

## The BayRaider 17

Here is a new dayboat we will be launching this summer, designed as a smaller version of our 20' BayRaider. Those familiar with our range will know that the BayRaider 20 is a water ballasted self righting dayboat that attempts to set new standards for safety and performance afloat. The BayRaider 17 is a smaller version, trying to retain as many features of the bigger boat as possible.

Here on the West coast of Wales, there are lots of places to sail, but not so many with all-tide slipways. I recently visited a customer in Poole Harbour who could sail off his mooring whenever he wanted, which seemed like decadent bliss to my "two hours either side of high water" mentality. The only other option here is to launch from a beach, and there are plenty of sandy beaches which allow car access to launch and recover boats. However, stories of cars getting bogged down while friendly but helpless locals watch the tide returning in glee are legion, and I wanted to avoid a similar fate. To do this, I wanted an exceptionally light weight boat, one that could be pulled by hand up the relatively shallow beaches here, without the need to take the car anywhere near the wet bit. Time will tell how successful we have been, though a lot of thought will go into a light weight trailer design.

The hull will be constructed from marine ply and epoxy, but making use of a structural cross linked polymer foam core where panels need greater stiffness with little weight penalty. Below the waterline she will be glass sheathed inside and outside, a process which adds stiffness and abrasion resistance. On the bottom will be a full length keel strip and two bilge runners to give further protection when beaching. In the cockpit she will have a self draining floor, with a water ballast chamber underneath, similar to her bigger sister. The underside of the self draining floor is stiffened with a foam core, adding further buoyancy low down where it is handy in any kind of swamped situation. In addition, she will have at least 4 independent air chambers totalling nearly 1000kg of positive buoyancy. The cockpit will feature an unobtrusive, low centreboard case, housing a high aspect ratio foil for maximum performance to windward. Benches down each side will have stowage space in the midships section for all the usual equipment associated with cruising in a small boat. A large optional spray hood forward will protect the front half of the cockpit and provide a hoop tent anchor point for those looking to sleep aboard (using drop in slats between the seats).

The rudder design enables the mizzen, rudder and outboard to be on the centreline and be placed where they all have best effect. The small standard shaft engine sits in a well, thrusting onto the rudder blade and is easy to reach from within the cockpit, allowing extremely tight manoeuvres. It can kick up fully, which improves performance no end, especially in such a light boat, and the rudder blade also kicks up a full 180 degrees, keeping the blade protected while on a mooring or while launching. The only snag with this arrangement is remembering to lower the rudder blade at least to horizontal, before setting off. Steering in air does not work as well, especially in a crowded anchorage.

The rig design and set up have been borrowed from her larger sister. The jib and mizzen combination in a boat this size is handy because you seldom need to bother with reefing, opting instead for just dropping the main. The rig is also handy for slow

speed sailing (ie approaching shore, or for fishing) and sheeted hard to the centreline, the mizzen will keep you head to wind all day. The whole rig is self tacking, with the jib set on our usual club boom, which doubles as a means to put serious tension into the rig for upwind work. The mizzen is small enough to be classed as a yawl but is technically forward of the rudder post, so some would call her a ketch. I like to keep everyone happy and call her a Kawl, which also sounds like a bowl of traditional Welsh soup. You read it first in Watercraft.

For those wanting extra performance, there will also be a retractable bowsprit from which could be flown an asymmetric spinnaker or other off-wind sail. These are much easier to handle than a traditional spinnaker and while not being quite so effective when running, they provide plenty of power up to a beam reach and have saved us the trouble of starting the engine many times. The sail itself stows in a bag stored under the foredeck and is small enough to be easily manageable, alone if necessary, though as the winds picks up, it is easier to have help to retrieve it.

Although traditional in appearance, the underwater sections of the hull will show a good flat run aft which should help the boat get up on the plane in the right conditions and show a clean pair of heels to most of the competition. The advantage of the water ballast system here is evident - a light weight boat for the trailer, for light winds, or for experienced crew, but a heavy, ballasted boat for family or nervous companions. The performance element is one that is often overlooked in traditional boats. We feel an ability to be able to work quickly and efficiently to windward is a huge safety feature in itself.

The boat will be available as a kit or a complete boat later this summer. Kit builders can choose from a panel kit (just the ply parts CNC cut to shape) or a full kit, with everything included except the paint. We hope to have the first boat at Beale Park Boat Show in June, but visitors making the trip solely to see her might well be advised to check with us nearer the time, or consult our website.