

Montgomery Blair Crew



Rowers and Families Handbook

Last update: January 2012

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CREW CALENDAR

The Blair Crew practices and competes year-round.

In the fall season, which starts in mid-September, new rowers (“novices”) learn the sport and compete in at least one race at the end of the season, while experienced rowers (“varsity”) typically compete in multiple regattas.

The winter season, December through February, focuses on conditioning, with workouts at Blair two to four times a week. Rowers also compete in at least one “erg sprint” competition.

The spring season lasts from late February or early March through mid-May. This is the main competitive season, with multiple regattas for both novices and varsity. It includes required, intensive practices each morning Monday through Thursday of Spring Break.

In both fall and spring, practices are held on-the-water at Bladensburg Waterfront Park on Mondays, Wednesdays and Fridays. All rowers are expected to attend water practices. In addition, attendance at Tuesday and Thursday land workouts at Blair are strongly encouraged.

In the summer, rowers are strongly encouraged to attend summer rowing camps, train at Bladensburg with Washington Rowing School, and stay fit with indoor erging.

Registration is conducted in advance of each season through the blaircrew.org website.

Check for the most current schedule information at www.blaircrew.org

INTRODUCTION TO PROGRAM

Welcome to Blair Crew! We're excited to be in our fourth season of competition and community.

The Blair rowing program originated in 2008. It is a parent-sponsored team sport for students attending Montgomery Blair High School. Blair Crew achieved 501c3 status in 2010.

The program is neither officially sanctioned by nor administered by the school. It is a club with an affiliation to the school. Any questions or concerns about the program or your rower should be addressed to the Board of the crew program or to the coaches. The Blair Rowing Club is sponsored by a Blair teacher, currently Dr. Dana Simel. The program is managed and run at the direction of Blair Crew, Inc. Most of the board members are parents, and all are volunteers.

We hope you'll find this handbook and resource guide helpful. Please don't hesitate to ask questions! Current contact information for the Blair Crew board of directors and coaching staff may be found on the website, www.blaircrew.org.

Sincerely,

The Blair Crew board

Board membership as of January 2012 (see website for contact info)

Nick Johnson, President
Steve Sleigh, Vice President
Evelyn Ying, Secretary
Monte Tarbox, Treasurer
Tom Armstrong, Equipment
Eileen Hoggarth, Transportation, Spirit, and Recruiting *
Julie Kaplan, Registration
Alyson Krogh, Fundraising *
Stuart Speaker, Website
Eva Sullivan, Coach Emeritus *
Linda Tipton, Regattas
Sean Tipton, External Relations

* denotes Blair Crew co-founder

FREQUENTLY ASKED QUESTIONS

GENERAL OVERVIEW OF CREW

What is crew?

Crew is the sport of rowing. In crew, an oarsman propels a shell across a defined distance, using only an oar and their body mass.

Do you have to be big to “do crew”?

You do not have to be big to row. The training emphasis is on building strength, endurance, and flexibility for all sizes and shapes. There are, of course, big kids who are very good at rowing, but there are also smaller kids who excel. In addition, coxswains tend to be on the smaller side.

Why do people row?

There are many reasons; one view is as follows:

‘Karen rowed for what the venerable American shell builder George Pocock called ‘the symphony of motion.’ As dawn breaks over the river, the shell is lifted from its rack out into the morning. On another rack the oars hang ready to be greased and slipped into the locks. Then, awakened to the river and the feel of the oars, the oarsmen blend in fulfillment of the shell. The symphony is not of competition. It is the synchronous motion over water, the harmonic flexing of wood and muscle, where each piece of equipment and every oarsman is both essential to, and the limit of motion itself’The Shell Game (Stephen Kiesling)

What are the coaches looking for in a rower?

First and foremost, coaches look for commitment. Rowing is a demanding sport, and like most sports, demands a day-in, day-out commitment to practice and improvement. Second, coaches look for physical ability. It is important to note that, with regular practice and conditioning, virtually every student can develop his or her physical ability to the point where they can row competitively. Finally, coaches look for a positive attitude toward the program, the sport, and toward their fellow rowers. Crew is a team sport, where successful boats succeed as a result of each rower playing his or her role. Mutual support and encouragement is vital to a team’s success. For further information: The coaches have prepared a very detailed “Rowers Contract” document, which parents and rowers will be asked to sign. A copy is available below.

What type of body does my child have to have to row?

Any body type will do, although taller rowers have an easier time managing the oars and are able to apply more leverage moving the boat.

What is a coxswain?

A coxswain is responsible for steering the boat, incorporating the race strategy agreed upon in practice, and motivating the rowers. He or she is also the person in charge of the shell while it is on land and on the water. They execute the practice and race regimens as decided upon by the coach and crew. They also are responsible for ensuring the shells are carried back to the boathouse, cleaned, and stored properly.

How does my child become a coxswain?

Generally, coxswains are the smallest and lightest of the team members, and Blair coaches will help guide appropriate athletes in that direction.

Can crew help my son/daughter get into college?

Possibly, but students should participate in crew because they enjoy it, not as a guaranteed passport to college. Colleges view crew as an extremely important high-school activity, given the level of commitment and fitness it requires. Further, many colleges have crew teams of their own, and they are looking for good rowers to be in their boats. Our coaches are well-connected in the rowing community and have always done a good job of working with seniors who want to continue rowing in college.

What kinds of boats are used?

The boats (or shells) are basically of two types and reflect the two forms of rowing---sweep rowing and sculling.

In sweep rowing each rower handles a single oar (about 12.5 ft or 3.9 m long). In sculling, a rower uses two oars, or sculls, (each about 9.5 ft or 3 m long). Blair rowing is generally confined to sweep rowing.

The word 'shell' is often used in reference to the boats because the hull is only about 1/8" to 1/4" thick to make it as light as possible. These shells are also rather long and racing shells are as narrow as possible while recreational ones can be rather wide. Most shells today are made of composite materials such as carbon fiber, fiberglass, or Kevlar. A few manufacturers still build wooden boats.

Each rower has his back to the direction the shell is moving and power is generated using a blended sequence of the rower's legs, back and arms. The rower sits on a sliding seat with wheels on a track called the slide.

Each oar is held in a U-shaped oarlock mounted on a metal pin at the end of a rigger. The rigger is an assembly of tubes that is tightly bolted to the body of the shell. The subtypes of rowing shells are classified according to the number of rowers in the shell.

What are sweep boats?

In sweep boats, each rower has one oar. These shells can have a coxswain---a person who steers the shell (using a rudder) and urges the rowers on. The symbol used for each subtype is included within the parentheses.

Blair Crew competes in sweep boats. We own an 8 and a 4.

Coxed Pair (2+): Two sweep rowers with a coxswain.

Coxless Pair (2-): Two sweep rowers without a coxswain.

Coxed Four (4+): Four sweep rowers with a coxswain.

Straight (or Coxless) Four (4): Four sweep rowers without a coxswain. Steering is usually accomplished via a rudder that is attached to a cable that is connected to one of the rower's foot stretchers (an adjustable bracket to which the rower's feet are secured). The coxless pair has a similar type of rudder setup.

Eight (8+): Eight sweep rowers with a coxswain. Eights are 52+ ft long and weigh about 250 pounds.

What are sculling boats?

Sculling boats are boats where each rower has two oars.

Only in rare cases do these boats have a coxswain. Steering is generally accomplished by applying more power or pressure to the oar(s) on one side of the shell. The hands overlap (usually left over right in the US) during part of the rowing cycle, or are always left in front of right.

Single (1X): One rower or sculler. Singles are about 26 ft long and less than a foot wide. Racing singles can weigh as little as 30 pounds. There are heavier (~45 to 50 pounds), shorter, and wider versions often referred to as recreational singles.

Double (2X): Two scullers. Most racing doubles can be also used as a pair with a different set of riggers designed for sweep oars. When used as a pair a rudder is usually added. There are also recreational versions of sculling doubles.

Quadruple (4X): Four scullers. Often referred to as a 'quad' and usually has a rudder attached to one of the sculler's foot stretchers as in the straight four. Most quads can also be rigged as a straight four using a different set of riggers.

What are the weight classifications in crew?

There are generally two weight classes for rowers--- open weight or heavyweight (HWT) and lightweight (LWT).

Men (M): For team LWT boats, there is a 150 lbs individual maximum.

Women (W): The individual maximum for team LWT boats is 130 lbs.

A rowing shell is usually built with a particular weight class of rower in mind. Until just recently the Olympics effectively had only HWT classifications.

The Blair program generally participates in the open category although, depending on the athletes, we may row a lightweight boat.

How are rowing competitions conducted?

Racing may involve 2 or 3 schools (sometimes called 'dual meets' or 'tri meets') or be larger regattas involving many schools, with heats and finals for some or all of the boats. The larger races are discussed in much greater detail in the subsection called Regattas below. Blair's racing schedule is made up of a number of dual- and tri-meets as well as larger regattas. In many instances, the larger local regattas in which Blair takes part are sponsored by a newly formed regional high school rowing association called WMIRA, Washington Metropolitan Interscholastic Rowing Association. www.wmira.info

Larger regattas generally have 3 or 4 or more boats per heat, with the boats racing side-by-side down lanes set out on a 1500 meter course. The races will generally have boats of the same weight class, and similar experience and gender, racing against each other. That is, there will be freshman-only heats for women and men, junior varsity heats of women and men, and varsity heats of women and men.

PROGRAM ORGANIZATION AND MANAGEMENT

How is Blair Crew organized?

Blair Crew is a parent-run and parent-funded organization, with a full slate of officers and Board members. In addition, coaches attend all Board meetings and, of course, share in the responsibility of the team's preparation and success.

Who supervises the kids?

Once delivered by bus to the practice or regatta, the rowers are supervised by the coaches. For out-of-town regattas, where a hotel stay is required, parent chaperones play a vital role in supervision during the time the rowers are not gathered as a team (i.e., evenings). While at school, before and after practice, the rowers are not supervised by coaches or the school, so they are expected to be mature and responsible enough to conduct themselves accordingly.

Who picks the coaches?

The head coach is selected by the program's Board, and in turn, the head coach, in consultation with the Board, selects the assistant coaches.

How can I stay informed about crew-related events in real time?

Email is our primary means of communication between coaches, team members, and parents. Our website posts updates for regattas, registrations, workouts, etc. as they occur.

For parents: <http://groups.yahoo.com/group/BlairCrew/>
For rowers: <http://groups.google.com/group/blaircrewrowers>
For everyone: www.blaircrew.org
Blair Crew is on Facebook too!

What boats do Blair crew members use for practice and competition?

Blair Crew rowers and parents made a huge fundraising effort at the end of the 2011 Spring Season to purchase our first Wintech 8, fittingly named Trailblazer. In Fall of 2012, we purchased another Wintech, a 4 named Artemis. As a team we also own 9 Concept II erg machines, an old but still riverworthy launch, one set of oars, and assorted equipment. We lease most of the rest of our equipment from Washington Rowing School.

Who pays for the boats used by my rower?

Unlike most other Blair high school sports, Blair Crew receives no public funding. The boats, oars, ergometers and other equipment are purchased or rented by Blair Crew Inc., and these purchase requirements are the primary focus of our annual fundraising campaign. This capital program is expensive to maintain, and is reflected in fundraising activities during the year.

Who picks the captains?

At the end of the spring season, the current team members often vote on captains (usually rising seniors) for both men's and women's teams.

What leads coaches to assign a rower to a specific seat?

Many different factors including erg score, rowing technique, attitude, fitness and overall athleticism.

What is the difference between the left (port) and right (starboard) sides of the boats?

There is no real difference, except that some rowers become accustomed to one or the other.

Are parent volunteers needed?

Yes!!

Blair Crew is a volunteer-run organization. Each family is expected to contribute their time and talents in some way and have loads of fun in the process. In order to provide the best experience for our rowers, we need people to organize everything from managing parking, setting up tents/food at regattas to chaperoning away races to fundraising to managing the crew website and email lists. Some volunteer jobs are short, one time jobs and others are more extensive. Some can be done from home via phone or computer; others require your presence at an event. Many jobs have their procedures and contacts documented so you are not starting from scratch. Parents sign up for volunteer jobs at meetings or can respond to email requests from the Board.

ROWING AS A SPORT

What's rowing all about?

Rowing is an exciting competitive sport involving skill, teamwork, strength and stamina. There are teams for men and women, organized by skill, and in some cases age and weight. Crews are identified by the number of rowers in a shell, or boat. Blair intends to row 8-person shells, led by the coxswain. They race against other schools on measured 1,500-meter courses.

Is rowing safe?

Yes – if conducted in a way consistent with coaching and official direction. As with all sports, injuries and accidents can occur. Our experience is that the risk for injury or accident is reduced significantly if rowers train properly, if they follow boat and oar handling directions, and if they remain attentive to the river, to boats around them, and to their fellow rowers.

Do rowers need to know how to swim?

Rowers are required to pass a swimming test, and are instructed in the proper safety steps to take in the unlikely event a shell capsizes. Incidentally, the boat itself will float with a full crew even when completely swamped (filled with water). Also, individual oars are buoyant enough to support an adult. It is best to stay with the shell rather than to try to swim to shore.

Do rowers wear life jackets?

Rowers do not wear life jackets on the water. However, there are life jackets for each rower on the accompanying launch which the coach drives.

How are rowers assigned to specific seats in a boat?

There are two types of boats that Blair will race, an 8+ and a 4+. Both are sweep boats. There are two variables in assigning seats: which side a rower rows (some prefer the left or port side, and some the right or starboard side), and where, relative to the front of the boat, a rower sits. Typically, the biggest rowers sit in the middle, the lighter rowers in the bow, and those with the best timing and form sit in the stern.

Seats are numbered, with the “bow” seat nearest the bow, and the “stroke” seat nearest the coxswain. The Stroke sets the timing for the boat, with the rest of the boat following him/her. Seats between the bow and the stroke seats are numbered (e.g. Bow, 2, 3, 4, 5, 6, 7, Stroke).

Each seat in a boat has a specific role and responsibility. During winter training and the spring season, coaches look for different combinations of power, technique and teamwork to put

together the group of 8 rowers who work best together. Erg times are important indicators of strength and endurance, and coaches consider them together with other factors.

What kinds of injuries can occur in crew?

With proper training and conditioning, injuries are rare. Rowers are urged to listen carefully to the coaches' instructions regarding exercise and fitness. With proper form, the sport of rowing is like any other sport: fun, healthy, and safe.

Obviously, injuries can and do occur, and can typically be attributed to inadequate conditioning or to lack of attention. Calluses on hands and sore arms and legs are common – especially at the outset of a season. Rowers who experience unusual soreness or pain are encouraged to consult their coach and physician.

What kind of in-season and off-season conditioning will make a rower stronger?

The coaches will give advice and instructions to the rowers on conditioning. A common piece of conditioning equipment is the ergometer or “erg”. While some athletes play other winter sports, there are very few sports that provide the combination of overall body conditioning that is provided by “erging”.

While in season, the coaches will assign conditioning workouts that typically include stretching, running, weightlifting, and “erging.” When out of season, the best way to stay in shape is to row -- a list of resources for summer rowing is below. Other than that, “erging” and running are always a good idea. See the section on winter training, below.

What is an Erg?

An erg, or ergometer, is an indoor rowing machine designed to simulate the movements a rower makes on the water. They are used extensively for conditioning and also for gauging the strength and fitness of each rower. If you're buying one to have at home, expect to pay about \$500 to \$850 for a used Concept2 rower (the standard kind that most rowers prefer).

Who makes the ideal rower?

From a physical standpoint, height is an advantage. Strength and endurance are needed to be successful at rowing. If you don't have strength and endurance coming in, you can develop it. Probably the most important quality is to be tenacious, hardworking and determined to give it your best and success will follow. If you are just beginning, keep in mind that none of your teammates began rowing before high school. Other athletic experiences will be to your advantage, especially to the extent that you are in shape and understand the importance of both technique and teamwork to any sport.

Who makes the best coxswain?

From a physical standpoint we value coxswains (pronounced “cox’n”) most for what's in their head and how they use it. Ideally they are lightweight, which usually means much shorter than the rowers. Although the coxswain does steer and shout commands, the position is as important as a quarterback is in a football game. The ability to motivate, coach during a race, and to think fast is what makes a coxswain successful. Finally, the willingness of the coxswain to participate in physical training activities is critical in building the bonds between the rowers and the coxswain.

Coxswains also are highly responsible for the safety of the crew (and other crews on the course), and of the boat, both in the water and when being moved by crew members over land. Some veteran crew members and parents have seen instances of coxswains – generally from other schools – who have endangered rowers on the course through poor judgment. For this reason, it is important that coxswains display exceptional maturity at all times.

PRACTICE and LOGISTICS

How much does it cost?

Fees are set at the beginning of each season and listed at www.blaircrew.org. In 2011-12, the fees are \$495 for fall, \$75 for winter workouts, and \$725 for spring. These fees are substantially lower than those charged by other teams in our area, reflecting our team's commitment to keep costs down and to fill a substantial part of our budget with fundraising.

Every rower and his or her families are also expected to participate in fundraising, since this sport is not funded by the school system. In addition, some families choose to make a special contribution in lieu of fundraising from their neighbors, friends, and others. In 2011-12, the expected minimum contribution to fundraising by each rower is \$200. Details on fundraising are provided throughout the year.

What do my fee & fundraising pay for?

Fees cover most of the operating expenses for the team: compensation for the coaching staff, equipment costs such as lease payments, repairs and insurance, bus transportation to and from Bladensburg, regatta fees, and other organizational costs. Fundraising helps with operating costs and also pays for our capital purchases, such as new boats and other equipment as the opportunity arises

Do rowers have to return to school by mid-August for practice?

No. Unlike other Blair sports, crew does not begin practice in August. Practice begins in September once school starts.

How often does the team practice?

At this time, the team practices on the water 3 days a week and some Saturdays while in season. On days with no water practice, there are coached workouts at Blair. The physical demands of the sport require that rowers stay in shape year-round. Rowers should be prepared to commit themselves to attending team practices and remaining in shape for the off-season through individual conditioning. Winter workouts are twice a week in December and four days a week in January and February.

When and where are practices?

On the water practices are held at Bladensburg's Waterfront Park, off Kenilworth Avenue and Route 450. In the event of inclement weather or unsafe water conditions, the coaches make the decision whether to have a land practice at Blair. The coaches allow enough notice to the rowers in such cases. An announcement is made on the Blair PA system and through email.

Does everyone practice together?

Sometimes, but not all of the time. Everyone is on one team but, due to equipment and facilities constraints, may be divided to work out in shifts or on a rotation basis

What should a rower wear/bring for practice?

Bring a water bottle. Wear running shoes and be prepared to run on any given day. Bring a hat (visor for sun and/or knit for warmth) and layered clothes – it's a lot colder on the water than it is in the Blair parking lot, and you will get wet – warm socks are a must in cold weather. Dress for a strenuous workout; coxswains, dress for warmth according to the weather. Don't forget to apply sunscreen. Put all of this equipment in a small zippered sports bag.

Does the team practice in inclement weather?

Yes. If the weather calls for only rain, there is practice at the boathouse on the water. If the weather calls for light rain & light wind, the team will generally practice at the boathouse, and the regime may include land-based elements, instead of boat work

What if a rower has to miss a practice?

Rowers should make every effort to attend each practice. Crew is a team sport, and the absence of a rower can materially disrupt a boat's ability to develop the close-knit harmony and teamwork that is required for success. However, if a rower needs to miss a practice, they **MUST** contact the coach prior to the practice, to allow the coach time to adjust his/her practice regimen. Failure to notify a coach will influence the coach's decision on which rowers sit in which seats and in which boats.

How do the rowers get to the Bladensburg Waterfront?

We rent a school bus that picks the rowers up at the Blair parking lot (SAC side) and departs at approximately 3:10. The rowers are returned to the same area between 6:25 and 6:45 depending on rush-hour traffic.

Detailed driving directions to the boathouse may be downloaded from <http://www.pgparcs.com/places/nature/bladensburg.html>.

Parking is free, but be sure to park in designated spaces.

How is it possible for rowers to keep up with this rigorous schedule and maintain their grades?

The experience at Blair has been that the rowers generally achieve good grades, take honors courses and AP courses, and are successful in their college searches. Blair Crew alumni now attend Princeton, Northeastern, University of Maryland, Temple, Tulane, and Davidson, among other schools.

The training program develops fit bodies, and that likely contributes to better focus and studying. There is some down time both before and during practice, and rowers have been known to do homework or help each other study. Obviously, grades are paramount, and parents must make their own decisions as to whether the crew program is having an adverse impact on their children's studies. Parents are encouraged to talk with other parents and rowers – you will learn that rowers have the time to balance rowing and academics, along with their myriad of other social activities.

What are winter workouts?

Winter workouts are a strength and conditioning program that is offered from December to late February at Blair by Blair Crew coaches. They take place after school and it includes running, lifting weights and indoor rowing machines. Winter workouts are not required, but it is highly recommended for any rower who wants to be successful in the spring. Athletes who play other winter sports are encouraged to participate in winter workouts as much as they can; those who don't should attend every day. Sticking with a disciplined program of erging is part of the personal character required to "pull one's weight" on the team.

Good performance on an erg depends on the height, weight, age, and sex of the rower. Erging competitions also take place during the year and are becoming increasingly common.

The team's erg machines may be rented over the summer for use at home. To read more about ergs, see this web site: <http://home.hia.no/~stephens/eliteerg.htm> and a calculator here: <http://www.oklahomarowing.org/ergcalc.html> .

Is there a commitment for rowers during Spring Break?

Yes. Practices are scheduled during Spring Break to give the rowers an opportunity to work together on the river as much as possible as the competitive rowing season begins. Attendance at these practices is mandatory.

REGATTAS

When are the regattas, how long are they, and how do I find information about them and directions to them?

Regattas may take up an entire day. The rowers often must arrive as early as 7 a.m. at the regattas in order to rig the boats. Rowers are responsible for their own transportation; carpools may be arranged through the team Email list especially for out-of-town races. For both away and home regattas, rowers usually do not return until late afternoon, as they wait until all the races are completed and often have to go to Bladensburg to unload and re-rig the boats. Directions to and information about the regattas is posted on www.blaircrew.org.

Preparing for a regatta

A race is a relatively short spurt of very hard work, so the body needs to be ready. There is often a team dinner the night before a regatta - eat healthy carbs, fruits, vegetables and protein (no soda, limited sweets). Coaches typically tell rowers to eat a healthy, light, protein/carb breakfast the day of a regatta: bananas, yogurt and so on. No eating two hours before a race.

Regatta tents and food

At most regattas, Blair has a tent where both parents and rowers congregate. Look for our team banner! (Sometimes parents are in a different place from rowers, so we have two tents.)

Parents coordinate the regatta support for both rowers and coaches. For rowers, food (for after they race or between races) means healthy carbs (including fruit), protein (including vegetarian options), and on hot days salty snacks. And, always, lots of water and sports drinks. Parents always appreciate coffee, especially on those chilly spring mornings. The team's regatta coordinator sends out a call for food/drink donations the week before the race.

How many regattas are there?

Blair Crew typically races 2-3 times in the fall and 5-6 times in the spring.

What are the transportation arrangements for out-of-town regattas?

Rowers typically carpool to regattas & make arrangements via the Email lists.

Do rowers miss school to compete?

Usually, no. The exception is the end-of-season Stotesbury Regatta in Philadelphia for selected varsity rowers, which requires missing 1.5 days of school in May. We work with MBHS

administration to permit these absences to be excused, and for any missed work to be completed without penalty.

As a parent/spectator, how can I most appreciate watching heats at regattas?

Spectator conditions vary considerably from one regatta to the next. But first, be sure to bring a “spectator kit” including a portable chair, water, snacks, binoculars, camera, umbrella, layered clothes, and regatta race schedule (which you will have received by email).

Scope out the course. Ask other spectators if you are unsure where heats start and where the finish line is located. It is often good to sit near the finish line, but other interesting perspectives might be found further up the course, or on a bridge overlooking the course. Blair’s “home” course is at the Bladensburg Waterfront; in addition to at the docks, there is viewing from the boardwalk along the trail slightly downriver.

Race appreciation depends in part on knowing which boats are racing, whether a Blair boat is in a particular heat, and the order and times of the finish for the heat. Unfortunately the schedule and even the order of heats often changes for various unforeseen reasons, so a race schedule prepared in advance might rapidly become obsolete, or partially obsolete. At some events, particularly the larger regattas, heat information is posted on a white board or by other means. It is often convenient to sit close enough to the board to check it often (but not so close as to be in the midst of a crowd of spectators who are coming and going to view the board). Dual- or Tri-meets do not have heats, just a final, so times are often not posted. Full results of a regatta are often posted on the internet shortly after it finishes.

Finally, while at regattas, please do not disturb your child before his race, as he or she warms up or consults with teammates or the coach, moves equipment, and the like. This is a busy period involving critical preparation and concentration. After the race, be sure your child is finished with all post-race activities, such as removing the shell and consulting with the coach before making contact.

What is the standard high school racing distance?

The standard high school racing distance is 1500 meters and the course usually has up to six designated lanes, which may or may not be marked by buoys. These races can take anywhere from 4 1/2 to 7 1/2 minutes depending on boat class, weather conditions, water current and the physical condition and experience of the rowers.

What is the starting procedure for regattas?

Crews are expected to be at their starting stations two minutes before the scheduled time of the race. Once the boats are in place, the judge at start will supervise the alignment process. When all crews are level, the Starter will then poll the crews by calling their name. When all crews

have been polled, the Starter raises a red flag, and says; "Attention!" After a clear pause the starter shall give the start by dropping the red flag quickly to one side and simultaneously saying: "GO".

In windy conditions, the Starter may dispense with polling the crews and use a "quick start". Here, the starter says "Attention!" and if no crew responds, immediately raises the red flag and gives the starting commands.

In the US, the procedure of last resort is the 'countdown start.' The Starter dispenses with further polling, and counts down "5-4-3-2-1 Attention! GO!" Once the countdown starts, hands are not recognized, and the crews should use the five second countdown to point their boats.

What about false starts?

Crews can be assessed a warning for a false start, for being late to the start, or for traffic rules violation. A crew that receives two warnings in the same race is excluded from the event.

What about equipment problems during a race?

If a crew breaks equipment in the first 100 meters of the race, it should stop rowing and signal to the umpire, who will then stop the race.

What about fouls and obstacles and protests?

Once the race has begun, the Referee follows in a launch. He/she will instruct a crew only to avoid a foul or safety hazard. If a crew is about to interfere with another crew, the umpire will raise a white flag, call the crew's name, and drop the flag in the direction where the crew should move. If a crew is about to hit a known obstruction (such as a bridge abutment) the umpire will raise a white flag, call the crew, and yell "Obstacle!" or simply "Stop!" If the umpire needs to stop the entire race, he will ring a bell or sound a horn, wave a red flag, and call out "Stop!" if necessary.

A crew that wishes to protest the race must raise a hand after it crosses the finish line and lodge the protest with the umpire.

What is a "head race?"

These races, which are generally held in the fall (US) or early spring (Europe) are about 2.5-3 miles long and the boats are started in their respective divisions separately at 10 second intervals. Head races are usually conducted on a river with an assortment of bridges and turns that can make passing quite interesting. We participate in head races during the Fall season.

What schools do we compete against?

We compete against other high schools. Our most frequent competitors are the schools of the Washington Metropolitan Interscholastic Rowing Association. Current members of WMIRA include:

Bethesda Chevy Chase	Holy Cross	Winston Churchill	Gonzaga
St. Johns High School	DeMatha	Woodrow Wilson	Holton Arms
Bishop Ireton	Walter Johnson	Bishop O'Connell	Seton
Georgetown Day	Whitman		

See www.wmira.info for the most up to date information.

ROWER RESPONSIBILITIES

To assure that all rowers understand their obligations to themselves, their teammates, and their school and community, each member of Blair Crew and a parent is required to sign a Rower Contract. The Contract summarizes expectations, rules and responsibilities, and must be signed prior to rowing in the spring season.

The current version of the Rower Contract is as follows:

Montgomery Blair Crew Team Expectations and Rules

To Parents and Rowers: This is a guide that is specific to the Blair varsity rowing program. Please go through this guide and be fully aware of what is contained within. Please sign at the bottom to indicate that you have read and accept the terms of this guide.

Attendance, Priorities, and Attitude

Attendance

All on the water practices are mandatory. You are expected to be on time at the boathouse. Once the dismissal bell rings at 3:00, go directly to the Blair parking lot, SAC side, to meet your ride. Once your car is full, the driver will leave. All cars need to be leaving no later than 3:08 to get to the waterfront on time.

If you are going to miss practice for any reason, it is your responsibility to make sure that your coach knows in advance by e-mail. This includes missing for illness. Please understand that anyone missing practice for any reason disrupts the entire team, as people have to be shifted around, and in some cases, entire boats cannot practice. Parents: please do not schedule doctor's appointments, tutors and the like for your child's during practice hours, except in emergencies.

Practice is held no matter the weather. If high wind or thunderstorms preclude an on the water practice, practice will either be held at school, or a land workout will be held at the boathouse. Please listen for any announcements.

Spring Break: This week is very important to the final development of the crews for the latter half of the season, and it is vitally important that everyone attend all the spring break practices. You are expected to attend all spring break practices. Understand that if you leave for the week, there is NO guarantee that you will return to the same seat/boat that you were in before you left. Your seat will not be held for you while you are away.

SATs: Please schedule your SAT for the first week in May when at all possible. That is an open week in the regatta schedule designed with the SAT in mind. Scheduling for the March/April

exam will cause you to miss a race. If you feel that you will need more than one attempt at the test, schedule your 1st test for the January/February test date.

Junior Year: The eleventh grade is an especially busy one, and one that is very important for college admissions. Please think ahead and take into account the increased workload you will receive from teachers while also practicing and preparing for races.

AP Exams: Plan for them. They are scheduled in May during the most competitive part of the season. It is vital that you carefully schedule study time so that you can practice and prepare for your exams. You must learn to budget your time and balance your commitments to your schoolwork and to your team. Remember, if you miss practice, you are affecting eight other people who have just as much schoolwork as you do! E-mail your AP Exam Schedule to your coach as soon as it is available.

Excused Absence: While all decisions about team operations are left to the coach's discretion, generally excused absences are allowed for academic, family, health or religious reasons. Remember it is the responsibility of the ATHLETE to contact the coach by email as soon as possible to inform them of their inability to attend practice.

Final Comment: Rowing is unique in its demand for perfect attendance. You have decided to make a commitment to the crew, and your teammates and coaches depend on you to fulfill that commitment.

Priorities

Remember to keep things in their proper place: family comes first, academics come next, and finally everything else. We understand that crew may be one of several interests you have. Understand, however, that rowing at Blair makes an unusually high demand of your time and dedication. Make certain you are willing to make that commitment.

We expect 100% effort from you at all practices; if you are unwilling to accept that responsibility, you should consider doing something else.

By now, you should be well aware of the academic demands at Blair. Remember, you will not be allowed to row if your GPA falls below a 2.0. It is your responsibility to do your schoolwork and to finish it in a timely fashion so that you do not need to miss practice to make it up. Learning to balance and budget your time will be a life long skill, so you might as well learn it now. Of course, extenuating circumstances will be considered, but again, an "I can't come to practice because I have too much work" is NOT an acceptable excuse. Remember that all of your teammates are facing the same academic rigors as you.

Parents: When considering to keep your child home for whatever reason (including disciplinary) or to take your child away on a trip during the spring season, please be aware that

this affects many other families as well. It disrupts the eight other people in the boat, as well as the kids in the other boats, as people will have to be shifted around among the boats. It also is unfair to the parents and families of the other kids on the team who have changed the organization of their lives during the spring season. The key to a successful crew is the unique and delicate blending of the eight rowers and a coxswain in the boat; inserting a new person can cause major disruptions. In many cases, if several people are missing, entire boats cannot practice, the coach's workout cannot be implemented, and everyone's time is wasted. Please be sensitive to the unique nature of this team sport.

Attitude

Be considerate of your teammates and coaches. Disrespect, disparaging and abusive comments or other improper behavior towards or about teammates, coaches, and members/coaches of other teams will not be tolerated under any circumstances. Such behavior is incompatible with fostering a harmonious and successful team environment.

Always remember that poor behavior reflects badly on yourself, your team, and your school.

Remember that we are all working together toward common goals.

Team members found to be violating the rules in this section will be subject to appropriate disciplinary action by the coach. The Booster Board will be notified of any action taken.

Alcohol, Drugs, and Tobacco:

Blair Crew has adopted the substance abuse policy of Montgomery Blair High School:

Substance Abuse

Rowers using alcohol or other illegal substances (not including tobacco products) violate county, state and national law. By using or abusing substances, a rower puts his/her life in jeopardy as well as disrespecting the other members of the team.

Consequences of Substance Use/ Abuse:

ON SCHOOL GROUNDS OR AT SCHOOL-SPONSORED ACTIVITIES:

Under the Zero-Tolerance Policy of Blair Crew, a rower who is in possession of, or under the influence of drugs, alcohol, or other illegal substances (not including tobacco products) on school grounds or during a school-sponsored activity will be denied the right to participate in any school-sponsored activity for up to one calendar year.

OFF SCHOOL GROUNDS OR AT A NON-SCHOOL SPONSORED ACTIVITY

First Offense: Upon verification* parent/guardian will be notified. Coach/sponsor will hold a counseling session with rower and the rower will be referred to MSAP (Maryland Student Assistance Program). The rower will be required to complete 10 hours of community service within a thirty-day period.

Second Offense: Upon verification* parent/Guardian will be notified. Administrator will hold a conference with the rower and the rower will undergo a professional assessment. The student must complete twenty additional hours of community service in a thirty-day period.

Third Offense: Upon verification* rower will be removed from all stipend extra-curricular activities for the remainder of the school year (this may include classes that involve extra-curricular participation for a grade). In addition, a parent/guardian conference with administration and sponsors will be held and up to 30 additional hours of community service may be assigned.

All rowers who are subject to these rules will receive an informative packet containing information pertaining to Alcoholics/Narcotics Anonymous. Students who are second-time offenders must give signed verification to their coach, sponsor, or counselor of having attended at least five meetings.

* Verification

For the purpose of this code of conduct, the term “verification” is defined as any of the following:

Self-admission of involvement by the rower

The rower’s own Parent/Guardian admission of student involvement

Observation of involvement by the sponsor, coach, any Walt Blair staff member, or the police

Comment: Use of these substances is unacceptable and incompatible with your status as a minor, your status as a student at Blair, and your status as an athlete. You are an athlete spending countless hours building up your strength and fitness. Using these substances negatively affects all the work you have put in. Quite simply, use of these substances has no place on an athletic team. Also, the team is a self-policed unit – you all have to watch out for each other. Ask yourself if you want to go to the starting line of a race knowing one of your crew has been drinking Friday night.

Other Items: Practice, Boat Selection

Practice Rules

Practice is not social hour - no wasting time.

As soon as you arrive at the boathouse, check your seating for the day on the line-up board. From there, take down an oar for the boat you will be rowing in. Do NOT expect someone else to get your oar for you.

Fill up your water bottle and go to the bathroom BEFORE your coach starts practice.

Make certain to properly stretch and warm-up BEFORE practice starts.

Do not interfere with any other team's practices. This includes talking to people on other teams while they are launching from or returning to the boathouse.

If you see another Blair boat needing some sort of assistance, help them.

Coxswains are required to set up and break down the coaching launches everyday.

Absolutely no horseplay. This includes throwing people off the dock.

Make certain oars are returned from the dock after practice. Do NOT expect someone else to get the oars.

Listen to your coxswain. Listen to your coach.

Boat Selection

Below is how boat selection should be approached once we reach that wonderful place where we have many rowers and multiple boats.

Boats: Our first priority is to select a First Varsity eight. Once this boat is selected, a Second Varsity eight and, in certain circumstances, a Varsity Lightweight eight will be chosen; finally a Third Varsity eight will be selected, if there are enough athletes. Fours are not a priority of the program, and fours will only be created in certain circumstances. There is no seniority in boat selection, the best 8 rowers will be placed in the Varsity - even seniors may be boated in the 3rd 8, so if you are a senior and do not want to row in the 3rd varsity make sure you have properly prepared yourself physically before the season begins.

While we place the most importance on the 1st boat, remember that the 2nd and 3rd eights also have important roles as well in their own right. Being in one of those boats says nothing about your worthiness as a rower, or as a person, for that matter. We want all of you to always strive to be in the 1st boat - having a 2nd boat full of people who will do anything to be in the 1st boat will only make both boats faster. Also remember that in rowing 2nd and 3rd boats compete

against the 2nd and 3rd boats from other teams so your competitive chances would relatively be the same.

Lightweights: At the coaches' discretion, a lightweight boat may be created for the men's and/or women's team. This enables athletes that are not naturally big to compete on an equal basis with similar athletes. The lightweight boat is equal in status to the 2nd varsity boat (i.e. If an athlete does not make the first boat, the coach may put them in the next fastest boat where their size will be an asset). Decisions about which athletes may compete as a lightweight are reached only after careful consultation between coaches, the athlete, the athlete's parents and a physician.

Spares: Usually, three spare rowers and a spare coxswain will be kept on each varsity squad and 2 spares and a coxswain on each freshman squad. Spares are required to attend every practice just like everyone else. There is no guarantee that a spare will race at any point during the season. At the same time, spares may be called upon to practice and race at any time in any boat. Depending on performance Spares may work their way in to racing boats during the season.

Selection Process: Any and all decisions regarding where an athlete will row are coaching decisions. Understand that selecting a boat is an art, and not a science. There are many factors to consider, some objective, some subjective. We consider erg scores, technical ability, attitude, responsiveness to coaching, the results of seat races, and the ability to blend in with the other athletes already selected for the boat. We also rely on our own instinct - while this is a purely subjective method of selection, it is one we use to a great degree. Things like grittiness, determination on the erg, the desire to always win an erg piece, a run, or to lift more than anyone else is all taken into account. Many times, those who are willing to do what it takes to row in the 1st boat successfully will clearly rise to the top on their own. It will often be as clear to the rowers as it is to the coach as to who is deserving of a seat in the 1st boat. Creating a line-up that will go fast is a unique blend of many things, and not just the eight fastest erg scores. While performance on the ergometer is an important factor, it is not the only factor considered. We start the selection process on the first day of winter training.

We do not claim to always be correct in selecting the right eight people. However, the line-ups we put out are what we consider to be the best at that time. You should understand this if you are in a situation where you are unhappy about what boat you're in. If that is the case, it is not the time to sulk and be counterproductive. Your job is to make whatever boat you are in go fast. If you continue to do good things on and off the water, we will notice, and you will likely get a shot at a higher boat. Line-ups are never set in stone, and we reserve the right to change anyone's seat at anytime.

Coaching: The 1st and 2nd Varsity eights are considered to be the "varsity" boats and will be coached by the varsity coach. The 3rd eight is considered to be a "junior varsity" crew and will

be coached by the Varsity assistant coach. The Lightweight eights are also considered "varsity" boats and will be coached by the varsity coach and/or the Varsity assistant coach.

Our job is to help you achieve your goals. Your job is to show up to practice motivated - to do well, to improve, and to work very hard. We cannot simply give you those traits. We can help you find them, but it is your responsibility to want to be on this team, to work hard, to be dedicated, to want to succeed, to want to improve, and to want to prove to yourself and to others what you're made of. Give us that, and along with your trust, we will do our best to help you attain the goals that you set for yourself through rowing at Blair.

Signed and dated:

Rower _____ Parent _____

ADDITIONAL RESOURCES

Thompson Boat Center: www.thompsonboatcenter.com/

Books, Magazines and Further Information: This is by no means complete.

Books

Assault On Lake Casitas by Brad Lewis.

The Shell Game by Steve Kiesling.

The Amateurs by David Halberstam.

The Nuts and Bolts Guide to Rigging by Mike Davenport.

The Complete Steve Fairbairn on Rowing by Steve Fairbairn.

Complete Book of Rowing by Steven Redgrave.

Rudern: GDR text of Oarsmanship by Dr. Herberger.

High Performance Rowing by John McArthur.

Rowing Against the Current : On Learning to Scull at Forty by Barry S. Strauss.

Mind over Water : Lessons on Life from the Art of Rowing by Craig Lambert;

Textbook of Oarsmanship : A Classic of Rowing Technical Literature by Gilbert C. Bourne

The Art of Sculling by Joe Paduda(Editor) and Les Henig (Contributor)

The Book of Rowing by D. C. Churbuck

Thomas Eakins : The Rowing Pictures by Helen A. Cooper

Rowing : The Skills of the Game by Rosie Mayglothling

Rowing Fundamentals by John A. Ferriss

Rowing x-pert - an exhaustive rowing bibliography from Germany

Magazines

SRowing Magazine

201 S. Capitol Ave., Suite 400

Indianapolis, IN 46225

Regatta

Amateur Rowing Association (see below)

6 Lower Mall

Hammersmith, London, UK

W6 9DJ

Rowing

Freepost

Esher, Surrey, UK

KT10 0BR

Ph: (0372) 467098

Independent Rowing News
PO Box 831, 4 West Wheelock St.
Hanover, NH 03755
Fax (603) 643-0606
Email: info@rowingnews.com

Associations

National Capital Area Scholastic
Rowing Association (NCASRA)
Email: ncasra@ncasra.org
Website: www.ncasra.org

United States Rowing Association (USRA)
201 S. Capitol Ave., Suite 400
Indianapolis, IN 46225
Ph: (317) 237-5656
E-mail: members@usrowing.org

Masters Rowing Association
4 Kelly Drive
Boathouse Row
Philadelphia, PA 19130
877-769-4644
(FAX) 215-232-4778
E-mail: mra@mastersrowing.org

Amateur Rowing Association --- England (ARA)
6 Lower Mall
Hammersmith
London
W6 9DJ
Ph. (081) 748 3632
Fax (081) 741 4658

Rowing Australia
3rd Floor, 224 Victoria Rd
Drummoyne, NSW 2047
Telephone: +61 2 9181 5144
Facsimile: +61 2 9181 5025

Rowing New Zealand
P.O. Box 677

New Plymouth, New Zealand
Fax (06)758-0754

FISA (Federation Internationale des Societes d'Aviron)
3653 Oberhofen am Thunersee
Switzerland
Ph: (41) 33-435053

Rowing Camps (Not guaranteed to be up-to-date)

Thompson Boat Center
2900 Virginia Avenue, NW
Washington, DC 20037
202-333-9543
www.thompsonboatcenter.com

Craftsbury Sculling Center
(for all experience levels from beginners to advanced scullers)
Box 31-R
Craftsbury Common, VT 05827
Ph: (802) 586-7767

Northeast Sculling and Rowing School
(Bill Miller --- coordinator/ director)
P.O. Box 2060
Duxbury, MA, 02331
Ph: (781) 934-6192
Email: email@rowcamp.com

Rocky Mountain Rowing Center
Lake Dillon
Frisco, Colorado
Ph: (800)766-1477
(970-)668-3174 (local)
Fax: (970)668-3032 E-mail:rowing@themanagers.com

Charles River Rowing Camps
(High School age only)
CRRC, P.O. Box 380441
Cambridge, MA 02238-0441
E-mail: hlparker@fas.harvard.edu or eholeary@fas.harvard.edu

Nike Rowing Camps
(for boys and girls)
Choose from many university locations throughout the US
phone (800) nike camp

Pioneer Navy Rowing Camp
Marietta OH
(for High school athletes)
Phone: Coach John Bancheri or Coach Kelli MacCulloch at (740)376-4515
E-mail: bancherj@marietta.edu

Navy Rowing Camp, United States Naval Academy
Annapolis, MD
(ages 13-18)
Phone (410)293-2419

Brian Pluckrose and Rosie Mayglothling
(residential and non-residential courses, weekly sculling school)
National Water Sports Centre
Holme Pierrepont
Adbolton Lane
Nottingham
NG12 2LU
England
Tel: (0602) 821212

GLOSSARY OF TERMS

Blades: The wide flat section of the oar at the head of the shaft. This term is often used when referring to the entire oar.

Bow: The forward section of the boat. The first part of the boat to cross the finish line. The person in the seat closest to the bow, who crosses the finish line first.

Bow coxed boat: A shell in which the coxswain is near the bow instead of the stern. It's hard to see the coxswain in this type of boat, because only his head is visible. Having the coxswain virtually lying down in the bow reduces wind resistance, and the weight distribution is better.

Bucket rigging: The rigging of an eight or a four so that riggers 2 and 3 are on the same side.

Button (or collar): A plastic or metal fitting tightened on the oar to keep the oar from slipping through the oarlock.

Catch: The point of the rowing cycle at which the blade enters the water at the end of the recovery and is accomplished by an upward motion of the arms and hands only. The blade of the oar must be fully squared at the catch.

Check: Any abrupt deceleration of the shell caused by some uncontrolled motion within the shell; an interruption in the forward motion of the shell. See 'Crab', below.

Coxswain: The person who steers the shell and urges the rowers on during practices and in a race. A knowledgeable coxswain can also serve as a coach for the rowers and can be the difference between winning and losing a race.

Crab: "Catching a crab". A problem encountered by a rower when his or her oar gets 'stuck' in the water, usually right after the catch or just before the release, and is caused by improper squaring or feathering. The momentum of the shell can overcome the rower's control of the oar. In more extreme cases the rower can actually be ejected from the shell by the oar.

Deck: The part of the shell at the bow and stern that is covered with fiberglass cloth or a thin plastic.

Drive: That part of the rowing cycle when the rower applies power to the oar. This is a more or less blended sequence of applying power primarily with a leg drive, then the back and finally the arms.

Ergometer: Rowers call it an "erg." It's a rowing machine that closely approximates the actual rowing motion. The rowers' choice is the Concept II, which utilizes a flywheel and a digital readout so that the rower can measure his "strokes per minute" and the distance covered.

Feathering: The act of turning the oar blade from a position perpendicular to the surface of the water to a position parallel to the water. This is done in conjunction with the release.

Finish: The last part of the drive before the release where the power is mainly coming from the back and arms.

Foot Stretcher: An adjustable bracket in a shell to which the rower's feet are secured in some sort of shoe or clog.

Gate: The bar across the oarlock that keeps the oar in place.

German rigging: A different way of setting up which side of the boat the oars are on in a sweep boat. Instead of alternating from side to side all the way down, in a German rigged boat, two consecutive rowers have oars on the same side.

Gunwale (or gunnel, saxboard): Top section on the sides of a shell which runs along the sides of the crew section where the rowers are located. The riggers are secured to the gunwale with bolts.

German rigging: The rigging of an eight so that riggers 4 and 5 are on the same side while the others alternate.

Hatchets (a.k.a. big blades or choppers or cleavers): A relatively new design of oar blades (although the idea has been around for some time). These were introduced by Concept II (Spring 1992) and are what the names indicate---oar blades that have a bigger surface area than the 'standard' (Macon) blades and have a hatchet or meat cleaver shape. The hatchets are a bit shorter (by about 7 cm) than the standard blades.

Jumping the slide: Another problem encountered by a rower when the seat becomes derailed from the track during the rowing cycle.

Keel: Technically, the structural member running the length of the boat at the bottom of the hull. Today, some shells are built without this member so the term often refers to the center line of the shell.

Layback: The amount of backward lean of the rower's body at the end of the finish.

Lightweight: Refers to the rowers, not the boats; there is a maximum weight for each rower in a lightweight event as well as a boat average.

Missing water: 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.

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

Oarlock: A U-shaped swivel which holds the oar in place. It's mounted at the end of the rigger and rotates around a metal pin. A gate closes across the top to keep the oar in.

Pitch: The angle between the blade (on the drive when the blade is 'squared') and a line perpendicular to the water's surface.

Port: The left side of the boat when facing the bow (stroke side in the UK and Ireland).

Power 10: A call for rowers to do 10 of their best, most powerful strokes. It's a strategy used to pull ahead of a competitor.

Rating: The number of strokes per minute. Also known as stroke rating.

Ratio: The ratio of the recovery time to the drive time. The recovery time should always be longer than the drive time (how much longer I won't say ... as someone wrote, the idea is to 'move the boat on the pull through (or drive) and take a ride (i.e. relax) on the recovery without sacrificing the very speed that they have generated').

Recovery: Part of the rowing cycle from the release up to when the oar blade enters the water.

Release: A sharp downward (and away) motion of the hand which serves to remove the oar blade from the water and start the rowing cycle.

Repechage: The second-chance race which ensures that everyone has two chances to advance from preliminary races since there is no seeding in the heats.

Rigger (or outrigger): The device that connects the oarlock to the shell and is bolted to the body of the shell. On sweep boats, riggers are typically alternating from side to the other on adjacent seats, but it is not uncommon to see two adjacent riggers on the same side. This is

referred to as "tandem rigging". Variations include "bucket rigging", "German Rigging" and "Italian Rigging".

Rigging: The adjustment and alteration of accessories (riggers, foot-stretchers, oar, etc.) in and on the shell. Examples of rigging adjustments that can be made are the height of the rigger, location of the foot-stretchers, location and height of the oarlocks, location of the button (or collar) on the oar and the pitch of the blade of the oar.

Rowing cycle: The process of a complete stroke, from release to feather, to recovery, to square, to catch, to drive, to finish and the layback. The cycle starts with the rower at 'rest' and legs fully extended with the oar blades immersed in the water perpendicular to the water's surface.

Rudder: Steering device at the stern. The rudder in turn is connected to some cables (tiller ropes) that the coxswain can use to steer the shell. Older shells have short wooden handles (knockers) on the tiller ropes. These knockers are used by the coxswain not only to steer the shell, but also to rap out the cadence of the stroke rate on the gunwale.

Run: The run is the distance the shell moves during one stroke. You can figure it by looking for the distance between the puddles made by the same oar.

Scull: This term is used interchangeably when referring to one of the oars used in a sculling shell, the shell itself or to the act of rowing a sculling shell.

Seat: The sliding seat that the rower sits on. The term "seat" also refers to the rower's place in the boat; the convention is to number the seats from bow to stern, i.e. the rower closest to the front of the boat is "1-seat" the next, "2-seat", etc. The 1-seat is also commonly referred to as "bowseat" or just "bow" while the sternmost (rear) seat is referred to as "stroke seat" or just "stroke".

Set (or set-up) of a boat: The balance or stability of the boat; a "good set" means that the boat does not rock from side to side. Items that can affect the set of the boat are the rower's posture, hand levels, rigging (the favorite culprit ... especially with the more advanced rowers), timing at the catch and release, and outside conditions such as the wind. It is not unusual for rowers within a shell not to agree on what needs to be done to establish a 'good' set, i.e. a level, stable shell that will provide the basis for that symphony of motion.

Slide (or track): The track on which the seat moves.

Shell: Can be used interchangeably with boat.

Skeg (or Fin): A small fin located along the stern section of the hull.

This helps to stabilize the shell in holding a true course when rowing. All racing shells have a skeg. The skeg should not be confused with the rudder.

Skying: The fault of carrying the hands too low during the recovery especially when a rower dips his or her hands just prior to the catch . This usually results in the blade being too high off the water's surface.

Slide: The set of runners for the wheels of each seat in the boat.

Slings (or boat slings, or trestles): Collapsible/portable frames with straps upon which a shell can be placed temporarily.

Squaring: A gradual rolling of the oar blade from a position parallel to the water to a position (almost) perpendicular to the surface of the water. This is accomplished during the recovery portion of the rowing cycle and is done in preparation for the catch.

Starboard: The right side of the shell when facing the bow (bow side in the UK and Ireland).

Stern: The rear end of the shell.

Straight: Refers to a shell without a coxswain i.e. a straight four or straight pair.

Stretcher or Footstretcher: Where the rower's feet go. The stretcher consists of two inclined footrests that hold the rower's shoes. The rower's shoes are bolted into the footrests.

Stroke: The rower sitting nearest the stern (and the coxswain, if there is one). The stroke is responsible for setting the stroke length and cadence (with the coxswain's gentle advice).

Sweep: One of the two disciplines of rowing – the one where rowers use only one oar. Pairs (for two people), fours (for four people) and the eight are sweep boats. Pairs and fours may or may not have a coxswain. Eights always have a coxswain.

Swing: The hard-to-define feeling when near-perfect synchronization of motion occurs in the shell, enhancing the performance and speed.

Washing out: The fault of rowing the oar out of the water, i.e. the blade comes out of the water before the drive is finished.

