

WELCOME TO ROWING 101

Many parents have never rowed. In fact, most parents experience the sport of rowing for the first time when their child joins a rowing program. Chances are if you've already been to a regatta, most of you didn't have a clue what was going on! Don't worry, you're not alone. 'Rowing 101' is an informational article designed to give you a quick and easy course in the sport of rowing. Simply follow along and you will soon look and sound like a rowing veteran!

WHAT IS A RACING SHELL?

The 'racing shell' got its name because the skin (hull) is thin, usually only 1/8" to 1/4" thick. Until the mid-1970's, racing shells were constructed out of wood. Today, most boats are made of composite materials including fiberglass or carbon fiber Kevlar, to name two. Stiffness and weight are its two most important factors. The Vespoli Millennium eight that won the Gold and Silver medals at the 2000 Olympics holds eight strapping 200+ pound rowers and a 110 pound coxswain – all the while weighing only 204 pounds itself! Vespoli Boats use the most state-of-the-art components and technology and produce some of the world's lightest, stiffest and fastest racing shells.

Racing shells fall into two broad categories - sweep and sculling boats. Rowers in sweep boats have one oar each, while scullers have two oars apiece. Most high school and college rowing is done in sweep boats, while club and international rowing includes both sweep and sculling boats.

SWEEP BOATS

Remember, in sweep boats each rower has one oar. There are five types of sweep boats - a straight pair (two rowers), a pair/with (two rowers and a coxswain), a straight four (four rowers), a four/with (four rowers and a coxswain), and an eight (eight rowers and a coxswain). Chances are your son or daughter rows in either a four/with or an eight. These are the predominant classes in high school and college rowing.

FOUR/WITH – A four/with (again, four rowers and a coxswain) is made in two configurations: bow-coxed and stern-coxed. You will notice that most pairs have the coxswain in the bow. You can usually only see the coxswain's head above the gunnels. The bow-coxed four is the racing configuration and is used now by most crews. The stern-coxed four is a more unusual, older design and is slower than the bow-coxed version. Steering for the four/with is accomplished by a rudder attached to cables.

Communication between the coxswain and the rowers (particularly in a bow-coxed four) is done through a small battery powered amplifier (cox box) used by the coxswain with several speakers mounted near the rowers. Somewhere the myth got started about the coxswain yelling, "stroke, stroke, stroke" each time the oars would enter the water. They do not! What a good coxswain does do is steer the boat straight, relay the position of other boats and motivate the rowers. The coxswain is always the smallest person in the boat, generally no heavier than 115 pounds.

EIGHTS – The eight is the sweep boat used by most men's and women's larger high schools and college teams. Eights are usually 60+ feet long and weigh 204 – 240 pounds depending on construction material. An old rule of thumb is 'the lighter and stiffer the boat, the faster and more expensive'! Top of the line racing eights, like the Vespoli Millennium and Millennium II (M2) are lighter and faster than the less expensive, heavier boats. Most elite international and college crews row in high tech boats like the Vespoli Millenniums. Vespoli also builds less expensive, but durable, fast racing shells for rowing programs unable to afford a fleet of elite boats.

ROWING CLASSES

There are two classes in rowing: lightweight and heavyweight (also known as open weight). Although virtually all high school crews are open weight, some colleges and large high schools offer both men's and women's lightweight rowing programs.

LIGHTWEIGHT – To qualify as a men's lightweight boat, no single rower can exceed 160 pounds and the boat average no more than 155 pounds. For women, the individual maximum is 130 pounds and the boat average no more than 125 pounds.

HEAVYWEIGHT (OPEN) – There is no maximum weight for either men or women in the heavyweight (open) class.

GLOSSARY OF COMMONLY USED ROWING TERMS

If you get comfortable with this list of rowing terms, you will dazzle your young rowers as well as have an understanding of their 'rowing talk'!

Blade – the 'business end' of the oar; the part that goes into the water

Boathouse – a building used for storing boats

Bow [pronunciation: rhymes with 'wow'] – the forward part of the boat

Bowball – a rubber ball attached to the point end of the bow to protect against unintentional impact

[A very, very close race is often described as 'winning by a bowball.']

Bowman – the number 1 seat in the bow

Catch – the point where the blade enters and 'catches' the water

Check – an unwanted motion of the boat when it appears to momentarily stop in the water

Cox Box – now a generic name for a battery powered, small amplifier that allows the coxswain to communicate with the crew; also gives the coxswain stroke rate information

Crab – when the oar blade gets stuck in the water during the stroke; can cause the boat to slow dramatically, and may even throw the rower from the boat

Crew – a team of rowers

Double – a shell with two scullers; sometimes designated as a '2-'

Eight – a shell with eight rowers and a coxswain; symbol is '8+'

Ergometer (erg) – a machine to simulate the rowing stroke; popular as a training tool and used in indoor competition

Feather – the motion of turning the blade parallel to the water during the stroke

Fin – an appendage in the stern of the boat that is used to keep the boat running straight in the water

Finish – at the end of the rowing stroke when the blade is taken out of the water; a 'clean finish' (no splash or drag) is important to maintain boat speed

FISA – Federation Internationale Societe de Aviron - the international federation that oversees rowing

Footstretcher – the foot rest to which the shoes are attached

Four – a boat with four sweep rowers

Gunwale – the top edge of the hull

Hatchet - a very common type of oar blade that is somewhat square

Hull – the outside skin of the boat.

Jumped Seat – the unpleasant event that happens when a rower slips off his seat while rowing

Jumped Slide – when the seat comes off of its slides

Keel – the spine of the boat from bow to stern

Launch – to put the racing shell into the water OR the boat which the coach uses to follow the crews

Megaphone – a device formerly used to communicate between coxswain and crew, but with the advent of the cox box they are seldom used

Oar – the device that uses leverage to move the boat through the water

Pair – a boat with two sweep rowers

Port – the nautical term for left; describes the position of a rower in the boat. [One's oar either enters the water from the port or starboard side of the boat; therefore you are either 'a port' or 'a starboard'.]

Port-rigged – a shell rigged so that the stroke oar (#8) is a port oar

Power 10 – a race tactic whereby the crew pulls as hard as possible for 10 strokes

Puddle – the effect in the water caused by the movement of the oar, particularly at the end of the stroke

Racks – wood or metal structures in the boathouse used to hold the shells

Ready-All, Row – starting command for most races

Ribs – provide the stability and rigidity (skeleton) in some boats

Rigger – metal (usually aluminum) structure that protrudes from the boat and provides a structure to hold the oar lock and the oar OR a person who actually rigs the boats by attaching the riggers et al

Rowing – the name of the sport

Rudder – an appendage under the stern of the boat used to turn the shell

Scull – the act of rowing a boat with each person having two oars OR the actual boat

Set-up – balancing the boat as it is rowed [A boat is 'set-up' when all the oars are equidistant from the water.]

Single – a one-person shell

Sky – the effect of lowering the hands too much and causing the oar to be too high off the water at the catch

Spacing – the actual distance between the puddles of all the rowers

Stakeboat - the small, anchored boat that is used to hold the shells in place before the start of a race

Starboard – the nautical term for the right side

Starboard rigged – the stroke (#8) is rowing from the starboard side

Stroke – the #8 rower (last rower toward the stern) who sets the cadence

Strokerate – the number of strokes per minute [In a race, this is usually between 34 and 38 strokes per minute.]

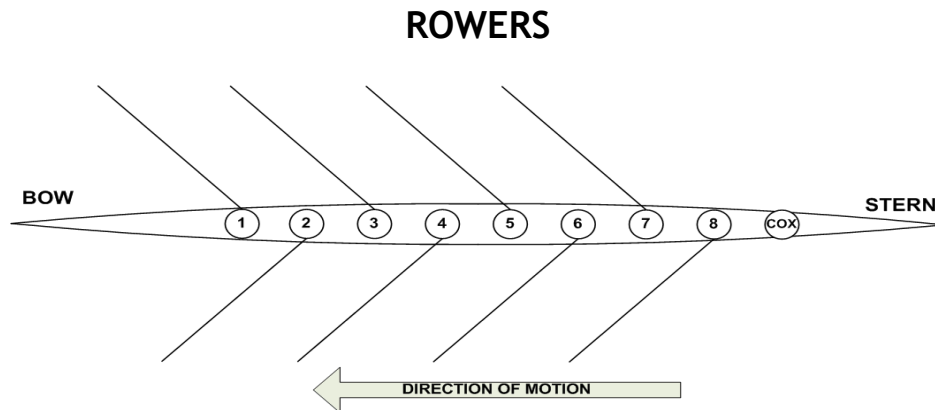
Strokewatch – used by the coxswain to measure the strokerate

Sweep – a boat in which each rower has one oar

Track – metal grooves that keep the seat wheels on a straight line

Wash – wake turbulence caused by the motion of the boat through the water

Weigh-Enough – a coxswain command to have all rowers stop rowing



Boat positions within an 8+ shell.

STERN PAIR

The 'stroke' is the rower closest to the stern of the boat. Everyone else follows the stroke's timing - placing their blades in and out of the water at the same time as stroke. The stroker can communicate with the coxswain (when in a stern-coxed boat) to give feedback on how the boat feels. During a race, it is the stroke's responsibility to establish the crew's rate (number of strokes per minute) and rhythm. (In coxed boats, the coxswain will assist the stroke in establishing the rate). Because of the great responsibilities, the rower in the stroke seat is usually one of the most technically sound members. The next rower ('seven' in an eight) sits directly behind stroke and is typically both fit and skilled: this rower acts as a buffer between the stroke and the rest of the crew. They closely follow the rhythm set by the stroker and help transmit this rhythm to the rest of the boat, and particularly to the rowers rowing on the same side as seven, since rowers tend to look at the blades on their side of the boat to check their timing.

MIDDLE CREW

The middle rowers of a crew (numbers 2 and 3 in a four, and 3, 4, 5 and 6 in an eight) are normally the most powerful and heaviest rowers, often called the **Fuel Tank**, **Engine Room**, **Power House** or **Meat Wagon**. The boat pitches and yaws less in the middle, and the oarsmen there have less effect on these movements, being closer to the centre of mass and centre of buoyancy. Therefore, the rowers in the middle of the boat do not have to be as technically sound or reactive to the movements of the boat, and can focus more on pulling as hard as they can. It is common practice among crews to put the most technically proficient rowers at the bow and stern and the physically strongest and heaviest rowers in the center.

BOW PAIR

The rower closest to the bow of the boat is usually called either 'bow' or the 'bowman'. In coxless boats, the bowman is often responsible for giving calls to the crew. The **bow pair** of bow and 'two', who are the two rowers closest to the boat's bow, are more responsible for the stability (called 'set') and the direction of the boat than any other pair of rowers, and are often very technical rowers. The bow of a stern coxed boat is subject to the greatest amount of pitching, requiring the bow pair to be adaptable and quick in their movements. Boats that are bow coxed rely on communication between the bowman and the cox - as the cox cannot see boats coming up from behind. Bowmen tend to be the smallest of the rowers in the boat.