IUCN Guidelines for the Placement of Confiscated Animals

Prepared by the

IUCN/SSC Re-introduction Specialist Group





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Eichaker

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Environmental Research & Wildlife Development Agency (ERWDA),

P.O. Box 45553 Abu Dhabi,

ADU DIIAL

UAE

Tel: ++971-2-681-7171 / Fax: ++971-2-681-0008

E-mail: FLaunay@erwda.gov.ae / PSoorae@erwda.gov.ae

Web Site: http://www.erwda.gov.ae

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IUCN GUIDELINES FOR THE PLACEMENT OF CONFISCATED ANIMALS

| EXECUTIVE SUMMARY | 6 |
|--|----|
| STATEMENT OF PRINCIPLE | 9 |
| STATEMENT OF NEED | 9 |
| MANAGEMENT OPTIONS | 10 |
| Option 1 – CAPTIVITY | 11 |
| Captivity – Sale, loan or donation | 12 |
| Captivity – benefits | 13 |
| Captivity – concerns | 13 |
| Option 2 – RETURN TO THE WILD | 14 |
| Return to the wild – benefits | 15 |
| Return to the wild – concerns | 15 |
| Option 3 – EUTHANASIA | 17 |
| Euthanasia – benefits | 18 |
| Euthanasia – risks | 18 |
| ESTABLISHING THE NECESSARY FRAMEWORKS | 19 |
| DECISION TREE ANALYSIS | 19 |
| DECISION TREE ANALYSIS - CAPTIVITY | 20 |
| DECISION TREE ANALYSIS - RETURN TO THE WILD | 22 |
| RELEVANT DOCUMENTS | 24 |
| ANNEXES | 25 |
| ANNEX 1 – DECISION TREE FOR CAPTIVE OPTIONS | 25 |
| ANNEX 2 - DECISION TREE FOR RETURN TO THE WILD | 26 |
| ANNEX 3 – KEY CONTACTS | 27 |

EXECUTIVE SUMMARY

Live wild animals are confiscated by local, regional, and national authorities for a variety of reasons. Once they have taken possession of these animals, these authorities must dispose of them responsibly, in a timely and efficient manner. Prevailing legislation, cultural practices, and economic conditions will influence decisions on appropriate disposition of confiscated animals. Within a conservation context, there are several possible options from which to choose:

- 1) to maintain the animals in captivity for the remainder of their natural lives;
- 2) to return the animals to the wild;
- 3) to euthanize the animals, i.e., humanely destroy them

The IUCN Guidelines for the Placement of Confiscated Animals discuss the benefits and risks involved in each of these options. These Guidelines should be read in conjunction with the IUCN Guidelines for Re-introductions (IUCN 1998), annexed hereto. They should also be read with reference to the CITES Guidelines for the Disposal of Confiscated Live Species of Species Included in the Appendices (Resolution Conf. 10.7) and the IUCN Guidelines for the Prevention of Biodiversity Loss due to Biological Invasion.

Returning confiscated animals to the wild is often considered the most popular option for a confiscating agency and can garner strong public support. However, such action poses real risks and problems and generally confers few benefits. These risks and problems include, but are not limited to, the following.

- 1. The mortality of animals released from captivity is usually high. Confiscated mammals and birds captured as juveniles have not learned the skills they need to survive in the wild. Other animals may be weakened or otherwise affected by their time in captivity and, thus, less able to survive. Finally, there is little chance of survival if the animals are released at a site that is not appropriate for the ecology or behavior of the species.
- Animals released into the wild outside of their natural range if they survive at all have
 the potential to become pests or invasive. The effects of invasive alien species are a
 major cause of biodiversity loss, as such species compete with native species and in
 other ways compromise the ecological integrity of the habitats in which they have
 become established.
- 3. Having been in trade or a holding facility often in association with other wild animals and, in some instances, domesticated ones, confiscated wild animals are likely to have been exposed to diseases and parasites. If returned to the wild, these animals may infect other wild animals, thus causing serious, and potentially irreversible, problems.
- 4. In many instances, confiscated wild animals have been moved great distances from the site of capture and changed hands several times, such that their actual provenance is unknown. It may, therefore, be impossible or very difficult to establish an appropriate site for return to the wild that takes into account the ecological needs of the species, the animals' genetic make-up, and other attributes that are important to minimize risks (e.g., competition, hybridization) to wild populations at a release site.
- 5. in cases where the provenance is known, the ecological niche vacated by that animal may already be filled by other individuals and replacing the animal could result in further undesired disturbance of the ecosystem
- 6. Responsible programs to return animals to the wild (c.f. IUCN 1998) are long-term endeavors that require substantial human and financial resources; hence, they can divert scarce resources away from other more effective conservation activities.

If returning confiscated animals to the wild is to be consistent with conservation principles and practice, it should a) *only* be into a site outside of the species' natural range if such an action is in accordance with the IUCN Guidelines for Reintroductions for a conservation introduction; and b) only be practiced in cases where the animals are of high conservation value and/or the release is part of a management programme. Any release to the wild must include the necessary screening and monitoring to address potential negative impacts, as set forth in the IUCN Guidelines for Re-introductions (IUCN 1998).

Retaining confiscated wild animals in captivity is a clear – and, in most cases, preferable - alternative to returning them to the wild. Clearly, returning animals to their owners will be required in cases of theft. There are a number of options for keeping animals in captivity; however, each of these also has costs and risks.

- As confiscated animals are likely to have been exposed to diseases and parasites, if held in captivity, they may infect other captive animals, causing serious, and potentially irreversible, problems.
- Finding an appropriate home for confiscated animals can be time-consuming, and caring for the animals during that time can be expensive.
- Wild animals have specific nutritional requirements and require specific care. Short-term and long-term humane care of confiscated wild animals requires space, finances and expertise not readily available in many countries.
- Transfer of ownership from a confiscating government authority to a private entity individual or non-commercial or commercial care facility can raise complicated legal and ethical issues, which are difficult and time-consuming to address. Sale or transfer of ownership may or may be seen to stimulate demand for these animals and exacerbate any threat that trade may pose to the species. It may also give the appearance that the government condones illegal or irregular trade or, in the case of actual sale, is benefiting from such trade.

In addition to avoiding risks to wild populations engendered by return to the wild, keeping confiscated animals in captivity provides other benefits, for example:

- Confiscated animals can be used to educate people about wildlife and conservation, as well as the consequences of trade in live wildlife.
- Confiscated animals placed in captivity can provide breeding stock for zoos, aquariums, and other facilities, thus potentially reducing the demand for wild-caught animals although the opposite effect may also occur.
- In specific instances where the provenance of the confiscated specimens is known, these animals can provide the nucleus, and breeding stock, for possible reintroduction programs.
- Confiscated animals can be the subject of a range of non-invasive research, training and teaching programs with important potential benefits for conservation.

Euthanasia must be considered a valid alternative to placing animals in captivity or returning them to the wild. Although it may appear counter-intuitive to employ euthanasia, it is by definition a humane act and can be wholly consistent with both conservation and animal welfare considerations. Further, although many confiscating authorities may be wary of criticism elicited by a decision to euthanize confiscated animals, there are a number of reasons to justify its use, including the following:

 In many, if not most, circumstances, euthanasia offers the most humane alternative for dealing with confiscated wild animals.

- Euthanasia eliminates the genetic, ecological, and other risks that release to the wild may pose to wild populations and ecosystems.
- Euthanasia eliminates the serious risk of spreading disease to wild or captive populations of animals.
- Euthanasia will often be the least costly option.

Establishment of an overall policy framework, with specific procedures for confiscating authorities, will facilitate consideration of the above three options for disposition, including the logistical, legal, and ethical questions that these authorities must address.

IUCN Guidelines for the Placement of Confiscated Animals

Statement of Principle

When live wild animals¹ are confiscated by government authorities, these authorities have a responsibility to dispose of them appropriately. Within a conservation context, and the confines of national and international law, the ultimate decision on placement of confiscated animals must achieve three goals: 1) to maximise the conservation value of the animals without in any way endangering the health, behavioural repertoire, genetic characteristics, or conservation status of wild or captive populations of the species² or any other wild living organism; 2) to discourage further illegal or irregular³ trade in the species; and 3) to provide a humane solution, whether this involves maintaining the animals in captivity, returning them to the wild, or employing euthanasia to destroy them.

Statement of Need

Increased regulation of trade in wildlife and enforcement of these laws and regulations have resulted in an increase in the number of live wild animals that are confiscated by government agencies as a result of non-compliance with these regulations. In some instances, the confiscation is a result of patently illegal trade; in others, it is in response to other irregularities. While in some cases the number of confiscated animals is small, in many others the number is in the hundreds or greater. The large numbers involved, and the need to care for and dispose of them responsibly, have placed serious pressures on confiscating authorities, many of whom lack the technical, financial or human resources or the necessary frameworks to address these situations adequately.

In many countries, the practice has generally been to donate confiscated⁴ animals to zoos or aquaria. However, this option is proving less viable. Zoos and aquaria generally cannot accommodate large numbers of animals that become available through confiscations. In addition to the resources required to house them and administer veterinary and other care, these institutions are usually less interested in the common species that comprise the vast proportion of wildlife confiscations. The international zoo community has recognized that placing animals of low conservation priority in limited cage space may benefit those individuals but may also detract from conservation efforts as a whole. Therefore, they are setting priorities for cage space (IUDZG/CBSG 1993), thus reducing their availability to receive confiscated animals.

There has been an increasing tendency to address the problem of disposition of confiscated animals by releasing them back into the wild. In some cases, release of confiscated animals into existing wild populations has been made after careful evaluation and with due regard for existing general guidelines (IUCN 1987, IUCN 1998). In other cases, such releases have not been well planned and have been inconsistent with general conservation objectives and

¹In these Guidelines, unless stated otherwise, confiscated animals should be understood to refer to live wild animals, not those that have been captive-bred.

²Although this document refers to species, in the case of species with well-defined subspecies , the issues addressed will apply to lower taxonomic units.

³Irregular trade in a species refers to, for example, insufficient or incomplete paperwork from the exporting country or poor packing that has comprised the welfare of the live animals in the shipment. ⁴Although not discussed here, it should be understood that, depending on the statutory authority of the agencies involved, animals may first be seized and then confiscated only on completion of legal proceedings resulting in forfeiture by the individual having previously claimed ownership of the animals.

humane considerations. Animals released in inappropriate habitat are usually doomed to starvation or death from other causes that the animals are not equipped or adapted against. In addition to humane concerns, release into wild populations may also have strong negative conservation value by threatening existing wild populations for the following reasons.

- Animals released into the wild outside their natural range can become pests or invasive, thus threatening agriculture and other sectors, native species, and the ecological integrity of the area in which they become established. The effects of invasive alien species are a major cause of global biodiversity loss.
- 2) The former home range of a confiscated animal may be quickly occupied by other individuals and releasing the confiscated animal could lead to further disruption of the animal's social ecology.
- 3) Diseases and parasites acquired by confiscated animals while held in captivity can easily spread into existing wild populations if these animals are released.
- 4) Individuals released into existing populations, or in areas near to existing populations, that are not of the same race or sub-species as those in the wild population, results in mixing of distinct genetic lineages.
- Animals held in captivity, particularly immature animals, can acquire an inappropriate behavioural repertoire from individuals of other species, and/or lose certain behaviours or not develop the full behavioural repertoire necessary for survival in the wild. It is also possible that release of animals could result in inter-specific hybridisation, a problem also to be avoided.

In light of these trends, there is an increasing demand -- and urgent need -- for information and advice on considerations relating to responsible placement of confiscated animals. There is also a pressing need for technical expertise and assistance in assessing the veterinary, husbandry and other questions that must be addressed in this process. Recognizing this problem, the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) have adopted guidelines for Disposal of Confiscated Live Specimens of Species Included in the Appendices (Resolution Conf. 10.7), applicable to both plants and animals. These IUCN guidelines build on and supplement those drawn up by CITES to apply more broadly to confiscated animals and confiscation situations.

Disposition of confiscated animals is not a simple or straightforward process. Only on rare occasions will the optimum course be obvious or result in an action of conservation value. Options for disposition of confiscated animals have thus far been influenced by the public's perception that returning animals to the wild is the optimal solution in terms of both animal welfare and conservation. However, a growing body of scientific study of re-introduction of captive animals, the nature and dynamics of wildlife diseases, and the nature and extent of the problems associated with invasive species suggests that such actions may be among the least appropriate options for many reasons, including those enumerated above. This recognition requires that the options available to confiscating authorities for disposition be carefully reviewed.

Management Options

In deciding on the disposition of confiscated animals, there is a need to ensure both the humane treatment of the animals and the conservation and welfare of existing wild populations. Options for disposition fall into three principal categories: 1) maintenance of the individual(s) in captivity; 2) returning the individual(s) in question to the wild; and 3) euthanasia.

Within a conservation perspective, by far the most important consideration in reviewing the options for disposition of confiscated animals is the conservation status of the species concerned. Where the animals represent an endangered or threatened species or are

otherwise of high conservation value⁵, particular effort should be directed towards evaluating whether and how these animals might contribute to a conservation programme for the species. The expense and difficulty of returning animals to the wild as part of a conservation (c.f. IUCN 1998, presented in Annex 4) or management programme or pursuing certain captive options will generally only be justified for species of high conservation value. How to allocate resources to the large numbers of confiscated animals representing common species is one of the fundamental policy questions that confiscating authorities must address.

The decision as to which option to employ in the disposition of confiscated animals will depend on various legal, social, economic and biological factors. The "Decision Tree" provided in the present guidelines is intended to facilitate consideration of these options. The tree has been designed so that it may be used for both threatened and common species. However, it recognizes that that conservation value of the species will be the primary consideration affecting the options available for placement. International networks of experts, such as the IUCN Species Survival Commission Specialist Groups (see Annex 3 for contact details), should be able to assist confiscating authorities in their deliberations as to the appropriate disposition of confiscated animals.

In some instances, in the case of international trade, there may be a demand for confiscated animals to be returned to their country of origin, and the government authorities of that country may request their return. CITES has established guidelines on this question through Resolution Conf. 10.7. It should be noted that it is often difficult to establish the true origin (including country of origin) of many animals in trade. Moreover, final disposition of confiscated animals upon their return to the country of origin will require consideration of the same options presented here. There is a need for cooperative efforts to review these options in order to ensure that repatriation is not undertaken simply to shift the burden of addressing the problem to the country of origin.

Option 1 -- Captivity

Confiscated animals are already in captivity; there are numerous options for maintaining them there. Depending on the circumstances and the prevailing legal or policy prescriptions, animals. can be donated, loaned, or sold, to public or private facilities, commercial or non-commercial, and to private individuals. Placement can be in the country of origin (or export), country of confiscation, or a country with adequate and/or specialized facilities for the species or animals in question. If animals are maintained in captivity, in preference to being returned to the wild or euthanized, they must be afforded humane conditions and ensured proper care for their natural lives.

Zoos and aquaria are the captive facilities most commonly considered for placement of animals, but these institutions are generally less willing and available to receive such animals than is assumed. As most confiscated animals are common species, the full range of captive options should be considered. These include zoos and aquaria as well as the following:

- Rescue centers, established specifically to treat injured or confiscated animals;
- Life-time care facilities devoted to the care of confiscated animals;
- Specialist societies or clubs devoted to the study and care of single species or species

⁵ It is recognized that "conservation value" may not always be easy to assess and may be a function of species' status at national or regional level as much as international level (e.g., listed as threatened by IUCN).

groups (e.g., reptiles, amphibians, birds) have provided an avenue for the disposition of confiscated animals through placement with these societies or individual members.

- Humane societies established to care and seek owners for abandoned animals may be
 in a position to assist with placement of confiscated animals with private individuals who
 can provide life-time care.
- Commercial captive breeders may be willing to receive and care for animals as well as to incorporate them into captive breeding activities. Such facilities, although commercial in nature, are likely to have the technical expertise and other resources to care for the animals. In addition, production of animals from captive breeding operations may reduce the demand for wild-caught animals.
- Research institutions maintain collections of exotic animals for many kinds of research (e.g. behavioural, ecological, physiological, psychological, medical and veterinary). Some research programmes have direct relevance to conservation. Attitudes towards vivisection or, in some instances, the non-invasive use of animals in research programmes as captive study populations vary widely from country to country and even within countries. These attitudes are likely to affect consideration of such programmes as an option for confiscated animals. However, it should be noted that transfer to facilities involved in research conducted under humane conditions may offer an alternative and one that may eventually contribute information relevant to the species' conservation.

Choosing amongst these options will depend on the conservation value of the animals involved, the condition of the animals, the circumstances of trade in the species, and other factors. As a general rule, where confiscated animals are of high conservation value, an effort should be made to place them in a captive facility that ensures their availability for conservation efforts over the long term, such as with a zoo, ex-situ research programme, or an established captive breeding program or facility.

Captivity – Sale, Loan or Donation

Animals can be placed with an institution or individual in a number of ways. It is critical to consider two issues: the ownership of the animals and/or their progeny, and the payment of any fees as part of transfer of ownership. Confiscating authorities and individuals or organizations involved in the placement of confiscated specimens must clarify ownership, both of the specimens being transferred and any progeny. They must also consider the possible implications of payment of fees in terms of public perception and for achieving the purpose of confiscation, which is to penalize and, in so doing, deter illegal and irregular trade. The following points should considered.

Transfer of ownership/custody. Unless specific legal provisions apply, the confiscating authority should consider including in an agreement to transfer ownership or custody the conditions under which the transfer is made, such as any restrictions on use (e.g., exhibition, education, captive breeding, commercial or non-commercial) or obligations concerning use (breeding efforts), that the animals may be put to. Such an agreement may set forth conditions relating to:

- subsequent transfer of ownership or custody;
- changes in the use of the animals by the new owner or custodian; and
- consequences of violation of the terms of transfer by the new owner or custodian.

Payment of fees. There may be cases where captive facilities are willing to receive and commit to care for confiscated animals providing payment is made by the confiscating authority against those costs. More frequently, the confiscating authority may seek to recoup the costs of caring for the animals prior to placement by levying a fee as part of transfer of ownership. Such payment of fees is problematic for many reasons, including the following:

- it may weaken the impact of the confiscation as a deterrent;
- it may risk creating a public perception that the confiscating authority is perpetuating or benefiting from illegal or irregular trade; or
- depending on the level of the fees proposed, it may work against finding a suitable option for maintaining the animals in captivity.

It is important that confiscating authorities be prepared to make public the conditions under which ownership of confiscated animals has been transferred and, where applicable, the basis for any payments involved.

Captivity - Benefits

In addition to avoiding the risks associated with attempting to return them to the wild, there are numerous benefits of placing confiscated animals in a facility that will provide life-time care under humane conditions. These include:

- a) educational value in terms of possible exhibition or other use;
- b) the satisfaction to be derived from the increased chances for survival of the animals;
- c) the potential for the animals to be used in a captive breeding programme to replace wild-caught animals as a source for trade;
- d) the potential for captive breeding for possible re-introduction or other conservation programmes; and
- e) the potential for use in conservation and other valuable research programs.

Captivity - Concerns

The concerns raised by placing animals in captivity include:

- A) DISEASE. Confiscated animals may serve as vectors for disease, which can affect conspecifics and other species held in captivity. As many diseases cannot be screened for, even the strictest quarantine and most extensive screening for disease cannot ensure that an animal is disease-free. Where quarantine cannot adequately ensure that an individual is disease-free, isolation for an indefinite period, or euthanasia, must be carried out.
- B) Captive animals maintained outside their range can escape from captivity and become pests or invasive. Unintentionally introduced exotic species have become invasive in many countries, causing tremendous damage to agriculture, fisheries, and transport, but also to native animal populations. The decline of the European mink (*Mustela lutreola*), listed as Endangered by IUCN, is in part a result of competition from American mink (*Mustela vison*) escaped from fur farms, while the negative effects of competition from introduced North American red-eared slider turtles (*Trachemys scripta elegans*), originally imported as pets, have been raised in relation to European and Asian freshwater turtles.
- C) COST OF PLACEMENT. Providing housing and veterinary and other care to confiscated animals can be expensive; as a result, it may be difficult to identify institutions or individuals willing to assume these costs.
- D) POTENTIAL TO ENCOURAGE UNDESIRED TRADE. As is discussed above, transfer of ownership

of confiscated animals to individuals or institutions, whether it involves loan, donation, or sale, is problematic. Some have argued that any transfer of ownership - whether commercial or non-commercial - of confiscated animals risks promoting a market for these species and creating a perception of the confiscating authority's being involved in illegal or irregular trade. These risks must be weighed in relation to the benefits, in particular that maintenance in captivity offers over return to the wild or euthanasia. Some factors that might be considered in assessing the degree to which transfer of ownership – and sale - might promoted undesired trade are:

- 1) whether the animals in question are already available for sale legally in the confiscating country in commercial quantities; and
- 2) whether wildlife traders under indictment for, or convicted of, crimes related to illegal or irregular trade in wildlife can be prevented from purchasing the animals in question.
- 3) the monetary/ commercial value of the animals in question

As regards the latter question, it should be noted that experience in selling confiscated animals suggests that it is virtually impossible to ensure that commercial dealers suspected or implicated in illegal or irregular trade are excluded, directly or indirectly, in purchasing confiscated animals.

In certain circumstances, transfer to commercial captive breeders may have a clearer potential for the conservation of the species, or welfare of the individuals, than non-commercial disposition or euthanasia. In the case of common species, commercial breeders may be a particularly attractive option; in the case of species of high conservation value, this option should be carefully assessed. There may be a risk of stimulating demand from wild populations through increased availability of the species, and it may be difficult to secure access to these animals for future conservation activities.

Option 2 -- Return to the Wild

Because of the serious risks posed to wild animal populations from released confiscated animals, return to the wild is considered here to be a desirable option in only a very small number of instances and under very specific circumstances. The IUCN Guidelines for Reintroductions (IUCN 1998, reproduced in Annex 4) make a clear distinction between the different options for returning animals to the wild to meet conservation objectives and discuss the purposes, rationale and procedures relating to these options.

The present Guidelines do not consider a viable option the return of animals to the wild except in accordance with the IUCN Guidelines for Re-introductions. Poorly planned or executed release or (re-)introduction programmes are no better than dumping animals in the wild and should be vigorously opposed on both conservation and humane grounds.

A) **Re-introduction**: an attempt to establish a population in an area that was once part of the range of the species but from which it has become extirpated.

Some of the best known re-introductions have been of species that had become extinct in the wild. Examples include: Père David's deer (*Elaphurus davidanus*) and the Arabian oryx (*Oryx leucoryx*). Other re-introduction programmes have involved species that persist in some parts of their historical range but have been eliminated from others; the aim of these programmes is to re-establish a population in an area, or region, from which the species has disappeared. An example of this type of re-introduction is the recent re-introduction of the swift fox (*Vulpes velox*) in Canada.

B) Reinforcement of an Existing Population (also referred to as Supplementation): the

addition of individuals to an existing population of the same species.

Reinforcement can be a powerful conservation tool when natural populations are diminished by a process which, at least in theory, can be reversed. One of the few examples of a successful reinforcement project involves the golden lion tamarin (*Leontopithecus rosalia*) in Brazil. Habitat loss, coupled with capture of live animals for pets, resulted in a rapid decline of the golden lion tamarin. When reserves were expanded, and capture for trade curbed, captive-bred golden lion tamarins were then used to supplement depleted wild populations.

Reinforcement has been most widely pursued in the context of rehabilitation programmes, i.e., when individual injured animals have been provided with veterinary care and released. Such activities are common in many countries, and specific programmes exist for species as diverse as hedgehogs and birds of prey. However common an activity, reinforcement carries with it the very grave risk that individuals held in captivity, even temporarily, are potential vectors for the introduction of disease or infectious organisms into wild populations.

Because of disease and other risks to wild populations, as well as the costs of screening and post-release monitoring, reinforcement should only be employed in instances where there is a direct and measurable conservation benefit (demographically and/or genetically, and/or to enhance conservation in the public's eye), or, at least, where the presumed benefits clearly outweigh these risks.

C) **Conservation Introductions** (also referred to as Beneficial or Benign Introductions): an attempt to establish a species, for the purpose of conservation, outside its recorded distribution but within an appropriate habitat and eco-geographical area. This is a feasible conservation tool only when there is no remaining area left within a species' historic range.

Extensive use of conservation introductions has been made in New Zealand, where endangered birds have been transferred to off-shore islands that were adjacent to, but not part of, the animals' original range. Conservation introductions can also be a component of a larger programme of re-introduction, an example being the breeding of red wolves (*Canis rufus*) on islands outside their natural range and subsequent transfer to mainland range areas.

Return to the Wild - Benefits

There are benefits of returning confiscated animals to the wild, providing the pre-requisite veterinary, genetic, and other screening is undertaken and post-release monitoring programmes are established (as per IUCN 1998).

- a) In situations where the existing population is severely threatened, re-introduction might improve the long-term conservation potential of the species as a whole, or of a local population of the species (e.g., golden lion tamarins).
- b) Return to the wild makes a strong political/educational statement concerning the fate of animals and may serve to promote local conservation values. However, as part of any education or public awareness programmes, the costs and difficulties associated with the return to the wild must be emphasized.
- c) Species returned to the wild have the possibility of continuing to fulfill their biological and ecological roles.

Return to the Wild - Concerns

As indicated above, because of the risk of biological invasion, these guidelines do not consider

it a viable option to return animals to the wild outside of their natural range in any but the most exceptional circumstances. Before return to the wild (as per IUCN 1998) of confiscated animals is considered, several issues of concern must be considered in general terms: welfare, conservation value, cost, and disease.

A) WELFARE. While some consider return to the wild to be humane, ill-conceived projects may return animals to the wild which then die from starvation or do not adapt to an unfamiliar or inappropriate environment. Humane considerations require that each effort to return confiscated animals to the wild be thoroughly researched and carefully planned. Reintroduction projects also require long-term commitment in terms of monitoring the fate of released individuals.

In order for return to the wild to be seriously considered on welfare grounds, some have advocated that the survival prospects for released animals must at least approximate those of wild animals of the same sex and age. While such demographic data on wild populations are rarely available, the spirit of this suggestion should be respected -- there must be humane treatment of confiscated animals when attempting to return them to the wild, and there should be a reasonable assessment of the survival prospects of the animals to justify the risks involved.

B) CONSERVATION VALUE AND COST. In cases where returning confiscated animals to the wild appears to be the most humane option, such action can only be undertaken if it does not threaten existing populations of con-specifics or populations of other interacting species, or the ecological integrity of the area in which they live. The conservation of the species as a whole, and of other animals already living free, must take precedent over the welfare of individual animals that are already in captivity.

Before animals are used in programmes in which existing populations are reinforced, or new populations are established, it must be determined that returning these individuals to the wild will make a significant contribution to the conservation of the species, or populations of other interacting species, or it must serve a purpose directly related to the conservation and management of the species or ecosystem involved. Based solely on demographic considerations, large populations are less likely to go extinct, and, therefore, reinforcing existing very small wild populations may reduce the probability of extinction. In very small populations, a lack of males or females may result in reduced population growth or population decline and, therefore, reinforcing a very small population lacking animals of a particular sex may also improve prospects for survival of that population. However, genetic and behavioural considerations, as well as the possibility of disease introduction, also play a fundamental role in determining the long-term survival of a population. The potential conservation benefit of the reintroduction should clearly outweigh the risks.

The cost of returning animals to the wild in a responsible manner can be prohibitive, suggesting that this option should only be pursued when species are of high conservation value. Exceptions to this rule may be instances where the confiscated animals are not of high conservation value, but the circumstances and technical and other resources are available to ensure re-introduction is undertaken in accordance with conservation guidelines (e.g., IUCN 1998)

C) DISEASE. Animals held in captivity and/or transported, even for a very short time, may be exposed to a variety of pathogens. Release of these animals to the wild may result in introduction of disease to con-specifics or unrelated species with potentially catastrophic effects. Even if there is a very small risk that confiscated animals have been infected by exotic pathogens, the potential effects of introduced diseases on wild populations are often so great that this should preclude returning confiscated animals to the wild.

Release into the wild of any animal that has been held in captivity is risky. Animals held in captivity are more likely to acquire diseases and parasites. While some of these diseases can be tested for, tests do not exist for many animal diseases. Furthermore, animals held in captivity are frequently exposed to diseases not usually encountered in their natural habitat. Veterinarians and quarantine officers, thinking that the species in question is only susceptible to certain diseases, might not test for the diseases picked up in captivity. It should be assumed that all diseases are potentially contagious.

In assessing the possibilities for disease, it may be particularly helpful to consider the known or presumed circumstances of trade, including:

- the time and distance from point of capture; the number of stages of trade and types of transport;
- b) whether the animals have been held or transported in proximity to wild or domesticated animals of the same or other species and what specific diseases have been known to be carried by such animals.
- D) Source of Individuals. If the precise provenance of the confiscated animals is not known (they may be from several different sites of origin), or if there is any question of the source of animals, supplementation may lead to inadvertent pollution of distinct genetic races or subspecies. If particular local races or sub-species show specific adaptation to their local environments, mixing in individuals from other races or sub-species may be damaging to the local population. Where the origin and habitat and ecological requirements of the species are unknown, introducing an individual or individuals into the wrong habitat type may also doom them to death.

Given that any release incurs some risk, the following "precautionary principle" should be adopted: if there is no conservation value in releasing confiscated animals to the wild or no management programme exists within which such release can be undertaken according to conservation guidelines, the possibility of accidentally introducing a disease, or behavioural and genetic aberrations that are not already present into the environment, however unlikely, should rule out returning confiscated specimens to the wild as a placement option.

Option 3 -- Euthanasia

Euthanasia -- the killing of animals carried out according to humane guidelines -- is a valid alternative to maintaining animals in captivity or returning them to the wild. Although it may appear counter-intuitive to employ euthanasia, it is, by definition, humane, and, thus can be wholly consistent with conservation and animal considerations. In many cases, it may be the most feasible option for conservation and humane, as well as economic, reasons. It is recognized that euthanasia is unlikely to be a popular option amongst confiscating authorities for disposition of confiscated animals. However, it cannot be overstressed that it may be the most responsible option. In many cases, authorities confiscating live animals will encounter the following situations:

- a) In the course of trade or while held in captivity, the animals have contracted a chronic disease that is incurable and poses a risk to other animals, whether held in captivity or in the wild.
- b) The actual provenance of the animals is unknown, and there is evidence to suggest that there may be genetic or other differences between them and presumed conspecifics in the wild, which could compromise the integrity of wild and captive populations, including those involved in breeding or conservation research activities.

- c) There are insufficient resources to return the animals to the wild in accordance with biological (e.g., IUCN 1998) and animal welfare (e.g., International Academy of Welfare Sciences 1992) guidelines.
- d) There are no feasible options for maintaining the animals in captivity.

In these instances, euthanasia may be the only responsible option and, thus, should be employed.

Euthanasia-- Benefits

- a) With respect to the conservation of the species in question and of captive and wild populations of animals, euthanasia carries far fewer risks (e.g. disease, genetic pollution, biological invasion) than maintenance in captivity or return to the wild.
- b) Euthanasia may be the best (and only) possible solution to an acute problem with confiscated animals. Many possibilities for maintenance in captivity may not guarantee the animals' welfare over the long term, and the survival prospects of animals returned to the wild are generally not high, as, depending on the circumstances, such animals often die of starvation, disease or predation.
- c) Euthanasia acts to discourage the activities that gave rise to confiscation, as the animals in question are completely lost to the trade, with no chance of recovery by the traders involved. This removes any potential monetary gain from illegal trade. In addition, euthanasia may serve as a broader deterrent, in educating the public and other sectors about the serious and complex problems that can arise from trade in live wild animals.
- d) The choice of euthanasia over maintenance in captivity or return to the wild offers an opportunity for confiscating authorities and other agencies to educate the public about more esoteric conservation problems, including those relating to invasive species and the potential negative consequences of releasing animals to the wild without adequate safeguards. Increased public awareness may generate additional ideas on placement of confiscated animals.
- Euthanasia can be inexpensive as compared to other options. As such, it does not divert human and financial resources that could be allocated to other conservation or related activities, such as re-introduction or lifetime care of other animals, or the conservation of threatened species in the wild.

When animals are euthanized, or die in captivity, an effort should be made to make the best use of the dead specimens for scientific purposes, such as placing them in a reference collection in a university or research institute, which are very important for the study of biodiversity, or making them available for pathology or other research.

Euthansia- Risks

- A) Just as there is potential positive educational value in employing euthanasia, there is a problem that it may give rise to negative perceptions of the confiscating authority for having taken that decision over other options. In such instances, there is a need to foresee such criticism and offer the rationale for the decision to euthanize.
- B) There is a risk of losing unique behavioural, genetic and ecological material within an

individual or group of individuals that represents variation within a species and may be of value for the conservation of the species.

Establishing the Necessary Frameworks

In order for prospective confiscating agencies to address the logistical, legal and other difficulties resulting from the seizure of wild animals, their eventual confiscation, and responsible disposition based on the above three options, there should be established an overall policy framework and specific procedures that *inter alia*:

- Identify the authority or authorities with responsibility for confiscation and placement of wild animals;
- Identify or provide the basis for establishing the facilities that will receive and, as necessary, quarantine, seized animals and hold them until final disposition is decided:
- Identify government or non-government agencies and experts that can assist in the identification, care, and screening of the seized or confiscated animals and assist in the process of deciding on appropriate disposition;
- Identify institutions, agencies, and private individuals and societies who can provide assistance to confiscating authorities in disposing of confiscated animals (including humane euthanasia) or can receive such animals;
- Elaborate on and provide for the implementation of the above guidelines in terms of specific legal and regulatory provisions and administrative procedures concerning transfer of ownership (including sale) of confiscated animals, short-term (e.g., upon seizure) and long-term (e.g., post-confiscation) care, levying of fees and other payments for care of confiscated animals, and other considerations that may be required to ensure that confiscated wild animals are disposed of responsibly in terms of both their welfare and the conservation.
- Produce and implement written policies on disposal of confiscated wildlife, taking steps to
 ensure that all enforcement personnel are provided the necessary resources to implement
 the policy.

Decision Tree Analysis

For decision trees dealing with "Return to the Wild" and "Captive Options," the confiscating party must first ask the question:

Question 1: Will "Return to the Wild" make a significant contribution to the conservation of the species? Is there a management programme that has sufficient resources to enable return according to IUCN Re-introduction Guidelines?

The most important consideration in deciding on placement of confiscated specimens is the conservation value of the specimen in question. Conservation interests are best served by ensuring the survival of as many individuals as possible; hence, the re-introduction of confiscated animals must improve the prospects for survival of the wild population. Re-introducing animals that have been held in captivity will always involve some level of risk to populations of the same or other species in the ecosystem, because there can never be absolute certainty that a confiscated animal is disease- and parasite-free. If the specimen is not of conservation value, the costs of re-introducing the animals to the wild may divert resources away from conservation programmes for other species or more effective conservation activities. In most instances, the benefits of return to the wild will be outweighed by the costs and risks of such an action. If returning animals to the wild is not of conservation value, captive options pose fewer risks and may offer more humane alternatives.

Q1 Answer: Yes: Investigate "Return to the Wild" Options.

NO: Investigate "Captive Options".

DECISION TREE ANALYSIS - CAPTIVITY

The decision to maintain confiscated animals in captivity involves a simpler set of considerations than that involving attempts to return confiscated animals to the wild.

Question 2: Have animals been subjected to comprehensive veterinary screening and quarantine?

Animals that may be transferred to captive facilities must have a clean bill of health because of the risk of introducing disease to captive populations. This should be established through quarantine and screening.

Q2 Answer: Yes: Proceed to Question 3.

No: Quarantine and screen, and proceed to Question 3

Question 3: Have animals been found to be disease-free by comprehensive veterinary screening and quarantine, or can they be treated for any infection discovered?

If, during quarantine, the animals are found to harbour diseases that cannot reasonably be cured, they must be euthanized to prevent infection of other animals. If the animals are suspected to have come into contact with diseases for which screening is impossible, extended quarantine, transfer to a research facility, or euthanasia must be considered.

Q3 Answer: Yes: Proceed to Question 4

No: If chronic and incurable infection exists, first offer animals to research

institutions. If impossible to place in such institutions, euthanize.

Question 4: Are there grounds for concern that certain options for transfer will stimulate further illegal or irregular trade or reduce the effectiveness of confiscation as a deterrent to such trade?

As much as possible, the confiscating authority should be satisfied that:

- 1) those involved in the illegal or irregular transaction that gave rise to confiscation cannot obtain the animals proposed for transfer;
- 2) the transfer does not compromise the objective of confiscation; and
- 3) the transfer will not increase illegal, irregular or otherwise undesired trade in the species.

What options can guarantee this will depend on the conservation status of the species in question, the nature of the trade in that species, and the circumstances of the specific incident that gave rise to confiscation. The payment of fees – to or by the confiscating authority – will complicate this assessment. Confiscating authorities must consider the various options for transfer in light of these concerns and weigh them against potential benefits that certain options might offer.

Answer: Yes: Proceed to Question 5a.

No: Proceed to Question 5b.

Question 5a: Is space available with a captive facility where the benefits of placement will outweigh concerns about the risks associated with transfer?

Question 5b: Is space available in a captive facility that offers particular benefits for the animals in question or the species?

There are a range of options for placement of confiscated animals in captivity, including public and private facilities, either commercial or non-commercial, specialist societies and individuals. Where several options for placement exist, it may be helpful to consider which offers the opportunity to maximize the conservation value of the animals, such as involvement in a conservation education or research programme or a captive-breeding programme. The conservation potential must be carefully weighed against the risk of stimulating trade that could exert further pressure on the wild population of the species.

Although placement with a commercial captive-breeding operation has the potential to reduce demand for wild-caught animals, this option should be carefully assessed: it may be difficult to monitor these facilities, and such programmes may, unintentionally or intentionally, stimulate trade in wild animals.. In many countries, there are active specialist societies or clubs of individuals with considerable expertise in the husbandry and breeding of individual species or groups of species. Such societies can assist in finding homes for confiscated animals with individuals who have expertise in the husbandry of those species

When a choice must be made between several options, the paramount consideration should be which option can:

- 1) offer the opportunity for the animals to participate in a programme that may benefit the conservation of the species;
- 2) provide the most consistent care; and
- 3) ensure the welfare of the animals.

In instances, where no facilities are available in the country in which animals are confiscated, transfer to a captive facility outside the country of confiscation may be possible. Whether to pursue this will depend on the conservation value of the species or the extent of interest in it. An important consideration in assessing this option is the cost involved and the extent to which these resources may be more effectively allocated to other conservation efforts.

The confiscating authorities should conclude an agreement to transfer confiscated animals to captive facilities. This agreement should set forth the terms and conditions of the transfer, including:

- a) restrictions on any use (e.g., exhibition, education, captive breeding), commercial or non-commercial, that the animals may be put to;
- b) a commitment to ensure life-time care or, in the event that this becomes impossible, transfer to another facility that can ensure life-time care, or to euthanize the animals; and
- c) conditions regarding subsequent transfer of ownership, including sale, of the animals or their offspring.

Q5 Answer: Yes: Execute agreement and sell.

No: Proceed to Question 6.

Question 6: Are institutions interested in animals for research under humane conditions?

Many research institutions maintain collections of exotic animals for research conducted under

humane conditions. If these animals are kept in conditions that ensure their welfare, transfer to such institutions may provide an acceptable alternative to other options, such as transfer to another captive facility or euthanasia. As in the preceding instances, such transfer should be subject to terms and conditions agreed with the confiscating authority; in addition to those already suggested, it may be advisable to include terms that stipulate the types of research the confiscating authority considers permissible. If no placement is possible, the animals should be euthanized.

Q6 Answer: Yes: Execute Agreement and Transfer.

No: Euthanize.

DECISION TREE ANALYSIS -- RETURN TO THE WILD

Question 2: Have animals been subjected to a comprehensive veterinary screening and quarantine?

Because of the risk of introducing disease to wild populations, confiscated animals that may be released must have a clean bill of health. The animals must be placed in quarantine to determine if they are disease-free before being considered for released.

Q2 Answer: Yes: Proceed to Question 3.

No: Quarantine and screen, and proceed to Question 3.

Question 3: Have animals been found to be disease-free by comprehensive veterinary screening and quarantine, or can they be treated for any infection discovered?

If, during quarantine, the confiscated animals are found to harbour diseases that cannot reasonably be cured, unless any institutions are interested in the animals for research under humane conditions, they must be euthanized to prevent infection of other animals. If the animals are suspected to have come into contact with diseases for which screening is impossible, extended quarantine, donation to a research facility, or ethanasia must be considered.

Q3 Answer: Yes: Proceed to Question 4

No: If chronic and incurable infection exists, first offer animals to research

institutions. If impossible to place in such institutions, euthanize.

Question 4: Can the country of origin and site of capture be confirmed?

The geographical location from which confiscated animals have been removed from the wild must be determined if these individuals are to be used to re-inforce existing wild populations. As a general rule, animals should only be returned to the population from which they were taken, or from populations that are known to have natural exchange of individuals with this population.

If provenance of the animals is not known, release for reinforcement may lead to inadvertent hybridisation of distinct genetic races or sub-species. Related species of animals that may live in sympatry in the wild and never hybridise have been known to hybridise when held in captivity in multi-species groups. This type of generalisation of species recognition under abnormal conditions can result in behavioural problems, which can compromise the success of any future release and also pose a threat to wild populations by artificially destroying reproductive isolation that is behaviourally mediated.

Q4 Answer: Yes: Proceed to Question 5.

No: Pursue 'Captive Options'.

Question 5: Do the animals exhibit behavioural abnormalities that might make them

unsuitable for return to the wild?

Behavioural abnormalities as a result of captivity can render animals unsuitable for release into the wild. A wide variety of behavioural traits and specific behavioural skills are necessary for survival, in the short-term for the individual, and in the long-term for the population. Skills for hunting, avoiding predators, food selectivity, etc. are necessary to ensure survival.

Q5 Answer: Yes: Pursue 'Captive Options'.

No: Proceed to Question 6.

Question 6: Can the animals be returned expeditiously to their site of origin (specific location), and will benefits to conservation of the species outweigh any

risks of such action?

Return of the animals to the wild through reinforcement of the wild population should follow the IUCN Re-introduction Guidelines (see Annex 4) and will only be an option under certain conditions, including:

- a) appropriate habitat for such an operation still exists in the specific location that the individual was removed from; and
- b) sufficient funds are available, or can be made available.

Q6 Answer: Yes: Re-inforce at origin (specific location) following IUCN Guidelines.

No: Proceed to Question 7.

Question 7: For the species in question, does a generally recognized programme exist the aim of which is conservation of the species and eventual return to the wild of confiscated individuals and/or their progeny? Contact IUCN/SSC, IIUDZG, Studbook Keeper, or Breeding Programme Coordinator (See Annex 3).

In the case of species for which active captive breeding and/or re-introduction programmes exist, and for which further breeding stock/founders are required, confiscated animals should be transferred to such programmes after consultation with the appropriate scientific authorities. If the species in question is part of a captive breeding programme, but the taxon (sub-species or race) is not part of this programme, other methods of disposition must be considered. Particular attention should be paid to genetic screening to avoid jeopardizing captive breeding programmes through inadvertent hybridisation.

Q7 Answer: Yes: Execute agreement and transfer to existing programme.

No: Proceed to Question 8.

Question 8: Is there a need, and is it feasible to establish a new re-introduction programme *following IUCN Guidelines*?

In cases where individuals cannot be transferred to existing re-introduction programmes, re-introduction following IUCN Guidelines, may be possible, providing:

a) appropriate habitat exists for such an operation;

b) sufficient funds are available, or can be made available, to support a programme over the many years that (re)introduction will require; and

c) sufficient numbers of animals are available so that re-introduction efforts are potentially viable.

In the majority of cases, at least one, if not all, of these requirements will fail to be met. In this instance, either conservation introductions outside the historical range of the species or other options for disposition of the animals must be considered.

If a particular species is confiscated with some frequency, consideration should be made as to whether to establish a re-introduction, reinforcement, or introduction programme for that species. Animals should not be held by the confiscating authority indefinitely while such programmes are planned, but should be transferred to a holding facility after consultation with the organization which is establishing the new programme.

Q8 Answer: Yes: Execute agreement and transfer to holding facility or new programme.

No: Pursue 'Captive Options'.

Relevant Documents

CITES. 1997. Resolution Conf. 10.7: Disposal of Confiscated Live Specimens of Species Included in the Appendices. Adopted at the Tenth Meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Harare, 1997).

(Available from CITES Secretariat or from http://www.wcmc.org.uk/CITES/)

IUCN. 1987. The IUCN position statement on translocation of living organisms: introductions, re-introductions and restocking. IUCN, Gland, Switzerland.

(Available from IUCN/SSC or from http://iucn.org/themes/ssc/PUBS/POLICY/INDEX.HTM)

IUCN. 1998. *IUCN Guidelines for Re-introductions*. Prepared by the IUCN/SSC Reintroductions Specialist Group. IUCN, Gland Switzerland and Cambridge, UK.

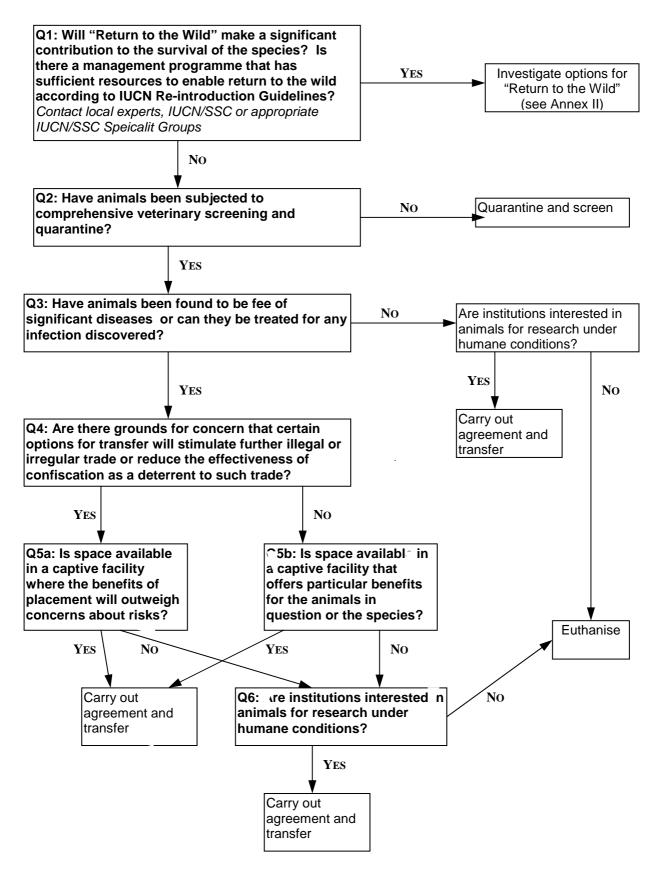
(Available from IUCN Publications Services Unit or from http://iucn.org./themes/ssc/PUBS/POLICY/INDEX.HTM)

IUCN. In prep. IUCN Guidelines for the Prevention of Biodiversity Loss due to Biological Invasion.

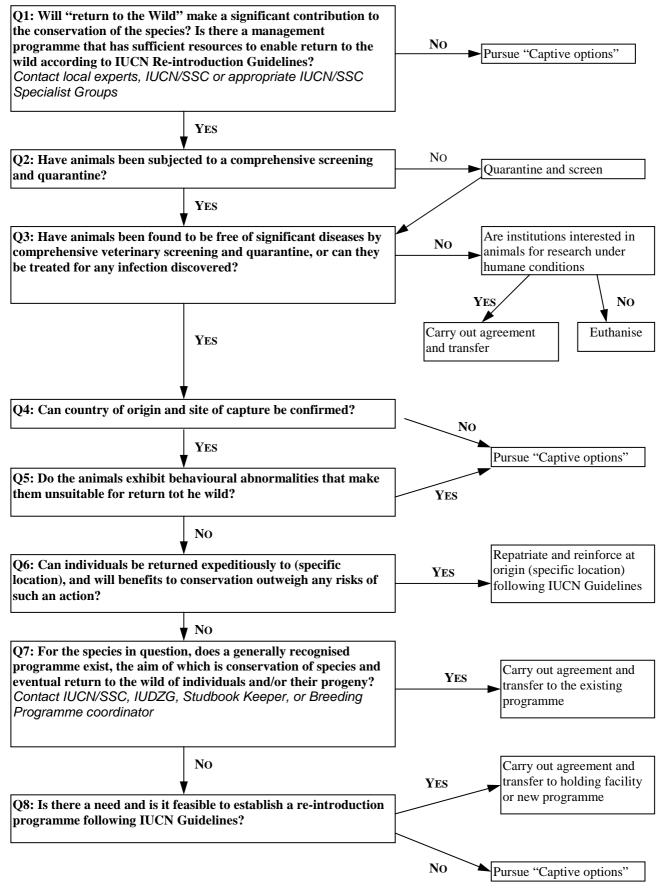
Prepared by the IUCN/SSC Invasive Species Specialist Group. IUCN, Gland, Switzerland.

IUDZG/CBSG. 1993. The World Zoo Conservation Strategy. The Role of Zoos and Aquaria of the World in Global Conservation. IUDZG-the World Zoo Organization.

Annexes
Annex 1- Decision Tree for Captive Options



Annex 2 - Decision Tree for Return to the Wild



Annex 3 - Key Contacts

IUCN Species Survival Commission

Contact: Species Survival Programme,

IUCN-The World Conservation Union,

Rue Mauverney 28,

1196 Gland, Switzerland.

Tel: +41-22-999-0153 / Fax: +41-22-999-0015 / Email: ssc @iucn.org

Website: http://www.iucn.org/themes/ssc/index.htm

Taxonomic Specialist Groups

Contact details for individual taxonomic specialist groups of SSC are available through IUCN at the contact details and IUCN website address provided above.

Disciplinary Specialist Groups

Re-introductions Specialist Group

Dr Frederic Launay, Chair

Mr. Pritpal Soorae, Executive Officer, Environmental Research & Wildlife Development Agency (ERWDA),

PO Box 45553, Abu Dhabi,

United Arab Emirates (UAE). Tel: 971-2-693-4650 / 681-7171

Fax: 971-2-681-0008

E-mail: PSoorae@erwda.gov.ae

Website:

http://www.iucn.org/themes/ssc/programs

/rsg.htm

Conservation Breeding Specialist Group

Dr Ulysses S. Seal, Chair, IUCN/SSC CBSG Program Office, 12101 Johnny Cake Ridge Road, Apple Valley, Minnesota 55124, USA.

Tel: +952-997-9800 Fax: +952-432-2757 E-mail: office @cbsg.org Website: http://www.cbsg.org

Veterinary Specialist Group

Dr. William B. Karesh, Co-Chair, Department Head, Field Veterinary Program, Wildlife Conservation Society,

2300 Southern Blvd., Bronx, NY 10460,

USA.

Tel: +718-220-5892 Fax: +718-220-7126 E-mail: wkaresh @wcs.org Dr. Richard Kock, Co-Chair,

Technical Assistant-Wildlife Veterinary

Expert,

PACE Epidemiology,

OAU-Inter African Bureau for Animal

Resources, P.O. Box 30786,

Nairobi, KENYA.

Tel: +254-2-318068 Fax: +254-2-226565

E-mail: Richard.kock@oau-ibar.org

Invasive Species Specialist Group

Dr. Mick Clout, Chair,

School of Environmental & Marine Sciences, University of Auckland, Tamaki Campus,

Private Bag 92019,

Auckland, New Zealand. Tel: +64-9-373-7599 Fax: +64-9-373-7042

E-mail: issg@auckland.ac.nz

CITES Secretariat

Chemin des Anémones, 1219 Châtelaine-Genève,

Switzerland

Tel: + 41-22-979-9139 or 40 Fax: +41-22-797-3417 Email: cites@unep.ch Website: www.cites.org