

Every Mutineer on the water should have a working anchor with adequate anchor rode. The anchor may be needed to fight a tide in light air or to secure the boat in the event of equipment failure. All boats participating in MNC are required to have anchor and anchor rode. The following is a great article by Bob DeRoeck that will help you decide which anchor is best for you.

Anchor Test

Anchor tests were conducted at the Sacandaga Challenge on July 31, 2010 with various types of anchors in what is primarily a sand bottom with a few rocks in the golf ball to baseball size range. Some of the same anchors were tested in a deep, clinging mud and also in a dense marsh grass bottom in the old harbor in Sandwich, MA later in the same week. The objective of these tests was to determine the relative effectiveness of the different anchor types in different bottom environments.

All testing was done with the same approximate scope of about 6-8 to 1. Pulls up to 50 pounds were done by one person. Pulls between 50-100 pounds were done with two persons. I estimate the accuracy of the "pull" force to cause the anchor to either drag or break free to be +/- 25%.

The anchors that were tested were as follows. The prices shown are those on the West Marine website, though it is likely that lower prices would be available through Defender Industries or other boating product discount stores:

1. Folding anchor. 3.3 pounds. \$15.99
2. Mushroom. 10 pounds. \$24.99
3. Bruce-type or "claw" anchor. 2.2 pounds. \$7.99
4. Guardian Aluminum "Danforth-type". 2.2 pounds. \$57.99. Note, that while the Guardian anchor is about half the weight of the Danforth, the dimensions of this anchor were substantially larger than the 4 pound Danforth.
5. Danforth. 4 pounds. \$24.99

The results in the following table are the approximate force required to cause the anchor to drag or break free. If an anchor could not "set" in a certain bottom type, DNS is shown in the table. If an anchor was not tested, DNT is shown in the table. With the "clinging" mud the anchor would set, but would typically fail by breaking free rather than dragging. Once the anchor broke free the mud ball attached to the anchor would usually prevent it from resetting.

<u>Anchor Type</u>	<u>Drag/Breakout Force sandy btm</u>	<u>Drag/Breakout Force mud btm</u>	<u>Drag/Breakout Force dense marsh grass btm</u>
1. Folding	<5	DNT	DNT
2. Mushroom	<5	<5	DNS
3. Claw	75-100	40-60	DNS
4. Guardian	75-100	DNT	DNT
5. Danforth	75-100	20-30	>150