

*The Vanishing Viper 2016: Priorities for Adder Conservation*

# IUCN Guidelines and adder translocations

Gemma Harding and Richard A. Griffiths



**DICE**  
University of Kent

Durrell Institute of  
Conservation and Ecology



University of  
**Kent**



# Why do translocations?

## Motivations:

- Conservation of species – *demand driven*
- Human-wildlife conflict – *supply driven*



# Reintroduction Guidelines

IUCN Position Statement on Translocation of Living Organisms

**INTRODUCTIONS, REINTRODUCTIONS AND RE-STOCKING**

Prepared by the Species Survival Commission in cooperation with the Commission on Ecology, and the Commission on Environmental Administration

Approved by the 22nd Meeting of the IUCN Council, September 1987

**FOREWORD**

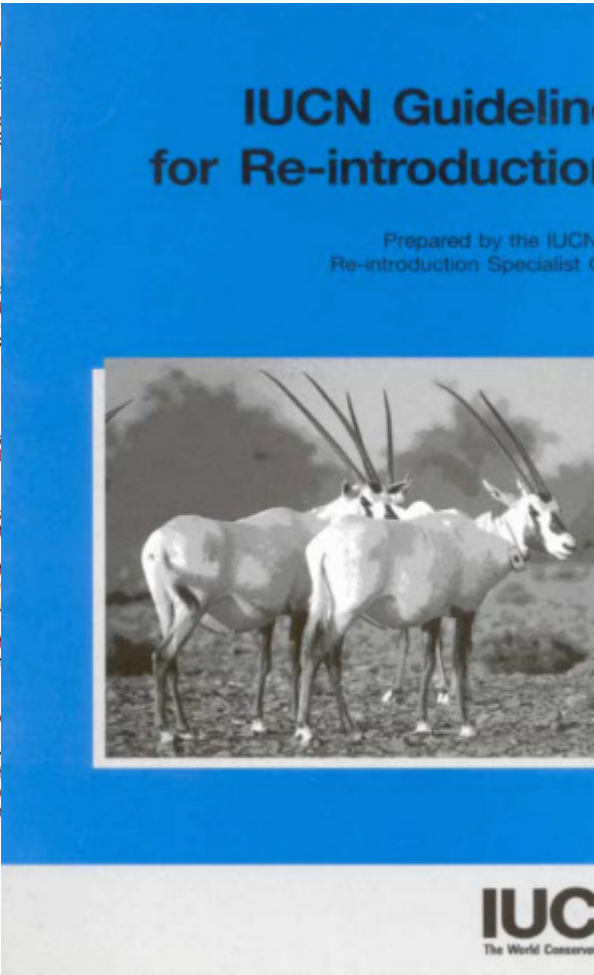
This statement sets out IUCN's position on translocation covering introductions, re-introductions and re-stocking. These three sorts of translocation are very different so the parts dealing with Introductions, Re-introductions, Re-stocking Implications, respectively.

**DEFINITIONS:**

Translocation is the movement of living organisms from one place to another. The three main classes of translocation in this document are defined as follows:

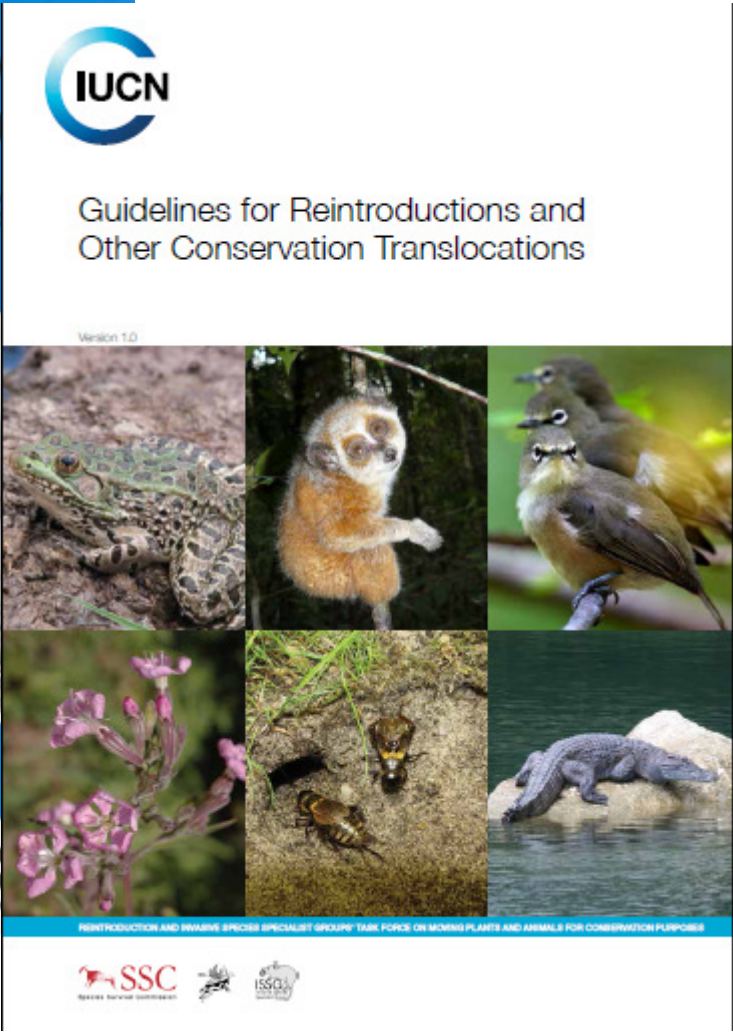
- **Introduction** of an organism is the intentional movement of a living organism outside its natural range.
- **Re-introduction** of an organism is the intentional movement of an organism into a part of its native range from which it has become extirpated in historic times as a result of human activity or natural catastrophe.
- **Re-stocking** is the movement of numbers of individuals of a species with the intention of building up the population in its original habitat.

Translocations are powerful tools for the management of natural resources. A well-planned and properly implemented translocation can bring about a more balanced environment which, properly used, can bring about a more balanced biological systems and to man, but like other powerful tools, it has the potential to cause enormous damage if misused. The purpose of this statement is to set out the advantageous uses of translocations and the ways to avoid the disastrous consequences of poorly planned translocations.



1987

1998



2013

# Other sources of guidance

## Towards an Endangered Species Reintroduction Paradigm

**Richard P. Reading**

Denver Zoological Foundation, 2900 East 23rd Avenue, Denver, CO 80205  
zooresearch@denverzoo.org

**Tim W. Clark**

Yale University School of Forestry and Environmental Studies, 301 Prospect Street  
Rockies Conservation Cooperative, Box 2705, Jackson, WY 83001  
timothy.w.clark@yale.edu

**Stephen R. Kellert**

Yale University School of Forestry and Environmental Studies, 301 Prospect Street  
stephen.kellert@yale.edu

### Abstract

*Reintroduction programs are becoming increasingly more common, but one reason for this lack of success is a narrow focus on biological considerations. This paper challenges the current paradigm for approaching reintroductions that centers on key variables, and instead proposes a model that is informed by a continuum of variables. Our model includes four categories of considerations: (1) biological considerations (ecology, genetic concerns, reintroduction authority and power (control of resources, laws and regulations), organizational aspects (program structure, bureaucratic behavior) and (4) socioeconomic considerations (people's values, attitudes, concerns, etc.). This model can aid people interested in reintroductions by providing comprehensive approaches to reintroduction promise to improve success.*

### Introduction

In response to the current extinction crisis, managers and conservationists are searching for innovative, more effective methods of species conservation. One such method is the translocation or reintroduction of species into formerly occupied habitat. As the list of threatened and endangered species lengthens, the need for employing reintroduction as a conservation tool increases (Jones 1990).

Most reintroductions, however, fail (Griffith et al. 1989). One reason for this, we suggest, is that the programs suffer from a narrow concentration on biological and ecological considerations and exclude a host of other equally important elements. As Clark (1989:3) stated: "Most descriptions of endangered species recovery focus only on the biology of species, thus creating the unrealistic view that conservation and recovery are strictly technical biological tasks."

In fact, numerous non-biological factors and forces have direct and paramount significance for species recovery, and conservation movement is to be successful it must explicitly recognize the complex, interactive impact of all the various elements of the various categories.

Kellert (1985:528) stated: "A compelling rationale for protected species will require that contemporary extinctions are the result of social and political forces." It is our experience that these elements often go unrecognized by individuals working on species reintroduction efforts.

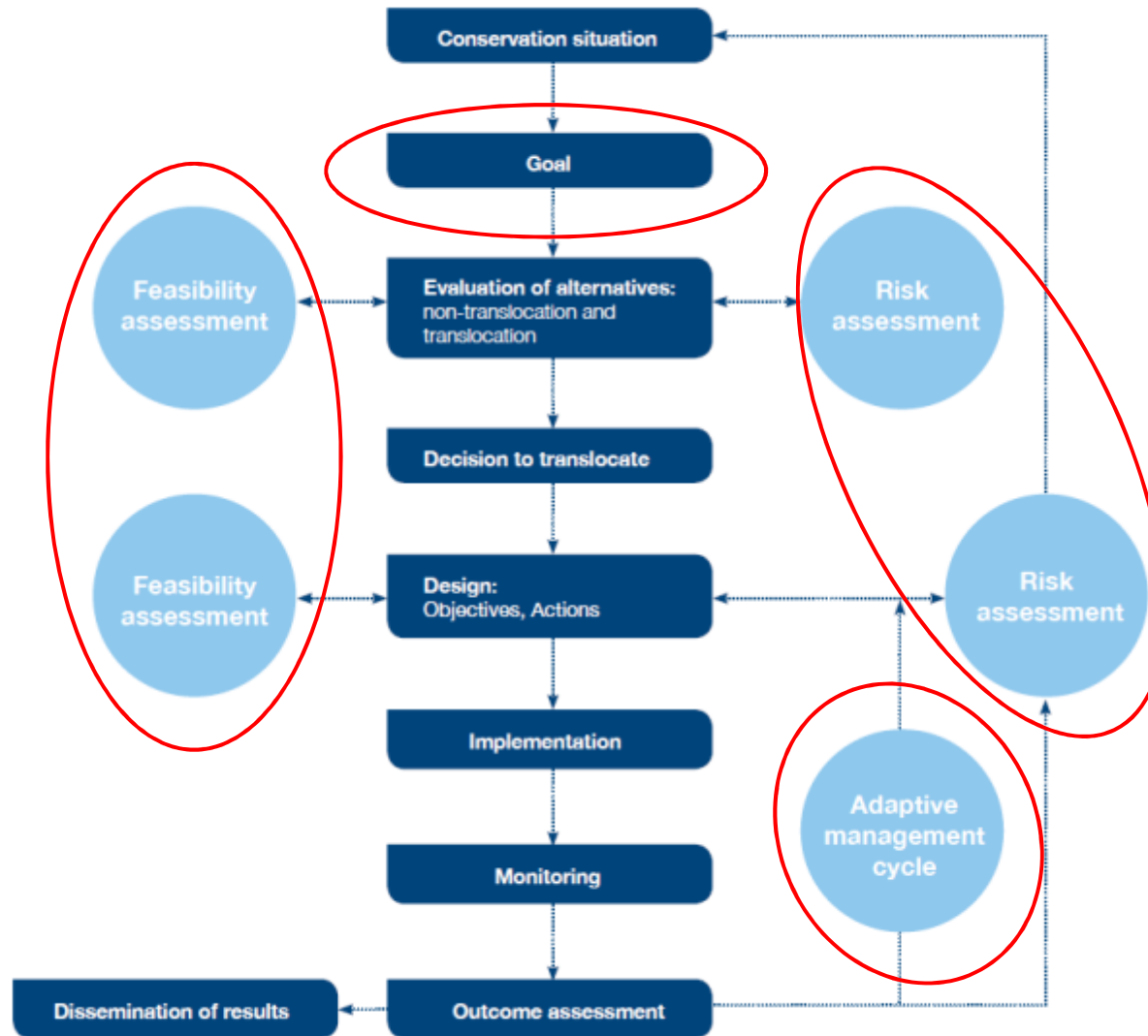
To increase awareness of the importance of these elements, we develop a more holistic, more holistic approach to endangered species recovery which explicitly includes

Reprinted from *Endangered Species UPDATE*: 1991, 8(11):1-4.

142 *Endangered Species UPDATE*



# The Conservation Translocation Cycle



From:

IUCN/SSC (2013). *Guidelines for Reintroductions and Other Conservation Translocations. Version 1.0.* Gland, Switzerland: IUCN Species Survival Commission, viiii + 57 pp.

# Risk assessment

- Risk to source populations
- Ecological risk
- Disease risk
- Associated invasion risk
- Gene escape
- Socio-economic risk
- Financial risk



# What do we already know?

## CONCEPTS AND QUESTIONS

### What is wrong with current translocations? A review and a decision-making proposal

Irene Pérez<sup>1,2\*</sup>, José D Anadón<sup>2,3,4</sup>, Mario Díaz<sup>5</sup>, Graciela G Nicola<sup>6</sup>, José L Tella<sup>3</sup>, and Andrés Giménez<sup>2</sup>

Should a species be translocated?

- Do not address population declines
- Driven by philosophical, aesthetic or sociopolitical reasons
- Often unsuccessful
- May be harmful

translocation projects and conservation efforts.

*Front Ecol Environ* 2012; 10(9): 494–501, doi:10.1890/

of many translocations published and unpublished. a established for translo- ly designed to guarantee

## CONCEPTS AND QUESTIONS

### Mitigation-driven translocations: are we moving wildlife in the right direction?

Jennifer M Germano<sup>1,2\*</sup>, Kimberleigh J Field<sup>3</sup>, Richard A Griffiths<sup>4</sup>, Simon Chulow<sup>5</sup>, Jim Foster<sup>6</sup>, Gemma Harding<sup>4</sup>, and Ronald R Swaisgood<sup>1</sup>

Despite rapid growth in the field of reintroduction biology,

applied to translocations initiated by a species funding unclear.

those of ill-suited many mi-

practices would hinder eff-

part of the these releases be reported and evaluated.

- Well-funded
- Designed to meet regulatory intent
- Poorly monitored and documented
- Supply driven

*Front Ecol Environ* 2015; doi:10.1890/140137

## The criteria covered

1. Is the species or population under threat?
2. Have the threats been addressed? ❌
3. Have alternatives been considered?
4. Have the risks to target species been assessed? ❌
5. Are risks for other species or the ecosystem acceptable? ❌
6. Are community and socioeconomic issues addressed?
7. Are viable populations likely to be established? ❌
8. Does the project include clear goals and monitoring? ❌
9. Do enough economic and human resources exist? ❌
10. Do scientific, governmental, and stakeholder groups support the reintroduction?



## Amphibian Reintroduction Guidelines are Coming!

By Gemma Harding, Luke Linhoff & Richard Griffiths

A working group involving a variety of partners and experts has been established to produce amphibian reintroduction guidelines. These guidelines will encompass a variety of information and guidance, and a draft will be available for open comment via the ASG website later this year.

The International Union for the Conservation of Nature (IUCN) Reintroduction Specialist Group (RSG) has developed non-taxon specific, best practice guidelines for reintroductions and other conservation translocations. The most recent guidelines published in 2013 was a major collaboration between dozens of reintroduction specialists. Various working groups have also developed reintroduction guidelines for specific taxon groups, such as elephants and non-human primates (all guidelines are available for download at <http://www.iucnsscrg.org/index.php>). Currently, a new guidelines document specifically for amphibian reintroductions and other conservation translocations is being developed in major new collaboration.

Recent research has shown that since the publication of the ACAP in 2007, the number of amphibian programs involving captive breeding and reintroduction has increased by over 50% (1). Supporting translocations and reintroductions to ensure they are carried out with the best available evidence is integral to the ACAP's goals for amphibian conservation. The production of a set of amphibian reintroduction guidelines has been a priority action of the ACAP reintroduction group for some time and has been driven to fruition by a variety of stakeholders. The advantages of such a document are that it will provide amphibian-specific guidance on such issues as planning, risk assessment, threat mitigation and monitoring. This will provide vital information not covered in the general guidelines for practitioners either currently carrying out or planning reintroductions.

We are aware there are limitations in the development and application of amphibian specific reintroduction guidelines. It is very difficult to make generalizations for such a diverse group of organisms that encompasses a vast range of ecology, physiology, behaviour, and natural history. Equally, many species that may be a high priority for reintroductions have poorly understood—or even unknown—natural histories (2). We therefore aim to embrace commonalities, case studies, and best practices and provide guidance and links to resources developed elsewhere that are useful for practitioners involved in reintroductions. The document will be organized in sections that cover each of the main stages of the reintroduction process from pre-release planning, implementation, and post-release monitoring, providing examples and useful links along the way. We hope that after the first guidelines are produced, they can be regularly updated and improved to maintain relevance and new developments in this rapidly changing field of amphibian conservation.

We are using similar processes utilized to develop other reintroduction guidelines. Initial planning and development started in earnest in February 2015. A core group of 11 specialists based in six different countries were enlisted in the fall of 2015 to develop the initial draft text. The guidelines are currently in a draft form, and are still being developed by the core team. However, in late-summer or fall 2016 we will be soliciting comments and feedback on a complete first-draft version. We aim to be inclusive; with the draft publically hosted online will invite feedback from all stakeholder groups, such as ACAP, ASG and RSG members, ASA partner organizations, other SSC working groups such as the Wildlife Health Specialist Group. Indeed, we welcome feedback from both to conservation professionals and citizen scientists. Following the consultation, comments and feedback will be integrated, and the guidelines will be put forward for formal adoption by the IUCN. The aim of the guidelines is to help in informing and improving translocation programs. Comments and feedback at the draft stages will be therefore critical to developing high-quality and useful guidelines.

We want feedback from YOU! So stay tuned for more information on this important document that you will have a chance to be a part of!

#### References:

1. G. Harding, R. A. Griffiths, L. Pavaianu, *Conservation Biology*, 30: 340-349 (2016).
2. B. Tapley, K. S. Bradfield, C. Michaels, M. Bungard, *Biodiversity and Conservation* 24:2625-2646 (2015).



Reintroduction in action: Releasing Chiricahua Leopard Frogs. Photo: Arizona Game and Fish Department.

50 | FrogLog 24 (2), Number 118 (June 2016)

Reptile  
reintroduction  
guidelines  
(incorporating  
mitigation  
translocations...)?



# Conservation or cosmetic surgery...?

We need to ensure that translocation programmes result in:



A transformation...



...not expensive mistakes