

Template and guidelines for developing a

Species Action/Recovery Plan

This template has been developed as a guide to assist authors who are writing an action plan for a single amphibian species. It includes a range of suggested sections and sub-sections, along with a brief definition of what should be included in each section. Each country will likely have different needs, and may decide to exclude some of these sections and/or add additional sections. Please note that this template is quite comprehensive, and possibly includes more information than is necessary for a basic plan. The first version of a species action plan does not need to be as detailed - additional information can be added as the plan develops.

It is important to have representation from all of the relevant stakeholder groups who have an interest in the species being managed, and this can be achieved by the formation of a Taxon Management Group. Forming a management group will ensure that all stakeholders’ needs are met, that expertise is available on all aspects of managing the program, and that the management processes are transparent. Typical membership of a Taxon Management Group should include representatives from each of the institutions that will house the animals (zoos, aquariums, museums, private holders etc.), amphibian husbandry experts, veterinarians, educators, researchers, population biologists, State or National wildlife agency representatives, private landowners and local people. Ideally, the group members would meet, at least during the establishment of the program, to discuss the overall aims of the program, to document any specific needs for the program or the species, and perhaps to draft a Taxon Management Plan.

There are a number of IUCN Species Survival Commission protocols and guidelines available which will be very useful during the development of a species action plan: [Strategic Planning for Species Conservation: A Handbook](https://portals.iucn.org/library/sites/library/files/documents/2008-047.pdf); [Guidelines on the Use of *Ex Situ* Management for Species Conservation](https://portals.iucn.org/library/sites/library/files/documents/2014-064.pdf); and [Guidelines for Reintroductions and Other Conservation Translocations](https://portals.iucn.org/library/sites/library/files/documents/2013-009.pdf).

There are also a number of population viability analysis models available that can assess the probability of extinction when basic demographics are known. Some of these include [Vortex](http://www.vortex10.org/Vortex10.aspx), [RAMAS](http://www.ramas.com/conservation), and [HexSim](http://www.hexsim.net/).

Some example amphibian action plans (in English and Spanish) are available as further guides on the Amphibian Ark web site, [www.amphibianark.org/husbandry-documents/?wpfb\_cat=16#wpfb-cat-](http://www.amphibianark.org/husbandry-documents/?wpfb_cat=16#wpfb-cat-)16.

Action Plan for (*species name*)

**Author(s)**

**Date of completion**

**Coordinator and contact details**

*Who are the main people responsible for ongoing development of the plan, maintaining open communications with all stakeholders, encouraging participation and documenting progress towards the goals? Include email contact for the main coordinator(s).*

**Contents**

*Include all section and sub-section headings with associated page numbers. This can be automatically generated in Word if using the Styles option.*

**Acknowledgements**

*Include thanks to anyone who reviewed the drafts of the publication; any organizations that provided time and/or resources for their staff to work on the publication; photographers whose photos are used in the publication; and anyone else who contributed to the publication. If any funding was received towards the costs of writing or producing the publication, thank the funding bodies (and consider including their company logos).*

**BACKGROUND**

**Species**

*Common and scientific names/synonyms, subspecies, if relevant.*

**Photo**

*Include a photo (if available) and credit the photographer*

**Conservation status**

*Include the global and national IUCN Red List categories, CITES, and any other national conservation status.*

**Distribution, population size and trends**

*What is the current and historic distribution of the species globally, and within the target country? Is the size of the wild population known, and is it decreasing? What have been the population trends over the past 5-10 years? Place names and general regions of target country can be included, however exact locations of threatened species should not be included, to avoid sharing sensitive information. Include any protected areas (effectively protected or otherwise) within the distribution, and any suitable areas for potential translocation or reintroduction.*

**Habitat and ecology**

*Habitat preferences and general comments on ecology.*

**Primary threats**

*Brief outline of the main threats identified as being of immediate and primary concern to the species. How likely is it that the threats can be partially or completely mitigated before the species faces possible extinction?*

**Conservation measures required**

*New actions recommended during a Conservation Needs Assessment, link to the Conservation Needs Assessment for this species. Include a brief outline of planned short-, medium- and long-term actions, including the organizations or individuals responsible for the actions, and suggested timeframes.*

**Current protection**

*Are the species and its habitat currently protected? If not, will it be possible to effectively protect safe habitat for the species? How will this be achieved and within what time frame?*

**Current and previous conservation actions**

*Are any actions currently underway to conserve this species, either in situ or ex situ? Have there been any previous actions and what is the current status of these actions? Who is currently responsible for these actions?*

**Knowledge gaps**

*Briefly list any specific gaps in our knowledge of the species, which are relevant to conserving them. This information will then provide potential actions for additional field research, and if the data are eventually discovered, updated action plans can be developed, based on the new information.*

**Challenges and obstacles**

*Are there are any challenges or obstacles that might stand in the way of achieving the goals of this plan? If so, how could they be overcome?*

**Budget and funding sources**

*Include a rough estimate of overall costs over the life of the plan, and also a summary of how long the currently available resources might last, and where additional resources might potentially come from.*

**PRIORITY ACTIONS**

*Include objectives (clearly defined and measurable), proposed actions and respective time frames, person(s) responsible for each of the following items.*

**In situ**

**Habitat management, restoration and/or protection**

*What actions will be taken to manage and restore the habitat to a safe environment for amphibians and what is the approximate timeframe for completing this? Who is the primary person or organization responsible for restoration and management of the species and its habitat? How will the land be protected in the future?*

**Threat mitigation**

*How will the threats be mitigated and what is the approximate timeframe to remove the threats? Who is the primary person or organization responsible for reviewing and mitigating the threats?*

**Distribution surveys**

*Are additional surveys required to be sure that the entire distribution and habitat requirements for the species are fully understood? Who will be responsible for coordinating these surveys?*

**Population and conservation status monitoring**

*Who will be responsible for ongoing monitoring of the population in the wild to ensure that the actions taken have been successful? How will the wild population be monitored?*

**Ex situ**

*Include this section if there is an ex situ component to the recovery plan.*

**Captive management**

*What is the primary role for the ex situ population (e.g. captive breeding for reintroduction, head-starting, research etc.) How many founder animals are required, where will they come from, and what are the plans if sufficient founder animals cannot be found? What is the current captive population, and the target population? How many organizations will be involved with the captive component? How will the genetics of the captive population be managed? Refer to the IUCN SSC* [Guidelines on the Use of *Ex Situ* Management for Species Conservation](https://portals.iucn.org/library/sites/library/files/documents/2014-064.pdf) *(also available in* [*Spanish*](https://portals.iucn.org/library/sites/library/files/documents/2014-064-Es.pdf)*) for further advice.*

**Capacity building for *ex situ* management**

*Are there enough skilled people in the country to manage captive amphibian conservation programs and which organizations are they based at? If not, how will enough people be trained to manage the ex situ programs?*

**Develop husbandry guidelines**

*Do husbandry guidelines or protocols exist for this species, or for closely-related species which require the same captive management protocols? If husbandry guidelines are already available, include details and/or link to the document. If husbandry guidelines do not yet exist, who will be responsible for developing them?*

**Ex situ research**

*Is ex situ research required, either directly related to understanding or improving husbandry protocols, or for other reasons (e.g. disease testing or management). If so, outline the research and who will be responsible for undertaking it.*

**Supplementation/translocation**

*Is supplementation or translocation being considered for this species? If so, provide details of the planned actions and who is responsible for managing the actions.*

**Reintroduction strategy**

*When threats facing the species in the wild have been mitigated, and/or suitable protected habitat is available for animals to be reintroduced to the wild, how will this be managed? Include information about pre-release health and disease checks, individual identification system of animals, who will undertake the releases, how the short and long-term post-release monitoring will be carried out.*

**Education and awareness**

**Public education and raising awareness**

*Are there any plans to help provide education to local communities, or to the general population about the threats facing amphibians and what actions people might be able to take to help reduce threats and protect amphibians? Public education could be provided via display panels in national parks and forests; in museums, libraries, zoos and aquariums; or by more traditional teaching programs in schools and local communities.*

**Community and stakeholder engagement**

*Have local communities, national and local governments, field researchers, the ex situ conservation community, private landholders and other stakeholders been involved with the development of the plan? What actions have been developed to ensure that they remain involved, and play their part in achieving the outcomes of the plan?*

**Exit strategy**

*What will be the triggers that cause the in situ and/or ex situ conservation actions to cease? What will happen to any remaining captive animals? How will the continued success of the conservation actions be monitored, and how often?*

**REFERENCES**

**Literature cited**

*Include a list of any papers which are cited within the action plan.*

**References**

*Include a list of papers, articles, journals or web pages which provide additional reference material which is of direct relevance to the action plan.*