GLANSIS

GREAT LAKES AQUATIC NONINDIGENOUS SPECIES INFORMATION SYSTEM

www.glerl.noaa.gov/glansis

Some of the ~~180~~ ~~182~~ ~~184~~ 187 Non-Native Species Established in the Great Lakes

Sea lamprey *Petromyzon marinus* EPA
Rudd *Scardinius erythrophthalmus* N. Burkhead - USGS
Shortnose gar *Lepisosteus platostomus* USFWS
Rainbow smelt *Osmerus mordax* W. Nelson-Stastny
Alewife *Alosa pseudoharengus* Maryland DNR
Kokanee *Oncorhynchus nerka* NOAA NMFS
Coho salmon *Oncorhynchus kisutch* USFWS
White perch *Morone americana* D. Facey
Round goby *Neogobius melanostomus* D. Jude
Orangespotted sunfish *Lepomis humilis* G. Sneegas, USGS
Oriental weatherfish *Misgurnus anguillicaudatus* N. Burkhead - USGS
Redear sunfish *Lepomis microlophus* Wikimedia
Suckermouth minnow *Phenacobius mirabilis* USGS
Rainbow/steelhead trout *Oncorhynchus mykiss* WI DNR
Common carp *Cyprinus carpio* NOAA GLERL
Ghost shiner *Notropis buchanani* Texas State Univ.
Bluespotted sunfish *Enneacanthus gloriosus* N. Burkhead - USGS

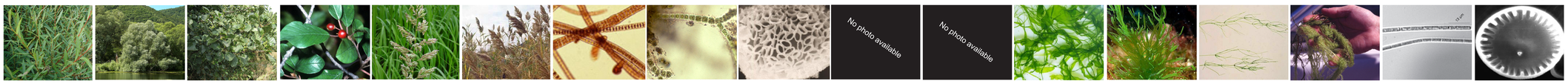
Western mosquitofish *Gambusia affinis* Wikipedia
Goldfish *Carassius auratus* Windsor Aquirre
Tubenose goby *Proterorhinus semilunaris* D. Jude
Chinook salmon *Oncorhynchus tshawytscha* NOAA GLERL
Ruffe *Gymnocephalus cernua* USGS
Bigmouth Buffalo *Ictiobus cyprinellus* Konrad P. Schmidt
Pink salmon *Oncorhynchus gorbuscha* NOAA GLERL
Fourspine stickleback *Apeltes quadracus* M. Gatreau, New Brunswick
Flathead Catfish *Pylodictis olivaris* G. W. Sneegas
Brown trout *Salmo trutta* NOAA
Blueback herring *Alosa aestivalis* Wikimedia
Chain pickerel *Esox niger* R. Barabe
N/A *Thermocyclops crassus* USEPA - Cornell Univ.
Calanoid copepod *Skistodiaptomus pallidus* USGS
Cyclopod copepod *Cyclops strenuus* USGS
Cyclopoid copepod *Megacyclops viridis* USGS
alanoid copepod *Eurytemora affinis* J. Cordell

Harpacticoid copepod *Heteropsyllus* nr. *nunni* USGS
Harpacticoid copepod *Nitokra hibernica* USGS
Harpacticoid copepod *Schizopera borutzkyi* USGS
Harpacticoid copepod *Nitokra incerta*
Parasitic copepod *Salmincola lotae* USGS
Japanese fish louse *Argulus japonicus* USGS
Parasitic copepod *Neoergasilus japonicus* P. Hudson - USGS
Amphipod *Echinogammarus ischnus* C. van Overdijk
Amphipod *Gammarus tigrinus* H. MacIsaac
Bloody red shrimp *Hemimysis anomala* NOAA GLERL
Fishhook waterflea *Cercopagis pengoi* I. Grigorovich
Waterflea *Bosmina coregoni* K. Havens
Waterflea *Eubosmina maritima* USGS
Waterflea *Daphnia galeata galeata* EAWAG
Waterflea *Daphnia lumholtzi* T. Ferro
Spiny waterflea *Bythotrephes longiramus* NOAA GLERL
Red swamp crayfish *Procambarus clarkii* Doloup - Wikimedia

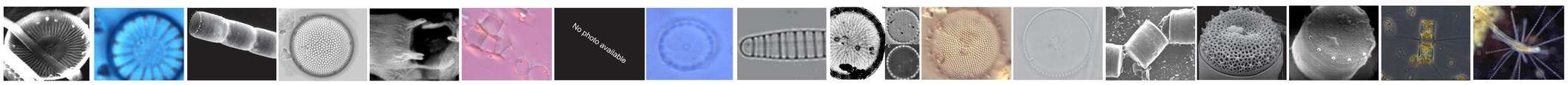
Water chestnut *Trapa natans* L. Mehrhoff - Univ. Conn.
European frogbit *Hydrocharis morsus-ranae* SGNIS
Curlyleaf pondweed *Potamogeton crispus* USGS
European water clover *Marsilea quadrifolia* Wikimedia
Moneywort *Lysimachia nummularia* R. Mohlenbrock
Sweetscent *Pluchea odorata succulenta* M. Plagens - Wikimedia
Marsh thistle *Cirsium palustre* K. Peters - Wikimedia
Marsh fleabane, sweetscent *Pluchea odorata odorata* USDA
Eurasian watermilfoil *Myriophyllum spicatum* MNDNR
Carolina fanwort *Cabomba caroliniana* L. Mehrhoff - Univ. of Conn.
European brooklime *Veronica beccabunga* Wikimedia
Yellow iris *Iris pseudacorus* USGS
Yellow floating-heart *Nymphoides peltata* G. Miller - OR Dept. of Ag.
Water cress *Nasturtium officinale* R. Mohlenbrock
Flattened rush *Juncus compressus* K. Peters - Wikimedia
Rush *Juncus inflexus* P. Houten - Wikimedia
Black-grass rush *Juncus gerardii* USDA

Flowering rush *Butomus umbellatus* Wikipedia
Creeping yellow cress *Rorippa sylvestris* Wikimedia
Western water horehound *Lycopus asper* R. Tatina
European water horehound *Lycopus europaeus* K. Peters - Wikipedia
Lady's thumb *Persicaria maculosa* S. Deway - Utah State Univ.
True forgot-me-not *Myosotis scorpioides* Wikipedia
Water foxtail *Alopecurus geniculatus* Wikimedia
Sedge *Carex disticha* K. Peters - Wikimedia
Swamp sedge *Carex acutiformis* Wikimedia
Brittle naiad *Najas minor* Wikimedia
Spiny naiad *Najas marina* K. Peters - Wikimedia
Poison hemlock *Conium maculatum* W. & W. Follette
Great hairy willow herb *Epilobium hirsutum* P. Utrecht - Wikimedia
Water mint *Mentha aquatica* Wikimedia
Lupine *Lupinus polyphyllus* Wikimedia
Purple loosestrife *Lythrum salicaria* MNDNR
Yellow loosestrife *Lysimachia vulgaris* Wikimedia

Bur reed *Sparganium glomeratum* USFS
Narrow leaved cattail *Typha angustifolia* M. Tu - TNC
Bittersweet nightshade *Solanum dulcamara* Wikimedia
Spearmint *Mentha spicata* Wikimedia
Creeping whorled mint *Mentha gracilis* Wikimedia
Seaside goldenrod *Solidago sempervirens* Wikimedia
Oak-leaved goosefoot *Chenopodium glaucum* Wikimedia
Rough-stalked meadow grass *Poa trivalis* Wikimedia
Redtop *Agrostis gigantea* Wikimedia
Indian balsam *Impatiens glandulifera* Wikimedia
Giant chickweed *Myosoton aquaticum* Kenraiz - Wikimedia
Weeping alkali grass *Puccinellia distans* Wikimedia
Reed manna grass *Glyceria maxima* Wikipedia
Barnyard grass *Echinochloa crusgalli* R. Mohlenbrock
Yard dock *Rumex longifolius* Wikimedia
Bitter dock *Rumex obtusifolius* Wikimedia
Crack willow *Salix fragilis* Z. Borzan - Univ of Zagreb

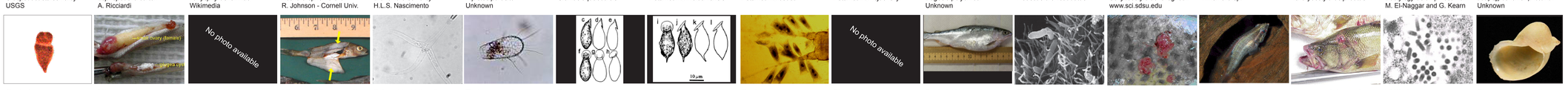


Purple willow *Salix purpurea* Wikimedia
White willow *Salix alba* Wikimedia
Black alder *Alnus glutinosa* Wikimedia
Glossy buckthorn *Frangula alnus* USGS
Reed canarygrass *Phalaris arundinacea* G. Mittelhauser
Common reed *Phragmites australis australis* J. Swearingen - NPS
Red alga *Bangia atropurpurea* R. Lowe
Red alga *Chroodactylon ornatum* R. Lowe
Alga *Hymenomonas roseola* E. Stoermer
Brown alga *Sphacelaria fluviatilis*
Brown alga *Sphacelaria lacustris*
Grass kelp *Ulva intestinalis*
Grass kelp *Ulva prolifera*
Starry stonewort *Nitellopsis obtusa* USGS
Green alga *Ulva flexuosa* E. Stoermer
Blue-green alga *Cylindrospermopsis raciborski* R. Lowe
Diatom *Cyclotella atomus* R. Lowe



Diatom *Discostella pseudostelliger* R. Lowe
Diatom *Cyclotella cryptica* E. Stoermer
Diatom *Stephanodiscus binderanus* R. Lowe
Diatom *Actinocyclus normanii subsalsa* E. Stoermer
Diatom *Skeletonema potamos* R. Lowe
Diatom *Skeletonema subsalsum* E. Stoermer
Diatom *Stephanodiscus subtilis*
Diatom *Discostella woltereckii* E. Stoermer
Diatom *Diatoma ehrenbergii* E. Stoermer
Diatom *Contricribra guillardii* M. Kuylenstierna & B. Karlson
Diatom *Thalassiosira baltica* E. Stoermer
Diatom *Thalassiosira weissflogii* E. Stoermer
Diatom *Pleurosira laevis* R. Lowe
Diatom *Thalassiosira lacustris* R. Lowe
Diatom *Thalassiosira pseudonana* R. Lowe
Diatom *Chaetoceros muelleri* reed-mariculture.com
Freshwater hydroid *Cordylophora caspia* M. Faasse

Freshwater jellyfish *Craspedacusta sowerbyi* USGS
Bryozoan *Lophopodella carteri* A. Ricciardi
Aquatic weevil *Tanysphyrus lemnae* Wikimedia
European water moth *Acentria ephemerella* R. Johnson - Cornell Univ.
Oligochaete *Branchiura sowerbyi* H.L.S. Nascimento
Oligochaete *Ripistes parasita* Unknown
Oligochaete *Gianius aquaeducis*
Oligochaete *Potamothrix moldaviensis*
Oligochaete *Potamothrix bedoti*
Oligochaete *Potamothrix vejdovskyi*
Flatworm *Dugesia polychroa* Unknown
Digenean fluke *Neascus brevicaudatus*
Asian tapeworm *Schyzocotyle acheilognathi* www.sci.sdsu.edu
Digenean fluke *Timoniella* sp.
Digenean fluke *Ichthyocotylurus pileatus*
Monogenetic fluke *Dactylogyrus amphibothrium* M. El-Naggar and G. Kearn
Monogenetic fluke *Dactylogyrus hemiamphibothrium* Unknown



Cestode *Scolex pleuronectis* Unknown
Microsporidian parasite *Glugea hertwigi* Maine DIF&W
Microsporidian parasite *Sphaeromyxa sevastopoli*
Microsporidian parasite *Heterosporis* sp. WI DNR
Salmonid whirling disease *Myxobolus cerebralis* Unknown
Testate amoeba *Psammonobiotus communis* Unknown
Testate amoeba *Psammonobiotus dziwnowi* Hugh MacIsaac
Testate amoeba *Psammonobiotus linearis* Hugh MacIsaac
Suctorian *Acineta nitocrae* I. Dovgal
Flagellate *Trypanosoma acerinae*
Bacterial kidney disease *Renibacterium salmonina* USGS
Furunculosis *Aeromonas salmonicida* NOAA
Muskie pox *Piscirickettsia* cf. *salmonis* MI DNR
Spring viremia of carp *Rhabdovirus carpio* Unknown
Largemouth bass virus *Ranavirus* sp. Unknown
VHS virus *Novirhabdovirus* sp. M. Faisal
European ear snail *Radix auricularia* USGS

New Zealand mudsnail *Potamopyrgus antipodarum* M. Ganglof
Japanese mystery snail *Cipangopaludina japonica* USGS
Banded mystery snail *Viviparus georgianus* USGS
Green floater mussel *Lasmigona subviridis* A. Bogan
Asian clam *Corbicula fluminea* N. Burkhead - USGS
Quagga mussel *Dreissena rostriformis bugensis* NOAA GLERL
Zebra mussel *Dreissena polymorpha* NOAA GLERL
Faucet snail *Bithynia tentaculata* USGS
Piedmont elimia *Elimia virginica* USGS
Chinese mystery snail *Cipangopaludina chinensis malleata* USGS
European valve snail *Valvata piscinalis* USGS
Buffalo pebblesnail *Gillia altilis* USGS
Greater European pea clam *Pisidium amnicum* USGS
Humpback pea clam *Pisidium supinum* F. Welter-Schultes
Henslow pea clam *Pisidium henslowanum* F. Welter-Schultes
European fingernail clam *Sphaerium corneum* USGS
Pygmy pea clam *Pisidium moitessierianum* F. Welter-Schultes

GLANSIS

A one-stop source for information about non-indigenous species in the Great Lakes region!

GLANSIS provides full species profiles for all 187 nonindigenous species established in the Great Lakes. These include information on:

- Identification
- Distribution
- Ecology and Life History
- Status in the Great Lakes
- Environmental and Socioeconomic Impact in the Great Lakes
- Benefits (if any) to the Great Lakes region
- Federal and State (Great Lakes) Regulations
- Management Options
- Bibliography

Our new interface (June 2017) will serve distribution data as GIS layers and provide an interface to manipulate those layers in combination with other ecological data from the Great Lakes Aquatic Habitat Framework (GLAHF).

GLANSIS NEEDS YOUR VERIFIED REPORTS!

Send reports to:

nas.er.usgs.gov/SightingReport.aspx

Or, contact:

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