

2013

State of Maine

Courtesy Boat Inspector Handbook



Thank you! Your help in halting the spread of invasive plants is priceless.

We know how valuable your time is and we thank you for your willingness to share it to protect Maine's waters.

The Lakes Environmental Association



The Maine Congress of Lake Associations MaineCOLA

The Maine Department of Environmental Protection





Marty Velishka carefully inspects the prop of a boat at Rangeley Lake.

Sources of help and information

Maine DEP Invasive Aquatic Species Program –DEP staff: John McPhedran, Karen Hahnel, and Paul Gregory, Bureau of Land and Water Quality, Maine Department of Environmental Protection, 17 State House Station, Augusta ME 04333 207-287-3901, milfoil@maine.gov.

Web sites with information about invasive aquatic species:

- Maine DEP: www.maine.gov/dep/water/invasives.
- Lakes Environmental Association (LEA): www.mainelakes.org.
- Volunteer Lakes Monitoring Program, Maine Center for Invasive Aquatic Plants: www.mainevolunteerlakemonitors.org/mciap.

Workshops for:

- Invasive Plant Patrol; Hand Removal of Plants
- Conducting Lake Surveys

Contact Scott Williams and Roberta Hill, 207-783-7733, Volunteer Lake Monitoring Program, 24 Maple Hill Road, Auburn ME 04210. vlmp@mainevlmp.org.

Maine Warden Service telephone numbers (by region) – Ashland : 435-3231 Bangor : 941-4440 Gray: 657-2345 Sidney: 547-5300 Greenville: 695-3756.

List of fishing tournaments: www.maine.gov/ifw/fishing/derbies_tournaments.

Courtesy boat inspector workshops and supplies: Ziploc ID bags, T-shirts, winch sticker.

For towns south and west of Augusta – Lakes Environmental Association (LEA), Peter Lowell, executive director, 207-647-8580, lakes@leamaine.org, www.mainelakes.org.

For towns north and east of Augusta – Maine Congress of Lake Associations (COLA), 207-495-2301, info@mainecola.org, www.mainecola.org.

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Efforts to prevent, detect and manage invasive aquatic species are made possible by boater participation in the Maine Lake and River Protection sticker program.

Courtesy Boat Inspection Program

Invasive aquatic plants such as variable leaf and Eurasian water milfoil, hydrilla, water chestnut and Brazilian elodea are a serious threat to Maine's waters. These plants are so vigorous and propagate so fast that they can crowd out native plants, affect fish populations, and make swimming and boating difficult, if not impossible. When that happens, costly control measures are needed.

Many new infestations occur in shallow waters near public boat launch facilities, so it's obvious invasive plants move from lake to lake on the boats and equipment of unsuspecting boaters. If people are the cause, they can also be the cure.

One critical control point to halt the spread of these plants is at Maine's public boat launching sites. Accordingly, the state has developed a program to educate boaters so they won't spread plants through lack of information. It's the Courtesy Boat Inspection Program, and it's our lakes' first line of defense.

The Maine Department of Environmental Protection (DEP) oversees the inspection programs in the state and distributes funding to organizations trying to protect lakes. While DEP provides training, protocol, and funding, none of this prevention work can be done without the hard work of local residents.

Courtesy Boat Inspectors do the following:

- Discuss with boaters how invasive aquatic plants spread
- Show boaters how to inspect boats and equipment for plant fragments
- Urge boaters to inspect before and after every launch
- Distribute information about invasive plants
- Articulate Maine law regarding the transport of these plants.



CBI Cam Dufour inspects a boat at Pleasant Pond in Litchfield.

Maine's 'Milfoil law'

The first bill involving invasive aquatic plants passed in 2000. Several related bills have passed since, including the sticker funding mechanism in 2001. Here are the key elements. Referencing fines can influence reluctant boaters.

Funding for education, prevention, eradication and enforcement comes from the sticker required for motorized boats on inland waters. Failure to display the appropriate sticker (see Page 5) can result in a fine. MRSA Title 12, Sections 13056 and 13058.

It is illegal to transport ANY aquatic plant, native or non-native, on the outside of a vehicle, boat, trailer or equipment. Violations may result in fines up to \$500 (\$2,500 for subsequent violations). MRSA Title 38, Section 419-C.

It is also illegal to possess, import, cultivate, transport or distribute any of the 11 invasive aquatic plants named in the law. Violations may result in fines up to \$500 (\$2,500 for subsequent violations). MRSA Title 38, Section 419-C. More serious fines, between \$500 and \$5,000, may be levied on boaters who launch boats carrying a prohibited invasive aquatic plant (defined in MRSA 38 Section 410-N). MRSA Title 12, Section 13068-A.

CBIs say:

"I grew up around Waterford and on Keoka Lake and I want to help protect the lake in any way I can. It's a beautiful place to work."

- CBI Rachel Brennan, Keoka Lake

The ideal inspection

A courtesy boat inspector can — and should — do much more than help boaters inspect their boats, trailers and equipment. Each inspection also is an opportunity to create a change in boater behavior, so that he or she automatically conducts an inspection without relying on an inspector. It's also a chance to educate the boater about why inspections are so important.

“CBIs need to engage boaters in discussion – have a dialogue – rather than to quietly inspect their boat without explaining the importance of the boater inspecting on their own,” says John McPhedran of DEP’s Invasive Aquatic Species Program.

See the box below for questions that can help “break the ice” and establish a dialogue with boaters. They are designed to provide an idea of how well a person understands the invasive aquatic plant problem and how well they grasp and implement the inspection process. It’s important to encourage boaters to ask questions. But that also means the courtesy boat inspector should know the facts and figures about invasive plant efforts and issues.

Be ready to talk about nearby or newly infested waters.

In addition to being familiar with the ‘milfoil law’, know how much money the milfoil sticker generates (about \$1 million annually; 60 percent for DEP and 40 percent for the Department of Inland Fisheries and Wildlife (DIFW). Tell boaters even a tiny fragment of a plant can start a new infestation.

The more interesting you are, the more likely someone

will listen. You might be the first — perhaps the only — person to talk to a boater about protecting Maine’s waters. Don’t miss this chance to make a friend for your lake.

Approaching the boater

Smile and be friendly as you approach the boater in the staging area, before he or she is on the boat ramp. Avoid delaying boaters or causing a backup.

In order to instill a “self-inspection” ethic among boaters, invite boaters to get out of their vehicles and conduct the boat and trailer inspection WITH you. If a boater is reluctant to take the time, simply offer the known infestations brochure, and record whatever information you can.

Make a note to approach this same boater again as he or she is leaving the launch to conduct a complete survey and inspection at that time. Ideally, you will inspect each boat and trailer TWICE — entering and leaving the water.

Sample Script: “Good Morning / Afternoon. I am a volunteer from _____. We are trying to prevent the spread of invasive plants such as milfoil and hydrilla in Maine lakes. The plants are spread from lake to lake when they become lodged on boats, gear and trailers. May I have just a few minutes of your time to give you some general information and to show you how to inspect for fragments? If you would walk around your boat with me, I can show you some areas to check for hitchhiking plants.”

How to ‘break the ice’ with boaters

These questions relate to inspection issues directly:

- “Have you ever noticed plants on your boat, motor, trailer or gear?”
- “Are there particular places on your boat, motor, trailer or gear where you might expect to find plant fragments?”
- “Have you encountered Courtesy Boat Inspectors before?” . . . “Did they do a good job?”
- “Do you check your boat and gear yourself if an inspector is not present?”

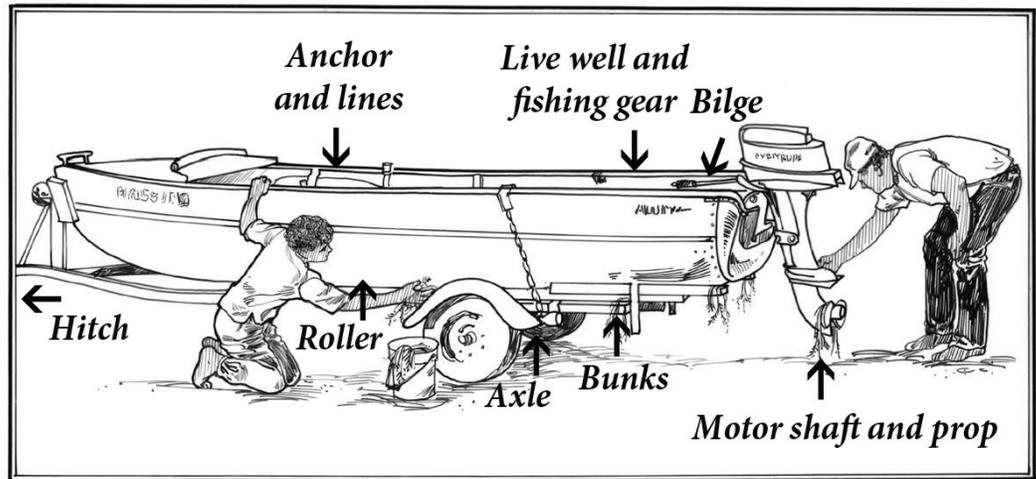
More general questions:

- “Did you notice any weed beds as you were boating?”

- “Were they easy to spot and were they easy to avoid?”
- “Did you drop anchor, and if you did, were there any plants on the anchor or line when you brought it back in?”
- “Did you notice fragments floating on the surface of the water?”
- “Do you fish weed beds?”
- “Have you ever seen milfoil growing?”
- “Do you boat out of state (if Maine registered)?”
- “Do you travel to a number of lakes or stick to one or two?”

Watercraft checkpoints

Look for hitchhiking plants anywhere on the boat and trailer where they could be caught by rough edges.



Where to inspect

You may only have time to check some boats, depending on how busy the site is. The purpose of equipment inspections is to remove any aquatic plants, even small pieces, before boats are launched and as they leave the water. Fragments may be found anywhere on the outside of the boat, but especially on and behind propellers, license plate holders, rollers or “bunks” that the boats ride on, the trailer frame, and any gear on the outside of the boat (see diagram above of boat with inspection hot spots).

Check personal watercraft intakes. Gear inside the boat, such as anchors and lines, chains, fishing tackle and even the floor of the boat, also can be a problem. A thorough inspection can take less than a minute, but it is critical to do.

Follow these steps and ask boaters to do the same on their own:

- ✓ **Clean** off any mud, plants (even small fragments), and animals from boats, trailers and equipment.
- ✓ **Drain** boat and equipment away from water.
- ✓ **Dry** anything that comes into contact with water.
- ✓ **Never** leave waters with live fish, or release plants or animals into a body of water unless they came out of that body of water.

Additional thoughts on the inspection process

What if a boater insists on launching even if he or she knows there are plants on the boat and equipment?

Always respect the boater’s wishes. Politely explain the dangers of invasive plants: “Invasive plants grow

in dense mats that shade out native plants, block fish movement, entangle boat motor propellers, and interfere with swimming and many other types of water recreation. Invasive plants out-compete native vegetation needed by fish and wildlife. These non-native plants grow very rapidly.”

Let boaters know they should always clean their trailers, boats, motors and gear of any plant matter before and after launching. You may also caution, in a non-threatening manner, that Maine law prohibits the transportation of ANY plant on the outside of a boat, trailer, or equipment and prohibits launching a boat with invasive plants.

It’s important to instruct boaters about properly cleaning their boats so they don’t inadvertently transport invasive plants from one lake to another. If you find plant material on a boat, ask the boater to pull aside so the two of you can do a really thorough inspection without holding up other boaters.

If the boat has a lot of plants, suggest the boater wash the boat at a location far away from lakes or streams before launching it. If the boater is resistant, you may caution him/her about Maine’s law, but do not try to enforce the law. If the boater launches anyway, note the license numbers on the vehicle and boat and communicate them to your coordinator or a Maine game warden. Remember, this is a courtesy – not mandatory – inspection.

Other invaders: Remember that invasive aquatic animals such as zebra mussels also threaten Maine waters. That’s why it’s critical to remove *any* debris during an inspection and remind boaters to do the same. See Page 11 for more information on invaders other than aquatic plants.

2013 Maine Courtesy Boat Inspection Form

Check here if you encouraged self-inspection _____

Lake Name _____ **Town** _____ **Launch Name/Location** _____ **Host Agency** _____
Date _____ **Military Time: From** _____ **To** _____ **Surveyor Name** _____

State Abbr.	If Motorized * <u>BOAT</u> Registration Last 3 alpha- numeric digits	Sticker Present? Circle Y/N / NM (non-motorized)	Last Waterbody Visited?		Boat Inspected at What Time?		**Is the Plant Suspicious?		
			Lake Name	State	Entering	Leaving	Any Plants Found? (Circle Y/N)	Was the Plant Identified as Invasive?	Who Identified? **see bottom of page
1		Yes No NM			Entering		Yes No	Yes No	
2		Yes No NM			Leaving		Yes No	Yes No	
3		Yes No NM			Entering		Yes No	Yes No	
4		Yes No NM			Leaving		Yes No	Yes No	
5		Yes No NM			Entering		Yes No	Yes No	
6		Yes No NM			Leaving		Yes No	Yes No	
7		Yes No NM			Entering		Yes No	Yes No	
8		Yes No NM			Leaving		Yes No	Yes No	
9		Yes No NM			Entering		Yes No	Yes No	
10		Yes No NM			Leaving		Yes No	Yes No	

Comments: _____

DO NOT CHANGE THIS FORM!

***IMPORTANT**— If you suspect a plant is invasive, record the entire boat registration number not just the last 3 alphanumeric digits.
****invasive plant identification must be done by VLMP so send all suspicious plants to VLMP for identification.**

FINAL
2/7/2013

The inspection form

The Inspection Form accommodates up to 10 inspections. It is important that each boat inspector has his/her own survey form. NO SHARING PLEASE!

Recording information on the inspection form

- Fill in the top two lines of the inspection completely. Failure to do so will render the entire form useless.
- Coordinators may want to fill in generic parts on these lines before photocopying.
- Be consistent when filling in the Launch Name/Location. This is important for data retrieval.
- Many of the columns can be filled in before you approach the boater.

Description of inspection form questions

If Motorized: This box is for recording the boat's state abbreviation and the last three alphanumeric digits of the boat registration number. **If a plant sample is collected for identification, record the entire boat registration number which will also serve to track the plant sample.** Non-motorized craft are not recorded here. **Note:** Massachusetts boat registration uses MS.

Sticker Present?: Beginning in 2008, the purchase of a new sticker for owners of Maine-registered watercraft was combined with the watercraft registration fee. The sticker reads "Stop Aquatic Hitchhikers - Preserve Maine Waters" and is physically attached to the Maine watercraft registration.

Owners of motorized boats with out-of-state registration are still required to purchase and affix a separate nonresident sticker (above), now square rather than the old triangle, but with the same wording as the sticker for Maine registered watercraft. Neither type of owner sees new or additional costs, but owners of Maine-registered watercraft automatically pay the combined cost of the sticker and registration when the boat is registered for use on inland waters.

What does this mean for you, the CBI? For Maine-registered boats, look for the rectangular "Stop Aquatic Hitchhikers - Preserve Maine Waters" sticker right next



to the boat registration. For non Maine-registered boats, look for the square sticker with the same wording beside the out-of-state registration. For both, circle "yes" if Maine-registered boats display the current registration/sticker combination or if non Maine-registered boats display the current square sticker. The 2012 registration for Maine boats (above) is orange. For non Maine-registered boats, the sticker is white. Look closely each year to see the date to make sure it is current.



This is also where you indicate if the boat is non-motorized by circling "NM." If "yes" or "no" is circled then it is understood that the boat is motorized. It is very important that one option is circled, otherwise the data is invalid and DEP will not use the inspection information in the final data summary of boat inspections.

Inspecting Non-Motorized Watercraft: You are encouraged to inspect non-motorized watercraft. Be sure to circle the "NM" in the Sticker Present Column.

What if a boater wants to launch on inland waters but their registration lacks the "Stop Aquatic Hitchhikers - Preserve Maine Waters" sticker?: Owners of Maine-registered watercraft used only in tidal waters may declare such use to their town clerk. The \$10 fee will be deducted from the total watercraft registration fee and the "Stop Aquatic Hitchhikers" sticker will be removed from the watercraft registration, since boats used exclusively in tidal waters do not require a sticker. But if tidal boaters later decide to boat on inland waters their mu-

Where can boaters buy a milfoil sticker in your town?

Check out the Maine Department of Inland Fisheries and Wildlife's list at:

www.minelakes.org/documents/Milfoil%20Sticker%20Agent%20List.pdf

municipal office can issue (for \$10) a new Maine watercraft registration that includes the milfoil sticker.

What if the boat does not have this year’s sticker? You do not have the authority to stop boaters from launching. However, you can inform them they risk a fine if a warden stops them. This is a good opportunity to explain where the money from the sale of the sticker goes.

A key point to remember is that all the funds go to dedicated accounts at DEP and DIFW for preventing and managing invasive aquatic species; none goes to the state’s general fund. Sixty percent of the sticker funds go to DEP and 40 percent to DIFW. For more information on how the money is spent, see Pages 15-17.

Last lake visited: Ask which body of water the boat was last on. You also need to record the state where the lake is located. Use the state abbreviation for this column if possible. It’s very helpful to know if a boat came from an infested lake so extra precautions can be taken.

Boat inspected at what time?: We need to know whether the boater is potentially introducing plants into the lake or bringing them out. Record the time the boat entered or left the lake in the appropriate line.

Please use **military time** and use the same survey line for each individual boat if you see it twice (entering and leaving the lake).

Any plants found?: If any aquatic plant is found, record a “yes.” If you find a suspicious plant – one you believe might be invasive – you must send it in to the Volunteer Lake Monitoring Program for identification or turn it in

Converting to military time			
Regular time	Military time	Regular time	Military time
Midnight	0	Noon	1200
1 a.m.	100	1 p.m.	1300
2 a.m.	200	2 p.m.	1400
3 a.m.	300	3 p.m.	1500
4 a.m.	400	4 p.m.	1600
5 a.m.	500	5 p.m.	1700
6 a.m.	600	6 p.m.	1800
7 a.m.	700	7 p.m.	1900
8 a.m.	800	8 p.m.	2000
9 a.m.	900	9 p.m.	2100
10 a.m.	1000	10 p.m.	2200
11 a.m.	1100	11 p.m.	2300

to the local program director, who will either confirm it is not invasive or send it in to the VLMP for positive identification. Was the plant identified as invasive? Don’t make your selection in this column until after a positive ID is made.

Who identified the plant?: Use this column to record the person and/or agency that identified the plant.

State abbreviations			
Alabama AL	Idaho ID	Montana MT	Rhode Island RI
Alaska AK	Illinois IL	Nebraska NE	South Carolina SC
Arizona AZ	Indiana IN	Nevada NV	South Dakota SD
Arkansas AR	Iowa IA	New Hampshire NH	Tennessee TN
California CA	Kansas KS	New Jersey NJ	Texas TX
Colorado CO	Kentucky KY	New Mexico NM	Utah UT
Connecticut CT	Louisiana LA	New York NY	Vermont VT
Delaware DE	Maine ME	North Carolina NC	Virginia VA
District of Columbia DC	Maryland MD	North Dakota ND	Washington WA
Florida FL	Massachusetts MS	Ohio OH	West Virginia WV
Georgia GA	Michigan MI	Oklahoma OK	Wisconsin WI
Hawaii HI	Minnesota MN	Oregon OR	Wyoming WY
	Mississippi MS	Pennsylvania PA	
	Missouri MO	Puerto Rico PR	

Dealing with suspicious plant fragments

Use the color pictures of plants found on Pages 19-23 to help determine if a plant fragment is suspicious. Suspicious means: Is there any possible chance the plant is an invasive? If yes:

Label and package the sample according to protocol (**being sure to record the entire boat registration number for the sample ID**) and send the sample to the Volunteer Lake Monitoring Program (see box at right). Also please do the following:

- Hold the applicable survey form until identification has been confirmed. When identity has been confirmed, write the plant name on the bottom of the original survey form.
- Fill in the “Was the Plant Identified as Invasive?” column to indicate if the plant was identified as invasive or not.
- Fill in the “Who Identified?” column to indicate who conducted the plant identification.
- Send the survey form to LEA and keep a copy for your records.

Reporting procedure

Survey forms should be sent every two weeks to LEA, 230 Main Street, Bridgton, Maine 04009. Please be sure all survey forms for the first half of the summer reach LEA by July 15 and by September 15 for the second half.

Keep photocopies of your completed forms in case the originals are lost. Please review forms before sending to make sure the inspector is writing legibly and has filled out the forms properly. Survey forms received later than two months after the season will not be entered into the state’s database.

PROGRAM COORDINATORS ARE STRONGLY URGED TO REVIEW SURVEY FORMS BEFORE SENDING THEM IN! It is much easier to correct mistakes or omissions when things are still fresh in your mind.

Invasive Aquatic Plant Sample

ID# (state and registration) MS 9521AR
Date collected 7-26-08
Collector's name Cyndi Broyer
Organization LPA
Contact's phone/email 207-925-2322
Waterbody Lovewell Pond
Town/County Fryeburg ME Oxford
Launch site name Fish + Game
Mail moist sample to VLMP, 24 Maple Hill Rd., Auburn, ME 04210

Preparing specimens for mailing

Keep the plant wet and cool; place it in the pre-labeled Ziploc bag provided to you at the beginning of the season. If the plant is delicate and/or flimsy, add enough water to the bag to cushion the plant and keep it wet.

If the plant is relatively sturdy, remove all air from the bag and seal. DO NOT wrap the plant in a wet paper towel or other absorbent material.

Using a waterproof marker, label the bag with the following information: Date; Collector’s name; Waterbody; Town; Launch site location; Submitted by (person’s name) and contact info; ID# (state abbreviation and **the boat’s full registration number**) which should also be on the inspection form.

Make sure the bag is sealed tight and place it in a small box with enough packing material (crumpled newspaper works well) to prevent movement.

Mail the specimen on a Monday or Tuesday, to minimize the possibility of weekend delays. Please contact VLMP at (207) 783-7733 or vlmp@mainevlmp.org to let them know the specimen is on its way.

Send packaged specimen to the following address:

Volunteer Lake Monitoring Program
24 Maple Hill Road
Auburn, Maine 04210

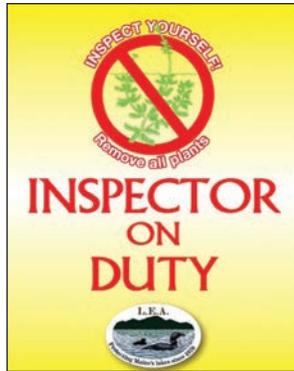
You will be contacted within 72 hours of receiving your plant sample. If the plant is invasive, the Maine Department of Environmental Protection will be notified. Remember to fill in the last two columns of the CBI Inspection Form once you learn if the plant specimen is invasive or not.

CBI's say:

“I think I saved the lake! I was happy that we caught it (a fragment of Eurasian milfoil).”
– CBI Adam Armington, Kezar Lake

What's worked well?

- Signs like the one shown at right let boaters know what's ahead, making them more receptive to inspections.
- Using an online scheduler lets CBIs enter or change their work shifts from a computer connected to the internet.
- Wearing the CBI T-shirt immediately identifies you to boaters.



Personal Safety

Nothing is of greater importance or concern than your personal safety. Please observe the following guidelines when you are at a launch site:

- If you have a cell phone, take it with you to the boat launch site.
- Always back away from a potentially dangerous or violent situation. Volunteers are not enforcers of rules and should never jeopardize their own safety.
- If you are ever suspicious of someone (such as a loiterer or someone who is not boating), do not hesitate to leave the launch site. It's a lot better to be safe than sorry! If you feel that a boat launch site is unsafe in any way, notify your coordinator or the host agency sponsoring inspections on your lake. It might be possible to request that the town send a police patrol car around on days that you are working, as they have a vested interest in the safety of their launch site as well. If it's that dangerous to be there, report the condition to the local, county or state police and cease operations.
- Do not allow a confrontation to develop, no matter how strongly you feel about the threat from invasive plants.

Conduct at the launch site

Follow these few simple guidelines and both you and boaters will be comfortable.

Always ask if boaters would mind answering a few questions and ask permission to inspect their boats with them.

Always introduce yourself and say which organization you are working for and why you are at the launch site. Do not just approach a boater and begin asking questions immediately, as they might be confused about who you are and why they should give you their time.

Wear a CBI T-shirt or other organization shirt if available. It helps promote your message and reassures boaters that they're being approached by someone involved in a legitimate project.

Maintain a positive attitude and wish all boaters a good day, no matter how irritable they may seem.

Tricky questions

Courtesy Boat Inspections have been around for a while, so most people are aware of the program, but here are some ideas in case someone asks: "Why are you out here wasting resources when the plant is going to come anyway?" You might say, "Even if we cannot keep the plants out completely, we can prevent a lot of widespread damage. Prevention gives us time to adopt new control methods as they are developed. Also, the longer we keep invasives out of a lake the longer we put off the enormous costs of management and property devaluation."

"Aren't all plants bad anyway?" It is important to clear up this misconception! Native plants are essential elements of an aquatic ecosystem, providing the basis for all life in the lake. The problem with invasive (non-native) plants is that they out-compete native plants, since they have no natural competition or predators.

"I don't think a sticker fee is fair because we boaters spend enough money as it is." Maine lacks adequate funding to protect its waters. Most states do not offer free public boat launches and it would be a shame if Maine had to charge boaters to launch their boats.

Many states charge a lot more than Maine does, either in registration fees, charges to launch boats or additions to the gas tax. In Vermont, 25 percent of boat registration fees go toward fighting invasive plants that have become established there.

In other New England states, boaters face higher fees and contend with more infested waters. Hundreds of Massachusetts lakes are impaired for boating and swimming by invasive plants.

“I don’t have time for this . . . I know all about it already!” This is a fairly common remark. If the boater does not wish to help you with the survey, you must respect their rights and let them be. Just offer them a brochure and wish them a nice day.

“Who is really getting the money from the stickers anyway?” Except for the \$1 per sticker agent fee for each non-resident boat and costs associated with distribution, printing and administration at Inland Fisheries and Wildlife, all of the money is channeled directly into the dedicated invasive aquatic species accounts at DEP and DIFW.

The state uses some of the money to offer grants to municipalities and non-profit organizations that sponsor volunteer efforts and local programs such as courtesy boat inspections. Refer to Pages 15-17 for a breakdown of how sticker revenues are distributed and spent.

Implementing the CBI Program on your lake

Beyond the immediate goal of protecting your lake, the benefits of running a CBI program are many: great PR for your association resulting in new members, greater donations, and even the emergence of new leaders within your group.

Requirements: Each organization receiving a grant from the DEP for CBI staffing must send a minimum of one representative to a CBI training session. That person, ideally the organization’s CBI supervisor, will be responsible for training all inspectors who are hired or who volunteer for the organization. **The main training session is held after the annual Milfoil Summit in late February/early March.** Contact LEA to arrange train-

Volunteer survey

Sponsoring group _____

Name _____

Address _____

Phone _____ Email _____

Left message/ Date _____ Left message/ Date _____ Left message/Date _____

Will volunteer? _____ (yes/no)

Preferred Launch Site _____ Doesn't Matter _____

Preferred day _____ Doesn't matter _____

Preferred time _____ Doesn't matter _____

Weekends available for boat inspection (Please circle the weekends volunteer is available):

June 1 June 8 June 15 June 22 June 29 July 6 July 13 July 20 July 27

August 3 August 10 August 17 August 24 August 31

Can you work July 1? _____ July 2? _____ July 3? _____ July 4? _____

Can you suggest other property owners or interested persons who might volunteer?

What training session would you like to attend?

Can you take a friend to the launch site with you during your assigned time? _____

What size T-shirt do you prefer? Small ___ Medium ___ Large ___ Extra Large ___ XX Large ___

 (Name of recruiter) (Phone) (Email) (Date)

ing if you can't make the Summit. Contact information is at right, under "Sources of help and information."

In addition to CBI training and a CBI supervisor, you will need volunteers, a staffing schedule and a volunteer coordinator for each launch site if possible. Use the media and your organization's newsletter to publicize the need for volunteers, but realize you will probably not get enough people unless you make direct person-to-person requests.

Use your membership list, divide it up among volunteers, and call individuals you think would be willing to help protect the lake. Be sure telephone callers use the Volunteer Survey Form (Page 9). You'll be amazed how little you remember about each call after 5 or 10 minutes have passed. The call has four objectives: explain the problem (invasive aquatic plants); state your need (volunteers); get a commitment, and schedule the individual for CBI training.

Scheduling inspectors: You can use Excel to make a spreadsheet showing the days and times you plan to have inspectors at launch sites. Two or three-hour time slots work for most volunteers. It's a lot easier if you can schedule a volunteer into the same time slot each week or for a period of weeks.

The busy times vary from site to site. Generally, Fridays, Saturdays and Sundays are good to cover. Some organizations cover weekends first, and then schedule extra volunteers on weekdays.

List places in your area where nonresident boaters can buy milfoil stickers.

1. _____

2. _____

3. _____

Sources of help and information

Maine DEP Invasive Aquatic Species Program –DEP staff: John McPhedran, Karen Hahnel, and Paul Gregory, Bureau of Land and Water Quality, Maine Department of Environmental Protection, 17 State House Station, Augusta ME 04333, 207-287-3901, milfoil@maine.gov.

Web sites with information about invasive aquatic species:

- Maine DEP: www.maine.gov/dep/water/invasives.
- Lakes Environmental Association (LEA): www.minelakes.org.
- Volunteer Lakes Monitoring Program, Maine Center for Invasive Aquatic Plants: www.mainevolunteerlakemonitors.org/mciap.

Workshops for:

- Invasive Plant Patrol; Hand Removal of Plants
- Conducting Lake Surveys

Contact Scott Williams and Roberta Hill, 207-783-7733, Volunteer Lake Monitoring Program, 24 Maple Hill Road, Auburn ME 04210. vlmp@mainevlmp.org.

Maine Warden Service telephone numbers (by region) – Ashland : 435-3231 Bangor : 941-4440 Gray: 657-2345 Sidney: 547-5300 Greenville: 695-3756.

List of fishing tournaments: www.maine.gov/ifw/fishing/derbies_tournaments.

Courtesy boat inspector workshops and supplies: Ziploc ID bags, T-shirts, winch sticker.

For towns south and west of Augusta – Lakes Environmental Association (LEA), Peter Lowell, executive director, 207-647-8580, lakes@leamaine.org, www.minelakes.org.

For towns north and east of Augusta – Maine Congress of Lake Associations (COLA), Maggie Shannon, executive director, 207-495-2301, info@mainecola.org, www.mainecola.org.

CBI's say:

"The majority of folks on the water have a genuine interest in keeping our lakes free from invasive plants." — CBI Cyndi Broyer, Lovewell Pond

Please watch out for these other invaders

Although this manual is focused on preventing the spread of invasive aquatic plants through courtesy boat inspections, it is important to realize there are also invasive aquatic animals that threaten Maine's water bodies. Species such as Quagga mussel (*Dreissena bugensis*), Zebra mussel (*Dreissena polymorpha*), Chinese mystery snail (*Cipangopaludina chinensis malleatus*), Chinese mitten crab (*Eriocheir sinensis*), Northern pike (*Esox lucius*), Asian clam (*Corbicula fuminea*), Rusty crayfish (*Orconectes rusticus*), the Spiny water flea (*Bythotrephes cederstroemi*) and Viral Hemorrhagic Septicemia (VHS) are among the most threatening to Maine.

Control methods for invasive aquatic animals vary greatly depending on the species, but following the five simple steps below can help to greatly reduce their spread into Maine.

1. Learn how to identify invasive aquatic species. Attend an Invasive Plant Patrol workshop.
2. Remove mud, plants, fish, and animals from all of your equipment and drain all water from the bilge and live wells before leaving launch areas. Many unwanted organisms (plants, animals, and diseases) can easily be transported and then unintentionally introduced into waters via recreational boater's bilge water and fish live wells. Bilge water and live well water should be drained prior to leaving a lake and if possible allowed to dry for 5 days before entering a new water body.
3. Clean your equipment with hot water or a pressure washer and allow it to dry for five days before transporting it into a new body of water.
4. If you have snails, plants, fish or other animals in an aquarium and you no longer wish to care for them, find a new aquarium home for them. Do not release them into the wild!
5. Never release any plants or animals into a different body of water from which they came.

The following pages describe some of Maine's most threatening aquatic animal invaders. The descriptions and photos are taken from the *Maine Field Guide to Invasive Aquatic Plants and their common native look-alikes* by the Maine Center for Invasive Aquatic Plants and the Maine Volunteer Lake Monitoring Program. Additional source references for individual species are listed after each description.

Chinese Mystery Snail

Cipangopaludina chinensis malleatus

Chinese mystery snails, native to parts of Southeast Asia, were brought to this country as a food source for Asian markets. It is believed that imported snails were intentionally released in some areas to create a locally harvestable supply.



Since their introduction, Chinese mystery snails have spread to many parts of the United States, and can now be found in a number of Maine lakes and ponds. Chinese mystery snails are distinctively large — the size of a walnut or golf ball and half-again as large as Maine's largest native freshwater snail.

Though they spend a good portion of their lives under the water surface, half buried in the bottom sediments, Chinese mystery snails may also be encountered with their trap doors sealed up tight, floating along at the water's surface. When these large snails die, they often wash up on shore, where their dark, olive-colored shells can be easily seen and (unpleasantly) smelled. Chinese mystery snails prefer the quiet water of lakes, ponds, roadside ditches and streams.

Chinese mystery snails may be transported, as adults or tiny juveniles, via bait buckets and water holding areas on boats. Like other snails, this species may serve as a vector for various parasites and diseases.

Chinese mystery snails occur in a number of Maine water bodies, but their full distribution in Maine is unknown. You can assist the effort to get a better handle on this invasive organism by reporting any sightings to MCIAP at 207-783-7733 or mciap@mainevlmp.org.

Reference: Martin, Scott M. 1999. Freshwater snails (Mollusca: Gastropoda) of Maine. *Northeastern Naturalist*. *Cipangopaludina chinensis* (Reeve, 1863). Fact sheet by Gulf and South Atlantic Regional Panel On Aquatic Invasive Species. www.gsar.org

Zebra mussels

Dreissena polymorpha

Zebra mussels are thought to have been introduced to this country as accidental stowaways attached to hulls or in the ballast water of ships entering the Great Lakes from Europe. Since they were discovered here in 1988, these tiny, freshwater bivalves, have become a major aquatic pest throughout much of the Midwest. Spreading to New England, primarily by way of boating activity, they have now impacted waters in Vermont, Connecticut, and Massachusetts, where the first documented occurrence of zebra mussels was in Laurel Lake in 2009.

Zebra mussels begin life as tiny free-swimming larvae, called veligers. It is during this stage that they are most readily transported from one water body to another (attached to boating gear, in bilge water, bait buckets etc.) and also most difficult to detect. After two or three weeks, the veligers “settle out” in the water body, attaching by way of strong, threadlike filaments to just about any hard surface they encounter. Rocks, sediment, wood, intake pipes, moorings, boat hulls and native mussel beds are all at risk of colonization. Zebra mussels are small (adults are about 15 mm) but voracious filter feeders, straining out major portions of the phytoplankton population and effectively starving out many native zooplankton species.

The gap created in the food web may cascade through the entire ecosystem. Zebra mussel infestations may clog power plants and industrial water systems, cause problems in irrigation canals and pipes, and foul boating equipment. Zebra mussels have not yet been detected in Maine.

Reference: Frequently asked Questions about the Zebra Mussel. United States Geological Survey. Florida Integrated Science Center, Gainesville FL.

http://cars.er.usgs.gov/Nonindigenous_Species/Zebra_mussel_FAQs/zebra_mussel_faqs.html



Photo by Simon von Meckelen

Quagga mussels

Dreissena bugensis

Quagga mussels are native to the Caspian Sea and, like zebra mussels, are thought to have come to this country in the ballast water of ocean-going ships. Quagga mussels were discovered in the Great Lakes in 1989, but were not identified as a distinct species until 1991. These invaders prefer silty or sandy lake bottoms, but may be found in waters ranging from warm and shallow, to deep and cold. Like zebra mussels, the shell is distinctly striped in dark and light bands. Adult quagga mussels are generally larger than zebra mussels (20 mm long, roughly the size of your thumbnail) and their shells are broader and more fan-shaped. The ventral (or hinged) side of the shell is convex, preventing the quagga mussel from being balanced, on this side, on a flat surface. (The zebra mussel will remain upright when placed on its ventral side.)



Quagga mussels feed year-round, even in winter when zebra mussels are dormant. Quagga mussel infestations also may clog power plant and industrial water systems, cause problems in irrigation canals and pipes, and foul boating equipment. Ecologically, they can alter benthic substrates and compete with native zooplankton, mussel and fish species for food and/or space. Quagga mussels have not been detected in Maine.

– Wisconsin Department of Natural Resources
www.dnr.state.wi.us/invasives/fact/quagga.htm

Didymo or “Rock Snot”

Didymosphenia geminata

Anglers and boaters using Maine’s streams and rivers are urged to be aware of a new threat! The aquatic nuisance alga known commonly as “Didymo” or “rock snot” has invaded the northern reaches of the Connecticut River in New Hampshire and in the White River and Battenkill River in Vermont. These are the first official reports of the invasive algae in the northeastern U.S. This highly invasive species has not been detected in Maine.

However, it already affects freshwater rivers and streams in other parts of the U.S., Canadian provinces of Que-

bec and New Brunswick and New Zealand. It is not known at this time how *Didymo* will affect water quality, aquatic habitat and fish populations in Maine, but its potential to alter habitats and displace natives species are of great concern to officials in regions where infestations have been established.



It is critical for anglers and boaters to be aware that *Didymo* is easily spread by even just one cell of the alga breaking off and drifting downstream in infested reaches. It is also very easily spread by waders and other fishing gear that touches the bottoms of streams in infested areas, so it is essential to check and clean all fishing equipment.

Useful link to find out more about *Didymo*:

www.epa.gov/region8/water/didymosphenia/

Viral hemorrhagic septicemia

VHS

VHS is an Ebola-like virus, deadly to fish, which was first reported in 2005 in North American freshwater fish. It's not a threat to humans, but is devastating to 22 species of freshwater fish populations. It's been found in the Great Lakes, St. Lawrence River, New York State and moving eastward (toward Maine).

Genetic tests suggest that the Great Lakes VHS probably originated in the Atlantic Ocean and most likely was transported in the bilge water of ships. VHS has been reported in more than 20 species and may be the most serious threat ever to our freshwater fish populations.

Report immediately to DIFW (207-657-2345) any fish appearing to be abnormal. VHS has been divided into three stages with symptoms which may overlap. These include darkening of the body, protrusion of the eyes, hemorrhages in gills and eyes, pectoral fins and body surface. The fish may become twisted and swim on their sides.

Keep any such fish cool (4 degrees C, 39 degrees F), but do not freeze. Virus isolation must be done within 24 hours after a fish is caught.

Northern pike

Esox lucius

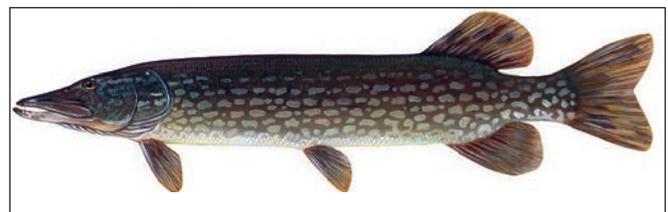
Northern pike are native to parts of Eurasia and North America, but not native to Maine. This popular "sport fish" was illegally introduced into the Belgrade Chain of Lakes in the 1970s. It's now present in at least 16 lakes in the Kennebec, Androscoggin, and coastal river drainages, and is suspected to occur in additional waters.

Esox lucius can inhabit almost every type of freshwater, from cold deep lakes, to warm shallow ponds, to sluggish streams. Besides fish, its diet includes frogs, crayfish, small mammals, and birds — just about anything it can sink its teeth into. Pike exceeding 30 pounds have been caught in Maine.

Northern pike may be confused with its close relative, the chain pickerel (*Esox niger*), a fish native to Maine. Unauthorized introductions of invasive, exotic fish species are particularly destructive to Maine's native brook trout populations, but pike are particularly voracious fish eaters. Their presence in one Maine lake is suspected of destroying one of the state's premier landlocked salmon populations. They may also cause irreversible changes to entire aquatic ecosystems.

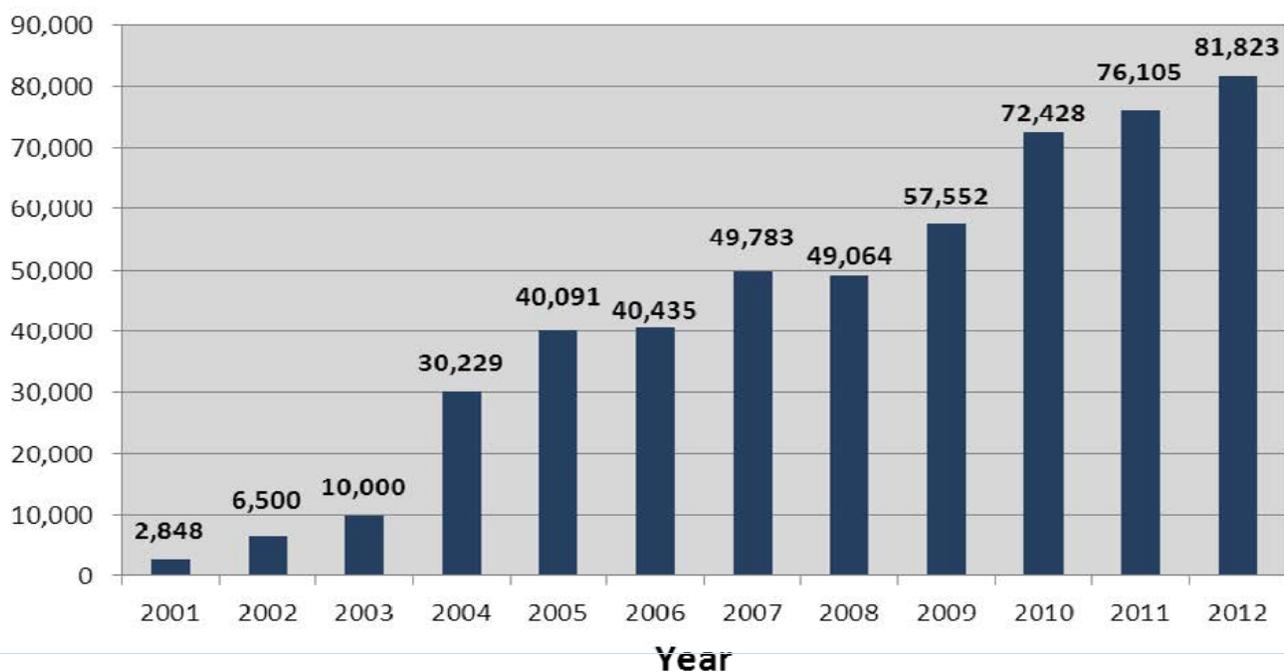
The illegal introduction of any fish into any Maine water is a Class E crime, punishable by fines up to \$10,000. The Maine Department of Inland Fisheries and Wildlife offers a minimum reward of \$2,000 for information leading to the apprehension of persons responsible for the illegal introduction of fish. Call Operation Game Thief at 1-800-253-7887. If you suspect that you have seen or caught a northern pike, please report your findings to the Maine Department of Inland Fisheries at 207-287-8000.

References: *Illegal Fish Stockings Threaten Maine Lakes and Rivers* by David Boucher, Fishery Biologist, Maine Department of Inland Fisheries and Wildlife; www.maine.gov/ifw/fishing/illegal_stocking.htm. Northern pike at www.maine.gov/ifw/fishing/species/identification/northernpike.htm



Northern pike

Courtesy Boat Inspections - Annual Totals



CBI statistics	2011	2012
Infested lakes with inspections	14	13
Water bodies with inspections	116	117
Total plants found	1786	2612
Total invasive plants found	287	279
Invasive plants on entering boats	45	47
Invasive plants on leaving boats	242	232
Total inspectors	714	773
Inspection hours	39,884	41,454
Boats with sticker	92%	93%
Participating organizations	115	108*
<i>Source: Maine Department of Environmental Protection</i>		

Confirmed 'saves' 2012	Boat direction	Invasive plant
Androscoggin Lake	1 leaving	Eurasian milfoil
Balch Pond	5 leaving	Variable milfoil
Lake Arrowhead	28 entering 118 leaving	Variable milfoil
Messalonskee Lake	4 leaving	Variable milfoil
Mooselookmeguntic	2 entering	Fanwort; variable milfoil
Mousam Lake	1 entering	Water Chestnut
Pleasant Pond, Litchfield	1 entering 7 leaving	Variable milfoil
Sebago Lake, Raymond	10 leaving	Variable milfoil
Sebago Lake State Park	82 leaving	Variable milfoil
Songo River	16 entering 1 leaving	Variable milfoil
Thompson Lake	4 leaving	Variable milfoil

***56 participating organizations were BASS clubs and 6,316 inspections were conducted at BASS tournaments.**

Department of Environmental Protection's Prevention and Control Efforts

Funding for Department of Environmental Protection's (DEP) Invasive Aquatic Species Program (IASP) comes from a fee on motorboats using inland waters. Boaters with Maine registrations pay \$10 and must display the "Stop Aquatic Hitchhikers – Preserve Maine Waters" sticker attached to the boat registration sticker. Boaters with out-of-state registration and all seaplane operators must purchase and display the \$20 Lake and River Protection Sticker.

Following are brief descriptions of primary program elements and major budgeted expenses for calendar year 2013. Budgeted salary/benefits for three DEP staff positions totals \$233,790 in 2013. The pie chart below includes estimated staff time for each program element (see below for estimates). The indirect charge, or overhead, is approximately 16 percent on every dollar

spent except for grant funds. The 2013 budget includes \$59,040 in overhead. Please email milfoil@maine.gov with questions regarding DEP funding and budget.

Early Detection

Over 3,500 "citizen scientists," trained and supported by the Maine Volunteer Lake Monitoring Program under contract with DEP, form the state's early detection program. They provide a core force for surveying boat ramps, inlets, dock and swim areas and other areas for potential plant invasion. Expenses include \$32,000 for Invasive Plant Patrol Workshops and \$50,000 for technical assistance and public outreach. An estimated 15 percent of DEP's IASP staff time is allotted to early detection.

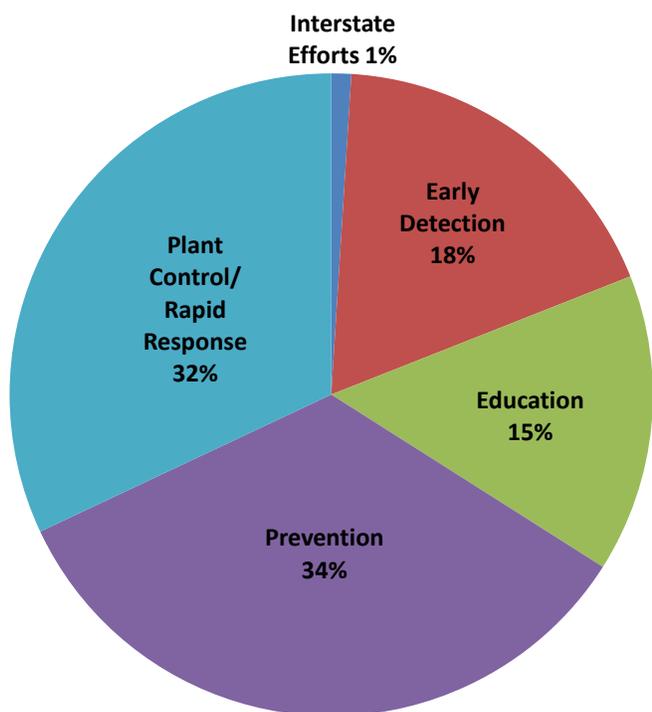
Education

IASP staff engages in educational activities to inform residents and visitors of the invasive species threat, promotes behaviors that prevent the spread of new infestations, and advises lake groups on plant control strategies and techniques. These activities include the following:

- Assisting lake groups with spread prevention and plant control programs
- Speaking about the invasive aquatic species threat to varied audiences and responding to requests for information from media outlets
- Distribution of brochures
- Technical assistance to plant retailers and schools that use plants as classroom tools
- Distribution of warning signs on infested and non-infested lakes and ponds

Approximately \$13,000 is budgeted for education and outreach projects. In addition, an estimated 32 percent of IASP staff time is allotted to education.

**DEP Invasive Aquatic Species Program
2013 Calendar Year Budget: \$779,360**



Boat Inspections

One day, all boaters will inspect their watercraft and trailers for hitchhiking plants and other biological debris that migrate from lake to lake. Until then, posting inspectors at ramps is the most effective way to assure biological threats do not spread and provides an opportunity to show boaters the importance of inspecting and removing plants and debris.

Boat inspectors are trained and grant funds are provided to support lake association and municipal boat inspection programs. Inspections have increased from 2,500 in 2001 to over 81,000 in 2012. The 2013 Courtesy Boat Inspection Program budget includes \$95,000 for small grants to local boat inspection programs and \$75,000 for inspections to prevent spread from already infested lakes. An estimated 20 percent of IASP staff time is allotted to boat inspections.

Plant Control and Rapid Response

Local and regional lake groups work tirelessly to control established infestations. The 2013 budget includes \$70,000 for grants to local groups. The IASP responds to newly-discovered infestations to limit spread both within the infested lakes and beyond. Efforts include manual removal of plants by trained volunteers and

SCUBA divers, deployment of warning buoys to direct boat traffic away from infested areas, and—in worst-case situations—the application of herbicides. The 2013 budget includes approximately \$63,000 for potential rapid response to a new infestation and for the IASP's ongoing management of existing infestations, including hydrilla (Pickerel Pond and Damariscotta Lake) and Eurasian water milfoil (Salmon Lake and Pleasant Hill Pond). An estimated 30 percent of IASP staff time is allotted to plant control and rapid response.

Task Force/Interstate efforts

Collaboration, both with neighboring states that have more extensive invasive plant problems and with Maine stakeholders, is essential to set priorities and find efficiencies. Not only do nearby states have a greater variety of invasive species able to migrate into Maine, they also have more experience in curbing or controlling plant infestations. Communication and the free exchange of experience are essential.

Within Maine, a Governor-appointed panel of stakeholders, the Interagency Task Force on Invasive Aquatic Plants and Nuisance Species, overviews and advises how revenues coming to the IASP serve the state best. An estimated 3 percent of IASP staff time is allotted to Task Force/Interstate efforts.

Total milfoil sticker sales and revenue, 2002-2012

Calendar Year	Resident	Amount	Non-resident	Amount	Grand Total	DIFW Share	DEP Share
2002	100,049	\$900,441	9,814	\$186,466	\$1,086,907	\$434,763	\$652,144
2003	94,451	\$850,059	9,135	\$173,565	\$1,023,624	\$409,450	\$614,174
2004	96,713	\$870,417	9,260	\$175,940	\$1,046,357	\$418,543	\$627,814
2005	98,393	\$885,537	10,239	\$194,541	\$1,080,078	\$432,031	\$648,047
2006	99,947	\$899,523	10,449	\$198,531	\$1,098,054	\$439,222	\$658,832
2007	98,255	\$884,295	11,666	\$221,654	\$1,105,949	\$442,380	\$663,569
2008	94,451	\$944,510	11,190	\$212,610	\$1,157,120	\$462,848	\$694,272
2009	94,568	\$945,680	11,052	\$209,988	\$1,155,668	\$462,267	\$693,401
2010	97,250	\$972,500	11,096	\$210,824	\$1,183,324	\$473,330	\$709,994
2011	92,675	\$926,750	10,203	\$193,857	\$1,120,607	\$448,243	\$672,364
2012	93,477	\$934,770	10,108	\$192,052	\$1,126,822	\$450,729	\$676,093
TOTAL	1,060,229	\$10,014,482	114,212	\$2,170,028	\$12,184,510	\$4,873,804	\$7,310,706

Source: Maine Natural Resources Services Center. Revenues collected January 1 - December 31.

DIFW's invasive species program

In 2012 game wardens checked 23,057 boats for compliance with Maine's Lake and River Protection Sticker Program and other laws and regulations. Maine Game Wardens issued 178 summonses and 472 warnings for failure to produce a valid registration and Maine's Lake and River Protection sticker. The Maine Warden Service continued to reach out and work with groups such as LEA, Belgrade Lake Association and other Lake Associations to continue creating partnerships and strong working relationships.

The Maine Warden Service utilized volunteer college interns this year to help spread the word on lifejacket safety and milfoil education. The Information and Education Bureau sponsored a radio message that constantly aired on the turnpike radio system warning of the dangers that milfoil poses to our waters in the State of Maine.

DIFW safety instructors taught recreational safety courses to approximately 10,000 students in 2012. The invasive species education information was provided to all students across all of the safety programs. Safety instructors also cover various informational programs/booths throughout the year to distribute information on invasive plants and fish to the general public.

The Department's Fisheries Division is busy confirming the presence of illegally stocked fish such as northern pike, smallmouth bass, black crappie, minnows and other species into a number of Maine lakes. In the 2012 fiscal year, Maine Fisheries Biologists responded to reports of non-native fish and other aquatic organisms in every county of the state. Biologists confirmed new occurrences of invasive fish in 12 waters. Fish species found were northern pike, golden shiners and smallmouth bass. In addition, four private ponds containing goldfish were reclaimed with the cooperation of individual landowners.

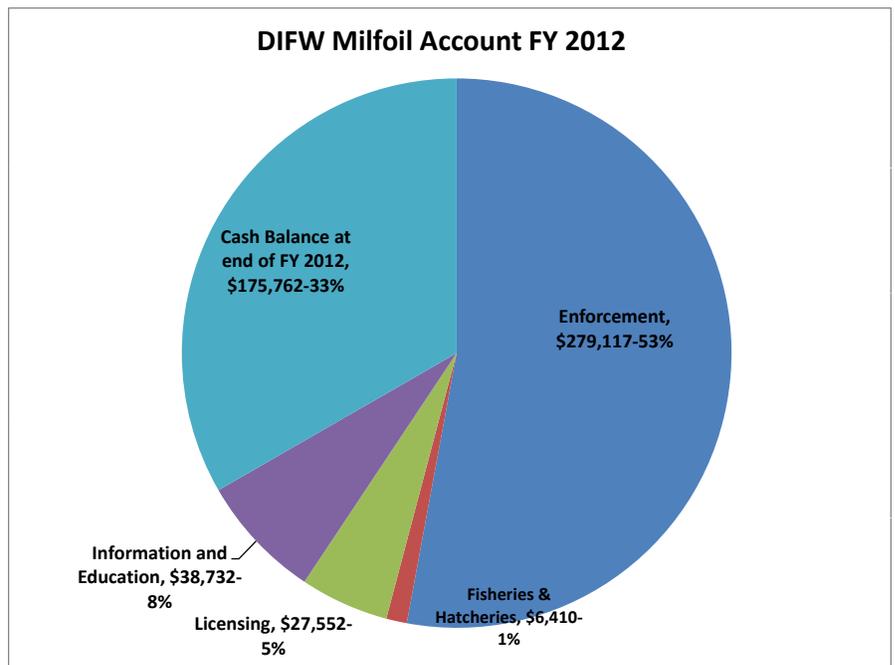
The Fisheries Division has two large scale reclamation projects in various stages of completion: Big Reed Pond and Wadleigh Pond. Both waters contain imperiled populations of Arctic char and are two of only twelve lakes in

Maine and the eastern United States where the fish occur. Big Reed Pond was reclaimed in 2010 and has been monitored and approved for the safe return of the char. Arctic char and brook trout were removed from Wadleigh Pond in the summer of 2012. The initial effort to reclaim the pond was scheduled to occur in the 2011-2012 fiscal year. However, delivery of the rotenone was delayed due to shipping complications. Hurricane Sandy further delayed the reclamation, which was re-scheduled for the first week of the 2012-2013 fiscal year.

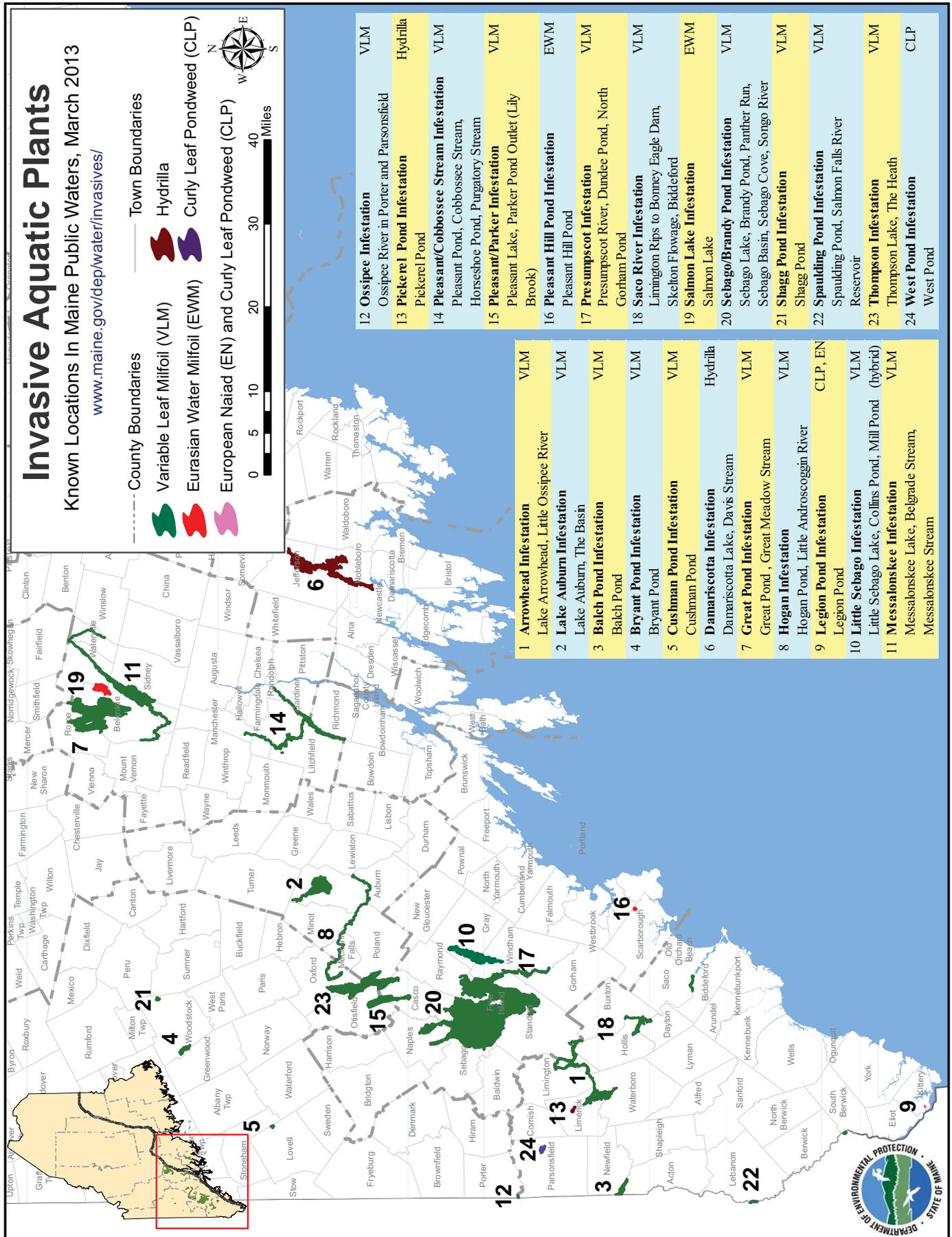
The State of Maine has an active invasive species task force comprised of members of the State Departments of Environmental Protection, Conservation, Health and Human Service and several public and private conservation organizations and water oriented agencies. The Maine Department of Inland Fisheries & Wildlife is represented by staff from the Fisheries Division and the Maine Warden Service. Department staff plays an integral role in addressing non-native invasive species.

Division Research Biologists oversaw the development of comprehensive data sets into statewide GIS - map layer for northern pike, muskellunge, black crappie, walleye, smallmouth bass and largemouth bass.

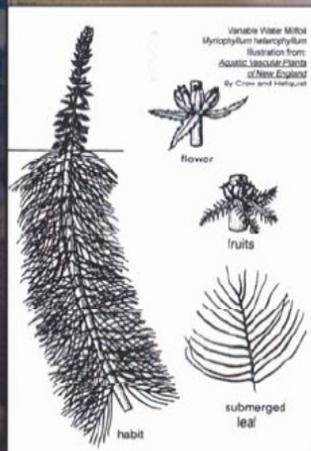
The Licensing Division spent \$27,000 in Milfoil funds this year. These funds support all aspects of the sale of milfoil stickers by IF&W agents throughout the State.

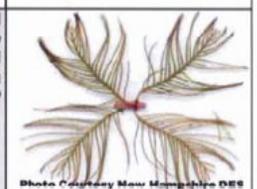


Map of known locations of infestations in Maine public waters



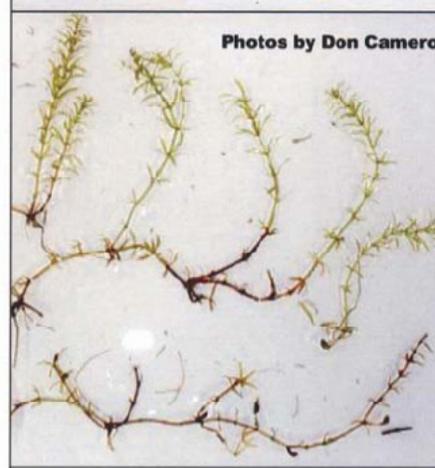
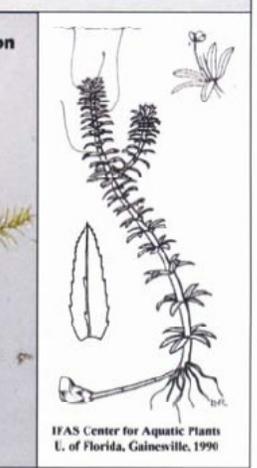
Invasive aquatic plants handout

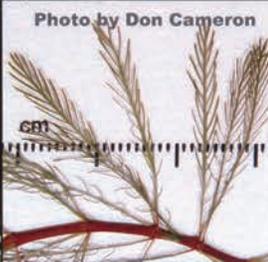
<p>Variable Water-milfoil <i>Myriophyllum heterophyllum</i></p>	<p>Invasive</p>
 <p>Variable Water Milfoil <i>Myriophyllum heterophyllum</i> By Roberta Hill © 2004 MCIAP</p>	 <p>Photo by Ann Murray University of Florida / IFAS Used with permission</p>  <p>Variable Water Milfoil <i>Myriophyllum heterophyllum</i> Illustration from: <i>Aquatic Macroalgae of New England</i> By Cross and Haynes</p> <p>habit flower fruits submerged leaf</p>
<p>Look Alikes: <i>Utricularia</i> sp. (Bladderwort) Native <i>Ceratophyllum demersum</i> (Coontail) Native Other <i>Myriophyllum</i> species</p>	

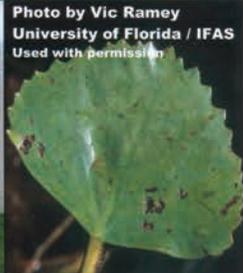
<p>Eurasian Water-milfoil <i>Myriophyllum spicatum</i></p>	<p>Invasive</p>
 <p>Eurasian Water Milfoil <i>Myriophyllum spicatum</i> Collected and photographed by Don Cameron © 2004 MCIAP</p>	 <p>Photo Courtesy: Maine Invasive Species DES</p>  <p>IFAS Center for Aquatic Plants University of Florida, Gainesville, 1990</p>
<p>Look Alikes: <i>Utricularia</i> sp. (Bladderwort) Native <i>Ceratophyllum demersum</i> (Coontail) Native Other <i>Myriophyllum</i> species</p>	

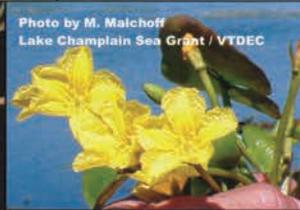
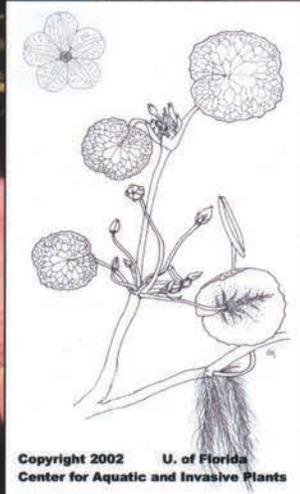
As of 2012, these four finvasive plants and European naiad have been documented in Maine's public waters.

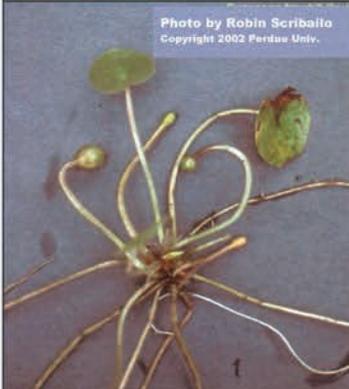
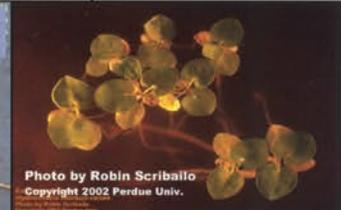
<p>Curly-leaved Pondweed <i>Potamogeton crispus</i></p>	<p>Invasive</p>
<p>Photos by Maine DEP Invasive Species Program</p>	
	 <p>Turion</p>  <p>Copyright 2001 University of Florida Center for Aquatic and Invasive Plants</p>

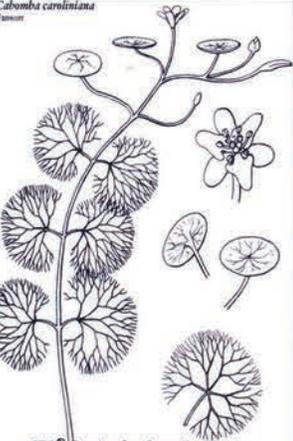
<p>Hydrilla <i>Hydrilla verticillata</i></p>	<p>Invasive</p>
<p>cm cm cm</p>	
 <p>Tuber</p>	
 <p>Photos by Don Cameron</p>	 <p>IFAS Center for Aquatic Plants U. of Florida, Gainesville, 1990</p>

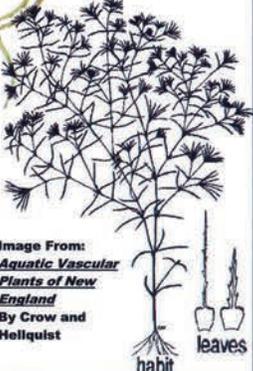
Parrot Feather <i>Myriophyllum aquaticum</i>	Invasive
<p>Photo by Vic Ramey University of Florida / IFAS Used with permission</p> 	<p>Photo by Don Cameron</p>   <p>IFAS, Center for Aquatic Plants U. of Florida, Gainesville, 1990</p>
Look Alikes: Other members of the <i>Myriophyllum</i> genus	

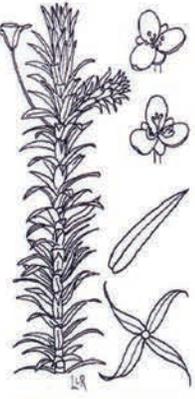
Water Chestnut <i>Trapa natans</i>	Invasive
<p>Photo by Vic Ramey University of Florida / IFAS Used with permission</p>  <p><i>Trapa natans</i> © 2005 MCIAP</p>	<p>Photo by Vic Ramey University of Florida / IFAS Used with permission</p>   <p>Water Chestnut <i>Trapa natans</i> © MCIAP 2004</p>
Look Alikes: None	

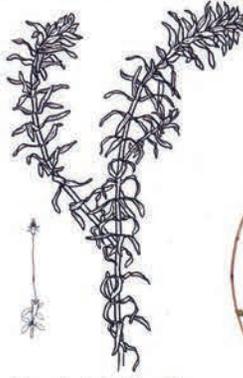
Yellow Floating Heart <i>Nymphoides peltata</i>	Invasive
<p>Photo by Vic Ramey University of Florida / IFAS Used with permission</p> 	<p>Photo by M. Malchoff Lake Champlain Sea Grant / VTDEC</p>   <p>Copyright 2002 U. of Florida Center for Aquatic and Invasive Plants</p>
Look Alikes: <i>Nuphar variegata</i> (Spatterdock) Native <i>Hydrocharis morsus-ranae</i> (European Frogbit) Invasive <i>Nuphar microphylla</i> (Yellow Waterlily) Native	

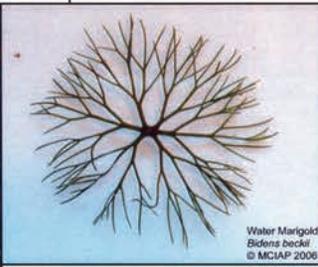
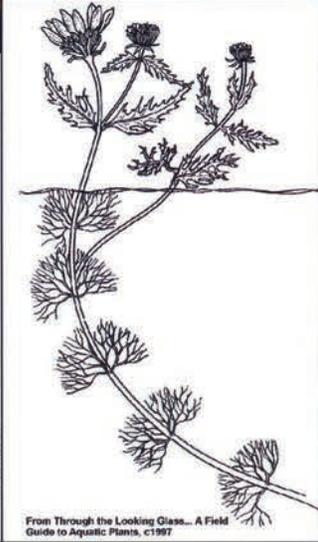
European Frogbit <i>Hydrocharis morsus-ranae</i>	Invasive
<p>Photo by Robin Scriballo Copyright 2002 Perdue Univ.</p>  <p>Photo by M. Malchoff L.C. Sea Grant / VTDEC</p> 	<p>Photo by Robin Scriballo Copyright 2002 Perdue Univ.</p>   <p>Copyright 2002 U. of Florida Center for Aquatic and Invasive Plants</p>
Look Alikes: <i>Nymphoides Cordata</i> (Little Floating Heart) Native <i>Nymphoides peltata</i> (Yellow Floating Heart) Invasive <i>Nuphar microphylla</i> (Yellow Waterlily) Native	

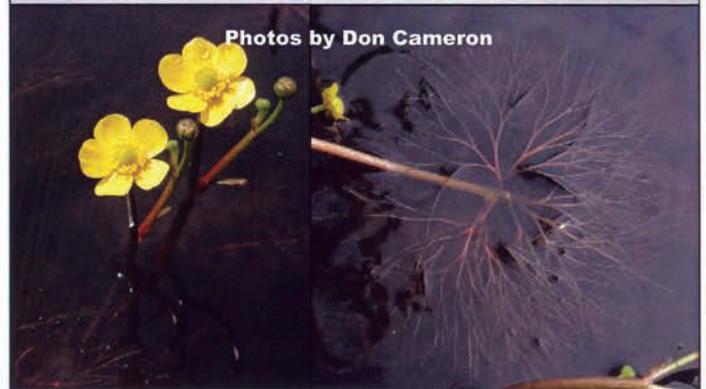
Fanwort <i>Cabomba caroliniana</i>	Invasive
 <p>Photo by Maine DEP Invasives Species Program</p>	 <p>Photo Courtesy: New Hampshire DES</p>
	 <p><i>Cabomba caroliniana</i> Fanwort</p> <p>IFAS Center for Aquatic Plants University of Florida, Gainesville, 1990</p>
<p>Look Alikes: <i>Bidens beckii</i> (Water Marigold) Native <i>Ranunculus flabellaris</i> (Yellow Water Crowfoot) Native <i>Utricularia</i> sp. (Bladderwort) Native</p>	

European Naiad <i>Najas minor</i>	Invasive
Photos by Don Cameron	
 <p>cm</p>	
	 <p>Image From: <i>Aquatic Vascular Plants of New England</i> By Crow and Hollquist</p> <p>leaves habit</p>
<p>Look Alikes: <i>Najas flexilis</i> (Slender Naiad) Native Other <i>Najas</i> species Native</p>	

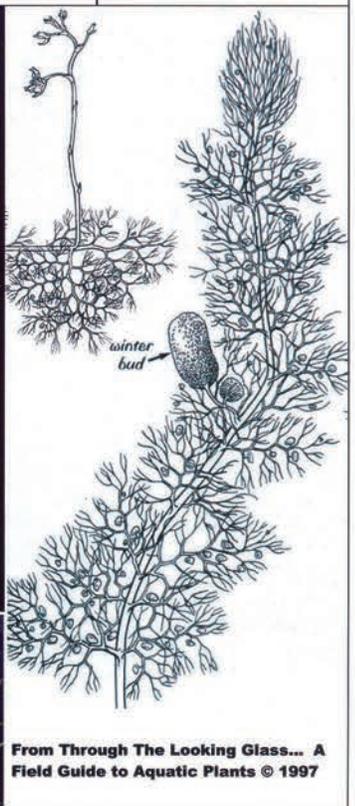
Brazilian Elodea <i>Egeria densa</i>	Invasive
 <p>Photo by Maine DEP Invasive Species Program</p>	 <p>Photo Courtesy NH DES</p>
	 <p>IFAS Center for Aquatic Plants University of Florida, Gainesville, 1990</p>
<p>Look Alikes: <i>Hydrilla verticillata</i> (Hydrilla) Invasive <i>Elodea canadensis</i> (American Waterweed) Native</p>	

American Waterweed <i>Elodea canadensis</i>	Native
 <p><i>Elodea canadensis</i> © MCIAP, 2004</p>	 <p>American Water Weed <i>Elodea canadensis</i> By Don Cameron © 2004 MCIAP</p>
 <p>From <i>Through the Looking Glass... A Field Guide to Aquatic Plants</i> © 1997</p>	

<p>Water Marigold <i>Bidens beckii</i></p>	<p>Native</p>
 <p>Photo by Don Cameron</p>	 <p>Water Marigold <i>Bidens beckii</i> © MCIAP 2006</p>
 <p>Water Marigold <i>Bidens beckii</i> Photo by Don Cameron © 2004 MCIAP</p>	 <p>From <i>Through the Looking Glass... A Field Guide to Aquatic Plants</i>, c1997</p>

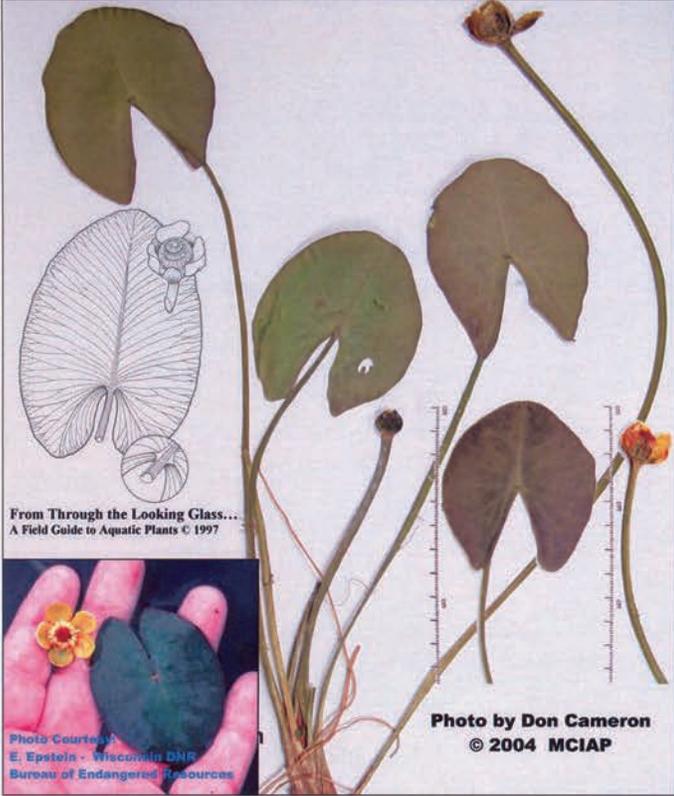
<p>Yellow Water Crowfoot <i>Ranunculus flabellaris</i></p>	<p>Native</p>
	
 <p>Photos by Don Cameron</p>	

<p>Coontail <i>Ceratophyllum demersum</i></p>	<p>Native</p>
 <p>Photo by Vic Ramey University of Florida / IFAS Used with permission</p>	 <p>Photo by Ann Murray University of Florida / IFAS Used with permission</p>  <p>IFAS Center for Aquatic Plants University of Florida, Gainesville, 1990</p>

<p>Common Bladderwort <i>Utricularia macrorhiza</i></p>	<p>Native</p>
 <p>Photos by Don Cameron</p>	 <p>winter bud</p> <p>From <i>Through The Looking Glass... A Field Guide to Aquatic Plants</i> © 1997</p>

Yellow Waterlily
Nuphar microphylla

Native



From Through the Looking Glass...
A Field Guide to Aquatic Plants © 1997

Photo Courtesy
E. Epstein - Wisconsin DNR
Bureau of Endangered Resources

Photo by Don Cameron
© 2004 MCIAP

Little Floating Heart
Nymphoides cordata

Native

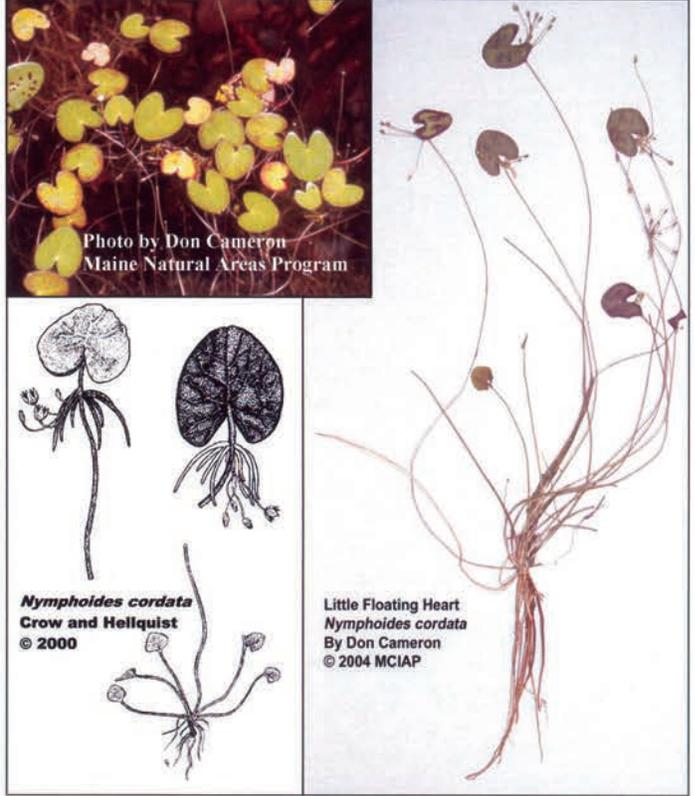


Photo by Don Cameron
Maine Natural Areas Program

Nymphoides cordata
Crow and Hellquist
© 2000

Little Floating Heart
Nymphoides cordata
By Don Cameron
© 2004 MCIAP

Clasping Leaf Pondweed
Potamogeton richardsonii

Native



Photo by Vic Ramey
University of Florida / IFAS
Used with permission

Richardson's pondweed
Potamogeton richardsonii
Photo by Vic Ramey
Copyright 2001 Univ. Florida

Center for Aquatic and Invasive Plants
Copyright 2001 Univ. of Florida

Slender Naiad
Najas flexilis

Native



Photos by Don Cameron

Najas flexilis
Slender naiad
Crow and Hellquist
© 2000

NOTES

In a nutshell: How to be a great CBI

1. **Be safe.** Don't stay around if someone gets ornery or if a situation seems uncomfortable.
2. **Urge boaters** to inspect their own boats and gear every time they enter and leave a water body.
3. **Be professional.** Your attire should promote the right image. CBI shirts are mandatory. Know the facts about invasives and be courteous.
4. **Discourage company.** You are at work so don't let friends deter you from giving your job full attention.
5. **Be prepared** to answer questions such as, "Where do I get a sticker?"
6. **Write legibly** and don't forget to fill out the top two lines of the survey sheet before you start.
7. **Be in touch.** Have a cell phone or know where the nearest phone is.
8. **Stay in touch.** Keep phone numbers handy for police, wardens and your supervisor.
9. **Be comfortable.** Make sure you have rain gear, an umbrella, a chair, water and sunscreen.
10. **Be inspired.** This is important work even though there will be slow times.

QUICK FACTS

About invasive aquatic plants:

Reproduce in many ways; may clone from small plant fragments.

Can survive out of water for days, reviving when rehydrated.

Can blanket and choke surface waters; make swimming and boating difficult, dangerous or impossible.

Harm native vegetation and wildlife; lower property prices; harm local businesses. Once well-established, they're virtually impossible to remove and very costly to manage.

About the 'Milfoil law':

It's illegal to transport any aquatic plant on the outside of a vehicle, trailer, or equipment in Maine.



CBI Aaron Tripp found and removed a Eurasian milfoil fragment on a boat launching at the Narrows public ramp on Kezar Lake in June 2011.

It's illegal to sell, possess, import, cultivate, transport or distribute any invasive aquatic plant in Maine. Violation may result in fines of up to \$500 (first-time) and up to \$5,000 for launching boats carrying any of the banned species.

Fines for failure to display a current boat sticker apply to all motorized craft on Maine inland waters. (Kayaks, canoes and sailboats without motors are exempt.)

About boat stickers:

2013 stickers are blue for Maine registered boats, white for non-Maine registered boats.

Cost \$10 for resident; \$20 for nonresidents. Resident/nonresident status depends on where boat is registered, not where owner resides (NH residents may store/register boat in Maine).

All the sticker money goes to education, prevention, control, eradication and enforcement. Money is divided 60/40 between DEP and DIFW, respectively. No sticker money goes into the General Fund!

CBI SUPPLY LIST

- | | |
|---|--|
| • Clipboard | explaining invasive aquatic plant threat |
| • Pen or pencil and an indelible marker | • Cell phone (<i>optional</i>) |
| • Plenty of survey forms | • Insect repellent, sunscreen, water |
| • Ziploc baggies for plant samples | • Folding chair and umbrella |
| • DEP brochures | • Trash bag |
| | • Your CBI T-shirt! |