



Large raft underway on the Delaware River somewhere north of Frenchtown

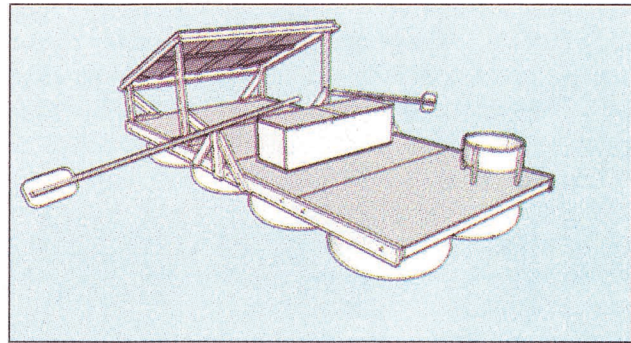
The platform raft is the modern equivalent of the heavy log and lumber rafts of the past. A well made platform raft will include all the essentials of camp life including a wall tent with a cot or two, cooking arrangements and all the storage that is needed for firewood, supplies for good camp meals, fishing gear and a nice fold up lounge chair. This all comes with the advantage that the camp moves with you.

The first step to planning a successful platform rafting trip is to find the river you will be traveling on. There are three basic types of rivers. The first type is

## HOME MADE RAFT CONSTRUCTION and TRAVEL By Brad Thomas

In centuries past, rafts were constructed from large timbers and used for travel, exploration and transportation of goods. The rivers served as highways to or from the back country. Trees were cut and logs were skidded down the bank to the river to be lashed together into timber rafts. Sweeps or large paddles were positioned on the front and back for maneuvering the massive assemblies.

In our modern day the practical use of a log raft is limited. But for those who enjoy boating, camping and fishing, living on a home made raft that is making its way down a river, as it snakes its way through the



Drawing of large raft



Erin Thomas and Brian Thomas on large raft in a flat section of the Delaware Water Gap National Park

country, is like taking a step back in time. Spending a weekend, week, month or more on a platform raft is an experience that will give you memories that will last a lifetime.

those encountered in the hilly regions of the country. The rivers in these areas will alternate between large deep sections and faster shallower areas with rocks, rapids and depths as little as 4-5". The second types of rivers are those that are found more often in the level land. They are wide and deep rivers that are typically free of rapids. Finally, the third type of river is those that the average home made raft has no business

being on. These include rivers with heavy commercial traffic, rivers with large rapids and rivers that are just too small to navigate. The best way to learn about any given river is by using canoeing guide books for reference. Most states have several good rivers to choose from and any river worth traveling will have plenty of navigational information available in one form or another.

With the attributes of the river in mind, a platform raft should be designed to fit the river and the trip. It is not hard to design and build a raft but there are a few considerations that should be kept in mind. First is the draft of the vessel; will the river be very shallow? If it is, this directly impacts to the type of flotation that should be used. The most common types of flotation for a home made raft are 55 gallon drums and tractor trailer inner tubes.

Drums are a great option for deeper water. Typically 55 gallon drums are used as they are plentiful and cheap. Plastic or steel drums will work fine. Drums that are permanently enclosed on both ends are the best option. They can be strapped to the raft with load binders or bolted on with bent treaded rods. Eight drums have a payload of about 1600 lbs and a draft of about 9-11". They can handle quite a bit of abuse but trying to drag a raft made of drums across or through a shallow area can prove to be a challenge.

Tractor trailer inner tubes sized 10-20 or 10-22 are heavy weight butyl rubber that inflate to 42-26" in diameter. The advantage of using inner tubes for raft flotation is that they have a very shallow draft of about 4-5" and, because of the flexible nature of an inner tube they handle shallows and the occasional collision with

an unseen river rock very well. They are ideal for the rivers that run through the hilly portions of the country with the occasional shallows. The clear disadvantage being the tubes weakness for being punctured, however at 8-10 lbs each these inner tubes are not easily damaged but several spare tubes and patches should be taken on any trip. Be careful not to end up with the cheap imported tubes as they don't inflate evenly and the rubber is very thin. Tractor trailer inner tubes can be found used typically for \$10-15 dollars a piece. Eight tubes work well for an 8' x 16' raft which is a comfortable setup for two people. A raft like this can handle about 1,600 lbs of raft, people and supplies. At this weight the tubes are half submerged with a draft of about 4-5".

The platform of the raft is typically constructed out of framing lumber and plywood. Pressure treated wood is not needed or desired as it adds quite a bit of weight to the assembly. Rafts larger than 8'x16' can be

built but, depending on the river, it may be better to build a few smaller rafts if precise maneuvering is required.

Paddles can be set up much like a rowboat and fashioned out of framing lumber or hardwood. For very large rafts it is better to put sweeps on the front and back of the raft. The purpose of the paddles or sweeps is not to propel the raft down river as the current takes care of that. It is instead to position the raft left to right within the river so that obstacles can be avoided and the raft can be kept in the main channel for clear passage.

The living accommodations are what make the platform raft ideal for extended travel and they make a raft a real pleasure to travel on. A wall style tent is a perfect shelter with its rigid frame so that when the rain comes or the wind is blowing the sides can be rolled down for sturdy, comfortable protection from the elements. A fire pit crafted from a cut down 55 gallon drum is much appreciated on the raft for



Setting up to launch the raft at the Eshback Access above the Delaware Water Gap



Rafts set up for camp at the end of the day.



Small raft approaching some fast water at the end of the day.

campfire cooking. Also, a large box that can be used for storage and a bench to paddle from works quite well.

With the raft built, it is time to set out, right? Well, not so fast. We have to take care of a few legalities. First, in fact even before we build the raft it is best to contact the state that you will be traveling in to determine the requirements for registering the homemade water craft. Because there is no engine or sail it is typically very easy to register a raft but there are a few states that have stricter policies so it is best to find out what hoops you have to jump through before building.

Traveling and camping on the rivers in the US is perfectly legal. All rivers and the land below the rivers are owned by the federal government and held in trust by the states for the purpose of navigation and use by the public. So anybody can float down a river and camp along the shore line below the regular high water mark as this is public property for our use. The high water mark is easy to distinguish as it is the point where the normal land vegetation and dirt starts. Entrance and exits form the river are made at standard boat access points. Some national parks, locks and dams have more

specific rules but it should not be a problem as long as you look into them for the river you are traveling on ahead of time. Of course standard adherence to boating laws should be observed like the use of life vests, and any other applicable boating laws.

Safety on the river is of course paramount as many people loose their lives each year in boating accidents. Many times the influence of alcohol, lack of respect for the water or lack of boating experience play a major role in these situations. Boating experience is a requirement for anybody who goes out on the water. As well as understanding the river, exercising prudence and using common sense.

One factor to be aware when rafting, under no circumstance should a person who ends up in the water be positioned downstream of the raft as there is the possibility of being trapped between the raft and a river obstacle. Rivers can also rise quickly in rain storms and this can present a dangerous situation for all boaters on the water. Adhering to standard boating safety practices should keep those involved in homemade rafting safe.

With these guidelines for construction and travel in mind, I

am sure you can begin to imagine pushing off shore into a welcoming river and traveling back in time away from the bills, traffic and responsibilities of modern life. Your concerns on the river become those of the most basic human needs.

I think back to my first journey where, after several long and fulfilling days of travel on the Delaware River, we were tied off to an island. There was not another person for miles. The sound of the fire cracking and smell from a sizzling steak filled the air. The sky was taken over by the red and orange pastels before night moved in and the moon and stars reflected brilliantly off the water's surface. The cares of the common world had long drifted away. The fire died off to keep glowing red coals. I rolled down the sides of the tent and lay down to a firm comfortable bed to drift to sleep to the sound of lapping water on the river's edge.

*You can learn more about home made raft construction and travel at the Home Made Rafters Association's website at:*  
[www.raftplan.com](http://www.raftplan.com)

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