



The Invasive Species Threat

Presentation to the Panel on the Future of the Trent Severn Waterway
September 14, 2007

Francine MacDonald
Invading Species Awareness Program
Ontario Federation of Anglers and Hunters

Invading Species Awareness Program



**Keep All Our
Lakes Great!**

You can stop invading species



Ontario

- Partnership of OFAH, MNR and many others
- Initiated in 1992
- Focus primarily on aquatic invaders
- Monitor the spread
- Prevent new introductions
- Research
- Control initiatives

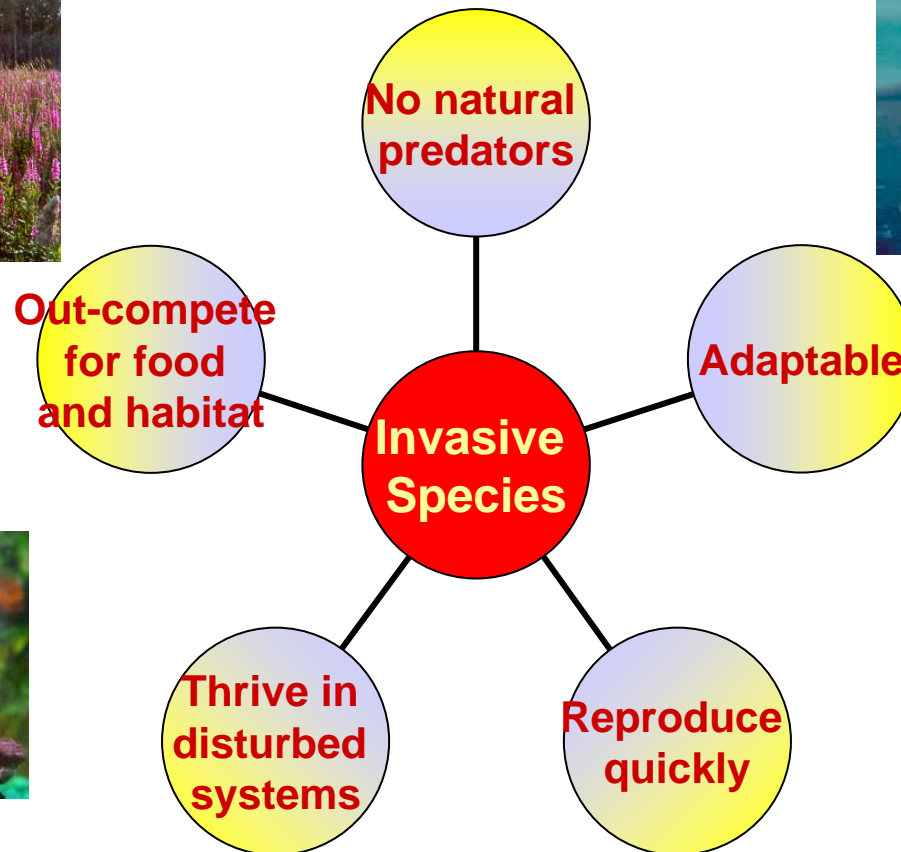


Presentation Overview

- What are Invasive Species?
- Why Should We Care?
- What Can Be Done?

What are Invasive Species?

Non-indigenous species of plants, animals, and fish that have been introduced outside their natural range. Their establishment and spread threatens ecosystems, habitats, or species with economic or environmental harm.



How do they get here?

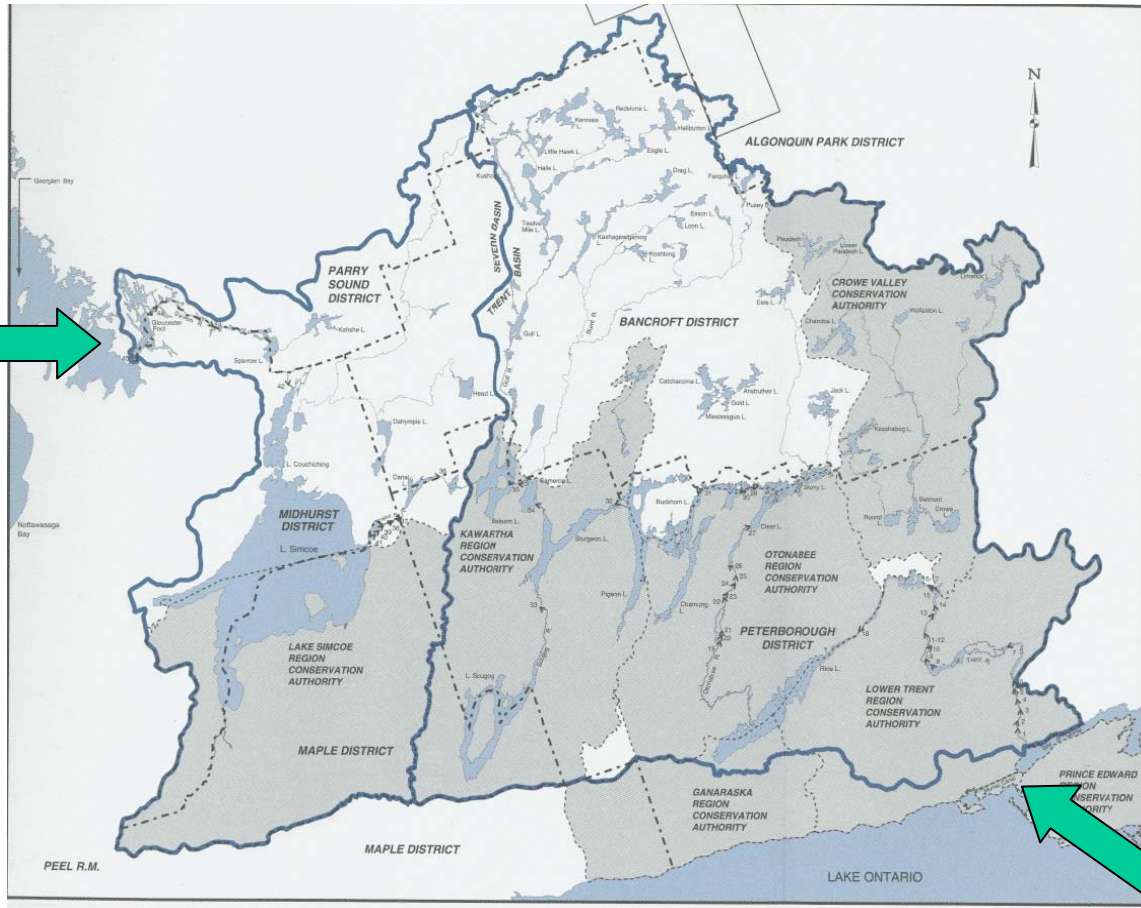
Pathways for Introduction and Spread

- Ship Ballast
- Aquarium Industry
- Horticultural Trade
- Recreational Watercraft
- Use of Live Bait
- Unauthorized Fish Introductions
- Live Food Fish Industry
- **CANALS...**



How Do They Get Here?

The Trent-Severn Waterway is a conduit for the spread and transfer of aquatic invasive species from the Great Lakes within and across the watersheds of south-central Ontario.



Why Should We Care?



- > 180 non-native species established in the Great lakes basin
- >10% have had significant ecol. and econ. impacts (ie. zebra mussel, sea lamprey, purple loosestrife)
- 2nd greatest threat to biodiversity
- Threat to Species at Risk
 - 25% of Canada's endangered species
 - 31% of threatened species,
 - 16 % of vulnerable species

ECOLOGICAL IMPACTS



Habitat Alterations



Disruption of Food Webs



Loss or decline of native species

SOCIAL AND ECONOMIC IMPACTS



Foul boats



Clog pipes



Foul beaches



Declines in Tourism

What Can Be Done?

Prevent Introductions of Invasive Species from the Great Lakes

- Collaborate with research institutions and agencies to increase understanding of invasive species dispersal mechanisms
- Investigate alternatives for invasive species prevention within Canal operations
 - Electric, acoustic and bubble barriers
 - Physical barriers
 - Marine railways, lifts etc.
- Support implementation of prevention technologies



Marine Railway on the Trent Severn Waterway

What Can Be Done?

Early Detection, Monitoring and Rapid Response

- Collaborate with other agencies to facilitate early detection of new invasive species
- Engage citizens in reporting sightings
- Work with federal and provincial agencies to develop a rapid response plan in the event of discovery of a new invasive species
- Enhance monitoring programs to increase understanding of dispersal techniques for invasive



Water chestnut removal in Lake Champlain

What Can Be Done?

Public Education and Outreach

- Educate anglers, boaters, shoreline residents about invasive species prevention
- Signage and educational materials at all lock stations
- Boat washing facilities at key launch sites to prevent dispersal of invaders to inland waters
- Incorporate invasive species prevention message in promotional materials (newsletter, website, brochures for visitors etc.)
- Training sessions for summer staff to ensure consistent messages



Support Materials for Invasive Species Management in the Trent Severn Waterway

- An Invasive Alien Species Strategy for Canada
- A Canadian Action Plan to Address the Threat of Aquatic Invasive Species
- Management Guidelines for Invasive Alien Species in Canada's National Parks
- Canadian Biodiversity Strategy

Protect Ontario Lakes

Don't spread invading species.



www.invadingspecies.com
1-800-563-7711

