

# A Network Connecting Science with Conservation

## Who We Are and What We Do





Scientific  
Knowledge



Network  
Capacity



Impact  
Decisions



Reduced  
Threat



Biodiversity  
Conservation



## Our Affiliates

80+ biodiversity information centers throughout the U.S., Canada, and Latin America

On-the-ground expertise

Global partners like Bat Conservation International

10,000+ data providers, scientists and technical staff

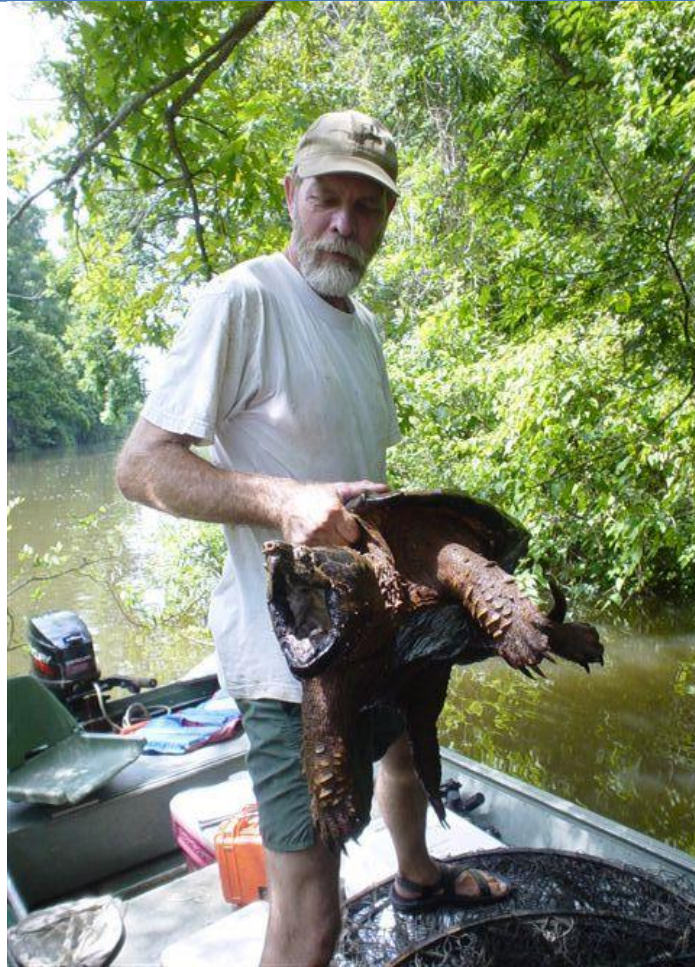
# What makes us a network?

- Common standards and methods
- Common goals and purpose
- Sharing data and innovations
- Local details in a global context
- 40 years shared history

*Theo Witsell, Arkansas NHP,  
and Milo Pyne, NatureServe*



# Appx 2,400 records in iDigBio tagged as being contributed by NatureServe network



*Alabama Natural Heritage Program*



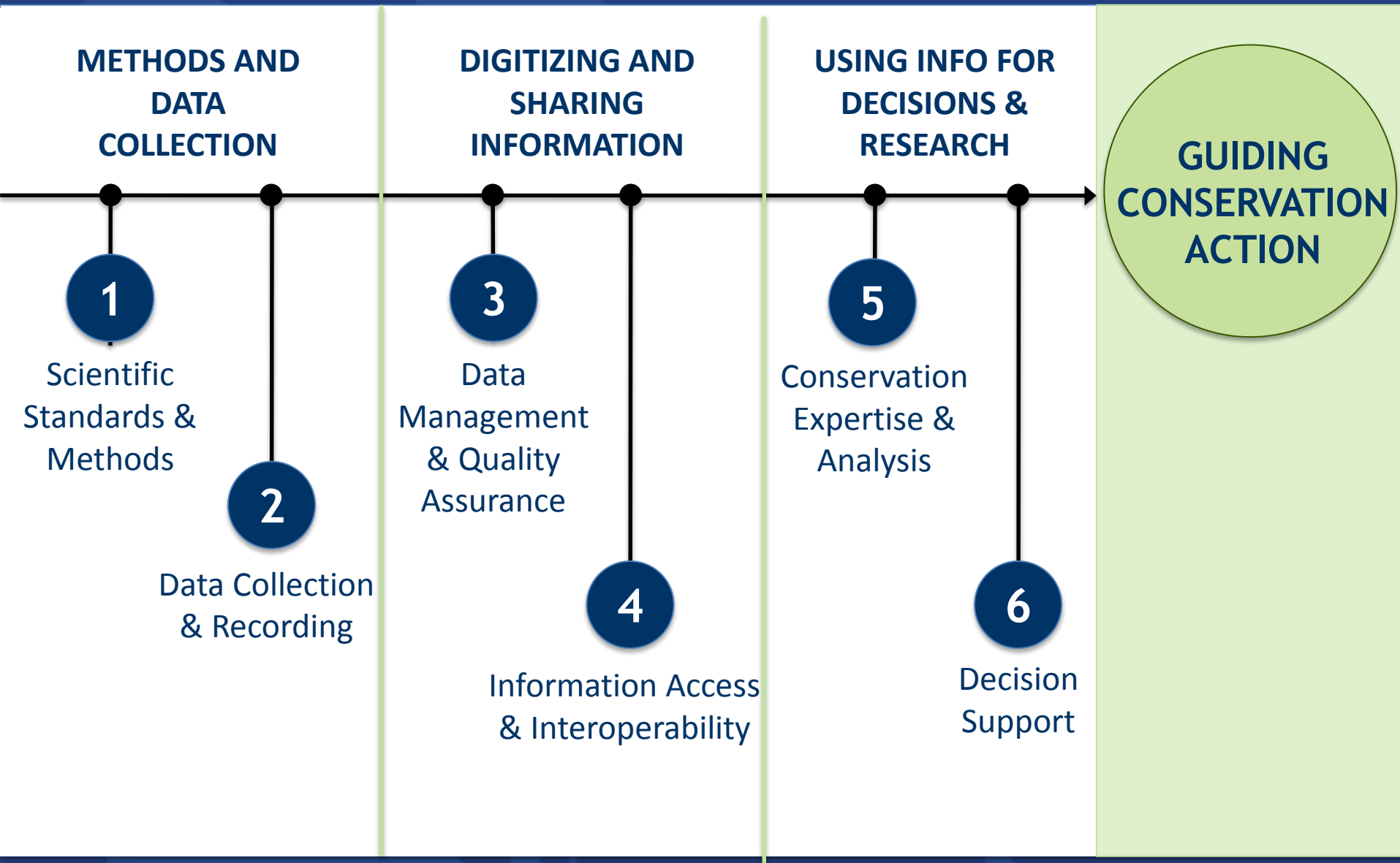
*Photo by R. White*



*Florida Natural Areas  
Inventory*

## Boots on the Ground

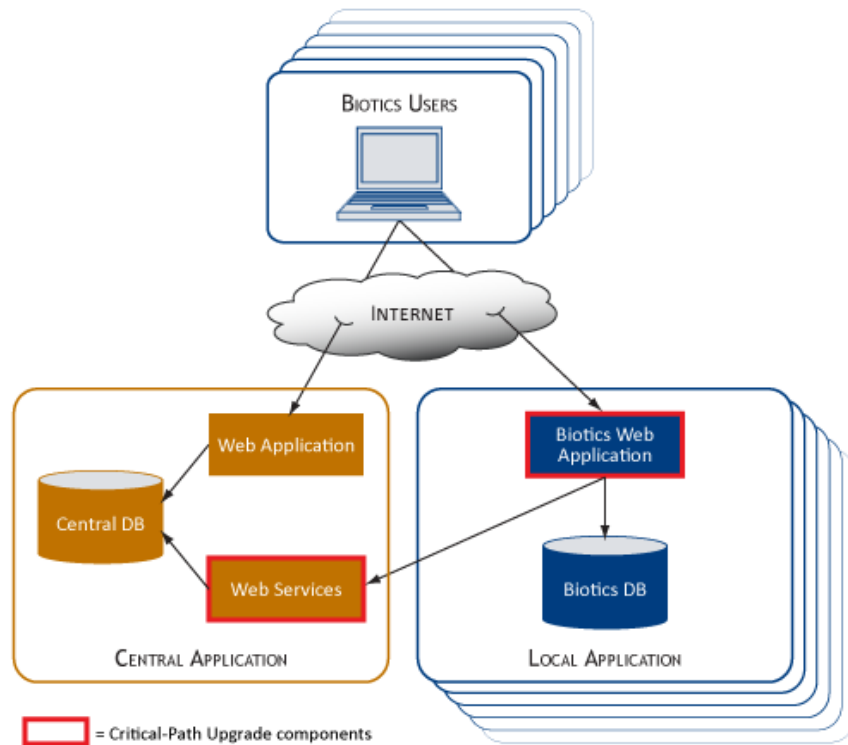
# Tools for Data Management and Access



# NatureServe's Technology Suite

Methods and Data Collection	Digitizing and Sharing Information	Using Information for Decisions & Research
   	  <b>Web Services</b>    	      

# Cloud-based Architecture

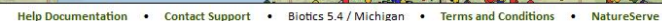


- Hosted web application (the cloud)
- ArcGIS Server mapping
- Separate databases for each institution
- Web service access between data nodes



Logged in as **rlb** • **Personal Settings** ▾ • **Log out**

Global Rank: G5T1  
National Rank: N1  
Subnational Rank: S1

Biotics 5.4 / MickRecord Management ▾ Map ▾ Data Exchange ▾ Queries and Reports ▾ Configuration ▾




# Access: Web Services

## <http://services.natureserve.org/>



NatureServe Web Services  
Delivering Biodiversity Data to your Desktop



Google™ Custom Search

Home | About Us | Projects | Visit Local Programs | Get Data | Products & Services | Publications | Support Us

- » Web Services Home
- » Index of Services
- » Essentials
- » New to Web Services
- » Global Comprehensive Species Data
- » Species Images
- » Global Species List by Name
- » Code Samples
- » Species Schemas
- » Technical Library
- » Use Guidelines and Citation

### NatureServe Web Services

#### About Web Services

NatureServe Web Services enable you to create dynamic, customized Web applications that interact directly with NatureServe's biodiversity databases. Using Web Services, data users can:

- Obtain near real-time access to the most recent biological inventories.
- Access and analyze data in your own applications, such as a GIS.
- Easily compare data developed across multiple states and provinces.

#### What's New

- **Species Images Service** — Provides access to NatureServe's collection of species images that are available for public use. The service provides direct access to the image metadata, selected by wild-carded scientific or common name. A **code sample** is available to show you how images can be retrieved and displayed by your application.

### Contacts

**Frank McLean**  
Web Services  
Specialist

### Other Resources



**Search** the animals, and ecosystems of the U.S. and Canada.



**Search** the birds, mammals, and amphibians of Latin America.

**Find** more NatureServe data.

Sitemap | [www.natureserve.org](http://www.natureserve.org) | Copyright © 2011 NatureServe |

# Web Services: Encyclopedia of Life

## <http://eol.org/>



Become part of the EOL community!

[Join EOL now](#)

Already a member? [Sign in](#)

## *Calidris canutus*

Red Knot [learn more about names for this taxon](#)

[Overview](#)[Detail](#)[Data](#)[158 Media](#)[7 Maps](#)[Names](#)[Community](#)[Resources](#)[Literature](#)[Updates](#)

### Table of Contents

#### OVERVIEW

[Brief Summary](#)[Distribution](#)

#### PHYSICAL DESCRIPTION

[Size](#)[Diagnostic Description](#)

#### ECOLOGY

### Degree of Threat: High

**Comments:** Increased commercial harvest of horseshoe crabs (for use as bait in eel and conch fisheries; especially in the Delaware Bay region in the 1990s; Walls et al. 2002, Morrison et al. 2004), a reduction in horseshoe crab populations, and a consequent reduction in red knot food resources (horseshoe crab eggs), body condition during spring migration, and annual survival (Baker et al. 2004) are major concerns for population that migrate along the U.S. Atlantic coast (González et al. 2006, Niles et al. 2007).

Actions to conserve horseshoe crabs have included reduced harvest quotas, more efficient use of crabs as bait, closure of the harvest in certain seasons and places, and the designation of a sanctuary off the mouth of Delaware Bay (Niles et al. 2007). The latest information is that the crab population may have stabilized, but there is no evidence of recovery (Niles et al. 2007).

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article rating from 0 people ★ ★ ★ ★ ★

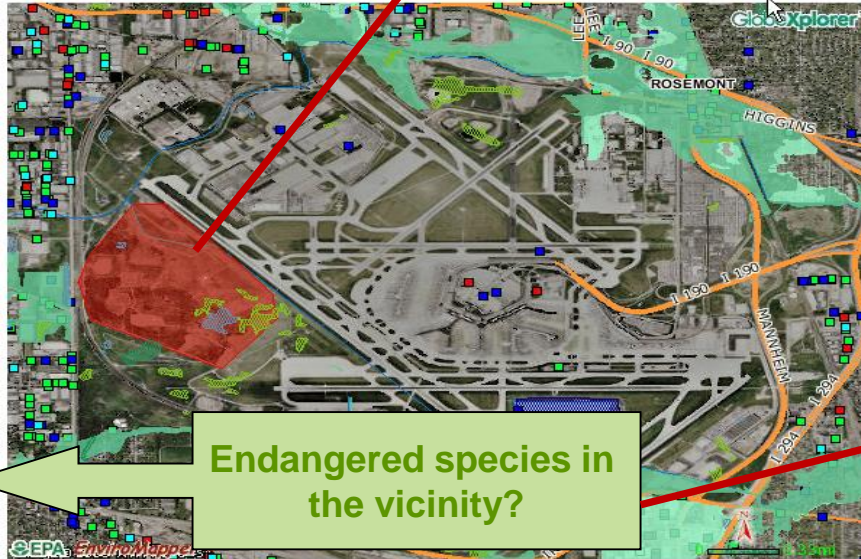
[comment on or rate this article](#)

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# Web Services: U.S. EPA NEPAAssist

Within 400 meters of a Wild and Scenic River?	No
Within an Area of Concern (Great Lakes)?	No
Within 400 meters of a Great Lakes shoreline?	No
Within Great Lakes basin?	No
Within 400 meters of an Environmentally Sensitive Shoreline?	No
Within an NNM Wetland?	
Within 400 meters of a Pipeline?	
Within 400 meters of an Oil Storage Facility?	
Within 400 meters of a Navigation Lock/Dam?	
Within 400 meters of a Non-navigational Dam?	
Within 400 meters of a Marina?	
Within a Wildlife Refuge?	
Within a National Forest?	
Within 400 meters of a National Forest?	
Within a State Forest?	
Within a Federally Managed Area?	
Within a State Managed Area?	
Within a Locally Managed Area?	
Within a Privately Managed Area?	
Within a Federal Special Designated Area?	
Within a State Special Designated Area?	
Within a Local Special Designated Area?	
Within a Private Special Designated Area?	
Within Other Environmentally Sensitive Areas?	
Within 400 meters of a Archaeological Site?	
Within 1609 meters (1 mile) of a Nuclear Power Plant?	
Within 1609 meters (1 mile) of an Electric Power Plant?	
Within 400 meters of an Animal Feedlot?	No
Within 400 meters of a Poultry or Hog Farm?	No
Within the boundaries of a Metropolitan Planning Organization?	Yes Chicago Area Transportation Study



1. EPA user can map the proposed project boundary (red area)

2. EPA user can choose from a list of datasets to find out what is nearby the project boundary.

3. If EPA user chooses "Endangered Species", NEPAAssist calls NatureServe's web service and user is informed if a species is nearby.



# Access: NatureServe Explorer

<http://explorer.natureserve.org/>

Comprehensive,  
searchable database

Data on 70,000+  
plants and animals,  
and 1,600 ecological  
communities

Free to the public

Data outputs only via  
pdf reports

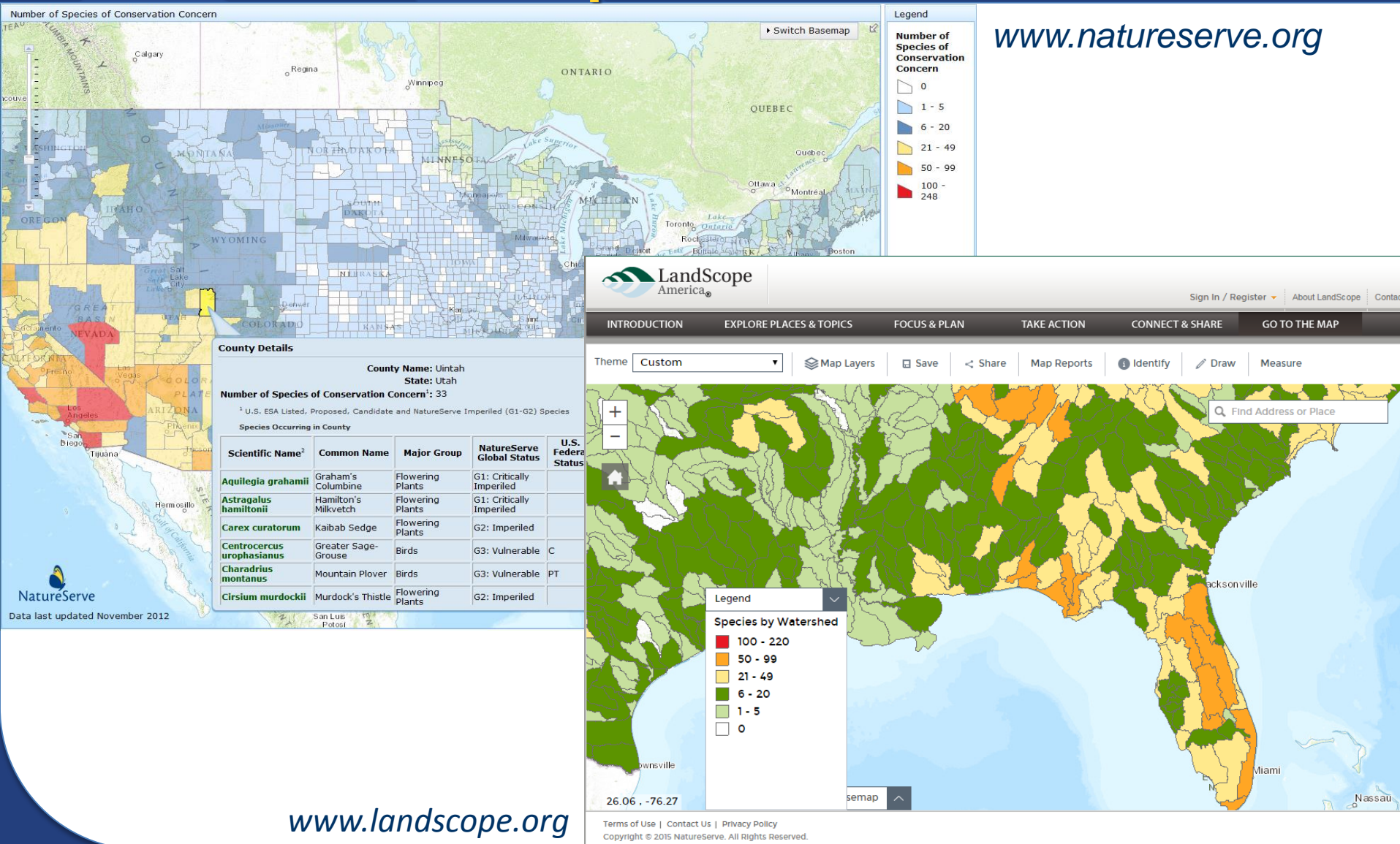
The image shows a screenshot of the NatureServe Explorer website and a sample report. The website header includes the NatureServe Explorer logo and the tagline "An Online Encyclopedia of Life". Navigation links include Search, About Us, About the Data, Local Programs, and Help. A welcome message states: "Welcome to NatureServe Explorer, an authoritative source for information on the plants, animals, and ecological communities of the United States and Canada. This conservation resource includes more than 55,000 species and ecosystems, with particularly in-depth coverage for rare and endangered species." Below this, there is a search bar and a link to "Selected Images Available".

The sample report is for the species "DOG" (CYNOMYS). It shows the distribution map of the species across the United States and Canada, with a legend indicating conservation status (e.g., S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S19, S20, S21, S22, S23, S24, S25, S26, S27, S28, S29, S30, S31, S32, S33, S34, S35, S36, S37, S38, S39, S40, S41, S42, S43, S44, S45, S46, S47, S48, S49, S50, S51, S52, S53, S54, S55, S56, S57, S58, S59, S60, S61, S62, S63, S64, S65, S66, S67, S68, S69, S70, S71, S72, S73, S74, S75, S76, S77, S78, S79, S80, S81, S82, S83, S84, S85, S86, S87, S88, S89, S90, S91, S92, S93, S94, S95, S96, S97, S98, S99, S100). The report also includes a table of taxonomic information:

Class	Order	Family
MAMMALIA	RODENTIA	SCIURIDAE

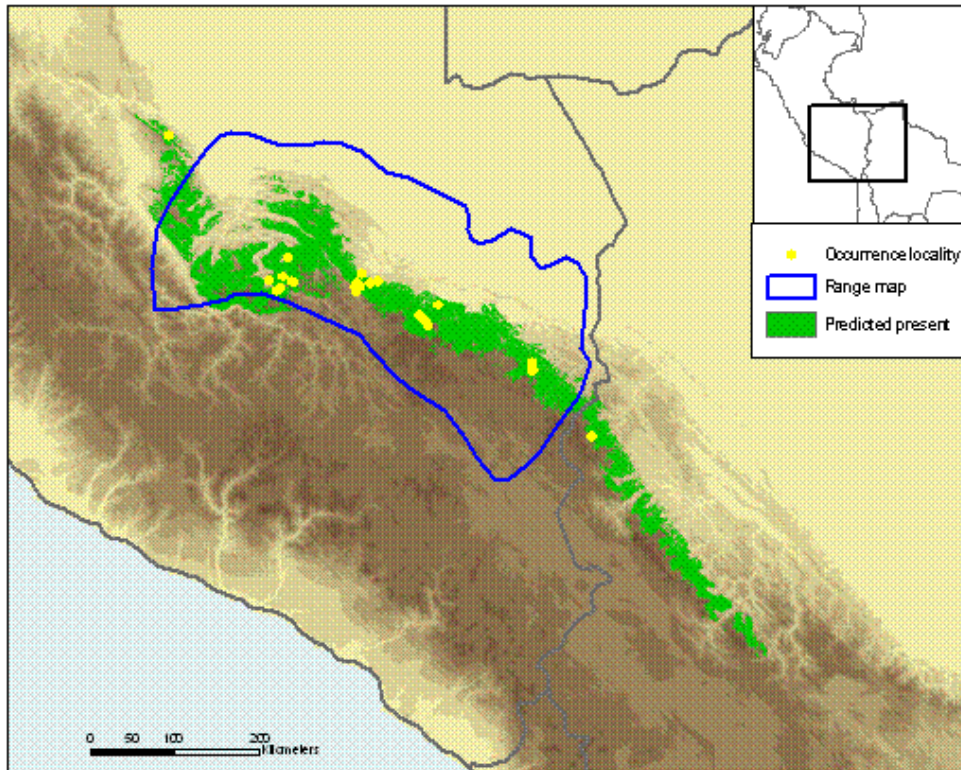
The report text describes the species and its distribution, mentioning that the species is found in the United States and Canada, and that it is a member of the genus CYNOMYS. It also mentions that the species is found in the states of California, Nevada, and Arizona.

# Access: interactive maps and map services

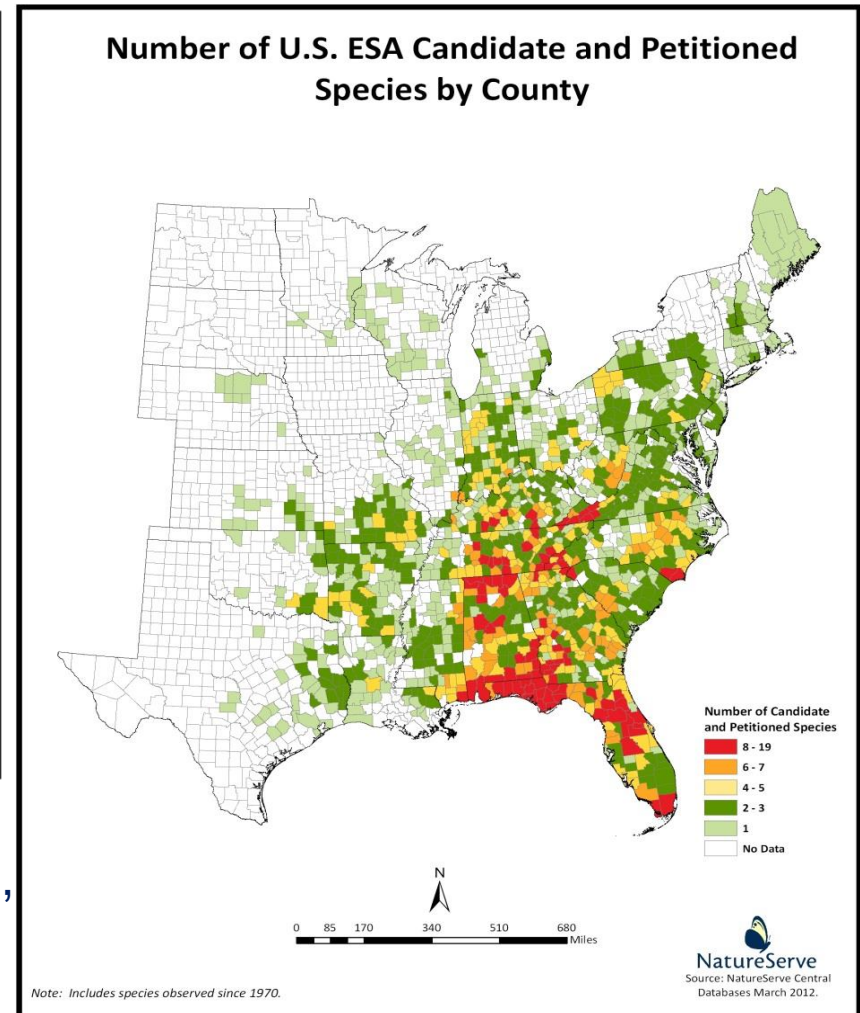




# Research Use: distribution of endangered/endemic species

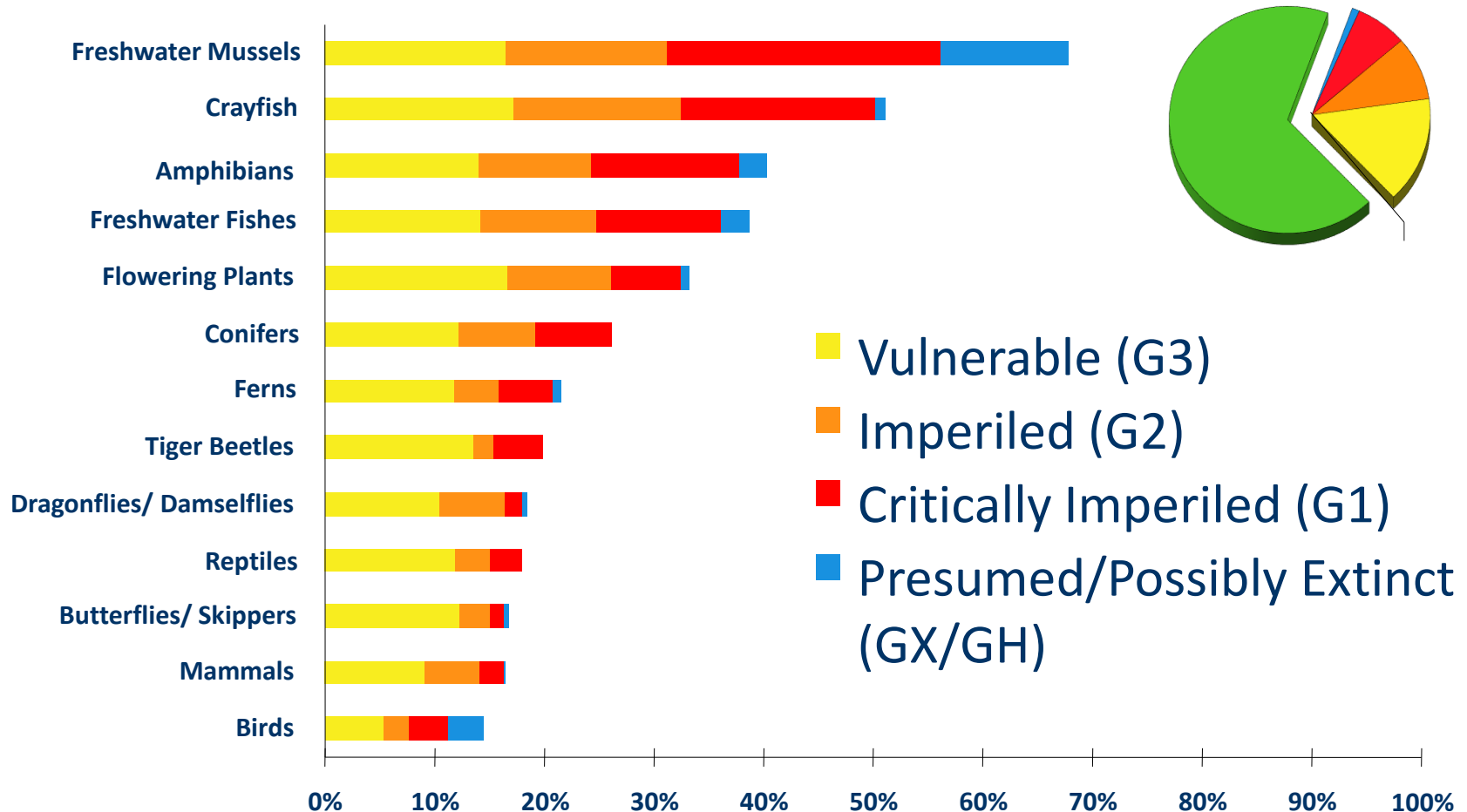


Results for a rare mammal in Peru and Bolivia: yellow points are known occurrences, green is the predicted occurrence, and the blue line is the original range map.





# Research Use: Assessing species at Risk



# Standards are established collaboratively



- Network members serve on governing councils
- Work groups include member programs and NatureServe staff
- Identify “best practices” from users
- Representation from across organizations

# Sustainability:

## Diverse funding, matching our strengths

### Infrastructure & Network



Private Foundations

### Standards & Data Services



Government Agencies

### Social Benefits



Corporate: Retail



Corporate: Banking



Corporate: Forestry



Individuals and Family Foundations



# Networking and collaboration are essential elements for success



NatureServe 2015 Joint Member / Management Team

# Thank you!

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