



Species Conservation Analysis Tool

**A Compilation of
State Wildlife Action Plans
Species of Greatest Conservation Need**

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Organization of Fish & Wildlife Information Managers

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Overview

- Past effort
- Revised process
- Redesigning of the tool



Initial Effort – 2010

- Lists of Species of Greatest Conservation Need were gleaned from all of the completed 2005 SWAPs
- Mapped lists of species to a taxonomic standard (ITIS)
- Worked with representatives from state agencies to review and QA/QC the results

Initial Effort – challenges & benefits

Compiled after original SWAPs were completed

(-) Lists pulled from PDFs (labor intensive, error prone)

(-) 25% of lists officially reviewed by state representatives after processing

(+) 1,000+ SGCN were added to ITIS the following year



Integrated Taxonomic Information System



- Internationally recognized standard
- Authoritative taxonomic information organized by taxonomic serial numbers



Increase common understanding to advance national conservation

To identify what priorities we have in common and develop common solutions we need to be speaking common language



Species database name resolution

Maine Species List (213)

Documentation and Downloadable File

Name Changes (12)

Show entries Search:

Scientific Name in Maine Plan	Altered Scientific Name	Common Name	Change Justification
<i>Acipenser oxyrinchus</i>	<i>Acipenser oxyrinchus</i>	Atlantic Sturgeon	Typographical Change
<i>Caprimulgus vociferous</i>	<i>Caprimulgus vociferus</i>	Whip-poor-will	Typographical Change
<i>Contopus borealis</i>	<i>Contopus cooperi</i>	Olive-sided Flycatcher	Replaced with Current Taxonomic Name Based on ITIS
<i>Coregonus clupeaforms</i>	<i>Coregonus clupeaformis</i>	Lake Whitefish	Typographical Change
<i>Hydranassa caerulea</i>	<i>Egretta caerulea</i>	Little Blue Heron	Replaced with Current Taxonomic Name Based on ITIS
<i>MegMASCops asio</i>	<i>Megascops asio</i>	Eastern Screech-owl	Typographical Change
<i>Morone saxatilis</i>	<i>Morone saxatilis</i>	Striped Bass	Typographical Change
<i>Physeter catodon</i>	<i>Physeter macrocephalus</i>	Sperm Whale	Replaced with Current Taxonomic Name Based on ITIS
<i>Terrapene c. carolina</i>	<i>Terrapene carolina carolina</i>	Eastern Box Turtle	General Nomenclature
Original Scientific Name	Altered Scientific Name	Common Name	Change Justification

Showing 1 to 9 of 9 entries (filtered from 12 total entries) First Previous 1 Next Last

Lessons learned – process revised

- In coordination with AFWA and USFWS, developed a process for gathering lists of SGCNs as 2015 SWAPs are approved.
- First 7 completed SWAPs are being used to refine the process and develop new capabilities in web tool.

Early and direct coordination

- **Direct coordination with the state wildlife coordinators allow for data to be provided in format easier to analyze**
- **Taxa Match with ITIS is completed by USGS staff and results provided back to state wildlife coordinators**



http://www.usgs.gov/core_science_systems/csas/swap/sgcn

A national look at Species of Greatest Conservation Need as reported in State Wildlife Action Plans

State Wildlife Action Plans are plans developed by a state for conserving wildlife and habitat before they become too rare or costly to restore. In 2005, all 50 States and five U.S. territories developed a State Wildlife Action Plan (<http://www.teaming.com/state-wildlife-action-plans-swaps>). Each plan includes the identification of Species of Greatest Conservation Need (SGCN) for that state.

One approach to advance the national conservation agenda is to use common terminology to identify and communicate common needs that extend across political boundaries. The U.S. Geological Survey has developed a process that allows the Species of Greatest Conservation Need from all of the state's plans to be compiled, making their representation across taxa groups and nationwide available via the Species Conservation Analysis Tool. Before a compiled view could be accomplished, consistent naming of species amongst the states' plans had to be achieved. Conforming species names to a single naming authority--the Integrated Taxonomic Information System (see www.itis.gov), an internationally recognized source for naming species, compiling a national list of Species of Greatest Conservation Need is now possible.

Revisions of State Wildlife Action Plans are currently underway and will be completed by 2015. USGS is coordinating with the Association of Fish and Wildlife Agencies and individual state agencies to provide access to compiled species lists from the revised plans. The Species Conservation Analysis Tool will be updated with the new data to enable up-to-date information to inform decisions effecting conservation.

Please direct questions regarding this effort to [Mary Pfaffko](#) or [Andrea Ostroff](#).

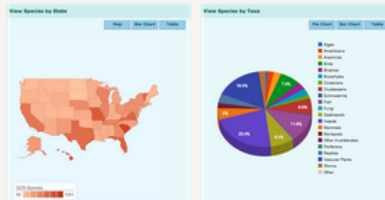
Important Message:

Revisions of each States' Wildlife Action Plan will be occurring throughout the year. Complementary changes to the Species Conservation Analysis Tool are underway to accommodate the revisions. As you explore the various views of the tool, be aware that there will be discrepancies among and between the earlier, revised, and newer lists of the Species of Greatest Conservation Need during this period of transition. Thank you for understanding, and be sure to visit again soon to see the progress.

What's New: Web Services

Species Conservation Analysis Tool

Launch the SWAP Species Conservation Analysis Tool



Species by State or Other U.S. Territory

Launch SWAP Species Lists by State



or

Select a State or Other U.S. Territory ▼

Species by National List

Launch SWAP Species by National List



Complied National List of Species in Greatest Conservation Need

Search for a species within the National List

Current Selection(s): 4442 Results Found

All Species [Download 4442 Results Found](#)

Filter By:

Year
2005
2015



< 1 2 3 ... 444 445 > Displaying 1 to 25 of 4442 Results: 25

TSN #	Scientific Name	Common Name	# of States 2005	# of States 2015	USFWS Listing Status	Taxonomic Group
13567897	Actinemys marmorat pallida	Actinemys marm pallida	10	18	Endangered	Amphibians
13567897	Agallissus lepturoides	Agallissus lepto	24	26	Threatened	Arachnids
13567897	Alptasia pallida	Alptasia allic	50	48	Candidate	Birds
13567897	Alle alle	Alle alle	27	12	Threatened	Crustaceans
13567897	Alligator mississippiensis	Alligator mississippiensis	0	10	Threatened	Fish
13567897	Allium burdickii	Allium burdickii	4	4	Candidate	Insects
13567897	Allium canadense	Allium canadense	2	4	Endangered	Mammals
13567897	Allium canadense var. Allium anisatum	Allium canadense var. Allium anisatum	3	3	Threatened	Mollusks
13567897	Allium cernuum	Allium cernuum	7	7	Candidate	Other Invertebrates
13567897	Allium schoenopras	Allium schoenopras	28	30	Endangered	Plants
13567897	Allium speculae	Allium speculae	15	17	Threatened	Reptiles
13567897	Allium tricoccum	Allium tricoccum	42	40	Candidate	Amphibians
13567897	Allocaonia brooksi	Allocaonia brooksi	11	14	Endangered	Arachnids
13567897	Allocaonia cunninghami	Allocaonia cunninghami	9	10	Threatened	Birds
13567897	Allocaonia frisoni	Allocaonia frisoni	4	6	Candidate	Crustaceans
13567897	Allocaonia frumii	Allocaonia frumii	8	6	Endangered	Fish
13567897	Allocaonia fumosa	Allocaonia fumosa	6	3	Threatened	Insects
13567897	Allocaonia illinoensis	Allocaonia illinoensis	34	37	Candidate	Mammals
13567897	Allocaonia jeanae	Allocaonia jeanae	24	25	Endangered	Mollusks
13567897	Allocaonia malverna	Allocaonia malverna	7	8	Threatened	Other Invertebrates
13567897	Allocaonia oribata	Allocaonia oribata	1	2	Candidate	Plants
13567897	Allocaonia ozarkana	Allocaonia ozarkana	6	4	Endangered	Reptiles
13567897	Allocaonia perplexa	Allocaonia perplexa	34	33	Threatened	Other Invertebrates
13567897	Allocaonia pygmaea	Allocaonia pygmaea	24	24	Candidate	Plants
13567897	Allocaonia simmonsii	Allocaonia simmonsii	7	5	Endangered	Reptiles



Complied National List of Species in Greatest Conservation Need

Search for a species within the National List



Current Selection(s): 4442 Results Found

Filter(s) Applied: X Birds | Clear All | [Download 4442 Results Found](#)

Filter By:

Year

2005

2015

Taxonomic Group

Amphibians

Arachnids

Birds

Crustaceans

Fish

Insects

Mammals

Mollusks

Other Invertebrates

Plants

Reptiles

Progress Map:

States/territories which have submitted their 2015 list.

Legend: List submitted List not yet submitted



Other U.S. Territories

- American Samoa
- Guam
- Mariana Islands
- Puerto Rico
- US Virgin Islands

Displaying 1 to 25 of 4442 Results: 25

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13567897	Actinemys marmorata pallida	Actinemy m 1 pallid	18	Endangered	Amphibians
13567897	Agallissus lepturus	Agallissu lepturo	24	Threatened	Arachnids
13567897	Aptasia pallida	Aptasia pallida	50	Candidate	Birds
13567897	Alle alle	Alle alle	27	Candidate	Crustaceans
13567897	Alligator mississippiensis	Alligator mississippiensis	0	Threatened	Fish
13567897	Allium burdickii	Allium burdickii	6	Candidate	Insects
13567897	Allium canadense	Allium canadense	26	Endangered	Mammals
13567897	Allium canadense var. virginianense	Allium canadense var. virginianense	3	Threatened	Mollusks
13567897	Allium cernuum	Allium cernuum	7	Candidate	Other Invertebrates
13567897	Allium schoenoprasum	Allium schoenoprasum	28	Endangered	Plants
13567897	Allium speculae	Allium speculae	15	Threatened	Reptiles
13567897	Allium tricoccum	Allium tricoccum	42	Candidate	Amphibians
13567897	Allocaecia brooksi	Allocaecia brooksi	11	Endangered	Arachnids
13567897	Allocaecia cunninghami	Allocaecia cunninghami	9	Threatened	Birds
13567897	Allocaecia frisoni	Allocaecia frisoni	4	Candidate	Crustaceans
13567897	Allocaecia frumi	Allocaecia frumi	8	Endangered	Fish
13567897	Allocaecia fumosa	Allocaecia fumosa	6	Threatened	Insects
13567897	Allocaecia illinoensis	Allocaecia illinoensis	34	Candidate	Mammals
13567897	Allocaecia jeanae	Allocaecia jeanae	24	Endangered	Mollusks
13567897	Allocaecia malverna	Allocaecia malverna	7	Threatened	Other Invertebrates
13567897	Allocaecia oribata	Allocaecia oribata	1	Candidate	Plants
13567897	Allocaecia ozarkana	Allocaecia ozarkana	6	Endangered	Reptiles
13567897	Allocaecia perplexa	Allocaecia perplexa	14	Threatened	Other Invertebrates
13567897	Allocaecia pygmaea	Allocaecia pygmaea	24	Candidate	Plants
13567897	Allocaecia simmonsii	Allocaecia simmonsii	7	Endangered	Reptiles

Search SGCNs by species

Compiled National List of Species of Great Interest

Filter By:

Year

2005
2015

Taxonomic

2005
2015

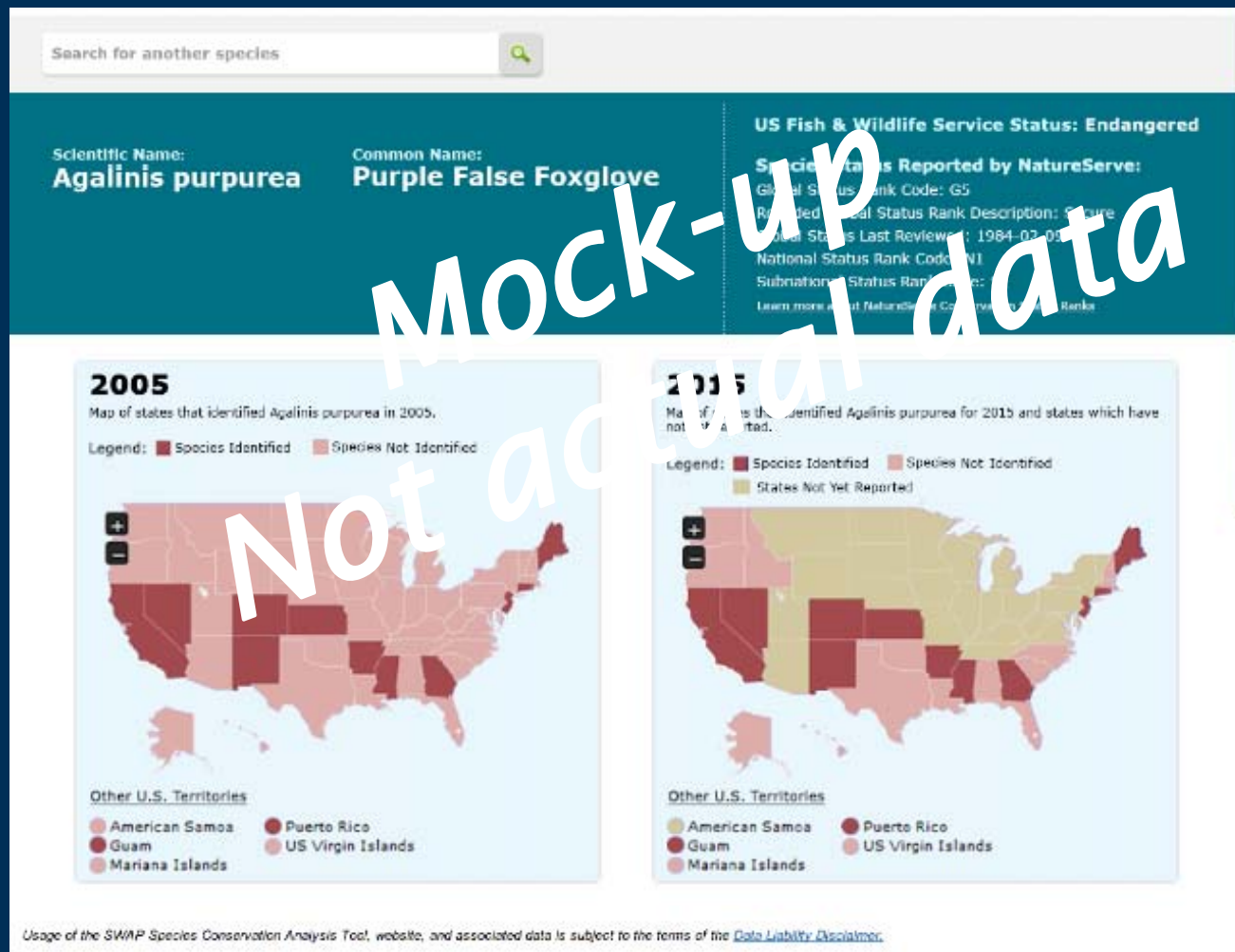
Algae
Amphibians
Arachnids
Birds
Crustaceans
Fish

Crested Auklet
Crested Anole
Crested Caracara
Creville Jack
Creeping Sedge
Creole Wrasse
Crested Pipefish
Crenichthys baileyi albivallis
Crenichthys baileyi baileyi
Crenichthys baileyi grandis
Crenichthys baileyi moapae
Crenichthys baileyi thermophilus
Crenichthys nevadae
Crenitis digestus
Crepidula fornicata
Crepidula plana
Cream-flowered Tick-trefoil

TSN #	Scientific Name
-1	Abronia umbellata
-1	Abudefduf saxatilis
-1	Abudefduf tauvina

Type-ahead capability searches common and scientific names at same time

Coming – Revised view of species conservation status



Mock-up
Not actual data

Web Services to meet partner needs

CSAS&L >> SWAP Home >> Web Services

Web Services

SWAP provides a Solr search API, providing the ability to search and retrieve data from SWAP using web services. The SWAP Solr search APIs support JavaScript Object Notation (JSON) and JSONP (JSONP).

More information can be found about Solr on the Apache website. Most modern browsers will automatically URL encode white space and other special characters that you enter on the URL line. calling Solr from javascript or another programming language you may be required to URL encode the query string. More information can be found about URL encoding in RFC-1738.

Web Service	Description	Response Fields	Request Parameters	Response Format	Notes	URL
National List of species for 2005	Provides a list of all species that are on the 2005 national list and an identification of which states each species has been reported in for all states.	scientific names, vernacular names, states for each	N/A	JSON	A scientific name may have multiple vernacular names linked to it.	http://usgs.ornl.gov/swap/solr/swap/select?q=nationalList%3Atrue%20AND%20publicationYear%3A2005&rows=0&wt=json&indent=true&facet=true&facet.pivot=scientificName,vernacularName,stateProvince&facet.mincount=1&facet.limit=-1
National List of species for 2015	Provides a list of all species that are on the 2015 national list and an identification of which states each species has been reported in for all states.	scientific names, vernacular names, states for each	N/A	JSON	A scientific name may have multiple vernacular names linked to it.	http://usgs.ornl.gov/swap/solr/swap/select?q=nationalList%3Atrue%20AND%20publicationYear%3A2015&rows=0&wt=json&indent=true&facet=true&facet.pivot=scientificName,vernacularName,stateProvince&facet.mincount=1&facet.limit=-1
2005 list of species for a state	Provides a list of all species reported by a given state for 2005	scientific names, vernacular names	state code (stateProvinceCode) or state name (stateProvince)	JSON	A scientific name may have multiple vernacular names linked to it.	http://usgs.ornl.gov/swap/solr/swap/select?q=publicationYear:2005 AND stateProvinceCode:NE&rows=0&wt=json&indent=true&facet=true&facet.limit=-1&facet.pivot=scientificName,vernacularName
2005 list of species for	Provides a list of all species reported by a list of states for	scientific names, vernacular names	state codes (stateProvinceCode)	JSON	A scientific name may have multiple	http://usgs.ornl.gov/swap/solr/swap/select?q=publicationYear:2005 AND



Contact for sharing SWAP SGCN lists

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