

Rowing Terms and Commands

For the novice rower and parents, understanding what rowing is all about first requires learning a new language. Fortunately, the vocabulary of rowing is not long and it is in English. Key terms and phrases to know are provided below. Please take some time to become familiar with them. It will quickly enhance your understanding of the sport and your ability to converse knowledgeably about it.

The Boat (Shell)

There are two types of boats or shells used in rowing, **sweep** boats and **sculling** boats. In sweep rowing, each rower uses only one oar. In sculling, the rower used two smaller oars, or sculls. Sweep boats can have two, four, or eight rowers. Sculling boats have one, two, or four rowers. Each boat may or may not include a coxswain, the person who steers the boat. For brevity, each type of racing shell has a specific designation code as follows:

NUMBER: How many rowers are in the shell
X If there is an X, it means they scull. No X means they sweep.
+ or - + means there is a coxswain on board. - means there is no coxswain.

SINGLE (1X): One rower, no coxswain.



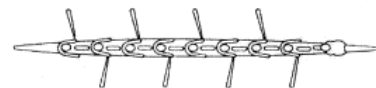
PAIR (2-): Two rowers with one oar each.



FOUR (4+): Four rowers with one oar each and a coxswain.



EIGHT (8+): Eight rowers with one oar each and a coxswain.



Each seat in the boat is numbered from the bow to the stern. Coxswains can sit either in the stern or the bow of the boat, depending on how big the shell is and how it is constructed. Steering is accomplished by the coxswain or by a rower using a rudder. However, single and double boats usually steer by changing the pressure applied to the port (left) and starboard (right) oars. The rower immediately facing the coxswain (stern) is called the **stroke**, and works with the coxswain in setting the stroke rate of the crew.

Modern racing shells are constructed of fiberglass and different high tech polymers and are very thin (hence the term "shell"). They vary in length from 60 feet for an 8-oared boat to 24 feet for a single scull. The larger shells weigh about 220 pounds. Racing shells reach speeds of up to 15 mph. Oars are usually about 12 feet long, with blades about 24 inches in length. The cost of a new shell can be up to \$35,000.

Glossary

Bow: Forward section of the shell, the part of the shell, which crosses the finish line first. Also used as the name of the person sitting nearest to the bow. The crew always faces the stern.

Stern: The rear of the racing shell. The direction the rowers are facing.

Starboard: The right side of the shell when looking at the bow. Oars on the starboard side of a standard-rigged boat are the Bow, 3, 5, 7.

Port: The left side of the boat when facing the bow. Oars from the stern forward are stroke (8), 6, 4, 2.

Seat: Where the rower sits.

Stretcher or Foot Stretcher: Where the rower's feet go. The stretcher consists of two inclined footrests which hold the rowers shoes. The rowers' shoes are bolted into the foot rests. The stretchers are moveable forward or backward to allow rowers of different leg lengths maximum slide range.

Tracks: The set of metal runners set inside the shell, to accept the wheels on the bottom of each rowers seat (slide).

Slide: Both the physical rails upon which the seat rolls, and the part of the stroke when the seat is moving, both during the drive and during the recovery.

Backstops: The end pieces of the track that prevent the seat from sliding off the back.

Frontstops: The endpieces of the track that prevent the seat from sliding off the front.

Gunwale: The top edge of a boat's side: pronounced "gunnel."

Rigger: The metal or carbon-fiber arms attached to the exterior side of the shell to which the oarlocks are attached. The rigger acts as the fulcrum. Also used as the name of the person who rigs boats, a "roving mechanic."

Oarlock: The device that holds the oar at the end of the rigger.

Gate: The metal or plastic rod fastened across the top of the oarlock that keeps the oar in the oarlock.

Rigging the Shell: To transport the shells to the Regattas requires the riggers to be removed. Rigging the shell is the act of attaching the riggers to the shell.

Rudder: Small, moveable piece on the bottom of the shell by which the coxswain can steer the boat.

Skeg: The stationary fin located at the stern section of the boat used to help stabilize the shell in holding a true course. It is not the same as the rudder.

The Oar

Oar: Used to drive the boat forward. Rowers do not use paddles.

Grip: The rubber or wooden part of the oar handle the rower holds onto.

Shaft: The main part of the oar between the grip and blade.

Blade: Refers to the business end of the oar, the wide flat part that contacts the water. Sometimes is used to refer to the entire oar. Blades are commonly longitudinally symmetrical (**spoons**) or shaped like hatchet blades (**hatchets**).

Collar: Also known as the **button**; this is the ring around the sleeve of the oar that is moved to adjust the load on the oar, and the relative length of the handle.

The Rowing Stroke

The rowing stroke is what drives the boat forward and a boat will only move as fast as the blades drive it. The stroke is a precise movement requiring the coordinated action of the rower's legs, back, and arms to generate power in one fluid motion. The stroke begins when the rower places the blade in the water and ends when the blade is removed from the water and is posed to begin another cycle. This cycle can be divided into four distinct phases: the **catch**, **drive**, **finish** (or release), and the **recovery**.

The **catch** starts when the blade enters the water at the end of recovery. It is accomplished by an upward motion of the arms only, elevating the grip and lowering the blade into the water. The rower is fully "compressed (knees bent, arms reaching forward) and up the slide (most forward position)". The blade is fully "**squared**" (perpendicular) to the water at this time.

The **drive** is that part of the stroke cycle where the rower applies power to the oar. This consists primarily of the leg drive, then straightening the back, and finally pulling in the arms. Most of the power in the stroke is accomplished during the leg drive. At the **finish**, the legs are straight and the hands have finished pulling the oars into the body. The rower is leaning back and pushing down on the oar handle to make it come out of the water. When the blade comes out of the water it is immediately rotated or "**feathered**" so that it is parallel to the surface of the water.

The **recovery** consists first of a quick "hands away" motion, pushing the oar handle forward to the full length of the arms, followed by the rower swinging the upper body back to a slightly forward body angle position. The rower then moves slowly back up the slide towards the catch. If the rower slides forward too fast, he/she will check the forward motion of the boat and slow it down. The timing of the slide must be consistent with the forward motion of the boat. Common terms used to describe errors in this phase are "**rushing the slide**" -moving the seat too rapidly to the stern, and "**shooting the slide**" failing to keep the seat under the rower during the drive, thus increasing body angle inappropriately.

Additional Terms

Back or backing: To propel the shell backwards by turning the concave side of the blade towards the bow of the shell and pushing the handle away from the body while the blade is in the water. Often one side of the boat while the other rows normally in order to spin the shell around.

Bow splash: The splash produced by the blade entering the water at the catch while the blade is moving toward the bow.

Catch: That part of the stroke cycle where the rower puts the blade in the water while simultaneously reversing direction on the slide.

"Catching a crab:" Rower saying, meaning the rower's blade entered the water at an angle, instead of perpendicular. As a result, the blade gets caught under the surface of the water, usually at the end of the pull through. Most likely to occur in choppy and poor conditions.

Checking it down or Holding Water: To place the blades of the oars vertically in the water as a means of slowing or stopping the shell.

Check it hard: To immediately stop rowing and quickly place the blades vertically in the water; to stop the shell quickly.

Drive: That part of the stroke cycle when the blades are in the water.

Feather: Rolling the oar handle in your fingers so the blade is parallel to the water.

Finish: That point in the stroke cycle immediately prior to the release, where the power is being applied solely by the back and arms.

Full slide: Type of stroke where the seat is moved on the tracks, so that the rower used legs, back and arms.

Half Pressure: The application of power in a racing shell such that the rowers are rowing half as hard as they can at full pressure. The rowers are pulling harder than they would at paddle pressure, but not as hard as if they were rowing at full pressure.

Layback: The rower's act of leaning back toward the bow during the stroke. Layback should not be more than a few degrees past vertical.

Piece: A term referring to any period of work performed in the shell. Might be a ten minute piece, a 500 meter piece, or a 20 stroke piece.

Puddles: The marks left by the blade on the water after the release. The puddles indicate the "run" of the boat by showing how far it has traveled since the previous stroke.

Recovery: The part of the stroke cycle where the oars are out of the water.

Release: The downward motion of the hand that serves to remove the blade from the water

and start the recovery.

Rating: The number of strokes rowed per minute. Also known as Stroke Rating.

Run (or Spacing): The distance the shell moves during one stroke. Good spacing means the crew is letting the boat work while they are on the recovery. By rushing the recovery, the crew will make the shell surge towards the stern immediately prior to catching and shortening the run for that stroke.

Rush: A technical error caused by sliding relatively too quickly and abruptly toward the stern.

Set: The balance of the boat.

Settle: The part of the race (or other piece) where the crew decreases the rating from the initial high stroke to a lower pace that the crew will maintain until the final sprint.

Skying: The incorrect action of carrying the hands too low during the recovery, especially when the rower dips his/her hands just prior to the catch (i.e. sort of winding up). This action usually results in the blade being too high off the water's surface.

Stroke: The rower who sits closest to the stern and the coxswains. The stroke sets the rhythm for the boat. All rowers behind the stroke must follow the stroke's cadence.

Swing: Occurs when the entire crew is moving perfectly in unison and the shell seems to be moving very fast without much effort.

Washing out: When the blade comes out of the water during the drive - creating surface waves, losing power and unsteading the shell.

Coxswain Commands

The coxswain (cox or cox'n) is an essential member of the crew, just as essential as the rowers themselves. The coxswain's primary job is to keep the boat moving straight and the rowers in synchrony. The coxswain calls out instructions and the stroke rate. The coxswain is also responsible for the safety of all the rowers in the boat as well as all of the equipment. The common commands described below will hopefully give the reader a sense of the dynamics of rowing and how the crew works together as a team. However, each coxswain/coach has individual preferences for these and/or other commands. All novice rowers should pay attention to and learn the commands specifically used in training.

During a race, the coxswain uses a **cox-box** to monitor the rower's stroke rate and call out the optimal cadence. The cox-box is a small electronic device that amplifies the coxswain's voice and also provides a read out of important rower performance information. There are a series of small speakers in the boat under the seats that transmit the commands of the coxswain to the rowers.

"SIT READY TO ROW:" The command to begin rowing. The coxswain generally give specifics on

the type of warm-up or drill, otherwise rowers row regularly on hearing the final command, "Row".

"HOLD WATER!" or **"CHECK IT DOWN!"** The coxswain's call that tells the rowers to drag their oar blades through the water perpendicularly, effectively stopping the boat.

"LET IT RUN!" or **"LET IT GLIDE!"**: The coxswain call for all rowers to stop rowing and to pause at the finish oars off the water, letting the boat glide through the water and coast to a stop. Used as a drill to build balance. This command is used in some programs interchangeably with weigh enough although originally it meant something different.

"POWER 10 (or 20 or 30 etc.)": The coxswain calls for a specific number of power strokes. A power stroke is a stroke that musters all the strength you can give. This is often a tactical move in a race, used to focus the rowers' energy for a surge.

"WEIGH ENOUGH!": All rowers stop rowing with blades dragging on water. This call actually sounds like "way nuff".

"SLOW THE SLIDE" or **"ADJUST THE RATIO"**: This command is used to correct either a rush or sluggishness on the recovery. The ratio compares the time used on the drive to the time spent on the recovery.

"BACK IT DOWN": The command to row backwards. The blades do not need to be turned around in the oarlocks although they can be.

"PADDLE" or **"ON THE PADDLE"**: Row at no pressure or to stop the drill/ piece. Instructing one side to paddle through will turn the boat to that side assuming the other side is rowing regularly."

"LAY HOLD" or **"HANDS ON!"**: Grab onto the boat and prepare to move it.

Rowing is a sport that can be enjoyed throughout an entire lifetime. It is not an easy sport, but the challenges and trials it presents make the rewards and benefits of the sport much sweeter. Rowing is demanding, both physically and mentally. It requires focus, dedication, hard work, personal sacrifice, and a willingness to work together as part of a team. These are attributes that serve the rower well throughout life. The rewards are many, though they are not all obvious, except to the rower and his/her team. Confidence, knowing success, knowing failure, understanding the value of teamwork, and friendship are among them.

Rowing is a very personal sport, measured mostly by one's own improvement, and occasionally by the sweetness of victory on the racecourse. It is decidedly character building, and moreover, it is simply fun!

Taken and modified from: www.srarowing.com/newrower/rowingprimer.aspx