



**AN OUNCE OF
PREVENTION....
INDIANA'S AQUATIC
INVASIVE SPECIES
STRATEGY**

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ANS TASK FORCE

RECOMMENDATION FOR PREVENTION:

“Establish a systematic risk identification, assessment and management process to identify and modify pathways by which nonindigenous aquatic nuisance species spread”

CONSIDERING THE PATHWAYS

FOREIGN INTRODUCTIONS:

- BALLAST WATER
- AQUACULTURE
- ORGANISMS IN TRADE

MOVEMENT ONCE HERE:

- FISH TRANSFERS AND BAIT RELEASE
- RECREATIONAL ACTIVITIES
- CANALS AND WATERWAYS

**USING REGULATIONS TO
PREVENT THE
INTRODUCTION OR
SPREAD OF AQUATIC
INVASIVE SPECIES**

CURRENT FISHERIES RULES

SPECIES ILLEGAL TO POSSESS LIVE:

- ASIATIC CLAM
- BIGHEAD CARP
- BLACK CARP
- ROUND GOBY
- RUDD
- RUFFE
- SILVER CARP
- SNAKEHEADS
- QUAGGA MUSSEL
- TUBENOSE GOBY
- WALKING CATFISH
- WHITE PERCH
- ZEBRA MUSSEL

IF CAUGHT, MUST BE KILLED IMMEDIATELY!

FISH STOCKING & AQUACULTURE

312 IAC 9-10-8 Fish stocking permits

- It is unlawful to stock fish unless a permit is obtained from the Division of Fish and Wildlife.



“Clean List” of 33
aquaculture species that can
be imported to Indiana
without a permit

BAIT REGULATIONS

CURRENT RULES:

- NO CARP
- 1 LAKE CAN USE SHAD
- NO USE OF BANED SPECIES

FUTURE:

- LIST LEGAL LIVE SPECIES (WHITE LIST)
- ALL OTHERS MAY NOT BE USED LIVE

REGS TO SLOW PLANT SPREAD

CONSIDERING ADOPTING RULES PROHIBITING ANY PLANT MATERIAL ON AQUATIC EQUIPMENT



**STOP AQUATIC
HITCHHIKERS!™**

Prevent the transport of nuisance species.
Clean all recreational equipment.

www.ProtectYourWaters.net

INDIANA PLANT RULE MAKING HAS BEEN...



Common waterweed
Egeria densa
Photo by A. Murray
Copyright 2001 Univ. Florida



Myriophyllum spicatum
Eurasian water milfoil
Photo by Vic Ramey
Copyright 2000 Univ. Florida

PURPLE LOOSESTRIFFE RULE

312 IAC 18-3-13 Permit to move, plant, or distribute *Lythrum* species

- ... a person must not sell, offer for sale, give away, or otherwise distribute seeds or plants of any species of *Lythrum* (commonly known as purple loosestrife) in Indiana.
- Species of *Lythrum* native to Indiana may be sold or distributed only by permit.

BRAZILIAN ELODEA RULE

- In Indiana a person must not possess, sell, offer for sale, gift, barter, exchange or distribute *Egeria densa* as an OUTDOOR water plant.
- Allow Brazilian elodea to infest anything other than an indoor aquarium
- Transport Brazilian elodea on aquatic equipment
- A property owner who has Brazilian elodea in an outdoor environment must take lawful efforts to eliminate this species.

HYDRILLA RULE

Hydrilla (*Hydrilla verticillata*) is a pest or pathogen. This section governs the standards for the control of Hydrilla and applies to any part or life stage of Hydrilla.

- A person must not possess, sell, offer for sale, gift, barter, exchange or distribute Hydrilla.
- Allow Hydrilla to infest any body of water
- Transport Hydrilla on or within any aquatic equipment
- A person who owns property that is infested with Hydrilla must take lawful efforts to eliminate the species.
- Any lake, river or other waterway in which Hydrilla is located is regulated to prevent the dissemination ...

COSTS OF AQUATIC PLANT INVASIONS

- **ERADICATION COSTS**
 - BRAZILIAN ELODEA \$1,240/ACRE
 - HYDRILLA \$2,290/ACRE
- **MANAGING THE WIDESPREAD INVADERS**
 - \$500,000 TO “MANAGE” EURASIAN WATERMILFOIL
 - COULD EASILY SPEND 4x THAT AMOUNT
- **LOST OR REDUCED RECREATION** (874K anglers, 19K waterfowl, 9K trap, 1.7 million watchers, spend \$1.5 billion per yr)
- **REDUCED PROPERTY VALUE**
- **EQUIPMENT DAMAGE**
- **ECOLOGICAL DAMAGE**

AQUATIC PLANT STRATEGY PROPOSAL

INCREASING GLOBAL TRADE HAS BROUGHT
HUNDREDS OF EXOTIC SPECIES LITERALLY TO OUR
DOORESTEPS IN A PERIOD OF HOURS OR DAYS

- “WHITE LIST”
PLANTS THAT POSE
LITTLE THREAT
- “BLACK LIST” THE
FEW KNOWN BAD
PLAYERS



OTHER METHODS TO PREVENT THE SPREAD

- **IMPLEMENT BMP's**
 - **REDUCE SPREAD OF DISEASES**
 - **ELIMINATE HITCHHIKERS**
 - **OFFER NATIVES FOR SALE**

- **EDUCATION**
 - **SUPPLIERS**
 - **POSSESSION LAWS**
 - **NATIVE or EXOTIC**
 - **CUSTOMERS**
 - **DON'T RELEASE**
 - **INFORMATION ON OTHER PLANTING OPTIONS**



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Habitattitude

PROTECT OUR ENVIRONMENT
DO NOT RELEASE FISH AND AQUATIC PLANTS

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