Non-native Species Position Statement

Background

The issue of non-native species is a difficult one for wildlife rehabilitators to ignore. As a group of people dedicated to helping wild animals in distress, the issues presented by whether or not to rehabilitate non-native species can create ethical, legal and emotional conflicts for rehabilitators. Non-native species may predate native wildlife and so may be the cause of casualties (feral cats, Felis catus are one example); they may threaten populations of native species by excluding them from their ecological niche. Many non-native species have adapted to survive in their new habitats and so often end up as casualties or orphans at wildlife rescue centers, causing a dilemma as to whether they should be rehabilitated or not.

There may be legal or regulatory controls regarding non-native species, especially those that are defined as invasive, because they are either known to, or have the potential to, cause major ecological damage. Some jurisdictions may prohibit the rehabilitation or release of such species. Rehabilitators must recognise this legal framework and act accordingly.

Policy

The policy of the IWRC on this matter is as follows:

- The IWRC supports restrictions on the commercial trade in wildlife and the keeping of such species as pets;
- The IWRC does not condone any actions that transgress local or national legislation or regulations;
- The IWRC supports the rehabilitation and release of a species that has been defined as non-native only in regions where
    - the species is already established as naturalized in the release area;
    - there is sound scientific evidence demonstrating that releases will not negatively impact populations of native species OR there is close monitoring by the scientific community to establish there is no harm;
    - there are no ongoing or planned population control measures for the target species; AND
    - there are no legislative or regulatory prohibitions against such activity.
- IWRC encourages continuing dialogue and research on the status of individual species as native, non-native, and alien. The health of a species in its historic region may be an additional factor for consideration by cross functional teams of scientists, policy makers, and conservation practitioners.
- The IWRC promotes programs that educate rehabilitators and the general public as to the impacts of invasive alien species on native wild animals, the environment, human health and other factors;
- The IWRC supports efforts to manage the impact of non-native species through the use of an

ethical decision making process as proposed by Dubois et al (2017)[1] up to and including the humane removal of invasive alien species, rehabilitation and placement, or humane euthanasia of animals[2–4] that cannot be rehabilitated and rehomed.

Context

- An alien or non-native species is an organism introduced outside its natural past or present distribution range by human agency, either directly or indirectly. This definition implies an active movement facilitated by humans through a number of different pathways, and covers both intentional and unintentional movements of species. Introductions can in fact be intentional — as in the case of species released to the environment for hunting, angling, aquaculture, forestry, agriculture, horticulture and gardening, and unwanted pets — and accidental, as in the case of hitchhikers and stowaways, such as aquatic species transported through ballast water.[5]
- Invasive alien species are species whose introduction and/or spread outside their natural distribution threatens biological diversity.[5]
- Not all non-native species are considered invasive, e.g. little owls (*Athene noctua*) were introduced to the UK by the Victorians and have become an established member of the UK's avifauna,[6] and some native species could be classified as invasive, e.g. barred owl (*Strix varia*) in some states of the US.[7]
- Some non-native species can thrive better in their new habitats while declining in their native habitats, such as European hedgehog (*Erinaceus europaeus*) in New Zealand,[8] Chinese water deer (*Hydropotes inermis inermis*) in the UK,[9] red crowned amazons (*Amazona viridigenalis*);[10,11] starlings in Europe;[12] Burmese pythons in the United States;[13] raccoon dogs in Europe.[14]
- Invasive alien species are known to have a number of impacts:
    - predation of local wildlife (e.g. pythons in Florida everglades)[13]
    - vectors of disease (e.g squirrel pox virus transmitted from gray squirrels to red squirrels in Europe)[15]
    - hybridisation between invasive alien and native species (e.g. white headed duck and ruddy duck)[16]
    - damage to agricultural crops or native plant life[17,18]
    - threat to human health (e.g raccoon dog as a vector for rabies in Europe)[19]
- This has resulted in many policies to control invasive alien species being adopted by different governments, despite public opinion often being skeptical.[20]
- However some alien species are also beneficial. Many crops are derived from plants that are alien to the country that they are cultivated in, such as wheat and many animals have been introduced as game.[21]
- Some alien species can be both beneficial and detrimental. Rabbits (*Oryctolagus cuniculus*) were introduced to the UK as a food source for people and have become an established prey item for many wild carnivores and improved chalk grasslands leading to re-establishment of large blue butterflies.[17] However they cause major agricultural damage.

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