

# Making a Hand Dredge

by Peggy Williams

## Materials:

1'X3' of window screening  
Seam binding  
6' of flat 1" X 1/8" aluminum  
8 three-eighths inch rivet  
1 1/2 inch rivet  
4-6' of 1" PVC pipe  
PVC pipe fittings & PVC  
cement

## Tools:

Sewing machine  
Metal shears  
Electric wire brush  
Pipe cutter  
Electric drill  
Riveter

Fold one of the long sides of the screening down 2" and sew on a sewing machine so you have a sort of hem with open ends. Sew the short ends of the window screening together using a zigzag stitch from the non-hemmed side to about halfway across (not all the way). Then sew the long end together, with the seam you made in the middle of one side of it. Sew seam binding across the long end to strengthen the stitching. This makes a bag with a loop at the top.

Cut 6" off the flat aluminum using metal shears and cut the short piece into 4 equal pieces (they'll be about 1 1/2" X 1/2"). Cut another piece 22" long. Using a wire brush, smooth the ends of the frame and the short pieces so they won't catch on the screening or your hands. Put the shorter pieces aside.

Bend the rest of the flat aluminum into a frame. Starting at the middle, mark off about 7" on each side and bend each end in the same direction. You now have a U with the long side 13-14". Mark off 6" from the bends, and bend again towards each other. You now have a rectangle with end pieces too long. Bend these pieces from where they meet in the middle in the same direction as the original bends, making a two-part handle. (Actually, we made a template of wood that was 18"X6" with rounded corners and began bending at the handle, going from one end of the aluminum piece to the other.)

Now make a U of the 2' long piece that fits on the long outside edge of the dredge frame and about 3" up each side of it.

Thread the screening onto the frame through the two inch hem. If you sewed it too far across it won't go on! It's a little confusing how it goes on but it will. The partially open end will be on the handle side and the unbroken piece of screening on the long side of the frame.

Cut a piece of 1" PVC pipe to 3" with pipe cutters. Fit it onto the handle of the dredge, with both pieces inside it. Drill a hole the size of your larger rivet through both the pipe and the aluminum near the screening with an electric drill. With a rivet tool put a rivet through both to keep the handle together.

Fit the 2' U on the outside edge of the frame, with the edges together so it extends beyond the screening and the screening is caught between the pieces. Hold one of the

small pieces of aluminum across both pieces of the aluminum near the bend and drill for rivets in both pieces, then insert rivets. Put two of the pieces near the bends of the long side and the other two at the ends of the short sides. This holds the extra piece to the frame and protects the screening when you are dragging the dredge through the sand.

Now make a handle of as many pieces of PVC pipe as you want. I make three pieces about 12" each. Glue fittings onto the pipe with PVC glue so you can screw them together: a male end and a female end on all but one of the pieces, and a cap piece and male end on the last one. Then glue a female end on the handle. You can screw one, two, or three pieces together to make the handle as long as you want. Longer pieces may break with the pressure of dragging the dredge through the sand and water.

When you use the dredge just tuck the handle under your armpit and pull along behind you as you are looking in the water for other stuff. Pull it up periodically and look inside to see what you've caught. Going through seagrass you'll get shrimp, fishes, starfish, and shells. Going through sand try to make it dig under a bit so you can get buried shells.

