Biodiversity Information Serving Our Nation (BISON)
Integrated Taxonomic Information System (ITIS)
EcoINFORMA

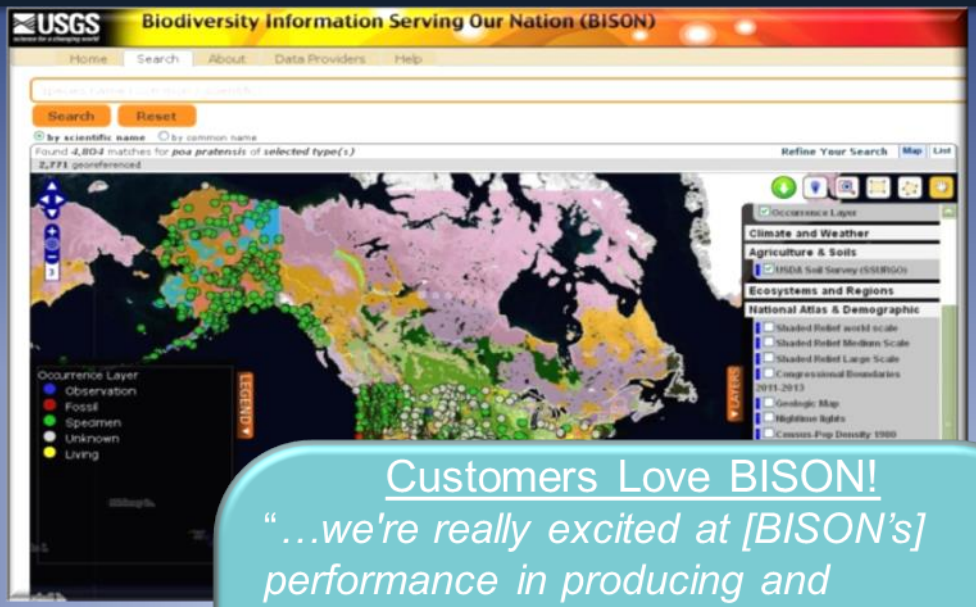
Gerald F. Guala, Ph.D.

United States Geological Survey, National Headquarters, MS 302, 12201 Sunrise Valley Dr., Reston, VA 20192; gguala@usgs.gov

U.S. Department of the Interior
U.S. Geological Survey

Biodiversity Information Serving Our Nation - (bison.usgs.ornl.gov)

- National Clearinghouse
- US Node of GBIF
- 243(257)+ million records & growing
- Nearly all species
- Every state and county
- 55 environmental layers
- Who, what, when, where for every record.
- 1456 data sets from 332 global providers across Federal, State, and local Gov'ts, NGOs and Academia.



Customers Love BISON!

"…we're really excited at [BISON's] performance in producing and mapping extremely large search-result sets (I generated one with 1.8 million hits in a matter of seconds)."

Scott L. Cross, Ph.D. NOAA National Oceanographic Data Center/National Coastal Data Development Center, Charleston, SC. April, 22, 2013

More than a million professional and citizen scientists have gathered the data that is in BISON

USGS

Core Science Systems

Everyone gets credit

Australian Antarctic Data Centre				
Australian Antarctic Division Herbarium	68	68	5093	293733
Australian Museum				
Australian Museum provider for OZCAM	117	117	7065	332103
Australian National Herbarium (CANB)				
Australian National Herbarium (CANB)	70	70	8085	337560
Australian National Insect Collection, CSIRO Entomology				
Australian National Insect Collection	62	62	5070	295559
Avian Knowledge Network				
Great Backyard Bird Count	123	123	11309	379387
Hawk Migration Association of North America - HawkCount	62	62	7558	306186
Point Reyes Bird Observatory - Point Counts	117	117	7863	306417
U.S.D.A. Forest Service, Redwood Sciences Laboratory - Lamna Point Count	118	118	7722	300860
BISON				
BLM - Landscape Monitoring Framework - Plants - 2011-2013	86	86	8535	320096
BLM - National Invasive Species Information Management System - Plants - 2010-2014	187	187	7949	309473
Big Island Invasive Species Committee - Pest Reports - 2005-2010	82	82	5328	277926
Denver Botanic Gardens - Specimen Collection	83	83	5770	288403
EPA - National Lakes Assessment - Zooplankton - 2007	60	60	7785	322485
Indiana University - Indiana - Hemlocks - 2005-2013	60	60	3990	275769
International Biological Information System	209	209	10027	343728
Kauai Invasive Species Committee - Pest Surveys - 2001-2011	82	82	5360	279333
Maui Invasive Species Committee - Pest Surveys - 1996-2011	60	60	6468	279285
Multistate Aquatic Resources Information System (MARIS) Fish Dataset	106	106	8265	342041
Murray State University - Lonicera japonica - 2008	60	60	4249	276479
NPS - Inventory and Monitoring Program - NPSpecies Park Species Lists	447	447	24130	553708
Towson University - MidAtlantic - Ailanthus altissima - 2011	60	60	4189	281651
USDA - PLANTS Database	279	279	19251	398389
USFS - Forest Inventory and Analysis - Tree Species	114	114	12723	349302
USFS - Forest Inventory and Analysis - Tree Species (Private Lands)	114	114	12587	305107
USFWS - Ruby Lake NWR - Vegetation Mapping Survey - 2012-2013	60	60	4024	279091
USGS ASC - Changing Arctic Ecosystems - Alaska - Birds	61	61	2630	2630
USGS ASC - Changing Arctic Ecosystems - Birdlist - 2011-2013	62	62	4254	283213
USGS ASC - Copper River Delta - Birds - 1997-2005	60	60	3765	3765

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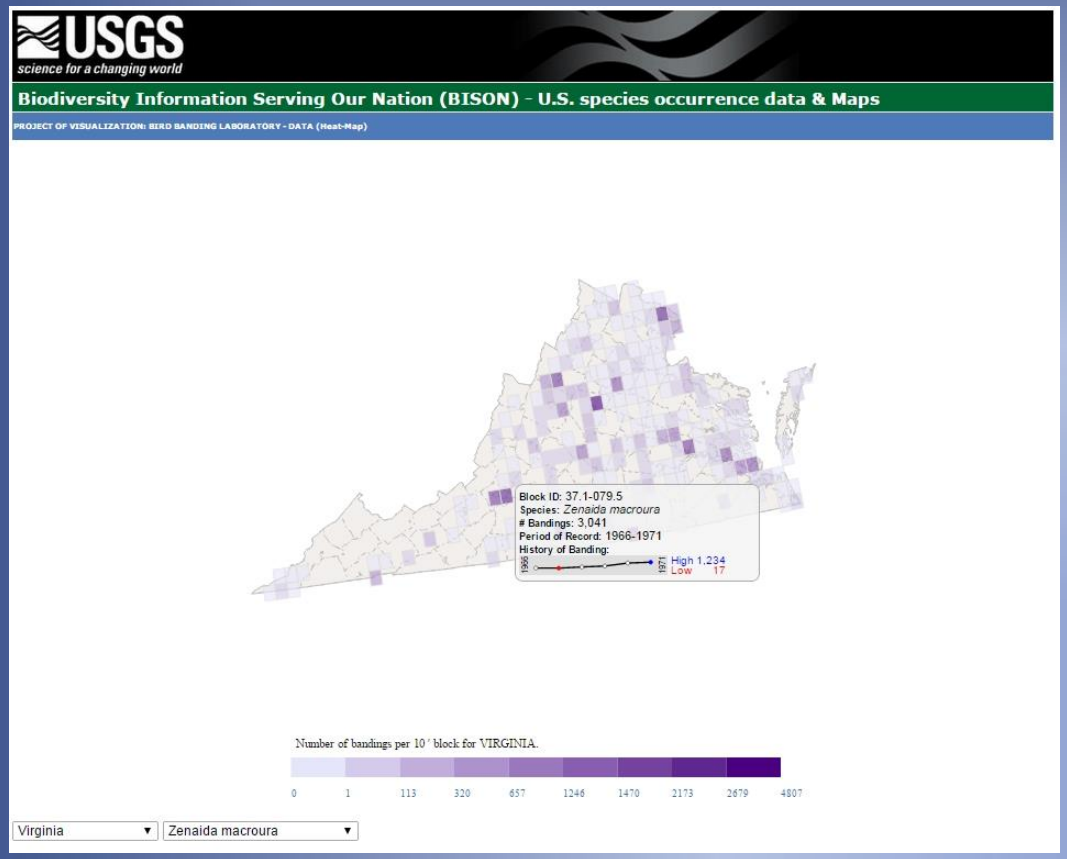
A Research Center can automatically summarize millions of it's records and give tens of thousands of their citizen scientists a fast and elegant view of their data.

Without making a significant investment in new cyberinfrastructure …



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You could spot mistakes in the data automatically…

Taxonomy

This application will look at all scientific names in the data set of a specific provider and compare them to the ITIS accepted names for those organisms in BISON. Conflicts will be listed. You will need to enter the three digit BISON Provider ID number which is listed in brackets after the provider name HERE.

Enter a BISON Provider ID: 281 Submit

224 Conflicts Found

Provider 281 = Acacia farnesiana *vs* ITIS = Vachellia farnesiana farnesiana
Provider 281 = Acer barbatum *vs* ITIS = Acer saccharum saccharum
Provider 281 = Acmella oppositifolia repens *vs* ITIS = Acmella repens
Provider 281 = Ageratina aromatica aromatica *vs* ITIS = Ageratina aromatica
Provider 281 = Aira elegans *vs* ITIS = Aira elegantissima;Molineriella laevis
Provider 281 = Alopecurus alpinus *vs* ITIS = Alopecurus magellanicus
Provider 281 = Amsinckia menziesii intermedia *vs* ITIS = Amsinckia intermedia
Provider 281 = Andropogon capillipes *vs* ITIS = Andropogon virginicus glaucus
Provider 281 = Andropogon mohrii *vs* ITIS = Andropogon liebmannii pungensis
Provider 281 = Arisaema triphyllum quinatum *vs* ITIS = Arisaema triphyllum
Provider 281 = Aristida longispica *vs* ITIS = Aristida longespica
Provider 281 = Aristida longispica geniculata *vs* ITIS = Aristida longespica geniculata
Provider 281 = Aristida longispica longispica *vs* ITIS = Aristida longespica longespica
Provider 281 = Arnica chamissonis foliosa *vs* ITIS = Arnica chamissonis
Provider 281 = Artemisia arctica *vs* ITIS = Artemisia norvegica saxatilis
Provider 281 = Artemisia campestris borealis *vs* ITIS = Artemisia borealis
Provider 281 = Baptisia bracteata laevicaulis *vs* ITIS = Baptisia leucophaea
Provider 281 = Baptisia bracteata leucophaea *vs* ITIS = Baptisia leucophaea
Provider 281 = Caltha palustris radicans *vs* ITIS = Caltha palustris
Provider 281 = Campanulastrum americanum *vs* ITIS = Campanula americana
Provider 281 = Campylopus introflexus *vs* ITIS = Campylopus pilifer
Provider 281 = Cardamine microphylla blaisdellii *vs* ITIS = Cardamine blaisdellii
Provider 281 = Carex leptalea harperi *vs* ITIS = Carex leptalea
Provider 281 = Carex stenophylla *vs* ITIS = Carex duriuscula
Provider 281 = Carex vallicola vallicola *vs* ITIS = Carex vallicola
Provider 281 = Carya alba *vs* ITIS = Carya tomentosa
Provider 281 = Castanea pumila pumila *vs* ITIS = Castanea pumila
Provider 281 = Celtis laevigata reticulata *vs* ITIS = Celtis reticulata
Provider 281 = Cercocarpus montanus glaber *vs* ITIS = Cercocarpus betuloides betuloides
Provider 281 = Chamaesyce arizonica *vs* ITIS = Euphorbia arizonica
Provider 281 = Chamaesyce bombensis *vs* ITIS = Euphorbia bombensis
Provider 281 = Chamaesyce cordifolia *vs* ITIS = Euphorbia cordifolia
Provider 281 = Chamaesyce hyssopifolia *vs* ITIS = Euphorbia hyssopifolia
Provider 281 = Chamaesyce maculata *vs* ITIS = Euphorbia maculata;Euphorbia nutans
Provider 281 = Chamaesyce melanadenia *vs* ITIS = Euphorbia melanadenia
Provider 281 = Chamaesyce micromera *vs* ITIS = Euphorbia micromera
Provider 281 = Chamaesyce nutans *vs* ITIS = Euphorbia nutans
Provider 281 = Chamaesyce polycarpa *vs* ITIS = Euphorbia polycarpa polycarpa
Provider 281 = Chamaesyce prostrata *vs* ITIS = Euphorbia prostrata
Provider 281 = Chamaesyce thymifolia *vs* ITIS = Euphorbia thymifolia
Provider 281 = Chasmanthium sessiliflorum *vs* ITIS = Chasmanthium laxum sessiliflorum
Provider 281 = Chenopodium ambrosioides *vs* ITIS = Dysphania ambrosioides
Provider 281 = Chrysopsis pilosa *vs* ITIS = Bradburia pilosa;Chrysopsis gossypina gossypina
Provider 281 = Chrysothamnus albidus *vs* ITIS = Ericameria albida
Provider 281 = Chrysothamnus linifolius *vs* ITIS = Lorandersonia linifolia
Provider 281 = Chrysothamnus pulchellus *vs* ITIS = Lorandersonia pulchella
Provider 281 = Cissus incisa *vs* ITIS = Cissus trifoliata
Provider 281 = Cladium mariscus jamaicense *vs* ITIS = Cladium jamaicense
Provider 281 = Cleistes divaricata *vs* ITIS = Cleistesiopsis divaricata
Provider 281 = Clinopodium arkansanum *vs* ITIS = Clinopodium glabrum

Location

This application checks the **Provided County** against the **County as calculated by BISON from the Provided Lat/Lon** for a given provider in BISON.

Enter a three digit BISON Provider ID: 281 Submit Reset

FINISHED: 998 Conflicts Found

Catalog Number: Calculated County vs Provided County and [Latitude, Longitude]

99140: Franklin County vs Worcester County [42.544, -72.329]
99141: Franklin County vs Worcester County [42.544, -72.329]
99139: Franklin County vs Worcester County [42.544, -72.329]
63548: Orleans County vs Orange County [44.824, -72.491]
87860: Orleans County vs Orange County [44.824, -72.491]
89475: Orleans County vs Orange County [44.824, -72.491]
85204: Penobscot County vs Piscataquis County [45.801, -68.765]
85401: Penobscot County vs Piscataquis County [45.801, -68.765]
83162: Penobscot County vs Piscataquis County [45.8, -68.765]
114538: Chittenden County vs Washington County [44.32083, -72.92083]
20208: Terrebonne Parish vs Plaquemines Parish [29.416, -90.7]
20790: Terrebonne Parish vs Plaquemines Parish [29.233, -90.7]
44655: Terrebonne Parish vs Plaquemines Parish [29.25, -90.7]
104918: Hardee County vs Putnam County [27.36, -81.575]
76089: Nueces County vs San Patricio County [27.85, -97.16667]
77193: Aransas County vs San Patricio County [28.06667, -97.11667]
82510: Frio County vs Medina County [29.067, -98.933]
86586: McMinn County vs Macon County [35.317, -84.625]
86730: McMinn County vs Macon County [35.317, -84.625]
84820: McMinn County vs Macon County [35.317, -84.625]
105509: Columbia County vs Webster Parish [33.416, -93.383]
78548: Gila County vs Coconino County [33.617, -110.975]
72800: El Dorado County vs Alpine County [38.796, -119.964]
60432: Calhoun County vs Union County [33.51667, -92.33333]
61456: Riverside County vs San Diego County [33.52, -116.866]
84209: Cochran County vs Lincoln County [33.757, -103.045]
103609: Franklin County vs East Baton Rouge Parish [31.379, -91.125]
33423: Rapides Parish vs Natchitoches Parish [31.40083, -92.75556]
86867: La Salle Parish vs LaSalle Parish [31.5095, -92.0877]
99754: La Salle Parish vs LaSalle Parish [31.5095, -92.0877]
99737: La Salle Parish vs LaSalle Parish [31.5095, -92.0877]
86865: La Salle Parish vs LaSalle Parish [31.5095, -92.0877]
86866: La Salle Parish vs LaSalle Parish [31.5095, -92.0877]
86868: La Salle Parish vs LaSalle Parish [31.5095, -92.0877]
99742: La Salle Parish vs LaSalle Parish [31.5095, -92.0877]
99755: La Salle Parish vs LaSalle Parish [31.5095, -92.0877]
87532: La Salle Parish vs LaSalle Parish [31.5095, -92.0877]
99741: La Salle Parish vs LaSalle Parish [31.5095, -92.0877]
98994: La Salle Parish vs LaSalle Parish [31.5095, -92.0877]
99965: La Salle Parish vs LaSalle Parish [31.5095, -92.0877]
98087: La Salle Parish vs LaSalle Parish [31.5686, -92.0768]
87531: La Salle Parish vs LaSalle Parish [31.5686, -92.0768]
99736: La Salle Parish vs LaSalle Parish [31.5686, -92.0768]
41768: La Salle Parish vs Grant Parish [31.61667, -92.08333]
90201: Concordia Parish vs Grant Parish [31.633, -91.416]
40802: Grant Parish vs St. Martin Parish [31.634, -92.418]
54604: La Salle Parish vs Grant Parish [31.635, -92.08472]
116356: Franklin County vs Lawrence County [31.5511, -90.83635]
66160: Adams County vs Franklin County [31.5555, -91.15517]

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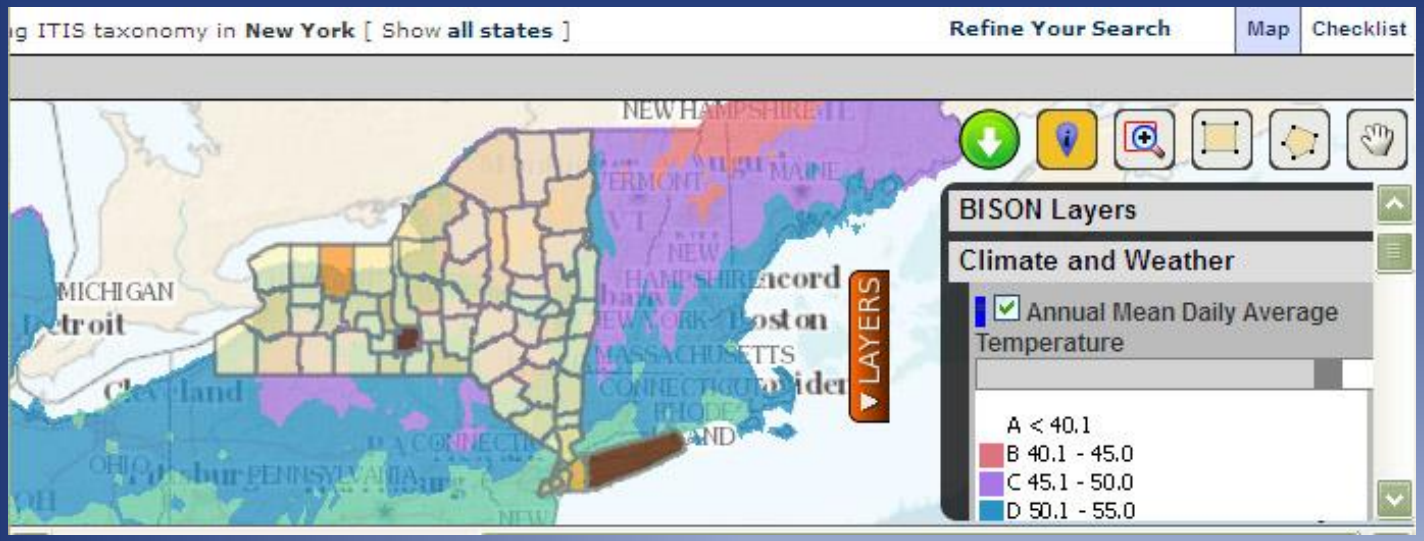
Custom Maps & Checklists



For Any Area Including Polygons

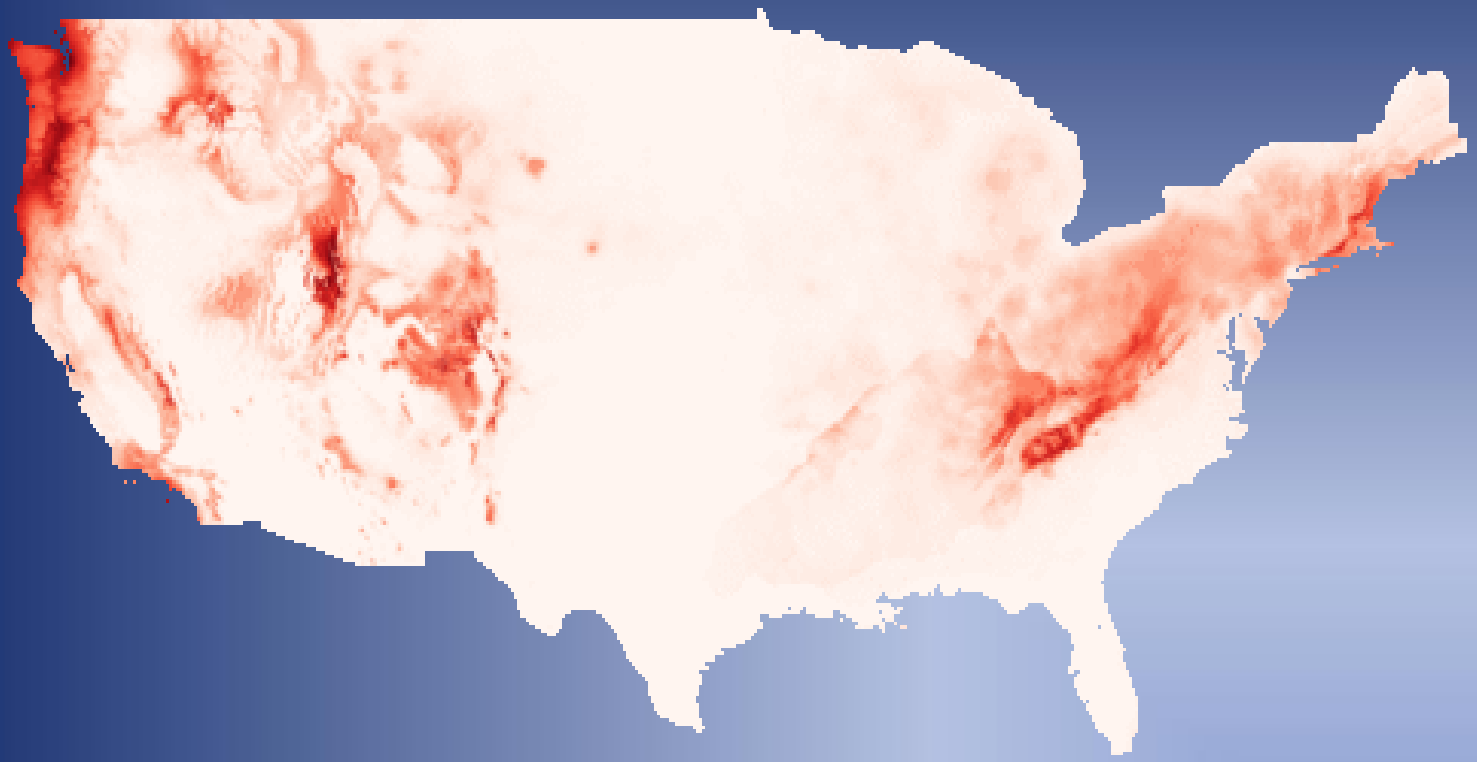
Found **9,070,998** matches for ***all species*** using ITIS taxonomy in **New York** [Show **all states**]

9,070,998 georeferenced

Kingdom	Count
Animalia	7974656
Chromista	10808
Fungi	2651
Plantae	454729
ITIS Scientific Name	**Count**
Abies balsamea	12807
Abies balsamea balsamea	28
Abies homolepis	2
Abies magnifica	1
Abies procera	1
Abietinella abietina	5
Abutilon theophrasti	39
Acacia baileyana	1
Acacia cultriformis	1
Acacia ligulata	1

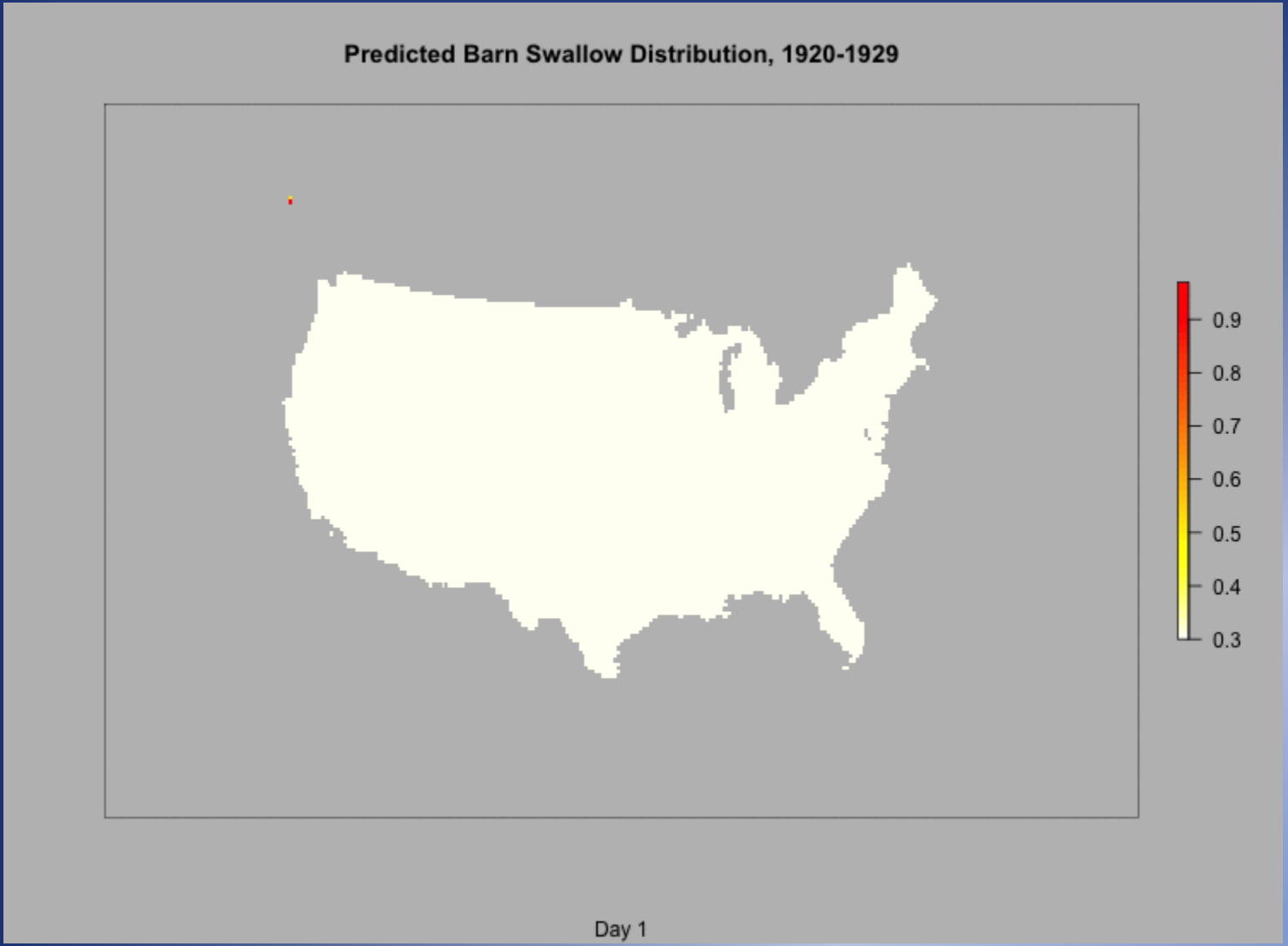
USGS

You could see the potential effects of climate change on a species at the click of a button…



***Taenionema atlanticum* (Winter Stonefly)** as its habitat suitability shifts using the A2 scenario for three future timesteps.
The A2 storyline and scenario family: a very heterogeneous world with continuously increasing global population and regionally oriented economic growth that is more fragmented and slower than in other storylines.
Layers are CURRENT & A2 scenario, 2039, 2069, and 2099.

USGS



Distribution of Barn Swallow (*Hirundo rustica*)
Probability by ordinal day of the year for the 1920's

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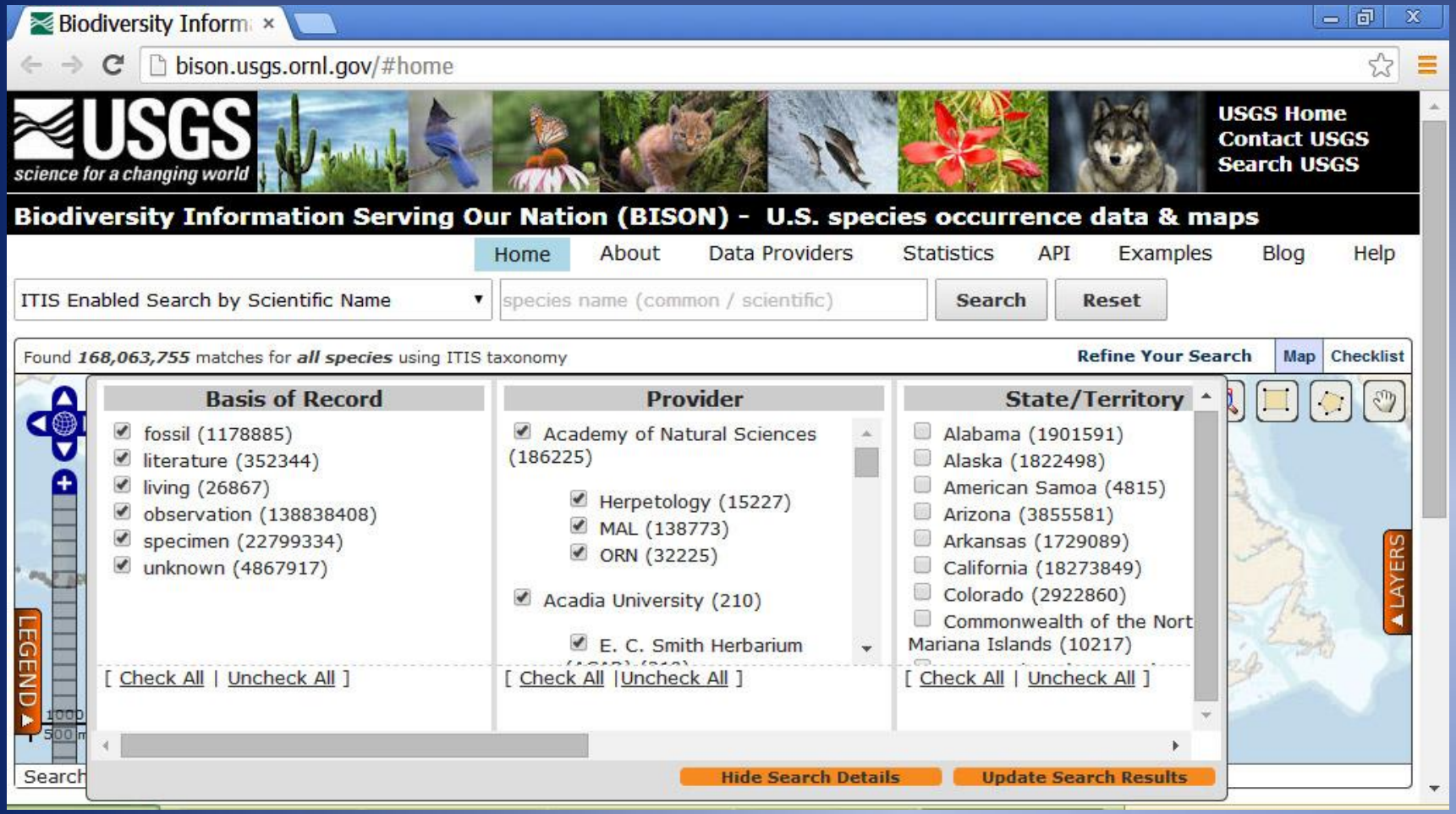
Search & Refine

Basis of Record
Provider
State/County

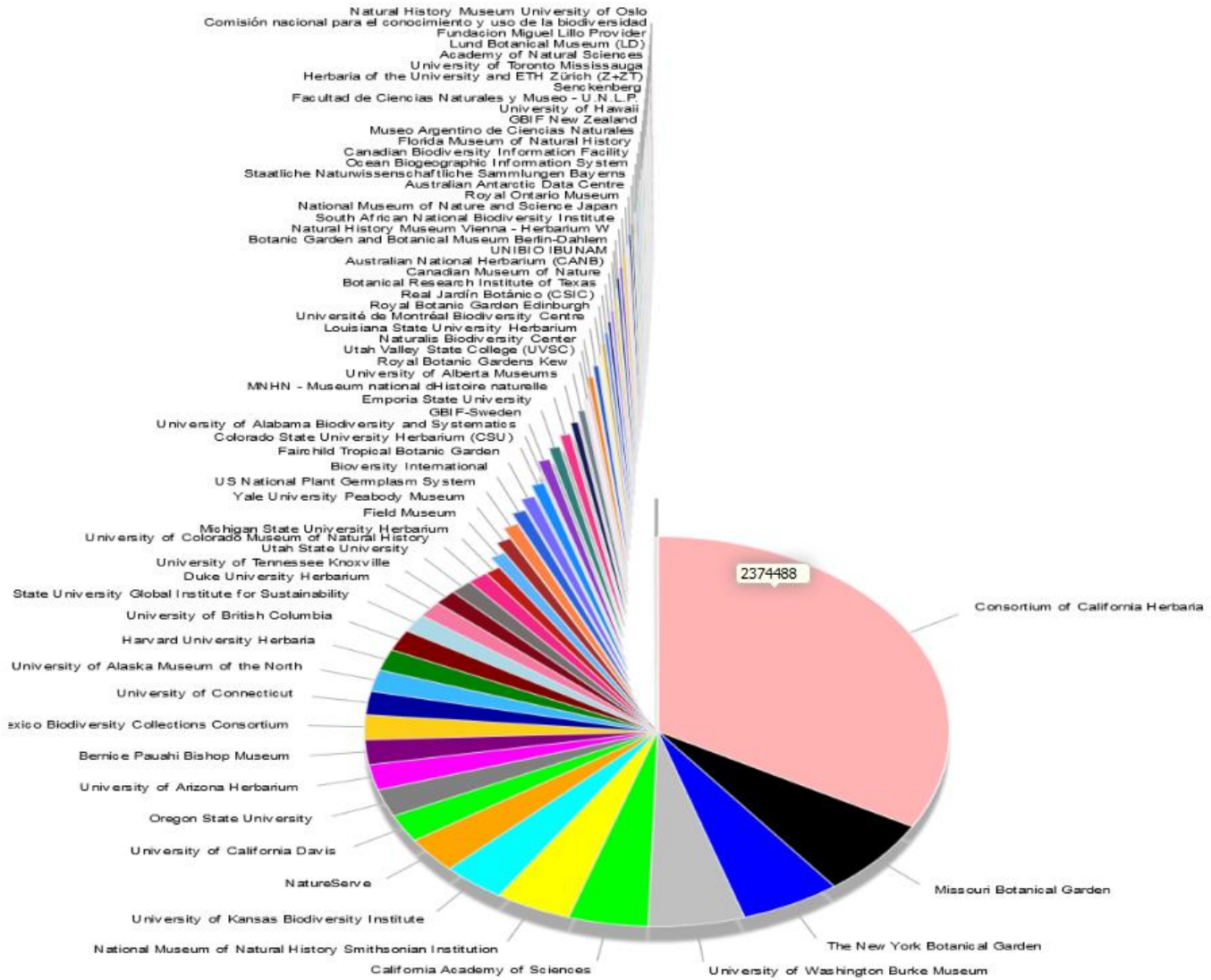
Higher taxa
Year range
Centroids



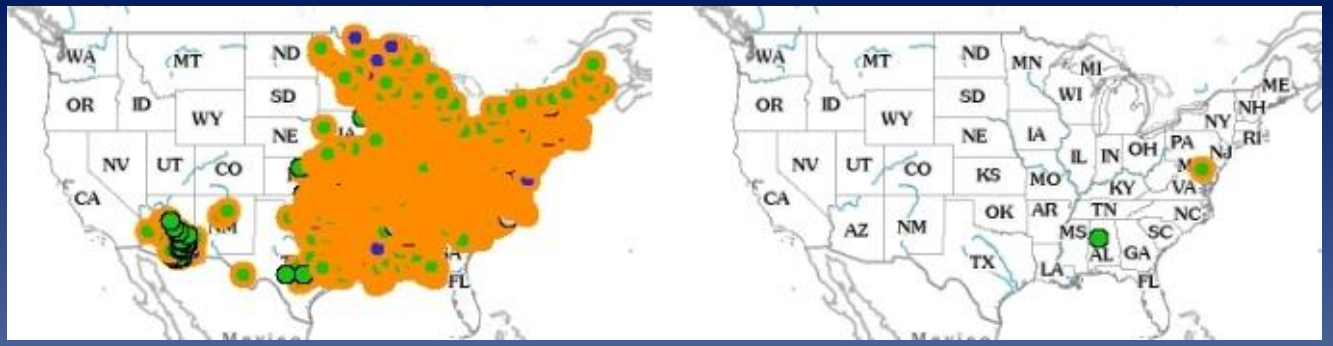
Dynamically Generated and Interactive 3D Pie Chart of the Relative Representation of Providers of Plant Specimen Records in BISON

Total Plant Specimens: 7168180

Click on a wedge to show the number of records from an individual provider.



The Power of ITIS



Go to Print Version

Rubus flagellaris Willd.

Taxonomic Serial No.: 24921

Download data (Download Help) ***Rubus flagellaris*** TSN 24921

Taxonomy and Nomenclature

Kingdom: Plantae
Taxonomic Rank: Species
Synonym(s):

Rubus scambens L.H. Bailey
Rubus aboriginum Rydb.
Rubus apogaeus L.H. Bailey
Rubus aptatus L.H. Bailey
Rubus arenicolus Blanch.
Rubus arizonensis Focke
Rubus arundelanus Blanch.
Rubus ashei L.H. Bailey
Rubus baileyanus Britton
Rubus cacaponensis H.A. Davis & T. Davis
Rubus celer L.H. Bailey
Rubus centralis L.H. Bailey
Rubus clarus L.H. Bailey
Rubus curtipes L.H. Bailey
Rubus deamii L.H. Bailey
Rubus decor L.H. Bailey
Rubus depavitus L.H. Bailey
Rubus enslenii Tratt.
Rubus exsularis L.H. Bailey
Rubus fecundus L.H. Bailey
Rubus felix L.H. Bailey
Rubus grimesii L.H. Bailey
Rubus hancinianus L.H. Bailey
Rubus injunctus L.H. Bailey
Rubus invisus (L.H. Bailey) Britton
Rubus ithacanus L.H. Bailey
Rubus kentuckiensis L.H. Bailey
Rubus leviculus L.H. Bailey
Rubus meracus L.H. Bailey
Rubus michiganensis (Card ex L.H. Bailey) L.H. B
Rubus multifer L.H. Bailey
Rubus mundus L.H. Bailey
Rubus nefrens L.H. Bailey
Rubus obsessus L.H. Bailey
Rubus particeps L.H. Bailey
Rubus plicatifolius Blanch.
Rubus profusiflorus L.H. Bailey
Rubus pronus L.H. Bailey
Rubus roribaccus (L.H. Bailey) Rydb.
Rubus russeus L.H. Bailey
Rubus sailori L.H. Bailey
Rubus schoolcraftianus L.H. Bailey
Rubus steelei L.H. Bailey
Rubus temerarius L.H. Bailey
Rubus uvidus L.H. Bailey
Rubus vixalacer L.H. Bailey
Rubus whartoniae L.H. Bailey
Rubus arenicola Blanch.
Rubus iniens L.H. Bailey
Rubus obvius L.H. Bailey
Rubus pernagaeus Fernald
Rubus plexus Fernald
Rubus sewardianus Fernald
Rubus alacer L.H. Bailey
Rubus alius L.H. Bailey
Rubus almus (L.H. Bailey) L.H. Bailey
Rubus armatus (Fernald) L.H. Bailey
Rubus austrinus L.H. Bailey
Rubus bollianus L.H. Bailey
Rubus bonus L.H. Bailey
Rubus botruosus L.H. Bailey
Rubus bretonis L.H. Bailey
Rubus camurus L.H. Bailey
Rubus canaanensis H.A. Davis & T. Davis
Rubus cathartium Fernald
Rubus census L.H. Bailey
Rubus clandestinus L.H. Bailey
Rubus coloniatus L.H. Bailey
Rubus complex L.H. Bailey
Rubus conabilis L.H. Bailey
Rubus connixus L.H. Bailey
Rubus cordialis L.H. Bailey
Rubus cordifrons (L.H. Bailey) L.H. Bailey
Rubus currulis L.H. Bailey
Rubus dives L.H. Bailey
Rubus effusus L.H. Bailey
Rubus ellagellaris L.H. Bailey
Rubus exemptus L.H. Bailey
Rubus exutus L.H. Bailey
Rubus fandus L.H. Bailey
Rubus florenceae L.H. Bailey
Rubus foliaceus L.H. Bailey
Rubus folioflorus L.H. Bailey
Rubus frustratus L.H. Bailey
Rubus fuscus Weihe & Nees ex Bluff & Finge
Rubus geophilus Blanch.
Rubus gordonii L.H. Bailey ex Core
Rubus housei L.H. Bailey
Rubus ignarus L.H. Bailey
Rubus imperiorum Fernald
Rubus indianensis L.H. Bailey
Rubus inobvius L.H. Bailey
Rubus jactus L.H. Bailey
Rubus jaysmithii L.H. Bailey
Rubus lassus L.H. Bailey
Rubus longipes Fernald
Rubus lundelliorum L.H. Bailey
Rubus macdanielsii L.H. Bailey
Rubus mainensis L.H. Bailey
Rubus maltei L.H. Bailey
Rubus masseyi L.H. Bailey
Rubus minnesotanus L.H. Bailey
Rubus neonefrens L.H. Bailey
Rubus occidualis (L.H. Bailey) L.H. Bailey
Rubus occultus L.H. Bailey
Rubus pauper L.H. Bailey
Rubus peracer L.H. Bailey
Rubus pityophilus S.J. Sm.
Rubus pohlii L.H. Bailey
Rubus polulus L.H. Bailey
Rubus polybotrys L.H. Bailey
Rubus prior L.H. Bailey
Rubus problematicus L.H. Bailey
Rubus redundans L.H. Bailey
Rubus rhodinsulanus L.H. Bailey
Rubus ricei L.H. Bailey
Rubus rosagnetis L.H. Bailey
Rubus sanfordii L.H. Bailey
Rubus satis L.H. Bailey
Rubus semierectus Blanch.
Rubus serenus L.H. Bailey
Rubus subinnoxius Fernald
Rubus subuniflorus Rydb.
Rubus tantulus L.H. Bailey
Rubus tenuicaulis L.H. Bailey
Rubus terraltanus L.H. Bailey
Rubus tetricus L.H. Bailey
Rubus tracyi L.H. Bailey
Rubus uncus L.H. Bailey
Rubus uniflorifer L.H. Bailey
Rubus urbanianus L.H. Bailey
Rubus usus L.H. Bailey
Rubus arundelanus var. jeckylanus (Blanch.)
Rubus flagellaris var. almus L.H. Bailey
Rubus flagellaris var. humifusus (Torr. & A. G
Rubus flagellaris var. occidualis L.H. Bailey
Rubus jaysmithii var. angustior L.H. Bailey
Rubus obsessus var. unilaris L.H. Bailey
Rubus recurvicaulis var. armatus Fernald
Rubus villosus Aiton
Rubus procumbens Muhl.
Rubus brevipedalis L.H. Bailey
Rubus clairbrownii L.H. Bailey

USGS

Recent ITIS World Updates

Aloes
Archaea
Bacteria
Booidea
Chiroptera
Dipodidae
Worms
Mussels

Gliridae
Lampyridae
Muroidea
Parulidae
Primates
Strepsiptera
Turtles

*97% of all occurrences in BISON are covered by ITIS

Discover and explore data resources on ecosystems and biodiversity, including ecosystem components, functions, and services.

HIGHLIGHTS

Biodiversity Resource Hub

Biodiversity Information Serving Our Nation

Ecosystem Services Resource Hub

EnviroAtlas

Land Cover Dynamics Resource Hub

Multi-Resolution Land Characteristics Consortium

More Highlights

UPDATES

Formal Release of EcoINFORMA, Ecosystems.data.gov, and Two New Themes of Climate.data.gov

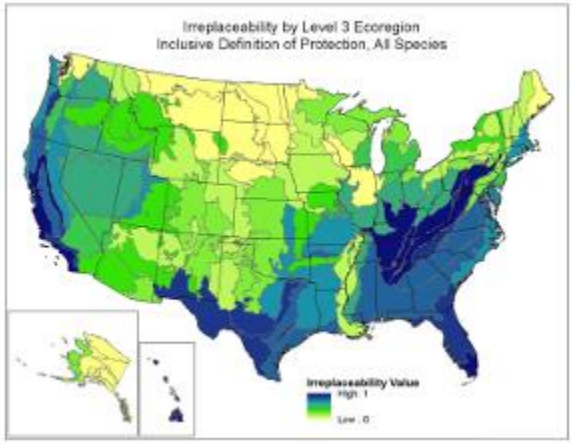
On December 9th, the secretary of the U.S. Department of the Interior, Sally Jewell, formally announced during the plenary session of A Community on Ecosystem Services (ACES) 2014 conference the launch of the U.S. Ecoinformatics-based Open Resources and Machine Accessibility ... Continued

Ecosystems.data.gov and EcoINFORMA

The Ecosystems Community (Ecosystems.data.gov) is now publicly available in Data.gov and provides access to ecosystem and biodiversity-related data. This community is the central web portal of the U.S. Ecoinformatics-based Open Resources and Machine Accessibility (EcoINFORMA) initiative. Visit the EcoINFORMA section ... Continued

Promoting synergy in the innovative use of environmental data across academia, non-profits, local and state governments, industry and the Federal government

A workshop hosted by NatureServe and the US Geological Survey with funding from the National Science Foundation



December 2-4, 2015 Department of the Interior, South Bldg., Washington DC