



BASIC ROWING TECHNIQUE

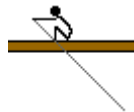
Getting the basics of your rowing technique is important for several reasons. Firstly getting it wrong can lead to instantaneous injury or acute long term damage for example to your lower back, shoulders or knees. If the potential damage to your body isn't enough to get you to concentrate on technique then remember, good technique means a more efficient stroke, which means you can pull less hard and get less tired for the same boat speed. Looked at another way good technique means you can go quicker and win more!

As a novice fresher you will be put out in a boat very quickly. When in the boat for the first few weeks you should not try to row hard – focus on getting the technique right early on, and once you have got the technique you can work hard.

It is important to realise that the rowing stroke is *one continuous movement*, with no pausing or stopping. It is possible to break it into four main parts, however:

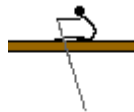
1. **Drive** (power phase) – when the blades are in the water, and power is applied to push the boat along
2. **Finish** (extraction) – getting the blade out of the water
3. **Recovery** – moving back up the slide, getting ready for the next stroke
4. **Catch** – dropping the blade in the water so power can be applied again

The Drive

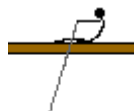


With the blade locked in the water at front stops, the shins should be vertical, the arms locked straight, and the back held solid.

The first part of the drive uses the legs to push off the stretcher (footplate) - the back and arms shouldn't move in the first part of the drive.



As the leg drive starts to run out, the body starts to lean backwards, *keeping a straight back*.



Finally, the arms and shoulders draw through.

During the drive, the blade handle should be drawn through *at a constant height*, so that the depth of the spoon in the water is constant.

It is important to try and build up the pressure *quickly but smoothly*, and maintain that pressure all the way through to the finish - think about trying to keep the blade handle moving through as quickly as possible all the way through the stroke. The legs, back and arms should flow together smoothly rather than be separate movements.

A sequence showing Dutch international Wim van der Velden:

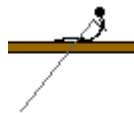


The start of the drive – note vertical shins in the first shot, and the body angle maintained from the first to second shot. By the third shot, half of the leg drive has been used, and a little opening of the body can be seen, although the arms are still straight.



As the legs are starting to near the end of the drive, the body swing is more pronounced, and the arms start to draw through. Note the shoulders stay level through the stroke, although the rotation is difficult to see. Note also, that the blade has been feathered (see below) - the handle has been tapped down to clear the blade, and the outside wrist is still flat, although the inside hand has twisted the blade.

The Finish



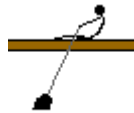
The blade is tapped out of the water using the *outside* hand – it should take a light push down on the blade handle to get the blade out of the water. It is useful to imagine the outside hand going round a circle at the finish: the pressure is maintained on the handle until the last moment, and the blade should then pop out of the water cleanly and without getting caught.



Normally, the blade is then feathered: although the blade comes out of the water square (ie vertical) the *inside* hand turns the blade handle so the spoon is flat to the water. At this point the blade should be well clear of the water. It is crucial that the tap down and feather is one movement.

It is common for novices (and seniors) to row square blades, however. The blade is kept at right angles to the water, so that the finish action can be learnt without introducing anything too complicated like feathering.

The Recovery



With the blade clear of the water, the arms are pushed out straight, then the body rocks over. The back should be held straight, with the movement coming from the hips. Once the blade has been tapped out of the water the hands should move forward at a *constant height*, with the outside hand controlling the height of the blade handle so that the blade doesn't clip the water.

The grip should be very loose – the blade is not very heavy and you should be able to press down lightly with your outside hand to control the height of the handle on the way forward.



"HANDS - BODY - SLIDE" is what your coach and cox will remind you of. Only start to move up the slide once your arms are out straight and your body has swung over. The hands should then move forward at the same height, and without rushing forward - keep the same speed forward with the outside hand and try to think about following it up the slide.

As you move forward towards front stops, the outside arm will reach between the knees, and the shoulders rotate (keeping roughly level) to allow you to reach forward for a long stroke. It is important to remember that you are rowing around in an arc - this rotation and reach around is crucial to a long effective stroke.

The blade should be gradually rolled square as you move up the slide, so that by three quarter slide you are fully square and ready to take the next catch.

The recovery in pictures:

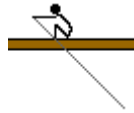


The hands are being pushed away from the body once the blade is clear of the water and feathered. Note the arms are straight and the body rocked over past vertical by the third shot, with no movement on the seat.



The body is fully over, and now the movement forward on the slide starts. Ideally the body angle should be held constant through the recovery - although the upper body should rotate as you reach around towards the catch. Note the blade is nearly square by half slide - it should be gradually rolled square so that it is fully square by 3/4 slide.

The Catch



Keeping the back and arms straight, the hands are lifted to drop the blade in the water. It is often useful to think about the outside hand going round a *small* circle to drop the blade in the water. The legs shouldn't start to push until the blade is locked in the water.

The catch is the most difficult part to get spot on – the hands and seat should move forward at exactly the same speed, slowing as you are just getting to the point of maximum reach forward. The blade should be hooked into the water (remember the small circle) at this point – just as the seat/hands stop moving forward. The blade will then be locked in the water as you start to apply pressure with the legs – if the blade isn't in the water you will push the boat backwards. A quick efficient catch is what makes a crew go quickly - but patience is needed to learn the movements.

Putting it all together

The different parts of the stroke should flow together smoothly, and the most important thing is to keep in time with the rest of the crew. If the hand heights and the timing of the movements are the same through the crew, then the boat will sit level. This takes experience and concentration, and even top college crews will struggle at the start of the year. Persevere get your technique right and then you will have the best platform to pull hard and win with!

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The animated rowers were originally made by [Ewoud Dronkert](#) of [USR Triton](#).

Photos from [Triton](#) site.