

ANCHORS AND GROUND TACKLE

By Richard Sorokin

An anchor is a device to hold a vessel in a particular position. The first anchors were stones attached to primitive rope. These were often ineffective because they would drag along the bottom. Modern anchors are designed to dig into the bottom and hold. Modern anchors are light of weight for their holding capacity, easy to store and come in a variety suited for different bottoms you may encounter. The most common anchor in our area is the Danforth anchor. It is made from galvanized steel, easy to store and good for most bottoms. The Fortress anchor is similar but made from aluminum alloy. Larger boats often carry a plow anchor. This has a pivot at the end of the shank. This allows it to stay buried over small changes in direction of pull caused by wind or current shift. The Bruce Delta and Bruce anchors are varieties of the plow anchor. The old kedge anchor must be heavier than the burying type anchor. Its thin arms and flukes make it the best type to use in weeds or grass. On very large ships the old navy type anchor is used. Two flukes pivoted on a shaft. To have good holding strength these anchors must be heavy. This makes them too heavy and impractical for small boaters. Grapnels are five curved, sharp-billed, claw like prongs arranged around a shank. This device is mainly used to retrieve things on the bottom. Poor storability not recommended for pleasure crafts.

Mushroom anchors are used for long term moorings. They dig in and are hard to move. All the gear that is between the boat and the anchor is called the rode. It is recommended that a length of chain be attached to the anchor with a shackle. The function of the chain is two fold. First it holds the shaft of the anchor close to the bottom making it bite into the ground. Second, it makes a sag in the rode that cushions shock loads due to surging. The length and size of the chain will depend on the size of the vessel. For most small boats 6 to 8 feet will do. The anchor line {rope} should be nylon, three strands. Nylon is elastic, it stretches and absorbs shocks. Too large of a line negates this advantage. Use a thimble shackle and an eye splice to attach it to the chain. The bitter end of the rode should be attached to a strong point on the vessel. You might not be able to hold the line. It is also wise to have a way of parting the line in an emergency. The scope of the line {ratio of length to bottom} should be 5: 1 calm day. 8 or 10 : 1 in heavy weather. This is the length you should let out. Most of us use the Danforth anchor its only drawback is that it can get stuck in the mud. There is a different way to rig the anchor so that it can be easily retrieved. Where the chain is attached to the shaft remove the shackle and chain. Drill a hole on one of the plates on the bottom of the anchor big enough for the shackle. Attach the chain to the plate with the shackle. When you lay the anchor down the chain should now be parallel to the shaft. Tie the end of the shaft and the chain together with some fishing line. When in the water the chain will pull the flukes into the bottom and hold the vessel. If the anchor gets stuck ride up the anchor line so you are over the anchor, pull hard breaking the fishing line and pull the anchor up from its bottom.