

Report of the Working Group on Guidelines for Rehabilitation of Captive Animals

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Working Group on IUCN Guidelines for the release of rehabilitated animals, Mike Jordan, IUCN SSC Reintroduction Specialist Group, Europe and Central Asia

IUCN has recognized that although release of rehabilitated animals may not always be the best practice, in the current wildlife scenario, it is nonetheless going to be done and should have some basic minimum standard or guidelines. Mike Jordan has been asked to coordinate the initiative to draft Guidelines for the release of rehabilitated animals for IUCN SSC Reintroduction Specialist Group. He will visit many individuals and groups in many countries in his attempt to create consensus among conservationists, wildlife managers, animal welfare enthusiasts, and others concerned with captive wild animals. The CBSG/RSG meeting held in Coimbatore, Tamil Nadu, India is the first of these meetings, and a good place to start as the country and region of many contentious issues. Mike Jordan introduced his theme with the following information and requests for the working group which formed.

Types of conservation release

- Reintroduction – re-establish an extirpated population.
- Restocking / Supplementation – increase an existing population.
- Benign Introduction – establish a population outside of the native range.
- Translocation – movement of wild individuals from one site to another.

Risk management process...

- Triage to ascertain suitability for release.
- Release should maximise the likelihood of survival of the rehabilitated individuals (welfare) whilst minimising the risk to already wild individuals and the ecosystem (conservation).
- Continuum of differing risk dependent upon circumstances such as distances moved, mixing with other taxa, duration in captivity etc.
- Guidelines will assist in assessing these risks and guiding best practice.

Group Members: Mike Jordan (*Facilitator*), Aaron Lobo (*Reporter*), C. Srinivasulu (*Computer Recorder*), Jayanthi Alahakoon, (*Flip Chart Recorder*), Nikhil Whitaker, Salam Rajesh, Kadambari (*Reporter*) A. K. Saha, Ravi Sankaran, Goutam Narayan. *Joining later:* Sally Walker, Sanjeev Kumari Paul, Snehal Bhatt, Zahed Md. Malekur; R. K. Sahu

Veterinary Sub-group Members: Sanjeev K. Paul, R. K. Sahu, K. A. Nanjappa, Md. Mansoor Qazi, A. K. Saha, Aniruddha V. Belsare, Jayanthi Alahakoon.

Mike Jordan introduced the working group members about the existing IUCN guidelines of reintroductions and outlined the needs to formulate the rehabilitation guidelines. After initial discussion the group enumerated the following (main) causes of need for formulation of rehabilitation guidelines.

Introduction

In the light of ever-increasing reintroductions being undertaken in the South Asian countries it has been imperative to formulate guidelines for rehabilitation of wild animals as such programmes undertaken in this region do not follow the existing IUCN guidelines for reintroduction either of captive bred or confiscated animals. Mike Jordan urged the working group to consider at least the following main areas while formulating the guidelines:

- What are the main causes of rehabilitation release, especially within this region?
- What are the key issues/ considerations to rehabilitators?
- What are the key issues/ considerations to conservation?

MAIN CAUSES FOR REHABILITATION

Rehabilitation is a process involving sick or injured animals picked up from the wild to nurse them back to fitness in captive condition to be released in the wild with its welfare being the underlying factor. Rehabilitation programmes could be categorized at

different levels as individuals rehabilitation programme (animal's welfare being the criterion), species, community and biodiversity level rehabilitation programmes (conservation of these elements being the criteria). We need to reduce the causes for unnecessary rehabilitation programmes. To do so the following needs to be taken into consideration:

- Species specific principles need to be developed
- There should be clarity of thought on whether it is the conservation of species or the welfare of individuals that takes priority.
- Rehabilitation is due to individual animals welfare but simultaneously addresses conservation related issues, for example, oil slick birds or problem leopards (in either of these cases decision of rehabilitation is governed by the fact that whether the large numbers of affected birds can really be taken care of or whether the problem leopard is not going to causes further problems at release site).

Issues pertaining to the rehabilitation programmes that had been undertaken in South Asia was discussed at length, and the group summarized that among the numerous causes (Box 1) that drives such actions some of the important ones are

- 1). **Excess Stock** [In captive facilities of the region (or South Asia) the positive growth rate of the captive population of some of the herbivorous species has been a problem that despite numerous counteractive efforts by concerned authorities to avoid further excesses, continue to occur and add to the surplus stock that needs re-wilding

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2). **Rehabilitating in captivity itself**
[Cases related to sick captive animals needing veterinary intervention]

3). **Conflict between human agencies**
[Human-animal conflicts leading to capture of the problematic animals from the wild]

4). **Displacement of animals due to natural calamities** [Animals that are displaced from their natural habitats due to natural calamities such as flood, drought, landslides, forest fires etc.]

5). **Conservation related captive breeding** [Overzealous captive breeding programme producing surplus stocks; it is important and detrimental that the objectives of the conservation related breeding programmes are clearly outlined and the release programmes are effectively linked with other related activities and timely executed to reduce overstocking of surplus animals]

6). **Over population in any given habitat** [Natural population highs in wild due to good season or lack of natural predator population]

The group felt that the rehabilitation of animals is undertaken due to various reasons and judicious application of the existing IUCN guidelines would reduce further implications resulting due to the reintroduction or rehabilitation practices in vogue in South Asian countries. The group felt that the habitat degradation (due to deforestation activities, developmental activities like hydro-electric projects, construction of roads, dams etc), habitat management practices (like for bolstering prey base as wild boar in Sanjay Gandhi National Park, Borivali), trade or trade-related activities (collection animals and their young or eggs), confiscated and or rescued animals, animals meant for restocking (as with anglers, game birds etc.), health related rescue, misguided collection activities in the name animal welfare or conservation, efforts to repopulate or restore any species in any given area are the major causes why the rehabilitation activities are undertaken in South Asia.

The group also felt that there is no water tight distinction between

Box No. 1. MAIN CAUSES FOR REHABILITATION		
REASONS FOR	CAPTURE	RELEASE
Excess stock		+
Over Population	+	+
Conflict	+	
Displacement		
Confiscation	+	
Pet Trade	+	
Habitat	+	
Natural catastrophe	+	
Man-made catastrophe	+	
Conservation		
Population	+	+
Invasive species, affects of	+	+
Habitat Management	+	+
Prey bolstering (via-a-vis-predator requirement)		
Population management (vis-à-vis predator requirement)		
Genetic management/ Variability	+	+
Welfare	+	+
Health	+	+
Commerce/Consumption/Sport	+	+
Aesthetics driven release	+	+
Misguided actions	+	+
Cultural beliefs	+	+
Legal	+	+
Research/Experiments	+	+

conservation needs or welfare needs. The group also discussed invasive species driven rehabilitation program (as Chinese Grass Carp that had been introduced in Dal Lake, Srinagar to control weeds has led to drastic changes on vegetation profile of the lake), disease risk management driven rehabilitation programmes, aesthetics/pleasure driven rehabilitation programmes (as in Beijing Park, China they are planning to release six to seven species in advance of the Olympics; in many places animals are released to commemorate local politicians visit). The group felt that rehabilitation programmes need to be undertaken only after having clearly outlined the reasons for getting/bringing the

animals from wild into captivity and also the reasons for releasing the animals into wild from captivity.

Identifying Issues / Consideration

The group felt that the key issues/ considerations for rehabilitators and conservation did not vary much and were treated under one head. The group felt that the rehabilitation programmes of sick or injured animals from the wild to the wild be undertaken only when the fundamental alternatives as euthanasia (not practiced in the region due to religious sentiments), refusing to accept the animals (due to disease risk as is the case with bird flu scare in some SE Asian countries) and lifetime captive care (limited numbers of such facilities in the region) run out.

Critically injured animals or diseased animals are constantly been released in to the wild due to these reasons, and their survivability chances decreases and the risk of spreading the disease in the new population pools increases manifold.

Key issues for South Asia

The key issues seemed to hinge on the following

- Religion/Culture [This issue was discussed in the light of religious and cultural belief prevalent in the region towards animals or other life forms in general; due to which 'proper' rehabilitation is ignored and 'forced' rehabilitation is undertaken]
- Human population [Ever increasing human population is leading to burgeoning pressure on environment and natural resources]
- Political pressure [Lack of political will to encourage scientifically driven rehabilitation processes, and pressure from local politicians to speed up the rehabilitation process to garner public support acts against 'good' rehabilitation]
- Excess Stock [Excess stocks in captive and semi captive facilities run by government departments and nongovernmental organisations drive the majority of the 'forced' rehabilitation programmes undertaken in the region]
- Euthanasia [Not permitted by most religious and welfare groups, as value is placed on life rather than quality of life in the region. Critically injured animals too have been rehabilitated and released back to the wild, rather than retaining them in the permanent captive care facility or euthanising them]
- Red tape [Long and unnecessary bureaucratic procedures cause immense delay in obtaining permissions to euthanise critically injured animals that in due course would suffer and eventually die; similarly, the release operations of species belonging to threatened categories are affected due to undue delays]

Overriding issues for Rehabilitation Programmes

- Taxa and its conservation status [It is the most important issue that needs to be addressed on priority; the conservation status of the taxa concerned would determine the other processes. If the taxa belong to threatened category it can be used to initiate Conservation Breeding Programme]
- Legal [Protection status of the taxa under existing legislation (local regional, national and international) needs to be considered and proper permits should be acquired from concerned authorities before initiating a rehabilitation programme]
- Record keeping [A poorly practiced science in developing countries, record keeping of all activities and observation made during the entire process of rehabilitation programme should be encouraged]

- Research [Shouldn't compromise the welfare of the animal; shouldn't slow down or jeopardize the process of rehabilitation; research should be in balance with the rehabilitation process]

- Political issues [Need to be tackled; involving local politicians to gather public support for rehabilitation programmes]

- Cultural and religious sentiments/issues [both positive and negative aspects need to be considered before any such programme is undertaken]

- Assessment of public opinion [Public opinion, both for and against, on the programme is important, as the same can be used to measure success and failures of the programme at a later stage]

- Health and safety issues [People directly involved (as the animal handlers) with the programme must take necessary precautions to counteract and reduce cross-contamination from animal to the handler and vice versa]

- Public awareness campaigns [Necessary to garner public support and inform the primary stakeholders about the importance of the rehabilitation programme]

- Publicity in media [for widespread publicity of the programme, and to garner public support from various sections of the society]

- Fund raising [an important issue that needs to be addressed from the very beginning as the successful implementation of the programme]

- Decisions appropriate with the level of risk
Like re-introduction programme, the rehabilitation programme too requires a multidisciplinary approach involving a team of persons drawn from a variety of backgrounds including experts and decision makers drawn from various agencies through government departments, non-governmental organisations, academicians from universities, veterinarians, zoo authorities, etc. The team should work with full cooperation for the success of the project. The working group has outlined the following issues/ consideration that needs to be addressed and has come up with basic guidelines that needs to be followed while undertaking and successfully implementing a rehabilitation programme.

I. Planning/Feasibility Studies

Emergency protocols

Trapping, pre-restraint considerations

Training of the assisting staff, capture team

Especially in case of larger animals, prior planning is needed PHVA

II. Removal from the Wild

Permits

Origin of the animal

History of the animal (this can be misleading)

Logistics

- i) Transport [Mobile/Portable veterinary unit for critical and emergency care]
- ii) Emergency care
- iii) Food and water

Genetic status and variability [Especially applicable to highly endangered and insular Species] Protocols for tranquilizations/immobilization

III. Assessment and Triage

Physical check up, screening and prioritisation

Prognosis [Take timely decision and provide advice/opinion and help the management authority take decision]

Euthanasia [rarely approved in the region (S Asia); CZA (and other Governmental Agencies, Forest Dept.) and NGO's oppose such actions, permissions often required]

IV. Treatment/Stabilization

Quarantine/Isolation

Habituation/ Imprinting

Appropriate disease screening; blood/sera samples should be taken when the animal is under restraint for later/retrospective analysis

Prophylactic intervention, whenever applicable Reduction of stress either by physical isolation or by use of chemicals

Zoonoses – considering

Batch sampling in case of large numbers of animals/plants

Post-mortem and findings need to be documented

V. Captive care

Habituation/ Imprinting

Individual marking

Husbandry

Time/duration in captivity [also to be taken in to consideration from subheads II to VI]

Hygiene

Enclosure size

Nutrition

Behavioural enrichment

Enclosure design & enrichment

Density

Age (species-specific)

Size of individual (species-specific)

Sex ratio (species-specific)

Appropriate routine health screening/monitoring depending upon the duration of captivity

VI. Pre-Release

Monitoring

Pre-release training

In-situ acclimatisation

Behavioural assessment

Homing instinct

Age (species-specific)

Size (species-specific)

Sex ratio (species-specific)

Number of individuals

Habituation/ Imprinting

Aversion therapy

Enclosure design (depending on soft vs. hard release)

Dangerous/Pest animals

Reproductive biology – understanding

Genetic status, variability – Applicable to highly endangered and insular species

Pre-release health screening

Prophylaxis [vaccination (and others) to be administered considering prevalence of possible disease at release site (CBSG Disease Risk Analysis)]

Food

VII. Release site:

Selection [habitat close to the area from where the animals originated; proximity to human habitation]

Niche [requirements and specificity]

Homing instinct

Logistics [transportation; crates, boxes etc.]

Natural distribution of the taxa

Habitat quality & suitability

Habitat size

Dispersal barriers

Carrying Capacity [existing density of the target animals in release site]

Reintroduction/reinforcement [applicability of existing guidelines]

Food and water availability

Predators – presence and density

Competition from sympatric species

Invasive species

Threats – biotic pressures; human pressures

Food & water supplementation

VIII. RELEASE

Season and time of release

Weather at time of release

Protocols for tranquilizations/immobilization/sedation/feeding

IX. POST-RELEASE ASSESSMENT

Research [should not jeopardise the rehabilitation process or negatively impact upon the survival of the individual/population]

Individual monitoring [individual marking e.g. microchipping, scale clipping, ringing, radio-tagging, physical condition monitoring]

Population Monitoring, nest counts, tracks & signs, transects

Spatial & resource utilisation

Habitat Monitoring & Management

Survivorship & recruitment

Measuring success

Intervention – conflict intervention, health, problems, failure

