













## LETTER FROM THE CONSERVATION FRONTLINE

# Peregrine Falcon Populations Under Threat Again

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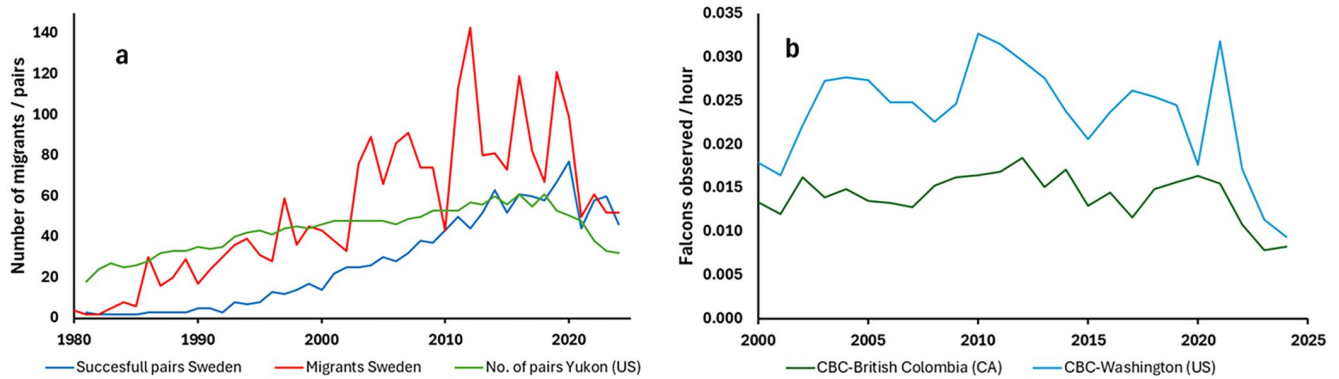
The recovery of the Peregrine Falcon, *Falco peregrinus*, is one of the best-known wildlife conservation successes of the past century (Cade and Burnham 2003). By the 1970s, many populations across North America and Europe were on the brink of extinction caused by environmental contaminants (White et al. 2013). Subsequent recovery was a result of decades of intensive, cooperative international conservation efforts to halt the release of chlorinated hydrocarbon pesticides and encourage repopulation (Cade et al. 1988).

As an endangered species, the Peregrine was listed in the Convention on International Trade in Endangered Species (CITES) Appendix I in 1975, prohibiting international commercial trade of wild birds. Following the recovery, it is globally classified as “Least Concern” in the IUCN Red List (BirdLife International 2021). Wildlife agencies in Canada and the USA in 2025 propose moving it from CITES Appendix I to Appendix II (CITES 2025), allowing the trade and capture of wild peregrines. However, we believe “downlisting” now is premature and problematic for the reasons listed below.

Firstly, the CITES downlisting case leans heavily on information from a few relatively well-studied populations in Europe and North America and ignores the vast data gaps from the rest of the world. A review of the IUCN database (BirdLife International 2021) reveals that the Peregrine’s status is “unknown” for 63% of all countries/territories evaluated. For most

Peregrine populations in South America, Africa, and Australasia, their distribution range, productivity, numbers, breeding, and conservation status are poorly known (Zuberogoitia 2023). Of the world’s 19 currently recognized subspecies of the Peregrine (AviList Core Team 2025), data gaps persist for at least 11 subspecies, and some are critically endangered such as the Cape Verde Peregrine, *F. p. madens*, historically estimated to be 15–20 pairs (Hazevoet 2001) and likely with very low genetic diversity (Johnson et al. 2023). Moreover, in some well-known cases, data and population trends presented in the database of IUCN are wrong (e.g., for Spain, Zuberogoitia 2023). In the overview of population sizes in the CITES downlisting proposal, the largest contribution (15%) to the population estimate for Europe is from Greenland, but Greenland Peregrines migrate through the United States and are double-counted as part of the “northern management population” in the estimate for North America.

Secondly, while most populations in Europe and North America have recovered, the species still suffers regional hazards that jeopardize some populations (USFWS 2023; Kéry and Zuberogoitia 2020). In recent years, sudden drops in critical demographic parameters have been recorded (Figure 1), possibly caused by avian influenza (Caliendo et al. 2024; Smith et al. 2025). Examples from North America include: (i) a 48% reduction in the number of breeding pairs along the Yukon River, Alaska, accompanied by a large increase in lone birds at recent breeding sites (S. Ambrose, own data); (ii) observations of wintering Peregrines



**FIGURE 1** | Examples of recent declines in breeding, migrating, and wintering Peregrine populations in North America and Europe: (a) number of migrating Peregrines recorded during standardized observations at Falsterbo, Sweden (data from Falsterbo Fågelstation, [n.d.](#)), number of pairs occupying breeding sites along Yukon River, Alaska, USA (S. Ambrose, unpublished), and number of successful breeding pairs in southern Sweden (BirdLife Sverige, unpublished); (b) number of wintering Peregrines recorded per observation hour during Christmas Bird Counts (CBC) in British Columbia (BC), Canada and Washington State (WA), USA (data from National Audubon Society [2020](#)).

recorded in British Columbia, Canada, and Washington, USA, which declined by 47% and 38%, respectively, compared to the previous 7 years (National Audubon Society [2020](#)); (iii) the number of migrating/staging Peregrines sighted/100 km line transects in Washington State was 35% lower in 2018–2023 compared to 1995–2017 (Varland et al. [2025](#)); (iv) the number of fall/autumn migrating Peregrines recorded per observation day at Assateague Island, Maryland, was 51% lower on average in 2018–24 compared to 2007–2017 (Earthspan Foundation [2025](#)).

In Europe, examples include: (i) 40% fewer breeding pairs in 2024 in Sweden compared to the “recovery peak” in 2020 (BirdLife Sverige [2024](#)); (ii) on average, 48% fewer migrating Peregrines recorded in standard observations at Falsterbo, Sweden (including those from northern Fennoscandia and western Russia) in 2021–2024 compared to the previous decade (data from Falsterbo Fågelstation, [n.d.](#)); (iii) in the Netherlands “~50% of all breeders died in 2022 along with a sudden ~25% decline in breeding pairs over consecutive [HPAI] panzootic years” (Badia-Boher et al. [2025](#); Caliendo et al. [2024](#)). Also, in Sweden and Scotland, the proportion of immature birds among territory-holding pairs has increased from the normal level of <3% to now 13% and 16%, respectively—indicating that the “buffer” of non-breeding adult birds has been depleted (Smith et al. [2025](#); BirdLife Sverige, unpublished).

Thirdly, in addition to the loss of natural habitats, the trafficking of eggs, nestlings, and adults is a persistent threat for some populations (Donald et al. [2024](#)) and global wildlife trade is consistently recognized as a major driver of species decline, particularly in the Southern Hemisphere (Morton et al. [2021](#)). The CITES downlisting proposal recognizes that “the scale of illegal trade is difficult to assess due to its clandestine nature” and Peregrines frequently enter the wildlife trade for use as display animals, falconry and for sport and recreation (Panter et al. [2023](#)). The demand for wild-caught birds (Saunders and McCarthy [2025](#)) will increase with a downlisting. The lack of effective law enforcement in many parts of the world is already leading to an illicit trade of several species of falcons, including Peregrines (Beingolea Maseveu [2009](#); Wyatt [2011](#)). Even in Europe, where control is relatively tighter, eggs and young are often stolen from nests and laundered into the

legal trade by falsely claiming they were captive-bred (BBC [2024](#); The Guardian [2024](#)). Control mechanisms such as closed rings and genetic tests do exist, but there are many challenges in their implementation (de Bruyn et al. [2026](#)). Nest robbing is a major concern for some less-known or small populations, for example, the pallid morph of the Austral Peregrine Falcon, *F. p. cassini*, in southern Argentina and Chile readily sought after by wildlife traffickers (Ellis et al. [2020](#)). This subspecies may also be affected by avian influenza which spread widely and rapidly throughout South America after 2022 (Kuiken et al. [2025](#)), although its potential impact remains unknown due to the lack of monitoring efforts.

In conclusion, although moving the Peregrine to Appendix II may have an insignificant negative impact on populations in North America and western Europe, it would jeopardize some of the least studied populations worldwide. In addition, due to the recent sudden declines even in “recovered” populations in Europe and North America, now will be a bad time for a downlisting. We encourage safeguarding the Peregrine Falcon by refraining from CITES downlisting until the status of all populations is known.

Future research should support more informed decisions regarding the species’ protection status. We recommend the implementation of targeted monitoring programs that: (a) fill distribution and population data gaps for poorly known subspecies (e.g., *F. p. cassini*, *ernesti*, *japonensis*, *madens*, *minor*, *peregrinator*); (b) address persistent knowledge gaps even in well-studied regions, such as those involving *F. p. pealei* and *F. p. calidus*; (c) incorporate population dynamics indicators (e.g., territorial turnover), which are critical for assessing the impacts of emerging threats like avian influenza and for modeling the effects of increasing legal and illegal trade; and (d) ensure that IUCN assessments are based on expert-reviewed and validated data to avoid discrepancies between reported and actual conditions.

#### Author Contributions

Miguel D. Saggese, Knud Falk, Iñigo Zuberogoitia, Roberto Sánchez, and Mátyás Prommer generated the idea and drafted the initial manuscript. All authors significantly contributed to subsequent drafts. All authors reviewed and approved the final manuscript.

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AI was not used in this manuscript.

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