

**Castle Cove Sailing Club
Moorings Guidance
Information for Members from the Moorings Officer**

These introductory notes are designed for Members with an interest in moorings. They give information on the way the Club manages its moorings and guidance on moorings tackle and maintenance. Please also read the Club rules and byelaws (for example Rule 7 and Byelaw 8) which specify obligations and rights relating to moorings.

Moorings Area

The Club Mooring Area extends from the steps (marked on Chart 2268) at the bottom of Old Castle Road in a direction 120° for 2,200 feet (in a line out from the pipeline from Sandsfoot Beach) thence in a direction 030° for 2,800 feet, thence in a direction 300° to the shore. A plan of the area is available in the Chartroom. Moorings West of the pipeline belong to Royal Dorset YC, those further South and West belong to Weymouth & Portland Cruising Association. The Club leases the area from the Crown Estates Commissioners to whom we pay rent. Mooring fees are also paid to Portland Harbour Authority (PHA) for their role in policing the area and maintaining the harbour wall.

Permission to use a mooring

Only Members of CCSC may moor boats in the CCSC moorings area (access for visitors is defined by the byelaws). The agreement of the Moorings Officer, who coordinates and manages the area, is needed before new moorings are laid. If a Member sells their tackle it must then be removed from the area unless the purchaser is already accepted as a Member and has the agreement of the Moorings Officer to retain the mooring position. The Moorings Officer may be able to put potential purchasers in touch with those wishing to sell tackle. Normally a mooring that is not in use should be lifted to avoid incurring maintenance costs.

Mooring inspection

Members supply their own tackle and are responsible for maintaining it. The Club has no responsibility for Members' moorings.

Moorings require regular maintenance. If tackle fails a boat may break free of its mooring and whilst drifting, cause damage to other boats as well as going aground or onto Portland Breakwater. Also, many Clubs reciprocate hospitality to cruising boats, moorings left in a poor state are particularly hazardous to visitors.

- If a boat becomes detached from its mooring and a claim is made, the insurance company is likely to scrutinise the state of the mooring before agreeing any settlement.
- Tackle must be inspected for wear before use each season and preferably a second time mid-way through; this can be done by a diver.
- Ground tackle is more difficult to inspect as it is often buried or covered by weed. It tends to wear less quickly. Club byelaws state that every mooring sinker must be lifted at least once every 5 years for inspection.
- Before buying a laid mooring, Members are advised to have it surveyed either by lifting it or having it videoed to know its condition.
- Members are responsible for ensuring their insurance is valid for a swinging mooring in Portland Harbour.
- **Don't skimp on mooring tackle.** Money saved by laying light tackle or by inadequate maintenance is no bargain when a boat is on the rocks! (See below for more detailed guidance)

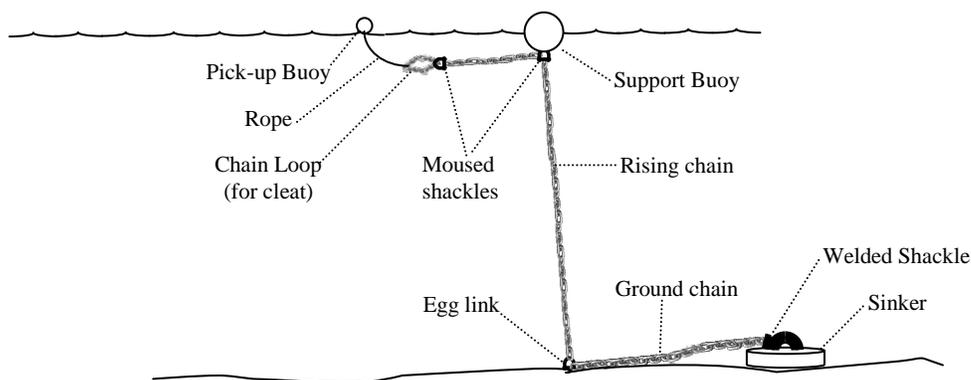
Members may arrange for their mooring to be inspected or the Club may, with Member's signed authorisation to proceed, arrange for inspections on a Member's behalf. Members whose moorings are inspected collectively will be informed that the inspection has taken place and of any remedial work suggested. There is a small additional charge for a written report of the inspection. Such collective inspections do not absolve Members of their responsibility to keep moorings in a good state of repair.

Costs

The price of tackle depends on how it is made, what weight it will carry and the condition it is in. Advice is available from textbooks, yachting magazines and from experienced sailors with local knowledge. Mooring fees are given in the Club Handbook and are pinned up in the Chart Room. CCSC mooring fees include the Crown Commissioners rent and expenses related to operating the moorings. PHA dues are listed separately.

Composition

Moorings normally comprise a heavy, flat sinker (weight) attached to a substantial ground chain with a slightly lighter rising chain shackled to a floating support buoy.



Please note the following:

- The weight should be iron or steel, NOT concrete which loses 40% of its weight in water.
- Two or more sinkers or anchors with connecting bridle should NOT be used.
- The ground chain should be heavy enough to move on the seabed with relatively little pull on the sinker in most conditions. Lengths in the table below allow ground chain to act as a shock absorber.
- No shackles or swivels should be included in ground chain.
- The riser should be fitted with an egg link so it can be reeved through the ground chain
- Most moorings have a small 'pick-up' buoy with a handle attached to the chain by rope (this makes catching and lifting the chain easier).
- The rising chain or stop should be brought over the fairlead or roller and made fast to the main Samson post or cleat.
- A rope tail should be taken from the chain to another substantial fixing such as the mast (in case the cleat fails).
- Use NON-floating buoyline ie Nylon or Terylene, NOT Polypropylene, Courlene or Ulstron
- Ensure that the support buoy is of adequate size (12 inch diameter minimum) and is brightly coloured (white, orange or yellow)
- Support buoys must be clearly labelled with mooring number and preferably the boat name or number and tonnage
- The use of a large diameter nylon rope to act as a spring to take the snatch loads and to avoid damage to the yacht fittings is advised. This nylon rope is in addition to the chain, the nylon rope normally takes the load and the chain is the back-up in case of failure.

Recommended sizes

Any good sailing manual will give advice on moorings and articles appear in yachting magazines from time to time. Guidelines for tackle likely to be suitable at CCSC are given below.

This information is for moorings using support buoys; Hippo type buoys need 16mm or 18mm dia stock chains

Boat Length of boat (feet)	Sinker Wt of iron sinker (cwt)	Ground Chain		Rising Chain					
		Size (inches)	Length (metres)	Size (inches)	Length (metres)				
					Depth at HWS (metres)				
					2	4	6	8	10
10	2	-		$\frac{5}{16}$	6	12	18	24	-
12	3	-		$\frac{3}{8}$	6	12	18	24	-
16	3	$\frac{3}{4}$	4	$\frac{3}{8}$	4	10	16	22	26
20	4	$\frac{3}{4}$	4	$\frac{3}{8}$	4	10	16	22	26
25	5	1	6	$\frac{1}{2}$	4	10	16	22	26
30	7	1	6	$\frac{1}{2}$	-	10	16	22	26

35	10	1 ¹ / ₈	8	½	-	10	16	22	26
40	15	1 ¹ / ₈	8	½	-	10	16	22	26

Good practice in maintenance

1. Shackles:

- **Shackle failure is the most common cause of mooring failure.** Spend a little extra to purchase *tested* shackles.
- Shackles tend to undo themselves as a result of boat and mooring movement with wind, tide and sun. Ground shackles should be welded; surface shackles should be moused (bound with wire). Heavy greasing of the shackle pin tends to deter ingress of sand thus protecting the shackle from wear and further reducing the risk of it coming undone.

2. Chain

- Certified chain should be used - chain that has had every link welded and checked. All chain wears over time; ½" chain should last for 3 years, (some owners routinely change chain every three years); ¾" chain may need to be replaced annually.
- Stainless steel must NOT be used in any part of mooring tackle. Electrolysis will cause degradation to all other parts of the mooring. Also degradation of the stainless steel occurs internally preventing detection of its condition; thus when it fails, it is likely to do so without warning.
- If the ground chain reaches to the surface at LWS, the rising chain may more easily be replaced when necessary.

3. Finding lost moorings:

- It is advisable to note the exact position of **the sinker** by recording two sets of leading marks to the shore or taking a position by GPS. By recording the position of the boat rather than the sinker, with 6 metres of ground chain plus riser chain, the search area for a lost mooring could be more than 530m square (ie making the mooring more difficult to find in a weedy seabed).
- Consider attaching a small pellet buoy: a small float attached well below the surface so that it floats approximately 5' off the sea bed (ie above the weed) to aid divers' searches. Also consider adding a similar float to a winter chain.
- It is not difficult for moorings to change ownership inadvertently. Mark ground tackle so that it is clearly distinguishable; a suitably-labelled, welded metal disc is ideal.

4. Avoiding wear

- When a boat is **not** on its mooring for protracted periods, movement of the floating support buoy (with wind, tide and sun) will cause the rising chain to move across the sea bed and wear over a length of about 5'. When not in regular use, to minimise wear, moorings should be '**winterised**'. Attach sufficient ¼" chain to drop the rising chain to the seabed. A lighter weight float can be used. Rope may be used in place of ¼" chain in summer but is vulnerable to propellers of boats fishing in the mooring area in winter.
- Boats tend to revolve in one direction as the wind follows the sun. If a boat remains tied to its mooring for a protracted period, the chain becomes twisted causing wear. Boats and chains should be inspected regularly and the chain untwisted.
- Some maintenance can be completed on the water, including lightweight welding (The Club has portable welding equipment) but substantial welding, (eg repairs to staples on ground plates) requires commercial level welding equipment.

For further information, or if in any doubt about how to proceed, please contact me or any other Committee Member (see handbook) who will put you in touch with someone who can help.

We wish Members all good sailing with fair winds

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