replied to the consultation with information about historical breeding areas, re-introductions, and population numbers in the Eurasian population segment. After 551 birds were released on Ekarma Island, monitoring showed an increase from 161 birds in 2010-2011 to 402 birds in 2012-2013.

The United States Fish and Wildlife Service's Migratory Birds program was also consulted. The program provided population estimates for the western Aleutian Islands and Semidi Islands population segments (referenced in this document), as well as basic information about state status, survey methods, and the flyway plan in the U.S. states of California, Oregon, Alaska, and Washington (where birds do not winter but may migrate through). *Branta hutchinsii leucopareia* are game birds in each state. The program noted that no information was available by state for legal/illegal trade; no trade impacts were reported.

We again consulted with other range states in May 2022 on submission of this proposal to transfer the species to Appendix II from Appendix I and received no replies except for Canada which had no further comments and Mexico which provided us with updated information that was integrated into this proposal.

11 Additional remarks

This proposal is consistent with other proposals accepted by the Conference of the Parties, which sought to transfer populations to Appendix II because of intensive management and protection with de minimis trade (e.g., CoP16 Prop. 1, *Rupicapra pyrenaica ornata*; CoP16 Prop. 20, *Tympanuchus cupido attwateri*; and CoP14 Prop. 23, *Nolina interrata*).

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Table 1. A summary of *Branta hutchinsii leucopareia** records in the UNEP-WCMC CITES Trade Database (1975-2020)

*CITES records here use the previous name for this sub-species, *Branta canadensis leucopareia*

Species name in CITES trade database	**(Re) Exporting countries**	**Importing countries**	**Number of trade records**	**Source/ purpose**	**Notes**
Branta canadensis leucopareia	CA	HK	6 live	Z	6 live geese were transferred for zoo purposes in 1981 from Canada to Hong Kong.
Branta canadensis leucopareia	US	JP	15 live	Z	15 live **captive-bred** geese were transferred in 1983 from the U.S. to Japan. The geese, transferred with the help of the U.S. Fish and Wildlife Service, were the first birds transported for a captive-breeding program at Yagiyama Zoological Park, with the intention of eventual re-introduction to Ekarma Island (Kuril Islands).
Branta canadensis leucopareia	CA	DE	12 live	B B	4 live **captive-bred** geese were transported from Canada to Germany for captive breeding purposes in 1989. Years later, 8 live geese that were **born in captivity** were transported from Canada to Germany for captive-breeding purposes in 2000.
Branta canadensis leucopareia	US	RU	38 live	Z B/S	20 live geese were transported from the United States (Alaska) to Russia in 1992 to start a breeding program at the Kamchatka Institute of Ecology and Nature Management, with the eventual goal of re-establishing the Asian population of the Aleutian cackling goose on the Kuril Islands. The geese included 10 breeding pairs from U.S. zoos. 17 **wild-caught** geese and 1 captive-born goose (taken from the wild as an egg) were transported in 2001 from the U.S. to Russia to become part of a captive-breeding program at the Kamchatka Institute of Ecology and Nature Management (under the care of Nikolai Gerasimov). The wild geese were captured by U.S. Fish and Wildlife Service colleagues on Buldir Island in Alaska, as part of a long-term effort to re-establish geese on the Kuril Islands of Russia.
Branta canadensis leucopareia	JP	RU	66 live adults; 6 eggs	S/N	Multiple transports were made from Japan to Russia of **captive-bred** geese for scientific purposes or re-introductions to the wild. These included: 6 live captive-bred

					geese in 1994 (origin noted as Russia); 4 live captive-bred geese and 6 eggs in 1995; and 8 live captive-bred geese in EACH year from 1997-2003. These geese may been from the Yagiyama Zoological Park captive-breeding program and may have been sent either to the Russian captive-breeding facility there or to be released on Ekarma Island.
Branta canadensis leucopareia	CA	US	2 live	T	2 live **captive-bred** geese transported in 1995 from Canada to the U.S. for commercial purposes.
Branta canadensis leucopareia	US	TW	19 trophies	T	19 **wild-caught** trophies transported from the U.S. to Taiwan in 1996 for commercial purposes.
Branta canadensis leucopareia	NL	ZA	2 live	T	2 live **captive-bred** geese were reported as transported from the Netherlands to South Africa in 1998 for commercial purposes.
Branta canadensis leucopareia	US	FR	2 parts/derivatives	Q	2 pre-Convention unspecified parts were transported from the U.S. to France and then back from France to the U.S. in 2000 for exhibition purposes.
Branta canadensis leucopareia	CA	US	1 body	T	1 **wild-caught** goose reported to have been transported from Canada to the U.S. for commercial purposes in 2000. Note that this record incorrectly says the sub-species was under App. II.
Branta canadensis leucopareia	NL	TH	4 live	T	4 live **captive-bred** geese transported from the Netherlands to Thailand in 2001 for commercial purposes.
Branta canadensis leucopareia	MX	US	1 feather	T	1 feather specimen being transported for commercial purposes was seized or confiscated in 2007.
Branta canadensis leucopareia	FR	CH	2 derivatives; 2 feathers	P	4 pre-Convention specimens or parts were transported from France to Switzerland for personal purposes in 2010.
Branta canadensis leucopareia	US	CA	1 skeleton	S	1 **wild-sourced** skeleton was transported from the U.S. to Canada for scientific purposes in 2012.
Branta canadensis leucopareia	CA	US	1 trophy	H	1 **wild-caught** hunting trophy was transported from Canada to the U.S. in 2018.

***Figure 1**: Abundance of the Aleutian cackling goose (with 95% confidence intervals) in the western Aleutian population segment, from 1996-2017, using mark-resight methods (Sanders 2017).*