

APPENDIX C

Web Sites on Great Lakes Nonindigenous Invasive Species

- ***American Society of Limnology and Oceanography***
<http://www.aslo.org/>

Provides information and updates on current topics. Additionally, registration for online use of *Limnology and Oceanography* journal is available.
- ***ANS Task Force***
<http://www.anstaskforce.gov/>

Provides information from the national ANS Task Force, including fact sheets, activities and accomplishments of the Task Force, reports and publications, meeting summaries, information on national meetings, state ANS management plans, and research.
- ***Biological Control Laboratory: University of Guelph***
<http://www.uoguelph.ca/~obcp/>

Catalogs purple loosestrife control strategies from Ontario and the Grand River Watershed. Contains references and links.
- ***Biological Invasions – Journal***
<http://www.wkap.nl/journalhome.htm/1387-3547>

Serves as homepage of the journal, *Biological Invasions*, providing abstracts and a searchable index of articles, along with subscription information and links to journals of related subjects.
- ***Canadian Coast Guard – Ballast Water Management***
http://www.dfo-mpo.gc.ca/regions/central/Wiley/bw_index.html

Outlines the responsibilities and programs of the Canadian Coast Guard in managing ballast water transfers.
- ***Cercopagis pengoi: Another Ponto-Caspian Invader in the Great Lakes***
<http://www.cs.uwindsor.ca/users/h/hughm/private/cercopagis.html>

Provides information on *Cercopagis pengoi*, including pictures, distribution maps, updates on spread and references.
- ***Chippewa/Ottawa Treaty Fishery Management Authority***
<http://home.northernway.net/~qitfap/>

Provides information on the activities and organization of the Chippewa/Ottawa Treaty Fishery

Management Authority.

- ***Cooperative Agriculture Pest Survey & National Agricultural Pest Information System's Purple Loosestrife Page***

<http://www.ceris.purdue.edu/napis/pests/pls/index.html>

Includes current news updates, fact sheets, distribution maps and links to other Internet sites on purple loosestrife.

- ***Flowering Rush Project: Department of Biology, Queen's University***

<http://biology.queensu.ca/floweringrush/>

Offers information on the flowering rush and the work being completed for the flowering rush project. Links and location information for the flowering rush are provided.

- ***Global Invasive Species Program***

<http://jasper.stanford.edu/GISP/home.htm>

Provides information on vectors of spread, educational efforts, ecological and economic consequences, early warning systems, current status, and assessment and best management practices. Information on terrestrial nonindigenous species is also emphasized.

- ***Great Lakes Commission – Great Lakes Panel on Aquatic Nuisance Species***

<http://www.glc.org/ans/anspanel.html>

Since 1991, the Great Lakes Panel on Aquatic Nuisance Species (ANS) has worked to prevent and control the occurrence of aquatic nuisance species in the Great Lakes. Their site features copies of the *ANS Update* newsletter, publications and policy position of the Panel, meeting summaries and upcoming events.

- ***Great Lakes Environmental Research Laboratory***

<http://www.glerl.noaa.gov/>

Offers synopses of current GLERL research and a broad data library. Provides links, publications, a description of facilities and searchable pages.

- ***Great Lakes Fishery Commission***

<http://www.glfc.org>

The Great Lakes Fishery Commission was established by the Convention on Great Lakes Fisheries between Canada and the United States in 1955. Their site features information on sea lamprey control, fishery management, publications and other materials, timely topics of interest, and images of sea lamprey and other Great Lakes fish. The site also features an extensive section of links to other pages of interest.

- ***Great Lakes Indian Fish and Wildlife Commission***

<http://www.glifwc.org/>

Provides information on many different aspects of aquatic nuisance species in the Great Lakes, tribal hatchery and fishery updates, descriptions of treaties and treaty rights, regulations, scientific reports and links.

- ***Great Lakes Information Network – Invasive Species Page***
<http://www.great-lakes.net/envt/flora-fauna/invasive/invasive.html>

Provides an excellent overview of nonindigenous invasive species issues, focusing on exotic species in the Great Lakes region with pictures, profiles of select species, timely updates and general resources. GLIN also provides a wide selection of links to other Internet materials including ballast water information, educational materials, the text of relevant laws, publications, state management plans and task forces. Visitors can also view the 30-minute TV special, *Aquatic Invaders*.

- ***Great Lakes Institute for Environmental Research***
<http://webnotes1.uwindsor.ca:8888/units/glier/glier.nsf>

Details the research efforts and publications of the GLIER. Provides information on the staff and links to other pages of interest.

- ***Great Lakes Radio Consortium***
<http://www.glrc.org/>

Provides high-quality environmental news and in-depth coverage of issues concerning the Great Lakes. Viewers can listen to GLRC coverage, as well as offer comment. Links to related pages are provided.

- ***Great Lakes Sport Fishing Council***
<http://www.great-lakes.org/exotics.html>

Offers links to information on a variety of nonindigenous aquatic nuisance species in the Great Lakes. Other resources include information on laws and policies, newsletters and distribution maps.

- ***Great Lakes United***
<http://www.glu.org/>

Great Lakes United is an international coalition dedicated to preserving and protecting the Great Lakes - St. Lawrence River ecosystem. Their web site features documents; newsletters; and in-depth coverage of issues in five program areas: sustainable waters, habitat protection, clean production, healthy communities, and nuclear-free lakes.

- ***Hugh MacIsaac's Laboratory for the Study of Biological Invasions***
<http://www.uwindsor.ca:7000/biology/macisaac/pages/index.htm>

Contains information on projects involving *Echinogammarus* and *Corophium* amphipods, *Bythotrephes* water fleas; and *Cercopagis* water fleas. Images, links and several full-text online articles are provided.

- ***Illinois Department of Natural Resources***
<http://dnr.state.il.us/>
 Provides searchable information on aquatic nuisance species programs in the state of Illinois and information on other activities of the Illinois DNR.
- ***Illinois Natural History Survey: Vegetation Management Guidelines for Purple Loosestrife***
<http://www.inhs.uiuc.edu/edu/VMG/ploosestrife.html>
 Contains descriptions, control recommendations, failed techniques and reference materials for controlling the spread of purple loosestrife.
- ***Illinois Natural History Survey: Update on Zebra Mussels and Native Unionids in the Illinois River***
<http://www.inhs.uiuc.edu/chf/pub/news/hav2.html>
 Provides an update on zebra mussel activities in the Illinois River, discussing control and monitoring techniques used in this unique area.
- ***Indiana Department of Natural Resources***
<http://www.state.in.us/dnr/>
 Provides searchable information on ANS programs in the state of Indiana, and other activities of the Indiana DNR.
- ***International Association for Great Lakes Research***
<http://www.iaglr.org/>
 Provides information and fact sheets on each of the Great Lakes, timely topics of interest and research publications. The site includes abstracts and ordering information for the *Journal of Great Lakes Research*.
- ***International Joint Commission***
<http://www.ijc.org/ijcweb-e.html>
 Offers publications and reports on aquatic nuisance species in the Great Lakes and other areas of Canada and the United States. The site documents binational efforts on research, monitoring and control.
- ***Invasive Plants of Canada Project***
<http://infoweb.magi.com/~ehaber/ipcan.html>
 Offers current updates on invasive plants, including information on purple loosestrife and European frog-bit (compiled by Alan Dextrase, Ontario Ministry of Natural Resources).
- ***MIT Sea Grant***
<http://web.mit.edu/seagrant/index.html>

The MIT Sea Grant site offers a searchable, online publication directory with publications dating back to 1971. The site also provides educational materials and a list of research projects currently pursued by MIT Sea Grant.

- ***Michigan Department of Environmental Quality – Office of the Great Lakes***
<http://www.deq.state.mi.us/ogl>

Features a selection of materials on exotic species control. Available on the web site are several documents, including Michigan's Nonindigenous Aquatic Nuisance Species (ANS) State Management Plan, the ANS State Management Plan Progress Report, and an ANS Handbook for Government Officials.

- ***Michigan Sea Grant – Zebra Mussel/Aquatic Nuisance Species Office***
<http://www.msue.msu.edu/seagrant/sgezmanns.html>

Contains several helpful features, including an extensive graphic library containing approximately 100 images available for loan or purchase. Also included are the Purple Pages, documenting the Purple Loosestrife Control Project at Michigan State University. This section features educational material for students from kindergarten to 12th grade and a purple loosestrife control handbook. Exotic species publications are also available on the web site.

- ***Minnesota Department of Natural Resources***
<http://www.dnr.state.mn.us/>

Provides information on aquatic nuisance species programs in the state of Minnesota and other activities of the Minnesota DNR.

- ***Minnesota Sea Grant***
<http://www.d.umn.edu/seagr>

Offers information and educational materials on exotic species, including the exotic flowering rush, round goby, ruffe and zebra mussel ID cards, publications, teaching materials and a field guide to aquatic exotic plants and animals.

- ***National Agricultural Pest Information System (NAPIS): Pest Information***
<http://www.ceris.purdue.edu/napis/pests/index.html>

Allows the user to search for information about a variety of pests and nonindigenous species that impact agricultural practices in the United States.

- ***National Aquatic Nuisance Species Clearinghouse***
<http://www.entryway.com/seagrant/>

Provides access to North America's most extensive technical library of publications related to the spread, biology, impacts and control of zebra mussels and other important aquatic nuisance species. Containing a database of searchable information, the clearinghouse offers information on a variety of aquatic nuisance species.

- ***National Park Service, Plant Conservation Alliance's Alien Plant Working Group***
<http://www.nps.gov/plants/alien/>

Provides a compiled national list of invasive plants infesting natural areas throughout the United States; background information on the problem of invasive species; illustrated fact sheets that include plant descriptions, native range, distribution and habitat in the United States; management options, suggested alternative native plants; and selected links to relevant people and organizations.
- ***New York State – Department of Environmental Conservation***
<http://www.dec.state.ny.us/>

Provides information on aquatic nuisance species programs in the state of New York and other activities of the New York DEC.
- ***Northeast-Midwest Institute – Biological Pollution: Aquatic Invasive Species***
<http://www.nemw.org/biopollute.htm>

Offers an overview of National Invasive Species Act (NISA) implementation, updates on the Great Lakes Ballast Technology Demonstration Project, Northeast-Midwest Institute policy analysis and reports, relevant links, and information and outreach.
- ***Northeast Sea Grant's Aquatic Exotics News***
<http://www.ucc.uconn.edu/~wwwsgo/aen.html>

Provides updates from the Northeast Sea Grant programs on the spread of nonindigenous aquatic nuisance species. Although not focused exclusively on the Great Lakes region, the site does feature information about the spread of exotics into the area.
- ***Ohio Department of Natural Resources***
<http://www.dnr.state.oh.us/>

Provides information on aquatic nuisance species programs in the state of Ohio and other activities of the Ohio DNR.
- ***Ohio Sea Grant and Lake Erie Programs***
<http://www.sg.ohio-state.edu/>

Provides a clearinghouse for information on exotic species in the Lake Erie region, searchable publications, educational and outreach materials, and links to the Great Lakes Aquatic Ecosystem Research Consortium and Center for Lake Erie Research.
- ***Ontario Federation of Anglers and Hunters***
<http://www.ofah.org/invading/invading.htm>

Contains information on a variety of nonindigenous aquatic species and advice for preventing their spread.

- ***Ontario Ministry of Natural Resources***
<http://www.mnr.gov.on.ca/>

Provides information on aquatic nuisance species programs in Ontario, and other activities of the Ontario MNR. Available in French and English.
- ***Pennsylvania Department of Environmental Protection***
<http://www.dep.state.pa.us/>

Provides information on aquatic nuisance species programs in the Commonwealth of Pennsylvania and other activities of the Pennsylvania DEP.
- ***Purple Loosestrife InfoCenter, developed by Manitoba Purple Loosestrife Project***
<http://www.ducks.ca/purple/>

Contains newsletters and updates, research abstracts, brochures, information on biological control, resources materials, pictures, answers to frequently asked questions, and links to other resources on purple loosestrife.
- ***Quebec's Aquatic Nuisance Species Web Site***
<http://www.fapaq.gouv.qc.ca/fr/faune/nuisibles/index.htm>

Details the extent of the aquatic nuisance species problem around Quebec and describes current monitoring and enforcement efforts (available in French only).
- ***Ruffe Control Program***
http://www.fws.gov/r3pao/ashland/ruffe/ruf_cont.html

Contains a copy of the Ruffe Control Program as submitted to the Aquatic Nuisance Species Task Force. It discusses solutions to ruffe control through population reduction, ballast water management, population investigation surveillance, fish community management, education and bait fish management. It contains sections on the Chicago Sanitary and Ship Canal, research needs and an extensive list of references.
- ***Sea Grant Nonindigenous Species Site – Zebra Mussel and Other Aquatic Nuisance Species***
<http://www.sgnis.org/>

Provides an extensive site that is simple and searchable, offering a wide variety of information on nonindigenous aquatic species. The site features several products available for distribution, such as bibliographies, education materials (kindergarten to university level), maps, newsletters, publications, research, training material and videos. Additionally, the site features a large graphic library of exotic species slides and links to nonindigenous aquatic species information designed for kids.
- ***University of Minnesota: Eurasian Watermilfoil Biocontrol Web Site***
<http://www.fw.umn.edu/research/milfoil/milfoilbc.html>

Contains information on the control of Eurasian watermilfoil, along with many references.

- ***U.S. Army Corps of Engineers, Great Lakes Regional Headquarters – Nuisance and Exotic Species***

<http://www.lrd.usace.army.mil/gl/exotic.htm>

Provides information on the Corps' activities promoting the health of the Great Lakes ecosystem. These programs include the restoration of environmental quality, Great Lakes Remedial Action Plans, planning assistance to states, the Chicago Sanitary and Ship Canal Dispersal Barrier, the aquatic plant control research program, and the zebra mussel research program.

- ***U.S. Coast Guard – Ballast Water Management Program***

<http://www.uscg.mil/hq/g%2Dm/mso4/contents.htm>

Details the U.S. Coast Guard's efforts to manage ballast water, including current news, a program description, briefs and talks, IMO documents, their field program, images, ballast water reporting forms, and ballast water regulations.

- ***U.S. Department of Agriculture – Animal and Plant Health Inspection Service***

<http://www.aphis.usda.gov/>

Contains information on the efforts of APHIS to detect and monitor animal and plant diseases in this country and to combat certain domestic animal diseases and plant pests. Of particular interest under "hot topics" is a site on the Asian longhorned beetle.

- ***U.S. Environmental Protection Agency – Great Lakes National Program Office***

<http://www.epa.gov/glnpo/>

Contains reports on monitoring, human health, ecology, sedimentation, pollution prevention, maps of the area and other program information.

- ***U.S. Fish and Wildlife Service – Invasive Species Program***

<http://invasives.fws.gov/>

Includes extensive information on many topics of interest, including current hot topics on invasive species, the Presidential Executive Order; mandates and legislation, the USFWS Director's priorities; the national strategy for invasive plant management, threat assessment, impacts to the refuge system and other areas, control and prevention efforts, pest management; and outreach and education.

- ***U.S. Geological Survey – Biological Resources Division***

<http://www.nbs.gov/>

Provides extensive information on biological resources, including science, news and information, partnerships and frequent updates on areas of interest. Fact sheets and research information are also included.

- ***U.S. Geological Survey – Invasive Species***

http://www.emtc.nbs.gov/invasive_species/invasives.html

Provides information on a variety of exotic aquatic species.

- ***Weed Feeders, Biological Control: A Guide to Natural Enemies in North America***
<http://www.nysaes.cornell.edu/ent/biocontrol/weedfeeders/wdfdrtoc.html>

Includes a searchable list of biological control agents for a variety of species, including the purple loosestrife.

- ***Wisconsin Department of Natural Resources***
<http://www.dnr.state.wi.us>

Provides information on aquatic nuisance species programs in the state of Wisconsin, and other activities of the Wisconsin DNR.

- ***Wisconsin Sea Grant – Zebra Mussels and Other Nonindigenous Species***
<http://www.seagrant.wisc.edu/fctlakes/GLnetwork/fexotsoc.html>

Provides detailed information on various aquatic species, including the Purple Loosestrife in Michigan.