Equipment

Racks
- Hull (on bottom C & F racks or in WB- WB-129 on a trailer). Sometimes you’ll get lucky, and find an unused hull already on the dolly, but usually you’ll have to load a hull onto the dolly. It usually takes two people to lift a hull, flip it over, and place it on the dolly. Before all the heavy lifting, check that the hull is usable for sailing. Check that you have a bailer and sponge in the hull. Check that the bailer and drain plugs are in place.
- The mast and sail assembly (on C rack).

The hulls and spars are marked with an MSC logo. Check for it.

Shed
- Rudder and tiller assembly
- A dagger board
- A life jacket for everyone on board
- Bailers, sponge if not in hull. Paddle if desired.

Inspect the Equipment

1. Unravel the mainsheet from the sail. The mainsheet should be wrapped around the mast in what’s known as a “Chain Stitch.” You can unravel it simply by untying the end of the line and pulling it away from the sail. If everything was done correctly, it should fall away easily.

2. Spread the sail out on the ground, by pulling the gaff away from the boom. The gaff will be the one with the line tied to it, rather than the one with the line hanging from a pulley (Figure 1).

3. Inspect the sail for any holes and tears (fix them) and inspect the “shower curtain” rings that hold the sail onto the gaff and boom. If any are open, snap them shut; if any are missing, replace them. Clear sail tape and spare sail rings are on the CSP shelving in the shed.

Figure 1. Sunfish Sail Spread Out
Rigging

Figure 2 depicts the goal. Steps follow.

Figure 2. Rigged Sunfish
1. Place the sail assembly on the deck. The correct position is with the brass mast-stepping ring (found on the forward end of the boom) centered over the mast step hole on the deck (see Figure 3). The boom and sail assembly should stretch out towards the stern. Make sure that the boom is below the gaff, so the pulleys on it are hanging down. The brass ring should be on the starboard side of the assembly when this is done.

![Figure 3. Deck Layout for Stepping the Mast](image)

2. Now pick up the mast. Note that one end has a plastic cap on it, with a small hole in the cap. This is the end that will be at the top when the mast is stepped. Find the halyard on the gaff, and insert the free end of the halyard into the hole on the mast cap. You'll want to pull about six feet of the halyard through the cap.

3. **Check the other end of the mast and make sure there is no sand on it** (sand will grind in the mast step and damage the boat).

4. Hold the mast upright over the deck, and insert it through the brass ring and into the mast step. If you've done everything correctly, the mast will be standing securely upright in the mast step, the brass ring on the gaff will be secured around the mast, and the sail will be on the port side of the mast.

5. Pull the halyard as much as you can, but don't lift the sail with it. Insert the end of the halyard through the fairlead next to the mast, from fore to aft, and tie a stopper knot in the aft end of the halyard.

6. Run the main sheet through the main block. The main block ratchets, which means that it spins freely in one direction, but does not spin at all in the other direction. When you insert the main sheet through the block, check to see if the pulley spins freely when you pull inwards on the mainsheet. This arrangement will make it easy for you to pull the sail inwards and hold it in when you’re sailing. The main block should not spin so freely when the mainsheet is being let out. Once the mainsheet is inserted through the main block in the correct direction, put a stopper knot in the end of it.
7. Now find the opposite end of the mainsheet, the one on the aft end of the boom. This end connects with the traveler, which is a length of cable near the stern. Tie a bowline around the traveler with the end of the mainsheet.

8. The last thing to do on shore is to rig the rudder. Make sure that the tiller goes **under** the traveler line; otherwise it will foul the traveler. Notice that the transom has a plate bolted to it (it’s called a gudgeon plate). The plate has two smaller pieces of metal sticking outward from it, each with a small hole. Now look at the rudder its metal housing has a spring-loaded rod on it. What you do is to push the rod upwards and fit the rudder in place so that the indentations on the rod match the holes in the gudgeon plate, all the while holding the rod up. When the rod is inserted into the gudgeon plate, let go. If all goes perfectly, it will snap down, locking the rudder in place. Unfortunately, it never goes perfectly, and you almost always have to jiggle the rudder a bit until the rod snaps down. **Make sure that the rod goes through both holes. The rudder can fall off if it doesn’t!**

9. Load the rest of your equipment (the dagger board, bailer, sponge, optional paddele, water bottle) into the cockpit, **put on your PDF**, and head for shore. Use the dolly or lift the boat. **Do NOT drag the boat across the grass or sand.** Once again, check that your bailer plug is secure.

10. When the boat is in the water, return the dolly to the bottom left rack C space. Do **NOT leave it on the beach.**

11. If you do not already have it on, **PUT YOUR PFD ON**. Crew as well.

12. Have the boat turned into the wind before raising sail. If it’s windy, you’ll want someone to hold the painter line for you while you raise your sail or tie it off to the jetty so the boat is into the wind. To raise the sail, **grasp the halyard ABOVE the fairlead block** and pull on the halyard until the gaff reaches the top of the mast. **Do NOT put vertical force on the halyard fairlead or it may rip out.** The gooseneck (i.e., the “mast-stepping ring” in Figure 3) often needs to be lifted for the sail to be hosted all the way up. Once the sail is raised all the way, you’ll need to cleat the halyard on the horn cleat just aft of the mast. You’re ready to launch!

**Launching**

There remains one last thing to do before launching: get on your boat. If you have crew, the easiest thing to do is to have them hold the boat (from the painter line) while you get on. Once you’re on, put the dagger board part way down (so that it doesn’t scrape against the ground before you reach deeper water). Depending on where you launch, you may not be able to push the tiller down until you’re a bit out. Have your crew point the bow towards the course you want to sail, and then power up the sail while they climb aboard. If you don’t have crew, you’ll have to turn the nose yourself, then leap aboard and grab the tiller as quickly as possible. Somewhere during all of this, you’ll have to push the rudder down, insert the dagger board (when you’re far enough out that it will not hit the bottom) and power up your sail (results vary by mariner). Some sailors find it helpful to launch from the end of the small jetty.
De-Rigging Your Sunfish

De-rigging a Sunfish is easy and doesn't take too much time, especially if you have someone to help you.

1. The first thing to do is get the sail down. To do this, turn the boat into the wind, uncleat the main halyard from the halyard cleat, and slowly let the halyard up until the sail is resting on the deck. AVOID letting the spars bang on the deck and avoid letting the sails fall into the water and get wet. (On a windy day, turning the boat into the wind will greatly aid your efforts in this regard). You may need to untie the stopper knot from the halyard in order to do this. If you’re planning to go back out, you may want to leave the halyard in place, tying it loosely around the mast so that you don’t have to remove the mast in order to re-feed the halyard through the mast cap later. If you’re going home, you might as well pull the halyard all the way out.

2. Flip the rudder up, remove the dagger board, and put the hull on the Sunfish dolly. Do NOT put the hull on the little Optimist dolly—you will exceed the capacity of the dolly. Once the hull is on the dolly, pull it up onto the shore so that the transom clears the water. If there are people waiting to launch, you’ll need to get the boat out of the way, farther uphill.

3. Undo the stopper knot in the main sheet, and pull it free of the main block. Undo the other end of the main sheet from the traveler so that the sail can be lifted away from the deck.

4. If your sail is dry, you can start putting it away. If it’s wet, spread it out on the ground so it can dry. Never put any sail away when it is wet if you can possibly avoid it!! Wet sails will mildew, ruining them. If it’s raining, you may need to put the sail away wet, since the Club does not have any sail drying racks. If you live close to the lake, consider coming back up when the weather clears and drying the sail out.

5. To fold Sunfish sails, start by spreading it out on the ground, (Figure 1), then fold the gaff up against the boom, leaving the sail out on the ground in a triangle. Place the mast against the gaff. Roll the sail inwards from the tip, in medium-tight rolls. You don’t want the sail to flap around, but you don’t want much tension on the cloth, either. Do NOT roll the sails around the spars. Next you’ll need to tie a Chain Stitch knot with the halyard and the mainsheet in order to make a self-contained bundle. It’s not hard to do, but almost impossible to explain in words. Have someone who knows how to do it show you how. Grog’ animated knots has a demo:


6. When the sail is fully secured, put it away on rack C. Lift the sail into the racks with the spars/boom down rather than sliding it. Put the sail onto the rack with the gooseneck nearest you—this will make it easier to avoid snugging another sail assembly with the gooseneck as you are putting it way (and when you are removing it from the rack).
7. Drain and clean the cockpit. Unplug the bailer, and let any accumulated water drain out (Figure 4). You may need to tilt the dolly. Carefully remove sand with a sponge. Once the cockpit is empty, put the bailer plug back in place. Remove your trash. Leave the boat nice and clean for the next person.

Figure 4. Opening the Bailer
8. **Drain the hull. This must be done after each and every sail.** Move the boat to the grassy area, open the side drain plug on the starboard side (Figure 5 and 6). The drain plug can be opened with a dime. Take the boat off the dolly and roll the boat onto its side (Figure 7). Let any accumulated water drain out. You may need to tilt the boat deck forward slightly at a vertical angle of 80 to 85 degrees. Once the flow stops, see whether you can get more to come out by tilting the boat slightly forward, then aft. If more than a quart or two comes out after sailing a few hours, be sure to tell the Community Sail Program Director so that someone can look into the problem. Once all the water is out, close the drain plug.

![Figure 5. Drain Plug Location](image)

![Figure 6. Drain Plug Photo](image)

![Figure 7. Rocking the Boat.](image)
9. Take the hull to the racks (or back to WB-129). If you are the last person returning a Sunfish to the racks, leave the boat on the dolly on the bottom left C rack; if you are not, you should put the hull on the racks so other people can use the dolly. Store the hull deck-side down. Wrap the painter around the rack.

10. Take the rudder, tiller, dagger board and PFDs to the shed. If the PFDs are wet, spread them out on the Escape or hang them someplace out of the way to dry.

11. **LOCK THE SHED!**

12. Report any problems with the equipment to the Community Sailing Program Director.

13. You’re done!

Fair winds and happy sailing!