

Boat Types

There are several different types of boats. They are classified using:

- **Number of rowers.** In all forms of modern competition the number is either 1, 2, 4, or 8.
- **Position of coxswain** (also referred to as cox). Boats are either coxless (*straight*), bow-coxed (also called bowloaders), or stern-coxed.

Although sculling and sweep boats are generally identical to each other (except having different riggers), they are referred to using different names:

- Sweep: coxless pair (or straight pair) (2-), coxed pair (2+), Coxless four (or straight four) (4-), coxed four (4+), eight (8+) (always coxed)
- Sculling: single scull (1x), double scull (2x), triple scull (3x) (very rare), quad (or quadruple) scull (4x), octuple scull (8x) (always coxed, and mainly for juniors and exhibition)
- Sweep/Sculling: Queep, 2 scullers and 2 sweepers (very rare) Randan 1 sculler and 2 sweepers (very rare)

With the smaller boats, specialist versions of the shells for sculling can be made lighter. The riggers in sculling apply the forces symmetrically to each side of the boat, whereas in sweep oared racing these forces are staggered alternately along the boat. The sweep oared boat has to be stiffer to handle these unmatched forces, so consequently requires more bracing and is usually heavier – a pair (2-) is usually a more robust boat than a double scull (2x) for example, and being heavier is also slower when used as a double scull. In theory this could also apply to the 4x and 8x, but most rowing clubs cannot afford to have a dedicated large hull which might be rarely used and instead generally opt for versatility in their fleet by using stronger shells which can be rigged for either sweep rowing or sculling. The symmetrical forces also make sculling more efficient than rowing: the double scull is faster than the coxless pair, and the quadruple scull is faster than the coxless four. One additional boat is the *queep*, a coxed or non-coxed shell. The bow and stroke positions have a set of sculling riggers and two and three have a sweep set. These shells have been used in the UK and recently at a club in Victoria BC, Canada. In addition to the queep the *trop* and the *coxed trop* are becoming more mainstream. They are mainly rowed in central Canada. The trop shell consists of three people where the bow has a pair of sculling oars, and 2,3 each a sweeping oar. A coxed trop is the same configuration as the trop plus a coxed seated at the stern of the boat. Many adjustments can be made to the equipment to accommodate the physiques of the crew. Collectively these adjustments are known as the boat's rigging.

Racing shells stored in a boathouse.

Racing boats (often called *shells*) are long, narrow, and broadly semi-circular in cross-section in order to reduce drag to a minimum. They usually have a fin towards the rear, to help prevent roll and yaw and to increase the effectiveness of the rudder.

Originally made from wood, shells are now almost always made from a composite material (usually carbon-fibre reinforced plastic) for strength and weight advantages.

FISA rules specify minimum weights for each class of boat so that no individual will gain a great advantage from the use of expensive materials or technology.