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Wemmer Pan Rowing Club

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An Introduction to Rowing Terminology

Two Types of Rowing

There are two distinct rowing techniques, distinguished by the number of oars or blades each rower uses.

SWEEP Each rower rows with both hands on a single oar or blade on one side of the boat. The length of the oar is about 4 metres.

SCULLING Each rower uses two oars, one in each hand, one on each side of the boat. The length of each oar is about 3 metres.

Boat Configurations

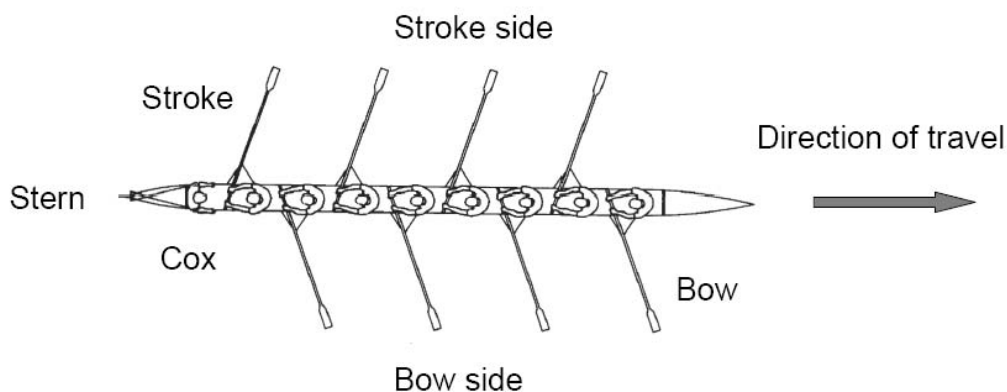
There are four different standard boat sizes, distinguished by the number of rowers in the boat or shell (whether 8, 4, 2, or 1). A symbol is used to indicate whether the boat has coxswain or cox (+) or without a coxswain or coxless (-). A further symbol is used to indicate whether the boat is a sculling boat (x).

Different naming conventions apply to sweep oar (eight, four, pair) and sculling boats (oct, quad, double, scull).

Standard sweep oar boat configurations are: **8+** (an eight); **4+** (a coxed four); **4-** (a coxless four); and a **2-** (a pair).

Standard sculling boat configurations are: **8x** (an oct); **4x+** (a coxed quad); **4x-** (a coxless quad); **2x** (a double); and **1x** (a scull).

Seats in a boat are numbered from the bow (bow or 1) towards the stern (stroke or 8 in an oct or quad). The coxswain in a coxed boat is seated at the stern, but also commonly in the bow for quads and fours. The rower closest the stern of the boat is called stroke because s/he sets the rate for the entire crew.



The diagram above shows an eight-bladed sweep oar shell (8+) with a stern cox.

Rowing Terminology

"ABOVE HEADS!"	Command to the crew to lift the boat over their heads, one hand on each saxboard.
AIRSTROKE	The rower starts the drive before the catch has been completed (or even started in some cases). This is also referred to as "rowing into the catch".
ALIGNER	The person at the start who aligns the boats evenly for a fair start.
BACK DOWN	Using a reverse rowing action to manoeuvre the boat backwards or for turning.
BACK STAY	The back brace of a rigger that locks the pin in position to maintain pitch (not found on wing rigger boats).
BACK STOPS	The end of the slide nearest the bow. Prevents the seat from running off the slide. Also used to describe the position at which the rower sits with their legs straight and blade to their chest.
BLADE	The face of the oar that enters the water during the rowing stroke. Also used to refer the whole oar.
BOW	End of the boat closest to the direction of travel. Also can be used to refer to the rower in seat number one. Bow-four refers to seats four through one. Bow-pair refers to seats two and one.
BOWBALL	Ball shaped safety cap that sits over the bow end of the boat, made of rubber or plastic. Compulsory on all rowing boats for safety of other water users.
BOWSIDE	The left-hand side of the boat from the rower's perspective, but the starboard (right-hand) side of the boat from the cox's perspective. Often marked by a green stripe on the oar.
BURST	A small number of strokes (usually less than a minute) taken at full pressure in training.
BUTTON	The plastic circular section of the oar that is pressed against the swivel when rowing.
CANVAS	Covering which encloses the bow and stern sections of the boat. Also used to measure distance at the start or during a race - one canvas is about two metres.
CATCH	The moment of entry of the spoon of the blade into the water during the rowing stroke. Immersion and the application of force should be indistinguishable actions.
CHECK	Bad technique that slows the boat down. Essentially, the momentum of the rowers sends the boat in the opposite direction.
CLEAVER	Type of blade that has a spoon in the shape of a meat cleaver.
CLOGS	Flexible shoes permanently attached to the foot stretcher, into which the rowers fasten their feet, and with a quick-release mechanism in case of emergencies.
COACH	Someone who follows the boat in a motor boat shouting instructions to the crew.
COLLAR	Plastic sleeve fixed to the oar that the button circles. The button can be moved along the collar to adjust the gearing of the blade.
CONNECTION	Used to describe the link between the power of a rower's legs to the force applied to the spoon of the blade. Should be made as soon as the catch is taken and held through the trunk muscles for the length of the work section of the stroke.
COX	(or COXSWAIN) A very important member of the crew. Their primary job is steering by means of strings or wires attached to the rudder, but they also provide race feedback about location on the course and relative to the other crews and stroke rate per minute. They serve as an in-boat coach during races, usually using a 'cox box'. They do call "power tens" and encourage, but don't go "stroke, stroke, stroke."
COX BOX	Electronic device which aids the coxswain by amplifying his/her voice through a small microphone and speaker system, and by displaying certain key information such as stroke rate, time, water speed.

COXLESS	Boat without a cox, such as a coxless four or coxless quad (to distinguish from a coxed four or a coxed quad). Doubles (usually), pairs and sculls are coxless boats.
CRAB	A stroke that goes bad. The oar blade slices into the water at an angle and gets caught under the surface, and will check or even stop the boat. A bad crab can catapult the rower out of the boat.
CREW	The rowers who make up the team in a boat.
DOUBLE	Boat for two scullers, usually coxless.
DRIVE	Part of the stroke where the rower pulls the blade through the water using legs, back and arms to propel the boat.
"EASY ALL!"	Coxswain call to have all rowers stop rowing.
EIGHT	Boat for eight sweep rowers. Will always have a cox.
ENGINE ROOM	The big powerful rowers in the middle of an eight or oct, at seats 6, 5, 4, 3.
ERGO	(or ERGOMETER) A land-based machine designed to simulate the actual rowing motion; used for training and testing.
EXTRACTION	The removal of the blade from the water by application of downward pressure to the blade handle. In sweep this is done with the outside hand on the blade handle. The movement is easiest when force is applied to the spoon of the blade until the last moment.
FEATHERING	Rotating the oar in the oarlock so that the blade spoon is parallel to the surface of the water, usually during the recovery portion of the rowing stroke. This is the position of the blade spoon for the recovery section of the stroke. Rowers must be careful to extract the blade fully before feathering.
FIN	A piece of metal or plastic attached to the underside of the boat towards the stern. Provides directional stability by preventing sideways slippage.
FINISH	Part of the stroke after the drive where the blades come out of the water. The rower removes the oar from the water, by first pushing down and then away with the hands. Following this (assuming clean extraction) the boat will be at its maximum speed. Force must be applied to the spoon right to the finish so that water does not catch up with the spoon.
FIRM	Term used to suggest that the rower is applying full pressure to the power phase of their rowing stroke.
FISA	The Federation Internationale des Societes d'Avion is the international rowing federation. The federation is responsible for all international racing and rules. Organises a series of 3 World Cup Regattas and World Championships annually.
FIXED SEAT	Either a description used to differentiate a boat without a sliding seat mechanism, or a technique where the rower rows using arms and body swing only and therefore not moving their seat.
FOOT STRETCHER	Part of the boat where the shoes are attached and where the rower pushes his legs against on the drive.
FOUR	Boat for four sweep rowers. Can be coxed or coxless.
FRONTSTOP	The end of the slide nearest the stern. Prevents the seat from running off the slide. Also used to describe the position at which the rower sits with their legs at 90 and the blade spoon at the furthest point to the bows.
"FULL CREW, ROWING FROM BACKSTOPS. ARE YOU READY? GO!"	This is a classic command. The cox specifies who the command is directed to, what they are to do, and gives them time to prepare. When the cox can see that the crew is ready they say 'Go!' to execute the command.
GATE	The metal bar, tightened by a screw that closes over the swivel to secure the oar in place.

GEARING	Term used to describe the ratio of inboard to outboard on the blade that determines how much power the rower can apply through the water.
GRA	Gauteng Rowing Association, the Constituent Member of RowSA responsible for administration of rowing in Gauteng.
GSRF	Gauteng Schools Rowing Federation, the federation of school clubs in Gauteng affiliated to SASRU which a Constituent Member of RowSA responsible for administration of school rowing affairs. It is in process of incorporating junior clubs into its administration and affairs.
"HANDS ON!"	Command to the crew to put their hands on the saxboard and get ready to lift the boat.
HEAD RACE	A rowing race where the shells race against the clock over a set distance. The crew with the fastest time wins. Usually run as a processional race, with crews starting one behind the other rather than side by side.
HEEL RESTRAINTS	Attached to the heels of the shoes and to the foot plate. Compulsory safety feature that helps the rower to release their feet from the shoe in the event of a capsize.
HEIGHT	Measurement of distance from seat to point of work at the centre of the bottom edge of the swivel.
"HOLD HARD"	Verbal instruction meaning to hold water in order to bring the boat to a stop quickly. Perform an emergency stop.
"HOLD WATER!"	Coxswain call that makes all the rowers drag their blades through the water perpendicularly, effectively stopping the boat.
INBOARD	The length of the blade from the end of the handle to the button at the point where it will sit against the swivel.
KEEL	The steadiness of the boat. If the boat alternates leaning from side to side, it is a sign of bad technique.
LATERAL PITCH	The outward angle of inclination of the pin to the vertical.
LAYBACK	Term for how much the rower leans back at the finish. Too much is bad; too little is also bad.
LEG DRIVE	Term used for driving the legs against the foot stretchers on the drive portion of the rowing stroke.
"LET IT RUN!"	Coxswain call for all rowers to stop rowing and to pause at the finish, letting the boat glide through the water and coast to a stop.
LENGTH	Length of stroke; the arc through which the blade turns when it is in the water from catch to finish.
LOOM	The shaft of the oar from the spoon to the handle.
MACON	Type of blade that has the traditional shape of spoon.
MISSING WATER	Bad technique where the rower isn't moving the blade through the water as much as possible. Usually caused by not getting the blade in the water soon enough at the catch, leading to a shortened stroke. Therefore, missed water equals less movement of the boat.
NOVICE	Term used to describe someone who has very little rowing experience.
OAR	Lever used to propel a rowing boat. Also known as a blade.
OUTBOARD	The length of the blade from the tip of the spoon to the button at the point where it will sit against the swivel. (Or, the engine on the coaching launch.)
OVERLAP	The amount by which the scull handles overlap when an athlete holds them horizontally at right angles to the boat.
PADDLE	Easy rowing at low rating and with minimal pressure.
PAIR	Boat for two sweep rowers.
PIN	The spindle on which the swivel rotates.

PITCH	Angle of inclination of the spoon to the vertical during the propulsive phase of the stroke. This is dictated by both the stern and lateral pitch.
"POWER 10!"	(or 20 or 30 etc.) - Coxswain call to take a certain number of power strokes. A power stroke is a stroke that musters all the strength you can give.
PRESSURE	The amount of effort applied by the athlete to the power phase of the stroke (usually light, 50%, 60%, 70%, firm or full).
POSTURE	Position of back and shoulder muscles during the stroke cycle.
POWER PHASE	The part of the stroke between the beginning and the extraction when the blade is in the water and propelling the boat.
PUDDLE	Swirl left in the water after the blade has been extracted at the end of the stroke.
PUSH	Tactical increase in speed.
PYRAMID ROWING	Strength / endurance building drill where the cox calls an increasing series of power strokes, then a decreasing series of power strokes (e.g. 'Power 10', '10 normal strokes', 'Power 20', '10 normal strokes', 'Power 10').
QUAD	Boat for four scullers. Can be coxed or coxless.
RATE	Number of strokes rowed per minute – used to advise the crew of their working rate. The cox may use the term 'pip' to describe a relative increase in rate: eg "Take the rate up two pips from 34 to 36."
RATIO	The ratio between the recovery phase of the stroke and the drive or power phase of the stroke. The recovery time should always be longer than the drive time; ideally three times as long.
"READY ALL. ROW!"	Coxswain call to begin rowing.
RECOVERY	Part of the stroke between the extraction and the beginning or catch, when the blade is out of the water, and where the rower comes back up the slide slowly towards the next catch. The oar is pushed away from the body by extending the arms, reaching the body forward and compressing the legs so the shin is vertical, preparing for the next Catch. The oar should not drag on the water.
REGATTA	An organised race between crews.
RELEASE	Another term for finish.
RIGGER	An apparatus attached outside the boat to its outer shell next to each seat to provide a fulcrum for the lever (oar), and which support the swivel and the pin. There are currently several different designs of rigger, from two or three stay metal or carbon tubing to metal or carbon wings.
RIGGING	The way in which the riggers, slides, swivel, pins, foot plate, oars and sculls can be adjusted to optimise athlete comfort and efficiency.
RIGGER JIGGER	A small spanner used for attaching and adjusting riggers.
RUDDER	A little movable fin on the bottom of the boat that the coxswain (or the stroke rower in a coxless boat) can control to steer the boat. Linked to the cox or a crew member by wires.
RUN	The distance the boat moves after a stroke. Long run is very good. Run can be visually measured by the distance between the last puddle made by two-seat and where stroke's blade enters the water.
RUNNING START	A racing start undertaken with the boat already moving.
RUSHING THE SLIDE	Bad technique that causes check. Comes from coming towards the catch from the recovery too fast.
SAXBOARD	The sides of the boat above the water line made to strengthen the boat where the riggers attach.

SCULL	Smaller version of the oar used for sculling. Also used to refer to a boat for a single rower.
SCULLING	Rowing with two oars.
SCULLING TAP TURN	Term used to describe a method of turning the boat where each sculler uses a forwards and backwards rowing action with the arms only.
SCULLING TURN	Term used to describe a method of turning the boat where each sculler uses a forwards and backwards rowing action with the slide and arms.
SHELL	The smooth hull of the boat. Sometimes made from wood but more commonly now from a synthetic material. Also used to refer to a racing rowing boat.
SKYING	Bad technique where the blade is too high off of the surface of the water at the catch.
SLIDE	Runners or tracks in which the rolling seat moves forwards and backwards to enable the rower to exert maximum force with the legs during the rowing stroke.
SPAN	The distance between the centres of the bow and stroke side swivel on a sculling boat.
SPIN TURN	Term used to describe turning the boat on its axis.
SPOON	The end of the oar which enters the water. Usually painted in the colours of the club represented by the rower.
SPLIT	The time to row the equivalent of 500 metres on an ergo.
SPRINT RACE	A rowing race is done with the crews starting with the bows of their shells aligned and a racing parallel to each other. They start together, and the first crew to cross the finish line wins. We do this racing in the spring. From a senior high school level and internationally, the race distance is usually 2 000 metres. Junior high school rowers (U14 & U15) usually race over 1 000 metres, as do master rowers (age 27 and older).
SQUARE	To turn the oar so that the spoon is at right angles to the water, usually just before the catch and as the blade enters the water. This action should be done early during the recovery to ensure good preparation for the catch. The blade should remain square throughout the drive portion of the stroke until the point of extraction.
STANDING START	A racing start done from a stationary position of the boat(s).
STERN	End of the boat farthest from the direction of travel. Also can be used in conjunction with either four or pair. Stern-four refers to seats eight through five. Stern-pair refers to seats eight and seven.
STERN PITCH	Sternwards angle of inclination of the pin to the vertical.
STRETCHER	A metallic or carbon plate inside the boat to which the shoes are attached. Secured with adjustable screws.
STROKE	One full motion to move a boat. Consists of the catch, drive, finish, and recovery.
STROKE	The rower who sits at the stern of the boat, facing the cox, and who sets the rhythm and rate for the rest of the crew sitting behind him / her (although other crew members can also influence rating and rhythm from behind).
STROKE RATE	How fast a stroke is being taken. In terms of strokes per minute.
STROKESIDE	The right-hand side of the boat from the rower's perspective. The left hand (port) side of the boat from the cox's perspective. Often marked by a red stripe on the oar.
STRIKE	When all rowers stop rowing and pause at the finish with their blades in the air off the water, letting the boat glide. Used as a drill to build balance or to celebrate a successful row.
SWEEP	Rowing technique in which each rower rows with a single oar on one side of the boat.
SWIVEL	The U shaped plastic rotating piece mounted on the pin at the outer end of the rigger to hold the oar in place at the pivot point whilst rowing.
TAP DOWN	To the lower the hands at the end of the stroke to remove the spoon from the water.

- TAP TURN** Term used to describe a method of turning the boat where each rower uses a forwards or backwards rowing action with their arms only.
- “TO WAIST!”** Command to the crew to lift the boat to waist level, holding the saxboard with both hands.
- “TO SHOULDERS!”** Command to the crew to the boat up / down to shoulder height and rest the saxboard on the shoulder.
- TRESTLES** Portable stands used to support a boat for rigging, washing, admiring etc.
- WASHING OUT** Similar to MISSING WATER except it means taking the blade out of the water too soon at the finish of the rowing stroke.



Please contact us via [admin\[at\]wemmer.co.za](mailto:admin@wemmer.co.za) with suggestions for additions or improvements.