

Species reintroduction is the deliberate release of a species into the wild, from captivity or other areas where the animal survives. A species that needs reintroduction is usually one whose existence has become threatened or endangered in the wild. These programmes are powerful tools used for stabilising, re-establishing, or increasing in-situ animal populations that have suffered significant declines. Reintroductions may include animals that have spent some of their early life-stages being cared for in a “headstart” programme that gives them a greater chance of survival than those born in the wild, those brought in for rehabilitation from illness or injury, those moved from one area for release elsewhere, or those that are offspring of animals that have had several generations cared for by accredited institutions. Ensuring there is suitable wild habitat available for a release programme is challenging but if all the conditions are right reintroduction can be a very effective way to re-establish a species in its former range.

For example, corncrakes in England and sand gazelles in Saudi Arabia have been reintroduced and New Zealand have undertaken a successful wild to wild translocation of the hihi (New Zealand stitch bird) to re-establish new populations of this endangered bird. For a number of reasons this can be an easier process than conservation breeding but it is still a challenging procedure. Reintroduction programmes have been implemented not only through the provision of animals for release, but also through the provision of expertise to specialist elements of the programmes, e.g. disease risk assessment of specimens before release in several UK native species.

Nations from all around the world have been cooperating in order to breed, raise and finally reintroduce many species. The aim of the European Endangered Species Programmes (EEP) is to ensure those species that are threatened with extinction in the wild have a demographically and genetically healthy population in the region. These animals are then be available for reintroduction should there be a need identified within that species conservation plan.

However, some breeding programmes have encountered significant problems in achieving self-sustaining captive. These issues range from low numbers, high mortality, infertility and incompatibility to low offspring survival rates. Some evidence suggests that this is because endangered species may have enhanced susceptibility to disease due to reduced genetic diversity that can result from small population size. However, there is a high frequency of disease outbreaks within captive collections. This is partly a result of enhanced exposure, especially to exotic pathogens. The prevalence of international wildlife trade and the normally close juxtaposition of diverse species in zoos have brought many species into contact with diseases and parasites for which they have little resistance.

### To consider

- How can endangered species be safely reintroduced into their natural habitat without harming the already existing ecosystem or further endangering the species?
- Should the role of reintroduction be lawfully enforced for each nation in order to maintain these animals at risk from extinction?
- Is extinction of certain species merely a way of natural selection in an environment or should it be regarded with great importance?