

# Glossary of Rowing Terms

**A | B | C | D | E | F | G | H | K | L | M | N | O | P | R | S | T | U | W**

**Aligner.** An official who is responsible for aligning boats evenly for a fair start.

**Blade.** The surface of the oar that captures and displaces water. *Spoon* blades have a curved blade shape. *Hatchet* blades have flat-ended cleaver shape.

**Bow.** The forward section of the boat; the end that crosses the finish line first. Also refers to the first seat rower, who occupies the seat farthest forward.

**Bow ball.** A round rubber protrusion attached to the boat's bow for protection.

**Bow four.** Seats one through four in the bow end of the boat.

**Bow pair.** Seats one and two in the bow end of the boat.

**Bow-coxed boat.** A shell configuration that places the coxswain near the bow instead of the stern. The coxswain lays nearly flat in this type of boat, so that only his or her head is visible. The bow-coxed configuration reduces wind resistance, and provides improved weight distribution.

**Bucket rig.** An rigging arrangement of an eight or four, where riggers two and three are on the same side of the boat.

**Button.** A wide collar on the oar that prevents the oar from slipping through the oarlock.

**Cadence.** The rowing stroke tempo. In a coxed boat, the coxswain often calls the the cadence to keep the rowers synchronized.

**Catch.** Stroke phase at the instant the oar blade enters the water. The rower is at full compression up the slide, and tries to reach as far as possible to obtain a long stroke. The boat is at its greatest moment of instability during the catch, placing a premium on balance.

**Check.** An abrupt deceleration of the boat caused by uncontrolled motion within the shell; usually a result of poor rowing technique.

**Check it down! and Hold water!** A coxswain's call that commands all rowers to drag their blades through the water perpendicularly, braking the boat.

**Collar.** A ring around the oar sleeve, designed to position the oar and prevent slippage.

**Course.** A straight area of a body of water, typically four to eight lanes wide, marked with buoys for rowing competitions. An Olympic® course is 2,000 meters. High school races are

usually 1,500 meters. An exception is the head race, which can be much longer (three miles or more) and follow a winding river course.

**Cox box.** A battery-operated electronic device that combines a digital stroke rate monitor and elapsed time readout with a voice amplifier; the coxswain uses the cox box to manage the race and to make his or her commands more audible to the crew. The coxswain typically wears a headband-mounted microphone, which is attached by a wire to the cox box.

**Coxswain, cox.** Pronounced "cox-en," the person who commands and steers a crewed shell, coordinating the rowers through verbal commands and managing the race tactically.

**Crab.** An oar blade that gets "stuck" in the water. The result of a poorly executed stroke, usually caused when the blade enters the water at an angle instead of perpendicular.

"Catching a crab" disrupts the boat's rhythm and can dramatically slow a boat, instantly costing a close race and potentially injuring the rower if his or her blade suddenly absorbs the full energy of the boat's forward momentum. The handle of an oar that has caught a crab can strike the affected rower in the chest or head in a split-second, though it often jerks up over the rower's head as water flow forces the blade downward below the surface. And while extremely rare, a rower who manages to hang on to the handle of an oar that has caught a crab can be catapulted out of the boat.

**Crew.** American term for the sport of competitive rowing. Also used to refer to a particular rowing team. The phrase "crew team" is redundant.

**Deck.** The closed-over portion of the hull at the bow and stern. The deck sheds water and strengthens the hull. Sometimes still called the *canvas*, a reference to the material that shell decks used to be constructed of.

**Dig deep.** To thrust an oar too deeply into the water, resulting in loss of power. Synonymous with *knife-in*.

**Double.** Seats two oarsmen, each individual with one oar.

**Drive.** Stroke phase during which the rower presses with his or her legs against the foot stretchers and pulls on the oar(s) to force the blade through the water and propel the boat. The drive phase is a coordinated full-body movement using the legs, back and arms. The rower remains upright during the first half of the drive. Midway through, after the knees come down, the rower leans back and pulls the oar(s) in with his or her arms. Ideal technique keeps the blade(s) just below the surface of the water and accelerates smoothly from start to the finish.

**Eight, eight-man shell.** Boat that seats eight rowers and a coxswain.

**Erg, erg machine.** Short for *ergometer*, a piece of exercise equipment that provides an excellent land-based simulation of the motion and physical stresses of rowing. Rowers workout on erg machines to build their stamina and endurance. Modern erg machines usually

have a digital readout that provides stroke rate, equivalent distance covered, split times and elapsed times.

**Erg test.** An equivalent distance race simulation performed by an individual rower on an erg machine for a recorded time. Erg tests measure strength and conditioning progress, and aid coaches in selecting rowers for specific boats and seat positions.

**Erging.** Exercising or simulating a race piece (for a time) on the erg machine.

**Feather, feathering.** Rotating the oar in the oarlock so the blade is parallel to the water surface. Feathering the blade while it is out of the water minimizes air resistance.

**Finish.** The last phase of the drive, just before the release. Power is coming mainly coming from the back and arms at the finish.

**Freshman.** A rower who is in the ninth grade in high school; though rowers in the sixth, seventh and eighth grades may compete in the freshman rowing class. The definition excludes students who have been retained in ninth grade for academic reasons. Coxswains of freshmen boats must meet this definition.

**FISA.** The international governing body for competitive rowing, including Olympic® rowing, founded in 1892. The acronym stands for the official French name: Federation Internationale des Societes d'Aviron. In plain English: International Federation of Rowing Societies.

**Foot Stretcher.** Also *stretcher*; an adjustable platform with two inclined footrests that hold the rower's shoes. The shoes are bolted into the footrests. The rower pushes his legs against the foot stretcher during the drive phase of the stroke.

**Four, four-man shell.** Boat that seats four rowers, with or without a coxswain.

**FSRA.** Florida Scholastic Rowing Association, the governing body of high school rowing in the State of Florida. FSRA is a non-profit organization that promotes high school-age rowing and hosts an annual state championship regatta. FSRA allows participation by independent rowing clubs that are not directly affiliated with or officially sanctioned by a specific high school or county school system.

**Gate.** A bar across the oarlock that keeps the oar in place.

**German rigging.** A variation in the arrangement of oars in a sweep boat. Instead of alternating from side to side, two consecutive rowers have oars on the same side in a German-rigged boat. Also, see bucket rig.

**Gunwales.** Pronounced "guh-nells," these are the top edges of the sides of the boat, where the riggers attach.

**Heat.** A qualifying race within a specific race category (e.g. men's varsity eight).

**Head race.** A race held over a winding river course, usually about three miles in length. Head races are scheduled in the Fall months (in the United States). Boats start, in their respective divisions, at 10-second intervals and turns and obstructions (e.g. bridges) can make steering and passing a true test of navigational skill for the coxswain.

**Hull.** The outer skin of a racing boat, usually constructed of fiberglass, wood or—more commonly today—carbon fiber.

**Keel.** Centerline of the boat. Also refers to the lateral steadiness of the boat. An unbalanced boat is said to be off keel.

**Layback.** Degree of backward lean of the rower's body at the end of the finish.

**Let it run!** Coxswain's call for all rowers to stop rowing, permitting the boat to glide through the water. Used after the boat crosses the finish line, and during drills to improve lateral balance.

**Lightweight.** A racing category that refers to the bodyweight of the rowers. Under current FSRA rules (Fall 2002), the Lightweight class weight limits are 150 pounds for boys and 130 pounds for girls. Rowers are required to weigh-in wearing racing attire, and an average rower weight limit per boat is not calculated.

**Lunge.** An abrupt lean of the body just before the catch, which can throw a rower oarsmen out of synch with the rest of the crew.

**Missing water.** A late catch, resulting in a shorter drive and, thus, less propulsion of the boat.

**Novice.** A first-year rower. While novice high school rowers tend to be freshmen, the term precisely refers to a rower in his or her first season, without regard for academic grade level. FSRA eliminated the novice class from state championship competition in Fall 2002.

**Oar.** A lever used to propel the boat forward. Rowers do not use paddles.

**Oarlock.** A square latch that holds the oar at the outer point of the rigger. The oarlock is the pivot point for the oar; the fulcrum of the lever.

**Oarsman; oarswoman.** A rower.

**Off keel.** An unbalanced boat.

**Outrigger.** A rigger.

**Pair.** Seats two oarsmen—each individual with two oars.

**Port.** The left side of the boat when facing forward (toward the bow); to the coxswain's left and the rowers' right.

**Power 10.** A coxswain's call for the rowers to perform 10 strokes at maximum power. A Power 10 is a tactic used to overtake or pull away from a competitor in a close race, usually at the finish line.

**Pyramid.** A training technique designed to build strength and endurance, during which the coxswain calls an increasing cadence of power strokes (Power 10, Power 20, etc.), each separated by a cadence of normal strokes, and followed by a decreasing cadence of power strokes.

**Race pace.** A strokes per minute rating that a rower or boat is capable of sustaining for an entire race.

**Racing start.** The opening strokes of a race, typically rowed at a high cadence to accelerate the boat.

**Recovery.** Stroke phase between the release and the catch, during which the oar is brought into position for the next stroke and the rower moves smoothly—and slowly—back up the slide. If the rower is too fast returning up the slide, his or her momentum will check the boat. The rower feathers the oar during recovery.

**Regatta.** An organized crew competition. A high school regatta may have races in the following men's and women's classes, for four- and eight-seat boats: varsity, junior varsity (JV), lightweight, freshman, and novice. FSRA voted in Fall 2002 to eliminate the novice class from its state championships.

**Release.** Stroke phase, starting the rowing stroke or following the finish of the drive (take your pick), when the blade(s) exit the water. The release is a sharp downward and away-from-the-body movement of the hand(s), causing the oar blade to rise. After the blade exits the water, the rower feathers the oar.

**Repêchage.** French term, pronounced rep-eh-shahj, from *repêcher*, "to finish up again." The repêchage is a second qualifying heat for a boat that has already lost, providing a second chance to advance to the finals.

*Why get a second chance?* Sports competitions with one or more qualifying rounds are often structured so that top competitors do not compete head-to-head until the later rounds of competition. This structure is called a *seeding system* and the hierarchical, advance ordering of the competitors is called the *draw*. The goal of a seeding system is to produce an order of finish most representative of the respective competitors' abilities, by reducing the odds that a top competitor will be prematurely eliminated by another top competitor in an early qualifying round. (This is not always an entirely noble goal: In paid attendance sporting events, the seeding system also increases the odds that later rounds of the competition will have high audience interest.)

An alternative to seeding is *double elimination*, a system in which each competitor has two chances to advance to the finals. The repêchage is a double elimination system. Philosophical debates about the quality of a victory aside, competitors generally prefer double

elimination because they are not penalized for bad luck or uncharacteristically poor performance in a single qualifying round.

While crew races are usually not seeded, FSRA does seed the qualifying heats at the Scholastic State Championship Regatta, based upon performance records in Florida's spring high school regattas.

**Rig, rigging.** The way in which riggers are arranged in a shell, which in turn dictates how the oars and rowers are arranged. Also refers to the process of preparing the boat for use.

**Rigger.** A triangular-shaped metal frame that is bolted onto the gunwale for each oar position. The outboard end of the rigger is the pivot point—or fulcrum—for the oar.

**Rigging.** Attaching and adjusting the riggers.

**Rowing.** Propelling a boat with a lever.

**Rudder.** A small fin on the bottom of the boat that the coxswain uses to steer the boat.

**Rudder cable.** A rope or cable operated by the coxswain to turn the rudder.

**Run.** The distance over water that the boat covers during one stroke. Run can be visually measured by estimating the distance between successive catches or puddles made by the same oar.

**Rush the slide.** To move from the recovery to the catch too quickly, often the result of a lunge.

**Scull.** Oar designed for rowing with a single hand; smaller than a sweeping (two-hand) oar.

**Sculler** A rower who sculls.

**Sculling.** Rowing with two oars, one in each hand (an oar rigged on each side of the boat).

**Seat.** The sliding seat the rower sits on. *Seat* also refers to the rower's sequential position in the boat; seat positions are numbered from bow to stern. The rower closest to the bow is the *One Seat*, the next is the *Two Seat*, and so on.

**Set.** The boat's balance; a delicate state influenced by each rower's body lean, timing, and rowing technique, and by the boat's design.

**Shell.** A crew boat; used interchangeably with *boat*.

**Single.** Boat that seats one rower who rows with two oars, one in each hand.

**Skying.** Poor catch technique in which the blade only skims the water surface, causing a loss of power.

**Sleeve.** Protective material along the pivot point of the oar shaft.

**Slide.** Set of two runner tracks for the wheels mounted underneath each seat in the boat.

**Sliding seat.** A rower's seat, with wheels that roll along a track. Permitting each rower's seat to slide forward and back inside the boat allows the legs to provide power for the stroke.

**Sprint.** The last 500 meters of a race. Also refers to a race substantially shorter than 2,000 meters, or shorter than 1,500 meters in high school competition.

**Square.** To turn the blade perpendicular to the water surface. The blade is squared at the end of the recovery, in preparation for the catch.

**Starboard.** The right side of the boat when facing forward (toward the bow); to the coxswain's right and the rowers' left.

**Stern-four.** Seats eight through five in an eight-boat.

**Stern-pair.** Seats eight and seven in an eight-boat.

**Stern.** The rear of the boat; the direction the rowers are facing.

**Straight.** A boat that races with no coxswain.

**Stroke.** The complete rowing motion, consisting of the release, recovery, catch, drive and finish. Also refers to the rower closest to the coxswain in the stern (the eight-seat position in an eight). This individual is usually the rower with the best combination of strength, technique and consistency, as he or she sets the tempo for the other rowers, based upon the coxswain's cadence calls.

**Stroke rate, rating.** The rowing cadence; stroke speed in strokes per minute.

**Sweep.** Sweeping is the opposite of sculling; a sweep rower rows with one oar on one side of the boat. Pairs (two people), fours (four people) and eights (eight people) are sweep boats. Pairs and fours may or may not have a coxswain. Eights always have a coxswain. Sweep also refers to an oar designed for use with two hands.

**Swing.** Rowing term that refers to an elusive sensation of near-perfection; a state in which all rowers in the boat are seemingly in a symphony of harmonic motion, with no wasted energy. Similar in meaning to the phrase "in the zone" in other sports.

**Toe.** To operate a rudder that's controlled by the foot.

**Track.** U-shaped piece of metal that keeps the sliding seat wheels on a straight path. Each slide has two tracks.

**Unisuit.** A body-fitting one-piece garment made from a spandex elastomeric fiber such as DuPont Lycra®. Unisuits are usually worn by rowers only during regattas, and the rules of

rowing require that each crew (i.e. team) wear identical unisuits. (Spandex shorts are often worn during practice, since baggy shorts or sweats could become tangled in the sliding-seat wheels.)

**Washing out.** Taking the blade out of the water too early.