

The Hunt for Aquatic Invaders



Invasive Aquatic Plant
Screening Survey Procedures

Your Mission . . .
Rule Out Presence of Target
Invaders



The more thorough the survey; the higher one's
confidence in a "NO IAP DETECTED" finding



The Challenge

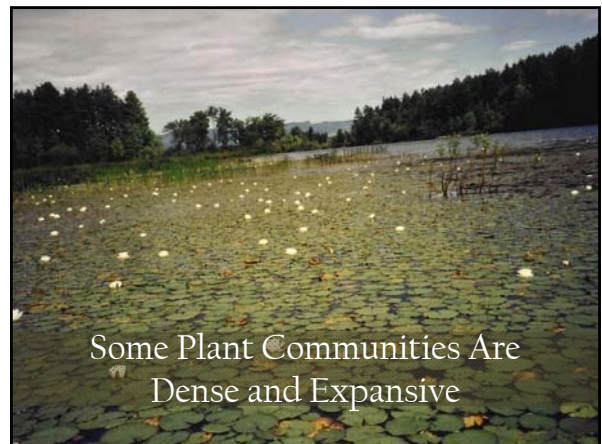
It is virtually impossible to be 100% thorough in
ones search



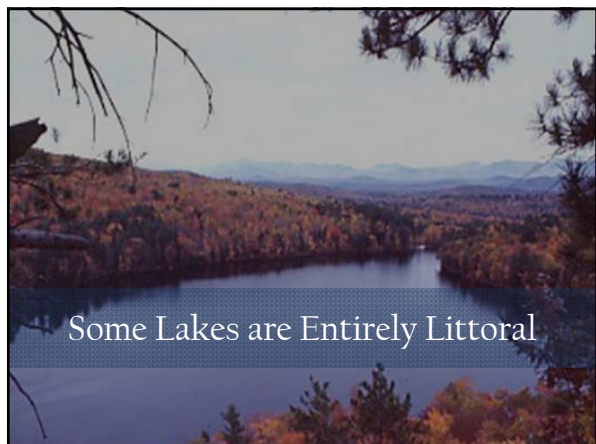
Weather and Light Conditions Are Not Always Conducive



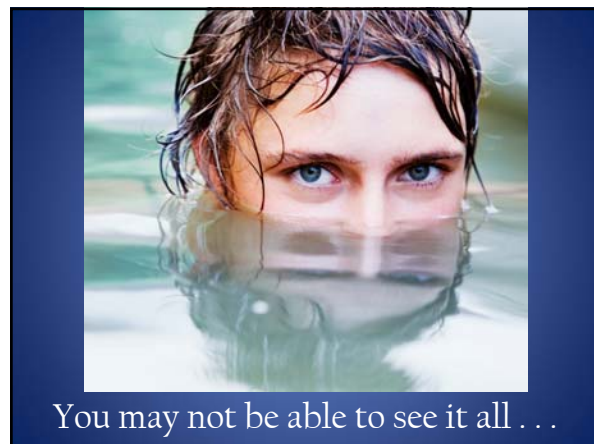
Limits of Time and Energy



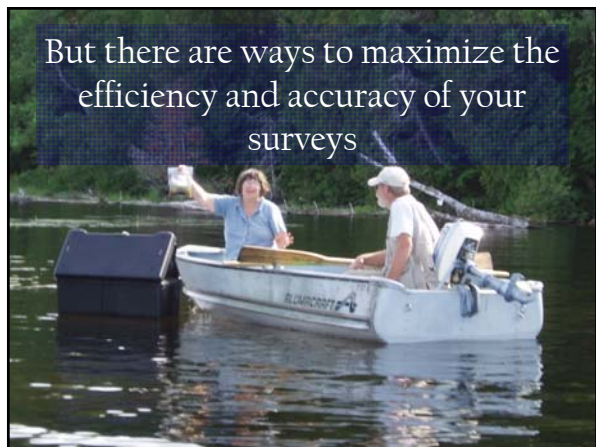
Some Plant Communities Are Dense and Expansive



Some Lakes are Entirely Littoral



You may not be able to see it all . . .

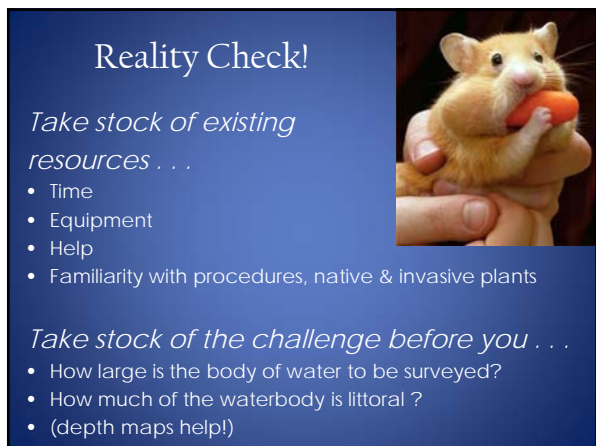


But there are ways to maximize the efficiency and accuracy of your surveys



1

Get Organized,
Develop a Plan of Action



Reality Check!

Take stock of existing resources . . .

- Time
- Equipment
- Help
- Familiarity with procedures, native & invasive plants

Take stock of the challenge before you . . .

- How large is the body of water to be surveyed?
- How much of the waterbody is littoral ?
- (depth maps help!)

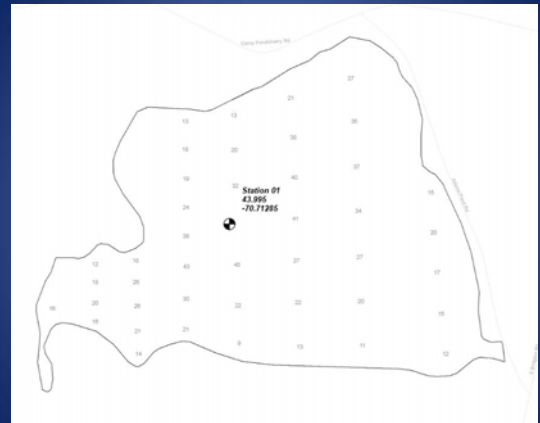


Determine likely outside depth of littoral zone

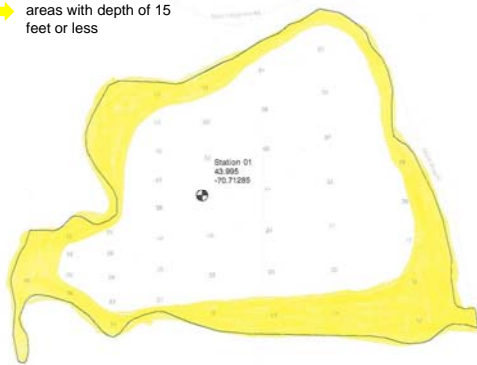
- Area where light penetrates to the bottom, supporting rooted aquatic plants
- Water clarity is determining factor



Use maps, depth charts and local knowledge of the lake to determine possible scope of survey



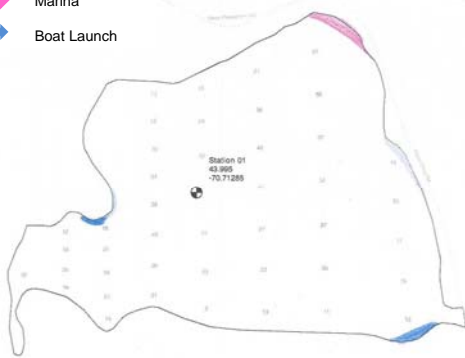
→ areas with depth of 15 feet or less



LEVEL 1: High Risk Areas

- Boat launch sites, marinas and high traffic areas
- Check a minimum of 300 feet on each side
- Extend to a depth where native plants do not grow

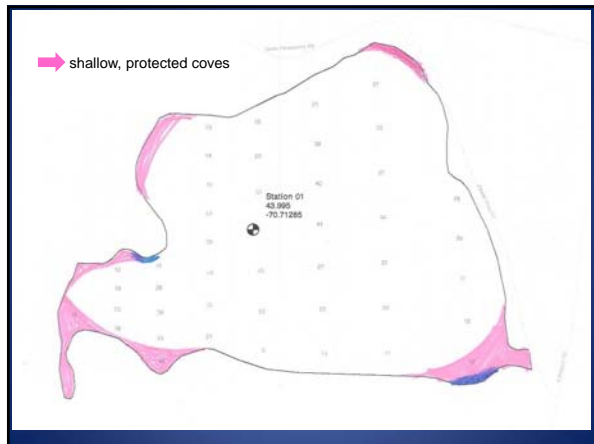
→ Marina
→ Boat Launch



LEVEL 2: Existing Aquatic Plant Communities

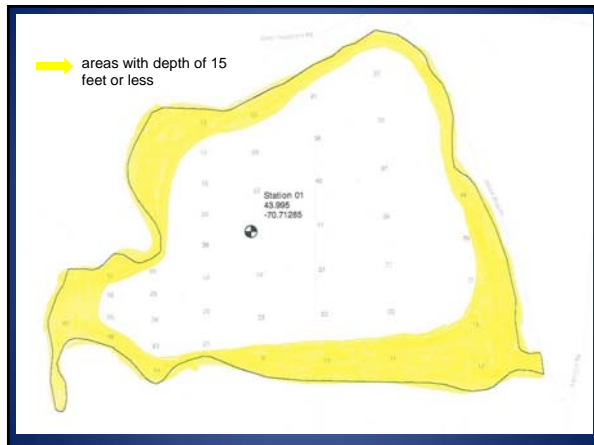
- All level 1, plus areas where *native* plant communities occur
- Typically shallow areas and sheltered coves
- Amount of potential habitat varies greatly





LEVEL 3: Survey Entire Shoreline

- Most time consuming, but highest degree of assurance
- Entire littoral area is screened
- Some lakes are entirely littoral



Don't forget to build SAFETY into your plan

- Never work alone!
- Always wear a PFD
- Be prepared for sudden changes in weather
- Dense plant communities can pose safety threats to swimmers & divers. Use caution!

2

Build Your Team




Every Team Needs a Captain!



- Helps recruit team members
- Organizes the survey team
- Provides local technical support
- Collects, checks, summarizes & submits data

Role of the Lake Association




- Financially supports, helps recruit and organize the team.
- Helps outfit team members with equipment
- Funds to support the team are raised by an optional donation check off in the annual lake association dues appeal
- Appreciation and social events

Hold a meeting to discuss the plan, recruit volunteers, determine sector assignments, etc.



Panther Pond Invasive Plant Patrol (PPIPPers!)



Team trained IPPs with novices or untrained "paddlers"

Two-Person Survey Unit

- *Safer, and better from a quality assurance standpoint*
- Observations will be more thorough
- Two person canoes, row boats, skiffs, and inflatables are all well suited to the two-person survey team
- Both team members keep a keen eye out for hazards
- The division of labor between captain and lead surveyor should be fairly well defined. You can always swap roles mid-way

The Multi-Kayak Unit



What will your lake community gain?

- Active, well trained, fully equipped survey team
- Rule out presence of IAP annually
- Greater level of community awareness & engagement
- Better understanding of native plant communities
- Native plant inventory

VLMP has developed resources to help you build and coordinate your IPP Team




VLMP
Maine Volunteer Lake Monitoring Program
Keeping our lakes and ponds the health of Maine lakes since 1977

HOME ABOUT MONITORING VOLUNTEER RESOURCES WORKSHOPS & EVENTS MEDIA

Invasive Plant Patrol Leaders


SEARCH for YOUR LAKE

VLMP Lakes of Maine

VIEW CURRENT WATER QUALITY CONDITIONS ON MAINE LAKES

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 Patrol leaders 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, unencumbered, self-administering, non-profit, non-governmental, and...

The IPP Plant Paddle



What is a Plant Paddle?

- "Plant Paddles" are short (2 - 3 hour) events that take place on shore and on the water
- Fun, informal way to introduce community members to the threat of IAP and the importance of early detection
- Guided learning experiences, well suited to community events, i.e., take days, civic group meetings, school outings, lake association meetings, etc.



VLMP IPP WORKSHOPS

IPP Leadership Training & Roundtable Events



80+ IPP Teams & Counting!

(active or actively forming)



3

Charting Course

Sectors

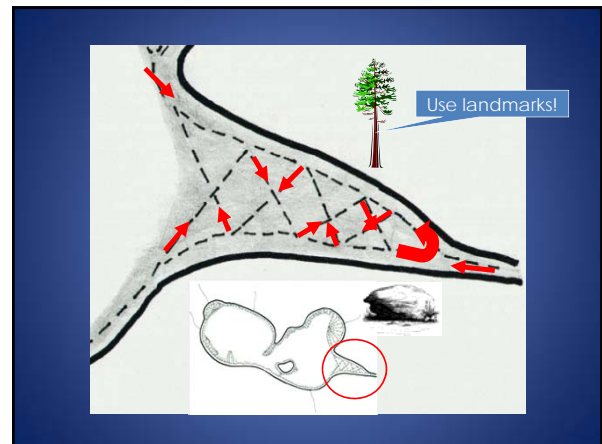
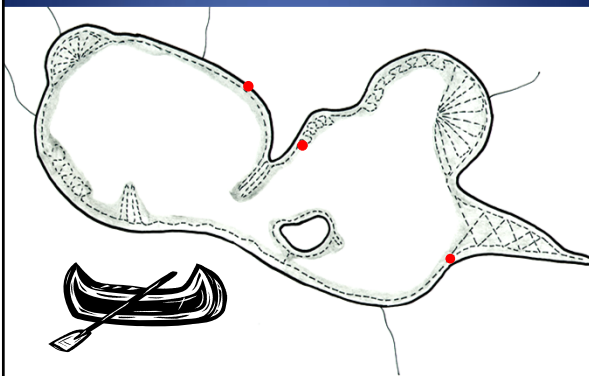
Once you know the scope of your task you can divide the survey area into "doable" sectors

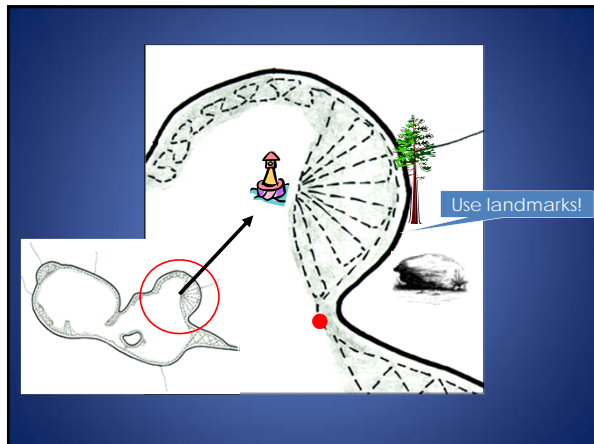
Considerations:

- plant density in each sector
- number of surveyors on your team
- proximity
- landmarks
- etc.



Setting & Adjusting Course

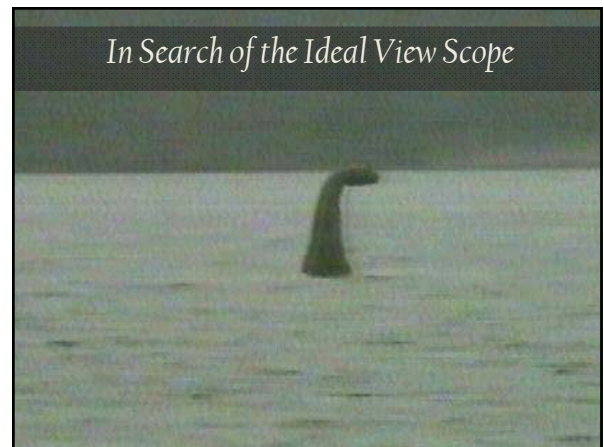




4

Your Toolbox

- ### What Makes a Good Scope?
- easy and comfortable to use
 - provides the widest possible angle of view
 - constructed of opaque materials to shield out as much side and back light as possible
 - being relatively cheap and easy to construct is a plus



"Made With Care in Quebec"



Wide Angle View Scope



Trunk Scope

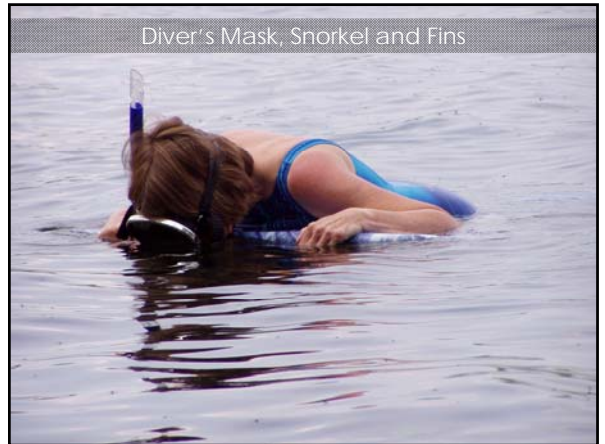
Kayak (Pistol Case) Scope



The Enright's Economical Tub Scope



Diver's Mask, Snorkel and Fins





View
Canoe



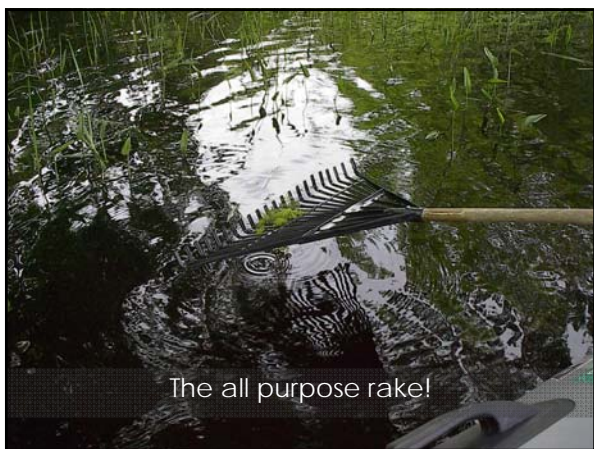
Lake
Annesegunticook's
"Peeping Tom"



What's Next ???



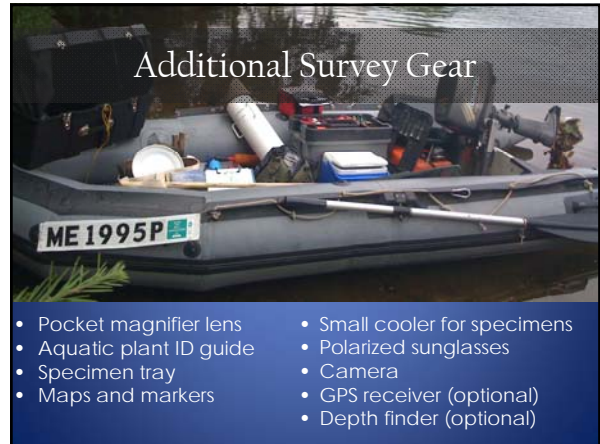
VLMP offers
Summer Scope
Clinics!



The all purpose rake!



Marker
Buoys

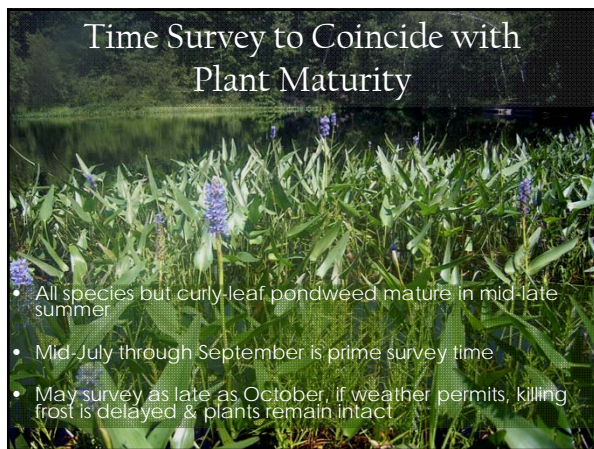


- Pocket magnifier lens
- Aquatic plant ID guide
- Specimen tray
- Maps and markers
- Small cooler for specimens
- Polarized sunglasses
- Camera
- GPS receiver (optional)
- Depth finder (optional)



- Good light
- Minimal reflection and glare
- Peak water clarity
- Dead calm
- Early morning often provides best viewing conditions of the day

Time your survey to coincide with the most favorable viewing conditions

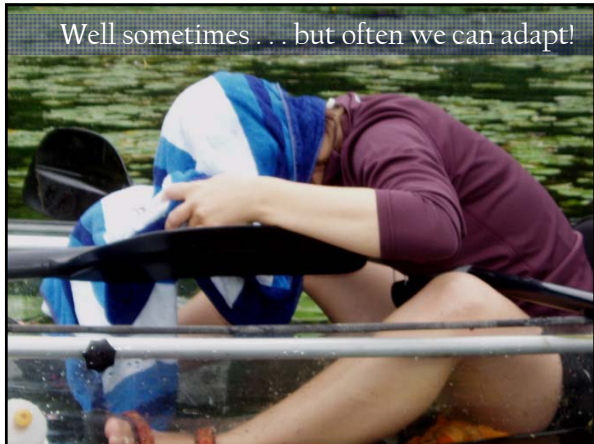


- All species but curly-leaf pondweed mature in mid-late summer
- Mid-July through September is prime survey time
- May survey as late as October, if weather permits, killing frost is delayed & plants remain intact



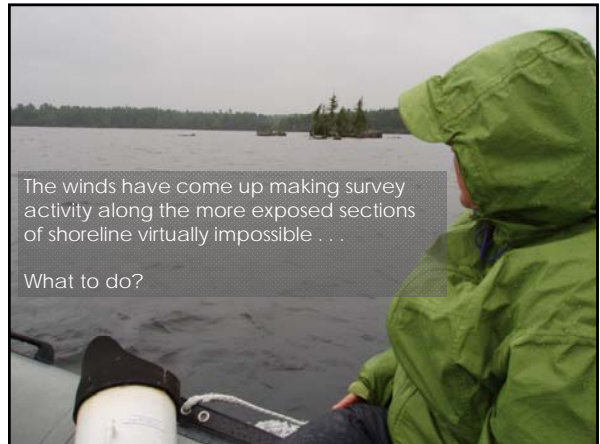
Do we throw in the towel???

Well sometimes . . . but often we can adapt!



The winds have come up making survey activity along the more exposed sections of shoreline virtually impossible . . .

What to do?



Change your location within the intended survey area to take advantage of the most favorable conditions available at that moment: protected coves, inlets, etc.



6

If You Find a Suspicious Plant

If you find a suspicious plant . . .



Follow These Steps

- Immediately mark the location with a buoy and on your map
- Carefully obtain a specimen
- DO NOT attempt to remove the plant
- Watch for and collect stray fragments
- Send or take the specimen to VLMP/CIAP for confirmation





PREPARING & MAILING SPECIMENS

- Contact us!
- Plants can be kept fresh for days by storing in a container of water in the fridge
- When ready to ship, place live specimens in heavy duty Ziploc bags
- NO paper towels: remove air from the bag. Float delicate samples in water.
- Mark the bag with your name, and contact information
- Ship the specimen in a SOLID CARDBOARD BOX, with packing material
- Enclose completed "Suspicious Plant Form"

Help us Track Your Suspicious Plant

7

Become a Certified Invasive Plant Patroller!

Certified IPP

WHAT WE ASK OF YOU . . .

- Attend one Introductory IPP Workshop
- Use VLM standardized survey protocols and data sheets
- Make a formal commitment to submitting your screening survey data on a REGULAR basis (*Sign up today!*)
- To maintain certification you must report survey activity or attend additional training at least once every three years

Certified IPP

WHAT YOU CAN EXPECT FROM US:

- Lifetime technical support
- Regular program updates including a personalized Spring Packet
- Free attendance to VLM's Annual Lake Monitoring Conference and a warm welcome into the growing VLM community
- A free bucket scope! (*Get 'em while they last!*)
- A great deal of appreciation!!!

REMINDER - Certification forms are at the registration table.
Free bucket scopes to newly certified IPPs *while they last!*



Join us on Facebook!



YOU'RE INVITED!

VLMP's Annual
Lake Monitoring Conference
Saturday, July 19
Great Outdoors, Turner