

## **Rowing quick facts from US Rowing**

Rowing is one of the original sports in the modern Olympic Games.

Baron Pierre de Coubertin, founder of the modern Olympics, was a rower.

Rowers were the third largest U.S. delegation (48 athletes) to the Olympic Games in 2000.

Eight-oared shells are about 60-feet long - that's 20 yards on a football field.

Rowing was the first intercollegiate sport contested in the United States. The first rowing race was between Harvard and Yale in 1852.

Physiologically, rowers are superb examples of physical conditioning. Cross-country skiers and long distance speed skaters are comparable in terms of the physical demands the sport places on the athletes.

An eight, which carries more than three-quarters of a ton (1,750 pounds), may weigh as little as 200 pounds. The boats are made of fiberglass composite material.

Singles may be as narrow as 10 inches across, weigh only 23 pounds, and stretch nearly 27-feet long.

The first rowing club in the U.S. was the Detroit Boat Club, founded in 1839.

The first amateur sport organization was a rowing club - Philadelphia's Schuylkill Navy, founded in 1858.

From 1920 until 1956, the USA won the gold medal in the men's eight at every Olympic Games.

The first national governing body for a sport in the United States was for rowing. Founded as the National Association for Amateur Oarsmen in 1872, it was changed in 1982 to the United States Rowing Association.

Yale College founded the first collegiate boat club in the U.S. in 1843.

FISA, the first international sports federation, was founded in 1892.

Dr. Benjamin Spock, the famous baby doctor, was an Olympic rower in 1924 and won a gold medal in the eight. Gregory Peck rowed at the

University of California in 1937.

Physiologists claim that rowing a 2,000-meter race - equivalent to 1.25 miles - is equal to playing back-to-back basketball games.

### **Things to know about ROWING!**

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 that 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.

It's all in the legs: Rowing only looks like an upper body sport. Although upper body strength is important, the power of the rowing stroke comes from the legs. Rowing is one of the few athletic activities that involve 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.

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.

The Boats: There are six basic boat configurations, three in sweep and 3 in sculling: Sweep boats come in pairs (2+ or 2-), fours (4+ or 4-), and eights (8+). Sculling boats consist of singles (1x), doubles (2x) and quads (4x). Sweep boats 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 a coxswain, but pairs and fours may or may not, thus the designation of "-" or "+" in the above descriptions. In sweep boats without a coxswain and sculling boats, a rower steers the boat by using a rudder moved with the foot or by applying pressure or longer strokes to one side.

The Equipment: Although wooden boats were the norm for many years, today's high tech rowing boats, called shells, are made from lightweight carbon fiber. The smallest boat on the water is a single which is only 27 to 30 feet long, about 10 to 12 inches wide and weighs approximately 30 pounds. Eights are the largest boat measuring 60 feet long, 22 to 26 inches wide and about 200 pounds. Rowers use oars (not paddles) to propel the boat forward. Sweep oars are approximately 12 feet long with sculling oars being somewhat shorter. Today's oars are also made from high tech, lightweight materials.

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 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 is the person who sets the rhythm of the boat for the rest of the rowers. If the boat has a coxswain, that person will sit in the stern or bow depending on the type and design of the boat. All eights have the coxswain in the stern where a pair and four may have the coxswain in the stern or the bow. The coxswain is an important member of the crew as they are responsible for steering the boat as well as being the coach during the race. They are tasked with carrying out the race plan and motivating the rowers to give everything they have when their bodies want to quit. Contrary to popular belief, the coxswain has never called out “stroke, stroke...”

Categories: Crews are categorized by sex, age and weight. Events are offered for men and women, as well as mixed crews containing an equal number of men and women. In high school rowing, there are also two different divisions if you will. Scholastic, this means that all rowers and coxswain in a boat attend the same school and Youth, where team members can be from different schools as long as they belong to the same rowing club. EGR rows as a Scholastic program. Scholastic race categories may differ from event to event but mostly consist of the following: Varsity or Senior – Usually the fastest and most experienced crew from each team. Junior or 2<sup>nd</sup> – this can be the next group of rowers below the varsity or be age or grade restricted (a junior crew cannot contain any rower in the senior year of school). Novice – rowers in their first year of competition, regardless of grade. Lightweight – rowers that do not exceed a specific weight limit, typically 130# for women and 150# for men.

SPH not MPH: Rowers speak in terms of Strokes per Minute (SPM), literally the number of strokes the boat completes in a minutes time. The stroke rate at the start of a race is high, 30 to 45. During the body of the race, the rowers “settle” somewhere in the 30’s and then bring the rate up again in order to sprint to the finish. Most race plans include “power 10’s” during the body in where the athletes are asked to give everything they have and concentrate for 10 strokes.

Teamwork is number ONE: Rowing isn’t a sport for athletes looking for MVP status. It is, however, teamwork’s best teacher. The athlete looking to stand out in an eight will only make the boat go slower. The crew made up of individuals willing to sacrifice their personal goals for the team will be on the medal stand together. Winning teams

successfully match their desire, talent and skills with one another.

## **Regatta Watching**

If you are new to the sport of rowing, attending and watching a regatta can be somewhat confusing. We hope that our Guide to Regatta Watching will help you understand what is going on and make the event more enjoyable for you. Please note that our point of reference for the following will be Scholastic High School racing as that is where EGR competes.

Events: As we stated in the things to know about rowing section, regattas are broken down into several events. The number of entries in each event will determine the number of races held to determine a winner. As most race courses are six lanes wide, any more than six entries will create “heats” to determine which crews advance to the “final” race. Depending on how many “heats” there are, determines how many boats advance out of each “Heat”. For example: 2 heats, first three boats advance to final, 3 heats, first two advance, 4 heats, either first boat from each heat and next two fastest times or first three from each heat advance to two semi-finals. You should check the regatta program available at each event for specific details. At most regattas, athletes are allowed to participate in two events.

The Race: All races in the spring are “Sprint” races, meaning that boats start from a dead stop and race in a straight line over a fixed distance. The first boat that crosses the finish line in the “Final” race is declared the winner. Depending on the level of the event and/or the location, the distance of the race may vary. Most high school races are 1500 meters (about 1 mile) in length. In order to compress schedules, sometimes events will schedule the “Heats” to be only 1000m with the “Finals” being 1500m. We do attend regattas where the distance is 2000m (the international standard). Depending again on the level and location of the event, the start of the race may be a “floating” start or a “fixed” start. In a floating start, all boats are “floating” and the aligner attempts to get all of the boats lined up at the starting line as close as possible. In a “fixed” start, the boats are backed into a stationary platform where a person holds onto the stern of the boat until the race starts. Finally, again depending on location, some race courses are marked with buoys separating each race “lane” and some race courses are only marked with buoys marking the outermost ends of the course. All courses have a marker located at least every 500 meters and the finish line.

Race Watching: The crew that's making it look easy is most likely the one that is 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. Remember however that there are no style points awarded in rowing, the first boat that crosses the finish line wins! At the finish, the judges are looking for the forward most part of the boat, the "bow ball" to cross the finish line. Consider this: rowing is one of the only sports where the competitors are actually going "backwards". Rowers face the stern (or back) of the boat when racing. At most regattas, the spectators are positioned at the finish and can only get a clear perspective of the last 500 to 250 meters of the race. A high school men's varsity 8+ can cover a 1500m course in less than 6 minutes (at about 10 to 14 MPH).

Race Strategy: Races are broken down by teams and coaches and they usually reference each of the 500 meter segments of the race. At the start, the crews attempt to get the boat up to full speed as quickly as possible. This is accomplished by taking short strokes to begin with and then eventually "lengthening" into a full stroke. Just after the start of the race, the athletes go into oxygen debt and then try to recover when, typically after 20 strokes, the race pace goes down into the low 30 strokes per minute. Crews will attempt to get in front at the start as it is much easier to control a race from the front rather than try and come from behind. At different parts of the race, crews will try to "make their move" to improve their position in the race. All crews will begin to "take it up" as they cross the marker for the last 500 meters. With 250 meters to go, all of the crews are in full sprint. Additional Tips: - Race times can vary considerably depending upon the course and weather conditions. Tailwinds will improve times, while headwinds and crosswinds will hamper times. - Crews are identified by their oarblade design. The FHC blades have a green base and a black tip separated by two white stripes (as seen on our web site header). - It doesn't matter whether you win an Olympic medal or don't qualify for the finals; each crew still carries their boat back to the rack. - Regattas usually last all day. - Races are typically run every 6 to 10 minutes depending on the distance and the caliber of the crews. - 3 seconds time between the first and second place varsity 8+ boats can equal one full boat length.

Our thanks to US Rowing and FHC Crew for providing some of the above text.