



41st Annual Connecticut River Raft Race

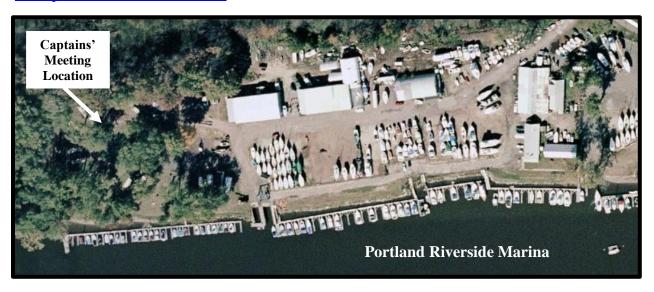
<u>Start:</u> Gildersleeve Island <u>Finish:</u> Riverside Marina

July 25, 2015 @ 10:00 a.m.

Participants can register for the Raft Race by submitting a notarized entry form; hold harmless agreement signed by all crew members, and submit all registration fees prior to or on the day of the Captains meeting held on July 11th 2015. The entry fee is \$16 per crew member. Entry forms can also be printed from our website at www.ctriverraftrace.org. Participants wanting to pre-register can mail all materials to our President, Dan "Otto" Pritchard, 8 Hale Road, Portland, Connecticut, 06480. If you have any questions call "Otto" at 860-883-5176.

CAPTAINS' MEETING & REGISTRATION July 11th, 2015 @ 10:00 a.m.

A Captains' meeting will be held at Riverside Marina, 37 Riverview Street, Portland, CT on July 11th, 2015 <u>Attendance is mandatory</u> for all team Captains who have not pre-registered by mail. This meeting also marks the registration deadline for the event. Directions to the marina can be found at www.portlandriversidemarina.com.



Crew members are also encouraged to attend. A Notary Public will be at the meeting to certify signatures on entry forms and this will require two forms of identification. Your form can also be notarized at any bank or town hall prior to the meeting.

The Captains' meeting is used to present the specific details of the event and is very useful especially to new participants. The items to be covered will include but are not limited to: safety requirements & equipment, race rules, raft inspection, launching procedures, parking arrangements, towing to the mooring areas, the starting location & cannon, racecourse description, finish line location, navigation, support boats, anticipated race duration, competition classes, awards, amenities at the finish area, day's end, and any last minute developments and/or instructions. The race committee will also clarify any concerns and respond to comments from the audience.

The race committee will also hand out additional rafting information and materials as necessary. Event T-shirts, beverage Koozies, and other items will also be on sale. **Pets are not allowed** to ensure the safety of all participants, guests, spectators, and marina patrons at the Captains' meeting or the Raft Race.

SOCIAL HOUR AFTER MEETING

Once all participants are registered and event information has been presented; everyone is invited to stick around for a social hour. Many participants bring rafting memorabilia and make it available for people to browse through. These items include photo albums, news articles, magazine stories, and all sorts of other stuff. Feel free to bring along cold beverages and some snacks. This year the Captains' meeting will be held down by the end of the marina by the campground area.

Seasoned rafters will be exchanging stories about previous races, discussing raft improvements & ideas, and declaring how much fun or misery they endured at last year's event. Feel free to listen in on the discussions, introduce yourself, and say hello. New participants will be able to learn a great deal from these veteran racers. This is also a great time to explore the marina grounds, inspect the launching areas, and visit the shoreline beach area adjacent to the finish line.

A work detail may be formed after the meeting to provide some manpower to clean the finish area. The spring floods wash ashore a variety of debris that needs to be cleared out to make the shoreline safe and secure. This labor is offered to the Portland Riverside Marine for so graciously allowing the event to finish on their grounds.

RACE RULES & SAFETY ADVICE

The Raft Race Committee promotes a safe, family-oriented event. We encourage all participants to act in a responsible sportsman-like manner, obey all safety requirements and raft race rules, assist their fellow rafters when necessary, and above all, enjoy the event. It is because of our exceptional safety record that we are able to hold a raft race each year. Remember, safety comes first! Watch out for fellow rafters, lend assistance when needed, and have fun.

- 1. <u>Animals are not allowed at Captains' Meeting or Raft Race.</u> Seeing-eye dogs are permitted but clean-up materials are required.
- 2. Racecourse starts at the South end of Gildersleeve Island and goes downriver approx. 4 miles to the West end of Riverside Marina.
- 3. Anticipated race duration is from approx. 10:00 a.m. 2:00 p.m.
- 4. All entries will be required to accept a tow if found to be floundering mid-race and/or have not finished by 2:00 p.m.

- 5. All rafts must be of homemade construction.
- 6. All raft entries have a minimum crew size of 3.
- 7. No commercially manufactured hulls allowed on any raft.
- 8. Inner tubes or inflatable devices are not allowed.
- 9. Minimum raft size is 4' x 8' and must be able to support the weight of the crew. Raft size to be measured at the waterline.
- 10. A raft's deck must be securely fastened to a frame and the frame securely fastened to the hulls and or flotation devices.
- 11. The use of nails below the water line is prohibited.
- 12. Rafts that have open hulls with no bulkheads shall have Styrofoam flotation fastened to the underside of the raft deck.
- 13. Aftermarket marine rigging such as cleats & rope are acceptable.
- 14. All sheet metal raw edges to be turned over and taped.
- 15. Any protruding long bolts to be sawed off, filed, and taped.
- 16. All rafts should be inspected prior to launching and may be subject to modification at the discretion of the Committee.
- 17. Contact a raft race committee member if you are planning to put your raft in the water earlier than Saturday, July 31st.
- 18. Kayaks and canoes have no construction restrictions and do not need to be inspected prior to launching.
- 19. Single entries in the kayak & canoe classes should use the buddy system during the race and/or team up with other entries.
- 20. All entries must be solely human powered and self-propelled and make use of poles, oars, paddles, paddlewheels, sails, propellers, flippers, etc. or any combination thereof.
- 21. Sweeper rafts can be power-driven but cannot pass a human powered entry unless performing official duties or providing emergency assistance to a vessel in need of help.
- 22. Sweepers must be state registered & meet Coast Guard requirements.
- 23. All minors must be accompanied by a parent or legal guardian.
- 24. All rafts must be equipped with a suitable anchor and line that is secured to the raft and anchor at all times.
- 25. Each entry must be equipped with a suitable towline.
- 26. Each participant must have a Coast Guard approved life jacket in their possession that should be worn at all times.
- 27. Captains will inform their crew of the whereabouts of stored (Coast Guard approved) life jackets aboard their raft AND will also conduct "abandon ship" drills with the crews donning life jackets before heading out.
- 28. All crew members shall wear sneakers or other appropriate footwear to prevent injuries from submerged sharp objects.
- 29. Sun-sensitive participants should wear appropriate sunscreen.
- 30. Participants should wear an appropriate hat with a large enough visor to help reduce exposure to the hot sun.
- 31. All entries must display their class designation and competition number in plain sight and must be clearly visible to the finish line officials
- 32. All Captains and their crew must remain aboard their registered vessel for the entire duration of the Race.
- 33. All entries must run entire course under their own power to be eligible for awards.
- 34. No Glass Containers are allowed at any time!
- 35. Each entry must have an adequate supply of drinking water onboard for the entire crew so as to prevent dehydration during the race.
- 36. All race entries should be outfitted with a first aid kit.
- 37. All race entries must have garbage bags for their own trash.

- 38. No mechanical devices or tubing shall be used to propel water balloons, spaghetti, snowballs, or any other dangerous objects.
- 39. Anyone exhibiting unsafe behavior will be disqualified and could be permanently banned from the event.
- **40.** No diving off any vessel or jumping into the water at any time! Sections of the racecourse can be very shallow in spots and may include submerged sharp objects.
- 41. All entries must have a designated driver for their crew members whenever present at Raft Race functions.
- 42. All vessels must be removed from the river at the end of the day unless other arrangements have been made with the Marina.
- 43. Derelict vessels are subject to police action and/or fines from the D.E.P. and risk permanent disqualification from the event.

EVENT SAFETY

The racecourse may be monitored & medical support provided by representatives from one or more of the following groups depending on availability: The United States Coast Guard, Connecticut's Department of Environmental Protection Marine Patrol, Middletown and/or Portland local Police & Fire Departments. Assistance may also be available from one or more of the following groups depending on availability: The Connecticut River Raft Race Committee and its Officers, Volunteers, and agents; Riverside Marina personnel, District 1 representatives from The United States Power Squadron, and all Sweeper Class rafts entered in the race.

Participants must obey all safety requirements & raft race rules. If there is an emergency and/or you see someone in trouble it is your obligation to make sure you or someone else gets to any raft and/or participants as soon as possible. Lend a hand until a Sweeper Class raft arrives. Elapsed race times will be adjusted for those providing emergency assistance to fellow competitors. If your vessel is taking on water and is in danger of sinking, immediately head towards the nearest shore and beach your craft. All rafts are required to accept a tow by a Sweeper Class raft if found floundering mid-race or if they have not finished the course by 2:00 p.m. Safety is the foremost concern throughout the day so please act wisely and provide help if needed. Anyone acting without regard for the safety of others, or themselves, will be disqualified and risk permanent disqualification from the event.

COMPETITION CLASSES

- $A \underline{America\ Class\ Rafts}$ These are the most competitive and fastest rafts, some of which are capable of running the racecourse in approx $\frac{1}{2}$ an hour.
- $C \underline{Cruising\ Class\ Rafts}$ These are the semi-competitive rafts, which make up the majority of entries. These rafts typically run the race course in a few hours.
- **S** <u>Sweeper Class Rafts</u> These are power-driven rafts that cannot pass human powered entries unless they are performing official duties or providing emergency assistance to a vessel in need of help.

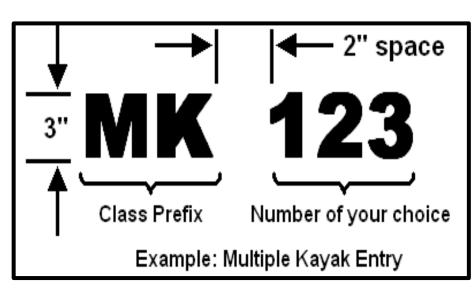
 $SK - \underline{Single \ Kayak}$ - These are kayaks paddled by only one person through the entire race course.

MK – <u>Multiple Kayak</u> - These are kayaks paddled by a minimum of two people through the entire race course.

 $SC - \underline{Single\ Canoe}$ - These are canoes paddled by only one person through the entire race course.

MC – <u>Multiple Canoe</u> - These are canoes paddled by a minimum of two people through the entire race course.

REGISTRATION NUMBER FORMAT



Each class has a letter prefix assigned to it. This represents the first letter or letters of the class name. This is assigned based on what category you're entered in. This is followed by a one, two, or threedigit number of your choice. Your registration number must be at least 3 inches high, contrasting colors to

the background, and be in block form. It must be painted on or attached to both sides of the vessel so it's visible and legible from at least 100 feet away. The registration number must read from left to right on both sides of the vessel. Examples of correct registration numbers: A 57, C 756, S 68, SK 158, MK 123, SC 007, MC 999.

INSPECTION OF RAFTS

Rafts should be inspected prior to launching and may be subject to modification or disqualification at the discretion of the Raft Race Committee. The main focus of inspection is to ensure that rafts have no obvious mechanical problems and the construction has been done in a safe manner. Especially important is that all sheet metal raw edges are to be turned over and taped and any protruding long bolts be sawed off, filed, and taped. Issues discovered during inspection must be corrected before the raft can be launched.

If you plan to launch your raft earlier than Saturday, July 25th it is imperative that the raft's Captain gets in touch with a Raft Race Committee Member to schedule an inspection. This is especially important if this is your first race and/or your first attempt at building a raft. The

main concern here is the safety of you and your crew. A list of all committee members is on the last page of the rulebook complete with phone and Email contact information. Contact Dan "Otto" Pritchard @ 860-883-5176 or Thomas Foote @ 860-836-9572 if you need to have your raft inspected. These are two committee members who live nearest the Portland Riverside Marina. Be prepared & equipped to make changes to your raft should any issues be found. You should bring along some hand tools, extra fasteners, rope, duct tape, etc.

SUPPORT BOATS

Participants launching at Yankee Boatyard or Riverside Marina will need a support boat to tow their raft upriver to the starting area. Due to the presence of boats tied to the marina docks & moorings caution must be exercised. Floating your raft upriver by hand is out of the question due to obstructions, river currents, and the distance involved. The four mile trip upriver can take upwards of an hour or two, so leave plenty of time to get upriver to the starting area.

Participants who do not have a support boat ought to consider using the alternate launch site up near the Portland Fairgrounds. This spot is ¼ mile upriver from the starting area. Participants will need to drift downriver a short distance in order to get to the start. This launch site is suggested for 1st time participants and people without a support boat. It is described in more detail in the next section of this booklet.

LAUNCHING FACILITIES

Rafts should be launched on Saturday, July 25th, 2015 as early as possible. The **primary launch site** is the boat launch situated between Riverside Marina & Yankee Boat Yard. There is a \$15 fee for a ramp pass which can be purchased at Yankee Boatyard's main office, which opens at 8:00 a.m. This cost is not included in your entry fee and is your responsibility. Get there as early as possible to avoid any traffic congestion at this launching site. If you plan to get underway earlier than 8:00 a.m. please make arrangements to purchase your ramp pass during the week or pay up at the end of the day. Yankee Boat Yard has parking across the street from the boat launch area so the lot doesn't become too crowded with cars and boat trailers. Contact them at 860-342-4735 or go to their website at www.yankeeboatyard.com for additional info.

Get everything ready before backing down the ramp. Complete any preparations, assembly, and equipment loading for your raft and/or support boat in the parking area. Back down the ramp only after everything is in place. There will be less congestion and waiting time for everyone involved by following this practice. There will be a lot of activity on race day. Besides there being numerous rafts to launch, there will also be marina patrons trying to put their own boats in as well. Be sure to arrive early and alternate between boat & raft launches. Launch your support boat first then launch your raft. Move your raft away from the launch ramp as quickly as possible to make room for the other people coming in behind you. There is a dock next to the ramp and this makes things a bit easier. Please don't hang around here too long. Keep everything moving.

If your raft, canoe, or kayak is small and can be carried to the water by hand please use the **secondary launch site.** This spot is located upriver beyond the boat slips and mooring docks used by Riverside Marina. The sandy shore is an excellent point to assemble your raft and launch from.

You can drive in close to the shore to unload your equipment and launch your watercraft. Afterwards this you will have to move your vehicle & trailer and park it in a designated parking area.

Using the primary & secondary launch sites will require you to tow your vessel to the start location four miles upriver. This could take upwards of a few hours or more depending on the size of your support boat. If you are not able to tow your raft upriver we advise you to use the alternate launch site ¼ mile upriver from the starting area. This is a private boat ramp and is located near the Portland fairgrounds.

The <u>alternate launch site</u> is a handy spot to launch from as it completely eliminates the need to tow your vessel up to the start. The ramp is situated approx. ¼ mile upriver from the race course start. New participants are encouraged to use this ramp as well as people with kayaks and canoes. Participants will need to paddle across to the adjacent shore while floating downriver to the starting area. You should examine this boat launch beforehand and appraise the conditions there before using it. This ramp is not suitable for launching larger rafts due to the steep incline of the ramp, fast current, and deep water. Parking is limited so you will need to move your vehicle out to a public road or to the finish area after launching.

Because this is a private boat ramp the race committee is obliged to maintain the land owner's right to privacy. Therefore, the exact location of this launch site will not be published in the rulebook or on our website. The location will be announced at the Captain's meeting only. If you pre-entered via mail please contact a committee member for directions to the alternate launch site if you would like to use it. It can only be used for the raft race and is off limits thereafter. Please show the land owner the utmost respect and follow any instructions that are given.

There are many other launching spots along the river. It is your responsibility to obtain permission from land owners and/or marina proprietors before using any launching spot not mentioned in this booklet. Please be considerate towards all landowners & businesses.

PARKING ARRANGEMENTS

The ramp pass from Yankee Marina includes parking for your tow vehicle & trailer. Parking at Riverside Marina is preferable since it will situate your crewmembers' cars in close proximity to the sandy beaches at the finish line, the band pavilion, and the spectator areas. Both boat yards are located right next to each other so this makes the walk or drive between them pretty easy. Go through the main entrance into Riverside Marina and drive past the main office and boat sheds. Continue towards the clearing near the edge of the woods. There should be someone there to direct you to a designated parking area.

Please don't park near the band pavilion, spectator areas, or the shoreline. Finish line activities will take place here on race day and there needs to be plenty of room for the participants and spectators to mill about. Since this spot is where the race ends, it makes good sense for participants to simply leave much of their equipment, lawn chairs, and coolers safely stored in their vehicles rather than load everything on their race vessel. Once the racing is done people can simply

retrieve what they need from their cars. All participants are reminded that they are guests of the marinas and should be on their best behavior and act courteously.

MOORING SPOTS AT FINISH AREA

Rafts launched earlier than Saturday, July 25th, 2015 need to be moored in a safe location. A good spot to secure your raft is slightly upriver of the last boat slip at Riverside Marina. This location makes heading to the start on race day much easier. If you use this area, be sure to leave sufficient room for your raft to drift around a little without contacting any other vessel. The tides and current are constantly shifting so use two anchors to minimize drift. Better yet, pull your raft up on the shore and tie it to a tree. Each year there are lots of rafts moored at this location which makes the site easy to spot.

Lots of veteran race participants will launch their rafts a few days beforehand. This helps many of them to avoid the potential delays at the launch ramp on Saturday morning. It also affords them plenty of time to sort out their equipment and complete any assembly work that may be necessary. Once everything is prepared & organized participants can then get a good nights rest knowing that they are ready to go in the morning. This peace of mind and preparation is a significant advantage on race day as it saves your energy for the race.

PRE RACE GRILLING CONTEST

A grilling contest will be held the night before the raft race at the Portland Marina. Raft race participants are welcome to submit their favorite grilled (homemade) food in the contest. The rules are simple: the food must be cooked on a grill over an open flame. The winner will be chosen based upon who receives the highest number of votes. Voters will consist of all who submit food and a random ten other "tasters" in the marina. The winning grill master will receive a trophy and bragging rights. The contest and tasting will take place at 7:00 p.m. on Friday evening before the raft race. Contest coordinators are Captain Gretchen Bartkus & 1st Mate Shawna Bartkus of the "All Day Suckers" raft.

START AT GILDERSLEEVE ISLAND

The start can be found in the sheltered waters, out of the main channel, on the Western side of Gildersleeve Island and flanks the Southern end, or downriver tip, of the island. The main channel is on the other side of the island. Directly across from the start area is Petzold's Marina. In close proximity and slightly upriver is the Middlesex Marina. The river frontages by these marinas are in a no-wake zone. Boats traveling in this vicinity go through very slowly and create no appreciable wake. These conditions provide an inherently safe start location.

RACE COURSE

Start: Southern End of Gildersleeve Island Finish: Portland's Riverside Marina

From Gildersleeve Island the racecourse goes downriver approximately 3.6 nautical miles. It is preferable to navigate the racecourse by hugging the eastern shore as this will offer the shortest possible route. The voyage downriver affords beautiful views of forest land, meadows, and a variety of wildlife. Wilcox Island will come into view at the halfway point. To the east side is the legendary Brownstone Quarries where early European settlers carved out the rock to build local homesteads and buildings. The quarries are now home to the Brownstone Exploration & Discovery Park: http://brownstonepark.com, which offers a wide variety of recreation activities. As vessels continue past the island they will pass beneath the Arrigoni Bridge which takes route 66 & 17 over the Connecticut River. A very short distance further downriver is an old railroad swing bridge and Middletown's Harbor Park can be seen on the western shore. This sight indicates the final leg of the race is at hand. At this point the river gradually changes direction as it starts flowing in an easterly direction towards Riverside Marina.

A racecourse diagram is included at the end of this booklet and offers a general overview of the entire race course layout. A larger version of this diagram will be available at the Captains' Meeting. It will show more details and provide both navigation information and water depths. A downloadable map & chart will also be posted on the raft race website at http://www.ctriverraftrace.org/racecoursemap.pdf

STARTING CANNON

On the southern tip of Gildersleeve Island is a sandy beach where our Cannoneer, Lord Gildersleeve, situates his starting cannon. It's best to leave plenty of breathing space between his field gun and your raft as the sound can be quite deafening. There may be a slight delay if rafts are still coming up the river after 10:00 a.m. Once all participants are positioned and ready to go the National Anthem will be played and the start cannon will be fired. Racing will commence as close to 10:00 a.m. on Saturday, July 25th, 2015 as possible. Please be patient if there is a delay due to stragglers being towed up the river to the start.

STAGGERED START

When the starting cannon is fired, the first wave of vessels to head out will be the Cruising Class Rafts, Canoes, and Kayaks. After approx. 10 minutes there will be a second cannon blast that signals the start of the America Class Rafts. The staggered start is engineered to keep all entrants closer together during the race. The second wave of competitors will catch up to, overcome, and pass the Cruiser Class rafts about midway through the race. Sweeper Class rafts will depart last and shall not pass a human powered entry unless performing official duties or providing emergency assistance to any vessel that is in need of help. Elapsed race times will be adjusted to reflect the staggered start to determine finisher positions.

NAVIGATION ON THE RIVER

Navigation down The Connecticut River is not to be taken lightly. Sections of the racecourse have water depths of only a few feet while in other spots the water can run very deep. Composition of the riverbed is just as varied and may include soft sand, mud, weeds, rocks, or

submerged sharp objects. Do not dive off any vessel or jump into the water at any time. The Connecticut River's flow is affected by tidal influence and in places there may be under currents or whirlpools. Other folks will also be out on the river too. Be on the lookout for other boat traffic. Listen carefully to the most recent navigation instructions provided at the Captains' meeting and take any handouts and navigation charts provided and study them closely.

FINISH AT RIVERSIDE MARINA

The racecourse ends on the northern shore of the river a few hundred feet upriver from the first set of boat docks at Portland Marina. Contestants should see a boat anchored just off shore that has a huge black & white checked flag raised above. This designates the finish line location. As you approach the finish make sure your registration number is not obstructed and it is clearly visible. Pass close to the finish line boat so that race officials can record your raft's registration number and elapsed time in the race. All vessels are to immediately head ashore to the sandy beaches after going past the finish line boat. The area adjacent to the finish is in a no-wake zone since it is close to the marina. These conditions provide an inherently safe finish location.

ANTICIPATED RACE DURATION

The Raft Race runs from 10:00 a.m. and ends at 2:00 p.m. Participants have 4 hours to complete the racecourse. All entries will be required to accept a tow by a Sweeper Class raft if found to be floundering mid-race or if they have not finished the racecourse by 2:00 p.m. Finish line activities at Riverside Marina will commence after the racing in done and will proceed through most of the afternoon with festivities beginning to wind down around 5:00 p.m.

EVENT SCHEDULE & RIVER TIDES – JULY 25TH, 2015

July 25, 2015	5 - Saturday			
Connecticut River				
Low Tide	3:50 a.m.			
High Tide	8:58 a.m.			
Low Tide	3:48 p.m.			
High Tide	9:29 p.m.			
Sunrise	5:38 a.m.			
Sunset	8:16 p.m.			
Raft Race Schedule				
Race Starts	10:00 a.m.			
Race Finish	2:00 p.m.			
Awards	3:00 p.m.			
End of Day	5:00 p.m.			

The Connecticut River is affected by tidal influence and there is a substantial change in water levels between high & low tides. The best time to launch and retrieve vessels is during high tide. There is more water over the ramps and it is less likely that people will back in so far that they'll run off the ramp, hit mud, and get stuck.

Participants mooring their vessels must leave sufficient slack in ropes to allow for the changing water levels. Watercraft put up on beaches must be placed above the high water mark and also tied off to a tree or an anchor.

SPECTATOR SPOTS ALONG THE RIVER

There is no one place for spectators to view the entire race. The best way to see the event is in the comfort of your own boat and traveling alongside the race competitors. Spectators can catch a glimpse of the rafts as they pass by any number of vantage points along the CT River. Some places to try include the marinas located along the race course. Boatyards are located on private property, so please ask permission to walk around them before trespassing. Other spots include the cliffs adjacent to the Brownstone Quarries, the Arrigoni Bridge, and anyplace else where the riverbank is accessible and provides a clear view. Middletown's Harbor Park has public binoculars that are mounted on pedestals and can be used for 25ϕ .

PUBLIC ACCESS TO FINISH AREA

Guests are invited to Riverside Marina to join the post-race activities. People are encouraged to come see the finish area, explore the shoreline, and view the various rafts. Spectators may also listen to a live music at the band pavilion and show off their dance moves and mill about with participants and enjoy the camaraderie of the raft racers. This marks the fourth year that the public can come to the raft race and participate in the activities at the finish line. The Race Committee is hopeful that this exposure will enhance event awareness and increase participation at subsequent raft race events. This finishing location also offers participants the opportunity of invite their friends and family along to enjoy the day and have some fun too.

In previous years the finish area was on Dart Island. While this was a delightful finish location it isolated the event from the view of the general public as it was only accessible by boat. The Race Committee intends to expand the event, make it more accessible, and promote the race as a family-oriented event. We're hopeful that you'll come join us and see what raft racing is all about.

AMENITIES AT THE FINISH

The finish area by Riverside Marina has plenty of neat stuff to do during the day. The riverfront is especially inviting as it has many trees along the beach that provide shade and a secure spot to tie off rafts. People in kayaks and canoes can pull their boats up onto the sandy beach and relax in the shade with the other participants. Many folks stake out a shady spot on the beach, set up a picnic area, and relax by the water. Others break out their grills and cook up a tasty meal to enjoy. Other beach activities include socializing, swimming, sunbathing, and sand castle making.

On hand again this year will be a local band to provide live music for all to enjoy and dance to. There will also be a volleyball court & horseshoe pit where people can enjoy a friendly game or two with their buddies. Tables will be set up where T-shirts and other raft race items can be purchased. At 3:00 p.m. an awards ceremony will take place and all winners will be announced and honored.

A portable outhouse will also be on hand as a convenience to folks needing bathroom facilities. Garbage cans will also be distributed nearby for trash and debris. Since community

grills are not going to be available this year due to insurance restrictions people may bring their own small grills to use. Do not leave your grill unattended and please make sure they are extinguished when you're done using them.

SWIMMING

There are no lifeguards stationed at the finish line area. So if you or your children decide to go into the water you are swimming at your own risk. Please use the buddy system and have a responsible adult swimmer watch over your youngsters. The water depth at the shoreline drops off quickly and can be very deep in places. Youngsters should wear a floatation device while swimming in the river. Feel free to bring water wings, inflatable toys, inner tubes, and sandcastle bucket & scoop. Please wear old sneakers or other appropriate footwear to prevent injuries from submerged sharp objects. No diving or jumping from rafts at any time. Please be courteous to others, keep a look out, and pick up any trash that gets misplaced. If you see anyone in need of assistance please render it immediately to avoid an accident, injury, or damage to nearby watercraft.

SCOREBOARD

Raft Race results will be posted on a large scoreboard located up near the band pavilion. It will be complete with an illustration that participants may sign, mark, or color in to leave their team's endorsement. Markers are provided and everyone is invited to participate.

RAFT RACE AWARDS

An award ceremony will commence at 3:00 p.m. at the band pavilion. As per tradition awards will be given to each of the fastest Captains in each of the race classes. Addition awards will also be given in the four special categories outlined below.

Raft ClassesKayak ClassesCanoe ClassesAmericaSingle KayakSingle CanoeCruisingMultiple KayakMultiple CanoeSweeper

Special Category Awards
Howie Rauch - fastest raft
Becky Thatcher - all female crew
American Heritage - most traditional raft
Committee's Choice - exceptional watercraft & crew

NON - PROFIT STATUS

The Connecticut River Raft Race, Inc. is an approved and recognized 501-3C non-profit corporation. Race profits are donated to a designated children's charity, usually located in the Portland and/or Middletown region. The funds contributed are raised through entrance fees, T-

shirt & beverage koozie sales, and donations made by private parties. For those who are interested, our books are open to anyone upon request. You may contact our Treasurer Richard Bartkus with these requests. If you would like to make a suggestion as to a good charity to contribute to please touch base with a committee member and pass along any pertinent information.

CALICO BROADCASTING, INC.

Calico Broadcasting usually video tapes the Raft Race for broadcast on public access television. Please be courteous during the filming and be on your best behavior. Demonstrate how much fun you're having and be sure to smile for the camera.

DAY'S END

At the conclusion of the day's activities, all race vessels must be removed from the river. Derelict vessels are subject to police action and/or fines from the D.E.P. and risk permanent disqualification from the event. When floating down to the boat ramp please be very careful. Have your support boat help you along the way. Please be patient once you have reached the boat ramp. There will be a lot of vessels showing up all at once to disembark. There will also be marina patrons trying to haul out their boats as well. Please keep everything moving and share the ramp. Do not unload equipment at the boat ramp. Once your vessel has been pulled out of the water pull it up to the parking lot. If your vessel is fairly small, then consider pulling your craft up near the west end of the marina at the finish area. This will reduce the congestion at the boat ramp and make for an easier time for all.

VOLUNTEERS

There is always lots of work involved to organize this Raft Race event and we welcome any and all help we can get. There are Committee meetings on the second Wednesday of each month where we iron out such issues as permits, insurance, advertising, T-shirt design, Rulebook distribution, event logistics, etc.... On race day we also appreciate any assistance that folks are kind enough to offer. Some help out at the launch ramp, others man the finish line boat and record course times, some help with towing duties, the cleanup of the finish area, or the loading of equipment. If you are interested in contributing some time to help us pull off this race, then please contact a Committee member. A list of all committee members is on the last page of the rulebook complete with phone number and Email contact information.

RAFT RACE HISTORY

The Connecticut River Raft Race first ran in 1975 from Deep River Landing to Goat Island. Next, it was run from Hurd State Park to Haddam Meadows. After this, the race ran from the Arrigoni Bridge to Dart Island State Park. The present racecourse goes from Gildersleeve Island to Riverside Marina.

Franklin Burton was the first Chairman. He was replaced by Ken Fischberg who took over next. Some years later Malcolm Chapman became the chief organizer. Bob Niland took the reins next. The current race President is Dan Pritchard.

Only a handful of America Class rafts have reached the highest pinnacle in raft race history by winning the race. The most successful rafts are: Lee Jet with 12 lifetime victories, Raft America & Triceratops with 4 wins each, the Wet Dream trilogy won the first three inaugural races, and Last Chance met victory twice. Some of the other champions who made it to first place status include: No Corporation, EB Exterminator, USA/Coca-Cola, Millennium Buzzard, and the Drinkasaurus Becks.

America Class Winners throughout the Years

1975	Wet Dream I	1995	Lee Jet
1976	Wet Dream II	1996	Triceratops
1977	Wet Dream III	1997	Lee Jet
1978	?	1998	Lee Jet
1979	?	1999	Triceratops
1980	Last Chance	2000	Lee Jet
1981	Last Chance	2001	Triceratops
1982	No Corporation	2002	Lee Jet
1983	Raft America	2003	Lee Jet
1984	Raft America	2004	Lee Jet
1985	Raft America	2005	Lee Jet
1986	Raft America	2006	Triceratops
1987	EB Exterminator	2007	Drinkasaurus Becks
1988	USA/Coca-Cola	2008	Millenium Buzzard
1989	Triceratops	2009	Millenium Buzzard
1990	Lee Jet	2010	Knotty Gurl
1991	Lee Jet	2011	Knotty Gurl
1992	Lee Jet	2012	Knotty Gurl
1993	Lee Jet	2013	Lee Jet
1994	Millennium Buzzard	2014	Millenium Buzzard

BASIC RAFT CONSTRUCTION

The six basic elements to join together when building a raft are floatation, a deck, propulsion, steerage, teamwork, and safety. The information that follows will explain each of these key principles in more detail. This knowledge should give you a good idea on how to build a raft. Rafts can be built from scrap wood, foam, plastic bottles, barrels, and recycled materials of every kind. With a little creativity you can take whatever is around you and recycle it into something that floats. Rafts are as varied as the imagination is capable of conceiving them.

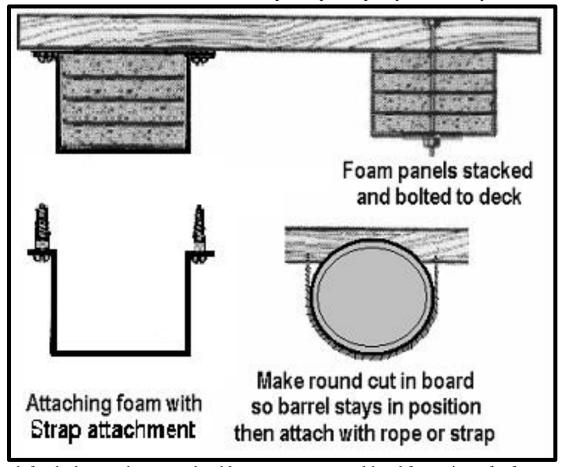
FLOATATION MATERIALS - FOAM

First off rafts are not boats and therefore don't need watertight integrity. This is because they're almost always built from materials that are naturally buoyant. A typical raft can be made out of some combination of foam, plastic barrels or bottles, wood, and anything else that floats. These floating materials will continue to provide lift even when they are damaged. Since a raft

doesn't require watertight integrity, it can be built out of anything that is available. The most common material used is foam.

Chunks and odd scraps of foam are often found floating up on riverbanks and beaches. These can be stuffed into a frame you construct out of wood. Expandable foam in a can (used for insulation jobs) quickly spreads out to fill in gaps and cracks. It can be used as glue to hold all your floating objects together inside your hull. The trick is to fill in as much airspace as possible before using the expandable foam. Consider adding things like packing peanuts, small soda bottles with lids, and anything else that is small and will float. If you use a wooden frame to hold everything together be sure to enclose it on all sides with wood to catch any loose pieces of foam.

Sometimes foam scraps can be found at construction sites, in dumpsters, or at the landfill. Always ask for permission before taking any surplus materials being thrown out. Sometimes you can find a marina that has lots of old dock foam pieces piled up. If you ask nicely or offer to



do some work for the boatyard you may be able to get some second-hand foam pieces for free.

Foam can also be bought at Home Depot or Lowes if you can't find any for free. The foam there is usually available in sheets and can be cut to size and stacked to form your floats. If you want to glue your foam sheets together try the adhesive on a scrape piece first to make sure the glue won't dissolve the foam.

BUILDING MATERIALS – FREE OR RECYCLED

Remember, a raft is much more rewarding to build with free recycled materials and on a shoestring budget. A good example of this can be seen from a group of guys who built their raft out of a picnic table and some old foam scraps they found laying around. They named their raft \$1.98 which reflected the amount they spent on the materials used to construct their raft. This clearly illustrates that it is not always necessary to spend lots of money in the construction of a raft. Using what you already have on hand can be a real time & money saver.



The "\$1.98 Raft" is a good example of a frugal rafting.

Plastic barrels of all types & sizes can also be used as floatation. These can take a lot of abuse without puncturing. These can usually be obtained at your local car wash, bulk juice distributor, or landfill. Be sure to also get the round bungs that are used to cap them and keep them watertight. Don't use a barrel which had toxic chemicals in it as these have the potential to leak harmful pollutants into the river. You could also get a good supply of plastic 5 gallon buckets & lids from a painter or sheetrock worker. Their bulk materials come in these large containers and are perfect for building rafts. Be sure to clean out any residual soap, juice, paint, or plaster before using plastic barrels and/or buckets.

The use of plastic buckets for floatation can be very convenient. To begin with they are easy to obtain and can be used as is. They are very durable and do not breach easily when abused or dragged over rocks, mud, or submerged sharp objects. They are also of a manageable size and can be easily adopted into many raft designs.

To illustrate how simple these are to use consider the group of girls who built a raft called the "Bucket Brigade." It was constructed out of an old ladder which had a bunch of 5 gallon buckets duct taped to the rungs. The girls also attached some foam to the sides of the ladder using some more of their duct tape. Then they added an outrigger for stability at the suggestion of the raft inspectors. A plastic duck was added to the outrigger to add some much needed character to the extra raft appendage. This raft worked flawlessly and they ended up winning the Becky Thatcher Award for their efforts



The "Bucket Brigade" utilizes simple raft construction.

If you want to use plastic soda bottles for floatation you can get them for 5¢ from people returning them at a recycling center. This is a good way to get a lot of plastic containers without having to buy the full container and drinking the contents before using them. Be sure to also get the lids so you can make the bottles watertight. Soda bottles can be configured in many ways and allow for a lot of design flexibility. Another good plastic container easily found in recycling boxes by curbside are plastic milk jugs. Be sure to glue and/or tape the caps on the milk jugs as they aren't as secure as the threaded soda lids are on bottles. The best scheme to employ when using lots of loose plastic soda bottles is to contain them in some sort of box or net. A length of rope can also be used to hold all the milk jugs together in a big mass; or they can be duct taped end to end onto a wooden frame. Whatever your configuration is please be sure to contain all the separate bottles maybe even taping a bunch of them together. You don't want to have to chase after lots of loose bottles around if they break free from your raft.



Here is a good example of soda bottle floatation.

HOW MUCH FLOATATION IS NEEDED?

A typical raft must use enough floatation to hold up the raft in the water and support the weight of the crew and any stuff onboard. This will vary for each raft and is dependant on your crew size, the raft's construction, and the materials being used. For each gallon of water you displace with floatation materials you will gain a floating force of about 8 pounds. For example a 55 gallon drum can float and/or support up to 400 pounds of weight and a 5 gallon buckets will hold up to 40 pounds. By comparison 1 cubic foot of foam will provide approximately 60 pounds of floatation. Whatever materials you use to float your raft be sure to build in some margin for error.

For example, let's assume you plan to have three people on your raft and the crew's combined weight is 480 pounds. You might estimate that your raft will weigh another 200 pounds. The total weight would then be 680 pounds. Next, divide this total weight by 8. The answer reveals that 85 gallons of water must be displaced to float the combined weight of the raft & crew. If you were instead going to use five gallon buckets for floatation, 17 would be needed to provide enough buoyancy to float the crew and the raft. It you were going to use foam you would need approximately 12 cubic feet of foam.

It is good practice to have much more buoyancy than what is necessary to just float your raft & crew. This extra flotation allows for a larger margin of safety. This is crucial because it is difficult to estimate the weight of a raft and all the stuff people may decide to bring onboard on race day. You are much better off to have too much floatation than not enough.

The placement of buoyant materials should be equally distributed in order to provide good stability. Most rafts typically place their floatation materials on each side of the raft just like on a pontoon boat. This is your best approach as it will provide good stability. Avoid placing all your floatation materials in one centralized location as this orientation will make your raft very unsteady and tipsy. Another trick to make your raft more stable is to add an outrigger. This is especially effective on longer rafts that aren't very wide.

THE DECK

The deck of your raft is where you'll be sitting as you go down the river. It should be strong and be able to support the weight of the crew and any gear you'll have on board. The most common deck material used on rafts is plywood that is attached to some sort of wood framing underneath. Don't use old pieces of wood full of splinters as this isn't too comfortable or safe to sit on. Use newer pieces of wood that are strong and robust. Placing a piece of old carpeting on top of the deck will provide a nice surface to sit on.

The deck should have attachment points on the underside of the framing to secure the flotation materials. By drilling small holes in the wood you will create spots where ropes can be passed thru. You can then tie the floatation materials to the bottom of the raft. A few eyebolts or cleats should also be attached to the deck or framing so that anchor ropes and tow lines can be secured someplace on the raft as well. Screws should be used to connect the deck and framework, don't use nails. Once the raft is wet and starts striking waves it will flex and nails will tend to pull out, get loose, and eventually fall out. Screws stay put much longer. A nice

addition to a deck is some sort of canopy to provide shade. A large umbrella will work just fine as will a small tarp and some sort of framework to hang it on.

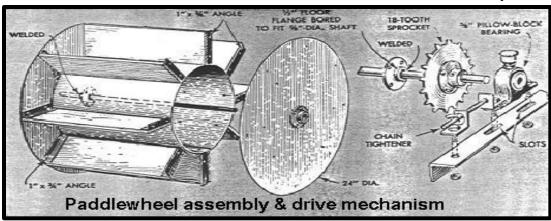
When designing your deck leave plenty of room for your crew to do their rowing or paddling. If the deck is too small paddlers may bang oars or not have enough room to kneel down or sit comfortably while rowing. You also want some spare room for a small cooler, your first aid kit, anchor, tow ropes, and any other supplies or tools that you will be carrying along on your raft.



Here is a good deck design strapped to two Sonotubes.

PROPULSION OPTIONS

Rafts will need some way to move through the water. Most participants will use paddles or oars. If you can build some oarlocks this makes the rowing much easier. Another popular choice is to also try using a sail made out of a plastic tarpaulin or bed sheet. Sails are great on windy days but can be unreliable. Sometimes the wind will be blowing the wrong way and other times the wind will blow fast and furious in the intended direction. There is no way to know for



sure if you'll catch a favorable breeze. Be sure to support the mast holding up the sail on three sides with a sturdy rope. This triangulation is necessary to safely hold everything together in a strong breeze.

A few raft teams have attempted to build a homemade paddle wheel using an assortment of bicycle parts. These can work quite well if put together properly. A key design element is to have a height adjustment built into the paddlewheel assembly. This is necessary so that the depth of the paddle's engagement in the water can be fine-tuned for optimal performance. Weight distribution on a paddle wheeler must remain stabile to ensure good performance. The Lin Lee raft is an excellent example of a raft with a well-designed paddlewheel.



The "Lin Lee" has a great paddle wheel design.

Another propulsion device that can be built is a homemade propeller. These can be more complicated to design and may require more than just a few odds and ends from a bicycle. The easiest way to make one is to find an old stationary exercise bike and weld a pipe underneath the sprocket. This pipe should have a T pipe on the opposite end where a sprocket, shaft, bearings, and propeller can be mounted.

The long length of chain needed to run between the two sprockets can be pieced together from two or three separate bike chains. A garage door opener chain can also be used as it is much longer than a bike chain and continuous in length. A chain guide made out of an old cutting board or wood will help keep the chain on the sprockets. This long length of chain will get pushed off the sprockets by the water if it is not supported in some way. You will not need to oil the chain as water is a pretty good lubricant, plus you don't want to be putting oil in the water.

Cut a hole in the deck so the propeller can be put in the water while the frame tubes will rest firmly on the deck.



A homemade propeller blade can be made by attaching a strong piece of metal to a pulley. The pulley can then be mounted on a shaft. Boat & trolling motor props will work but are not optimal for pedal power speeds. A better choice is a larger diameter blade with lots of surface area. You will have to experiment with different shapes to get something that works.

A bicycle driven propulsion system will take a while to refine. The key is to test them out, see how they work, and then make changes until they work right. The extra work can yield a very competitive raft. To see a first class propeller system have a look at the one used on the Little Willie. It has four pedal stations that run two separate submerged propellers. Whatever you end up using for propulsion it is good practice to carry extra paddles with you.

They are handy to have if something breaks and/or stops working properly.

STEERING

Paddles allow for propulsion and steerage around obstructions. But, if you use a paddlewheel, a propeller, or a sail, you will need some other means to steer your raft. In these cases a rudder is absolutely essential. One can be made by simply tying an oar, at its midpoint, to the back of the raft. Some folks use a door hinge and attach a piece of plywood to it. A handle can then be attached to turn the rudder. Being able to navigate straight on the racecourse and steer clear of obstacles makes rafts safer and easier to control.

TEAMWORK

Teamwork is one of the key ingredients to raft racing. You want to join forces and ideas with as many people as you can. The benefits of this joint effort become evident when looking for building materials, coming up with ideas, and constructing your raft. One of the best parts of the race is the preparation stage. You'll all have fun together and get excited and really make great efforts to get everything done. Each person will have some special talent to contribute. All these different aspects coming together are what make the entire raft race team work.

SAFETY

Safety must be maintained at all times while procuring materials and building the raft. It's no fun to get hurt, so wear safety glasses whenever handling power and/or hand tools. Also

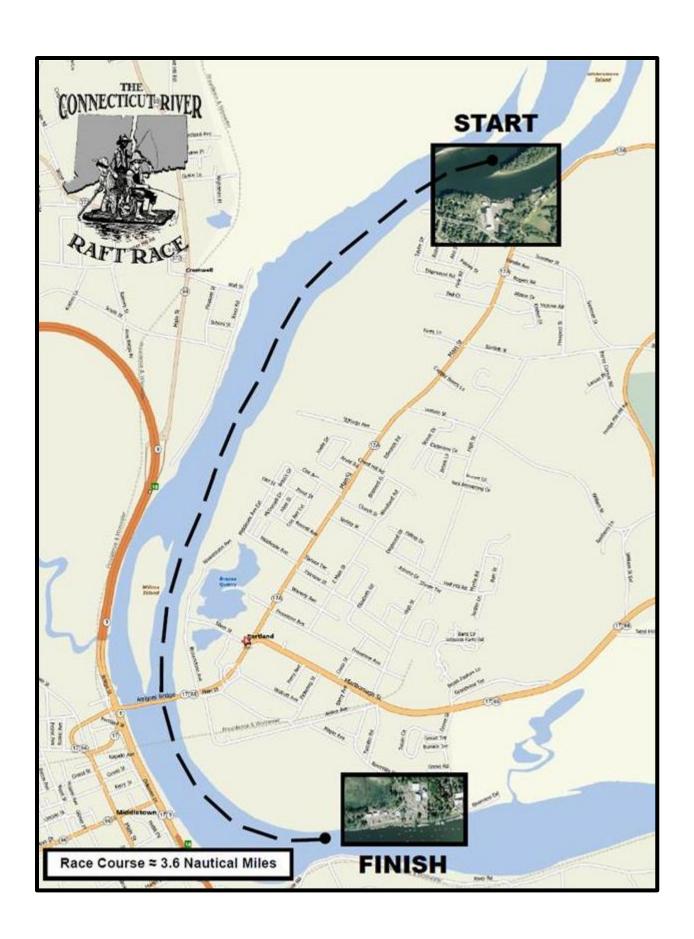
wear gloves when handling your materials and use caution whenever cutting materials. Your teammates may be working nearby on something while you're busy doing something else. Always look out for each other and help one another whenever necessary. A good practice is to use sandpaper or a file to smooth out and remove sharp edges whenever you cut something. Chances are you'll be wearing shorts out on the raft on race day so you don't want to pick up a splinter or get cut on anything sharp. Bend over exposed sharp metal edges and cut off protruding bolts. Then apply duct tape to these sharp edges. Have a first aid kit available during your build sessions and whenever you're out on the water.

TESTING YOUR RAFT

Once you've finished building your raft, test it out to see how it works. This is important because you don't want any surprises on race day. Take your raft it a pond and see if it floats with your crew aboard and everything else you will be carrying. In some cases you may find that you need a little more buoyancy. In other cases you might need to reposition some of the floatation materials to help stabilize the raft. Next, find out if your propulsion works as expected. Your crew should try out their rowing stations to see if oarlocks are working right and positioned correctly. Try putting up your sail to verify it is in working order. Be sure to also try out the rudder. Since paddlewheels only need to be submerged slightly they may need to be adjusted up or down to run smoothly. There is a whole list of items that contribute to your raft being a stable platform out on the water. You won't know how well it will work until you try it out. Make any adjustments beforehand and then retest your raft until you get it right. This ensures you will be ready to kick some fanny on race day. Make sure all crew members testing out the raft has on a Coast Guard approved life jacket. Never go out on the water without one and look out for each other at all times.

EMERGENCY REPAIRS

Be sure to always carry emergency tools, duct tape, bungee cords, rope, fasteners, and anything else you can think of just in case you need to make an emergency repair out on the water. Things can break, come loose, or jam up. You want to be able to mend anything that needs fixing, tightening, or re-attachment. Sometimes periodic adjustments are going to be necessary, especially if you have a paddlewheel. All tools should have a safety landyard attaching it to the raft or enough foam attached so it won't sink if dropped overboard accidently. Having the ability to recover from a mechanical problem can be a key factor in winning a raft race. You don't have to succumb to a simple mechanical problem if you bring emergency gear along to save the day.



www.ctriverraftrace.org

Visit our website to see: Raft race rules, Information, Event pictures, Raft building tips, Maps, Race results, Contact information, and Links to other events.













President

Otto 860-883-5176 dan-pritchard@sbcglobal.net

Vice-President

Thomas 860-836-9572 tdfmeb@comcast.net

<u>Treasurer</u>

Richard 203-598-6736 carbide1978@gmail.com

Recording Secretary

Gretchen 203-345-1940 gbfoodie@gmail.com

Board of Directors

Shawna 203-640-3260 sbartkus@comcast.net

Board of Directors

Dave 860-707-3691 crazydave757@hotmail.com

Board of Directors

Maureen 860-836-9572 tdfmeb@comcast.net