

Species Vulnerability Indices

Alternatives to "DIY"

Species are Important!



Vulnerability Indices can...

- ... save R & D time
- ... remind you about vulnerability factors
- ... compare apples and oranges
- ... promote transparency

Vulnerability Indices cannot...

- ... turn garbage into gold
- ... replace in-depth VAs of species

System for Assessing Vulnerability of Species (SAVS) to Climate Change (Forest Service)



Framework for categorizing the relative vulnerability of threatened & endangered species to climate change (EPA)



Climate Change Vulnerability Index (NatureServe)



Climate Change Sensitivity Index (University of Washington and TNC)



All:

- are potentially rapid
- score individual factors
- produce categories of relative vulnerability
- address uncertainty

SAVS



www.fs.fed.us/rm/grassland-shrubland-desert/products/species-vulnerability

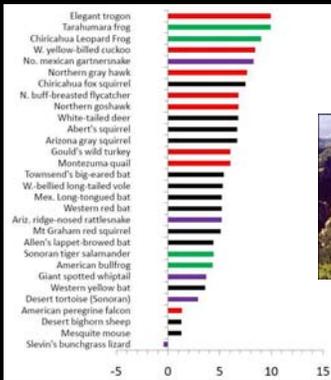
Terrestrial vertebrates

Questionnaire-based tool: Habitat, physiology, phenology, biotic interactions

Abundance, range, demographics considered implicitly

Scale: habitat/management area

Coronado National Forest



Coe et al. 2010

Less **Vulnerability** More

EPA



<http://cfpub.epa.gov/ncea/cfm/recorddisplay.cfm?deid=203743>

T&E Vertebrates Only

Baseline & climate change vulnerability

Abundance, range, demographics considered in baseline

Spatial Scale: any

NatureServe



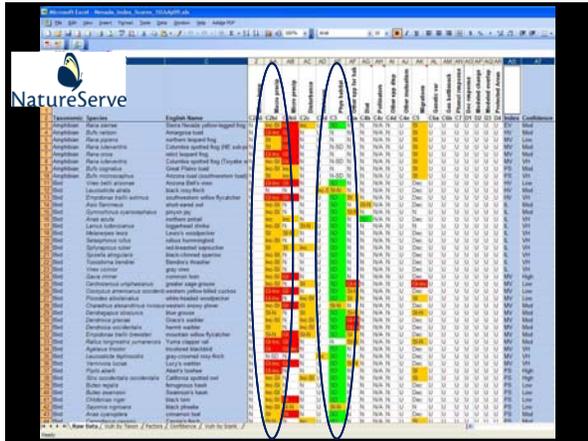
www.natureserve.org/climatechange

Terrestrial/aquatic, plants/animals

Excludes conservation status factors – use in conjunction with G/S-ranks

Exposure and sensitivity sections

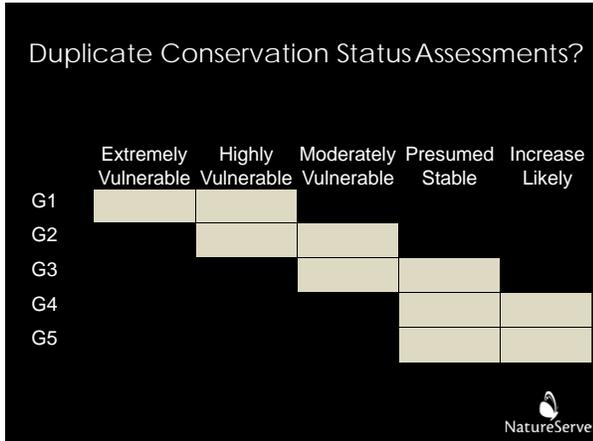
Scale: state or large conservation area

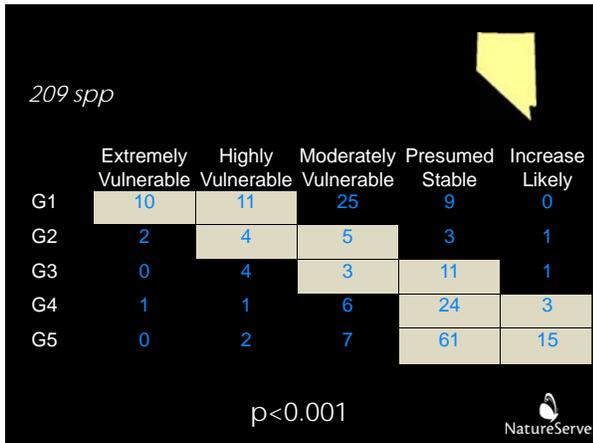


Duplicate Conservation Status Assessments?

- Extremely Vulnerable
 - Highly Vulnerable
 - Moderately Vulnerable
 - Presumed Stable
 - Increase Likely
- G1
- G2
- G3
- G4
- G5







Climate Change Sensitivity Index (University of Washington and TNC)



Climate Change Sensitivity Database

Home Browse Species Browse Systems Your Profile

Home Page

Welcome!
Welcome to the Sensitivity Database.

Climate change poses a daunting challenge to natural resource managers and in response the University of Washington has partnered with key collaborators to conduct a climate change sensitivity assessment. This assessment is designed to evaluate the sensitivity of the species and ecological systems of the Pacific Northwest to climate change.

This digital database summarizes the inherent climate-change sensitivities for species and habitats of concern throughout the Pacific Northwest and will provide resource managers and decision makers with some of the most basic and most important information about how species and systems will likely respond to climate change.

Please come take a look!

Recent Updates

- Rock Squirrel Updated: 4 sec ago
- Edgaria concolora group Updated: 4 days 18 hours ago
- Quercus garryana var. garryana Updated: 2 weeks 5 days ago
- Pinus albicarpa Updated: 2 weeks 6 days ago
- Red-tailed Chipmunk Updated: 2 weeks 8 days ago
- Marina peruviana Updated: 3 weeks 5 days ago
- Plethodon ishikawae Updated: 3 weeks 5 days ago
- Martes pennsylvanica Updated: 4 weeks 1 day ago
- Lynx baileyi Updated: 4 weeks 1 day ago

User login

Username: *
Password: *

- Log in using OpenID
- Create new account
- Request new password

Sources of Sensivity/Adaptive Capacity data
GAP PAD Viewer (<http://www.gap.uidaho.edu/padusmap.html>)