Vermont Public Access Greeter Program Manual









Prevent the transport of nuisance species. Clean <u>all</u> recreational equipment. www.ProtectYourWaters.net

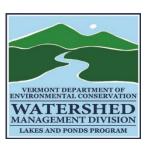




Table of Contents

Vermont Public Access Greeter Program
Introduction1
Program Goals1
Protecting Vermont Waters1
Aquatic Invasive Species Program2
Spread Prevention2
Vermont Fish and Wildlife and Special Use Permits2
Program Data3
2021 Inspection Results4
AIS Interceptions5
Survey1236
Public Access Greeter Duties
Vermont Watercraft Inspection Materials6-15
Interacting with Boaters
Troubleshooting Interactions9
Greeting and Interviewing to Determine Risk Factors
Conduction a Watercraft Inspection Entering a Waterbody
Inspection of Watercraft Leaving a Waterbody14
Types of Watercraft15
Boat Inspection Checklist
Vermont Watercraft Decontamination Procedures 17-25
Types of Watercraft Decontamination19
Decontamination Equipment20
Guidelines for Watercraft Decontamination 21-25
Intercepting and Submitting Specimens
Vermont Fish and Wildlife Partners
Contacting Law Enforcement
What if a Boat Requires Decon or an Inspection and the Boater Refuse?
Game Warden Patrol Area Map31
Additional Resources
Appendices
Appendix A: Aquatic Nuisance/Invasive Species Laws and Regulations
Appendix B: Greeter Program Field Sheet
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Vermont Public Access Greeter Program

Introduction

Aquatic invasive species are non-native nuisance species that cause major social and ecological impacts when introduced into bodies of water outside of their natural range. In Vermont, their spread and growth continue to be a cause of great concern, demanding an incredible amount of attention and resources. Aquatic invasive species (AIS) are spread in many ways including, but not limited to, overland transport of watercraft, trailers, fishing equipment and other recreational equipment. The most effective way to prevent spread is through education, equipment inspections, and watercraft decontaminations performed to clean and remove potential invasive species "hitching a ride" on equipment and watercraft. Preventing the spread of aquatic invasive species to new waterbodies is far more effective and economically



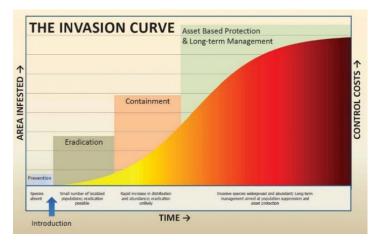
sensible than controlling invasive species once they are established. Public Access Greeters educate access visitors about aquatic invasive species, provide watercraft inspections, and *STOP* new introductions.

Program Goals

To prevent the spread of aquatic invasive species by establishing a well-trained network of public access greeters who:

- Educate boaters about the harmful effects of invasive species and measures that can be taken to prevent their spread.
- Inspect and decontaminate boats and encourage boaters to take appropriate steps to avoid transporting invasive species.
- Stop invasive species introductions.

Protecting Vermont Waters



The Vermont Public Access Greeter Program has seen growth and success since its establishment in 2002. Because overland transport of aquatic invasive species continues to be a problem, the Greeter Program, with its unified message and consistent methodology, is critical to preventing the spread of aquatic invasive species. Even if a water body is already known to have an infestation of one invasive species, another equally or more disruptive species could still be introduced. In addition, microscopic organisms like zebra mussel veligers, spiny waterflea, or pathogens such as viral hemorrhagic septicemia are difficult to observe and therefore intercept. These organisms are removed by cleaning and drying all equipment used while boating, fishing, or recreating on any waterbody. The VTDEC will continue to foster the establishment of new greeter programs in effort to help protect Vermont's remarkable water resources.

Aquatic Invasive Species Program

The Vermont Department of Environmental Conservation Department manages aquatic invasive species threats and spread prevention efforts through the Lakes and Ponds Aquatic Invasive Species Program. The Vermont State Statutes, Aquatic Nuisance Control regulations (10 V.S.A. § 1451) provides that basis for the goals of the program and is as follows:

- 1. Prevent the infestation and proliferation of invasive species in the State that result in negative environmental impacts, including habitat loss and a reduction in native biodiversity along with adverse social and economic impacts and impacts to the public health and safety.
- 2. Quickly initiate a response to contain and control a new aquatic species introduction before it can spread critical to reduce future management costs and protect the integrity of Vermont's ecosystems.
- 3. Detect infestations of new aquatic species early and act upon them swiftly to minimize economic, social, and ecological impacts as well as to increase the probability of a successful eradication effort.

The overland movement of boats, personal watercraft, fishing gear, and other water-based equipment is a significant means by which zebra mussels, Eurasian watermilfoil, water chestnut and other aquatic invasive species are spread between waterbodies. Citizen monitoring activities at public access areas are an effective tool in helping to prevent the spread of AIS. In Vermont, these programs are typically referred to as "greeter programs." Demonstrated in the Invasion Curve figure on the prior page, prevention is the best method to manage invasive species and less costly.

The AIS Program oversees the Vermont Public Access Greeter Program and provides Aquatic Nuisance Control Grant in Aid funds to partners so that they can facilitate a local program. The AIS Program staff also provides training and educational information and supplies, and partners with the Vermont Fish and Wildlife Department for assistance. Vermont Public Access Greeters are hired by municipalities, lake associations, and/or or other partners and are not state employees.

Vermont Public Access Greeter Program's that are stationed at a Vermont Fishing Access Area request and receive an annual Special Use Permit by the Vermont Fish and Wildlife Department to operate a Greeter Program under the guidelines and requirements within the permit.

Spread Prevention

The Public Access Greeter Program is one of many initiatives to prevent the spread of Aquatic Invasive Species in Vermont. Spread prevention and early detection efforts in Vermont include the Vermont Invasive Patrollers (VIPs), Aquatic Species Monitoring, Early Detection and Rapid Response (EDRR) procedures, aquatic invasive species mapping, signage at boat launches and access areas around the state, producing and distributing educational materials, Boat Wash and Watercraft Decontamination, and the Public Access Greeter Program. More information on all these efforts can be found on the Department of Environmental Conservation website.

Vermont Fish and Wildlife Access Areas and Special Use Permits (SUP)

Special Use Permits (SUP) are required for activities at State-owned Fishing Access Areas by the Vermont Fish and Wildlife Department (VFWD). Applicants are required to apply for a SUP on an annual basis to implement a Public Access Greeter Programs at a VFWD Fishing Access Area and must apply to the conditions outlined within the permit. Failure to receive, or meet the conditions in the SUP, may result in the forfeit of ANC Grant in Aid award.

Vermont Public Access Greeter Program Data

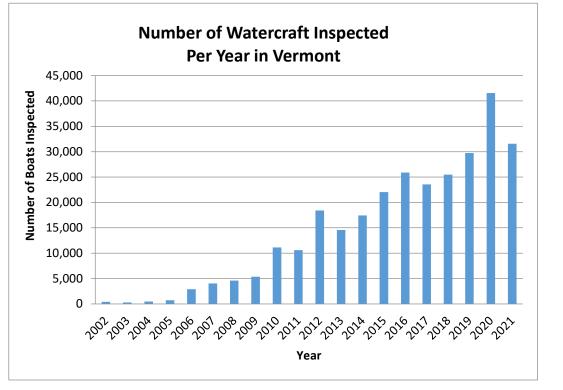
Since 2002, the Vermont Public Access Greeter Program has expanded to access points at 30 lakes and ponds statewide, and those numbers are increasing annually. The total number of inspected watercrafts has increased since the program's inception, from 404 in 2002 to 31,575 in 2021. During 2010, greeters intercepted and removed 366 instances of aquatic invasive species, roughly 35% of recorded intercepts. A large number of invasive species intercepts continue to be instances of Eurasian watermilfoil.

2021 Participating Programs Lakes

Lake Bomoseen Lake Carmi Lake Caspian Crystal Lake Lake Dunmore/Fern Lake Echo Lake Lake Eden Lake Elmore Lake Fairlee Harriman Reservoir Harveys Lake Lake Hortonia Lake Iroquois Island Pond Joe's Pond Maidstone Lake Lake Memphremagog **Miles Pond** Lake Morev Lake Ninevah Peacham Pond Lake Raponda Lake Rescue Salem Lake Seymour Lake Shadow Lake Somerset Reservoir Lake St. Catherine Waterbury Reservoir Lake Willoughby Woodward Reservoir

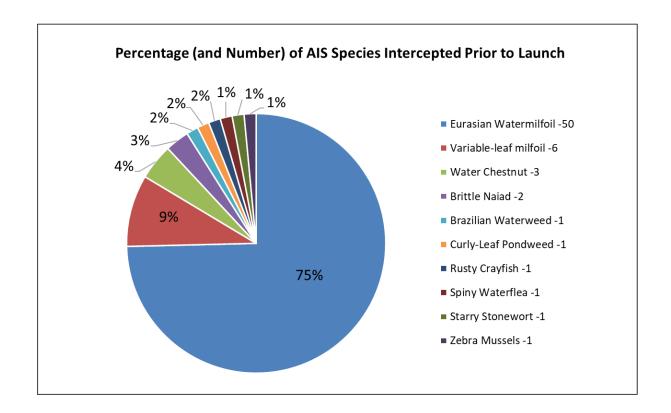
2021 Highlights and Accomplishments

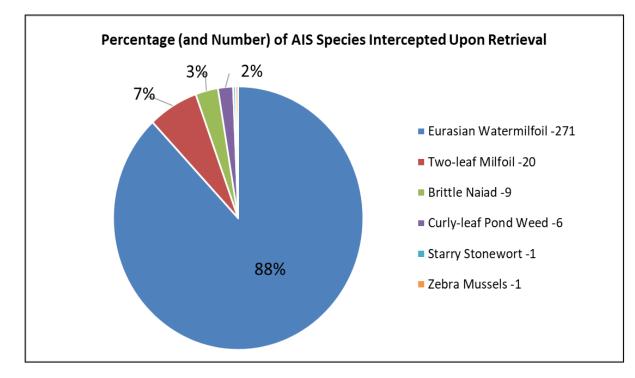
- Greeters representing 31 locally run programs provided coverage at 33 launches on lakes and ponds across the state.
- Greeters greeted and educated 31,575 visitors about AIS and spread prevention techniques, sharing the Clean, Drain, Dry! message.
- Greeters inspected 31,575 watercrafts of various types.
- Greeters recorded and removed 1,057 organisms from jet skis to motorboats.
- Greeters intercepted and removed 366 instances of AIS, accounting for roughly 35% of recorded intercepts.
- Considering this, in 2021 public access greeters saved four lakes from the introduction of a new aquatic invasive species!
- Of the 67 instances of an AIS encounter upon launching a boat, approximately 75% were identified as Eurasian watermilfoil (*Myriophyllum spicatum*)



Waterbody	Launch Inspections	Retrieval Inspections	Organisms	# w/AIS
•	<u> </u>	×	•	-
Bomoseen	397	207	110	74
Burr (Sudbry)	0	1	0	(
Carmi	169	123	17	10
Caspian	1221	2	1	1
Colchester	1	0	0	C
Crystal (Barton)	921	638	3	C
Dunmore	1616	964	8	1
Echo (Chartn)	519	393	0	C
Eden	968	672	22	3
Elmore	851	640	24	3
Fairlee	1568	1295	159	96
Harriman (Whithm)	0	2	0	C
Harveys	596	169	2	C
Hortonia	2	0	0	C
Iroquois	1266	218	29	20
Island	587	286	6	2
Joes (Danvll)	207	9	0	C
Maidstone	155	13	1	C
Memphremagog	202	60	62	61
Miles	151	114	1	C
Morey	943	772	129	8
Ninevah	775	427	17	4
Peacham	360	251	16	(
Raponda	527	178	8	C
Rescue	203	56	2	C
Salem	400	157	59	2
Seymour	920	634	174	1
Shadow (Glover)	376	266	1	(
Somerset	236	22	42	7
St. Catherine	559	411	94	59
Waterbury	440	63	12	10
Willoughby	794	562	20	4
Woodward	2287	1751	38	(
Totals	20217	11356	1057	366
ALL INSPECTIONS	31575			

Vermont Public Access Greeter Inspection Results





Vermont Watercraft Inspection Survey123

Since 2021, Survey123 has been used by Public Access Greeters in place of Excel or paper datasheets to record Watercraft Inspection Surveys. VTDEC also launched an iPad loan program to assist programs with the transition to using Survey123.

What are the benefits of Survey123?

- We are able to create vector maps that demonstrate boat traffic in the State, and the priority locations where VTDEC should focus spread prevention programs.
- To track invasive species movement thoughout the season and target monitoring efforts to catch invasive species spread.
- To better understand the number and types of aquatic species Greeters are able to intercept on boats entering or exiting waterbodies.
- Gather information on how familiar boaters are with AIS, and how future education and outreach can be most effective.

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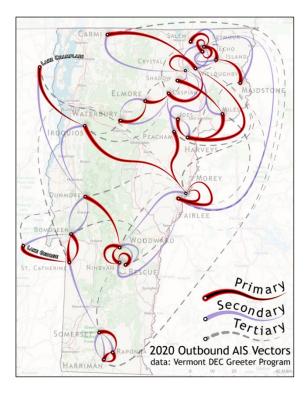
Vermont joins a number of states throughout the country that use Survey123 to record watercraft inspections and potential threats of aquatic invasive species transportation. Public Access Greeters with the Lake Champlain Basin Program and Greeters in other states across the Northeast have already been using Survey123! Our data is now easily complatible with these programs to more broadly understand aquatic invasive species movement in our region. By using Survey123, rather than receiving all the watercraft inspection data at the end of the season, we are able to more quickly identify and respond to potential introductions of AIS.

How does the Vermont Department of Environmental Conservation use the data?

This data is used to better understand when, how, and where watercraft are moving between waterbodies and potentially transporting invasive species. Management and monitoring of AIS is informed by this data. A vector map from 2020 data is shown to the right.

Learning how to use Survey123

We have created a Watercraft Inspection Survey123 Guide for Vermont Public Access Greeters along with a step by step tutorial video that are both available on the VTDEC website on the Public Access Greeter Page. There are also additional resources available for the Survey123 app on the ArcGIS Survey123 website.



Public Access Greeter Duties

As a Public Access Greeter, you will be interacting with members of the public on a day-to-day basis. This section is designed to guide you through the process of educating access users, inspecting watercraft, and decontaminating watercraft if the necessary resources are available.

Vermont Watercraft Inspection Materials

Materials needed:

- ✓ Greeter Manual and Fact Sheets
- ✓ Enforcement Agency Contact List
- ✓ Tablet/smartphone with Survey123 app
- ✓ Greeter program t-shirt
- ✓ "Greeter on Duty" sandwich board
- Personal safety materials (sunblock, insect repellent, raingear, shelter, WATER!!)
- ✓ Informational materials (rack cards, brochures, etc.)
- ✓ Large Sponge
- ✓ Sealable plastic bags (for sample submission)
- ✓ Cell phone/camera (optional; but helpful for specimen ID)
- ✓ Adjustable wrench (for boat plug removal)



Note: The following steps are recommended protocol for watercraft inspection to prevent the spread of aquatic invasive species. As a greeter, you <u>do not</u> have any enforcement authority but can remind boaters that watercraft inspections and decontaminations are mandated in State statute.

Interacting with Boaters

- When possible, approach boaters/access users *before* they put their boat or other equipment into the water. Often a boater will pull into an access area and immediately begin to back the trailer into the water. You will want to position yourself so that you are not in the boater's way and can be seen. You can politely motion to the boater to stop, but you have no legal authority to force boaters to stop and you should not interfere with them in any way.
- 2. Approach boaters/access users and introduce yourself by name and affiliation (e.g. Lake Wannabe Association). Explain that you are there to inform water users about aquatic invasive species. Ask boaters if they are familiar with aquatic invasive species. Ask where and when the boat and equipment was last used, and whether any precautions were taken to ensure that the boat and trailer were free of aquatic invasive species before arriving at the access.
- 3. Provide accurate information about aquatic invasive species and boat/trailer cleaning techniques (see below) as necessary. Offer to give the boater informational watch cards or other handouts if available (copies may be obtained from VTDEC). Inform the boater of Vermont's Aquatic Invasive Species Transport Law it is illegal to transport any aquatic plant or plant fragment, zebra mussels or quagga mussels.
- 4. If the boater indicated that the boat had been in a different waterbody within a period of 10 days or less and the boat and equipment had not been cleaned, or plants or other foreign objects can be seen attached to the boat or equipment, offer to assist the boater with an inspection and cleaning (see below).

- 5. Upon completion of the inspection and cleaning, encourage the boater to perform the same procedures each time the boat or other equipment is removed from the water.
- 6. If plants are present on a boat or trailer and the owner refuses a boat inspection, you should point out that any plant fragment, be it native or exotic, is illegal to transport on recreational equipment and that tiny juvenile zebra mussels will often attach to submerged aquatic plants (native and nonnative). Therefore, all plant/animal material should be removed before placing the boat in the water. Boat cleaning assistance can only be provided with the boater's consent. You have no legal authority to force individuals to clean their boats.
- 7. If a violation of a Vermont law or regulation is observed and the violator refuses to comply with requests to correct the problem, the greeter should record details of the incident and contact the proper enforcement authorities (see page 24).

First Impressions

A Public Access Greeter's first impression sets the conversation with boater. It is important to greet people in a friendly, helpful manner so that the interaction will be quick and relatively simple. Below are some tips:



DO

- ✓ Approach boaters when they are settled and when you will not be interrupting what they are doing.
- ✓ Convey your message politely and respectfully.
- ✓ Encourage responsible behavior. Inform recreators of applicable laws and regulations.
 - Convey your message in your own words and in your own way but keep facts accurate. Refer to the educational materials provided to you.
- Offer educational handouts as additional resources. Point access users to pertinent aquatic invasive species signage.
- ✓ Thank the boater for their time and consideration.
- ✓ Ask for help from your site coordinator or VTDEC staff as needed.
- ✓ Walk away from confrontation and leave the launch site if you feel unsafe.

DON'T

- ✓ Bombard boaters with questions immediately upon approaching them.
- ✓ Engage in conflict or debate, argue, or lose your temper.
- ✓ Frame your message in an adversarial tone.
- ✓ Delay people from launching their watercraft or cause backups.
- ✓ Provide personal information about yourself.



Troubleshooting Interactions with Access Area Users

Generally, access area users are interested in and concerned about the health and state of their water body. Make sure you are prepared to answer questions and to discuss aquatic invasive species with boaters. Below are examples of questions that you may be asked.

Question: "Is this really necessary? Aren't the plants going to get here anyway?"

<u>Suggested Response</u>: Even if a new aquatic invasive species infestation can't be prevented, spread prevention efforts have additional benefits: decreasing the likelihood of widespread ecological damage, increasing the time available to continue to research new control methods, and delaying burdensome costs of controlling an aquatic invasive species and subsequent property devaluation.

Question: "Aren't all aquatic plants bad anyway?

<u>Suggested Response</u>: This is a common misconception. Aquatic plants form the base of the food web. A healthy, diverse native aquatic plant community is critical to any freshwater system and enhances ecosystem stability by:

✓ Providing fish habitat

✓ Transporting nutrients through the food web

✓ Increasing water clarity

- ✓ Stabilizing sediments in the lake bottom
- ✓ Providing food and oxygen for other organisms
- ✓ Taking up nutrients that would otherwise be used by algae, thereby preventing algal blooms
- ✓ Preventing erosion through the absorption and diffusion of wave energy

Invasive plants frequently form dense monocultures, with just one species dominating a particular area, compromising or eliminating the benefits provided by a diverse, native aquatic plant population.

<u>Question:</u> "Do I have to? I don't have time for this. I get it and I don't need your help." OR "There's no plant material on my boat, so it's unnecessary for you to perform a decontamination."

<u>Suggested Response:</u> "I understand there isn't any visible material. However, the fact that you were on a different lake within the last 14 days that has an AIS not found in this lake, and your boat hasn't been decontaminated, makes you a high-risk vessel. Zebra mussels have microscopic larvae can survive in water contained bait buckets, live wells, bilge areas, ballast water tanks, and motors. It's possible you have AIS on your boat and just can't see it, which is why we would really appreciate your permission to perform a decontamination on your boat. It is safe, will only take ten minutes, and we appreciate that you can help protect this water body."

If a public access user does not wish to have their watercraft or associated equipment inspected or decontaminated, respect their wishes. Remind them of legislation under Act 67 mandating inspections and potential decontamination when an authorized greeter is on duty and the Vermont Fish and Wildlife Warden will be called. For more information, go to "What if a Boat Requires Decontamination or an Inspection and the Boater Refuses?" found on page 32.

Question: "What is Act 67?"

<u>Suggested Response</u>: Act 67 updated prior legislation before 2017 regarding aquatic nuisance species management. The revised legislation added new aquatic nuisance species, transportation restrictions, the requirement to clean, drain, and dry vessels, the requirement for inspections to take place upon entering and exiting a waterbody, and the designation for watercraft inspection and decontamination authorized stations. For more details on this legislation, see Appendix A.

Greeting and Interviewing Boaters to Determine Risk Factors

Step 1: Ensure Personal and Public Safety

Your safety and the safety of those around you is your top priority at all times. Many vehicles and people may be moving around the inspection area. At times, you may be required to look underneath trailered watercraft. Make sure all efforts are made to ensure the safety of everyone involved, including:

- ✓ When an interview and inspection take place, ask the driver of the vehicle to turn off the engine, put on the parking brake, and step out of the vehicle.
- Stay out of dangerous weather. In the case of lightning, get to a safe location away from the water and large trees.
- Remove yourself from a situation in which you feel threatened by someone or uneasy because of suspicious behavior. Get to a safe place and contact State Police as soon as possible. In these situations, record vessel and/or vehicle registration plate number for law enforcement.

Step 2: Greet the Boater

Find an appropriate time to approach the boater as they are preparing to launch, such as when they are waiting in line at the ramp, or just before or as they finish readying their watercraft. Let them get settled before you approach. They are much less likely to be receptive to your message if they are just getting out of their vehicle or rushing to ready their watercraft. There are a few things that you can do to ensure that the inspection process is pleasant and informative for the boater. They include:

- ✓ Introduce yourself, the association that you work for, and your role as a greeter so that access users know why you are approaching them.
- ✓ Ask **politely** if they would give you a few minutes to convey your message about AIS, assist in the inspection of their equipment, and ask a few questions.
- ✓ Provide a brief explanation of the purpose of the inspection and what you are looking for. Not every lake, river, and pond in Vermont will have an access greeter, so it is essential that boaters know how to inspect their own watercraft correctly and thoroughly.
- ✓ Inform the boater how AIS affect boats, gear, fisheries, water recreation, and water infrastructure.
- ✓ Provide brochures, rack cards, or other educational materials to the boater.

Step 3: Assess to Determine Risk Factors Using Watercraft Inspection Survey123

Some of this information can be obtained from a quick visual assessment of the watercraft. In addition, there are a few simple questions you will have to ask the boater that can provide a great deal of information on a vessel's risk of carrying AIS. For more information on entering this information into Survey123, refer to the Watercraft Inspection Survey123 guide. The green Survey123 icon indicates that question or observation that should be recorded in Survey123.

- **1.** The first step of an assessment is recording some basic information including the boat launch location you are stationed at and the **Date/Time**.
- **2.** As the watercraft is approaching, you will have to determine the **Watercraft Direction**, either launch (entering the water) or retrieve (exiting the water).
- 3. Depending on your familiarity on types of watercraft, you will likely be able to determine the **Type of Watercraft** (Outboard, Inboard, Kayak, Sailboat, etc.) but can always ask the boater if you are unsure.

- **4.** "Are you familiar with Aquatic Invasive Species, and do you normally take steps to prevent their spread?" is a question you can either ask as part of *Step 2: Greet the Boater* or can be asked during this stage of the initial assessment. A boater that takes measures to prevent the spread of AIS will likely have a lower-risk watercraft. If you find out that a boater is not aware of AIS and does not take preventative steps, this is a good opportunity to provide a courtesy inspection and educational materials.
- **5.** "What is the purpose of your trip today?" is the next question for the boater. Survey123 will give you the choices of Fishing, Commercial, Governmental, or Other Recreation.

6. "What was the last waterbody in which the watercraft was used?"

The risk of the inspected watercraft will vary greatly depending on the AIS present in the last waterbody. For example, a watercraft last used in Green River Reservoir (no confirmed AIS) is a much lower risk than a watercraft last used in Lake Erie (many confirmed AIS). Check the Vermont Infested Waterbodies List (Appendix C) to check that the last waterbody is or is not on the list.

7. "How long has it been since the watercraft was last used?"

AIS, as the name implies, are aquatic and need water for survival. However, some can persist for days or even weeks out of water, especially in dark, damp conditions. Therefore, a watercraft that has been recently used (<14 days) has a higher risk than one that has been out of water for months.

Step 4: Visual Assessment to Determine the Risk Factors for a Watercraft Inspection

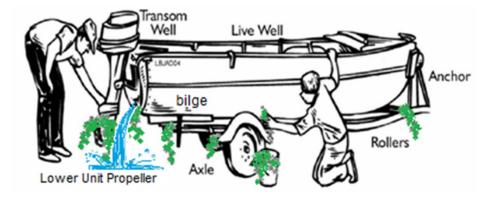
While some risk factors can be determined from the questions above, others will require a quick visual inspection of the watercraft. This step is very important to determine if a **simple** or a more **thorough inspection** will be done. For a simple inspection, you will:

- ✓ Visually check the vessel's (and trailers, if applicable) exterior to determine if they are dirty, crusty, slimy, or have any evident plant material.
- ✓ Identify if the vessel is a simple or complex vessel, meaning it has multiple compartments, a closed hull, or more than one engine. For a complex vessel such as a wake boat or other watercraft with an inboard motor, ask the owner if the vessel has ballast tanks (interior compartments designed to take on water). If so, you may ask the boater when the tanks were last filled, or if he/she would be willing to turn the ballast pumps on to ensure that the tanks are empty.
- ✓ Visually and physically inspect the vessel to determine if there is any standing water present. Standing water poses a significant risk of transporting AIS and should always be treated with caution.

A vessel that has a high risk of transporting invasive species will require a Watercraft Inspection. A vessel is considered a high risk if the Greeter finds any of the elements below in their assessment:

- **1.** The vessel was last in an infested waterbody with confirmed AIS and the AIS are not present at the inspection location lake, and the vessel was used within the last 14 days.
- 2. The vessel is dirty, slimy, crusty, or has evident plant material attached.
- 3. The vessel contains standing water.
- Was an Inspection Performed? For high-risk watercraft, take extra care when going through the inspection steps on the next page. Keep in mind that the watercraft in question could be carrying invasive species. Treat standing water in high-risk watercraft with increased scrutiny.

Step 5. Conducting a Watercraft Inspection – Use Your H.E.A.D



Once it is determined that the watercraft is a high risk of containing an AIS, a more thorough inspection can reduce the potential for introduction of an aquatic invasive species. While inspecting the watercraft, payclose attention to points on the watercraft and trailer where organisms may become snagged and other areas most likely to harbor AIS and/or standing water. You can remember and examine the four major areas of concern using the acronym **H.E.A.D**. Perform a visual and tactile inspection of the outside of the vessel and trailer while paying particular attention to the following areas:

HULL & TRAILER

- ✓ Trailer bunks/rollers, tire wells, and lights. Remove any organic material. These are snag points for aquatic plants, and plant material can also be pinned between the vessel and trailer bunks upon exiting a waterbody.
- ✓ Bilge area. Inspect for standing water. If there is water in the bilge area, or if the bilge isn't visible, ask the boater to remove the bilge plug until drained. OR If applicable, have the boater activate the bilge pump.
- ✓ Anywhere else where plant material could be snagged or animals attached.

ENGINE OR MOTOR

Motors typically have several areas in which plant material can get snagged. Many will also hold water if not properly drained, which can carry invasive animals. Take the following steps to ensure that the internal and external components of the motor, are free of AIS:

- ✓ Ask that the outboard or inboard/outboard motor be lowered. If water drains out of the motor, allow it to drain completely before being raised.
- ✓ Visually and physically inspect the engine, gimbal area, and transom of the boat. Feel the engine, gimbal area, and transom of the boat for bumps, slime, or a sandpaper consistency. These could be signs of organic material or juvenile mollusks.
- ✓ For jet skis and jet boats, ask if the owner will "burp" (turn on the engine and rev for 5-10 seconds) the vessel. This will expel any water or vegetation in the engine.





<u>A</u>NCHOR & EQUIPMENT CHECK

Any equipment that comes in contact with water can harbor AIS. Anchors are a significant risk, since they contact bottom substrates can easily pick up plant material and sediment.

Be sure to check the following areas:

- ✓ Anchor and anchor rope/chain.
- Visually and physically inspect the anchor and related equipment for plants, mud, and other organisms.
- Anchors are often stored in dark, damp compartments that are conducive to the survival of AIS. Depending on the situation, you may want to suggest that the boater thoroughly dry the anchor and anchor rope/chain after each use.
- ✓ Check any additional equipment such as life vests, buoys, paddles, ropes, nets, etc. Ensure all equipment is clean and dry.

DRAIN & CHECK INTERIOR COMPARTMENTS

For larger craft, you may need to ask to board the vessel to inspect interior compartments that could hold standing water, such as livewells. For smaller craft, you should be able to inspect these without entering the vessel. Take the following steps when examining internal compartments:

- ✓ Ask the boater to open up compartments so that you can see all bait wells, livewells, equipment lockers, and visible ballast tanks (if applicable).
 - If the vessel has standing water in a livewell or any other compartment, you should work with the boater to remove standing water from the vessel using a sponge or towel.
 - \circ Ensure that the compartments are fully drained to the best of your ability prior to launch.
 - If the boater has live bait in a livewell, you may inform the boater of Vermont Baitfish Laws (Appendix A).
 You do NOT have the authority to ask for a baitfish receipt, however. If a boater is obviously breaking the law, you may contact law enforcement if you deem it appropriate.
- ✓ If the vessel has an inboard or inboard/outboard (I/O) engine, be sure to inspect the engine compartment and its bilge.

Step 6: Closeout Interaction with the Boater and Record Inspection in Survey 123

Thank the boater for their time, and finally ask: "Will you check for AIS in the future?"

- ✓ Remind boater to replace the bilge plug. The boater is responsible for ensuring the vessel is watertight before launching.
- Remind boater to raise the engine or motor to avoid damages while the watercraft is trailered.
- Thank the boater for their time!

Step 7: Submit Watercraft Inspection Survey123 Data

After closing out interaction with the boater, complete and submit the data you collected using Survey123. If an inspection and/or decontamination was performed, make sure to record this in Survey123. Also record if any plant samples were collected and sent in for further identification.





Inspection of Watercraft Retrieving from a Waterbody

When conducting inspections on watercraft pulling out of the lake or pond, much of the procedure remains the same. Some of the questions asked (i.e. last body of water visited) will no longer be necessary, however. Also, you will not expect that the watercraft be completely dry, since it was just in use. For an exit inspection, you will be looking to ensure that the watercraft is **cleaned**, **drained**, **and drying**.

Step 1: Ensure Personal and Public Safety

Same procedure as the entrance inspection step 1. Safety should always be the utmost concern.

Step 2: Greet the Boater

Same as for an entrance inspection.

Step 3: Conduct an Initial Assessment

Same as for an entrance inspection, except that you may record without asking the last waterbody that the watercraft was in and the last time the watercraft was used.

Step 4: Determine Risk Factors

Same as for an entrance inspection, although information about your lake or pond will be used to assess risk of the vessel transporting invasive species to another body of water. For example, if you are inspecting a watercraft leaving your lake, and your lake has a known infestation of Eurasian watermilfoil or spiny waterflea, you'll want to be especially careful to inspect, and potentially decontaminate, the boat and trailer thoroughly.

Step 5: Conduct Watercraft Inspection

Same as for an entrance inspection, but gear, compartments, bilges, etc. may be damp or contain some water. Your goal is to ensure that these are drained to allow for drying by doing the following:

- Inform the boater that, by statute, the bilge plug must be left out during transport. This will allow the watercraft to fully drain prior to the next launch. Boaters are now required by law to have the bilge plug removed during overland transport of their boat.
- Ask that compartments containing water be drained, and that damp compartments/gear be left open and exposed to the sun to ensure complete drying.

Step 6: Closeout Interaction with the Boater

Same as for an entrance inspection, although it is required that the bilge plug be left out.

Step 7: Submit Watercraft Inspection Survey123 Data Same as for an entrance inspection.



Types of Watercraft

Identifying what type of watercraft you are inspecting or decontaminating is an essential step to ensure you are properly inspecting and/or decontaminating that vessel. Below are some examples of each of the major categories included in the Survey123 Watercraft Inspection Survey.

Outboard Motor – An outboard motor is a propulsion system for boats, consisting of a self-contained unit that includes engine, gearbox and propeller or jet drive, designed to be affixed to the outside of the transom. They are the most common motorized method of propelling small watercraft.

Inboard Motor - As opposed to an outboard motor where an engine is mounted outside the hull of the craft, an inboard motor is an engine enclosed within the hull of the boat, usually connected to a propulsion screw by a driveshaft.

Jet Ski – A Jet Ski (also called a personal watercraft or water scooter) is a recreational watercraft that the rider sits or stands on, rather than inside of, as in a boat.

Sailboat - A sailboat is a boat propelled partly or entirely by sails, they may or not also have an inboard or outboard motor.

Non-motorized Boats including Canoes, Kayaks, and Rowboats – These are smaller boats that generally do not have a motor and are propelled using paddles. It is important to note that while these types of boats are non-motorized, in some cases they can have motors attached.











Boat	t Inspection C	hecklist		
CHE	CK ALL PARTS OF WATE	RCRAFT WHERE AN ANS IS DE	TECTED OR SUSPECTED (H.E.A.D.)	
	Vessel Exterior: Hull			
	Entire hull	Transducers	Pitot tubes	Sailboats:
	Transom	Depth sounders	Water intakes/outlets	Centerboard box
	Water holding pock	ets Recessed bolts	PWC—foot recesses	Rudder and transom
	Trim tabs (top and b	oot.) 🔲 Through hull fitting	s 🖬 Lights	Carl Keel
				Fittings
	Vessel Exterior: Trailer	1		
100	Rollers, bunks, pads	License plate	ailer lights 🔲 Trailer wiri	ng 🔲 Trailer axles
	Trailer springs		ckets and hollows D Wheels an	
	Engine or Motor			
	Exterior housings	Propulsion system	Prop., shaft supports	Water intake/outlets
	Rudders	Propeller shaft	Gimbel area	Anti-Cavitation plates
	Propeller and assen	bly 🔲 Lower unit	Propeller guards	
	Anchor and Equipmen	it		
	Anchors and ancho	r rope/chain Drift sock(s	Waterfowl decoys	Float cushions/belts
	Rope and equipment	nt lockers 🛛 🖬 Motor well	PFD's	Water skis and ropes
	Bait and live wells	Internal ba	llast tanks 🔲 Nets	
	Drain Interior Compar	tments		
	Bilge	Bait and live wells	Ballast tanks	n motor or engine lower unit
	Drain inboard engir	ne compartments and bilge	Drain water cooled generate	ors, swamp coolers with plugs

Vermont Watercraft Decontamination Procedures

Why Perform Vessel Decontamination?

Invasive species, such as zebra or quagga mussels, can travel great distances over land by "hitchhiking" on watercraft. They can survive up to 30 days out of water depending on temperature and/or humidity. Through a comprehensive education, inspection and decontamination program, we can stop the spread of these costly invasive species. Zebra and quagga mussels, spiny waterflea, and other AIS can safely and effectively be killed and removed from a vessel by trained personnel. Decontamination includes the use of hot water with high or low pressure to decontaminate boats, motors/engines, trailers, personal gear, and other equipment. The objective of decontamination is to kill and remove, to the extent practical, all visible mussels or suspected AIS. Killing AIS prevents establishment of new populations as a result of vessel/equipment transport.

What does vessel decontamination generally consist of?

Vessel decontamination consists of a very hot water rinse or spray at high or low pressure. There are no soaps, bleaches or chemicals used or recommended. The hot water kills AIS, and the high-pressure spray removes them from the vessel. The general recommendation is to use 140°F water at high pressure (3,000 psi) to decontaminate the hull and 140°F water at low pressure to decontaminate motors/engines. Interior compartments are decontaminated with 120°F at low pressure to avoid damaging pumps. A 140°F hot water rinse for ten seconds, to each spot, will kill most AIS. A reduced temperature of 120°F for interior compartment standing water decontaminations for the protection of the vessel is more than sufficient to kill juvenile stages of AIS.

When will a decontamination be performed?

Most inspections do not result in a decontamination being performed. Often, only certain compartments or components of the boat requires decontamination. Time and resources available at a public access point will determine whether a watercraft decontamination is possible. Circumstances that should result in serious consideration of a watercraft decontamination:

- There are visible aquatic invasive species on the watercraft, trailer, vehicle or other equipment, or vectors for AIS are present (i.e., mud on an anchor) that cannot be removed effectively by hand.
- Recently used in an infested/suspect/unknown waterbody.
 - Even if you cannot physically see standing water, you might assume that standing water is present in the motor system or ballast system, as these areas often do not completely drain. If the watercraft was last in a high-risk or unknown waterbody, and was used within the past two weeks, there is a possibility that viable AIS could be present within these enclosed systems. You may consider a hotwater flush of equipment in question.
 - A motor flush, ballast tank flush, and live well flush will only be required if the boater has been in a body of water containing Asian clam, zebra mussel, or spiny waterflea within the past five days (See infested waterbodies list – Appendix C).
- Next destination and status of the lake.
 - Exit decontaminations are only required if the boater plans on visiting a different waterbody within five days of exiting current high-risk waterbody. If you are a greeter stationed at an infested waterbody (such as Lake Champlain or Lake Bomoseen), you should always encourage boaters leaving the access point to undergo a watercraft decontamination.

Note: Decontamination should only be performed when necessary. When inspecting boats at a lake with a lakewide infestation of Eurasian watermilfoil, and a watercraft shows up with suspected Eurasian watermilfoil stuck between the boat and trailer, decontamination measures are not warranted. You would still remove the plant material and inform the boat owner that it is against the law to transport invasive species over land, but realize it is probably not posing a significant risk to your waterbody. Remember, not all boaters will be receptive to mandated decontamination protocol, but they may be more likely to cooperate if they realize that the decision process deeming a decontamination necessary has been logical.

What types of decontaminations will I do?

Every inspection is different, and you will need to use all the information at your disposal to determine the best course of action. Technologies range from high pressure, hot water decontamination units to low pressure, low temperature hoses. In many cases no boat wash or decontamination may be available. If a watercraft decontamination station IS available and a greeter deems a decontamination necessary, boaters are required to comply with the recommended course of action. This does NOT mean you should physically restrict a boater from entering or leaving a body of water without a decontamination. In the case of a serious infraction, you may contact law enforcement.

What if a boat required decontamination and does not have access to a unit?

If a boat requires decontamination and you do not have access to a decontamination unit, you may choose to ask the boater to bring their vehicle and vessel to a local car wash. Alternatively, you may direct the boater to a nearby decontamination unit at a different lake.

What if a boat requires decontamination and the boater refuses?

If at Greeter assesses and communicates to the boater that the vessel is a high risk (whether by finding an abundance of aquatic plants or animals on the vessel, and/or was in an infested waterbody within the last several days) that requires a decontamination and is in violation of the law, and the boater refuses to comply and receive assistance, you cannot block entry for the boater. Remember, your safety is the most important! The first action is to contact the local Vermont Fish and Wildlife Game Warden. The law states that boaters cannot transport any aquatic species (10 V.S.A. § 1454) and fines may be provided to those that are found to be in violation by the Vermont Fish and Wildlife Game Warden. The second action is to contact your Greeter Coordinator. The recommended steps for dealing with a boater that refuses to acknowledge or comply with a Greeter's request for an inspection of decontamination are outlined in the When to Contact Law Enforcement Page (Page 31).

Types of Watercraft Decontamination

Plant Decontamination

This decontamination is performed whenever plant material cannot be removed from the vessel or trailer by hand. This decontamination is localized and requires using 140°F hot water only on the areas where plant material is located.

Exterior Decontamination for Suspected or Known AIS

This protocol is performed when adult or settled mussels, unidentifiable bumps, or other AIS are detected on the vessel. This decontamination is often the most complicated and ensures that the watercraft exterior has been completely decontaminated. In many cases, this will be combined with standing water decontamination to ensure a complete decontamination of the vessel, inside and out.

Motor Flush

A motor flush is performed to remove high-risk standing water that may still be inside of a motor that was not fully drained. Even a properly drained inboard or inboard/outboard motor can contain small amounts of water that can act as vectors for microscopic organism transport. This procedure should only be performed if the watercraft in question has been on a body of water with an infestation of Asian clam, zebra mussel, or spiny waterflea within the past 5 days.

Standing Water Decontamination

This protocol is performed to kill zebra and quagga mussel veligers, spiny waterflea eggs, or other microscopic AIS in standing water that can't be fully drained from the vessel. This decontamination applies to interior compartments that contain water or have equipment that have come in contact with the waterbody. The interior compartments include, but are not limited to: livewells, bait wells, bilge areas, and ballast tanks.

These interior compartments of a watercraft are required to be decontaminated if they have been on a waterbody infested with Asian clam, zebra mussel, or spiny waterflea within the past five days. Equipment includes, but is not limited to: anchor, mooring and anchor lines, PFD's, swim platforms, inflatables, down-riggers, planing boards, water skis, wake boards, ropes, ice chests (used for bait or for holding fish), fishing gear, bait buckets, and stringers. Equipment decontamination is at the discretion of staff located at authorized watercraft inspection stations – high-risk equipment (most likely a muddy anchor) should be subject to decontamination.

Note: Decontamination is required in Vermont when it is deemed necessary by an authorized public access greeter, when decontamination equipment is available, and when other criteria listed above are fulfilled. Transportation of aquatic plants and other aquatic invasive species on a watercraft is also against the law. Remember, greeters do not have enforcement authority, but can contact law enforcement if needed. You may inform boaters of these laws but should not be confrontational.

FAKE-A-LAKE		EAR MUFFS (Round)	
	Used on Inboard Engines on the intake usually bottom of the hull.		Used on several types of I/O or Outboard Engines dependent on shape and size of intakes.
EAR MUFFS (Dual Feed)		EAR MUFFS (Mercury)	
	Used on I/O or Outboard Engines to provide maximum flow of water for bigger engines.	e to a	Used specifically on Mercury/ Mercruiser Stern Drives. Squeeze the W shaped clamp together to removed one ear from the pin, slide pin through intak and reconnect.
EAR MUFFS (Rectangle)		DIFFUSER	
	Used on several types of I/O or Outboard Engines dependent on shape and size of intakes.		Used for low pressure, medium flow water.
EAR MUFFS (Volvo/Penta	a)	THRU HULL HOSE	
	Used specifically on Volvo/Penta Drives. Attach the rubber snubble to the outdrive to keep it in place and place ears over intakes.		Used to flush through hull fitting on any boat with a bilge.
HOSE THREAD ADAPTER			
	Used to adapt the pressure washer fitting to all of the listed attachments with a hose threading (above).		

Guidelines for Watercraft Decontamination

General Decontamination

- 1. Follow the standard operating procedures for your decontamination unit. Check all fluids on the decontamination unit to make sure it is ready to operate.
- 2. Connect the wand to the hose. Start the decontamination unit using the proper operating procedures for your unit.
- 3. Ensure water temperature reaches 140°F, unless sensitive areas (i.e. rubber hoses) are being treated. In that case, ensure water temperature is 120°F.



4. Decontaminate the exterior of the hull and trailer. Connect the 40° (white) nozzle with the use of the quick connect to the end of the wand. Start the decontamination unit. Keep the wand at a 45° angle and work methodically in one direction. On trailers, be sure to decontaminate the openings of the tubular frames. Do not use the wand to "scrub" the hull. Keep the tip of the wand within 12 inches of the hull and trailer as you move around the boat. Water temperature decreases approximately 15 to 20° per foot of distance when sprayed from a power nozzle.

WARNING: Use low pressure on all carpeted areas, decals, electrical connections, gimbal area on the inboard/outboard engine, interior compartments, transducers, and depth sounders and their wiring.

- 5. Turn off the decontamination unit when you have completed decontaminating all necessary interior compartments. Turn the burner off fist, then allow the engine to run until cool water is discharged, and then turn off the key.
- 6. Note "exterior decontamination" in the comment section of the data sheet. Remind the boater to CLEAN, DRAIN, and DRY their vessel.

Plant Decontamination

During the entrance and exit inspection, if any plant or plant fragment is found it must be hand removed and properly disposed of away from the lake by the inspector or boat operator. However, there may be a situation

when plant material is caught between the hull of the vessel and the trailer bunk or roller, or is wrapped around the propeller or transducer, and can't be completely removed by hand. In these cases, decontamination of affected areas should be performed.

- 1. Start the decontamination unit using the standard operating procedures for your unit.
- 2. Apply low pressure 140°F water directly to the plants or plant fragments for 15 seconds.
- 3. Decontaminate areas where plants are located and can't be removed:



- ✓ Trailer's carpeted bunk: Use 140ºF water at low pressure. Move the low pressure hose slowly along the length of the bunk. Keep the tip of the wand/diffuser close to the bunk to maintain an even temperature.
- ✓ Trailer's frame and rollers: Use 140°F water at high pressure. Move the wand/diffuser slowly along the length of the trailer. Keep the tip of the wand/diffuser close to the trailer to maintain an even temperature.
- ✓ **Propeller**: Use 140ºF water at high pressure. Be thorough and remove 100% of the plant material.

- ✓ Transducer: Use 140ºF water at low pressure. The wiring and "water wheel" attached to this instrument dictate that low pressure is used in order to prevent damage.
- ✓ Interior compartments. Follow standing water decontamination protocol.
- 4. Turn off the decontamination unit when you have completed decontaminating all necessary interior compartments. Turn the burner off first, then keep the wand trigger depressed until cool water is discharged, and then turn off the key.
- 5. Note "plant decontamination" in the comment section of the data sheet. Remind the boater to CLEAN, DRAIN, and DRY their vessel.

Animal Decontamination

If you suspect that you have found mussels or other AIS you should decontaminate all affected areas. For an exterior decontamination, all affected parts of the vessel must be exposed to hot water at the appropriate temperature and pressure to ensure the AIS are dead and removed. If an exterior decontamination is warranted, then it is likely that the watercraft should also have inside compartments and the motor flushed.

Sample Collection and Specimen Identification

Greeters are not required to identify the material they remove during an inspection. However, if you would like to identify the sample, please follow the guidelines in the next section "*Intercepting Aquatic Organisms: What to do when an aquatic organism has been found during a greeter inspection*" and use the identification guides provided by VTDEC.

Contact VTDEC immediately at (802) 828-1535 if the watercraft was last in a body of water that does not have a known infestation of the plant or animal that was intercepted (see Appendix C: *Infested Water Bodies List*). For assistance in sample identification, please submit the collected sample via mail using the sample submission form (See Appendix D) and the instructions on that form.

Standing Water Decontamination of Interior Compartments

- 1. Follow the standard operating procedures for your decontamination unit.
- 2. Check all fluid levels of the decontamination unit. With the trigger squeezed, start the unit and purge the water until it runs clear.
- 3. Turn on the engine and the burner and measure the temperature of the water until the desired temperature is reached (120° F).
- 4. Start the decontamination by having the boat operator open all interior compartments that need to be decontaminated and remove plugs. Flush each compartment.





- 5. Use a laser thermometer and measure the temperature at the through-hull discharge port for that compartment. Continue flushing until the exit temperature of the water reaches 120°F for 30 seconds. Be sure to keep the tip of the attachment close to the sides of the compartment to prevent temperature loss.
- Next, if equipped, have the boater turn on the discharge pump for the compartment, and run hot water through the pump system until discharge water reaches 120° F for 30 seconds.
- 7. Turn off the decontamination unit when you have completed decontaminating all necessary interior compartments. Turn the burner off first, then allow the engine to run until cool water is discharged, and then turn off the key.
- 8. Note "standing water decontamination of compartments" in the comment section of the data sheet. Remind the boater to CLEAN, DRAIN, AND DRY their vessel.

Standing Water Decontamination of Outboard Motors and Inboard/Outboard Engines – Motor Flushes

All decontamination stations will have clamp-style motor muffs for flushing of outboard and I/O motors. Follow these steps to decontaminate these engines:

- 1. Attach the hose to the end of the wand (quick connect fitting).
- 2. Attach the muff attachment to the hose.
- 3. Make sure the motor/engine is completely lowered. Place the muffs so that all the intake openings are completely covered. If all intakes cannot be completely covered, then motor decontamination should not proceed so as not to damage the motor's impeller.
- 4. Start the decontamination unit following the standard operating procedures.
- 5. Start the water by engaging the trigger. Check to make sure the intake openings are still covered on both sides and that the muffs are tight.
- 6. Stand clear of the propeller and have the boat operator start the motor/engine in Neutral.
- Flush the engine until the water temperature is 140°F for 120 seconds when measured by a laser thermometer at the discharge port(s).
- 8. Have the boat operator turn off the motor/engine.
- 9. Remove the muffs and allow the motor/engine to completely drain before being raised
- 10. Turn off the decontamination unit when you have completed decontaminating all necessary interior compartments. Turn the burner off first, then allow the engine to run until cool water is discharged, and then turn off the key.
- 11. Note "standing water decontamination of compartments" in the comment section of the data sheet. Remind the boater to CLEAN, DRAIN, AND DRY their vessel.









Standing Water Decontamination of Inboard Engines and their Bilges

All inboard intakes, which are located on the bottom of the hull, have a cover over the opening that protects the engine from sucking up large particulates. Locate the intake opening before proceeding.

- 1. Attach the hose to the end of the wand (quick connect fitting) and then attach the fake-a-lake attachment.
- 2. The fake-a-lake must be placed snuggly against the bottom of the hull covering the intake port for the inboard.
- 3. Start the decontamination unit following the standard operating procedures.
- 4. Start the water by engaging the trigger.
- 5. Stand clear of the propeller and have the boat operator start the engine in Neutral.
- 6. Flush the engine with low pressure water until the exit temperature of the water is 140°F for two minutes when measured with a laser thermometer at the discharge port(s).
- 7. Have the boat operator turn off the engine.
- 8. Remove the fake-a-lake from under the boat; disconnect the hose from the wand.
- 9. Turn off the decontamination unit when you have completed decontaminating all necessary interior compartments. Turn the burner off first, then allow the engine to run until cool water is discharged, and then turn off the key.
- 10. Note "standing water decontamination of compartments" in the comment section of the data sheet. Remind the boater to CLEAN, DRAIN, AND DRY their vessel.

Standing Water Decontamination of Ballast Tanks

- 1. Attach the hose to the end of the wand (quick connect fitting) and then attach the fake-a-lake attachment.
- 2. The fake-a-lake must be placed snuggly against the bottom of the hull covering the intake port for the ballast tank. You may need the boat owner's assistance in identifying ballast intake ports. **DO NOT begin a ballast tank flush without being certain that you have identified the correct inflow port.**
- 3. Start the decontamination unit following the standard operating procedures.
- 4. Start the water by engaging the trigger.
- 5. Have the boat operator turn on the intake ballast pump. Fill it up with low pressure or until the exit water temperature reaches 120°F. If there is no ballast tank discharge pump, flush the ballast tanks with 120°F water for at least 3–5 minutes.
- 6. When the discharge water reaches 120° F, have the boat operator turn off the intake ballast pump. Release the trigger to stop the water flow.
- 7. Have the boat operator turn on the ballast tank discharge pump to drain the tank as much as possible.







- 8. Repeat these steps for every ballast tank. Ask the boater if they have multiple tanks.
- 9. Turn off the decontamination unit when you have completed decontaminating all necessary interior compartments. Turn the burner off first, then keep the wand trigger depressed until cool water is discharged, and then turn off the key.
- 10. Note "standing water decontamination of compartments" in the comment section of the data sheet. Remind the boater to CLEAN, DRAIN, AND DRY their vessel.

Intercepting Aquatic Organisms and Submitting a Specimen

Protocol for Vermont Public Access Area Greeters

Steps to follow when an aquatic organism has been found during a greeter inspection.

If a greeter finds plants or animals during an inspection on the watercraft, trailer or associated equipment, remove all material, record what water body the watercraft was last in, if known, and follow the appropriate protocol below for either plant or animal material. Vermont Aquatic Invasive Species Program staff will follow-up with you on submitted samples.



If a specimen was submitted, check the box in the Watercraft Inspection Survey 123

Plant Material

If you can, use the guidance materials provided by the State of Vermont to identify the plant. Sources include the <u>Key to Common Vermont Aquatic Plants</u>, the <u>Vermont Invasive Patrollers (VIP) Manual</u>, and the <u>Vermont's Gallery</u> <u>of Invaders</u> found at the Aquatic Invasive Species Program Website.

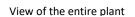
- If you determine or suspect that the plant is an aquatic invasive species, cross reference it with the list of Vermont Infested Waterbodies (see Appendix C) known to have aquatic invasive species. If the plant came from a location where its establishment is known, record the incident, but no further action is required. If the plant is not found in the listed waterbody on the list, or if you think the specimen is a new species threatening Vermont, continue to Step 2.
- 2. If you identified a plant species that is not on the list of waterbodies known to have aquatic invasive species, or may be a species new to Vermont, or are unsure of the identification, within two days either:

a. Take several photographs of the plant. Include a view of the entire plant as well as a close-up of the leaves or other relevant information. Please include a ruler, or a common object within the photo to demonstrate the scale of the specimen (see photos on right).

Email these pictures to kimberly.jensen@vermont.gov, or text photos to (802) 490-6120. In your message, include the suspected identification and the name of the waterbody it came from. Press or freeze the plant in the event its identity needs to be confirmed at a later date if the plant cannot be identified from the photographs. Or,

b. Mail the plant. Wrap the plant specimen in a wet paper towel and place it into a sealable plastic bag. If there is more than one species, wrap them individually. Fill out a sample submission form (see Appendix D) and follow the mailing directions on the form. Mail samples Monday through Wednesday only. Keep the sample(s) in a cool place until mailing can occur. Sample submission forms can be downloaded from the Vermont Aquatic Invasive Species webpage.







Close-up of a cross section of a plant stem with leaves and any close up of the plant parts.

Animal Material

- 1. If you suspect that the animal found is invasive (e.g., zebra mussel), carefully check the watercraft, trailer or equipment again, removing all material found. Explain to the watercraft/equipment owner your suspicions, why it is of concern and encourage them to wash their watercraft/equipment before launching or after retrieving.
- 2. If you suspect that the animal collected is an aquatic invasive species, cross reference it with the list of Vermont water bodies known to have aquatic invasive species. If the animal is coming from a location where its establishment is known, record the incident, but no further action is required. If you are unsure of the identification or uncertain if the water body it came from has that species, continue to step 3.
- 3. Take several photographs of the animal. Include a view of the entire specimen as well as a close-up. Email these pictures to kimberly.jensen@vermont.gov, or text photos to (802) 490-6120. In your message, include the suspected identification and the name of the water body it came from.
- 4. Save the sample. Place the animal sample is a sealable plastic bag or container, note what you suspect the species is, the date collected and where it came from, and store it in a freezer.

Out-of-State Watercraft

If a suspected invasive species is intercepted from a watercraft, trailer or associated equipment last in a water body outside of Vermont, follow the appropriate plant or animal protocol above as if the species came from the list of Vermont waterbodies known to have aquatic invasive species. Contact Kim Jensen at kimberly.jensen@vermont.gov or (802) 490-6120 and we will contact the appropriate authorities.

Priority Species to look for that are a threat to Vermont

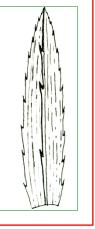
Hydrilla (Hydrilla verticillata)

© This is an invasive plant not found in Vermont



Hydrilla typically has 5-8 leaves per whorl. Each strap like leaf is visibly serrated and pointed at the tip of the leaf.





Round Goby (Neogobius melanostomus)

The round goby (Apollonia melanostomus) poses a serious threat to North American aquatic ecosystems, with potential impacts on sport and commercial fishing. Since its discovery in the St. Clair River in 1990, this bottom-dwelling fish has rapidly spread to many areas of the Great Lakes.



Vermont Fish and Wildlife Department Partners

The VTDEC AIS Program works with its sister department, the Vermont Fish and Wildlife Department (VFWD) on spread prevention activities throughout Vermont. These activities include acting on early detection and rapid response to new AIS threats and introductions into Vermont waterways, providing the Special Use Permit for Greeter Programs to be staged at Vermont Fishing Access Areas, and responding to Aquatic Nuisance Control violations.



Vermont Public Access Greeters that are stationed at Vermont Fishing Access Areas are required to annually apply for and receive a Special Use Permit (SUP) before a Greeter Program is to begin each year. Greeters and public citizens are required to adhere to the authorized activities for the use of state-controlled fishing access areas as outlined in the Vermont Fish and Wildlife Regulations State Statute (10 App. V.S.A. § 115).

Authorized activities for Vermont Fishing Access Areas include fishing, boating, hunting, and trapping. Parking of vehicles and boat trailers and launching of inboard and outboard motorboats engaging in these activities are also considered priority uses.

Prohibited activities include discarding trash, washing, cleaning or discarding dead fish, camping, picnicking, making or maintaining fires of any kind, swimming, and parking of vehicles and or trailers while the vehicle owner or user is not present at the access area or on the adjacent public waters. For an entire list of the authorized and prohibited activities, please visit the Vermont State Statute (10 App. V.S.A. § 115).

Per the Aquatic Nuisance Control State Statute (10 V.S.A. § 1454), a person transporting a vessel to or from a water shall, prior to launching the vessel and upon leaving a water, inspect and drain the vessel, the motor vehicle transporting the vessel, the trailer, and other equipment, and shall remove and properly dispose of any aquatic plants, aquatic plant parts, and aquatic nuisance species.

Greeter Programs that meet VTDEC training requirements are approved aquatic nuisance species inspection stations. Greeters can request a motor vehicle, trailer, and other equipment for inspection and decontaminated prior to launching the vessel and upon leaving a water if the Greeter identifies the vessel for inspection or decontamination.

Greeters serve as a deterrent against illegal activities and Aquatic Nuisance Control violations at fishing access areas and can inform VFWD when these activities occur, however Greeters cannot prohibit access, threaten, or intimidate individuals from using or accessing fishing access areas or waters of the State. If and when invasive species violations occur, Greeters should contact the VFWD Wardens.

When to Contact Law Enforcement

Generally speaking, you should never hesitate to contact the authorities, whether a local warden, county sheriff, or state police, if you believe it to be warranted. They can decide if a certain situation requires their immediate response but are appreciative to be informed of all concerning activities at a public access. The coordinator of your program should provide the contact information of the warden, county sheriff, and state police in your area. If not, please request that they do so.

Situations in which contacting the authorities is probably not necessary:

- ✓ Minor, accidental offenses.
 - If someone drives away with a non-invasive aquatic plant hanging off their trailer, especially if it wasn't noticed during the inspection process. Despite the boater technically being in violation of the law, it is unlikely that a warden would deem the situation worthy of response. If you notify a boater of a violation, and they ignore you or become belligerent, then you may consider notifying authorities.

Situations in which it is advised to contact a warden/state police/county sheriff:

- ✓ **ANY** time in which there is risk to public well-being. This includes:
 - Someone operating, or with the intent to operate, a vehicle (motor vehicle or watercraft) while under the influence of drugs or alcohol.
 - Physical altercations at the access area, or verbal altercations that you feel may escalate into physical altercations.
 - A serious injury at the public access area.
- ✓ Illegal drug use at the public access area.
- ✓ Intentional disregard for the law.
 - If a person is knowingly breaking the law (bait transport, transport of aquatic plants, refusal of warranted inspection or decontamination, others), you may call law enforcement if they continue to ignore regulations. Please refer to Appendix A for abbreviated legislation regarding bait fish, aquatic invasive species transport, boat inspections and more.
- ✓ Any other time specified by your local warden.
 - It's a good idea to get to know your region's warden and ask them if there are other situations in which they would like you to contact them. For example, some wardens may want to be alerted about people swimming or walking dogs at the access area, which are non-permissible uses. Otherwardens may only want to be notified of more egregious offenses.

Use your best judgement as to what constitutes the need for a call to law enforcement. When in doubt, do not hesitate to call your local law enforcement.

If a law enforcement agent is contacted please contact your coordinator, who should also notify VTDEC of the intent. The law enforcement agent will take your information and then please return safely to work or home. **Greeters should in no way or manner take** *any* **further actions**.

As a greeter, you <u>do not</u> have any enforcement authority but can remind boaters that watercraft inspections and decontaminations are mandated in State statute.

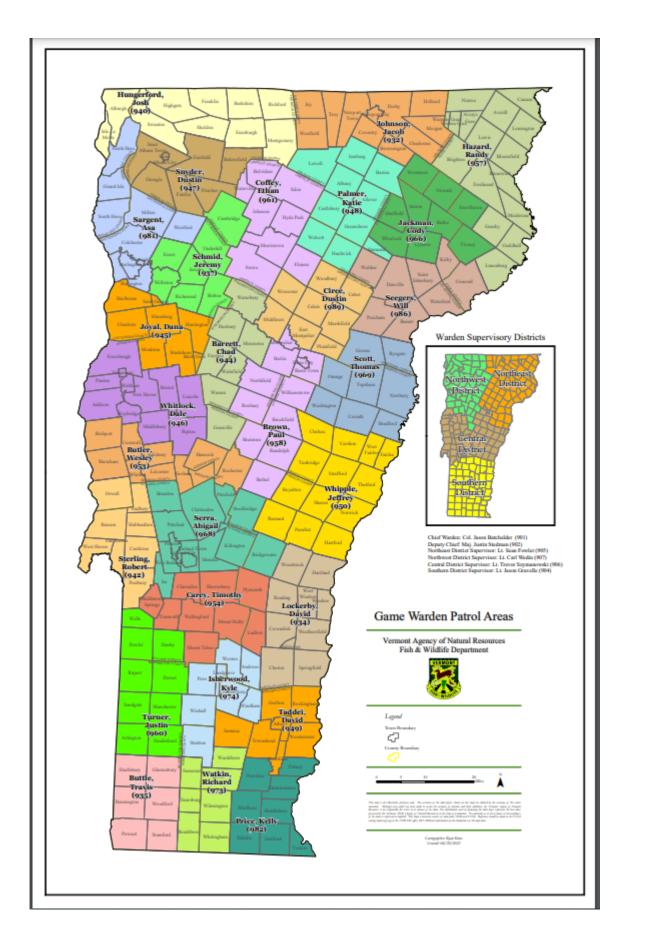
What if a Boat Requires Decontamination or an Inspection and the Boater Refuses?

If at Greeter assesses and communicates to the boater that the vessel is a high risk (whether by finding an abundance of aquatic plants or animals on the vessel, and/or was in an infested waterbody within the last several days) that requires a decontamination and is in violation of the law, and the boater refuses to comply and receive assistance, you cannot block entry to the boater. Remember, your safety is the most important! The first action is to contact the local VFWD Game Warden. The law states that boaters cannot transport any aquatic species (10 V.S.A. § 1454) and fines may be provided to those that are found to be in violation by the VFWD Game Warden. The second action is to contact your Greeter Coordinator. The recommended steps for dealing with a boater that refuses to acknowledge or comply with a Greeter's request for an inspection of decontamination are as follows.

- 1. Inform the boater of the high-risk findings and ask that the boat be decontaminated with assistance, or at a decontamination access point, a local car wash, or at the boater's residence.
- 2. Inform the boater that refusing to inspect and decontaminate the boat is in violation of the Aquatic Nuisance Species Regulations (noted on the Greeter Program Sign) and that they may be fined up to \$1,000 for violations of this law by a Vermont Fish and Wildlife Warden.
- 3. Do not engage in conflict or debate, argue, or lose your temper if a boater refuses.
- 4. As a greeter, you do not have any enforcement authority but can remind boaters that watercraft inspections and decontaminations are mandated in State statute.
- 5. Tactfully and discreetly, write down the boater's vehicle license plate.
- 6. If the situation is safe to do so, photograph evidence of egregious AIS that are found.
- 7. Contact the local VFWD Game Warden and leave a message.
- 8. Contact the Greeter Coordinator who will then contact VTDEC to inform them of the violation.
- 9. If the warden calls back, answer any questions they may have and provide any evidence if they ask for it. The wardens may not call back and may have sufficient information to proceed. Do not continue to call wardens after a message has been left.
- 10. Return to work.
- 11. Remove yourself from a situation in which you feel threatened by someone or uneasy about an interaction. Walk away from confrontation and leave the launch site if you feel unsafe.
- 12. If an egregious violation has occurred and the boat was entered into an un-infested waterbody, note where the boater went in the waterbody if you are able. With assistance from the Greeter and the Greeter Coordinator, VTDEC may conduct an early detection and rapid response event to survey the waterbody for any potential introduction of the AIS that may have been found on the boat or trailer.

Contacting VFWD Wardens for Aquatic Nuisance Control Violations:

- 1. When you reach out to a warden, first try their cell phone. If they do not answer, you should leave them a message with the important data: issue at hand, vehicle/boat registration license information and anything that else that you feel is important.
- 2. If you did not reach the warden, next call the State police dispatch number and let them know you have an issue and would like to speak to a warden. They will advise if there is someone available to connect you with.
- 3. Keep in mind, wardens cover on average 8-10 towns, have rotating days off and are responsible for many different areas of need, so if you do not make contact with a warden, understand that they are likely busy at that time.



Additional Resources

Vermont Invasive Species Patroller & Vermont Invasive Patroller for Animals

Gain Experience in aquatic invasive species identification by attending a Vermont Invasive Patrollers (VIP) or a Vermont Invasive Patrollers for Animals (VIPA) training session. The VIPA training sessions happen in June, and most VIP training sessions happen in July. Attending any portion of these workshops, (either a virtual workshop or in-person field day) would certainly aid in communicating with recreators who are interested in aquatic invasive species. Here, you will receive more information about the biology of specific aquatic invaders in Vermont and add to your repertoire the ability to identify aquatic invasive species while on and in the water.

This knowledge will allow you to be even more effective in your role as a public access boat launch greeter. With VIP training you will also be able to contribute to reliable invasive species surveys of your favorite waterbodies, a task important to the success of early detection and management of aquatic invasive species. Contact VTDEC for more information.

Additional Education Opportunities

While it is not a requirement that greeters are familiar with the biology and life history of all invasive species and potential invaders of Vermont water bodies, this information is a valuable conversation piece to have available while interacting with and educating boaters as a public access greeter.

Being able to provide additional facts regarding invasive species and spread prevention practices (such as that found in the Aquatic Invasive Species Guide or on informational signage, pictured below) may increase your credibility as an invasive species expert. Gaining the trust of boaters and recreators is an important tool in creating an environment where you can effectively communicate the message of invasive species control and management. Visit the AIS Program Website for more in-depth information.

This manual, and all of the resources referenced therein, can be found online on the VTDEC Aquatic Invasive Species Program website at http://dec.vermont.gov/watershed/lakes-ponds/aquatic-invasives.

Contact Kim Jensen at <u>kimberly.jensen@vermont.gov</u> or (802) 490-6120 with any questions, comments, or concerns about greeter programs or aquatic invasive species in Vermont.

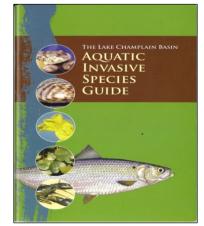
Additional Resources are found in the Appendices.

- Relevant Vermont Legislation (See Appendix A)
- VTDEC Greeter Program Datasheet (See Appendix B)
- VT Infested Waterbodies List (See Appendix C)
- Intercept Reporting and Sample Submission Form (See Appendix D)









Appendix A

Aquatic Nuisance/Invasive Species Laws and Regulations

While greeters do not have any law enforcement or regulatory authority, it is important to be aware of the laws pertaining to aquatic invasive species so that you can inform the public. Below is an abbreviated reference to Vermont statute pertaining to aquatic invasive species.

10 V.S.A. § 1454. TRANSPORT OF AQUATIC PLANTS AND AQUATIC NUISANCE SPECIES

A person shall not transport an aquatic plant or, aquatic plant part, zebra mussels (Dreissena polymorpha), quagga mussels (Dreissena bugensis), Asian clam (*Corbicula fluminea*), fishhook waterflea (*Cercopagis pengoi*), rusty crayfish (*Orconectes rusticus*), spiny waterflea (*Bythotrephes longimanus*), or other aquatic nuisance species identified by the Secretary to or from any Vermont waters on the outside of a vehicle, boat, personal watercraft, trailer, or other equipment water. This section shall not restrict proper harvesting or other control activities undertaken for the purpose of eliminating or controlling the growth or propagation of aquatic plants and aquatic nuisance species.

A person transporting a vessel to or from a water shall, prior to launching the vessel and upon leaving a water, inspect the vessel, the motor vehicle transporting the vessel, the trailer, and other equipment, and shall remove and properly dispose of any aquatic plants, aquatic plant parts, and aquatic nuisance species. It shall be a violation of this section for a person transporting a vessel to or from a water to not have the vessel, the motor vehicle transporting the vessel, the trailer and other equipment inspected and decontaminated at an approved watercraft inspection station prior to launching the vessel and upon leaving a water if:

(1) an aquatic nuisance species inspection station is maintained at the area where the vessel is entering or leaving the water;

(2) the aquatic nuisance species inspection station is open; and

(3) an individual operating the aquatic nuisance species inspection station identifies the vessel for inspection or decontamination.

When leaving a water of the State and prior to transport away from the area where the vessel left the water, a person operating a vessel shall drain the vessel, trailer, and other equipment of water, including water in live wells, ballast tanks, and bilge areas. A person is not required to drain: (i) baitboxes when authorized to transport bait away from a water; or (ii) vehicles and trailers specifically designed and used for water hauling. A person operating a vessel shall drain the vessel, trailer, and other equipment to avoid a discharge to the water of the State.

When a person transports a vessel, the person shall remove or open the drain plugs, bailers, valves, and other devices that are used to control the draining of water from ballast tanks, bilge areas, and live wells of the vessel, trailer, and other equipment. Vehicles and trailers specifically designed and used for water hauling, and emergency response vehicles/equipment are exempt from this. If staff of an approved aquatic nuisance inspection station observe a violation of the above, staff shall notify the person transporting the vessel.

VERMONT AGENCY OF AGRICULTURE, FOOD & MARKETS QUARANTINE #3 - NOXIOUS WEEDS

Whereas, the Vermont Agency of Agriculture, Food & Markets having found that certain noxious weeds outcompete and displace plants in natural ecosystems and managed lands; and Whereas, competition and displacement of plants by certain noxious weeds has significant environmental, agricultural and economic impacts; and Whereas, it has been determined to be in the best interest of the State of Vermont to regulate the importation, movement, sale, possession, cultivation and / or distribution of certain noxious weeds: Therefore, the State of Vermont is hereby establishing this noxious weed quarantine regulation in order to protect Vermont's environmental and economic resources.

TRANSPORT OF LIVE FISH AND USE OF BAITFISH – SUMMARY OF KEY RULES

Baitfish regulations are designed to protect Vermont's fish populations and fishing opportunities by managing the movement of baitfish to prevent the introduction or spread of fish diseases and other aquatic invasive species. New regulations, effective January 1, 2020, provide more flexibility for anglers by allowing the movement of baitfish from one waterbody to another through a zone system.

- Establishes an east and a west baitfish zone within which baitfish can be used (not between).
- Establishes a list of black-list waters that have high fish disease or invasive species risk. Baitfish can be used on these waters but may not be used on other waters.
- Establishes new baitfish holding rules that account for baitfish zones and black-list waters.
- Allows anglers to harvest and move approved wild baitfish species from waterbodies through a wild baitfish endorsement that can be added at no cost to an angler's fishing/combination license.

Commercially Purchased Baitfish:

- A person purchasing baitfish shall retain a transportation receipt issued by a state-approved commercial bait dealer, authorizing transportation of baitfish overland by motorized vehicle. Greeters do not have the power to demand proof of the transportation receipt only a law enforcement official may do so.
- A transportation receipt shall be valid 4 days to 10 days from time and date of sale.
- Allows commercial baitshops to harvest approved wild baitfish species from a baitfish zone (i.e rainbow smelt, white sucker, etc.) and sell them to anglers for use in that same baitfish zone.
- Anglers shall not transport baitfish away from state waters by motorized vehicle. Unwanted baitfish shall be discarded dead in the water, on the ice, or safely disposed of in the trash.
- Anglers may purchase baitfish from a New York bait shop for use on Lake Champlain only, provided the bait shop is Vermont-licensed, and the baitfish is accompanied by a Vermont-issued baitfish transportation receipt. Likewise, anglers may purchase baitfish from a New Hampshire bait shop for use on the Connecticut River and its setbacks only, provided the bait shop is Vermont-licensed, and the baitfish are accompanied by a Vermont-issued baitfish transportation receipt.

Note: As a greeter, you do not have the authority to require a boater to present a bait receipt, and you should NOT ask for such a receipt. Water provided by a certified bait shop for the purpose of transporting legal live bait is considered to be sterile and allowable under the law. You do not need to request that this water be drained.

	Watercraft		Watercraft type	Watercraft Last waterbody Watercraft Last waterbody type visited (Name) visited (Access)	Watercraft Last waterbody Watercraft Last waterbody type visited (Name) visited (Access)	Watercraft Last waterbody Last waterbody type visited (Name) visited (Access)	Watercraft Last waterbody Vype visited (Name) visited (Access)	Waterbody: Watercraft type Last waterbody visited (Name) Last waterbody visited (Access) Last waterbody visited (Town) Last waterbody visited (State) Used in last 14 days? Trip Purpose Familiar With AIS? Image: Note of the state of th	Waterbody: Waterbody: Watercraft Last waterbody Last waterbody Last waterbody Last waterbody Used in last Trip type visited (kame) visited (Access) visited (rown) visited (state) "t/d ays? Purpose use use use use use use use use use <th>Waterbody: Waterbody: Watercraft Last waterbody Last waterbody Last waterbody Isst waterbody</th> <th>Date (mm/dd/yy):</th> <th>Time Launch/ Retrieve</th> <th>-</th> <th>2</th> <th>3</th> <th>Δ</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> <th>10</th> <th>11</th> <th>12</th> <th>13</th> <th>14</th> <th>15</th> <th>ō</th> <th>16</th> <th>16 17</th> <th>16 17 17 18</th> <th>117 117 118 118 118 118 118 118 118</th> <th>10 11 11 11 11 11 12 12 12 12</th> <th>110 117 118 118 119 119 120 20</th> <th>10 10 11 11 11 10 10 10 20 20 20 20 20 21 20 21 21 21 21 21 21 21 21 21 21 21 21 21</th> <th>10 10 17 1 18 1 19 1 20 1 21 1 22 1 23 1</th> <th>16 17 17 18 19 20 21 22 23 24</th> <th>16 17 17 18 19 20 21 22 23 24 25</th> <th>Not Not Not</th>	Waterbody: Waterbody: Watercraft Last waterbody Last waterbody Last waterbody Isst waterbody	Date (mm/dd/yy):	Time Launch/ Retrieve	-	2	3	Δ	5	6	7	8	9	10	11	12	13	14	15	ō	16	16 17	16 17 17 18	117 117 118 118 118 118 118 118 118	10 11 11 11 11 11 12 12 12 12	110 117 118 118 119 119 120 20	10 10 11 11 11 10 10 10 20 20 20 20 20 21 20 21 21 21 21 21 21 21 21 21 21 21 21 21	10 10 17 1 18 1 19 1 20 1 21 1 22 1 23 1	16 17 17 18 19 20 21 22 23 24	16 17 17 18 19 20 21 22 23 24 25	Not Not
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<u>Appendix B</u>

Greeter Program Field Sheet (Upload Data to Survey123)

Appendix C

Vermont Infested Waterbodies List 2021

Waterbody	Town	AL	AC	BN	CLP	EF	EWM	RC	SS	SWF	VLM	wc	ZM
Arrowhead Mountain Lake	Milton				X		X						
Austin Pond	Hubbardton	+					x			<u> </u>			
Baker Pond	Brookfield	+					x						
Beaver Pond	Proctor	+					x						
Beaver Wetland	Mendon	+					X				-		
Beebe Pond	Hubbardton	+			x		x						
Berlin Pond	Berlin	+					x						
Big Marsh Slough	Highgate	+				x	x			<u> </u>	х	x	
Black Creek Marsh	St.Albans	+			x							x	
Black Pond	Hubbardton	-			X		x						
Black River	Springfield	-					x	х					
Blissville Wetland Pond	Blissville	+								<u> </u>		x	
Bomoseen, Lake	Castleton	+	x	x	x	x	x			<u> </u>		x	x
Broad Brook	Vernon	+					x			<u> </u>			
Brookside Pond	Orwell					x						x	
Brownington Pond	Brownington						x						
Bullis Pond	Franklin	-			x							x	
Burr Pond	Sudbury	-			x		x						
Cabot Clark Marsh	Highgate	+										x	
Carmi, Lake	Franklin	x			x		x						
Castleton River	Castleton	-					X			\vdash			
Cedar Lake	Monkton	+					x			<u> </u>			
Champlain, Lake - Burlington Bay		x			x		X			x			x
Champlain, Lake - Isle LaMotte		X			X	x	X			x			X
Champlain, Lake - Main Lake		x			x	x	x			X/FWF		x	x
Champlain, Lake - Mallets Bay		X			x		x			X			x
Champlain, Lake - Missisquoi Bay		X			x	x	X			<u> </u>	x	x	x
Champlain, Lake - Northeast Arm		X			x	-	x			x			X
Champlain, Lake - Otter Creek		X			x	x	X			x		x	x
Champlain, Lake - Port Henry		X			x	X	x			X		X	X
Champlain, Lake - Sandbar WMA												x	
Champlain, Lake - Shelburne Bay		x			x	X	x			X			x
Champlain, Lake - South Lake		X		х	x	x	x			x	x	х	x
Champlain, Lake - St. Albans Bay		X			x	X	x			X		x	x
Chipman Pond	Tinmouth						X						
Clay Brook	Warren	-					x						
Clyde Pond	Derby	-					X						
Coggman Creek		-										х	
Coggman Pond	West Haven	-			x		x					x	
Connecticut River	Brattleboro	+		х	-			x		<u> </u>		X	
Connecticut River, Herricks Cove	Rockingham	-					x					x	
Connecticut River, Hoyts Landing	Springfield				x		x						
Connecticut River, TransCanada launch	Concord	-					x			<u> </u>			
Connecticut River, Wilder Dam	Hartford	-					x			<u> </u>			
Cranberry Pool	Highgate	-			x	x	-					x	
Crystal Lake	Barton	+			-	-	x						
Daniels Pond	Glover	-			x					<u> </u>			<u> </u>
Dead Creek	Ferrisburgh	+			<u> </u>			-	<u> </u>	<u> </u>		x	<u> </u>

Waterbody	Town	AL	AC	BN	CLP	EF	EWM	RC	SS	SWF	VLM	wc	ZN
Dead Creek	Highgate						X					x	
Derby Lake	Derby	<u> </u>					X		x	-		<u>^</u>	
Deweys Mill Pond	Hartford	-				-	X		~	-			\vdash
Dog River	Berlin	<u> </u>					^	x	-	-	-	-	\vdash
Dunmore, Lake	Salisbury	-					x	<u>^</u>	-	-	-	-	1 x
East Creek	Orwell	<u> </u>					^		-	-	-	x	⊢^
Echo Lake	Hubbardton	-	-	-			x		-	-	-	<u> </u>	-
		<u> </u>					-		-	-	<u> </u>	<u> </u>	-
Eligo, Lake	Greensboro	-					X	-	-	-	-	<u> </u>	-
Elmore, Lake	Elmore		-	-			X		-	-	<u> </u>	<u> </u>	-
Fairfield Pond	Fairfield	-			X		X	-	-	-	<u> </u>	<u> </u>	-
Fairfield Swamp Pond	Fairfield	<u> </u>	-				X		-	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Fairlee, Lake	Thetford	-					X		_	<u> </u>	-		-
Fern Lake	Leicester	-		X	X		Х	<u>, , , , , , , , , , , , , , , , , , , </u>	_				
Forest Lake	Calais				X								
Frog Pond	Orwell						х	<u>, , , , , , , , , , , , , , , , , , , </u>					
Gale Meadows Pond	Londonderry						Х						
Glen Lake	Castleton				Х		Х						
Great Hosmer Pond	Craftsbury						х						
Half Moon Pond	Hubbardton				x								
Halls Lake	Newbury						х				x		
Hinkum Pond	Sudbury						X				<u> </u>		
Horton Pond	Benson	-		х	x					<u> </u>		x	
Hortonia, Lake	Hubbardton	-		x	x	x	x		-	-		L^	
Hough Pond	Sudbury			<u>^</u>	x	^	x		-	-	-	<u> </u>	
Indian Brook Reservoir	Essex	-			<u> </u>		x		-		-	-	\vdash
		-			~				-	-	-	<u> </u>	-
Iroquois, Lake	Hinesburg	<u> </u>			X		X		-	-	-	<u> </u>	-
Kent Pond	Killington	<u> </u>					X		-	<u> </u>	-	<u> </u>	
Lamoille River	Milton	-					X	X	-	-	-	<u> </u>	-
LaPlatte River	Shelburne	-			X	х	Х	<u>, , , , , , , , , , , , , , , , , , , </u>	-	-	_		
Leicester River	Salisbury						X	-					
Lemon Fair River	Orwell							·		_		X	
Lewis Creek	Ferrisburgh						х	х					
Lily Pond	Poultney				Х		х					Х	
Line Pond	Barnard					1	х	19 - 19 19					
Little Pond	Wells				х		х					х	
Long Pond	Eden						х						
Lower Pond	Hinesburg					х	х						
McCabes Brook	Shelburne						Х						
Metcalf Pond	Fletcher						X						
Memphremagog, Lake	Newport Town	<u> </u>			x		X		x	-	-		CANA
Mill Pond	Windsor	<u> </u>			<u>^</u>		X		~	-			Cristin
Mill Pond (Parson's Mill)	Benson	-					x		-	-	<u> </u>	x	-
Mill River	St. Albans	-				x	^	-	-	-	-	<u> </u>	\vdash
		<u> </u>				^	~	~	-	-	<u> </u>	<u> </u>	
Missisquoi River	Highgate	-					X	X	-	-	-	<u> </u>	-
Morey outlet brook	Fairlee	-				-	X		-	-	-	<u> </u>	-
Morey, Lake	Fairlee		-				X	x		-	-		-
North Hartland Reservoir	Hartland						X			-	-		L
North Montpelier Pond	East Montpelier						х				-		L
North Springfield Reservoir	Springfield						Х					х	L
Old Marsh	Fair Haven				х								
Ompompanoosuc River	Norwich						Х	х					
Otter Creek	Ferrisburgh						Х					х	
Paran, Lake	Bennington				x		Х					X	
Pauline, Lake	Ludlow						?						
Pelkeys Swamp	Benson					x	x					x	
Phillips	Benson			x	x					<u> </u>		x	
Pike River	Berkshire	<u> </u>		^	^			x	-	-	-	-^	-

Waterbody	Town	AL	AC	BN	CLP	EF	EWM	RC	SS	SWF	VLM	WC	ZM
Pinneo, Lake	Hartford						X	2 - S					
Porter Lake	Ferrisburgh	· · ·			Х		X					х	
Poultney River	Poultney						X						
private pond	Arlington						X						
private pond	Hinesburg						X						
private pond	St. Albans						X						
Rescue, Lake	Ludlow						X						-
Richville Pond	Shoreham				х	х	X					х	
Rock River	Highgate					х	X					х	
Root Pond	Benson				х							х	
Round Pond	Newbury						X						
Rutland City Reservoir	Rutland Town						X						
Sadawga Pond	Whitingham				х		X						
Salem Lake	Derby						X						
Shadow Lake	Glover						X						
Shaftsbury	Shaftsbury											х	
Shelburne Pond	Shelburne				X	х	X						
Singing Wetland	Bennington				х		X					х	
Spectacle Pond	Brighton			х									
St. Catherine, Lake	Wells	X			х		X					х	
Star Lake	Mount Holly						X						
Stevens Brook	Maidstone						X						
Stoughton Pond	Weathersfield						X						
Sunrise Lake	Benson						X						
Sunset Lake	Benson			Х	Х		X						
Ticklenaked Pond	Ryegate						X						
Thorp Brook	Charlotte							х					
Vergennes Watershed (Norton Brook)	Bristol						X						
Waterbury Reservoir	Waterbury			Х									
West River	Brattleboro						X						
White River, various locations								х					
Whitney Creek	Addison				1		X					х	
Williams River	Rockingham						X	Х					
Willoughby, Lake	Westmore						X						
Winona, Lake	Bristol			Х		х	X						
Winooski River	Colchester						x	х					

Species	Total Number of Waterbodies
AL - alewife	3
AC - Asian clam	1
BN - brittle naiad	11
CLP - curly-leaf pondweed	37
EF - European frogbit	14
EWM - Eurasian watermilfoil*	100
RC - rusty crayfish	13
SS - Starry Stonewort	2
SWF -spiny water flea	1
VLM - variable-leaved watermilfoil	3
WC - water chestnut	33
ZM - zebra mussel	3

Appendix D

Aquatic Specimen Submission Form

Keep the sample in a cool place until it is mailed, then follow the directions below to mail this completed form with the sample (Monday – Wednesday only) at the address below. Questions? Call (802) 828-1115. ATTN: Plant Sample, VTDEC – Watershed Management Division

1 National Life Drive, Davis 3, Montpelier, VT 05620-3522.

		Phone:
Email Address:		· · · · · · · · · · · · · · · · · · ·
Are you a: 🛛 VIP 🛛 Greeter 🗌	Other Waterbody:	Town:
If a Greeter, was this sample c	ollected during a boat inspectio	on? 🗌 Yes 🗌 No
		Date Collected:
	Yes □ No If yes , with whom	
 fruit, if possible) in a wet p If there is more than one s If there are samples from r clearly mark the different I Place the plastic bags in a r label below. 	aper towel and place it into a s pecies obtained per waterbody nore than one water body, divi ocations on the bags. manila envelope and mail the sa	
	ATTN: Aquatic Spe VTDEC – Watershe 1 National Life Drive Montpelier, VT 0562	d Management Division e, Davis 3
Are you a: 🗌 VIP	□ Greeter	□ Other

Contacts

Aquatic Invasive Species Management

Kimberly Jensen Email: Kimberly.Jensen@vermont.gov Phone: (802) 490-6120

Vermont Fish & Wildlife Department, Facility and Lands Administration

Mike Wichrowski Email: Mike.Wichrowski@vermont.gov Phone: (802) 917-1347

Vermont Fish & Wildlife Department Law Enforcement Phone: (802) 828-1529 or (802) 828-1483

See Vermont Department of Fish and Wildlife Laws and Regulations handbook for individual warden contact information.

Aquatic Invasive Species Management

1 National Life Drive, Davis 3 Montpelier, VT 05620-3522 Phone: (802) 828-1115 www.dec.vermont.gov/watershed/lakes-ponds



DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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