IUCN SSC Guidelines for Assessing Species' Vulnerability to Climate Change. Version 1.0

Submitted by byoung2 on November 22, 2016

Link:

http://iucnccsg.com/wp-content/uploads/2016/08/CCVA-Guidelines-complete-lowres_l...

IUCN SSC Guidelines for Assessing Species' Vulnerability to Climate Change

Editors: Wendy B. Foden and Bruce E. Young

SSC Species Survival Commission

Climate Change Specialist Group

Produced with support from

User Rating:

☆

No votes yet

Abstract

Predicting climate change impacts on biodiversity is a major scientific challenge, but doing so is important for assessing extinction risk, developing conservation action plans, providing guidance for laws and regulations, and identifying the mechanisms and patterns of impact to inform climate change adaptation. In the few decades since the threat of climate change has been recognised, the conservation community has begun assessing vulnerability to climate change.

There is no single 'correct' or established way to carry out climate change vulnerability assessments (CCVA) of species. A range of methods have been developed, and a large and burgeoning scientific literature is emerging on this subject. This document aims to ease the challenge that conservation practitioners face in interpreting and using the complex and often inconsistent CCVA literature. The intended target audiences include conservation practitioners (e.g., for CCVA of their focal species or the species in their focal area) and researchers (e.g., for carrying out CCVA to serve conservation, or to evaluate the rigorousness of others' studies)**.**

These guidelines cover an outline of some of the terms commonly used in CCVA, and describe three dominant CCVA approaches, namely correlative (niche-based), mechanistic and trait-based approaches. This guide is structured to provide readers first with background information on definitions and metrics associated with CCVA. A discussion on identifying CCVA objectives follows, setting the stage for core guidance on selecting and applying appropriate methods. The subsequent sections focus on interpreting and communicating results, as well as suggestions for using results in Red List assessments and addressing the many sources of uncertainty in CCVAs. A final section explores future directions for CCVAs and research needs. The guide ends with ten case studies that provide essentially worked examples of CCVAs that cover the range of methods described.

This guidance document has been developed by a Climate Change Vulnerability Assessment working group convened under the IUCN Species Survival Commission's Climate Change Specialist Group. The authors' collective experience covers a broad range of ecosystems, taxonomic groups, conservation sectors and geographic regions, and has been supplemented by an extensive literature review. No guidance on this topic can be exhaustive, but nonetheless, this document should provide a useful reference for those wishing to understand and assess climate change impacts on their focal species, at site, site network and/or at broader spatial scales.

Electronic Publication date:
Saturday, September 3, 2016
Additional Document Information
Habitat/Biome Type:
Coastal
Marine
Freshwater
Aquatic
Terrestrial
Sector Addressed:
Biodiversity
Conservation/Restoration
Conservation / Restoration
Research
Wildlife
Jurisdiction:
Multilateral/Transboundary

Document Type:
Whitepaper / Report