

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

Translocations are powerful tools for the management of a degraded environment which, properly used, can bring about a recovery of biological systems and to man, but like other powerful tools, they have the potential to cause enormous damage if misused. This document sets out the advantageous uses of translocations and the ways to avoid the disastrous consequences of poorly planned translocations.

IUCN Guidelines for Re-introduction

Prepared by the IUCN Re-introduction Specialist Group



IUCN
The World Conservation Union

1987

1998



Guidelines for Reintroductions and Other Conservation Translocations

Version 1.0



REINTRODUCTION AND IMMUNE SPECIES SPECIALIST GROUPS' TASK FORCE ON MOVING PLANTS AND ANIMALS FOR CONSERVATION PURPOSES



2013

University of Kent

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
Rookies 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 presents a model for approaching reintroductions that centers on key elements of a continuum of variables. Our model includes four categories: (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, etc.). This model can aid people interested in reintroductions in developing comprehensive approaches to reintroduction promise to improve

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 endangered species recovery, and conservation movement is to it must explicitly recognize the complexly interactive impact of combinations of all the various

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

To increase understanding of the importance of these elements, we are developing a thematic, more holistic approach to endangered species reintroduction which explicitly includes

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

142 *Endangered Species UPDATE*

CONSERVATION SCIENCE AND PRACTICE no.9



Reintroduction Biology

Integrating Science and Management

Edited by John G. Ewen, Doug P. Armstrong, Kevin A. Parker and Philip J. Seddon

WILEY-BLACKWELL



Global Re-introduction Perspectives: 2013

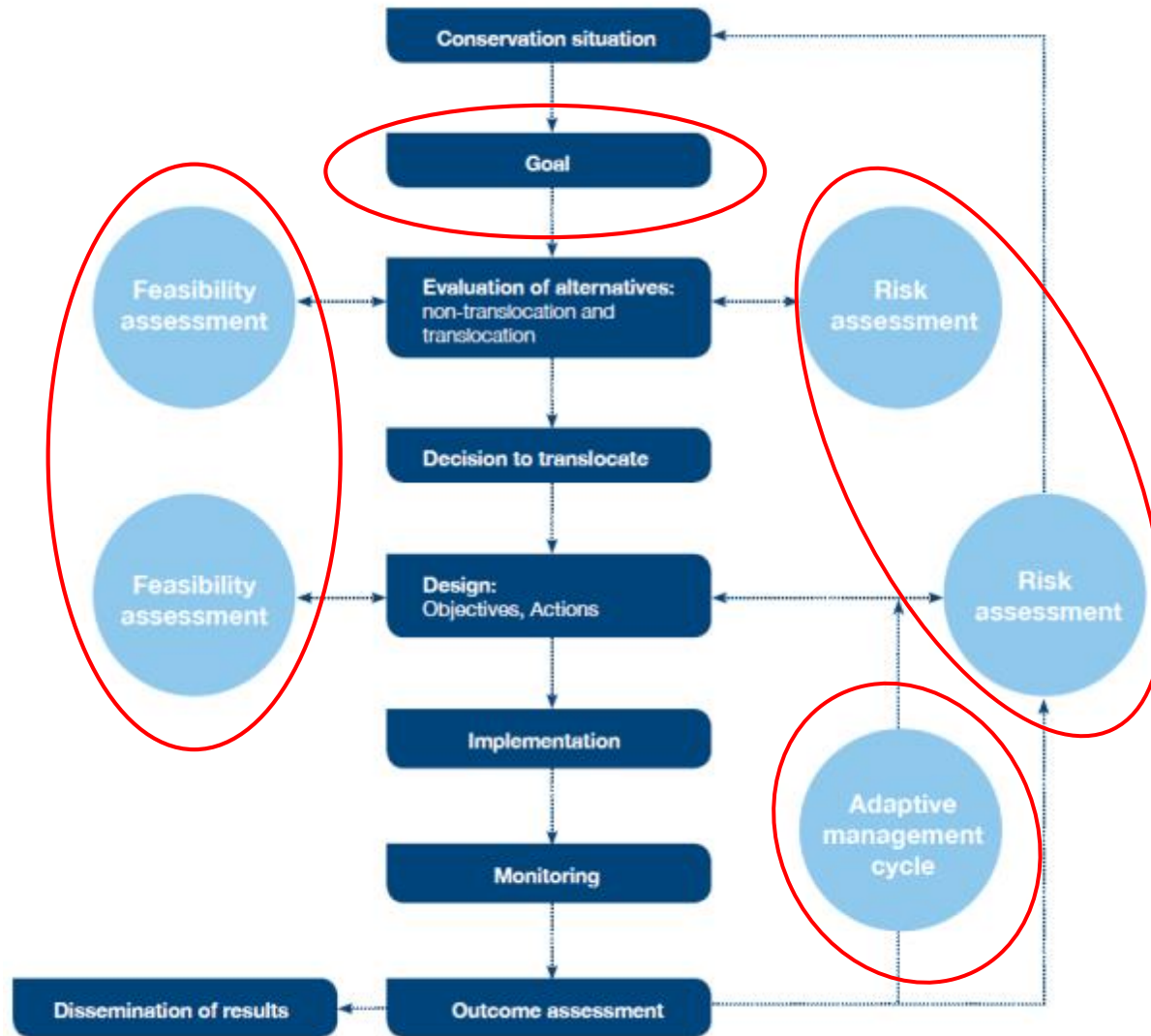
Further case-studies from around the globe
Edited by Pritpal S. Soorae



IUCN/SSC Re-introduction Specialist Group (RISG)



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



From:

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

What do we already know?

CONCEPTS AND QUESTIONS

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

Irene Pérez^{1,2*}, José D Anadón^{2,3,4}, Mario Díaz⁵, Graciela G Nicola⁶, José L Tella³, and Andrés Giménez²

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

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

CONCEPTS AND QUESTIONS

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

Jennifer M Germano^{1,2*}, Kimberleigh J Field³, Richard A Griffiths⁴, Simon Clulow⁵, Jim Foster⁶, Gemma Harding⁴, and Ronald R Swaisgood¹

- 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, behaviours, 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.



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

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. Pavajeau, *Conservation Biology*, 30: 340-349 (2016).
2. B. Tapley, K. S. Bradfield, C. Michaels, M. Bungard, *Biodiversity and Conservation* 24:2625-2646 (2015).

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

