

Brief 2: How to design a species recovery plan



This brief was summarised by Yvette Harvey-Brown (BGCI) from Chapter 11 of BGCI's and IABG's Species Recovery Manual



Introduction

Effective recovery of threatened species is greatly improved through preparation of a strategy and an action plan to implement it. A species recovery plan will act as a road map for species recovery, setting out what you need to do and how best to achieve it. Each species or population of target species differs in terms of its eco-geographic profile and the nature and diversity of the habitat in which it occurs. The combination and nature of the threats to the species, population or habitat will also vary from case to case. Therefore, although the basic elements are the same, there is no universal template for a species recovery plan. This brief provides guidance on key elements to include in a recovery plan.

A species recovery plan

A document stating the research and management actions necessary to halt the decline of a target species, to support the recovery of a target species to levels where protection is no longer necessary and to enhance the chance of long-term survival of the target species in the wild.



What to include

A recovery plan may be concise and just a few pages long or extensive and up to 100 pages or more depending on the range of activities involved. They may involve both habitat and population recovery actions. For example, restoration of degraded habitat may be required for the recovery of threatened species.

There are three essential components to a recovery plan:

- **An evaluation of the current status of the species, including a thorough analysis of the threats**
- **The aims and objectives of the plan**
- **The actions proposed.**

It is important to agree on the objectives of the plan and include a statement on what the plan will achieve and how these aims will be fulfilled. A key decision for species recovery planning is to select which populations to include and how many individuals are needed to maintain a Minimum Viable Population. Guidance on selecting how many populations and individuals to include is provided in Species Recovery Brief 3.

Minimum Viable Population: The smallest possible size at which a population of a species can exist without facing extinction.

Common features of a species recovery plan are listed in the table (to the right). Much of the information will have been gathered during the eco-geographical survey (see Species Recovery Brief 1). Ideally, plans should contain photographs or other illustrations of the plant and its habitat, maps and other graphic material.

TOP TIP

You should include as much information as possible in your species recovery plan to help inform and justify the species recovery actions.

COMMON FEATURE	DESCRIPTION
Species description	A description of the species, including its scientific name, essential synonyms, common names, its reproductive biology, phenology and current conservation status.
Eco-geographical information	Location of the populations, their habitat, ecology, soil preferences, demography, size and viability and distribution of genetic variation.
Threats	An assessment on the nature of the threats affecting the conservation status of the species.
Conservation actions	A summary of existing conservation actions that are already being undertaken and by whom.
Recovery actions	The detailed actions that will be required to contain, reduce or eliminate the threats and ensure the maintenance of viable populations of the species.
Site actions	Actions that may be needed to safeguard and manage the site.
Objectives and targets	The management objective(s) and targets (both short and long-term) and a set of indicators to demonstrate when the objective(s) have been achieved.
Mitigation approach	A statement of how the plan will be implemented and what scientific techniques will be adopted.
Legislation	Identification of any policy or legislative actions that need to be taken.
Responsibilities	Identification of the lead agency/party and a list of the organisations that will play a part in the management actions.
Stakeholders	Arrangements for negotiation with the site authorities and other interested parties or stakeholders regarding management interventions.
Timeline	An implementation schedule, including priorities of tasks.
Budget	A detailed budget with annual cost estimates for the various actions involved.
Monitoring	A monitoring programme and schedule (including post-recovery monitoring).
Reviewers	Arrangements for external reviews.
Communication strategy	Plans for communication and publicity.



Participation in recovery planning

Species recovery plans require teamwork, involving specialists from a number of disciplines and the general public. It is good practice to involve, or at least consult, all interested and knowledgeable parties in the preparation of recovery action plans. This can include conservation biologists and practitioners from academia and other institutions, environmental officials and managers, protected area managers and local conservation NGOs. It is important that local knowledge is also considered, for guidance on how to engage with local communities see Species Recovery Manual 4.

TOP TIP

It is recommended that the drafting group of the species recovery plan should be a small manageable expert-based team but have a diversity of contributors.

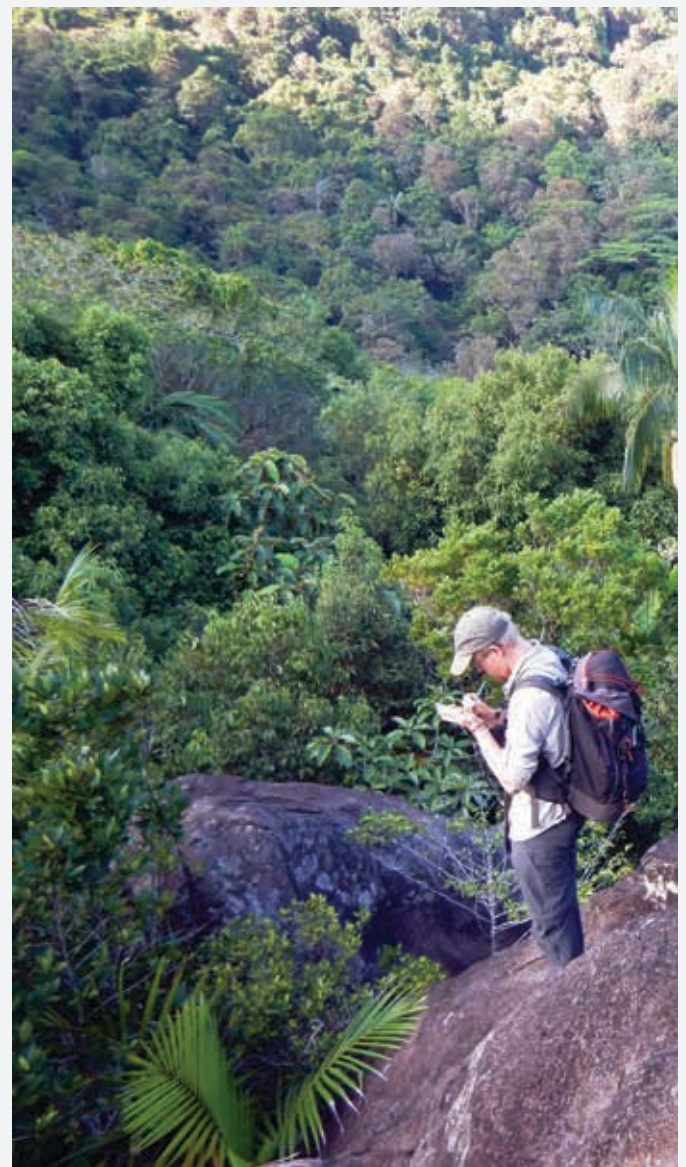
How and where to publish

Recovery plans may be produced in a range of formats, from electronic files on official environment agency websites to books and booklets. Plans are also occasionally published in journals or as free-standing publications.

In some countries, plans must be published officially once approved and are in effect statutory instruments with a series of conditions regulating the whole process and involving extensive review and consultation.

TOP TIP

It is important to be aware of the requirements for species recovery plans in the country of operation.





Single-species versus multi-species plans

A key decision that should be made in species conservation and recovery planning is whether to focus on a single or multiple species in the same ecosystem. For groups of species that co-occur in a particular ecosystem and apparently share common threats, multi-species plans are sometimes recommended. The strengths and problems associated with multi-species recovery plans are outlined below.

ADVANTAGES OF MULTI-SPECIES PLANS

Address common threats in a concise and focused manner

Can be more cost-effective

Reduce duplication of effort in describing the habitats of, and threats to, each species

Provide a good format for environmental impact statements

Promote thinking on a broader scale

Benefit other species not currently at risk

Provide an approach that can improve the structure, distribution, connectivity and function upon which a group of species depend.

DISADVANTAGES OF MULTI-SPECIES PLANS

They are less likely than single-species plans to include species-specific biological and ecological information

The lumping together of species that do not appear to be based on any biologically logical criteria (i.e. similarity of habitats or threats)

Multi-species plans tend to have fewer recovery tasks implemented during the life of a plan

Species included in multi-species plans have been found to be four times less likely to exhibit positive status trends.