



Position statement: Species translocation

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Definitions

Translocation is the movement of a species, by people, from one area to another. There are three types:

- **Introduction** is the deliberate or accidental translocation of a species into the wild in areas where it does not occur naturally and has not occurred since the last glaciation (or during historic time). This may be into the UK or from one part of the UK to another.
- **Re-introduction** is the deliberate or accidental translocation of a species into the wild in areas where it was indigenous in historic times but is no longer present.
- **Re-stocking** is the translocation of an organism into the wild into an area where it is already present.

The World Conservation Union (IUCN) developed a position statement on translocation¹ and specific policy guidelines on reintroduction.² In 2003, the Joint Nature Conservation Committee (JNCC) published a policy on translocation of species for conservation in Britain³, which adopts the IUCN guidelines. Non-native species were covered separately by a DEFRA review in 2003⁴, consultation was held on a draft non-native species strategy in 2007, and the final strategy for Great Britain is due to be published in 2008. In Northern Ireland, Environment and Heritage Service (EHS), together with the National Parks and Wildlife Service (NPWS) in the Republic of Ireland commissioned a report on invasive species⁵. Implementation of its recommendations began in 2006.

Introductions

Non-native species have been introduced into areas where they did not formerly exist for a variety of reasons, such as economic development (eg sitka spruce), improvement of hunting and fishing (eg fallow deer), ornamentation (eg rhododendron), or maintenance of cultures by incoming settlers (eg sweet chestnut or rabbits). In general, the damage done by introductions to natural ecosystems far outweighs the benefits to biodiversity derived from them.

The establishment of introduced species (eg sika deer) can break down the genetic isolation of communities of co-evolving species (eg red deer). Such isolation has been essential for the evolution and maintenance of the world's species diversity. Non-native species (eg grey squirrel) can interfere with the dynamics of natural systems causing the premature extinction of species (eg red squirrel across much of England and Wales). Especially successful and aggressive invasive species increasingly dominate large areas (eg Japanese knotweed). In global terms the UK's biodiversity is distinctive, due to our recent glacial history and subsequent relative insularity. As such, it has been suggested that our

biodiversity is particularly vulnerable to introductions.⁶

IUCN's recommendations include that:

- Species introduction should only be considered if clearly defined benefits to people or natural communities can be foreseen and native species do not provide a suitable alternative.
- Species should not be introduced into a semi-natural habitat unless there are exceptional reasons for doing so.
- An assessment should be made of the impact on surrounding semi-natural habitats of introducing any species to artificial, arable, ley pasture or forestry systems.

Re-introductions

Re-introduction is used as a conservation tool for restoring species to an original habitat where it has become extinct due to human persecution, over-collecting, over-harvesting or habitat deterioration, but where these factors no longer persist or can now be controlled.

IUCN makes a number of key points. It recommends that re-introductions should only take place where:

- The original causes of extinction have been removed or reduced sufficiently (including the attitudes of local people, where appropriate).
- The habitat requirements of the species are satisfied and are likely to be sustained for the foreseeable future (ie it should not be considered if a species became extinct because of habitat change which remains unremedied or where significant habitat deterioration has since occurred).
- Individuals are of the closest available race or type to the original stock, which previously occurred in the area.
- The long term protection of the re-introduction area is assured.
- Actions are based on thorough research into previous re-introductions of the same or similar species.
- Removal of individuals for re-introduction does not endanger the captive stock population or wild source population.
- There is full permission and involvement of all relevant government agencies.
- Adequate post release monitoring is planned.

Re-stocking

Restocking is sometimes considered as a conservation strategy where populations have dropped below critical levels and natural recovery is in doubt due to inbreeding or slow reproductive rates. IUCN recommends that restocking should only take place where:

- The causes of population decline have been largely removed.
- Actions to encourage the resident population to expand have been unsuccessful.
- The area has the capacity to sustain the desired population.
- Individuals are of the same race as the population into which they are released but not from genetically impoverished or cloned stock.
- If captive-bred animals are to be used, there is no danger of infecting wild populations of the same species with new diseases and no problems associated with animals being socially accepted by wild individuals of the same species.

The Woodland Trust view

Although IUCN's guidance on species translocation focuses on animals, the same principles apply to all species, including fungi and plants eg the translocation of trees to create new native woodland. The Woodland Trust concurs with the IUCN's recommendations. Translocation in the UK, as elsewhere, has tended to focus on individual charismatic species (eg beaver, pine marten, red kite, dormouse, chequered skipper). We believe that in the UK, where semi-natural habitats are highly fragmented by intensive land use, the creation of habitats by reintroductions and restocking is vital to conservation action in order to:

- Place existing semi-natural habitats on a more sustainable footing by enlarging them with the creation of new habitats next to them. This will buffer them from intensive land-use nearby, provide a larger area that will enable more species to be self-sustaining within them, and reduce the possibility of less mobile species wandering into hostile territory and succumbing to adverse conditions⁷.
- Facilitate the rapid migration of species in response to climate change. Creating new, substantial areas of semi-natural habitat and enlarging existing semi-natural habitats will increase scope for species to establish themselves following rare and chance long distance dispersal events⁸.

However, we believe that in terms of species choice (both the movement of individual species and assemblages of species as part of habitat creation), re-introductions and restocking should only be considered a conservation priority where:

- Management of the species concerned can be met by management of the habitat as a whole rather than by long term species-specific actions⁹, and either
- The species concerned is fundamental to sustaining or re-establishing the habitat as a whole, in other words, is a keystone species eg trees, or
- It is established that the survival of the species is at risk, or
- The species can be used in a pragmatic way to promote wider issues of habitat protection, management, restoration and creation (so-called flagship species eg dormouse is thought to need woods exceeding 50 ha to sustain healthy populations).

The Woodland Trust believes that for woodland creation and tree planting the implications of IUCN's guidelines are that:

- Non-native trees should not be planted into native or ancient woods.
- Within ancient and native woods, natural regeneration should be encouraged. Where it is necessary to plant trees within ancient woods this should be with native species of mainly local provenance, though this may be supplemented with native trees of other provenances to allow greater genetic resilience in the face of rapid climate change¹⁰.
- Planting of native woods on land adjacent to ancient woods should be undertaken with site-native species of mainly local provenance, though this may be supplemented as above.

The Woodland Trust disapproves of introduced species being moved around the UK without proper care, especially where they are a known threat to woodland habitats (eg muntjac deer). We also object to the translocation of irreplaceable semi-natural habitats (eg ancient

woodland) being proposed as a compensation measure for development (roads, buildings etc).¹¹

The Woodland Trust will evaluate any proposals to translocate woodland habitats or species with reference to IUCN's guidelines and the points detailed above.

References

¹ Species Survival Commission, Commission on Ecology and Commission on Environmental Policy, Law and Administration (1987) *IUCN Position Statement on Translocation of Living Organisms*

² Species Survival Commission (1995) *IUCN/SCC SSC? Guidelines for Re-introductions*

³ McLean, I.F.G. (2003) A Policy for Conservation Translocation of Species in Britain, JNCC

⁴ Anon (2003) Review of non-native species policy: report of the working group, DEFRA
<http://www.defra.gov.uk/wildlife-countryside/resprog/findings/non-native/report.pdf>

⁵ Quercus, Queens' University Belfast (2006) Invasive Species in Ireland (EHS/NPWS)
<http://www.ehsni.gov.uk/invasivespeciesinirelandquercusreport.pdf>

⁶ Holdgate, M. (1999) Lancaster: British Association of Nature Conservationists/National Trust Conference - Nature in Transition

⁷ The Woodland Trust (2000) *Woodland biodiversity: Expanding our horizons*

⁸ Williamson, D. (1999) *Plants on the move*. New Scientist (Inside Science 112)

⁹ The Woodland Trust (1999) *Seeing the woods for the trees*

¹⁰ The Woodland Trust (2007) Position Statement: Tree Provenance

¹¹ The Woodland Trust (2001) Position Statement: Ancient Woods and Translocation