

Winter Training Guide Part 2 – Training on the Water

The core element of training takes place in the boat. That is, after all, what the whole thing is about. Crews need to go out as often as they can, so at least one and preferably two of the training sessions in the winter should be on the water. However, this can be difficult to achieve because of shorter daylight hours and adverse weather or river conditions, so in practice more of the winter sessions tend to be land based. (This not a bad thing, because these other forms of training can help you develop the required physical conditioning more directly.)

Time on the water is precious, and you should use it to best advantage. The mere act of turning up and paddling up and down the river won't result in much improvement in your rowing unless it is properly focussed. Outings therefore need to be purposeful and well directed in order to have their best effect. Practice doesn't make perfect, contrary to the old adage – you need *perfect* practice in order to make perfect.

Rowing races are generally won, not by spectacular starts, mid-race 10-stroke bursts or frantic finishes, but by a high cruising pace throughout the race that your opposition is unable to match. It is the development of that pace that is the long-term goal of your training. And the main aim in all your winter training outings is for the crew to learn how to move the boat as effectively as possible so that their collective technique will convert the power they apply into boat speed.

Many books have been written about rowing technique, and it is not going to be discussed in detail here. However, a separate document on the website contains a detailed analysis of the rowing stroke written by Adrian Barsby when he was secretary of the National Coaching Committee, and this deserves close study. In the meantime, here are some fundamentals for crews to focus on.

- Togetherness, rhythm and timing. Crews won't go fast unless they row well together. This is not simply a matter of getting the blades in and out of the water at the same time (although that is important), but also applying the work at the same time during the stroke and moving together throughout the recovery phase. All this requires a good sense of rhythm and a focus on consistency so that every stroke is the same as every other.
- Letting the boat run. Another old adage – 'races are won between the strokes'. The boat moves much farther during the recovery phase than during the propulsive phase – if you let it. You can often see that the difference between two racing crews side by side is that the faster one is getting more run between the strokes than the slower one, even if the amount of effort being applied in the water is the same. Concentrate on relaxation and control on the recovery, move the hands away smoothly and quickly from the finish and rock the body over, then let the boat run under you to let your feet come towards you while you reach round to take the next stroke, staying relaxed all the time.
- Light and accurate catches. The insertion of the blade in the water is often described as the end of the recovery rather than the beginning of the stroke. What this is getting at is that you must place the blade in the water properly before you can apply any work to it. Of course, all this happens very quickly and you need to pick up the speed of the boat straight away, but you should resist any inclination to hit the catches violently.
- Long strokes. Make the most of the full range of movement available to you in order to move the boat. As you insert the blade, your seat should be at frontstops with your shins

vertical, your body should be fully rocked forward (but not over-reaching so as to collapse into a weak position), and your arms should be straight although not locked rigidly at the elbow. Your hands should be at the height that leaves a minimum distance between the blade and the water before the catch, so that you are able to hook on to the water at full reach, without missing any part of the stroke. Similarly, hold on to the finish of the stroke, keeping pressure on the footplate until your body is swung back beyond the vertical and your arms have finished the stroke by bringing the blade handle close to your body. Throughout the stroke the blade needs to be covered at the right depth – essentially the depth at which it will float, with the painted part covered – but avoiding any tendency to dig deep, or wash out by dropping the hands while you are still in the propulsive phase.

- Progressive acceleration. The purpose of the exercise is not to pull the blade through the water but to lock it in position and then catapult the boat past it. The main propulsive force comes from the leg drive, but this must be connected to the oar handle through the lower back, shoulders and arms without dampening its effect through any weaknesses in that chain. The aim should be to hang your body weight on the oar handle as it is driven backwards by the legs – sometimes described as suspension – rather than remaining sitting heavily on the seat and just tugging the handle with your arms. As the boat speed picks up, you should use the back, shoulders and arms progressively to maintain and even increase the acceleration through to the finish of the stroke.
- Keep it lively. Whatever pressure you are rowing at, the boat should never feel heavy, and the rating and rhythm should be appropriate to the amount of work put in. Even when you are paddling light, you should keep it crisp and athletic rather than stodgy or lazy. When you are paddling at half pressure, concentrate on sweeping the blade through smoothly and effectively and making the boat run as far as possible. When you are paddling firm, make it really dynamic in the water but don't forget to relax and let the boat run on the recovery. When switching between these different levels, make sure the differences are distinct; don't fall into the habit of paddling along in a nebulous way with no one in the crew quite sure what pace you are trying to go at.

The content of a typical outing

During the winter, the main emphasis should be on long sustained pieces of rowing to build stamina, and on technical exercises to improve technique. Outings should also include some faster bursts, but more from the point of view of experimenting with different rhythms and pressures than to build absolute speed. The time for higher intensity training is later in the year, as we get nearer to the regatta season.

The distance covered in a normal outing in a four or an eight should be at least up to the shed and back (about 10k). More specifically, though, outings should include at least one long sustained steady state row, with the dual objectives of building stamina and developing the ability to row effectively and efficiently together for a prolonged period. Once crews have got used to this, they should be aiming for at least 20 or 30 minutes at this pace, although they may need to build towards this in the early stages. One of Upton's big advantages is that we have such an extensive stretch of river to row on, so even longer stretches are possible. When doing these pieces, the emphasis should be on consistency, rhythm, long strokes, relaxation, moving the boat as far as possible per stroke, and keeping it lively while maintaining the right level of work throughout the piece.

In addition, some time should be spent on continuous paddling but with frequent changes of pressure (light/half pressure, light/firm, or combinations of all three). This can be done by repeating sequences of the same number of strokes of each (e.g. 20 light, 20 firm), or in a more complicated 'pyramid' pattern (e.g. building up the alternations from 5 to 10 to 15 to 20 to 25 and back down again).or whatever other variants of these you choose. This is a good conditioning exercise, but it is also an opportunity to experiment with pace and embed the different rhythms of different pressures. Make sure that the differences between the pressures are distinct, and aim for quality rowing throughout the sequence, in the light pressure as well as in the half pressure or firm.

The winter is also the time of year when we should be taking the opportunity to perfect our technique, both individually and as a crew. One of the main ways of doing this is conducting technical exercises, some examples of which are listed below. These are equally applicable to sweep-oar rowing and sculling.

- Zero catches and quarter pressure finishes. The catch is what it says – zero. You come to the beginning of the stroke and simply drop it in the water without trying to move the blade through the water at all (momentarily) – then you pick up the stroke after a split second and accelerate through to a quarter pressure finish. Obviously this can only be done at a low rating and when the boat is not moving very fast. It is a good way of getting to feel just how light a catch can be, and countering any habitual tendency to hit the catches hard. **Improves: lightness of touch at the catch**
- Sending the boat as far as possible per stroke. This should be done with a lot of pressure but an unnaturally low rating – in the range 12-15 strokes per minute. However, you must keep moving throughout the recovery. This is another exercise that helps in getting a feel for the boat and good slide control. It also emphasises strong finishes to send the boat away level. **Improves: acceleration, finishes and relaxation on the recovery**
- Square-blade rowing. This puts emphasis on clean finishes and sending the boat away level, with relaxation on the recovery. This exercise is usually more easily done at quarter or half pressure. If you're not very good at it you can start by doing every alternate stroke square, or having only half the crew rowing with square blades at a time. **Improves: finishes and balance**
- Break the strokes down and build them back up. From full strokes at light pressure change to a series of strokes at $\frac{3}{4}$ slide, then $\frac{1}{2}$ slide, then $\frac{1}{4}$ slide, then no slide, then back up again (perhaps 10-15 strokes of each length). Get used to the slightly different rhythm at each level, but be careful not to rush when the stroke is shorter. As you build the strokes up, concentrate on maintaining the 'hands, body, slide' sequence. **Improves: sequence of movement on the recovery, components of the stroke**
- Feet out rowing. This helps to counter any tendency to rush the slide on the recovery, because you have to get your hands and body moving forward to give you momentum and then let the boat run under you. Only to be done at low pressure and rating. **Improves: sequence of movement and relaxation on the recovery**
- Eyes closed. A good exercise to get you both listening and feeling the rhythm of the boat without any visual clues. **Improves: togetherness, sensitivity to timing**

- Pause rowing (sometimes called ‘single strokes’). Pause either at the hands-away position or at half-slide and balance the boat there for 3 -4 seconds until the cox says ‘go’, and then move gently on to take another stroke. This can be done on every stroke or in groups of a few strokes – say up to five. **Improves: finishes, balance**
- Dunking and quarter slide push. This is done by sitting at front stops at your normal catch position and dropping the blades in and out of the water (dunking) and then attempting to take a 10cm stroke (quarter slide push), catching but not moving the body or arms - just moving the legs to start the power. Afterwards revert to normal paddling, trying to repeat the feeling in the full stroke. **Improves: sequence of movements at the catch**
- Fast hands. Take normal strokes but move the hands away from the finish at twice the normal speed. This helps to break any habit of pausing at backstops, and gets you to think more flexibly about hand speed alternatives. **Improves: fluent finishes**
- Pairs rowing. This gives you the chance to perfect your technique at low speed in an perfectly stable boat. Also concentrate on achieving complete togetherness with the other person rowing. **Improves: focus on technique, togetherness**

The above list should not be regarded as definitive or compulsory; like the rest of this guide these are just suggestions of things that you might find useful. Perhaps as much of half of every outing should be spent doing a selection of these (or other) exercises – not all of them, but maybe 5 or 6. Even top international crews devote a good deal of time to these apparently basic drills.

The more important issue is how you do the exercises. To get any benefit, you need to concentrate hard on each exercise as you do it and focus on what you are trying to achieve. Simply grinding through a series of exercises as a way of passing the time until you get back to normal rowing is not productive.

You should discuss the content of an outing as a crew before going afloat, rather than simply going out on the river and deciding as you go along. Remember that everything you do should have a purpose, and you should agree what you are trying to achieve.