



Nonindigenous Aquatic Species Database



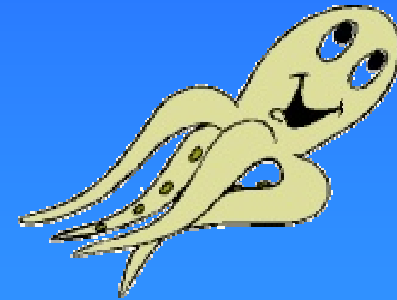
Shawn Dalton
U.S. Geological Survey
Gainesville, FL





Sources of Data

- Literature
- State and Federal Agencies (YOU!)
- Private Individuals
- Universities
- Museums
- Field Studies



USGS NAS Database Capabilities



- Web-based Queries
- Source Analysis - Origins
- Pathways
- Temporal Trends
- Spatial Patterns
- Mapping

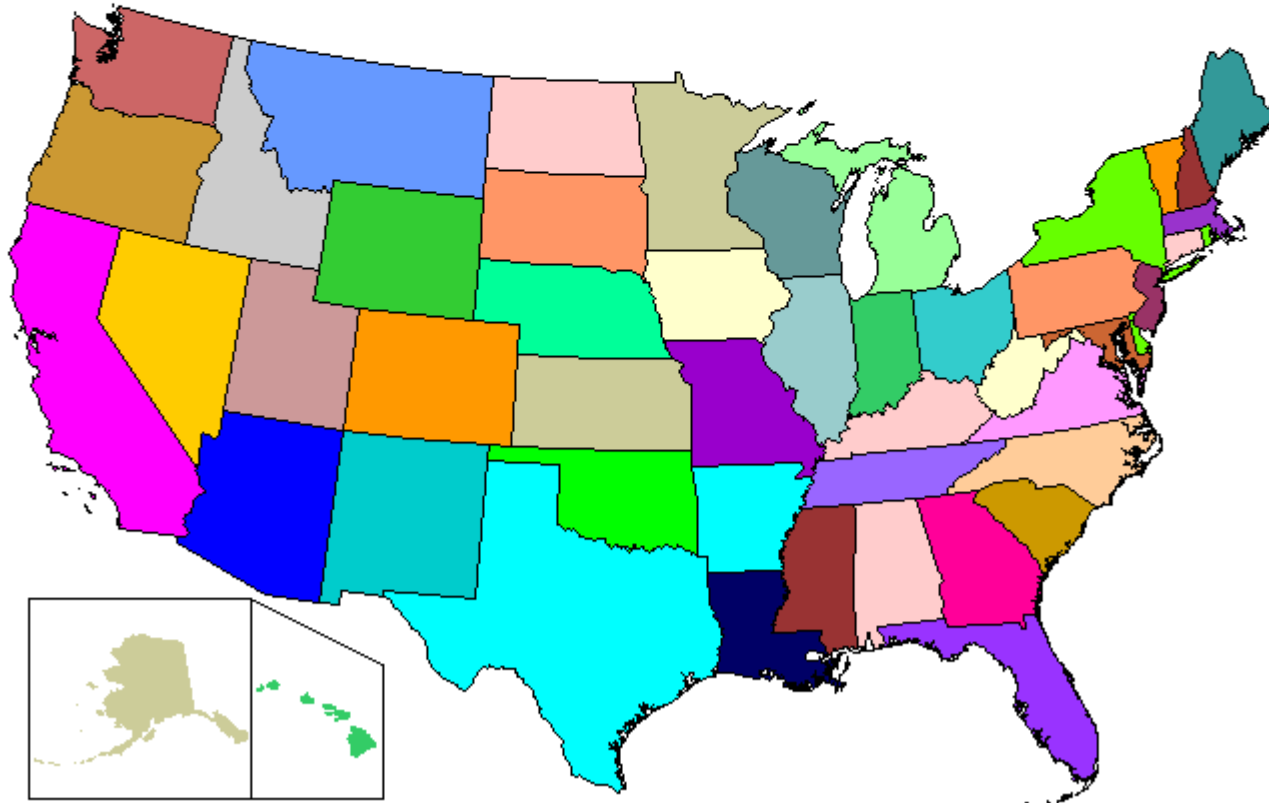
Species Lists By State

This page allows you to query for an up-to-date listing of [nonindigenous](#) species by state. You may either select the state from the scrolled list or by clicking on the map below.

Group

State:

Sort by:





NAS - Nonindigenous Aquatic Species

[NAS Program Home](#)

[News](#)

[Alert System](#)


[Database & Queries](#)

[General Taxa Information](#)

[Links to Other Resources](#)

Generate a Nonindigenous Species List

Select your criteria below. A list of nonindigenous species that matches your criteria will be generated. Species with fact sheets will have links to the fact sheets.



Group 



State:



Genus:

Species:

Common Name:

Status  

Freshwater/Marine  

Pathway  

Exotic/Transplant:

Sort by:









Results per page:

NAS - Nonindigenous Aquatic Species

NAS Program Home	News	Alert System	Database & Queries	General Taxa Information	Links to Other Resources
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total of 105 records
Page 1 of 3

Species in HUC 17

Photo (from Fact Sheet)	Group?	Family	Scientific Name	More Info	Common Name	Native Habitat	Exotic / Native Transplant
	Fishes	Acipenseridae	<i>Acipenser transmontanus</i>	collection info maps fact sheet	white sturgeon	Freshwater	Native Transplant
	Fishes	Acipenseridae	<i>Acipenser</i> or <i>Scaphirhynchus</i> sp.	collection info maps fact sheet	sturgeon (eastern species)	Freshwater	Native Transplant
	Fishes	Clupeidae	<i>Alosa sapidissima</i>	collection info maps fact sheet	American shad	Freshwater-Marine	Native Transplant
	Fishes	Centrarchidae	<i>Ambloplites rupestris</i>	collection info maps fact sheet	rock bass	Freshwater	Native Transplant
	Fishes	Ictaluridae	<i>Ameiurus catus</i>	collection info maps fact sheet	white catfish	Freshwater	Native Transplant
	Fishes	Ictaluridae	<i>Ameiurus melas</i>	collection info maps fact sheet	black bullhead	Freshwater	Native Transplant
	Fishes	Ictaluridae	<i>Ameiurus natalis</i>	collection info maps fact sheet	yellow bullhead	Freshwater	Native Transplant
	Fishes	Ictaluridae	<i>Ameiurus nebulosus</i>	collection info maps fact sheet	brown bullhead	Freshwater	Native Transplant



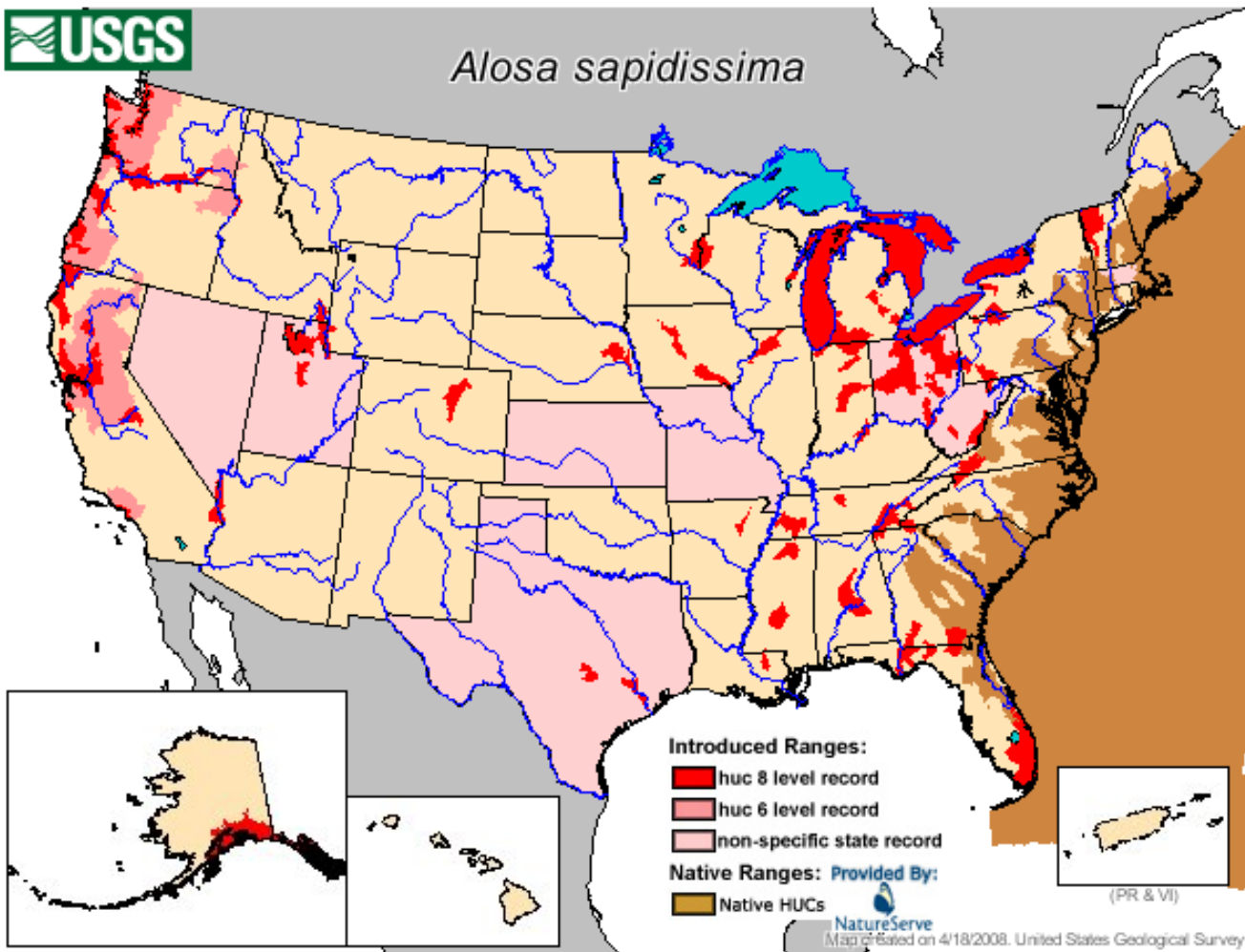
Alosa sapidissima

(American shad)
Fishes
Native Transplant

- collection info
- maps
- fact sheet



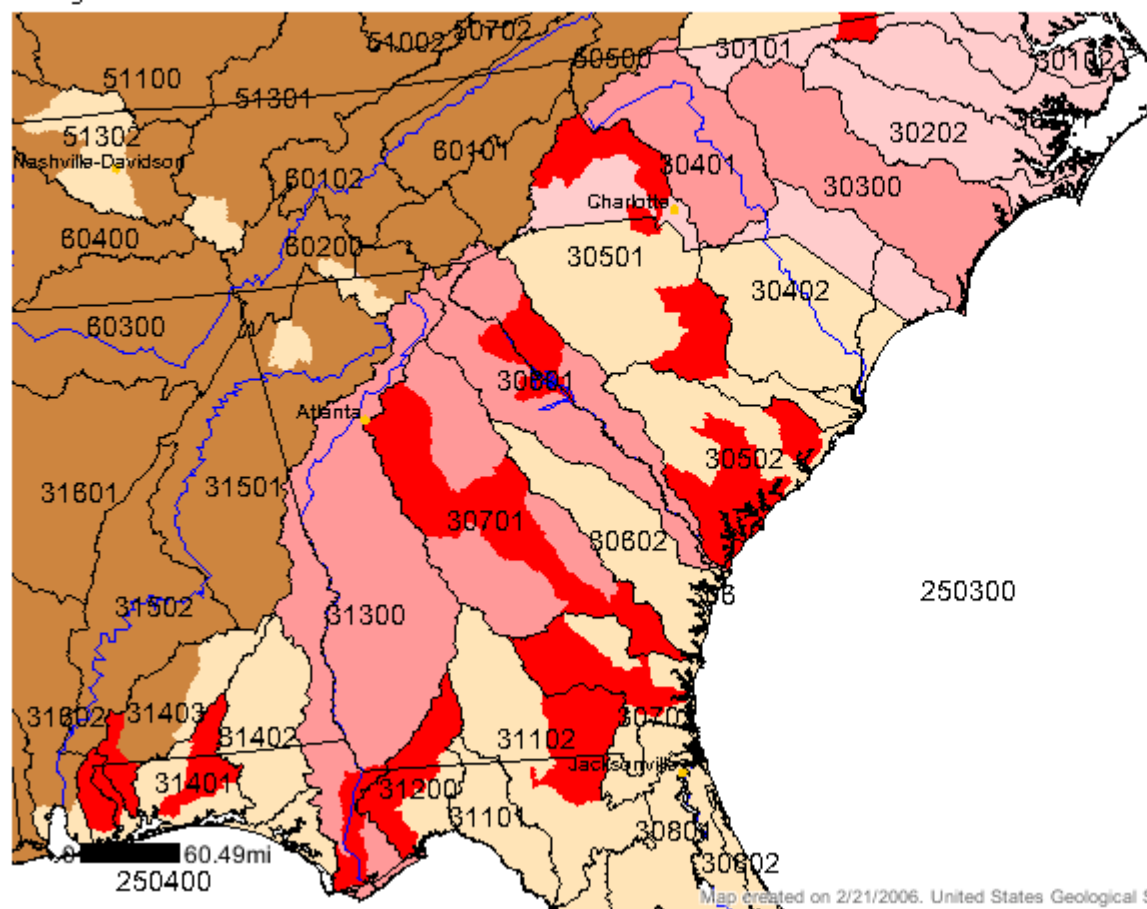
Alosa sapidissima



Interactive

Mapped collection data for *Pyloodictis olivaris*

Navigation: ZoomIn ZoomOut Pan



Get Collections in Area:

- State
- [HUC6](#)
- [HUC8](#)

After selecting one of the above, click a shaded area on the map. The data will be displayed below the map.)

Show Layers:

- Major Cities
- All Cities
- Interstates
- Counties
- [HUC6 Numbers and Borders](#)
- [HUC8 Numbers and Borders](#)

Other interactive maps:

- Hawaii
- Alaska
- Puerto Rico

Collections

23 Results for *Alosa sapidissima* (American shad) in OR
[click here for the full listing in all states](#)

Specimen ID#	State	County	Locality	Year	HUC Number	Drainage Name	Status
40441	OR		Columbia River	1876	17080000	Lower Columbia	established
40420	OR	Curry/Josephine	Rogue River	1883	17100300	Southern Oregon Coastal	established
40443	OR		Columbia River	1885	17080000	Lower Columbia	established
40414	OR	Multnomah	Willamette River at Portland	1885	17090012	Lower Willamette	established
40415	OR	Linn	Willamette River at Albany	1886	17090003	Upper Willamette	failed
40442	OR		Columbia River	1886	17080000	Lower Columbia	established
40419	OR	Coos	Coquille River	1889	17100305	Coquille	established
40422	OR	Hood River	The Dalles on the Columbia River	1893	17070105	Middle Columbia-Hood	established
40424	OR	Columbia	Columbia River at Cowlitz River	1896	17080003	Lower Columbia-Clatskanie	established
40425	OR		Off Knappton (=Knapp?)	1896	17080006	Lower Columbia	established
40426	OR	Columbia	Columbia River off Cottonwood Island near the mouth of the	1896	17080003	Lower Columbia-Clatskanie	established
40421	OR		Columbia River as far up as the Cascades, 150 miles from the mouth	1896	17000000	Pacific Northwest	established
40416	OR	Curry/Josephine	Rogue River	1896	17100300	Southern Oregon Coastal	established
40417	OR		Columbia River	1896	17080000	Lower Columbia	established
160483	OR	Coos	Coos Bay	1942	17100304	Coos	established
160484	OR		Rogue River	1942	17100310	Lower Rogue	established
160485	OR	Lincoln	Yaquina Bay [Newport, OR]	1942	17100204	Siletz-Yaquina	established
40470	OR		whole coast of OR	1976	17100000	Oregon-Washington Coastal	established



Fact Sheets



Pomacanthus asfur (Forsskål 1775)

Common Name: Arabian angel

Taxonomy: available through 

Size: 40.0 cm TL.

Native Range: Western Indian Ocean: Red Sea and the Gulf of Aden. Reef-associated, marine (FishB).

Nonindigenous Occurrences: A specimen was seen and photographed off Boca Raton, **FL** (REEF 2002). A second was photographed off Dania, Broward County, Florida (REEF 2002).

Means of Introduction: Aquarium release.

Status: Reported in Florida.

Impact of Introduction: Unknown.

Remarks: A prized species in the marine aquarium trade.

References

Courtenay, W.R., Jr. 1995. Marine fish introductions in southeast American Fisheries Society 14(1):2-3.

The Reef Environmental Education Foundation (REEF). 2002. Exot <http://www.reef.org/exotic>.

References

Atlantis Charters. 2002. Lionfish in North Carolina. Atlantis Charters.

Anonymous. 2002. Lionfish off Georgia coast experts surprised. DiveNews.com. February 11, 2002.

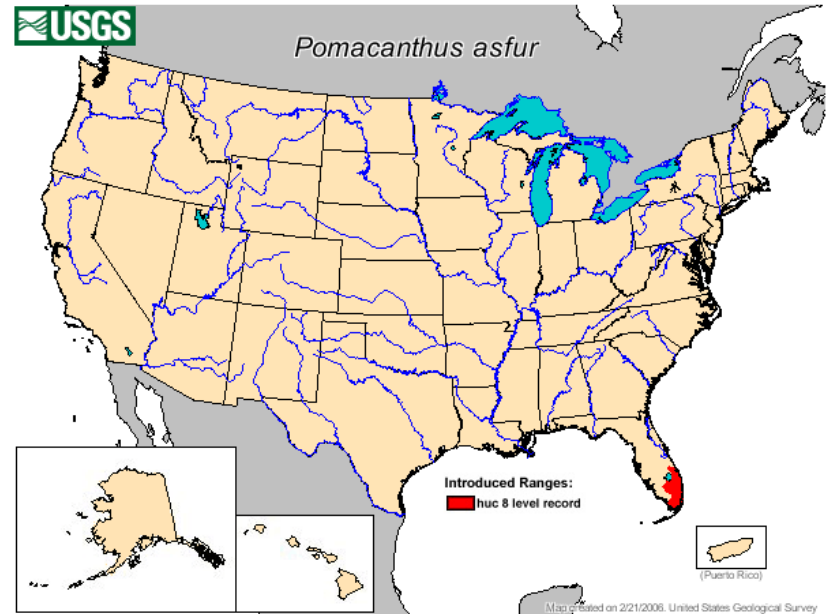
Bernadsky, G. and D. Goulet. 1991. A natural predator of the lionfish, *Pterois miles*. Copeia 1991: 230-231.

Courtenay, W.R., Jr. 1995. Marine fish introductions in southeastern Florida. Newsletter of the Introduced Fish Section, American Fisheries Society 14(1):2-3.

Fishelson, L. 1975. Ethology and reproduction of pteroid fishes found in the Gulf of Aqaba (Red Sea), especially *Dendrochirus brachypterus* (Cuvier), (Pteroidae, Teleostei). Pubblicazioni della Stazione zoologica di Napoli 39: 635-656.

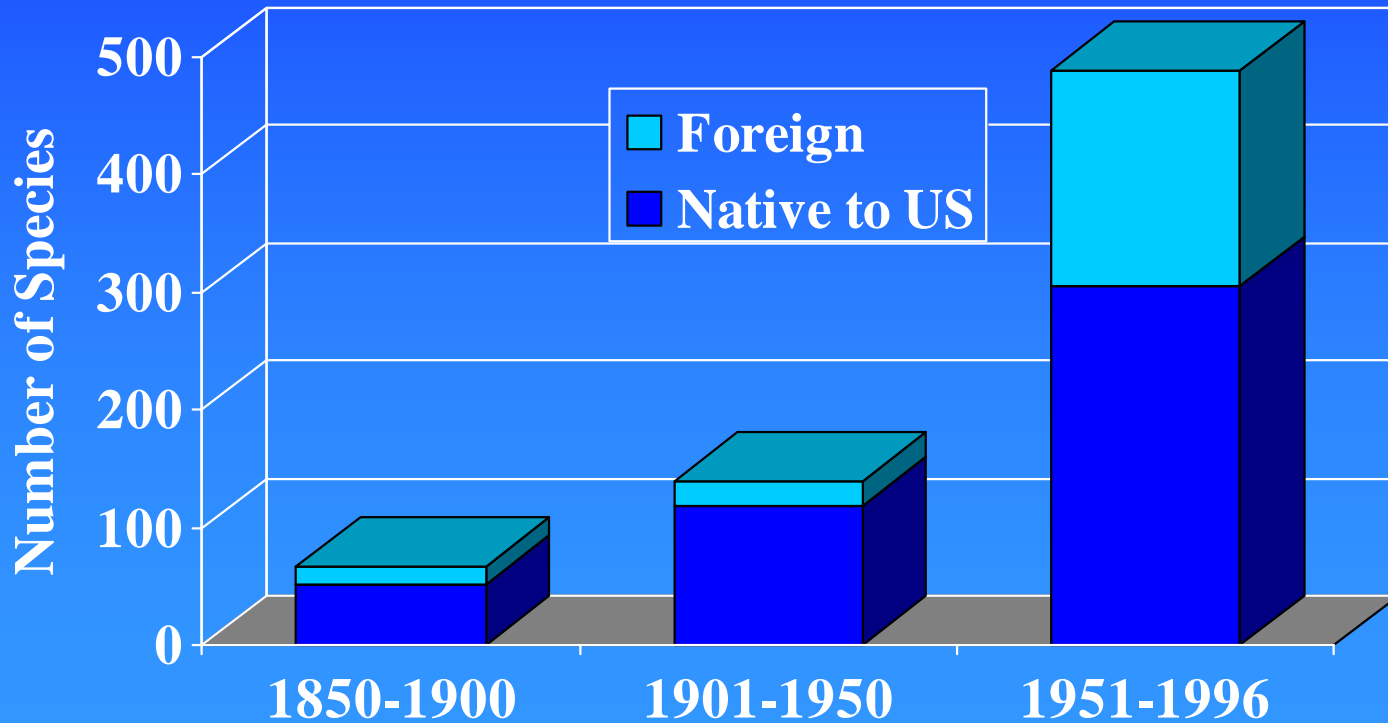
Fishelson, L. 1997. Experiments and observations on food consumption, growth and starvation in *Dendrochirus brachypterus* and *Pterois volitans* (Pteroinae, Scorpaenidae). Environmental Biology of Fishes 50: 391-403.

Golani, D. and O. Sonin. 1992. New records of the Red Sea fishes *Pterois miles* (Scorpaenidae) and *Pteragogus pelycus* (Labridae) from the Eastern Mediterranean Sea. Japanese Journal of Ichthyology 39: 167-169.

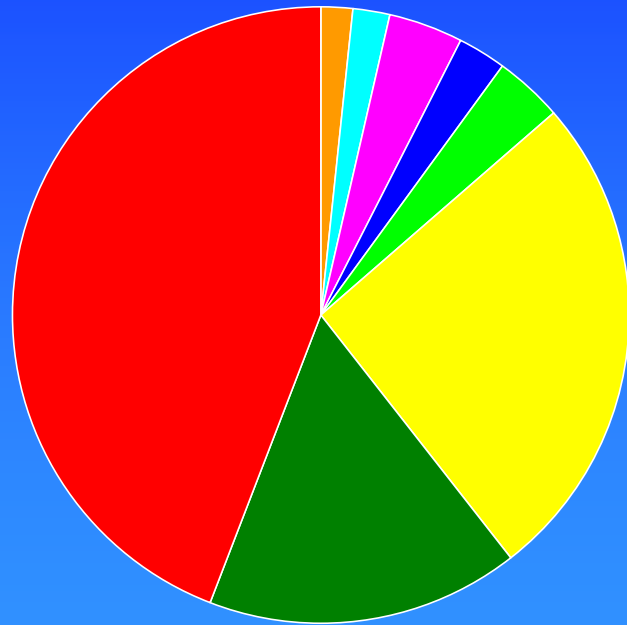
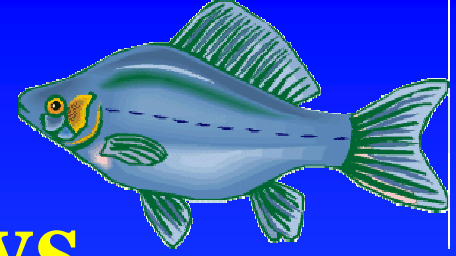


Interactive maps: [Continental US](#), [Hawaii](#), [Puerto Rico](#)

Cumulative Number of Fish Species Introduced in the United States

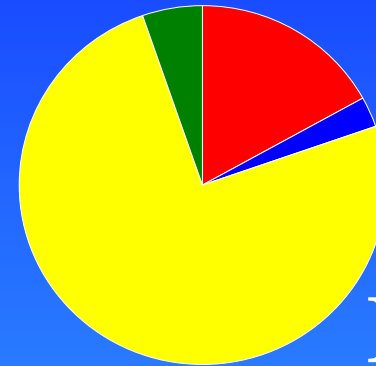


Comparison of Fish Introduction Pathways

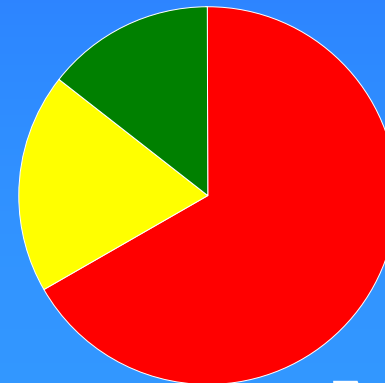


U.S.

- Ballast Water
- Biocontrol
- Unknown
- Misc.
- Conservation
- Aquarium Release
- Bait Release
- Stocked For Sport

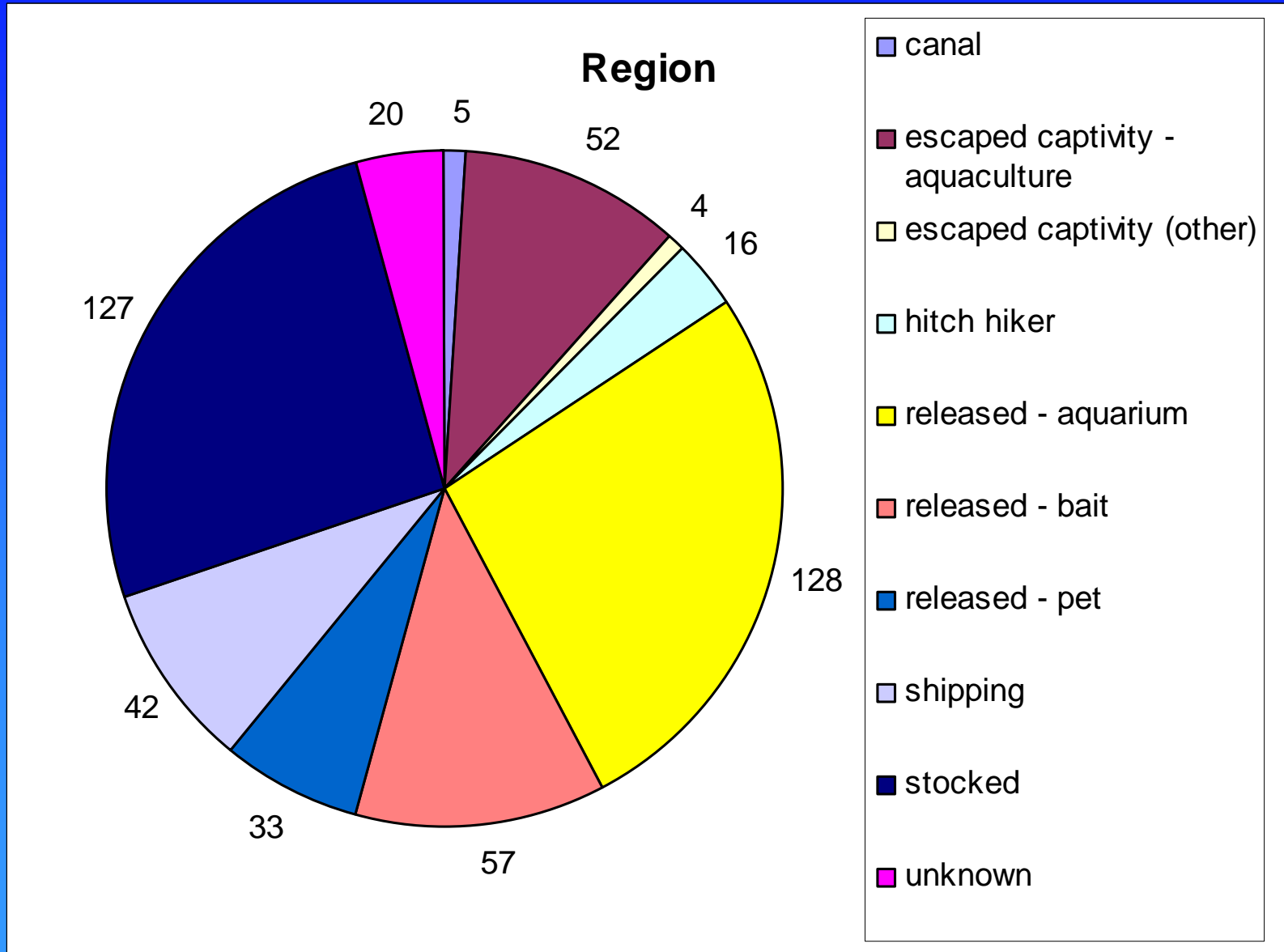


Florida



Montana

All Taxa in Southeast





NAS Alert System

Nonindigenous Aquatic Species Program





The banner features a map of the United States with state abbreviations. Overlaid on the map is the text "NAS Alert System" in a large, red, serif font. Below the map, the text "Nonindigenous Aquatic Species Program" is written in a smaller, green font. To the right of this text is the USGS logo, which consists of a green square with white wavy lines and the letters "USGS" in green. At the bottom of the banner, there is a navigation bar with four buttons: "NAS Home", "Alerts Archive", "Register", and "Login". On the left side of the banner, there is a small icon of a hand pointing to the right. On the right side, there is a circular inset image showing a person looking at a computer screen.

[NAS Home](#) [Alerts Archive](#) [Register](#) [Login](#)

STATE WATCH (?)



GROUP WATCH (?)



SPECIES WATCH (?)



BONUS ALERTS (?)

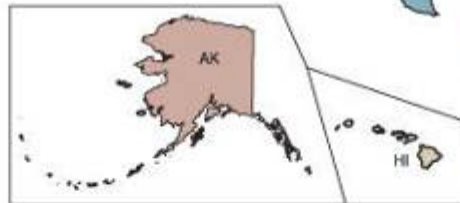


STATE WATCH (?)



Please alert me when:
a new nonindigenous species is found in the following states :

- Alabama
- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Florida
- Georgia
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Pennsylvania
- Puerto Rico
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virgin Islands
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming



[all](#), [none](#)

Regions: [New England](#), [Mid-Atlantic](#), [South](#), [Midwest](#), [Southwest](#), [West](#)
 Coastal: [Atlantic](#), [Gulf of Mexico](#), [Pacific](#), [Great Lakes](#)

Group Watch

GROUP WATCH (?)



Please alert me when a **nonindigenous species** from the following group(s) is found for the first time in the United States, or is found in a new area (state, huc8, or county):

Vertebrates:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Amphibians-Frogs | <input checked="" type="checkbox"/> Reptiles-Crocodilians |
| <input type="checkbox"/> Amphibians-Salamanders | <input type="checkbox"/> Reptiles-Lizards |
| <input checked="" type="checkbox"/> Fishes | <input type="checkbox"/> Reptiles-Snakes |
| <input type="checkbox"/> Mammals | <input checked="" type="checkbox"/> Reptiles-Turtles |

Invertebrates:

- | | | | |
|--|--|---|---|
| <input type="checkbox"/> Annelids-Oligochaetes | <input type="checkbox"/> Crustaceans-Cladocerans | <input checked="" type="checkbox"/> Crustaceans-Shrimp | <input type="checkbox"/> Nebaliaceans |
| <input type="checkbox"/> Annelids-Polychaetes | <input type="checkbox"/> Crustaceans-Copepods | <input type="checkbox"/> Cumaceans | <input type="checkbox"/> Polyplacophors |
| <input checked="" type="checkbox"/> Coelenterates-Anthozoon | <input checked="" type="checkbox"/> Crustaceans-Crabs | <input type="checkbox"/> Ectoprocts | <input type="checkbox"/> Sponges |
| <input checked="" type="checkbox"/> Coelenterates-Hydrozoans | <input checked="" type="checkbox"/> Crustaceans-Crayfish | <input type="checkbox"/> Entoprocts | <input checked="" type="checkbox"/> Tunicates |
| <input checked="" type="checkbox"/> Coelenterates-Scyphozoon | <input type="checkbox"/> Crustaceans-Isopods | <input checked="" type="checkbox"/> Mollusks-Bivalves | |
| <input type="checkbox"/> Crustaceans-Amphipods | <input type="checkbox"/> Crustaceans-Lobsters | <input checked="" type="checkbox"/> Mollusks-Gastropods | |
| <input type="checkbox"/> Crustaceans-Barnacles | <input type="checkbox"/> Crustaceans-Ostracods | <input type="checkbox"/> Mollusks-Nudibranchs | |
| | <input type="checkbox"/> Crustaceans-Mysids | <input type="checkbox"/> Mollusks-Cephalopods | |

Species Watch


SPECIES WATCH (?)



Please alert me when

These specific species expand their range (into a new state, a new drainage (HUC8), or new county within a state)

- [Northern Snakehead](#) (*Channa argus*)
- [Black Carp](#) (*Mylopharyngodon piceus*)
- [Silver Carp](#) (*Hypophthalmichthys molitrix*)
- [Bighead Carp](#) (*Hypophthalmichthys nobilis*)
- [Round Goby](#) (*Neogobius melanostomus*)
- [Zebra Mussel](#) (*Dreissena polymorpha*)
- [Ruffe](#) (*Gymnocephalus cernuus*)

New ▾ Reply ▾ Forward Move ▾ Add Sender... Print Delete Close 

From: <NAS_Alerts@usgs.gov>
To: pam_fuller@usgs.gov
Date: Thursday, October 21, 2004 03:18PM
Subject: NAS Species Alert - Mytella charruana

An alert has been generated that matched your criteria from the [Nonindigenous Aquatic Species database](#):

***Mytella charruana* (Charru mussel)** was found in a new **County, Drainage**

Details:

State: FL

County: Volusia

Drainage: Cape Canaveral (3080202)

Location: Mosquito Lagoon, off the University of Central Florida's research facility dock (Fellers House Field Station)

More information on this specimen can be found:

<http://nas.er.usgs.gov/queries/specimenviewer.asp?SpecimenID=161140>

More information on this species can be found:

<http://nas.er.usgs.gov/queries/SpResults.asp?SpeciesID=106>

This is an auto-generated e-mail from the US Geological Survey - Nonindigenous Aquatic Species database
If you no longer wish to receive alerts, please visit: <http://nas.er.usgs.gov/AlertSystem/unregister.asp>

FILTER ALERT RESULTS:

Group:


In State:


Dates Between: and


Sort by:

ARCHIVE



The 10 Most recent alerts available in 

total of **594** alerts match your criteria. Click on the dipnet  to get details about the collection.

	Date	Species	New Area:
Bonus	 3/31/2008	quagga mussel <i>Dreissena rostriformis bugensis</i>	County: San Diego (CA) new lake, although previously reported in this county and drainage.
	 3/14/2008	parrot-feather <i>Myriophyllum aquaticum</i>	Drainage: Grays Harbor (17100105)
	 3/14/2008	goldfish <i>Carassius auratus</i>	Drainage: Lower Maumee (4100009)
	 3/13/2008	water-lettuce <i>Pistia stratiotes</i>	County: Charles (MD) Drainage: Lower Potomac (2070011)
	 3/12/2008	pirapatinga, red-bellied pacu <i>Piaractus brachipomus</i>	Drainage: Cape Canaveral (3080202)
	 3/10/2008	gizzard shad <i>Dorosoma cepedianum</i>	County: Coconino (AZ) Drainage: Grand Canyon (15010002)
	 3/10/2008	grass carp <i>Ctenopharyngodon idella</i>	County: Broward (FL)
	 3/6/2008	New Zealand mudsnail <i>Potamopyrgus antipodarum</i>	County: Alameda (CA) Drainage: San Francisco Bay (18050004)
	 3/6/2008	New Zealand mudsnail <i>Potamopyrgus antipodarum</i>	Drainage: Sacramento headwaters (18020005)
	 3/6/2008	New Zealand mudsnail <i>Potamopyrgus antipodarum</i>	County: Box Elder (UT) Drainage: Northern Great Salt Lake Desert (16020308)
	 3/6/2008	New Zealand mudsnail <i>Potamopyrgus antipodarum</i>	Drainage: Shoshone (10080014)
Bonus	 2/28/2008	Yellow Anaconda <i>Eunectes notaeus</i>	County: (FL)

NISbase Overview

- A distributed database system
- Developed by USGS/NAS and SERC
- Works like Expedia
- Fact Sheets and Collections Records
- Uses XML technology

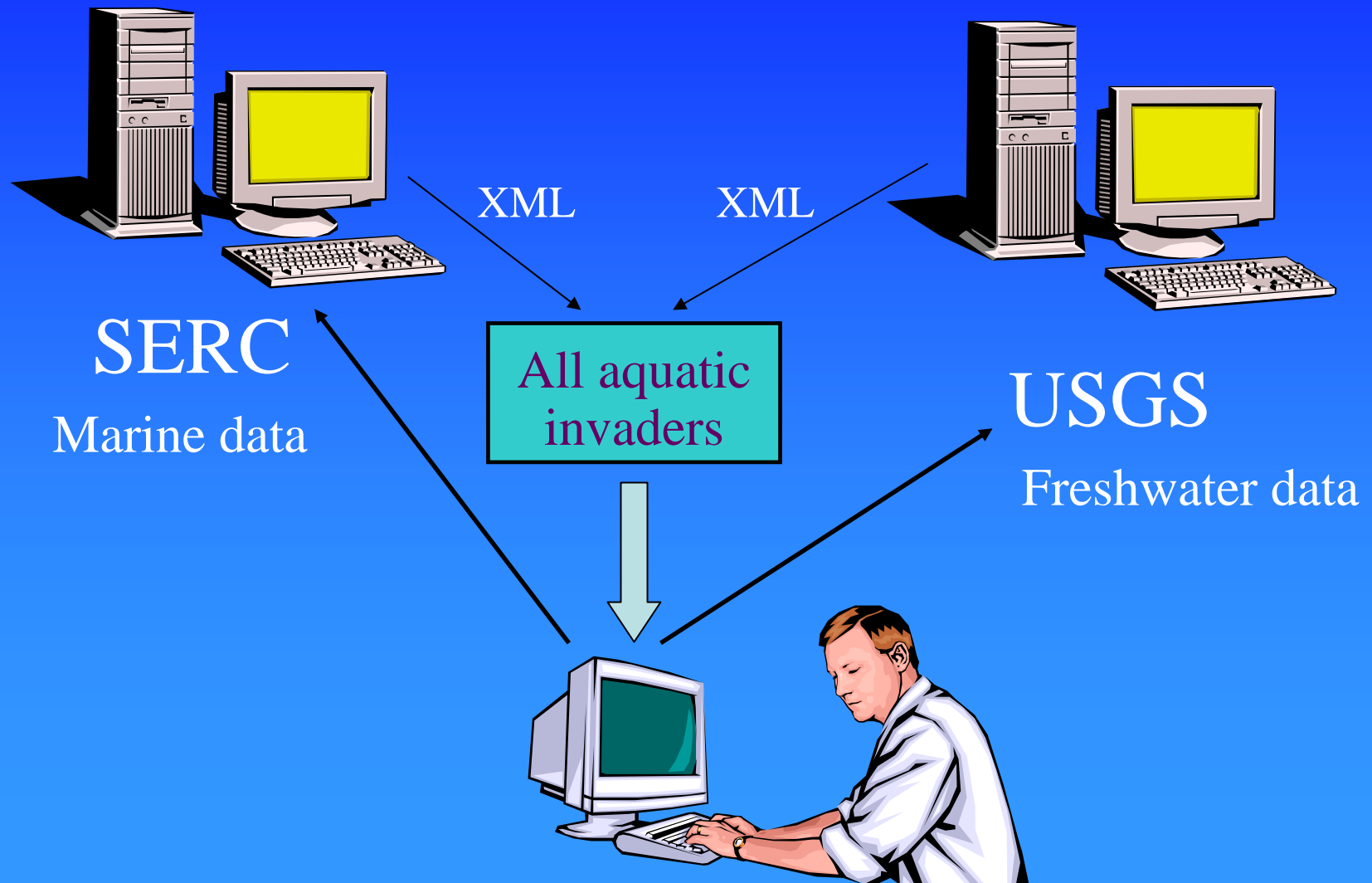


Smithsonian Environmental
Research Center



<http://nisbase.org>

Database Integration





New Search Options

[Standard Search](#)

[Advanced Species Search](#)

[Reference Search](#)

Generate a Species List from the NISbase Distributed Database System.

Select your criteria below. A list of species that matches your criteria will be generated. Links to species factsheets and collection records will be included..

Group: **State:**

Genus: **Species:**

Common Name:

Records per source*:

Select the participating database(s) you wish to include in the search.

- [NAS Database \(Nonindigenous Aquatic Species Database\)](#)
- [Chesapeake Bay Exotic Marine and Estuarine Species Information System](#)
- [Nonindigenous Species in the Gulf of Mexico Ecosystem](#)
- [NIMPIS \(National Introduced Marine Pest Information System\)](#)
- [Introduced Marine Species of Hawaii Guidebook](#)
- [CIESM Atlas of Exotic Species in the Mediterranean Sea](#)
- [Guide to the Exotic Species of San Francisco Bay](#)

Search tips:

You may use this form to search for any part of a word.

Example: Common Name = "turtle" will return all species with the word "turtle" in the common name..

*The maximum number of records returned per source. It is best to try and be as specific as possible with your search criteria.

NISBase is a distributed database providing information concerning nonindigenous species. Through this site, users can access information on taxonomy, life history, native and introduced ranges, photos, maps, and impacts of aquatic species introduced around the world.

Results of Distributed Non-indigenous Aquatic and Marine Species Query

Data Source: USGS-NAS SERC-ChesDB GSMFC-NIS
 Records Returned: 18 4 4
F C
[Species Summary Link](#) [Collection Records Link](#)

<u>Group</u>	<u>Scientific Name</u>	<u>Common Name(s)</u>	<u>USGS-NAS</u>	<u>SERC-ChesDB</u>	<u>GSMFC-NIS</u>
Crustaceans					
	<i>Loxothylacus panopaei</i>	Mud Crab Parasitic Barnacle		F	
Crustaceans-Crabs					
	<i>Atergatopsis immigrans</i>	crab	C		
	<i>Callinectes bocourti</i>	Red blue crab	C		
	<i>Callinectes sapidus</i>	blue crab	C		
	<i>Carcinus maenas</i>	green crab	C	F	
	<i>Charybdis hellerii</i>	an Indo-Pacific crab	C		F
	<i>Eriocheir japonicas</i>	Japanese mitten crab	C		
	<i>Eriocheir sinensis</i>	Chinese mitten crab	C		F
	<i>Geothelphusa dehaani</i>	a freshwater crab	C		
	<i>Glabropilumnus seminudus</i>	crab	C		
	<i>Hemigrapsus sanguineus</i>	Asian shore crab	C	F	
	<i>Panopeus herbstii</i>	Atlantic mud crab	C		
	<i>Panopeus pacificus</i>	crab	C		
	<i>Petrolisthes armatus</i>	green porcelain crab	C		
	<i>Platychoirapsus spectabilis</i>	saber crab	C		F
	<i>Rhithropanopeus harrisi</i>	Harris mud crab	C		
	<i>Schizophrys aspera</i>	decorator crab	C		

[Search NISbase](#) [About NISbase](#)**Data Source:** USGS-NAS SERC-ChesDB GSMFC-NNAS NIMPIS**Records Returned:** 21 2 4 3[Species Fact Sheet Link](#)[Collection Records Link](#)[Google Images Link](#)[ITIS Taxonomy Link](#)

Group	Scientific Name	Common Name(s)	USGS-NAS	SERC-ChesDB	GSMFC-NNAS	NIMPIS
Crustaceans-Crabs						
Google	<i>Atergatopsis immigrans</i>	crab				
Google	<i>Callinectes bocourti</i>	Red blue crab				
Google	<i>Callinectes exasperatus</i>	rugose swimming crab				
Google	<i>Callinectes sapidus</i>	blue crab				
Google	<i>Carcinus maenas</i>	green crab				
Google	<i>Charybdis hellerii</i>	an Indo-Pacific crab				
Google	<i>Eriocheir japonicas</i>	Japanese mitten crab				
Google	<i>Eriocheir sinensis</i>	Chinese mitten crab				
Google	<i>Geothelphusa dehaani</i>	a freshwater crab				
Google	<i>Glabropilumnus seminudus</i>	crab				
Google	<i>Hemigrapsus sanguineus</i>	Asian shore crab				
Google	<i>Metacarcinus novaezealandiae</i>	Pie-crust crab				
Google	<i>Nanosesarma minuta</i>					
Google	<i>Pachygrapsus fakaravensis</i>	Polynesian grapsid crab				

Results of Distributed Non-indigenous Aquatic and Marine Species Query

Data Source: USGS-NAS GSMFC-NIS
 Records Returned: 20 20
F **C**
 Species Summary Link Collection Records Link

<u>Group</u>	<u>Scientific Name</u>	<u>Common Name(s)</u>	<u>USGS-NAS</u>	<u>GSMFC-NIS</u>
Fishes				
	<i>Alosa sapidissima</i>	American shad	F C	
	<i>Ameiurus melas</i>			C
	<i>Ameiurus nebulosus</i>	brown bullhead	F C	
	<i>Astronotus ocellatus</i>	oscar	F C	
	<i>Astyanax mexicanus</i>	Mexican tetra	F C	
	<i>Carassius auratus</i>	goldfish	F C	F C
	<i>Cichlasoma cyanoguttatum</i>	Rio Grande cichlid	F C	
	<i>Colossoma or Piaractus sp.</i>	unidentified pacu	C	
	<i>Ctenopharyngodon idella</i>	grass carp	F C	F C
	<i>Cyprinella lutrensis</i>			C
	<i>Cyprinodon variegatus</i>			C
	<i>Cyprinus carpio</i>	koi	F C	F C
	<i>Dorosoma petenense</i>			C
	<i>Esox niger</i>			C
	<i>Fundulus chrysotus</i>			C
	<i>Fundulus grandis</i>			C
	<i>Gambusia affinis</i>			C
	<i>Hybopsis winchelli</i>			C
	<i>Hypophthalmichthys molitrix</i>	silver carp	F C	F C
	<i>Hypophthalmichthys nobilis</i>	bighead carp	F C	F C

GISIN

Global Invasive Species Information Network

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GISIN Data Providers Workshop, 2-5 June, 2008

- Ministère de l'Agriculture, Direction de la Protection des Vegetaux **Morocco**
- Invasive Species Specialist Group, Species Survival Commission, IUCN-The World Conservation Union
New Zealand
- Ministry of Agriculture; Center for Management of Invasive Alien Species **China**
- Global Biodiversity Information Facility **Denmark**
- Atlas of Living Australia **Australia**
- CAB International-South East Asia Regional Centre; ASEA **Malaysia**
- Federal Biological Research Centre **Germany**
- National Biological Information Infrastructure; US Geological Survey **United States**
- BioNET-INTERNATIONAL **Great Britain**
- Wildlife Conservation Society China Program **China**
- Global Invasive Species Programme; Universidad Nacional del Sur **Argentina**

Request:

```
http://example.org/service.php?op=search&Model=BioStatus
&ScientificName=Tamarix&CountryCode=USA&Presence=Present&Harmful=Yes
```

Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <header>
    <source accesspoint="http://example.org/GISIN.asp"
      sendtime="2005-11-11T12:23:56"/>
  </header>
  <search>
    <records>
      <record>
        <scientificName>Tamarix ramossissima</scientificName>
        <countryCode>USA</countryCode>
        <presence>Present</presence>
        <origin>Indigenous</origin>
        <harmful>Yes</harmful>
      </record>
    </records>
    <summary start="0" totalReturned="1"/>
  </search>
</response>
```

Database Integration



What we say:

Nonindigenous

Invasive

Weed

Invader

Alien

Nuisance

Exotic

Pest

Organism - Area - Time

What we mean:

Origin - Indigenous, Nonindigenous, Unknown

Presence - Absent, Sometimes, Present, Unknown

Persistence - Persistent, Temporary, Transient, DiedOut, Unknown

Distribution - Widespread, Moderate, Localized, Unknown

Abundance - Monoculture, Dominant, Common, Rare, Zero, Unknown

Trend - Expanding, Stable, Declining, Unknown

Rate Of Spread - Rapid, Moderate, Slow, Unknown

Harmful - Yes, No, Potentially, Unknown

Regulatory Listing - Prohibited, Restricted, NotConsidered, Unknown

