



## **Position Statement and Code of Conduct for Falconry with respect to Invasive Alien Species**

### **The International Association for Falconry and Conservation of Birds of Prey, 2014**

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#### **BACKGROUND: THE INTERNATIONAL ASSOCIATION FOR FALCONRY AND CONSERVATION OF BIRDS OF PREY**

The IAF ([www.iaf.org](http://www.iaf.org)) is an international non-government organization, currently federating 86 Falconry associations from 60 countries and over 30,000 members, including a strong and active European membership. Its constitutional objectives, to which all members are subscribed, are:

- 1.** To represent Falconry throughout the world. Falconry is the traditional sport of taking quarry in its natural state and habitat by means of trained birds of prey. It is a hunting art.
- 2.** To preserve and encourage Falconry within the context of sustainable use of wildlife.
- 3.** To encourage conservation, the ecological and veterinary research on birds of prey and to promote, under scientific guidance, domestic propagation for Falconry.
- 4.** To develop, maintain and amend national and international laws, treaties and conventions to permit the pursuit and perpetuation of Falconry.
- 5.** To require the observation of Falconry, hunting, conservation and welfare laws, regulations, traditions and culture with regard to the taking, import, export and keeping of birds of prey, the taking of quarry species and the right of access to land in the country concerned.
- 6.** To promote and uphold a positive public image of Falconry with specialist organisations which regulate or otherwise affect falconry.

The IAF is a Falconry and Conservation organization: Falconers understand and value the many and diverse habitats, species and populations of relevance to falconry. Falconers have played key roles in conservation successes over the years, for example in establishing and running the Peregrine Fund ([www.peregrinefund.org](http://www.peregrinefund.org)), and involvement in raptor monitoring and various reintroduction programs which include programs to re-introduce the Tree-Nesting Peregrine population in Europe, amongst others. The IAF had a delegate at the 6<sup>th</sup> CoP of the Convention of Biological Diversity in The Hague, and IAF is a member of IUCN.

## **BACKGROUND: ALIEN INVASIVE SPECIES**

The European Union has a new biodiversity strategy to 2020, which it is committed to achieving after failing to reach targets of the previous strategy. One of the claimed reasons why the EU's biodiversity is constrained or threatened is the impact of alien invasive species (IAS): non-indigenous species that cause environmental harm (European Environment Agency 2012). The issue has political traction and the attention of mainstream politicians because environmental economists have calculated that IAS cost the Union 12 billion euros per annum, and the numbers of IAS are claimed to be increasing.

## **FALCONRY AND EXOTIC SPECIES**

Falconry is a unique partnership between human and predatory bird that has a cultural history going back thousands of years ([www.iaf.org/HistoryFalconry.php](http://www.iaf.org/HistoryFalconry.php)). Falconry is recognised under the EU Birds Directive. Despite a modern erosion of human links with our natural environment and wild inhabitants of these places, Falconry persists to this day throughout the world, and IAF currently has affiliations from 60 countries and links to Falconers in even more countries. On November 16<sup>th</sup> 2010, Falconry was formally inscribed and added to UNESCO's Convention for the Safeguarding of Intangible Cultural Heritage ([www.unesco.org/culture/ich/index.php?lg=en&pg=00011&RL=00732](http://www.unesco.org/culture/ich/index.php?lg=en&pg=00011&RL=00732)).

Within Falconry's deep heritage is a frequently recurring history of flying raptors outside their indigenous ranges. Exotic species were often gifted between nations. History and art report that Genghis Khan flew 500 white gyrfalcons on his campaigns in Asia, most of which were well outside the gyrfalcon's native range. More recently, and because of limitations on wild raptor availability (both imposed by falconers upon themselves as well as through legislation), captive breeding for falconry has seen an increase in the production of exotics and hybrids between closely-related species. **Despite this extensive history of movement and flying of exotics, no Falconry species or hybrid has become invasive** ([www.europe-alien.org/speciesSearch.do](http://www.europe-alien.org/speciesSearch.do), European Environment Agency 2012).

## **RISKS OF ALIEN INTROGRESSION FROM FALCONRY**

At the heart of falconry is the ancient hunting partnership between human and bird, based upon a fundamental principle that the bird is trained to depend upon, and return to, its falconer. To this end, falconers show full responsibility on the IAS issue: they train their birds extremely carefully using techniques that have evolved over thousands of years, they spend large amounts of money developing and employing modern and reliable radio telemetry to absolutely minimise the risk of loss. **Thus, the risk of IAS from Falconry starts from the premise that Falconers do not deliberately release their birds to the wild, and take every step to prevent loss.**

The principle for minimising the risk of loss is supported by empirical evidence analysing the rate of loss in the UK according to the mandatory captive raptor registration database published in *Endangered Species Research* (Fleming et al. 2011). Figure 4 in that paper clearly shows that rates of falcon loss in 2007 are ~1% of falconry birds, with clear evidence for declines from 1990, concurring with improvements and cost-reductions in telemetry. **Thus, Falconers prevent loss and, on the basis of UK Falconers, lose a tiny proportion of the birds they fly (only a proportion of which will be exotics or hybrids).**

Reports from birdwatchers across many regions in the UK collated by Fleming *et al* (2011) generate a similar picture: on average about one reported ex-falconry bird per report per year (only some of which will be exotic or hybrid), with some regions covering areas as large as Scotland. **We can conclude from these evidence-based measures of risk that very few Falconers lose birds, and that very few of those become established in the wild.**

## **EVIDENCE OF ALIEN INTROGRESSION FROM FALCONRY**

No ex-falconry bird has become invasive, or is recognised as such ([www.europe-alien.org/speciesSearch.do](http://www.europe-alien.org/speciesSearch.do), European Environment Agency 2012). However, 5 years ago, Birdlife International produced a 2008 position statement calling for a ban on the production and keeping of hybrid falcons because of *'an unacceptably high risk of unnatural genetic introgression to native wild falcon populations in the EU'* ([www.birdlife.org/eu/pdfs/Nature\\_Directives\\_material/BHDTF\\_Position\\_Hybrid\\_Falcons-2008\\_04\\_23.pdf](http://www.birdlife.org/eu/pdfs/Nature_Directives_material/BHDTF_Position_Hybrid_Falcons-2008_04_23.pdf)). Even though hybrids are usually non-adapted, sometimes sterile or subfertile, and any progeny produced will be sequentially diluted by indigenous wild genotypes, concerns were raised by Birdlife because a handful of incidents of hybrid falcons surviving and showing breeding attempts in the wild had been reported. Nittinger et al (2007) conducted a molecular genetics study of hierofalcons, part of which was to compare pre-hybrid (before 1970) wild saker genomes versus those after hybrid use (post 1970). 22 historic saker specimens were compared with 60 contemporary specimens. There was no evidence of an increase in the very low rates of hybridization known from nature, and therefore **no evidence for an increase in genetic signature from ex-falconry hybrid introgression.**

IAF has been collecting all evidence from bird reports and fellow Falconers of ex-falconry hybrids attempting to breed in the wild since 1995. We have 12 supported records over the last 18 years, most of them unsuccessful, from records across the European Union and North America. Half of the records were in Germany, associated with large-scale hacking of hybrids by big breeders who did not recover all their males. This practice has now ceased.

We accept it important to monitor this issue, and propose to continue to do so, but argue that this level of breeding attempt, across 18 years, and across such a huge geographical area, indicates an insignificant risk. **Most importantly, no hybrid breeding attempt or success has been reported in the last 6 years.** In summary, despite widespread hybrid use in falconry across over 40 years, there is ample theoretical and empirical evidence that harmful genetic introgression to indigenous wild populations has NOT occurred from raptor hybrids.

## **CHALLENGES AND RESPONSIBILITIES FOR FALCONERS WHEN FLYING HYBRIDS AND EXOTICS: AN IAF CODE OF CONDUCT**

Despite studies so far demonstrating no evidence for an IAS issue from Falconry, it is important that falconers take responsibility to ensure that no ex-falconry species ever does become established. On top of these, is the responsibility arising from a primary duty of care by Falconers to their birds through prevention of loss. Responsibility has been taken by some groups where past risks of bird loss existed: free-hacking is now conducted in large, enclosed conditioning pens; telemetry technology and investment has risen to high levels and reached new bounds as a major industry within Falconry; the tradition for hacking back (post-use release) by some falconry cultures such as Arabia has ceased for non-indigenous species. Despite all this, the success of captive breeding occasionally allows Falconry birds to get into irresponsible hands, and these can be lost because they are flown in inappropriate places by irresponsible people. The responsible Falconry community will not tolerate these incidents which are failures of the duty of care to our birds.

Therefore, to even further minimise any risk that exotic species or hybrids could potentially pose to the name of responsible Falconry through the Invasive Alien Species issue, IAF requires that affiliated Falconry Clubs should formally adopt this code of conduct when their members fly exotic species or hybrids:

- 1. No hybrids or exotics should ever be deliberately released to the wild***
- 2. Modern functioning telemetry should be used when any hybrid or exotic species is flown***
- 3. IAF will manage an online reporting scheme so that any incidents of ex-falconry hybrids or exotics can be recorded attempting to establish or breed in the wild***

This code should allow Falconers to monitor the IAS issue effectively and transparently, while further minimising any risk of loss or poor publicity created by lost falconry birds.

## REFERENCES

- Birdlife International position statement on hybrid falcons (2008)  
[www.birdlife.org/eu/pdfs/Nature\\_Directives\\_material/BHDTF\\_Position\\_Hybrid\\_Falcons-2008\\_04\\_23.pdf](http://www.birdlife.org/eu/pdfs/Nature_Directives_material/BHDTF_Position_Hybrid_Falcons-2008_04_23.pdf)
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- Fleming LV, Douse, AF & Williams NP (2011) Captive breeding of peregrine and other falcons in Great Britain and implications for conservation of wild populations. *Endangered Species Research* **14**: 243-257.
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