

SAFETY!

- Always work in teams
- Always wear a PFD
- Be prepared for sudden changes in weather
- Dense plant communities can pose safety threats to swimmers & divers. Use caution!

THE HUNT FOR AQUATIC INVADERS

Invasive Aquatic Plant Screening Survey Procedures

Your Mission...

Rule Out Presence of Target Invaders

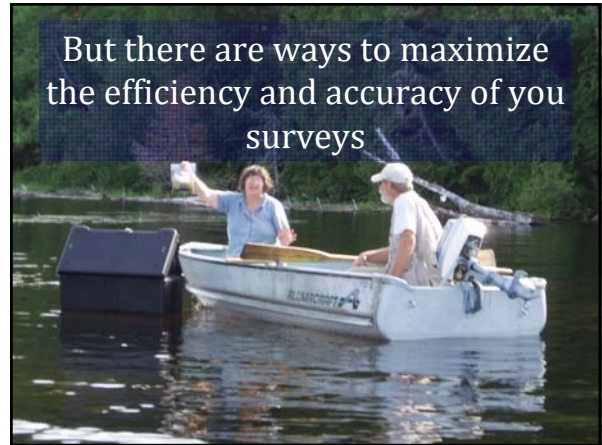
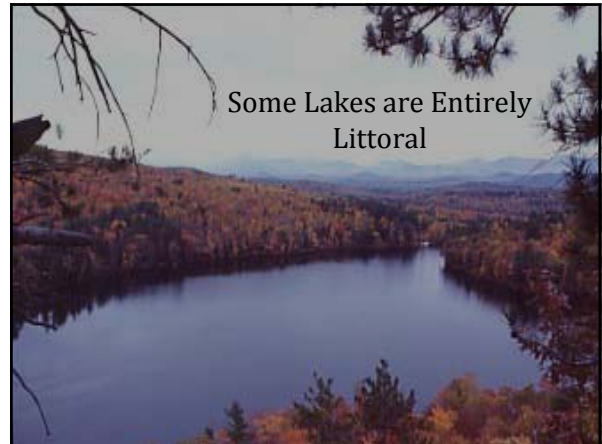
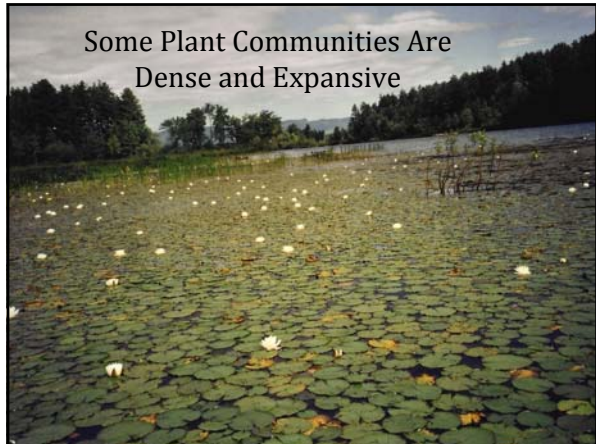
The more thorough the survey; the higher one's confidence in the "NO IAP DETECTED" result

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



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*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 . . .

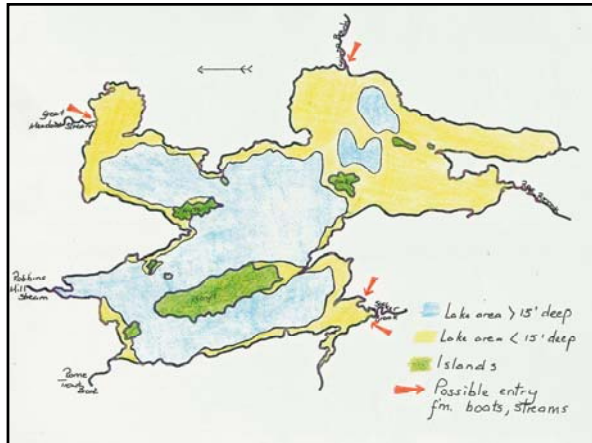
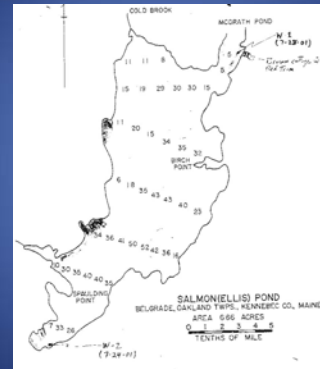
- How large is the body of water to be surveyed?
- How much of the waterbody is littoral ? (depth maps help!)

Determining the Littoral Zone

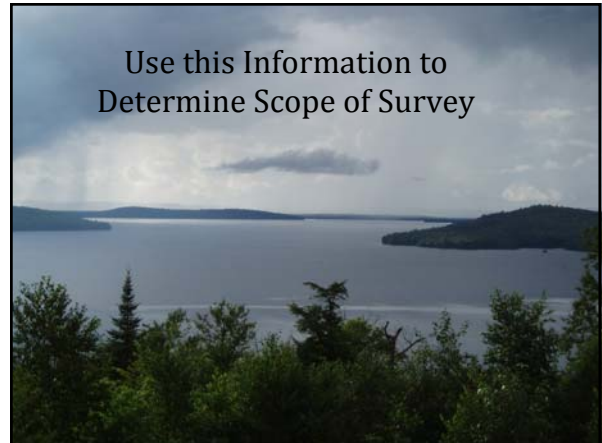
- Area where light penetrates to the bottom, supporting rooted aquatic plants
- Water clarity is determining factor



Potential Habitat Assessment



Use this Information to Determine Scope of Survey



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

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

Divide the waterbody into "doable" sectors

LEGEND

GRID = 1 mile (approx. 528 ft.)

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Go While the Going is Good

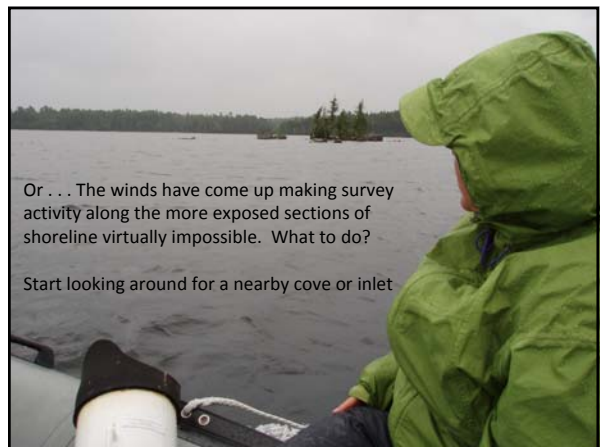
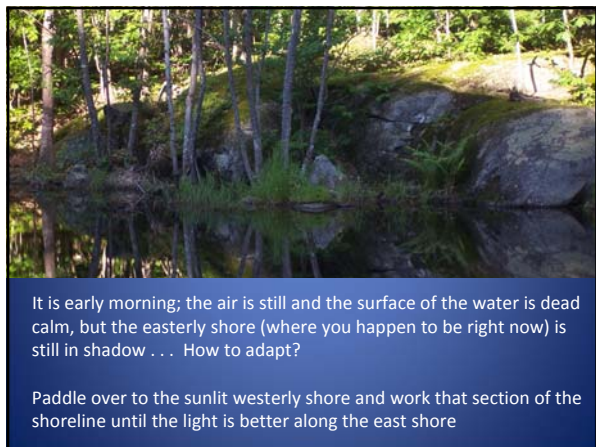
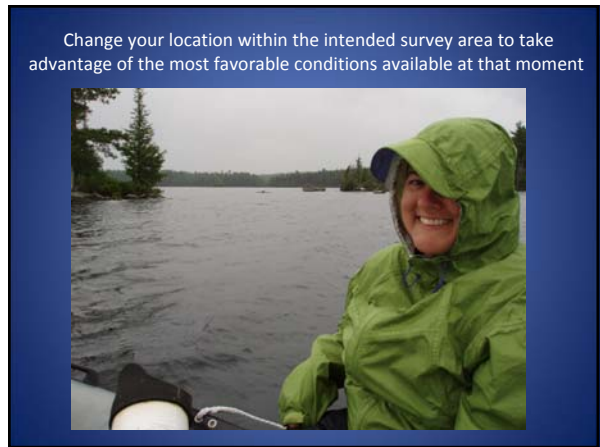
Time your survey to coincide with the most favorable viewing conditions

Optimal Conditions

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

Time Survey to Coincide with Plant Maturity

- 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



4

Scopes

How They Work



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

Bucket Scope with Cover



Wide Angle View Scope



Pistol Case (Kayak) Scope



The Enright's Economy Scope



View
Canoe



Diver's Mask, Snorkel
and Fins



VLMP offers
Spring Scope
Clinics!

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Teamwork

Two-Person Survey Team

- *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

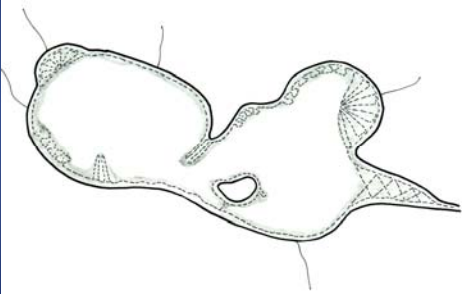
Kayak Teamwork



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Charting Course

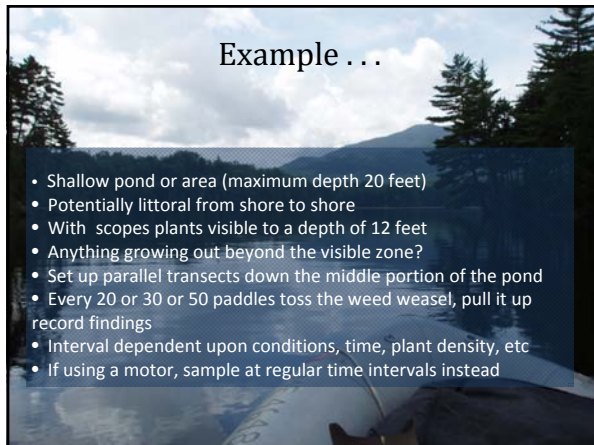
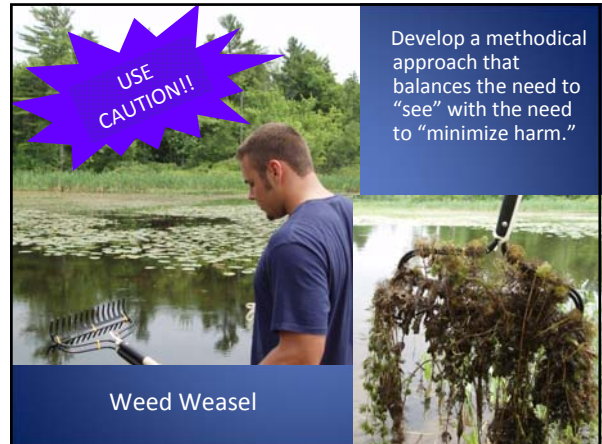
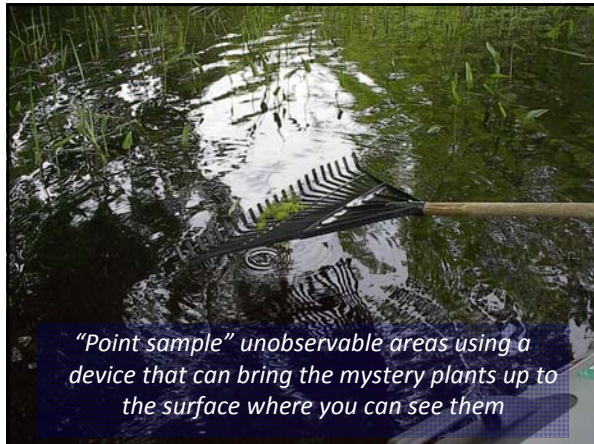
Setting & Adjusting Course



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Your Toolbox





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Getting to Know the Natives

See More *Knowledgably* as Opposed
to Simply Seeing More . . .



Signs That You Are Hooked . . .

- Is your refrigerator is full of plastic bags containing samples of plants you intend to key out later?
- Do you have more photos of aquatic plants on your camera than family members?
- Can you just not wait to get back out there tomorrow to explore that next little cove?

Welcome to the wonderful world of botanizing!

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

- Plants can be kept fresh for days by storing in a container of water in the fridge
- Contact us first!
- Use heavy duty Ziploc bags
- Place fresh live samples in the bag (NO paper towels) and remove air from the bag. Float delicate samples in water.
- Mark the bag with all pertinent information, including your phone number and email
- Carefully pack the bag in a SOLID CARDBOARD BOX
- Enclose completed "Suspicious Plant Form"

Help us Track Your Suspicious Plant



The form includes fields for: Name, Address, Phone, Date of contact, Name of contact, Date specimen arrived, Name of collector, Name of site, Date of ID, Species identification, Date of collection, and a section for 'Check if specimen from a location that requires special handling'.

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Become a Certified Invasive Plant Patroller!

- Attend one Introductory IPP Workshop
- Make a formal commitment to submitting your Screening Survey data on an annual basis
- Recertification requirement
- Lifetime technical support
- Spring Mailing Updates
- Free attendance, Annual VLMP Lake Monitoring Conference



Please document your efforts, regardless of whether or not you find an aquatic invader

Your survey results will become part of a growing statewide database



The form is titled 'INVASIVE AQUATIC PLANT SCREENING SURVEY DOCUMENTATION FORM' and contains sections for 'Section 1: General Information', 'Section 2: Invasive Aquatic Plant Screening Survey', and 'Section 3: Suspected IAP observed'.

Include Maps!



The images show a satellite-style aerial map of a lake area and a hand-drawn map of the same lake with several red dots indicating specific locations or points of interest.

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Many Trained Eyes Make Light Work

Recruit Some Help!



Join or Form an IPP Team!!



57 Waterbodies with IPP Teams!
(active or actively forming)



So There You Have It!



Happy Hunting!!

May you NEVER find what you are looking for!

Please don't forget to fill out your
evaluation forms!!



Your feedback is greatly appreciated