GLANSIS

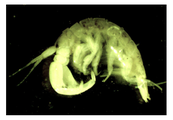
GREAT LAKES AQUATIC NONINDIGENOUS SPECIES INFORMATION SYSTEM

www.glerl.noaa.gov/glansis

The GLANSIS Watchlist

Bristle worm
Hypania invalida
Mike Dobson - APEM

Branching bryozoan
Fredericella sultana
Michiel van der Waaij

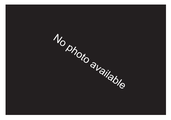

Lake amphipod
Apocorophium lacustre
Trent Henry & Gabrielle Habeeb

Caspian mud shrimp
Chelicorophium curvispinum
Silvia Waajen

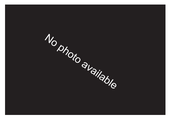
Demon shrimp
Dikerogammarus haemobaphes
NOAA GLERL

Killer shrimp
Dikerogammarus villosus
Dr. Michal Grabowski

Amphipod
Echinogammarus warpachowskyi



Thick scud
Obesogammarus crassus



Amphipod
Obesogammarus obesus

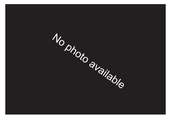
Amphipod
Pontogammarus robustoides
Dr. Michal Grabowski

Tanaid crustacean
Sinelobus stanfordi
David M Knott

Water flea
Daphnia cristata

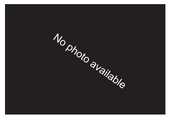
Water flea
Cornigerius maeoticus maeoticus

Water flea
Podonevadne trigona ovum

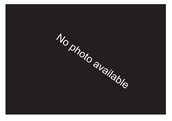


Cyclopoid copepod
Cyclops kolensis

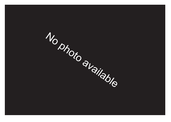
Harpacticoid copepod
Ectinosoma abrau
A.I. Naberezhny



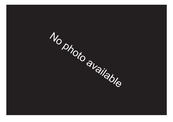
Harpacticoid copepod
Paraleptastacus spinicaudus



Calanoid copepod
Calanipeda aquaedulcis



Calanoid copepod
Heterocope appendiculata



Calanoid copepod
Heterocope caspia

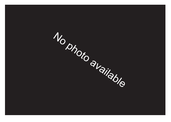
Harris mud crab
Rhithropanopeus harrisii
D.E. Keith

Yabby
Cherax destructor
Daiju Azuma

Caspian slender shrimp
Limnomysis benedeni
Patrick Steinmann

Opossum shrimp
Paramysis intermedia
Daneliya & Petryashov

Opossum shrimp
Paramysis ullskyi
Mikhail Daneliya



Lake Opossum shrimp
Paramysis lacustris

Big-scale sand smelt
Atherina boyeri
Massimiliano Marcelli

Northern snakehead
Channa argus
Maryland DNR

Caspian Sea sprat
Clupeonella cultriventris
Yuriy Kvach

European bullhead
Cottus gobio
Hans Hillewaert

Bleak
Alburnus alburnus
David Perez

Crucian carp
Carassius carassius
Akos Harka

Grass carp
Ctenopharyngodon idella
USGS

Steelcolor shiner
Cyprinella whipplei
Noel M. Burkhead - USGS

Silver carp
Hypophthalmichthys molitrix
Department of Fisheries and Allied Aquacultures - Auburn University

Bighead carp
Hypophthalmichthys nobilis
Amy Benson - USGS

Ide
Leuciscus idus
Steffen Zienert

Eurasian dace
Leuciscus leuciscus
Piet Spaans

Eurasian minnow
Phoxinus phoxinus
Karel Jakubec

Topmouth Gudgeon
Pseudorasbora parva
Seotaro

Roach
Rutilus rutilus
Karel Jakubec

Racer goby
Babka gymnotrachelus
Yuriy Kvach

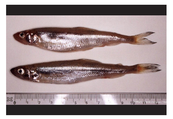
Starry goby
Benthophilus stellatus
Vasile Otel - Danube Delta National Institute for Research and Development

Caucasian dwarf goby
Knipowitschia caucasica
Vasile Otel - Danube Delta National Institute for Research and Development

Monkey goby
Neogobius fluviatilis
Yuriy Kvach

Blue catfish
Ictalurus furcatus
Source Unknown

Amur sleeper
Perccottus glenii
Petrtyl


Smelt
Osmerus eperlanus
Andrew Marriott

Eurasian perch
Perca fluviatilis
Karel Jakubec

Zander
Sander lucioperca
eLNuko

Chum salmon
Oncorhynchus keta
E.R. Keeley

Sheatfish
Silurus glanis
Dieter Florian

Shortsnouted pipefish
Syngnathus abaster
Giacomo Radi

Colored lagoon cockle
Hypanis colorata
The MUSSEL project (http://mussel-project.uwsp.edu)

Golden Mussel
Limnoperna fortunei
Darrigran G. - National University of La Plata, Argentina

Indian hygrophila
Hygrophila polysperma
Pinpin

Water lettuce
Pistia stratiotes
Leslie J. Mehrhoff - University of Connecticut, Bugwood.org

Swamp stonecrop
Crassula helmsii
Ashley Balsam

Parrot feather
Myriophyllum aquaticum
André Karwath

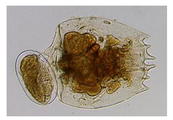
Brazilian waterweed
Egeria densa
Mike Pursley

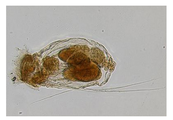
Hydrilla
Hydrilla verticillata
Colette Jacono - USGS

Water soldier
Stratiotes aloides
Jörg Hempel

Water hyacinth
Eichhornia crassipes
Jo O'Keefe

Leo
Leyogonimus polyoon
USGS - National Wildlife Health Center


Rotifer
Brachionus leydigii
Jersabek, C.D., H. Segers, and P.J. Morris, Academy of Natural Sciences of Philadelphia


Rotifer
Filinia passa
Jersabek, C.D., H. Segers, and P.J. Morris, Academy of Natural Sciences of Philadelphia

Rotifer
Filinia cornuta
Michael Plewka, plingfactory

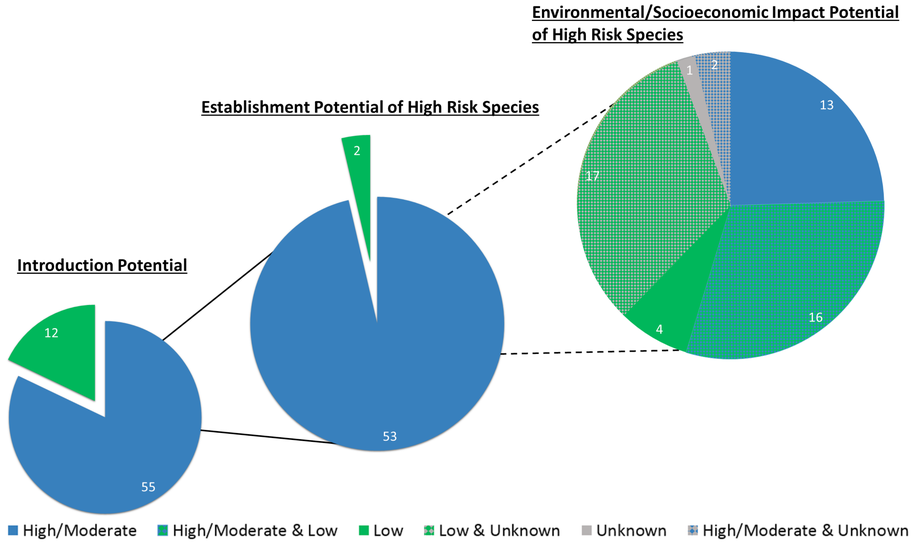
GLANSIS The Watchlist: Future invaders of the Great Lakes

The Watchlist provides information and risk assessments necessary to:

- Guide early detection and rapid response efforts.
- Develop comprehensive policies that address multiple species and pathways.
- Prioritize monitoring efforts based on the relative threat of organisms in certain pathways.

Risk Assessment: Key Findings

- 53 of the 67 Watchlist species considered to be high-to-moderate risks of introduction and establishment (hereafter "High Risk Species").
- 13 of the 53 High Risk Species anticipated to have significant socioeconomic and environmental impacts.
- 19 of the 53 High Risk Species with at least one unknown impact.



"High Risk Species" refers to Watchlist species with a high-to-moderate potential for introduction and establishment in the Great Lakes basin. High and moderate ratings were aggregated into one category for this figure (High/Moderate). Solid colors represent species that have equally scored potentials for environmental and socioeconomic impacts (e.g. The solid green slice indicates species with Low Environmental AND Low Socioeconomic impact potentials). Patterned-colors represent species that have unequal environmental and socioeconomic impact potentials (e.g. The blue/green patterned-slice indicates species that have the potential for High/Moderate environmental impact with Low socioeconomic impact OR Low environmental impact with High/Moderate socioeconomic impact).

GLANSIS NEEDS YOUR VERIFIED REPORTS!

Send reports to:

nas.er.usgs.gov/SightingReport.aspx

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