



New Haven Rowing Club

Safety Handbook

August 16, 2023

The **NHRC Safety Handbook** has been developed and revised over the years to ensure safe rowing and safe passage for members and guests on the Housatonic River. This document includes safety information on the following topics:

- 1) Launching and Docking
- 2) Rules of the River
- 3) Warm Weather Rowing
- 4) Cold Water Rowing
- 5) Rowing Landmarks
- 6) River Hazards
- 7) Rowing Certifications

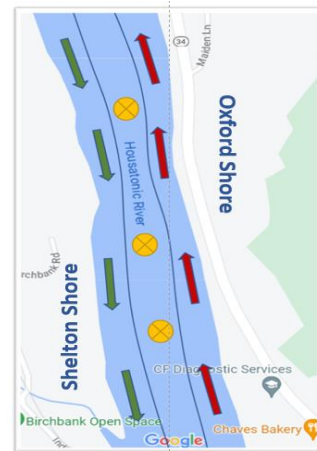
1) Launching and Docking

- **Rowing Logbook:** every rower must sign out in the Rowing Logbook which can be found on the desktop near the northern set of bay doors, and upon return sign back in. Required information includes:
 - Date of departure
 - Responsible party: Bow, Stroke or Coxswain
 - Name of the boat: Club name or Private
 - Departure time
 - Return time
- **Adjustments:** all adjustments to foot stretchers and rigger heights should be made before launching when possible or after shoving off from the dock so as not to hinder other members' ability to launch or land.
- **Launch Direction:** when launching and landing, the bow must always be pointed upriver (north) which is to the right when facing the water.
- **Be Efficient:** all crews should minimize their time on the dock. Launch quickly and land efficiently. Boats must be returned to the boat house before rowers retrieve their personal belongings and return their oars.

2) Rules of the River

- **Rowing Upriver (North):** when leaving the dock and heading upriver (north; to the right), always stay on the Boathouse side of the river. This is referred to as the **Oxford** shore.
- **Rowing Downriver (South):** when leaving the dock and heading to the left (south; downriver) always stay on the far side of the river. This is referred to as the **Shelton** shore.
- **After Launching:** either row upriver (north) and to the right along the Oxford shore, or row across to the river to the Shelton side before turning downriver (south) and to the left.
- **Crossing the River:** When departing the boathouse and heading downriver, or turning around at any location, all crews must watch for and yield to boats traveling in up and downriver their standard travel lanes.
 - Boats crossing the river must give way to crews rowing up or downriver.
 - Boats crossing the river do not have the right of way and are required to hail to boats heading in their direction well in advance of potential contact.
- **Travel Lanes: the “1/3rd Rule”:** to ensure safe passage, the Housatonic River is divided into thirds. Rowers are required to row in specified travel lanes along each shoreline, each of which is 1/3rd of the width of the river.

- Heading downriver, the rowing lane runs along first 1/3rd of the river along the Shelton shore.
- Heading upriver, the lane runs along the first 1/3rd of the river along the Oxford shore.
- The middle 1/3rd of the river is out of bounds except when crossing to reverse direction.
- Rowers are required to stay within their rowing lanes even when passing.
- Rowers violating these rules may have their rowing rights restricted or suspended



- **Right-of-Way & Yielding:**
 - Boats traveling upriver and downriver in their rowing lanes always have the right of way over boats which are stopped or turning around.
 - Smaller boats (1x, 2x and 2-) must always yield to larger boats (4x, 4+, 8+)
 - A boat being overtaken must yield and give safe passage to a boat approaching from astern. Generally, this means moving toward shore (to starboard) to allow the faster boat room to pass on the outside. Be sure to hail to the approaching crew so they know your intentions.
 - However, if a slower boat is being overtaken on a turn, the slower boat should move to the outside to give the faster boat the inside (faster) path.
 - In the event a boat of any kind is approaching from in front of you - and should you see them – be sure to move to starboard (to your left) so as to pass port-to-port.

- **Collisions & Damage:**

- Collisions generally occur in the middle of the river when rowers fail to remain in their respective rowing lanes. This is particularly true in the major turns.
- In the event of damage, the boat at fault shall:
 - Be courteous at all times.
 - Assume financial responsibility for the cost of any repairs.
 - Report the incident in writing to the chair of the Safety Committee and provide supporting detail when possible.
 - Rowers who are found to be at fault by the Safety Committee may have their rowing privileges suspended.

- **Flipping and Recovery**

- Every sculler should perform a flip drill and learn how to get back into their boat. The best way to do so is to practice in shallow water.
- If you do flip and cannot get back in your boat, stay with your boat. It is a natural flotation device and will keep you buoyant.
- If you see someone else flip, row over and offer your assistance. Do not leave the immediate area while a fellow rower is in the water.
- If you have a whistle and the rower is in distress, use it.
- In an extreme situation, you can also tow a person to shore.



- **Buddy Boats:** in the Spring and Fall, it is strongly advised that rowers row with a “Buddy Boat” (e.g., a second boat rowing at a comparable speed). When Winter Rowing rules are in effect, a Buddy Boat is required at all times meaning a two-boat minimum.
- **Swim Test:** all club members rowing out of the NHRC boathouse must complete a swim test as prescribed by the Safety Committee and sign a waiver.
- **Flip Test:** It is advised that rowers perform a flip test when the weather warms, and be certain they know how to reposition an overturned shell and get back in.
- **Courtesy Rule:** As a courtesy to the homeowners in the morning, rowers and coaches are asked to keep conversations on the dock and on the water to a minimum and keep voices low when on the river.

4) Rowing Attire and Marine Lighting

- **Hi-Viz Rule:** all rowers rowing out of the NHRC boathouse are required to wear Hi-Viz (neon) tops at all times no matter where you may sit in the boat.
 - This applies to warm-up gear, splash jackets and other training attire.
 - Acceptable tops include Hi-Viz Yellow and Hi-Viz Orange only.
 - White, Black, Red, Pink and Mustard Yellow are not Hi-Viz.



- **Marine Lighting:** before sunrise or after sunset, all boats are required to be outfit with US Coast Guard-approved marine navigation lighting and with batteries in good condition. Light configuration is as follows:
 - **Red/Green bow light** in the standard configuration: Red to port and green to starboard. Mounted on the foredeck or in the bow card slot.
 - **White stern light** mounted on the stern deck and clearly visible from astern.

It is recommended that rowers add a hat light or rigger lights to aid in your being seen, particularly in the fog. These lights are in addition to and not a replacement for your bow and stern lights. Private boat owners are advised to purchase their own lights.



- **Coaching Launches:** prior to departure from NHRC, each launch must be properly equipped with the following safety items:
 - Life Jackets for everyone in the launch and the largest coached crew being coached.
 - Anchor with 50' of anchor line
 - An oar or a paddle
 - First Aid kit & space blankets
 - Tool kit and repair kit (duct tape)
 - Air horn or whistle
 - VHF radio or a cell phone



- **Other Safety Rules**
 - No rowing more than 30 minutes before sunrise or after sunset. Certain exceptions apply. See Rowing Classifications on Page 10 for details.
 - No rowing by boat class when the river height exceeds certain thresholds. See Flood Classifications on Page 11.
 - Boats should never proceed on the wrong side of the river for any reason unless specifically directed to do so by a coach or race official.
 - When stopping anywhere along the river, boats should always be positioned parallel to shore. Never stop perpendicular to the shore.
 - Heel ties must be tied and bow balls must be checked and firmly in position.
 - Rowers who consistently violate this rule may have their rowing rights restricted or suspended by the Safety Committee

5) Rowing in the Fog

*The fog comes on little cat feet.
It sits on its haunches
Looking over our river
And then moves on.*

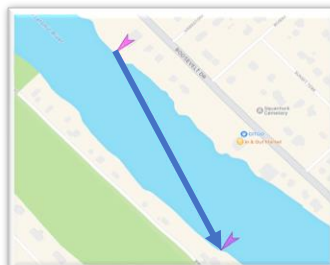
Carl Sandberg
(with apologies)



Rowing In the Fog



To launch in the fog, you must be able to see the white house with the white picket fence 325 meters downriver on the Shelton shore. If the fog sets in during your row, return immediately to the boathouse while keeping in sight of the shore at all times.

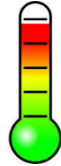


6) High Winds and Lightning

- **High Winds:** rowers are restricted from launching when strong winds and there are white caps in front of the boathouse.
- **Lightning:** when lightning is imminent or thunder is heard, boats may not launch, and all boats on the water should exit the water as soon as possible.
 - Boats on the river near the boathouse should immediately return to NHRC.
 - Boats near Yale or Star Rowing Club should dock there and seek shelter.
 - Boats near the beach should beach their boats and seek shelter in one of the nearby buildings but not under a tree.

7) Warm Weather Rowing

- In the warmer weather rowers are advised to bring aboard the following safety devices.
 - A cell phone and a marine whistle
 - An Inflatable lifejacket
- In extreme heat and humidity, rowers are advised to take additional precautions. This would include carrying extra water infused with electrolyte tabs. FISA classifies the risks of exercise in extreme heat as follows:



- 77F-90F: Moderate Risk
- 90F-100F: High Risk
- 100+F: Best not to row

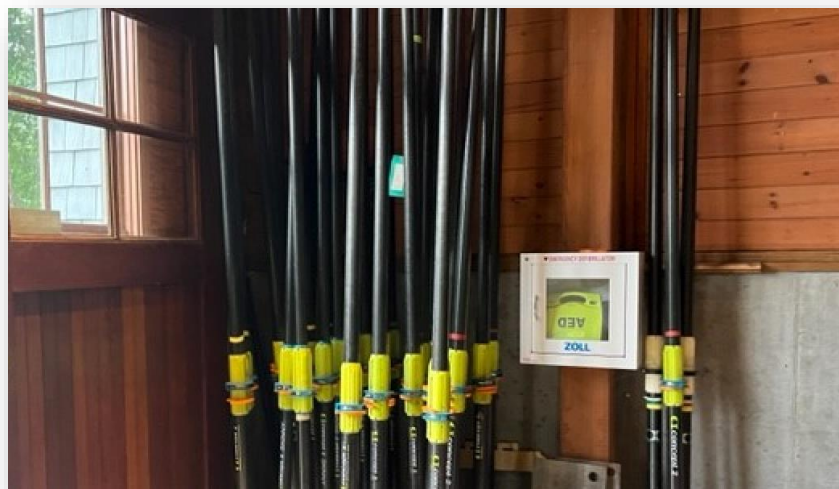
8) Cold Water Rowing

When the water temperature drops below specified temperatures for three consecutive days, certain other rowing restrictions shall apply. For more information on the risks of cold-water immersion, click here: <https://www.coldwatersafety.org/the-danger>

- **Four Oar Rule:** when the water temperature drops below 50 degrees, the Four Oar Rule goes into effect. All boats launching require four oars, meaning no singles or pairs.
- **Eight Oar Rule:** when the water temperature drops below 40 degrees, the Eight Oar Rule goes into effect. All boats launching from the dock require eight oars in the water meaning eights and quads only. No singles, doubles, pairs or fours.
- **Winter Rowing:** when the water temperature drops below 40 degrees for three consecutive days, Winter Rowing rules apply.
 - To row in the winter, each rower must be certified by the Captain of Winter Rowing.
 - Members only. Non-members may not row during Winter Rowing.
 - All rowers must sign and return a Winter Rowing waiver.
 - The Eight Oar Rule applies meaning Quads and Eights only.
 - All rowers are required to wear over-the-shoulder, auto-inflate lifejackets.
 - No rowing through ice. If you hit skim ice, back out and turn around.
 - No rowing if the river is at Flood Stage (11 feet) or the water is turbulent at the dock.
 - No rowing if there are white caps or the wind speed is greater than 12mph.
 - Two-boat minimum. Boats must remain in eyesight of each other.
 - Each boat must carry a cell phone and a whistle.

9) In an Emergency

- **Medical Emergency:**
 - If a launch is nearby, wave your hands above your head. This is the international sign of distress.
 - If in cell phone range, dial 911 and direct the medical services to the nearest landmark where they can attend to the injured.
 - If you have a VHF radio, call the US Coast Guard on Ch 16. “Mayday, Mayday” if someone is in severe medical distress.
 - If a **cardiac event**, the priorities are 911, CPR, AED. Get to shore ASAP and start CPR.
- **Lost in the Fog**
 - Move immediately toward shore and remain in sight of the shore during the entire row back to NHRC. If close to Yale, pull in there.
- **Launch – Loss of Power**
 - Immediately drop anchor and call for assistance. In an emergency, dial 911 or hail the US Coast Guard on VHF Ch 16.
- **Boathouse Emergencies**
 - For general medical issues such as cuts and burns, a first aid kit can be found immediately inside the main entry door next to the small desk.
 - If a **cardiac event**, locate the emergency defibrillator (AED) next to the sweep oars by the upstream bay doors. Remove the AED, press the ON button and open the case. Detailed instructions can be found inside.



10) Rowing Landmarks:

- **Heading Upriver from NHRC**

- **The Indian:** a painted rock 1,200m upriver from the boathouse. Club boats may not proceed upriver past the Indian.
- **Stevenson Dam:** private boats may row past the Indian toward the dam, but it's shallow and rocky in places and not recommended.



- **Heading Downriver toward Yale**

- **Direction:** To the left and south when facing the water from the Boathouse.
- **Housatonic House:** the restaurant ~600 meters downriver on the Oxford shore
- **The Airplane:** 1,000 meters down from the Boathouse on the Shelton shore.
- **The Wire:** 1,600 meters downriver from the Boathouse. Good location to stop and adjust foot stretchers and rigger heights.
- **The Wall:** 2,700 meters downriver from the boathouse and 350 meters long. Good location for a power piece.
- **The Beach:** at Indian Well State Park. 3,500 downriver from the boathouse.
- **The Houses:** 4,300 downriver just past the Beach. Continue for 600 meters.
- **The Wires (at Yale):** 6,000 meters downriver. All rowers are required to turn at the Wires to avoid the dam where strong currents can fool you. Row across the river toward the Yale boathouse before turning upriver.
- **The Derby Dam:** ~300 meters past the Wires. You cannot see the dam, so pay attention and heed the warnings seriously.



- **Returning to NHRC from Yale**

- **Yale Boathouse:** 250m north of the dam on the Oxford shore.
- **The Cove:** 1,500m upriver from Yale on the Oxford shore. Be sure not to steer into the Cove.
- **River View ("The Barbeque"):** located 2,000m downriver from NHRC. From here, you have a 425m run to the wires.
- **The Wire:** power lines across the river 425m north (upriver) of The Barbeque.
- **The Airplane:** a white seaplane on a lawn on the Shelton side 1,000m upriver from the Barbecue and 1,000m downriver from the boathouse.
- **Housatonic House:** the restaurant on the Oxford shore marking the final turn to NHRC. 600 meters to go.

11) River Hazards

- **Wind:** when the wind speed increases particularly where the river widens near Yale, conditions can be very challenging. When the wind picks up, rowers are advised to turn around at the houses below the beach at Indian Wells State Park.
- **Current:** the current can be docile, but after a rain or when the Stevenson Dam is opened, it can become quite strong. It can make for a long return from Yale.
- **Logs and Debris:** this is always a concern, particularly after a storm. An impact with a log can puncture your hull, and it is easy to get stuck on a large and partially submerged log when it floats perpendicular to the shore.
- **Boulders & Outcroppings:** numerous docks project out onto the river along both the Shelton and Oxford shorelines and must be avoided. In addition, moored boats may project out into the river. Here are other outcroppings to avoid:
 - Upriver, submerged boulders near the Indian on the Shelton shore.
 - Downriver ~500m south of the boathouse, a small outcropping of dirt and rocks project into the river on the Shelton shore. Steer clear.
 - Downriver ~300m south of the beach and 120m past the end of Indian Well State Park, a sandbar emerges from the Shelton shore. Steer clear.
 - Returning to NHRC, a sandbar emerges from the Oxford shore 150m downriver from the Housatonic House restaurant. Steer clear.
- **Water Skiers and Waterski Buoys:** in the summer, residents along the river erect a slalom waterski course on the Oxford shore near the Cove. Watch for it and either avoid it or row through it and practice steering so that the buoys run neatly under your riggers.
- **Yale Racecourse Buoys:** in the spring, Yale places a series of orange race buoys in the river downriver from the beach. You can row between them, and it is best to avoid them!
- **Fishing Boats and Fishing Lines:** Fishermen fish wherever they like, and can often be found directly in your path. Fair warning. Additionally, their fishing lines extend a great distance from their boat or from shore, so be mindful. If you feel the fishing line on your back, stop immediately and remove the line to reduce the chances of getting hooked.
- **Kayakers & Paddle Boarders:** they often travel in the same rowing lanes, but are looking forward and won't see you. Fair warning. A mirror is most helpful in avoiding collisions.
- **Weeds:** in the summer, weeds emerge mostly along the Oxford shore near the Cove and downriver from the Housatonic House. They will snag your blade and have a tendency to muck up the rudders of steered boats.
- **The Dam:** the Derby dam is unforgiving, and boats have gone over the dam with loss of life. All rowers heading downriver are required to stop at the wires across from Yale and turn upriver. Note that the current can easily pull you another 50+ meters toward the dam.

12) Rowing Certification Levels

There are three rowing certification levels for both sweep rowers and scullers. The requirements for each certification level are as follows:

Tier 1: Novice Rower

- Generally, in their first or second year of rowing in sweep or sculling boats
- Has not yet been certified as a Tier 2 Intermediate Rower.
- Tier 1 Restrictions:
 - A Tier 3 Senior rower must be present for a Tier 1 rower to launch.
 - Rowing is restricted to daylight hours during Spring, Summer and Fall.
 - Tier 1 rowers may not participate in Winter Rowing.

Tier 2: Intermediate Rower

- To qualify for Tier 2, a rower must be able to
 - Remove boats from their rack space and position it on slings.
 - Adjust foot stretchers and set rigger heights.
 - Move the boat out of the boathouse without dings or damage.
 - Launch and land on the dock without assistance.
 - Return the boat and oars to their proper locations in the boathouse.
 - Steer a 1x, a 2x/- or a 4x/- in the assigned rowing lanes.
- In addition, a Tier 2 rower must be able to:
 - Demonstrate proficiency in sweep rowing or sculling.
 - Perform a 360 degree turn to port & starboard in a single.
 - Come to a hard stop after rowing hard at 20 strokes per minute.
 - Demonstrate knowledge of the effects of wind & current.
 - Demonstrate an understanding of the safety rules and river navigation.

Tier 3: Senior Rower

- To qualify as for Tier 3, a rower must demonstrate:
 - Complete understanding of the NHRC safety rules and regulations.
 - Demonstrate proficiency in sweep rowing or sculling, and steering.
- In addition, a Tier 3 rower must be able to:
 - Properly navigate upriver and downriver in the assigned rowing lanes.
 - Perform advanced rowing skills including drills and high cadence.
rowing without significant degradation of rowing style.

Advisory - Rowing Mirrors: as a sculler, one can generally see 45 degrees off the bow in either direction, but it is exceptionally difficult to see directly over the bow. Accordingly, it is recommended that scullers in every Tier and at every level of experience learn to use a rowing mirror to aid in navigation and avoid collisions. In addition, when head racing, rowing mirrors are extremely effective at helping scullers navigating an optimal course.

13) Rowing Classifications

The following Rowing Classifications table outlines the privileges and restrictions associated with the challenging atmospheric and aquatic conditions on the Housatonic. Be sure to understand which restrictions may apply to you or our boat class, and be aware that you may be in different Classification Tiers as a sweep rower or sculler depending on experience and level of proficiency.

Rowing Classifications and Restrictions For Sweep and Sculling

Classification	Oars	Water Temperature				In the Fog ⁵	In the Dark ⁶
		<40°	40-50°	51-60°	> 60°		
		<i>Four Oar Rule</i> ¹					
Tier 1, Novice							
1x, 2-	2	No	No	No	Yes	No	No
2x	4	No	No	No	Yes	No	No
4+	4	No	No	Yes	Yes	No	No
4x, 8+	8	No	Yes ³	Yes	Yes	No	Yes ⁶
Tier 2, Intermediate							
1x, 2-	2	No	No	No	Yes	No	No
2x	4	No	No	Yes	Yes	No	Yes ⁶
4+/-	4	No	Yes	Yes	Yes	No	Yes ⁶
4x, 8+	8	No	Yes	Yes	Yes	No	Yes ⁶
Tier 3, Senior							
1x, 2-	2	No	No	Yes	Yes	No	Yes
2x, 4+/-	4	No	Yes ⁴	Yes	Yes	No	Yes
4x, 8+	8	Yes ²	Yes	Yes	Yes	No	Yes

- 1) **Four Oar Rule:** at water temperatures < 50°F, the Four Oar Rule goes into effect. No singles or pairs may launch.
- 2) **Winter Rowing:** at water temperatures < 40°F, Winter Rowing rules apply. Only Tier 3 rowers may row.
- 3) **Novice 8+ :** Tier 1 Novice 8's may row only if accompanied by a dedicated launch.
- 4) **Life Jackets:** in water temps between 40-50°F. over-the shoulder, auto-inflate life jackets are required in all 2x's
- 5) **Fog Rule:** you must be able to see the white house and picket fence 325m downriver on the Shelton shore.
- 6) **In the Dark:** no rowing more than 30 minutes before sunrise or after sunset unless accompanied by a launch.




14) Flood Level Restrictions

As the Housatonic River rises due to storms and winter snow melt, the flow rate of the river rises at a substantially faster rate. Not only is the river moving fast, with increasing speed comes increased turbulence which is particularly challenging for singles and doubles.

By way of example, at a river height of 8 feet, the flow rate through the Stevenson Dam is 6,600 cubic feet per second. At 11 feet, which the river authorities define as Flood Stage, the flow rate more than doubles to 13,674 cubic feet per second. At this flow rate, the turbulence near the Indian can easily flip a single.

Accordingly, the following table was established by the Safety Committee to provide certain guidelines and restrictions by Boat Class as the river rises.

Flood Level Classifications						
River Height	Boats					
	1x	2-	2x	4-	4x	8+
Up to 8 feet	Green	Green	Green	Green	Green	Green
8 - 9 feet	Yellow	Yellow	Green	Green	Green	Green
9-10 feet	Red	Red	Yellow	Green	Green	Green
10-11 feet	Red	Red	Red	Yellow	Green	Green
11-12 feet	Red	Red	Red	Red	Yellow	Yellow
Over 12 feet	Red	Red	Red	Red	Red	Red

-  Boats may launch
-  Caution; Use your judgment
-  Boats may not launch