

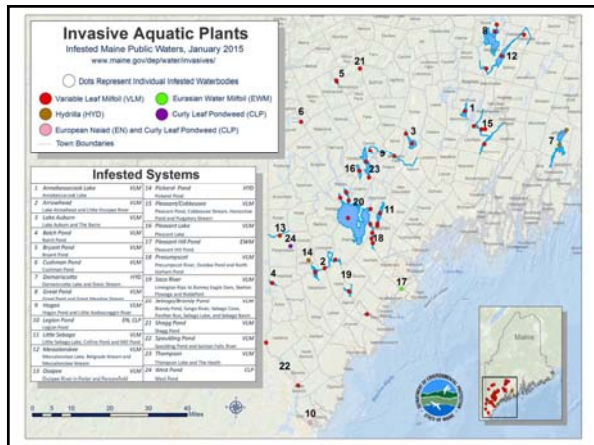
Invaders Are Detrimental & Have Advantages Over Native Plants

- > Very well adapted
- > Strong competitors
- > From "away" (*natural checks & balances are left behind*)

Invasiveness works both ways !

MAINE'S INVASIVE AQUATIC PLANTS LIST

| | |
|------------------------------|-----------------------|
| Eurasian watermilfoil | Brazilian elodea |
| Hydrilla | European frogbit |
| European naiad | Fanwort |
| Curly leaf pondweed | Parrot feather |
| Variable watermilfoil | Yellow floating heart |
| | Water chestnut |



Variable Water-milfoil

Most Abundant IAP in Maine
Infestations include variable milfoil hybrid

Hydrilla

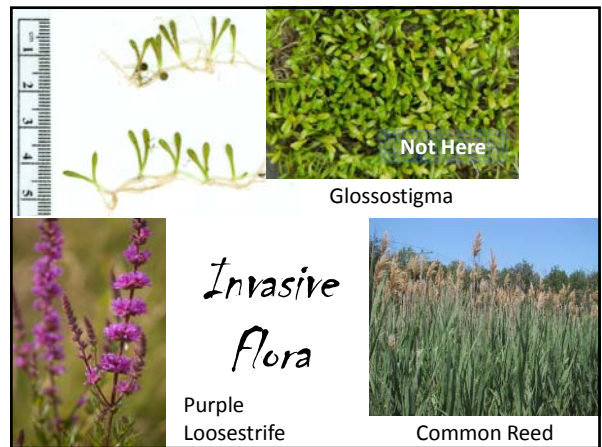
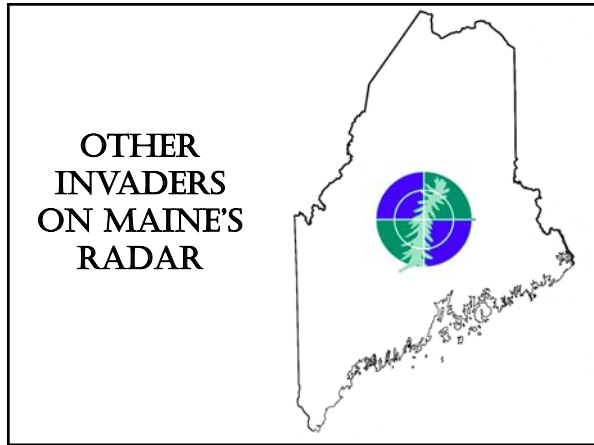
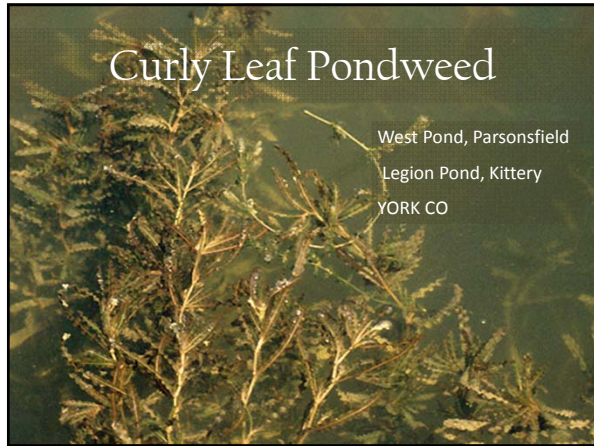
Pickerel Pond, Limerick, YORK CO
Damariscotta Lake, Jefferson, LINCOLN CO
Davis Stream, Jefferson, LINCOLN CO

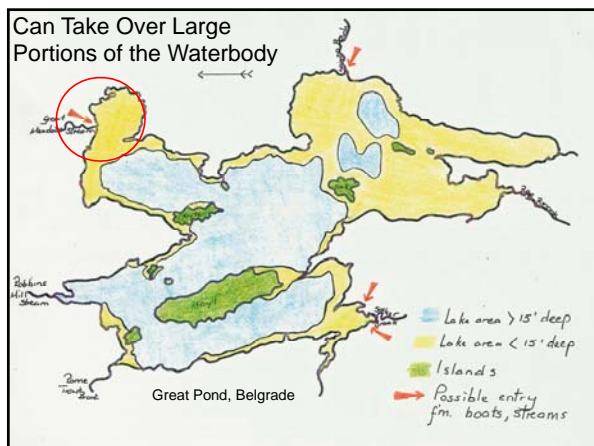
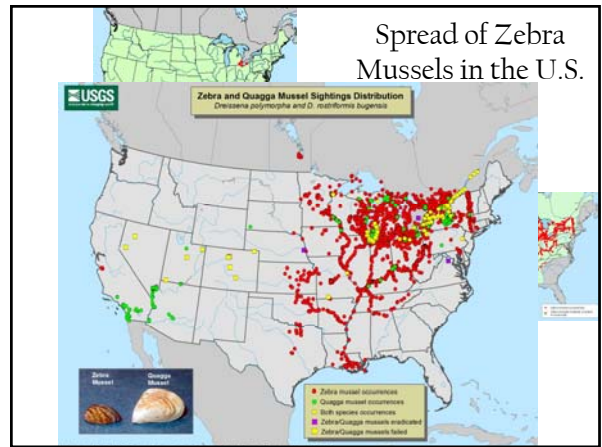
Eurasian Water-milfoil


Pleasant Hill Pond, Scarborough
CUMBERLAND CO

Salmon Falls, Belgrade
Kennebec COUNTY

DE-LISTED IN 2014 !





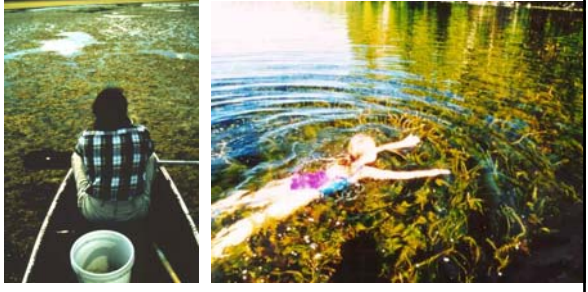
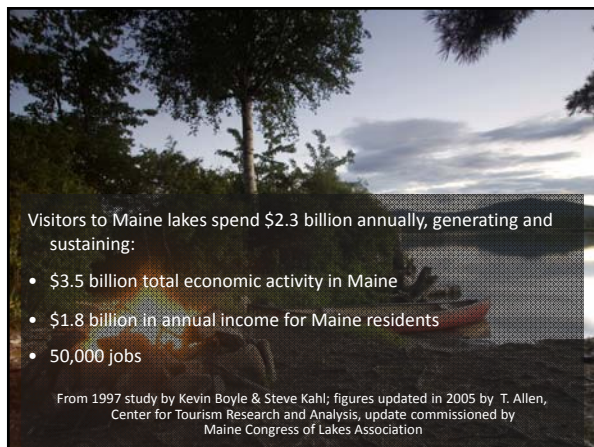


Economic Impacts

Studies have repeatedly shown that invasive plant infestations negatively impact economic activity associated with lakes and ponds

Depress Tourism & Recreational Activity

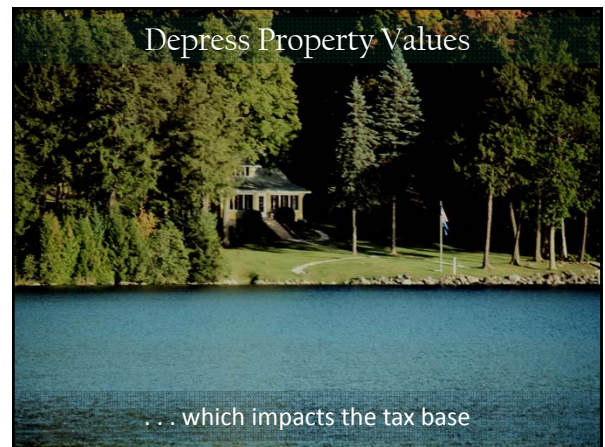
640,000 Maine residents recreate on Maine lakes every year

Visitors to Maine lakes spend \$2.3 billion annually, generating and sustaining:

- \$3.5 billion total economic activity in Maine
- \$1.8 billion in annual income for Maine residents
- 50,000 jobs

From 1997 study by Kevin Boyle & Steve Kahl; figures updated in 2005 by T. Allen, Center for Tourism Research and Analysis, update commissioned by Maine Congress of Lakes Association



Depress Property Values

... which impacts the tax base



Control Costs




Infestations Can Result in Complex Social Issues




Potential Health Impacts

50% of the people of Maine get their drinking water from surface water sources

PORTLAND WATER DISTRICT
1000 W. WASHINGTON ST. PORTLAND, ME 04101

Access Issues: Should Infested Water Bodies be Quarantined?



Should Access Be Restricted to Protect Uninfested Waterbodies?

HOW DO AQUATIC INVADERS SPREAD??

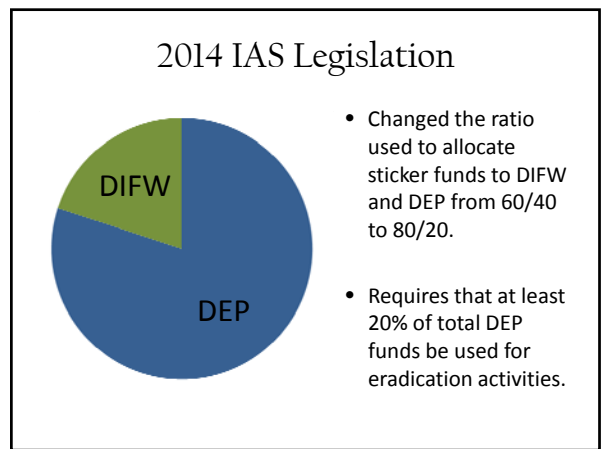
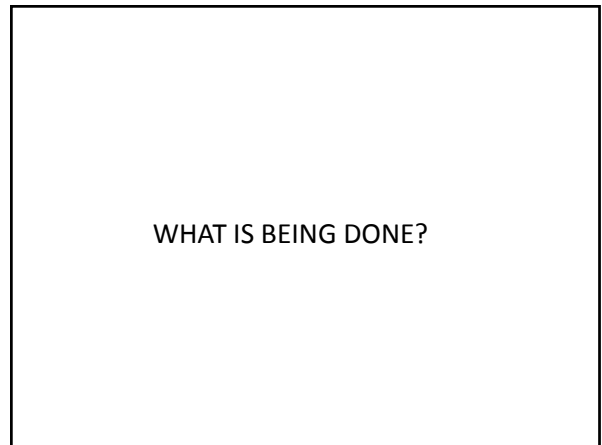
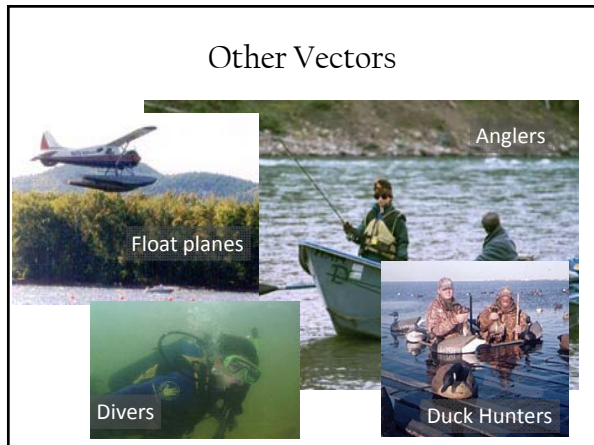
All it takes is a tiny fragment or seed!





Wildlife Vectors







State and local efforts to control Invasive Aquatic Plants (IAP)



Control Challenges *no silver bullets!*

- Costly and difficult
- Often destructive (collateral damage to native communities)
- Often a short-term solution to a long term problem
- Unknown long-term effects
- Often must be repeated – indefinitely!



Manual Control Methods Are Most Commonly Used in Maine

- Manual Removal
- Benthic Barriers
- Diver Assisted Suction Harvesting

Chemical control is seen by the State of Maine as a “method of last resort” to be used in “extraordinary circumstances”



VLMP Invasive Aquatic Plant Control Methods Training



Good News!

THREE LAKES HAVE BEEN DELISTED!

- Great East Lake (VWM)
- Middle Range Ponds (VWM)
- Salmon Lake (EWM)

SEVERAL MORE ARE GETTING THERE . . .

- Cushman Pond (VWM)
- Pleasant Lake (VWM)
- Lily Brook (VWM)
- Pickerel Pond (HYDRILLA)



In almost every case . . .

. . . early detection and dedicated volunteer effort have been the keys to success

Lew Wetzel & Pixie Williams, PLPPA

WHAT CAN YOU DO?



The importance of public involvement in this effort cannot be overstated

Prevention!

BEFORE LEAVING THE BOAT LAUNCH

INSPECT your boat, trailer and equipment and remove any plants and animals or clumps of algae

DRAIN, on land, all water from the motor, livewell, bilge, and transom well; some invasive organisms may not be visible to the naked eye

EMPTY your bait bucket on land; never release live bait into a waterway, or transfer aquatic animals between waterways.

Prevention!

AFTER LEAVING THE BOAT LAUNCH

WASH your boat, tackle, trailer, and other equipment to kill any invasive species not visible at the boat launch; use hot tap water and dish soap, OR a high-pressure sprayer with soap, AND . . .

DRY your equipment for at least five days; some invasive organisms can survive for long periods of time out of water.

LEARN what these organisms look like, and know which waterways are infested

REPORT any new infestations to VLMP, DEP or DIFW

Avoid Boating in Infested Areas



Post Warning Signs at Public Boat Launch Sites

Plant Disposal Container

Brochure Holder



Help Inform Your Community



Speak, or distribute materials to:

- Lake Associations
- Town Offices
- Public Boat Landings
- Marinas
- Realtors
- Fishing Clubs
- Schools

Join the Statewide Volunteer Effort



Courtesy Boat Inspections: The First Line of Defense

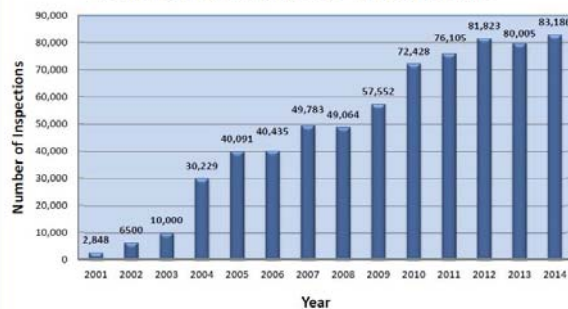


Dave Potter, Unity ME



CBI's Are Saving
Maine Lakes!

Courtesy Boat Inspections - Annual Totals



105 Confirmed CBI "Saves" in 2014!

Boat Inspection? I Can Do It!



Increased Emphasis
on Self Inspection



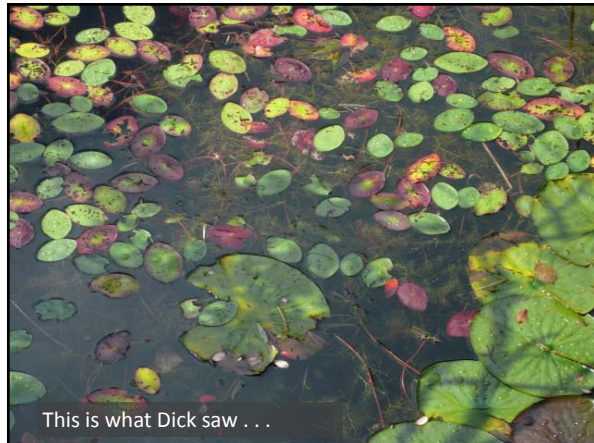
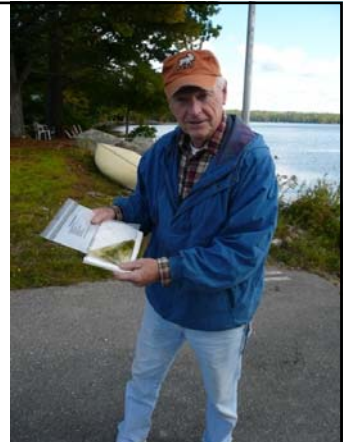
Be on Alert for Suspicious Plants



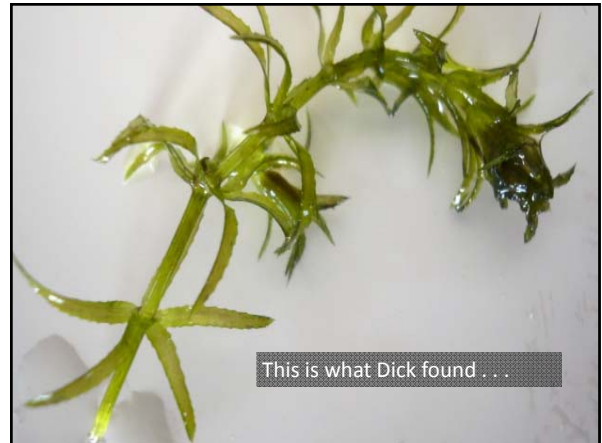
Alert and informed citizens have been the "Early Detectors" for almost every documented infestation

The Importance of Early Detection!

Meet Dick Butterfield



This is what Dick saw . . .



This is what Dick found . . .

Dick's find triggered a concerted RAPID RESPONSE



- Isolating the lagoon
- Manual Removal (shown)
- Benthic Barriers
- Targeted Herbicide
- Careful Monitoring

Lesson #1

Invasive plants are not always where you think they should be



Lesson #2

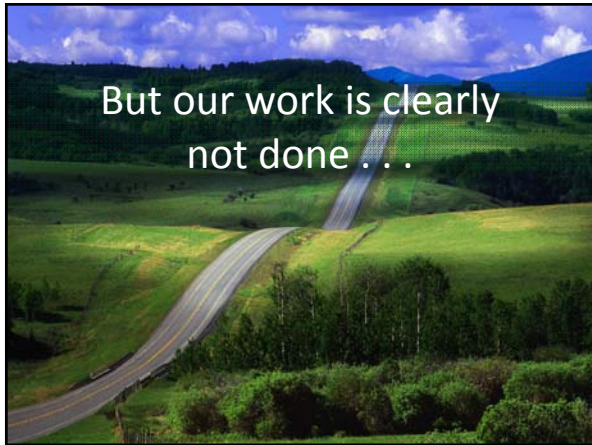


Early detection saves lakes & lake communities from ecological and economic disaster!

We are making a difference!!



But our work is clearly not done . . .



THE CHALLENGE

6000 lakes and ponds
Thousands of miles of stream habitat



VLMP has trained over 3700 Invasive Plant Patrollers across the State of Maine



IPP LEADERSHIP



We encourage and support volunteer leadership at every level

VOLUNTEER LEADERSHIP AT EVERY LEVEL

INDIVIDUAL LEVEL
Invasive Plant Patrollers
Trained Invasive Plant Patrollers, generally working in tandem, are taking action on the front-lines to protect Maine waters from the threat of aquatic invaders

LAKE LEVEL
Volunteer Lake Team Leaders
Team leaders help to organize teams, manage data, and provide technical assistance to team members

REGIONAL LEVEL
Volunteer IPP Regional Coordinators
Often working in concert with paid regional lake & watershed association staff, volunteer regional coordinators help to organize and support IPP team efforts on the lakes in their region

STATEWIDE LEVEL
Volunteer IPP Leaders
IPP Leaders work directly with VLMP and State Agency Partners to support statewide early detection and rapid response efforts



If not, let us help you form an IPP team

- The more eyes on the water the better
- Better quality assurance
- Long term sustainability
- More fun!!

Invasive Plant Patrol Leaders

Welcome to our webpage just for YOU!

When the VLMP achieves its ultimate goal as an organization, virtually every lake in the State of Maine will have one or more water quality monitors and an active team of trained Invasive Plant Patrollers routinely monitoring the health of the waterbody. This statewide cadre of dedicated volunteers, trained and certified by the VLMP, will be supported and sustained by a well-resourced, integrated, collaborative system including the VLMP, local, county, and State...

A good place to start is on the VLMPs IPP Leaders Page . . . leadership training & networking opportunities, resources, an IPP leader exchange & MORE!

Thank you for joining us in this important endeavor!!