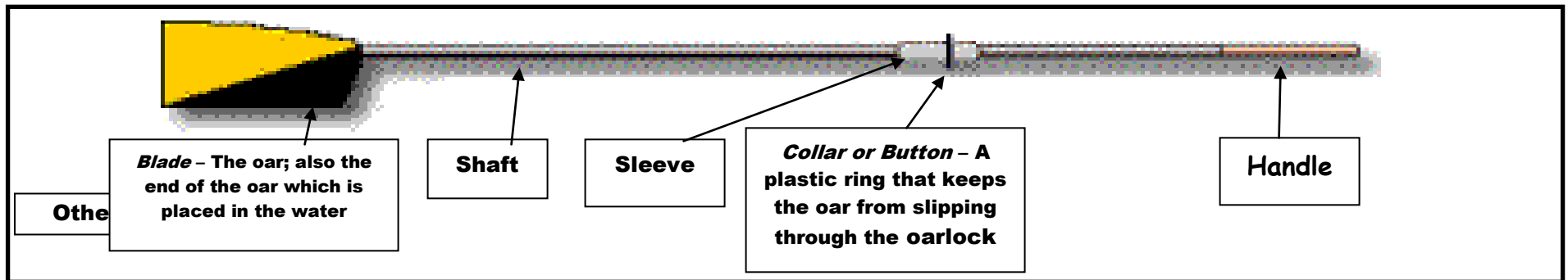
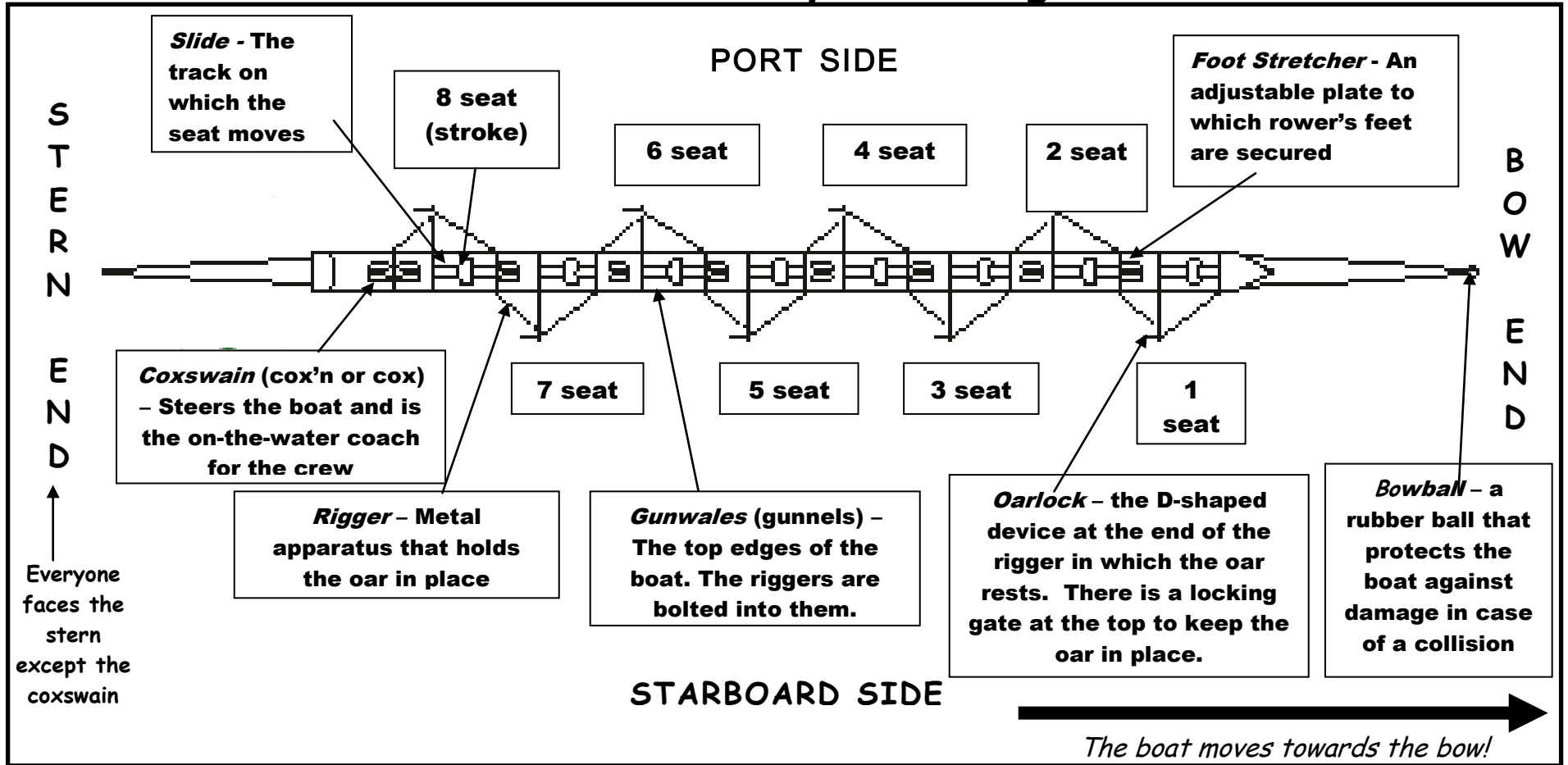


Basic Vocabulary of Rowing



Catch: The moment the blade first enters the water.

Crab: A stroke that goes bad. The oar blade slices into the water at an angle and gets caught under the surface.

Drive: The part of the rowing cycle where the rower applies power to the buried blade.

Erg(ometer): A rowing machine designed to simulate the actual rowing motion; used for training and testing.

Feathering: Turning the oar blade flat during the recovery to lessen wind resistance.

Fin (or skeg): A small flat appendage located along the stern which helps stabilize the shell in holding a straight course.

Finish: The oar blade leaving the water at the end of the stroke.

Keel: The centerline of the shell.

Recovery: The time between drives, when the blade of the oar is traveling through the air.

Rudder: Device used to steer the shell.

Shell: A racing boat; term for rowing boats.

Slings: Collapsible/portable frames with straps upon which a shell can be placed.

Split: The time a crew takes to complete a 500 meter segment of the race.

Squaring: Term describing the turning of the oar from a horizontal (feathered) to a vertical (squared) blade position.

Coxswain Commands while bringing the boat to the water:	
Hands On	Get a grip on the boat and be ready to lift it
Up to waist, ready, up	On the 2nd "up", lift it
Up to shoulders, ready, up	On the 2nd "up", lift it...make sure to rest the boat on the soft part of your shoulder
Walk it forward	Start walking straight ahead
Weigh enough (sounds like "wane off")	In all rowing situations, this means stop everything (walking, rowing, etc.)
Turn and face the bow	Still holding the boat in the same spot, turn and face the other end of the boat
Up and overhead, ready, up	On the 2nd "up", put one hand on each side of the boat, push the boat overhead and center yourself underneath it. Lock your elbows!
Toes to the edge	Move so that your feet are on the edge of the dock
Get an inside grip	Get solid grip inside the boat (on a rib)
Down to waist, ready, down	Roll the boat towards the water to waist level
Push it out	Push the boat out over the water
And In	Gently set the boat in the water

Insights to the sport of rowing

Taken from www.USRowing.org

1. **Rowing is a total body workout.** Rowing only looks like an upper body sport. Although upper body strength is important, the strength of the rowing stroke comes from the legs. Rowing is one of the few athletic activities that involves all of the body's major muscle groups. It is a great aerobic workout, in the same vein as cross-country skiing, and is a low-impact sport on the joints.

2. **Rowers are probably the world's best athletes.** Rowing looks graceful, elegant and sometimes effortless when it is done well. Don't be fooled. Rowers haven't been called the world's most physically fit athletes for nothing. The sport demands endurance, strength, balance, mental discipline, and an ability to continue on when your body is demanding that you stop.

3. **Sweep (like a broom) and Sculling (with a "c").** There are two basic types of rowing: sweep rowing and sculling. In sweep rowing, athletes hold one oar with both hands. In sculling, the athletes have two oars, one in each hand.

4. **The boat.** Although spectators will see hundreds of different races at a rowing event, there are only six basic boat configurations. Sweep rowers come in pairs (2s), fours (4s) and eights (8s). Scullers row in singles (1x), doubles (2x) and quads (4x). Sweep rowers may or may not carry a coxswain (cox-n), the person who steers the boat and serves as the on-the-water coach. All eights have coxswains, but pairs and fours may or may not. In all sculling boats and

sweep boats without coxswains, a rower steers the boat by using a rudder moved with the foot.

5. **The categories.** Rowers are categorized by sex, age and weight. Events are offered for men and women, as well as for mixed crews containing an equal number of men and women. There are junior events for rowers 18 or under or who spent the previous year in high school, and there are masters' events for rowers 27 and older. There are two weight categories: lightweight and open weight.

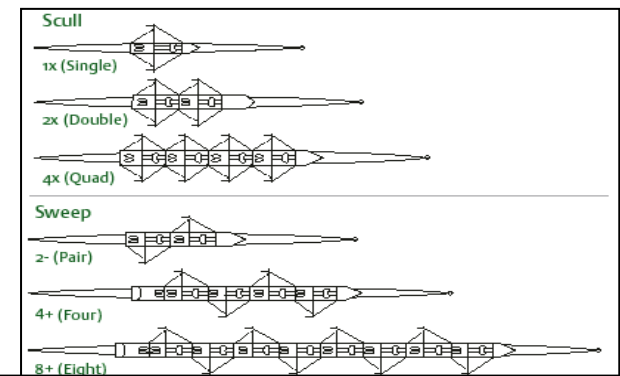
6. **The equipment.** Today's rowing boats are called shells, and they're made of lightweight carbon fiber. The smallest boat on the water is the single scull, which is only 27-30 feet long, a foot wide and approximately 30 pounds. Eights are the largest boats at 60 feet and a little over 200 pounds. Rowers use oars to propel their shells. Sweep oars are longer than sculling oars, typically with carbon fiber handles and rubber grips (although some sweepers still prefer wooden handles). Sculling oars are almost never wood.

7. **The crew.** Athletes are identified by their position in the boat. The athlete sitting in the bow, the part of the boat that crosses the finish line first, is the bow seat or No. 1 seat. The person in front of the bow is No. 2, then No. 3 and so on. The rower closest to the stern that crosses the finish line last is known as the stroke. The stroke of the boat must be a strong rower with excellent technique, as the stroke is the person who sets the rhythm of the boat for the rest of the rowers.

8. **SPM not MPH.** Rowers speak in terms of strokes per minute (SPM), literally the number of strokes the boat completes in a minute's time. The stroke rate at the start is high – 38-45, even into the 50s for an eight – and then "settles" to a race cadence typically in the 30s. Crews sprint to the finish, taking the rate up once again. Crews may call for a "Power 10" during the race – a demand for the crew's most intense 10 strokes.

9. **Race watching.** The crew that's making it look easy is most likely the one doing the best job. When watching a race, look for a continuous, fluid motion from the rowers; synchronization in the boat; clean catches, i.e. oars entering the water with little splash; and the boat with the most consistent speed.

10. **Teamwork is number one.** Rowing isn't a great sport for athletes looking for MVP status. It is, however, teamwork's best teacher. The athlete trying to stand out in an eight will only make the boat slower. The crew made up of individuals willing to sacrifice their personal goals for the team will be on the medal stand together. Winning teammates successfully match their desire, talent and bladework with one another.



Stretches for Rowing

(These are great for before or after rowing, or daily to improve flexibility.)

Taken from a presentation at the 1997 US Rowing Convention, given by Dean Pinciotti, PT, Jeff Erickson, MPT, and Dr. Timothy Hosea, MD Sports Physical Therapy.

* ALL STRETCHES SHOULD BE HELD FOR 30 SECONDS AND DONE TWICE TO EACH SIDE. DO NOT BOUNCE.

1. QUADRICEPS

Position: Side-lying with top knee bent, extend your hip. With your hand holding the top of the foot, opposite arm will cradle your head.

Motion: Pull the foot backwards and up bending the knee and extending the hip.

Tips: Pain should never be felt in the knee joint.



2. HAMSTRINGS AND CALVES

Position: Sit with leg to be stretched extended on the ground with foot and toes pointed upward. Opposite leg should be bent with bottom of foot touching the straight leg.

Motion: Move hands forward along the leg toward the toes, leaning and bending from the waist while keeping your back straight.

Tips: Make sure to keep your back straight and knee extended fully.



3. GLUTES AND HIPS

Position: Lying on your back, right leg at a 90 degree angle, place the left foot onto the front of the right knee, using your right hand to hold the leg.

Motion: Use left hand to push on front of the left knee, extending your elbow.

Tips: No pain should be felt in the knee joint.



4. HIPS AND BACK

Position: Lying on your back, bend your hip and knee to 90 degrees, place your opposite hand on the knee while keeping the opposite leg extended straight.

Motion: Gently pull knee and leg across the midline of the body, turn head toward opposite side and extend arm.

Tips: Keep shoulders flat!

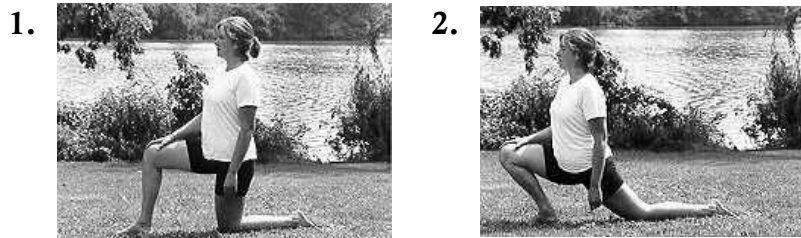


5. HIP FLEXORS

Position: In 1/2 kneeling position, with right foot flat and knee at 90 degrees.

Motion: Gently lean body forward over the front foot keeping your back and torso straight while extending the hip.

Tips: Keeping your back up straight will enhance the stretch.

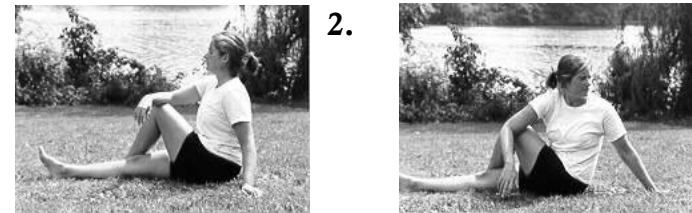


6. BACK, HIPS AND RIBS

Position: Sitting with one leg bent over and extended opposite leg. Rest your elbow on the bent knee.

Motion: With the opposite arm resting on the ground use the elbow resting on the bent knee to rotate your body slowly and turn.

Tips: Relax your Hips!

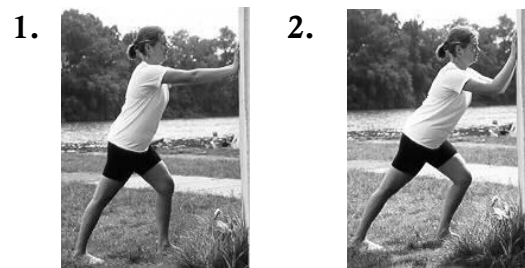


7. ACHILLES TENDON

Position: Standing facing a wall or tree, separate your feet, elbows straight and hands on wall/tree.

Motion: Slowly bend the forward knee, keeping your back straight, bending your elbows and moving your body toward the wall/tree.

Tips: Be sure to keep the heel of the back leg touching the ground. Don't let it lift up! Keep your toes pointed straight.

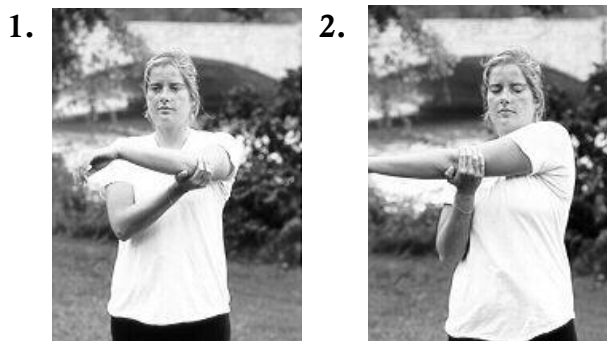


8. ROTATOR CUFF AND SHOULDER

Position: Standing with arm in front of you with our elbow bent, use the opposite hand to hold underneath, just above the elbow.

Motion: Slowly pull across your body toward the opposite shoulder.

Tips: Stretch should be felt behind the shoulder. Pain should never be felt in the front of the shoulder during the stretch.



9. FOREARM AND WRIST

Position: Standing with arm extended in front of you, grasp the fingers.

Motion: Slowly extend the fingers so they are pointing upward.

Tips: Stretch should be felt in the forearm and not the wrist joint.

