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

Twentieth meeting of the Conference of the Parties
Samarkand (Uzbekistan), 24 November – 5 December 2025

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

To transfer *Falco peregrinus* from Appendix I to Appendix II in accordance with the Precautionary Measures of Resolution Conf. 9.24 (Rev. CoP17) Annex 4.

B. Proponent

Canada and United States of America*

C. Supporting statement

1. Taxonomy

1.1 Class: Aves

1.2 Order: Falconiformes

1.3 Family: Falconidae

1.4 Genus, species or subspecies, including author and year: *Falco peregrinus* Tunstall 1771

1.5 Scientific synonyms:

1.6 Common names:
English: Peregrine Falcon
French: Faucon pèlerin
Spanish: Halcón blancuzco, Halcón real, Halcón viajero, Halcón peregrino, Halcón común

1.7 Code numbers: A-213.005.002.020 and A-213.005.002.027

2. Overview

The Peregrine Falcon has an extremely large global range distribution, a large global population size (248,000 to 478,000 mature individuals) and an increasing global population trend. (Sections 3 and 4, BirdLife 2021). It does not meet the biological criteria for listing on Appendix I. Peregrine Falcon is traded internationally primarily for falconry or to supply breeding stock for captive breeders. CITES trade data indicate that an average of 1,551 live birds were exported per year from 51 countries from 2015 to 2024 - over eighty percent of all specimens were captive-bred from source code C or D (Section 6.2). Numbers of

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* *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.*

key exporters are small and most are within the European Union, which has strong controls in place. Current conservation efforts and trade controls for the wild population are effective (Section 7.1, 8.2).

Resolution Conf. 9.24 (Rev. CoP17) indicates that a species in demand for international trade should only be transferred to Appendix II if certain precautionary safeguards are met. For a species in demand for trade, the Conference of the Parties must be satisfied with range State implementation of the Convention's requirements, and in particular implementation of Article IV. The Conference of the Parties must also be satisfied that there are appropriate enforcement controls and compliance with the requirements of the Convention.

To assess whether precautionary measures are in place to allow transfer of Peregrine Falcon to Appendix II, the Secretariat published, at the request of Canada, a Notification (2024/113) in October 2024 including a survey addressed to all Parties and inviting comments from interested observers (Section 6). Twenty-seven Parties responded to the Notification and together represent approximately 75% of all exports of live Peregrine Falcon and 9.8% of all imports of specimens of Peregrine Falcon globally. The information collected from the respondent Parties and other sources allows for robust assessment as to whether a transfer to Appendix II would be in accordance with the precautionary measures of Resolution Conf. 9.24 (Rev. CoP17).

All Parties indicated that they have national protection for the species. Protection ranges from total prohibition of the capture, killing, owning, transporting, possession and trade of wild specimens and the practice of falconry to countries where falconry is allowed and Peregrine Falcon can be harvested from the wild for national use with certain controls. Most Parties indicated that they would not have concerns with the effectiveness of national / international legislation for ensuring conservation of the Peregrine Falcon with an Appendix II listing. Information on national and international legal instruments for Peregrine is in Section 7. International efforts are supporting national and regional efforts and the global population of Peregrine Falcon continues to grow and increase. An Appendix II listing also requires a non-detriment finding (NDF) before export and thus ongoing review by range States.

Some Parties expressed concern that an Appendix II listing would increase demand for wild peregrines and / or increase illegal trade, which could impact the global population and / or smaller subpopulations. The current state of utilization and trade of Peregrine Falcon is considered in Section 6. Demand for wild Peregrine Falcon is expected to remain small in terms of the number of birds, and specialized for falconry and captive-breeding operations for new bloodlines and specific varieties, with most birds for falconry continuing to be supplied by the well-established captive-bred industry (Reuter pers. comm. 2025). With a CITES Appendix II listing, national governments will continue to be responsible for regulating any wild take and national use (including captive breeding).

Additionally, some respondents highlighted concerns with increasing Avian flu cases globally, how this is impacting peregrine populations, and how this may factor into an Appendix II listing. Avian flu poses a mortality threat to birds (Couty et al. 2024; EFSA et al. 2023) which CITES Scientific Authorities would be expected to consider when making any Non-Detriment Findings. In addition, it is unlikely that infected Peregrine Falcons would enter the trade chain, becoming a vector for Avian flu (Reuter pers. comm. 2025), as infected individuals quickly succumb to the illness (Rayment et al. 2025, Bertran et al. 2012). Moreover, many countries impose quarantine procedures for live wild bird importations and monitor them for Avian flu for a specific period of time (FAO, Animal production and health, 2011).

All factors considered, Canada views transfer of the Peregrine Falcon from Appendix I to Appendix II to be low risk for the species conservation. Transfer to Appendix II would be an opportunity to demonstrate the success of CITES for a species with a healthy population, despite ongoing threats, and that does not meet the CITES biological criteria for retention in Appendix I. Such a transfer will reduce administrative measures for a species where most individuals traded at low levels are captive bred, allowing Parties to dedicate limited resources to where they would achieve a greater conservation impact.

3. Species characteristics

3.1 Distribution

Peregrine Falcon has an extremely large global distribution, one of the widest of any bird species, and occurs in North America, Africa, Europe, Asia, Australia, and South America. The species lives and breeds on every continent except Antartica.

3.2 Habitat

Peregrine Falcon inhabits a wide variety of habitats, including wet and dry, and hot and cool climates (del Hoyo et al. 1994). Peregrine Falcon also inhabits highly-modified human environments and can thrive in these environments due to an artificially-high prey base and freedom from persecution (Chace and Walsh 2006). Kauffman et al. (2003) documented much higher fecundity and juvenile survival rates for urban individuals versus rural individuals in California (Kirmse 2003).

Nesting sites may be the most important component determining suitable breeding habitat. Despite the global scale of their distribution across many biomes, nest-site characteristics are remarkably similar, and are usually naturally occurring cliffs and bluffs (e.g., Brambilla et al. 2006, Carrière and Matthews 2013) although some tree-nesting has been documented in both North America (Campbell et al. 1977) and Europe (Kirmse 2003). Additionally, in recent decades, Peregrine Falcon across its global range has also begun nesting more frequently on buildings and other man-made structures in built-up urban areas (Cade et al. 1996). Non-breeding adults ("floaters") can occur in areas with no suitable nesting habitat (White et al. 2002).

3.3 Biological characteristics

Peregrine Falcon is a small to medium-sized predator that specializes in birds ranging from hummingbirds to geese (White et al. 2002). Other prey may include small mammals such as bats and rodents that can form a significant part of their diet in some areas (e.g., Court et al. 1988). Long, pointed wings and well-developed flight muscles facilitate high speed flight and high-speed mid-air attacks on prey.

Peregrine Falcon typically raises one clutch of three to four eggs per season (Defenders of Wildlife 2016). The highest mortality of birds is in the first year of life (White et al. 2002), with mortality upwards of 60% (USFWS 2004). Populations often contain some non-breeding adults ("floaters"). They can serve as an important buffer to change if breeding adults are lost from the population but can also result in increased competition for food that affects nestling survival (Millsap and Allen 2006; USFWS 2004). The lifespan of peregrine falcons is 7-15 years but birds can live as long as 20 years (White et al. 2002; Defenders of Wildlife 2016).

Generally speaking, populations at higher latitudes breed at those latitudes, and then migrate to lower latitudes along established flyways (Ganusevich et al. 2004, Goodrich and Smith 2008, Dixon et al. 2012), while populations at lower latitudes are non-migratory.

3.4 Morphological characteristics

Peregrine Falcon is a falcon exhibiting reverse sexual dimorphism, females being approximately one-third larger in all dimensions and in weight (White et al. 2002). Body size is the most reliable indicator for distinguishing males from females. Adult plumage is generally dark grey on the back and crown with broad malar stripes while the chest and breast are pale with dark baring and streaking. Juveniles have a brown back and head with a reduced malar area and pale chest and breast with dark barring and some streaking.

As a result of its large distribution, the species shows great variation in size and colour. Morphological differences are clearly defined by geography in some populations, but there is also much variation over vast reaches of large continental regions, making the boundaries of subspecies difficult to demarcate (White et al., 2013). Variation in morphological appearance does not correspond consistently with pattens in available molecular data (White al., 2013) In general, birds in northern latitudes are larger than those located further south.

3.5 Role of the species in its ecosystem

Peregrine Falcon is a specialist bird predator and it may influence the migratory behaviour of other bird species such as passerines, shorebirds and some seabirds. Wintering shorebirds in Mauritania altered both their flocking behaviour and foraging patterns in response to the Peregrine Falcon predation (Van Den Hout et al. 2008). Behavioural changes due to increases in Peregrine Falcon predation concurrent with recovering populations have even been linked to declines in shorebird body condition and numbers in British Columbia, Canada (Ydenberg et al. 2004). It is unlikely, however, that the viability of populations of other species is dependent on the role of the Peregrine Falcon in the ecosystem.

4. Status and trends

In 2021, the International Union for Conservation of Nature's Red List of Threatened Species (IUCN Red List) assessed the Peregrine Falcon as a species of 'Least Concern' globally with an increasing population trend (BirdLife International 2021). The IUCN European Red List regional assessment also identifies the species as Least Concern and with an increasing population trend (BirdLife International 2021).

4.1 Habitat trends

Habitat is generally not limiting for the Peregrine Falcon. In recent decades, Peregrine Falcon across its global range has also begun nesting more frequently on buildings and other human-made structures in built-up urban areas (Cade et al. 1996).

4.2 Population size

The population size for the Peregrine Falcon is very large, and numbers are not close to the threshold that would establish the species as one of global concern. The global population size is estimated to be 248,000 to 478,000 mature individuals (BirdlLife International 2021). Within its global range, populations at higher latitudes are more productive and have higher density than populations closer to the equator, probably due to greater prey availability (Jenkins and Hockey 2001).

A literature review and the responses to Notification (2024/113) in October 2024 provide more detailed information on country-level or continent-level populations, as summarized below. Presentation of population information allows for more detailed understanding of populations in relation to trade.

Africa: In response to Notification (2024/113), Tunisia, Morocco and South Africa each indicated 100-1,000 breeding pairs of Peregrine Falcon. Algeria indicated that the number of peregrines in the country is significant. Garrido et al. 2021 estimated the North African population to be 2,290-2,900 pairs and the overall trend as stable although there may be some local declines. Simmons et al. (2008) estimated <100 pairs in the whole of Namibia, while estimates for other countries are of the same magnitude: 350-400 pairs in Zimbabwe, 75-80 pairs in the Canary Islands, and <20 pairs in Cape Verde (Global Raptor Information Network 2014).

Asia including Middle East: In response to Notification (2024/113), Iran estimated its current population at 10-100 breeding pairs of Peregrine Falcon. Singapore reported 0-10 pairs and the United Arab Emirates reported 10 breeding pairs (and 20 non-breeding). Japan reported its population numbers of Peregrine Falcon to be significant with breeding status surveys showing that breeding sites have increased over the past 20 - 30 years. Kuwait confirmed that it has no breeding population of Peregrine Falcon – the species is only a transitory migrant or rare resident in the country. In 2016, China reported 100-1,000 breeding pairs and Mongolia 0-10 breeding pairs (CoP17 Info.Doc. 5).

Australia and Oceania: The total population size for Australia was earlier estimated at 3,000-5,000 breeding pairs (Global Raptor Information Network 2014) but is currently unspecified though reported by Australia as abundant and common its response to Notification (2024/113).

Europe: The most recent IUCN European Red List regional assessment estimates 16,100-31,100 pairs of Peregrine Falcon across its European range (including Greenland), which equates to 32,200-62,100 mature individuals (BirdLife International 2021). Greenland has approximately 15% of the continental population, followed closely by Spain at 11%, Türkiye at 10%, and the United Kingdom of Great Britain and Northern Ireland (United Kingdom) at 8% (BirdLife International 2021). In response to notification 2024/113, Germany, Spain and the United Kingdom each reported 1,000-5,000 breeding pairs. Czech Republic, Finland, Slovakia and Sweden each reported 100-1,000 breeding pairs, while Croatia, Slovenia and the Netherlands each reported between 10-100 breeding pairs of Peregrine Falcon. Malta reported 0-10 pairs of Peregrine.

North America: In response to Notification 2024/113, Mexico reported between 100-1,000 pairs of Peregrine Falcon in 2024. The United States reported 1,000 to 5,000 pairs, with data analysis from 2019 and 2020 determining that there are 94,366 individuals in the northern management population and 9,583 individuals in the southern management population, for a total of 103,949 Peregrine Falcons. Canada estimates the population of Peregrine Falcon to be around 35,100 mature

individuals, and potentially higher (COSEWIC Assessment and Status Report, 2017). Partners in Flight Science Committee (2020) estimated the total population in the USA/ Canada to be c.72,000 individuals.

South America: In response to Notification (2024/113), Peru reported 10-100 pairs of Peregrine Falcon. One of the few systematic surveys in the region of the Chilean coast recorded 140 breeding pairs (Global Raptor Information Network 2014).

4.3 Population structure

Peregrine Falcon populations consist of four age classes: juveniles (less than one year old), sub-adults, floaters (non-breeding adults) and breeding adults (Millsap and Allen 2006). The number of juveniles in a population is determined by the number of breeding pairs, with production dependent on the experience of the breeding pair and prey availability (Millsap and Allen 2006). Mortality is highest amongst juveniles. The number of breeding adults is limited by prey availability and the number of nesting sites (Millsap and Allen 2006). Once all potential nesting sites are occupied, the average age of breeding pairs increases due to competition for nest sites, and the number of floaters increases (Millsap and Allen 2006).

4.4 Population trends

In the past, Peregrine Falcon populations suffered severe declines due to the effects of organochloride pesticides such as DDT (See section 5). At present, the global population is increasing in addition to the European population (Bird Life International 2021).

In some areas, Peregrine Falcon has surpassed its pre-DDT population levels (e.g. Altwegg et al. 2014, Holroyd and Banasch 2012, Heinrich 2009, Banks et al. 2003). For example, it has undergone a large and statistically significant increase over the last 40 years in North America (2.6% increase over 40 years, equating to a 127% increase per decade; data from Breeding Bird Survey and/or Christmas Bird Count: (Butcher and Niven 2007). Data from COSEWIC (2017) provides even better coverage for northern populations and similarly suggests that there has been a significantly large increase for this area (Partners In Flight 2021).

A similar pattern of steep population declines followed by gradual recovery after DDT was banned also occurred in Europe (Banks et al. 2003, Wegner et al. 2004), parts of Asia (Kokorev 2003, Döttlinger and Nicholls 2005, Efimenko 2005, Sielicki and Sielicki 2007) and South America (de Carvalho Filho et al. 2011).

The population in the Arctic region is estimated to be stable (Franke et al. 2019). And the overall trend in North Africa is thought to be stable, although there may be some local declines (Garrido et al. in prep.).

Many populations that did not experience a historical decline also appear to be increasing, often due to use of urban environments for breeding. In Cape Town, South Africa, urban Peregrine Falcons increased from 3 breeding pairs in 1997 to 18 in 2010 (Altwegg et al. 2014).

There are a few exceptions to the general global trend of stable or increasing populations. There is evidence for localised declines, e.g. in Libya (Garrido et al. 2021). Despite an overall increase in Canadian Peregrine Falcon numbers, low productivity has been recorded in some locations (Holroyd and Banasch 2012).

4.5 Geographic trends

Although the global range of Peregrine Falcon contracted with local extirpations due to DDT, in almost all cases populations have recovered and recolonized their former range. The Peregrine Falcon currently has a wide and stable global range and has proven adaptable to co-existing with humans even in environments highly modified from their natural state, such as in urban areas. Thus it is likely that for the foreseeable future, Peregrine Falcon populations will persist in most areas of the globe.

5. Threats

At a global scale, Peregrine Falcon populations are considered secure. The Peregrine Falcon has an extremely large range, increasing population trend and extremely large population size (BirdLife International 2021). Threats to individuals and local populations do still exist.

Environmental toxins have been the main threat to Peregrine Falcon populations around the globe (Castagna et al. 2024). Peregrine Falcon populations in North America and Europe declined significantly following World War II, mainly due to the widespread use of organochlorine pesticides such as DDT (Heinrich 2009), which caused eggshell thinning and breakage resulting in breeding failures and ultimately population declines.

In many countries, organochlorine use has been banned and these chemicals are decreasing in the environment (Jarman et al. 1994, USFWS 2003) and in Peregrine Falcon populations (Henny et al. 2009). Although global use of DDT has remained relatively constant in the first decade of the 21st century (van den Berg et al. 2012), the fact that Peregrine Falcon populations are stable or increasing around the world suggests that current levels of DDT use are not having a significant impact on populations. Pesticide and chemical use may still be having an impact on bird populations (Castagna et al. 2024, Molard et al. 2007).

The latest (i.e., 2020–2023) highly pathogenic avian influenza (HPAI) H5 virus has recently caused repeated mass mortality events among wild birds and infection has been detrimental for a variety of bird species, including the Peregrine Falcon (Couty et al. 2025; EFSA et al. 2023). The number of wintering and breeding Peregrine Falcons in the Netherlands for example has recently declined (Caliendo et al. 2024). The World Animal Health Information System has reported 392 Peregrine Falcons infected by avian flu from 2017 to June 2025. By region, most of these infected falcons were found in Europe with 236 cases and in North America with 110 cases. Asia declared 37 cases, Central and South America and the Caribbean had 7 cases and only 2 cases were reported in Africa.

Other threats include habitat alteration and destruction, especially of nesting areas, which can have an effect on local Peregrine Falcon populations. In its West African range, the species may be vulnerable to habitat degradation through wood harvesting, overgrazing and burning as well as exposure to pesticides (Thiollay 2006). Weather can also affect breeding (Bradley et al. 1997) and cause long-term declines in productivity (Anctil et al. 2013).

The species is used extensively in falconry, although the IUCN Red List assessment of Peregrine Falcon reports that population-level impacts of this activity are uncertain (White et al. 2013, BirdLife 2021). In North Africa, the main threat to the species is illegal trapping and collection of nestlings for use in falconry (Garrido et al. 2021).

Rock climbing activities may pose a threat to the species' nest sites (Global Raptor Information Network 2015), and careless methods of field study may result in abandonment of eggs (White et al. 2020). It is highly vulnerable to the effects of potential wind energy development (Strix 2012), and collision or electrocution from electricity cables may be common in some areas (White et al. 2020). While persecution has decreased significantly since the species received legal protection, illegal persecution still occurs in some areas (RSPB 2023).

6. Utilization and trade

6.1 National utilization

Peregrine Falcon has historically been used extensively for the practice of falconry, which is defined as hunting wild prey with trained raptors. Falconry is still the main driver of trade and use of Peregrine Falcon today (Kenward 2009). Falconry is a highly organized sport represented globally by the International Association for Falconry and Conservation of Birds of Prey (IAF). The IAF is an accredited member of IUCN International Union for Conservation of Nature and currently has 110 member associations from 87 countries worldwide, totalling 75,000 members. These associations work actively with governments to conserve the species and promote the sport under sustainability and best practices criteria.

Today, falconry techniques are used for a variety of purposes, including traditional hunting; falcon speed competitions; educational displays and exhibitions; and nuisance-bird control in historic sites, landfills, crop sites, industrial complexes and airports (Reuter and Cooper 2016). Falconry techniques were also

instrumental for conservation and recovery of falcons, when populations were reduced due to widespread use of DDT in the 1940 – 70s (IAF 2013), and they are still used today for recovery and management activities.

Larger falcons are favoured by falconers because the larger birds have greater hunting success with larger prey species (Reuter and Cooper 2016). To satisfy the desire for larger falcons, falconers may use species other than Peregrine Falcon (e.g., *Falco rusticolus*, *Falco cherrug*), larger Peregrine Falcon that occur in northern regions, or they may simply prefer female over males (Reuter and Cooper 2016). However, a market exists for both sexes because males are used for activities such as speed competitions, hunting of smaller prey, nuisance-bird control, and flight exhibitions. Falconers prefer to acquire falconry birds as juvenile, first-year birds because they are generally easier to train than adults and they have already developed hunting skills in comparison with nestlings (Reuter and Cooper 2016). The majority of Peregrine Falcon currently used for these activities are captive bred (Reuter and Cooper 2016). However, wild-caught falcons are also used in some countries (see Section 7.1).

6.2 Legal trade

Data for this section was extracted from the CITES trade database on March 16, 2016 for the years 2010-2014, and on May 29, 2025 for the years 2015-2024 using the CompTab report. These data sets are analyzed separately to allow for a comparison of trade in Peregrine Falcon over time. The analyses include data associated with direct export only as reported by the exporting country. Only records reported by exporters were used because these data most accurately reflect the specimens in trade: combining import and export data would result in the reporting of duplicate trade if different terms or codes were used by trading partners in their annual reports. Although there is known trade in hybrids of Peregrine Falcon, the CITES trade database only refers to "*Falco* hybrids" and it is therefore not possible to determine which species are involved. *Falco* hybrid trade data were not analyzed.

From 2010 to 2014, 2,759 live Peregrine Falcons were exported, with an average of 552 Peregrine Falcons exported per year. Of these, 85% of exports were of captive–bred birds. Fifteen percent of exports were either of wild origin birds (278 birds), unknown origin birds (134 birds) or birds that were exported with no source code on the permit (15 birds). As an Appendix I species, trade in specimens of wild origin is limited to non-commercial trade. Therefore, as expected, all live birds exported with source codes W and U were either exported with purpose codes P (personal) or N ((re-) introduction to the wild), except for one wild live falcon that was exported from South Africa to Swaziland as purpose code H (hunting trophy). Countries reporting export of birds with purpose code P were Qatar and Saudi Arabia. Countries reporting export of birds with purpose code N were United Arab Emirates, Qatar and Azerbaijan.

In comparison to trade in live birds, other trade types are negligible. Dead specimens of wild origin were exported as purpose code S (Scientific) and included 9 bodies, 63 eggs, 374 feathers, 8 shells (egg) and 199 specimens (e.g., blood samples). There were 41 dead specimens (38 bodies, 2 trophies and 1 skeleton) of captive-bred origin exported for purposes T (commercial), Z (zoo) or P (personal). These were probably taxidermy specimens.

For 2015-2024, 15,512 live Peregrine Falcons[1] were exported or re-exported, with an average of 1,551 Peregrine Falcons per year from 51 countries. This is an increase in average number exported when compared to the previous five year period (2010-2014). Of these exports, 96% were captive-bred (source codes C or D). The remaining were either wild origin birds (source code W or F; 641 birds), unknown origin birds (34 birds) or no source code provided (26 birds). Similar to 2010-2014 and as expected for an Appendix I species, trade in wild origin specimens were for personal or re-introduction purposes. Of the 51 Parties exporting Peregrine Falcon in 2015-2024, 28 were from Europe, 11 were from Asia, 2 were from North America, 5 were from Africa, 3 from South America and 1 from Oceania. One exporter was unknown. As in 2010-2014, trade in specimens other than live birds was negligible.

Table 1 shows specifically the direct export data for the two periods (2010-2014 and 2015-2024). Direct export represents the first entry into trade and identifies the countries that would need to make NDFs for wild trade or ensure that trade in captive bred specimens meets the guidance in CITES resolutions on captive breeding. The data indicates an increase in the average number of birds exported for the

[1] *Falco pelegrinoides* (Barbary falcon) was recognized by CoP19 as a subspecies of the Peregrine Falcon. Between 2015 and 2022, 226 live birds (source code C or D) were exported or re-exported.

first time per year, driven primarily by increased exports from the European region; other regions had stable or decreased direct exports during the 2015-2024 period when comparted to 2010-2014.

In addition to direct exports, there were 2,891 live birds re-exported between 2015 and 2024. The majority of these birds were source C and D (captive-bred) and traded for commercial purposes or personal use (78.65 %). Specimens originating from the wild accounted for 447 of these re-exports, with 83% re-exported for re-introduction purposes. The remainder were re-exported for personal or educational purposes. Approximately half of these birds were re-exported from the European region.

Table 1: Comparison of direct exports of live Peregrine Falcon by CITES Region between 2010-2014 and 2015-2024 is provided in the following table. The 2010-2014 data is from CoP17 Prop. 17 Table 1.

Region	2010-2014	2015-2024
1 - Africa	<1% (9 birds)	<1% (26 birds)
2 - Asia	18% (489 birds)	3.01% (380 birds)
3 – South/Central America and Caribbean	2% (52 birds)	<1% (40 birds)
4 - Europe	71% (1961 birds)	92.54 % (11 680 birds)
5 – North America	9% (248 birds)	3.92 % (495 birds)
6 -Oceania	0	0
Total	**2 759 birds**	**12 621 birds**
Average per year	552 birds	1 262 birds

Overall, the top ten exporters by volume represent 84.12% (13,049 birds) of the total exports and re-exports. By region, Europe is the top exporter (81.93 %, 12,710 birds) followed by Asia (14.25%, 2,211 birds) and North America (3.29%, 511 birds). See Table 2 for country specific data.

The top ten importers by volume represent 93.82% of the total imports between 2015-2024. By Region, Asia (primarily from the Middle East) is the top importer (92.42%, 12,146 birds) followed by Europe (5.75%, 756 birds). The remaining exported Peregrine Falcon between 2015-2024 represent 1.81% (239 birds) of the total imports.

Table 2: Main exporting and importing countries from 2015-2024 based on export data extracted from the CITES Trade Database.

Rank	Exporting Country	% Total Export (Number of birds)	Importing Country	% Total Import (Number of Birds)
1	Germany*	20.05 (3 111)	United Arab Emirates	56.25 (7 392)
2	Spain *	19.7 (3 058)	Qatar	23.22 (3 051)
3	United Kingdom*	13.09 (2 031)	Saudi Arabia	3.38 (444)
4	United Arab Emirates*	10.11 (1 569)	Kazakhstan	3.24 (426)
5	Austria	7.02 (1 089)	Kuwait	1.74 (229)
6	Czech Republic*	3.99 (619)	Spain*	1.59 (209)
7	The Netherlands*	3.71 (577)	Bahrain	1.31 (172)
8	Poland	2.75 (427)	United Kingdom*	1.23 (161)
9	Slovania*	1.83 (285)	Jordan	1.03 (136)
10	Denmark	1.82 (283)	Japan*	0.83 (109)
	Total	84.12 (13 049)		93.82 (12 329)

* Parties that provided population and management information in response to CITES Notification 2024/113.

Trade in live Peregrine Falcon is primarily for the practice of falconry, either for breeding stock or falconry birds. While there are over 200+ range states for the Peregrine Falcon, traditional falconry is not practiced in all range states, and there are a relatively limited number of practitioners relying on Peregrine Falcon for the sport.

In both the 2010-2014 and 2015-2024 period, trade of Peregrine Falcon was found to be concentrated among relatively few countries in Europe, Asia (the Middle East) and North America. Examination of trade patterns indicates that Middle Eastern countries are the greatest importers and European countries are the greatest exporters of live Peregrine Falcon.

6.3 Parts and derivatives in trade

For the period of 2015-2024, 3,146 specimens (other than live birds) of the Peregrine Falcon were exported which represents 17% of all trade in specimens of Peregrine Falcon. The majority of these exports, 92.14%, were for scientific purposes and included specimens such as feathers and eggshells. 80% of these specimens were of wild origin.

6.4 Illegal trade

This section discusses illegal trade under the current Appendix I listing. Possible illegal trade resulting from a transfer to Appendix II is discussed in Section 6.5.

The scale of illegal trade is difficult to assess due to its clandestine nature. Illegal trade in falcons is known to occur, although the Peregrine Falcon is not the most sought-after falcon species in illegal trade (Panter et al. 2023). Tactics such as mislabelling or using fraudulent permits contribute to enforcement challenges (Advocate 2024). Wild Peregrine Falcon juveniles and eggs are often stolen from nests and laundered into the legal trade by falsely claiming they were captive-bred (BBC 2024). The whole region of North Africa faces the problem of raptor poaching for illegal trade (Garrido et al. 2021; Maghreb Ornitho 2018). This is important for hawks and especially falcons, particularly Sooty, Lanner and Peregrine Falcons, some of which are trapped for falconry and traded in local and international markets (Garrido et al. 2021).

Reports of seizures, court cases or studies are the best sources of information regarding illegal trade in the species. The 2024 World Wildlife Crime Report indicates that approximately 1% of all seizures between 2015-2021 was in birds of prey. Information on whether Peregrine Falcon was among that 1% is unknown. In 2022, in the context of OPERATION THUNDER, a global law enforcement intelligence-led operation coordinated by INTERPOL and the World Customs Organization (WCO) with the support of the CITES Secretariat and the International Consortium on Combating Wildlife Crime (ICCWC), Pakistan made a notable seizure involving falcons where young birds of prey were seized. While the official reports don't detail the exact number or species seized in Pakistan, falcons have historically been a key target in the region due to their high black-market value—some fetching tens of thousands of dollars each.

An internet search also found media reports of recent Peregrine Falcon seizures and smuggling that demonstrate that illegal trade in Peregrine Falcon occurs (e.g. BBC 2024, The Guardian 2024, Mongabay 2023, Al Jazeera 2021). These reports suggest that the demand comes primarily from Middle Eastern countries for falconry purposes.

For Parties that have provided information, some indicated concerns regarding illegal trade and about effectiveness of existing legislation in addressing illegal trade. However, the extent of this illegal trade appears to be very low in comparison to the volume of legal trade and has not impacted the population status of the species.

6.5 Actual or potential trade impacts

Current trade of Peregrine Falcon is not a conservation threat to the species. The wild population size is large. Most of the trade is in captive-bred individuals. Trade in wild birds is low and for non-commercial purposes. Current conservation efforts and trade controls are effective (Section 7.1, 8.2) and illegal trade is not a significant concern for most key Parties.

The Precautionary Measures in Resolution Conf. 9.24 (Rev. CoP17) specify that Parties should act in the best interest of the conservation of the species concerned and adopt measures that are proportionate to the anticipated risks to the species when considering a transfer to Appendix II. Estimation of the risks to wild populations associated with a transfer to Appendix II requires consideration of implementation by the range States of the requirements of the Convention for the species; the biology of the species; and the capacity of the market to increase.

The precautionary measures are discussed below in consideration of responses by Parties that have provided information regarding possible impacts of a transfer. All factors considered, a transfer to Appendix II is a measure that is proportionate to the low risks to the species from international trade.

Implementation of the Convention: A transfer of the Peregrine Falcon to Appendix II could result in increased legal trade of wild birds, with the potential to harm wild populations. However, Parties that have provided information generally indicated that national-level controls were robust and effective at protecting wild falcons from overharvest and unsustainable take (Sections 7.1, 8.2). Indeed, the recovery of wild populations of Peregrine Falcon in many countries has resulted from national-level protection and management efforts (Section 8.1). National governments control allowable wild take, national use, and issuance of CITES permits for trade (including non-detriment findings). Decisions about national-level enforcement for an Appendix II species also remain under national-level control. Most Parties that have provided information indicated that national-level controls would not change as a result of a transfer of the Peregrine Falcon to Appendix II, thus maintaining the current levels of controls for the species.

Range States can control whether captive breeding is permitted and implement any necessary controls to manage captive breeding operations to manage risks to wild populations. For example, closed leg-ring systems of identification for captive birds can be effective at preventing laundering of wild birds of the favoured age class (juvenile birds; section 6.1).

International instruments are already in place to support regional and global efforts aimed at the conservation and sustainable management and trade of the peregrine falcon and its habitat (Sections 7.2, 8.1). Stakeholders are also engaged in conservation efforts. The International Association for Falconry and Conservation of Birds of Prey and their affiliated national associations work with members and governments towards sustainable use of falcons (Section 6.1).

An Appendix II listing requires a non-detriment finding before export is allowed to ensure non-detriment of trade and monitoring the impact of trade on the species. There are provisions under CITES to address unsustainable trade through the Review of Significant Trade should concern arise due to levels of wild take (Section 8.6)

Biology of the species: Juvenile birds are the preferred age group associated with take from the wild for falconry because these birds have already developed hunting skills and are generally easier to train than adults (Reuter pers. comm. 2025, Section 6.1). This age group has high natural mortality and is not yet part of the breeding population (Section 3.3). Removal of juvenile birds from Peregrine Falcon populations has a lower impact on the wild population compared with take of adult birds and is considered an effective management strategy for limiting effects of take from the wild (Millsap and Allen 2006). For example, it has been estimated that a 5% level of take of nestlings or juveniles is so small as to be undetectable in population monitoring, and that healthy populations can sustain 10-20% removal of juveniles (USFWS 2004). A more recent study confirmed that Peregrine Falcon in North America is robust enough to support wild take for falconry, taking into account current allowable take, actual harvest and the estimated population size (USFWS 2023). Additionally, in healthy populations, the active breeding population can be much smaller than the number of adults, and thus some wild take of adults could occur without harm (and possibly with benefit if prey is scarce) to the wild population (Section 3.3). Thus, the structure of healthy Peregrine Falcon populations provides some natural resiliency to either legal or illegal take that would serve to guard against population declines.

Avian flu poses an emerging mortality threat to birds (Couty et al. 2024; EFSA et al. 2023). Mortality due to avian flu would need to be considered when making any Non-Detriment Findings in support of international trade. However, as infected birds succumb rapidly to the new strains of Avian flu, it is unlikely that Peregrine Falcons in trade would become vectors for Avian flu (Reuter pers. comm. 2025, Rayment et al. 2025, Bertran et al. 2012).

Market Capacity: It is possible that eased trade restrictions associated with captive-bred birds, resulting from an Appendix II listing, could stimulate the falconry market. However, it seems unlikely that the change would be large enough to have a negative impact on wild falcon populations. Currently the market for wild live Peregrine Falcon is small in terms of number of birds and is expected to remain small and specialized for falconry and related purposes (Reuter and Cooper 2016; Reuter pers. comm. 2025). Most of the birds in trade are captive-bred (Section 6.2), and this is likely to continue because the captive-bred falcon industry is well-established. The Peregrine Falcon is not necessarily the most sought-after species for falconry due to its smaller size compared with other falcons, and this is unlikely to change.

A recent study (Panter et al. 2023) shows that between 1975 and 2020, 272 species of raptors were traded. Hybrid Falcons were most commonly traded, comprising more than a third of the global diurnal CITES-listed raptor trade and nearly a quarter of the entire live raptor trade globally. This was followed

by Gyrfalcons (*Falco rusticolus)*; Saker Falcons (*F. cherrug)*; Peregrine Falcons (*F. peregrinus*) and Northern White-faced Owls (*Ptilopsis leucotis*). Peregrine Falcon accounted for 7.1% of the global trade in raptors. Falconers often cross falcon species to produce F1, F2 and backcross hybrids of these species' combinations. Such combinations result in offspring birds that express selected phenotypic and genotypic characteristics desired for falconry such as increased body size, attractive plumage and increased climate tolerance in regions.

7. Legal instruments

7.1 National

wenty key trading countries indicated having national protections for the species either specifically or through general wildlife regulations in 2016. None of those countries indicated concerns with effectiveness of their national legislation for ensuring conservation of the Peregrine Falcon and management of legal trade. Most countries indicated that they did not expect any change to national-level controls as a result of a transfer of the Peregrine Falcon to Appendix II in 2016. In October 2024, the CITES Secretariat issued a Notification to the Parties (2024/113) on behalf of Canada with a questionnaire on current legislative instruments or other tools that concern the conservation, protection and management of the Peregrine Falcon. Responses received by Canada further confirmed the precautionary measures have remained unchanged. Responses from 13 additional Parties confirmed that precautionary measures are in place within their countries to ensure the protection of the Peregrine Falcon if the transfer from Appendix I to Appendix II is agreed.

National regulations for the Peregrine Falcon can be loosely organized into three categories: those that protect the species as vulnerable or recovering, those that allow the possession of raptors for falconry purposes and breeding (primarily using captive-bred falcons), and those that allow wild take for the purpose of falconry or breeding. Accordingly, protection ranges from total prohibition of the capture, killing, owning, transporting, possession and trade of wild specimens to countries where Peregrine Falcon can be harvested from the wild.

7.2 International

International instruments support regional and global efforts aimed at the conservation and sustainable management of the Peregrine Falcon and its habitat. They are essential to the sustainable management of a migratory species. There are three primary international agreements cited by Parties that provide information pertaining to the international legal protection of the Peregrine Falcon, summarized below.

The Convention on the International Trade of Wild Fauna and Flora (CITES): The species *Falco peregrinus* was listed on CITES Appendix II in 1975 except for the subspecies *F. p. tundrius, F. p. peregrinus and F. p. anatum*, which were listed on Appendix I. All the Appendix II subspecies of the Peregrine Falcon were transferred to Appendix I in 1977.

The Convention on Migratory Species (CMS): Also known as the Bonn Convention, the goal of CMS is to conserve migratory species throughout their range. The Peregrine Falcon is listed in CMS Appendix II, which includes species that either requires international agreements for their conservation and management, or that have a conservation status that would significantly benefit from international cooperation. A *Memorandum of Understanding (MOU) concerning the Conservation of Migratory Birds of Prey of prey in Africa and Eurasia*[2] came into effect November 1, 2008 and is currently signed by 66 range States (as of June 4, 2025) and five co-operating Partners, including the International Association for Falconry and Conservation of Birds of Prey (IAF), the IUCN Species Survival Commission Vulture Specialist Group and the Peregrine Fund. Currently, approximately, two thirds of Parties that provided information are signatories to CMS and the conservation MOU. An Action Plan in Annex 3 of the MOU categorizes the Peregrine Falcon in Category 3, which includes migratory species other than those globally Threatened or Near Threatened (Category 1) and that require international agreements for their conservation and management, as well as those that have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement.

[2] http://www.cms.int/raptors/en/page/agreement-text

European Union: The Peregrine Falcon is listed in Annex A of the EU Wildlife Trade Regulations (European Union 1997). As such, there are strict import and export controls in place that must be implemented by all European Union countries.

The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) aims to ensure conservation of wild flora and fauna species and their habitats by means of cooperation between states. It has been signed by 49 countries and the European Union. The Peregrine Falcon is listed as a strictly protected fauna species in Appendix II of the Bern Convention.

To implement the Bern Convention in the European Union, the *EU Birds Directive* was adopted in 1979. The *EU Birds Directive* protects migratory species and their habitat and generally bans activities which could threaten birds that are naturally occurring in the EU (European Union 2009). Several of the Parties that provided information are members of the EU and are required to implement both the *EU Wildlife Trade Regulations* and the *EU Birds Directive* through national legislation.

The European Union range States are not all significant players in the trade of the Peregrine Falcon, but it is worth noting that the strict controls in the European Union apply to the majority of the Peregrine Falcon trade in the world. The trade restrictions imposed by the *EU Wildlife Trade Regulations* for Peregrine Falcon are stricter than those required by a CITES Appendix II listing. According to responding Parties, the trade controls would be unlikely to change in the event of a transfer of the Peregrine Falcon to Appendix II.

8. Species management

8.1 Management measures

Wild Peregrine Falcon populations have recovered and grown globally, often through management efforts focussed on recovery of the species. Management efforts have included close monitoring, collaboration between countries for shared populations, and enforcement of the existing national and international legal frameworks. In many instances, captive breeding and contributions of falconers were key factors in the recovery of the Peregrine Falcon. In Belgium, Canada, the Netherlands, Spain, and the United States, specific programs have been developed for the recovery of the Peregrine Falcon populations that include placing artificial nests in key sites and/or releasing individuals in areas with historical distribution. In some countries, including Canada, such efforts are no longer necessary because populations have recovered and are now in stable or increasing.

8.2 Population monitoring

According to the information provided by Parties, the majority have ongoing efforts for conservation and monitoring of the Peregrine Falcon in their territories. Governmental and academic scientists, park wardens and civil society groups monitor nesting sites and wild populations, and generally assure the conservation, protection and population health of the species in the wild.

8.3 Control measures

8.3.1 International

There are a number of international-level control measures within existing international instruments as detailed in Section 7.2.

8.3.2 Domestic

See sections 6.4, 7.1 and 8.1 for more information on national-level controls that are aimed at ensuring a sustainable harvest of wild peregrine falcons and the effectiveness of these controls.

8.4 Captive breeding and artificial propagation

Captive breeding of the Peregrine Falcon was initially focused on recovering populations that had been reduced due to widespread DDT use in the 1940 to the 1970s (IAF 2013). Captive breeding was used extensively to produce young birds for release into the wild. These programs were very effective, and in many cases have stopped due to the full recovery of the species in those regions (Reuter and Cooper 2016; Cade and Burnham 2003).

Currently the Peregrine Falcon is bred in captivity in significant numbers to fulfill the demand in regions such as North America, Europe or the Arab countries (Heinrich 2009, Kenward 2009, Fleming et al. 2011). Captive-bred birds are trained to hunt like wild falcons but are more adapted to interacting with practitioners, making them more desirable for falconry. Trade data indicates that 96% of the legal trade of live Peregrine Falcon between 2015-2024 involved captive-bred falcons.

Captive breeding of Peregrine Falcon is not permitted by all range States. There are CITES-registered breeding operations for the Peregrine Falcon or Peregrine Falcon hybrids in Canada, Czech Republic, Denmark, Germany, Serbia, Spain, the United Kingdom, and the United States.

8.5 Habitat conservation

Peregrine Falcon is protected when they occur in protected areas such as national parks or in wildlife management areas. Many countries indicated that existing national legal frameworks also specifically consider the protection of habitats for the species. For example, the *EU Birds Directive* protects migratory species and their habitat, and generally bans activities which could threaten birds that are naturally occurring in the EU (European Union 2009).

8.6 Safeguards

Safeguards have been mentioned throughout the proposal. These include national protection and management provisions for recovery of wild populations and establishment of legal take (Section 7.1). Safeguards also include an international Raptor MOU under the *Convention on Migratory Species* (Section 7.2.2), and a well-managed supply of captive-bred Peregrine Falcons that provides an alternative source to the take from the wild (Section 8.4). Falconry stakeholders also serve as an important safeguard: The IAF represents the falconers (Section 6.1) and provides information and guidance to its members in 87 countries to support sustainable, legal take.

Under CITES, certain safeguards apply to all Appendix II falconry birds. These include the continued requirement for exporting countries to issue export permits with legality findings and non-detriment findings (Resolution Conf. 16.7 (Rev. CoP17) and Resolution Conf. 18.7 (Rev. CoP19)) and to undertake Article IV monitoring of trade. Ongoing monitoring of trade volumes and trends also occurs as part of the Review of Significant Trade (Resolution Conf. 12.8 (Rev. CoP18), and through this process Parties are held accountable to the Appendix II provisions associated with non-detriment of trade.

9. Information on similar species

Many falcons have some similarities in their appearance and juveniles can be difficult to identify, along with challenges with identifying hybrids, however identification is not anticipated to be an increased issue for Peregrine Falcon with an Appendix II listing because of lookalike issues (Reuter pers. comm. 2025). The CITES Guide to Falconry Species, (Law Enforcement Edition), developed by Environment Canada, contains information on the identification of juvenile falcons and hybrid falcons. This is a useful tool to help prevent illegal trade in those species and to monitor and control the cross-border movements of falcons. Genetic testing can also be used to identify falcons and their hybrids (Padula et al. 2023). Trade in all falcons is controlled through CITES under the listing of Falconiformes spp., in either Appendix I or II.

10. Consultations

Canada requested the publication of Notification 2024/113 on October 7, 2024 announcing that Canada is considering submitting this proposal and through the notification is broadly consulting with range State Parties on their conservation and management approaches for the Peregrine Falcon as well as on the effectiveness of implementation and enforcement efforts relating to its international trade. Twenty-seven responses were received from Parties and another eight responses were received from non-governmental organizations, including the Animal Alliance of Canada, CATCA Environmental and Wildlife Society, HSI/Canada, Pro Wildlife, Species Survival Network, the World Animal Protection International, the Association for Falconry and Conservation of Birds of Prey, and WWF International, expressing their support or concern on the potential proposal.

11. Additional remarks

Article II paragraph 1 states that "Appendix I shall include all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorized in exceptional circumstances." By this proposal, Canada believes that we have presented a case that the Peregrine Falcon no longer meets the requirements for an Appendix I listing. The species is not threatened with extinction. The information provided by Parties to Notification 2024/113 demonstrated that controls are in place to ensure that the species will not become endangered in the future by international trade. Canada understands it was not the intention of the original drafters of the CITES Convention to maintain species in perpetuity on Appendix I when the conditions for inclusion are no longer met. The Convention was designed to provide adequate protection for recovered species by their transfer to Appendix II.

Adoption of this proposal by the 20th meeting of the Conference of the Parties, as one non-government respondent indicated, "represents an opportunity for CITES to demonstrate its maturity, by acknowledging that, when a species, even an iconic species such as this, no longer meets the Appendix I criteria, the appropriate measures should be taken."

12. References

Advocate Avenue: Falcon Trafficking and Wildlife Crime: Legal Challenges in Combating Illegal Trade**.** Website: https://advocateavenue.com/falcon-trafficking-and-wildlife-crime-legal-challenges-in-combating-illegal-trade/ [Accessed: June 19, 2025]

Al Jazeera. 2021. Poachers' paradise: gulf hunts fuel Pakistan falcon trafficking. https://www.aljazeera.com/news/2021/1/4/poachers-paradise-gulf-hunts-fuel-pakistan-falcon-trafficking [Accessed June 19, 2025]

Altwegg, R., A. Jenkins, and F. Abadi. 2014. Nestboxes and immigration drive the growth of an urban Peregrine Falcon *Falco peregrinus* population. Ibis 156:107–115 pp.

Anctil, A., A. Franke, and J. Bêty. 2013. Heavy rainfall increases nestling mortality of an arctic top predator: experimental evidence and long-term trend in peregrine falcons. Oecologia 174:1033–1043.

Banks, A. N., R. H. Coombes, and H. Q. Crick. 2003. The Peregrine Falcon breeding population of the UK & Isle of Man in 2002. BTO Research Report. Web site: http://www.gardenbirdwatch.org/sites/default/files/u196/downloads/rr330.pdf [Accessed: March 3, 2014].

BBC. 2024. Nest raider ordered to pay £27,000 after peregrine falcon thefts. BBC. Nest raider ordered to pay £27,000 after peregrine falcon thefts [Accessed: June 19, 2025]

Bertran K, Busquets N, Abad FX, García de la Fuente J, Solanes D, Cordón I, et al. (2012) *Highly (H5N1) and Low (H7N2) Pathogenic Avian Influenza Virus Infection in Falcons Via Nasochoanal Route and Ingestion of Experimentally Infected Prey*. PLoS ONE 7(3).

BirdLife International. 2004. Birds in Europe: population estimates, trends and conservation status. BirdLife International, Cambridge.

BirdLife International. 2015. *Falco peregrinus*. The IUCN Red List of Threatened Species.Web site: http://dx.doi.org/10.2305/IUCN.UK.2015-4.RLTS.T45354964A80472203.en [Accessed: 23 February 23, 2016]

BirdLife International. 2016. Bern Convention. Web site: http://www.birdlife.org/europe-and-central-asia/policy/bern-convention [Accessed 14 March 2016].

BirdLife International (2021) European Red List of Birds. Luxembourg: Publications Office of the European Union.

Bradley, M., R. Johnstone, G. Court, and T. Duncan. 1997. Influence of weather on breeding success of peregrine falcons in the Arctic. The Auk 114:786–791.

Brambilla, M., D. Rubolini, and F. Guidali. 2006. Factors affecting breeding habitat selection in a cliff-nesting peregrine *Falco peregrinus* population. Journal of Ornithology 147:428–435.

Butcher, Gregory & Niven, Daniel. (2007). Combining Data from the Christmas Bird Count and the Breeding Bird Survey to Determine the Continental Status and Trends of North America Birds.

Cade, T.J., and W. Burnham (eds). 2003. Return of the Peregrine. The Peregrine Fund, Boise, Idaho. 394pp.

Cade, T. J., M. Martell, P. Redig, T. Septon, and H. Tordoff. 1996. Peregrine Falcons in urban North America. p. 396 *in* D. Bird, D. Varland, and J. Negro (eds.). Raptors in human landscapes, Academic Press Limited, London, San Diego.

Caliendo, Valentina & Bellido-Martín, Beatriz & Fouchier, R.A.M. & Verdaat, Hans & Engelsma, Marc & Beerens, Nancy & Slaterus, Roy. (2024). *Highly Pathogenic Avian Influenza Contributes to the Population Decline of the Peregrine Falcon (Falco peregrinus) in The Netherlands*. Viruses. 17. 24.

Campbell, R.W., M.A. Paul, M. S. Rodway, and H.R. Carter. 1977. Tree-nesting Peregrine Falcons in British Columbia. Condor 79:500–501.

Carrière, S., and S. Matthews. 2013. Peregrine falcon surveys along the Mackenzie River, Northwest Territories, Canada. Web site: http://www.researchgate.net/publication/258333516_Peregrine_Falcon_Surveys_Along_The_Mackenzie_River_Northwest_Territories_Canada/file/72e7e527d5ebbbfc90.pdf [Accessed March 3, 2014]

Castagana, F. et al.. 2024. Understanding Environmental Contamination Through the Lens of the Peregrine Falcon (*Falco peregrinus*). Environments 11 (12):264

Chace, J. F., and J. J. Walsh. 2006. Urban effects on native avifauna: a review. Landscape and Urban Planning 74:46–69.

Council of Europe. 2016. Web site: http://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/104/signatures?p_auth=NiX9BN5x [Accessed 14 March 2016].

Court, G.S., C.C. Gates, and D.A. Boag. 1988. Natural history of the Peregrine Falcon in the Keewatin District of the Northwest Territories. Arctic 41:17–30.

Couty, M., Guinat, C., Fornasiero, D., Briand, F.X., Henry, P.Y., Grasland, B., Palumbo, L. and Loc'h, G.L. 2025. The role of wild birds in the global highly pathogenic avian influenza H5 panzootic. arXiv preprint arXiv:2504.11910.

De Carvalho Filho, E.P.M., J.S. Lisboa, F.C.R. da Cunha, G. Diniz, M.G.D. de Carvalho, M.F. de Vasconcelos, F.I. Garcia, C.E. A. Carvalho, R. Silva, and L. A. Silva. 2011. New records of Peregrine Falcon, *Falco peregrinus*, in Minas Gerais, Brazil. Cotinga 33:102–104.

del Hoyo, J., A. Elliott, J. Sargatal. 1994. Handbook of the Birds of the World, vol. 2: New World Vultures to Guineafowl. Lynx Edicions, Barcelona, Spain.

Defenders of Wildlife. 2016. Basic facts about peregrine falcons. http://www.defenders.org/peregrine-falcon/basic-facts (Accessed 23 February 2016).

Dixon, A., A. Sokolov, and V. Sokolov. 2012. The subspecies and migration of breeding peregrines in northern Eurasia. The Newsletter of the Middle East Falcon Research Group, Issue No. 39.

Döttlinger, H., and M. Nicholls. 2005. Distribution and population trends of the “black shaheen” Peregrine Falcon *Falco peregrinus peregrinator* and the eastern Peregrine Falcon *F. p. calidus* in Sri Lanka. Forktail 21:133–138.

Efimenko, N. N. 2005. The peregrine falcon in Turkmenistan. Falco 25:12–15.

EFSA et al. Annual report on surveillance for avian influenza in poultry and wild birds in Member States of the European Union in 2022. EFSA J. 21, (2023)

Enderson, J. H., W. Heinrich, L. Kiff, and C. M. White. 1995. Population changes in North American peregrines. Transactions of the North American Wildlife and Natural Resources Conference 60:142-161.

Environment Canada. 2015. Management Plan for the Peregrine Falcon *anatum/tundrius* (*Falco peregrinus anatum/tundrius*) in Canada [Proposed]. *Species at Risk Act* Management Plan Series. Environment Canada, Ottawa. iv + 27 pp.

European Union. 1997. Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein. Council of the European Union, Brussels.

European Union. 2009. Directive 2009/147/EC of The European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. *Council of the European Union, Brussels.* http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009L0147

FAO, 2011. International Trade in wild birds and related bird movements in Latin America and the Caribbean. 2011. Vol 166: E-ISBN 978-92-5-106216-6

Fleming, L., A. Douse, and N. Williams. 2011. Captive breeding of peregrine and other falcons in Great Britain and implications for conservation of wild populations. Endangered Species Research 14:243–257.

Franke, A., Falk, K., Hawkshaw, K. et al. 2019. Status and trends of circumpolar peregrine falcon and gyrfalcon populations. Ambio 49: 762-783.

Ganusevich, S. A., T.L. Maechtle, W.S. Seegar, M.A. Yates, M.J. McGrady, M. Fuller, L. Schueck, J. Dayton, and C.J. Henny. 2004. Autumn migration and wintering areas of Peregrine Falcons, *Falco peregrinus*, nesting on the Kola Peninsula, northern Russia. Ibis 146:291–297.

Garrido, J.R., Numa, C., Barrios, V., Qninba, A., Riad, A., Haitham, O., Hasnaoui, H., Buirzayqah, S., Onrubia, A., Fellous-Djardini, A., Saheb, M., Rousselon, K., Cherkaoui, S.I., Essetti, I., Noaman, M., Radi, M., Cuzin, F., Irizi, A., Monchaux, G., Hamdi, N., Monti, F., Bergier, P., Ouni, R., Etayeb, K., Chokri, M.A., Azafzaf, H., Gyenge, P., Si Bachir A. and Bakass, B. 2021. *The conservation status and distribution of the breeding birds of prey of North Africa*. IUCN: Gland, Switzerland. xvi + 102pp.

Global Raptor Information Network. 2014. *Falco peregrinus.* Web site: http://globalraptors.org/grin/SpeciesResults.asp?specID=8248 [Accessed March 3, 2014].

Goodrich, L.J., and J.P. Smith. 2008. Raptor migration in North America. State of North America's Birds of Prey. Nuttall Ornithological Club and American Ornithologist's Union, Cambridge, MA and Washington, DC. Web site: http://rpi-project.org/publications/TP-09.pdf [Accessed March 1, 2014].

Green, M.G., T. Swem, M. Morin, R. Mesta, M. Klee, K. Hollar, R. Hazlewood, P. Delphey, R. Currie, and M. Amaral. 2006. Monitoring results for breeding American Peregrine Falcon (*Falco peregrinus anatum*), 2003. U.S. Department of Interior, Fish and Wildlife Service, Biological Technical Publication FWS/BTP-R1005-2006, Washington, DC.

Heinrich, W. 2009. Peregrine falcon recovery in the continental United States 1974-1999, with notes on related programs of The Peregrine Fund. Pp. 431–444 in J. Sielecki and T. Mizera (eds.). Peregrine Falcon populations - status and perspectives in the 21st century, European Peregrine Falcon Working Group, Turul, Warsaw.

Henny, C.J., M. A. Yates, and W.S. Seegar. 2009. Dramatic declines of DDE and other organochlorines in spring migrant peregrine falcons from Padre Island, Texas, 1978-2004. Journal of Raptor Research 43:37–42.

Holroyd, G. L., and U. Banasch. 2012. The 2005 Canadian Peregrine Falcon survey. Canadian Wildlife Biology & Management 1:30–45.

IAF (International Association for Falconry and Conservation of Birds of Prey). 2013. Falconry and Conservation. International Association for Falconry and Conservation of Birds of Prey, Brussels. Website: http://www.iaf.org/ConservationandFalconry.php.

Jarman, W.M., S.A. Burns, W.G. Mattox, and W.S. Seegar. 1994. Organochlorine compounds in the plasma of peregrine falcons and gyrfalcons nesting in Greenland. Arctic 47:334–340.

Jenkins, A.R. 1997. Peregrine Falcon. Pp. 250–251, in The Atlas of Southern African Birds.

Jenkins, A.R., and P. A. Hockey. 2001. Prey availability influences habitat tolerance: an explanation for the rarity of peregrine falcons in the tropics. Ecography 24:359–365.

Jenny, J. P., F. Ortiz, and M. D. Arnold. 1981. First nesting record of the Peregrine Falcon in Ecuador. Condor 83:2307.

Kauffman, M.J., W.F. Frick, and J. Linthicum. 2003. Estimation of habitat-specific demography and population growth for peregrine falcons in California. Ecological Applications 13:1802–1816.

Kenward, R.E. 2009. Conservation values from falconry. *in* B. Dickson, J. Hutton, and W.M. Adams (eds) Recreational hunting, conservation, and rural livelihoods, Blackwell, Oxford, UK; Hoboken, NJ.

Kirmse, W. 2003. Tree-nesting peregrines *Falco p. peregrinus* in Europe did not recover. Proceeding of the 6th world conference on birds of prey and owls, May 2003, Budapest, Hungary.The World Working Group on Birds of Prey and Owls, Budapest, Hungary.

Kokorev, Y. 2003. Peregrine falcon (*Falco peregrinus calidus*). Falco 21:3–4.

Maghreb Ornitho. https://magornitho.org/2018/01/rare-falcons-rescued-poachers-morocco/. [Accessed: June 18,2025]

Maseveu Oscar Beingolea. 2008. Is illegal take affecting the peregrine falcon population in central Peru: why and how? Proceedings of the Fourth International Partners in Flight Conference: Tundra to Tropics 171–178

Millsap, B.A and G.T. Allen. 2006. Effects of falconry harvest on wild raptor populations in the United States: Theoretical considerations and management recommendations. Wildlife Society Bulletin 34: 1392-1400.

Molard, L., M. Kery, and C.M. White. 2007. Estimating the resident population size of Peregrine Falcon *Falco peregrinus* in Peninsular Malaysia. Forktail 23:87.

Mongabay. 2023. Falcon trafficking soars in middle east fueled by conflict and poverty. https://news.mongabay.com/2023/08/falcon-trafficking-soars-in-middle-east-fueled-by-conflict-and-poverty/ [Accessed June 19, 2025]

Padula A., Bueno V., Giangregorio P., Mengoni C., 2023. Cross-amplification in Falcons and Their Hybrids: A New Implemented Multi-locus Panel for Conservation and Forensic Purposes. Journal of Forensic Sciences 14: 06

Panter C.T. and Jones Georgia C.A and White Rachel. 2023. Trends in the global trade of live CITES-listed raptors: Trade volumes, spatiotemporal dynamics and conservation implications. Biological Conservation 284: 1-13

Partners in Flight. 2020. Population Estimates Database, version 3.1. Available at: http://pif.birdconservancy.org/PopEstimates.

Partners in Flight. 2021. Avian Conservation Assessment Database, version 2021. Available at: http://pif.birdconservancy.org/ACAD.

Phelps, J. and Biggs, D and Webb E.L. 2016. Tools and terms for understanding illegal wildlife trade. Frontiers in Ecology and the Environment 14: 479-489

Rayment, K.M., Franzen-Klein, D., Kurimo-Beechuk, E. et al. 2025. *Exposure and survival of wild raptors during the 2022–2023 highly pathogenic influenza a virus outbreak*. Scientific Reports, 15, 6574.

Reuter, A. and E.W.T Cooper. 2016. Legislative or other controls concerning the conservation and protection of peregrine falcon (*Falco peregrinus*) in selected range states. Unpublished Report prepared on contract for Environment and Climate Change Canada.

Reuter, A. pers. comm, 2025. Email correspondence to D. Cator. June 2025. Mexico City, Mexico.

Rosen G.E, Smith K.F. 2010. Summarizing the evidence on the international trade in illegal wildlife. Eco- Health 7: 24-32

RSPB. 2023. Birdcrime - A 15-year review of the illegal killing of birds of prey in the UK (2009–2023). Available at: https://www.rspb.org.uk/birds-and-wildlife/crimes-against-birds

Schoonmaker, P.K., M.P. Wallace, and S.A. Temple. 1985. Migrant and breeding peregrine falcons in northwestern Peru. The Condor 87:423–424.

Sielicki, S., and J. Sielicki (eds.). 2007. Peregrine Falcon populations: status and perspectives in the 21st century. Stowarzyszenie Na rzecz Dzikich Zwierząt Sokół", Warszawa.

Simmons, R.E., A.R. Jenkins, and C.J. Brown. 2008. A review of the population status and threats to Peregrine Falcons throughout Namibia. Pp. 99–108 in J. Sielicki and T. Mizera (eds.), Peregrine Falcon populations - status and perspectives in the 21st century pp. European Peregrine Falcon Working Group, Turul, Warsaw. Website: http://www.the-eis.com/data/literature/Peregrine_Falcon_Pop_Procs_2008_99-108.pdf [Accessed: March 4, 2014].

Strix, 2012. Developing and testing the methodology for assessing and mapping the sensitivity of migratory birds to wind energy development. BirdLife International, Cambridge.

The Guardian. 2024. Inside the battle against Scotland's falcon thieves. The Guardian. https://www.theguardian.com/environment/2024/feb/13/peregrine-falcon-thieves-dna-database-scotland-wild-raptors-birds-aoe [Accessed: June 19, 2025]

Thiollay, J.M. 2006. The decline of raptors in West Africa: long-term assessment and the role of protected areas. Ibis 148: 240-254.

USFWS (United States Fish and Wildlife Service). 2003. Monitoring plan for the American Peregrine Falcon, a species recovered under the Endangered Species Act. US Fish and Wildlife Service, Divisions of Endangered Species and Migratory Birds and State Programs, Pacific Region, Portland, Oregon. Website: http://dx.plos.org/10.1371/journal.pone.0004754 [Accessed February 25, 2014].

USFWS (United States Fish and Wildlife Service). 2004. Final Revised Environmental Assessment, Management Plan, and Implementation Guidance: Take of nestling American Peregrine Falcons in the Contiguous United States and Alaska for Use in Falconry. United States Fish and Wildlife Service, Division of Migratory Bird Management.

USFWS (United States Fish and Wildlife Service). 2023. 2023 Peregrine Falcon Status Assessment, Sustainable Take Rate, and Take Limits. U.S. Fish and Wildlife Service, Division of Migratory Bird Management, Washington, D.C. USA. Website: Peregrine Falcon Status and Take Assessment Report 2023_FINAL.pdf [Accessed June 24, 2025]

Van den Berg, H., M. Zaim, R.S. Yadav, A. Soares, B. Ameneshewa, A. Mnzava, J. Hii, A.P. Dash, and M. Ejov. 2012. Global Trends in the Use of Insecticides to Control Vector-Borne Diseases. Environmental Health Perspectives 120:577–582

Van Den Hout, P. J., B. Spaans, and T. Piersma. 2008. Differential mortality of wintering shorebirds on the Banc d'Arguin, Mauritania, due to predation by large falcons. Ibis 150:219–230.

Wegner, P., G. Kleinstauber, F. Baum, and F. Schilling. 2004. Long-term investigation of the degree of exposure of German peregrine falcons (*Falco peregrinus*) to damaging chemicals from the environment. Journal of Ornithology 146:34–54.

White, C.M., T.J. Cade, and J.H. Enderson. 2013. Peregrine Falcons of the World, Lynx Edicions, 379 pp.

White, C.M., D.A. Christie, E.J. de Juana, S. Marks. 2016. In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. and E.J. de Juana (eds.). Peregrine Falcon (*Falco peregrinus*), Handbook of the Birds of the World Alive. Lynx Edicions, Barcelona. Website: http://www.hbw.com/node/53247 [Accessed: March 18, 2016].

White, C.M., N.J. Clum, T.J. Cade, and W. Grainger Hunt. 2002. Peregrine Falcon (*Falco peregrinus*). A. Poole (ed.), The Birds of North America Online, Cornell Lab of Ornithology, Ithaca, NY. Website: http://bna.birds.cornell.edu/bna/species/660 [Accessed April 20, 2016].

White, C. M., N. J. Clum, T. J. Cade, and W. G. Hunt. 2020. Peregrine Falcon (*Falco peregrinus*), version 1.0. In: S. M. Billerman (ed.), *Birds of the World*, Cornell Lab of Ornithology, Ithaca, NY.

World Animal Health Information System. 2025 - Website: https://www.woah.org/en/what-we-do/animal-health-and-welfare/disease-data-collection/world-animal-health-information-system/ [Accessed: May 22, 2025]

Ydenberg, R.C., R.W. Butler, D.B. Lank, B.D. Smith, and J. Ireland. 2004. Western sandpipers have altered migration tactics as peregrine falcon populations have recovered. Proceedings of the Royal Society B: Biological Sciences 271:1263–1269.