Considerations in releasing animals – some IUCN fundamentals

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Before releasing animals to the wild, you always want to plan carefully so that problems and actual disasters do not result. It is a given that we are only talking about "conservation releases" here at this meeting, as conservation is probably the only justification for releasing any captive animal to the wild. Following on to that, in order to plan properly you have to understand what type of conservation release you are undertaking.

Types of conservation release - definitions :
Reintroduction: when you want to re-establish an extirpated population (that is, put a population back in an area from which they have died out).
Reinforcement/ Supplementation/ Augmentation/ Restocking – when you want to increase an existing population (Add extra individuals to an existing population).
Benign Introduction – this is when you need to establish a population outside of the native range (substitution is also a form of this type)
Translocation (not mutually exclusive; a source of stock) – when you conduct a movement of wild individuals from one site to another (This is an alternative to captive breeding).

You also want to conduct your exercise only when all the reasons for releasing animals are righteous and when the plans are entirely complete.

When to consider reintroduction?
A reintroduction should be integrated within a whole conservation strategy. It can be considered when natural recolonisation is unlikely or very slow.

Before reintroducing in any form you must insure that the reasons for extirpation, that is extinction have been addressed. That means that the reasons the species became extinct have been corrected ... such as prey base restored, poaching issues neutralised, habitat improved, etc. Also reintroduction must be driven by '*field needs*' NOT '*captive conditions*', such as the need of zoos which have overbred too many animals to dispose of stock.

These considerations are all covered in the IUCN SSC Guidelines for reintroductions 1995

When to consider reinforcement/ supplementation ?
You may consider releasing animals in order to strengthen an existing population as well as replace a lost population. In fact it would be better if more of us could recognise when reinforcement or supplementation was needed, and conducted the appropriate exercises rather than wait until the population has become extinct ! Reinforcement might be undertaken to increase genetic variability in a small population. In some species biology their natural rate of population growth is very slow which may prevent the species from recovering from a dip in population for any of the many reasons populations decline. Reinforcement can be used in meta-population management of fragments. Again, there should be a legitimate field need for the exercise, not a captive need. We *don't* use these procedures to bolster small populations without addressing reasons for decline or to dispose of captive stock, ever. This is also covered by the Reintroduction Specialist Group in its IUCN SSC Position statement 1987.

When to consider introduction?
We consider the method called "introduction" ONLY when there is insufficient suitable remaining habitat left within the species range. This route can be taken ONLY following a small scale reversible trial. It should be integrated within whole conservation strategy and when the reasons for non-occurrence have become known and successfully addressed. These decisions must be driven by '*in situ*' NOT '*ex situ*' conditions. We never introduce animals to dispose of surplus stock.
Substitution is a form of introduction when we want to re-establish 'ecological services' after a species has gone extinct in a particular locality. If it is possible to find a similar species, it may be "substituted" for the missing species. These are hard things to know and need expert oversight. RSG's IUCN SSC Position statement 1987 and IUCN SSC Guidelines for reintroductions 1995 both address this course of action.

When to consider translocation ?
Translocation might be done for 'Conservation' - Secure & productive donor populations (harvesting) or for 'Rescue' – Mitigation for habitat destruction or to save individuals/ populations. It is necessary to use genetically and ecologically similar populations.

Considerations in Reintroduction & Reinforcement
In Reintroduction & Reinforcement, Consideration of animal and plant issues (Species) must done. Both plant and animal species have to be managed ... population management, dispersal management and selection of stock.

- Managing population !
- Managing dispersal !
- Selection of stock – Translocation?

Animal/Plant issues include : the Number of individuals, Inbreeding, Sources of stock, Health Screening, Demography, Genetic provenance, Dispersal, MVP

Consideration of site and habitat issues

- Managing multiple sites !
- Food/ prey availability !
- Government / NGO reserves !

Animal/Plant issues in Reintroduction & Reinforcement: Number of individuals, Inbreeding Sources of stock, Health Screening, Demography, Genetic provenance, Dispersal,MVP

Site issues include Habitat quality, Habitat size, Site management, Donor sites, Habitat fragmentation

Consideration of release issues
- Responsibility for monitoring !
- Integrating release programmes !
- Cooperation and partnerships !

Reintroduction & Reinforcement Release issues:
Spatial distribution, Monitoring, Hard vs. Soft release, Number of releases, Release timing, Pre-release training, Release season

Consideration of legal and social issues
- International cooperation !
- Statutory site designation !
- local inhabitants/public' support !

Release protocol issues
Spatial distribution, Monitoring, Hard vs. Soft release, Number of releases, Release timing, Pre-release training, Release season

Legal and Social issues
Economic value, Species protection, Cultural issues, Movement legislation, Site designation

The complexity of Release
Reintroduction and Restocking require the folllowing values and actions : Monitoring, Hard Vs. Soft release, Release timing, Pre-release training, Species protection, Economic value, Cultural issues, Movement legislation, Site designation, Spatial distribution, Release season, Number of releases, Number of individual, Demography, Inbreeding, Genetic provenance, Sources of stock, Dispersal, Health Screening, MVP, Habitat quality, Habitat size, Donor sites, Site management, Habitat fragmentation.

from Reintroduction SG guidelines

"A reintroduction requires a multi-disciplinary approach involving a team of persons drawn from a variety of backgrounds."

Reintroduction is a highly complex & expensive conservation action.

Consider engaging with many partners for consultation

Attendees of CBSG RSG South Asia Meeting

Bangladesh
Md. Shafiqur Rahman
Md Abdur Razzaque Mia
Jillur Rahim Shahriar
Zahed Md Malekur Rahman
Md. Golam Rabbani
Md. Mongur Morshed Chowdhury

India
Surendra Singh Rajpoot
Sally R. Walker
Sanjay Molur
B.A. Daniel
R. Marimuthu

Nepal
Sarita Jnawalil
Shiv Raj Bhatta

Pakistan
Md. Monsoor Qazi

United Kingdom
Miranda Stevenson
Mike Jordan

Sri Lanka
Samanthi Mendis
Chamila Dhanawardana
Shanthasiri Jayaweera
Naalin Perera
Deepthi Wickramasinghe
Pubudu Darshana Weerarathna
Chandani Ganga Wijesinghe
M Rohan A.K. Pieris
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Renuka Bandaranayake
M.M. Bahir
Dinesh Gabadage
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Channa Rajapakse
Wipula B. Yapa
H.M.B.C. Herath
Arunthathy Ponnusamy
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Sampath De Alivis Goonatilake
Mrs. Dammika Malsinghe
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