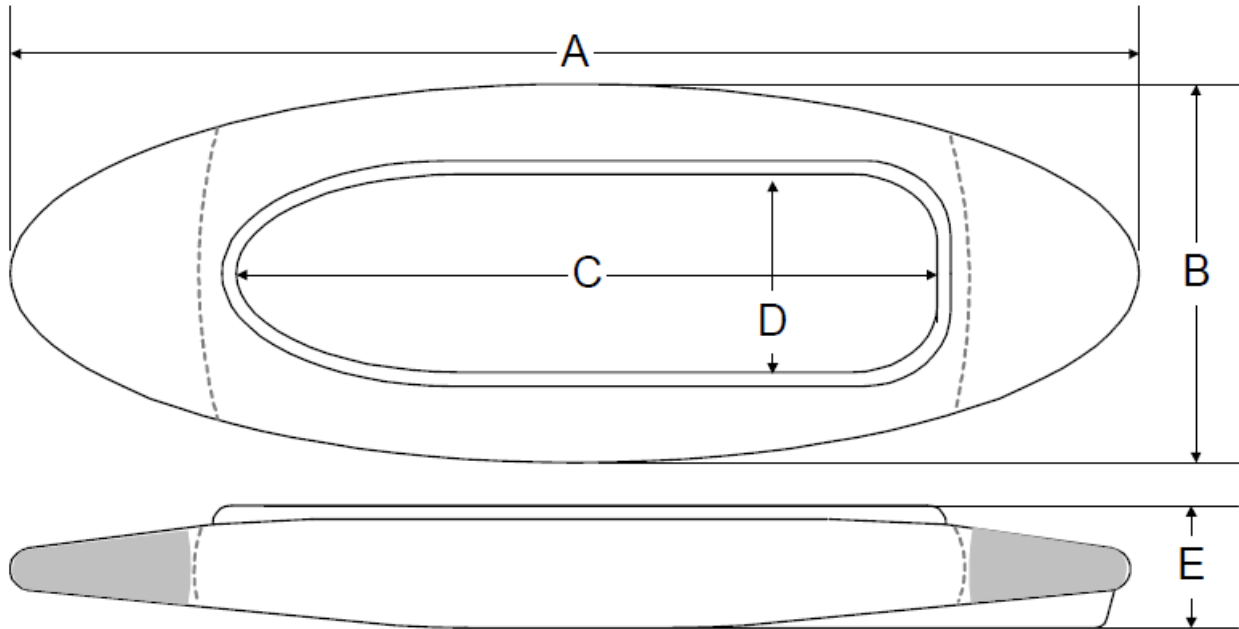


## Home Made, DIY layout duck boat

Here are my plans for making a layout boat for ducks. It's based on the AquaPod. A commercial Aqua Pod boat costs around \$1,000 or more. You can build your own, which is strong, safe, and light for around \$400; a considerable savings.



### Dimensions of the boat.

A – 121"

B – 40"

C – 74"

D – 21"

E – 14"

### Procedure:

1. Set up a 10 foot work table on saw horses. ½ " Wafer board works well. It only needs to be 42" wide and about 9 feet long.
2. Layer foam core insulation panels on top of each other to form the basic shape of the boat; glue the panels together with construction glue
3. Using a "hot-knife" roughly cut out the shape of the boat by trimming the edges, forming ½ of the boat, either the top or bottom. <http://hotwirefoamfactory.com/home.php>
4. Form either the top or the bottom of the boat; your mold is used twice for both the bottom and top half of the boat.
5. Use Bondo or plaster of Paris to coat the shaped foam. Sand the Bondo or plaster smooth using sand paper.
6. Cover the foam with plastic packing tape so you can easily release the foam mold from the fiberglass – you are going to use this mold again for the other ½ of the boat.

7. Using tight-fitting rubber gloves (not latex), Spread one coat of marine two-stage epoxy on the tape coated foam mold.
8. Layer fiberglass cloth on the epoxy. Crisscross the epoxy for added strength.
9. Smooth out with a flexible plastic spreader making sure to flatten out any wrinkles in the fiberglass cloth so that you have a smooth surface. Allow to dry for 24 hours.
10. Repeat the process
11. When the fiberglass and epoxy covering hardens carefully remove it from the foam. The boat will be very flimsy at this point so be careful not to break the hull.
12. Trim the bottom edges of the newly created fiberglass boat section so that the second section will match the first section. It should lie flat on your work table.
13. Clean the foam and make the second half of the boat following exactly the same process as the other half.
14. When both halves are formed join the halves using strips of duct tape to hold them in place. You now have a completed boat consisting of two halves.
15. Coat the entire boat with marine epoxy and layer it with fiberglass cloth; crisscrossing the fiberglass cloth for strength.
16. Repeat this process removing the duct tape as you progress along the boat. You will have 4 layers of fiberglass at this point – two from the original  $\frac{1}{2}$  mold and two from the joined halves
17. When the fiberglass-epoxy boat has hardened – give it a good 48 hours in a warm place to cure. You are ready to cut out the top
18. Following the pattern cut out the section needed to get into the boat. Use a jig saw for this. Be sure to wear breathing protection at this point.
19. Use wooden or plastic molding strips to fashion the raised entry opening ridge on the top of the hull. Plastic corner molding works well here. You can bend the strips slightly; cutting each piece at an angle to fit around the corners. (you could also use a rubber hose, which is flexible to make the ridge, coating it with epoxy and fiberglass cloth)
20. Drill and glue the strips on the hull of the boat, all the way around the entry opening.
21. Use more epoxy resin and fiberglass cloth to secure the strips to the hull of the boat; making it watertight.
22. When these strips have hardened you are ready to reinforce the inside of the hull.
23. Use closed foam blocks, cut to fit, to reinforce the bow and stern section. This will give the boat added floatation properties. You can actually use your original mold so you don't have to buy any additional foam core insulation.
24. Use 2" diameter PVC pipe cut at angles to fit the sides of the boat. Use epoxy and fiberglass cloth to reinforce the bond. Make sure you don't put any reinforcement tubes where your, your seat or your legs are going to be. Four tubes should be enough, two behind you and two in front of you.
25. Flip the boat over and glue a wooden triangular keel to the bottom of the boat, running vertically, using more epoxy and fiberglass cloth. The keel should be approximately 3 feet long, 4 inches high at the stern, and 1 inch thick. This will give the boat some additional stability. You can use your wafer board table to make the keel. Glue two  $\frac{1}{2}$ " pieces together to make a 1" thick keel.
26. A comfortable seat can be secured to the floor of the boat using epoxy and fiberglass. Do not screw holes in the hull of the boat. Make sure the seat can recline and has a padded head rest.
27. Test your boat for leaks and strength. If the boat seems to wobble or flex at any point use additional epoxy and fiber glass cloth to strengthen.

28. When the boat is reinforced and the seat is installed paint the boat a camo pattern best suited to match the marshes you will be hunting in.
29. You will need to acquire a light-weight kayak paddle to maneuver the boat in the marshes.
30. You may also cover yourself and the boat with commercial marsh grass to further camouflage the boat and conceal your presence.