

# Murwillumbah Rowing Club Inc.



P.O. Box 846  
Murwillumbah NSW 2484  
[www.murwillumbahrowing.com.au](http://www.murwillumbahrowing.com.au)  
ABN 35 079 900 893

## Learn to Row Handout

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### Mission Statement

- To facilitate and nurture Rowing at all levels of participation
- To provide the opportunity for all members to achieve their goals

### Our Values

Our values, in relation to all dealings with our stakeholders and each other, are to:

- Encourage participation
- Strive for excellence at all times
- Foster inclusion, cooperation and teamwork within the club and with all external stakeholders
- Engender respect at all times
- Facilitate fun and enjoyment for all

### Email contacts (refer to website for current office holder):

- [captain@murwillumbahrowing.com.au](mailto:captain@murwillumbahrowing.com.au)
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versions:

Tim Rose Sept09  
Jenny Culley Sept09  
Tim Rose Nov11

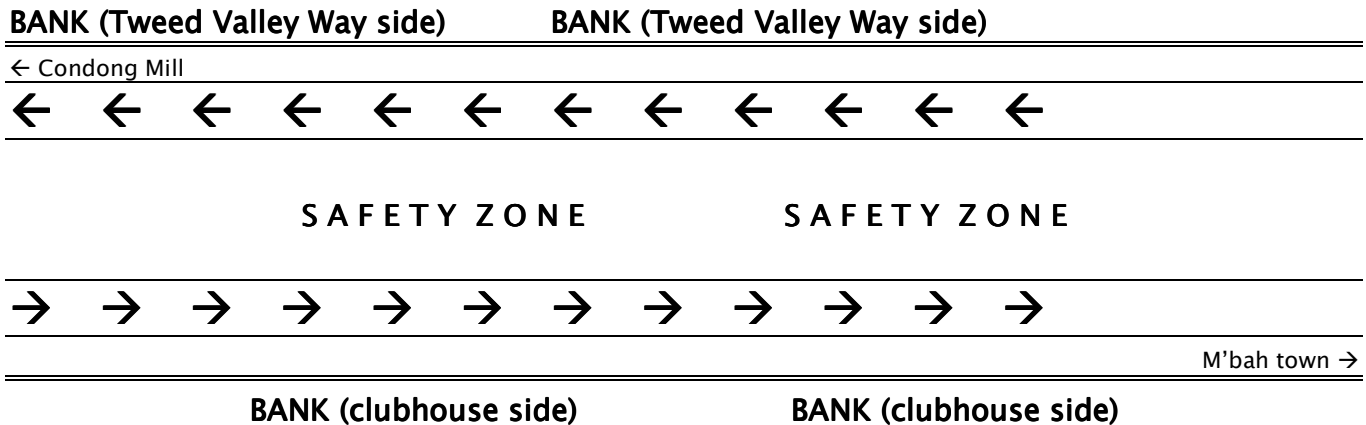
**Safety First**

Like all aquatic sports, rowing has some basic necessities in order to prevent serious injury.

1. Rowers should be able to swim at least 100 metres.
2. Understand and obey the river traffic rules, restrictions and hazards of all waterways on which you intend to row.
3. Newcomers should not row unless accompanied by coach or experienced rower.
4. Assess weather conditions before rowing. Do not row if a lightning appears imminent or visibility is poor e.g. fog, heavy rain.
5. Coxless boat crews should check their course regularly and be wary of craft that might change course without notice.
6. Protect yourself from the effects of heat and sun. Avoid training in temperatures over 30 degree's Celsius; drink water up to the rate of 250ml per 15 minutes of exercise; wear a hat, long sleeve training top, water resistant sun block & sunglasses. Waterbottles should be in a soft covering, so as not to harm/rub the shell of the boat.
7. In cold weather, dress to retain body warmth in order to prevent injuries and/or illness.
8. Make sure you have warmed up prior to any strenuous training session or race.

## WATER SAFETY RULES

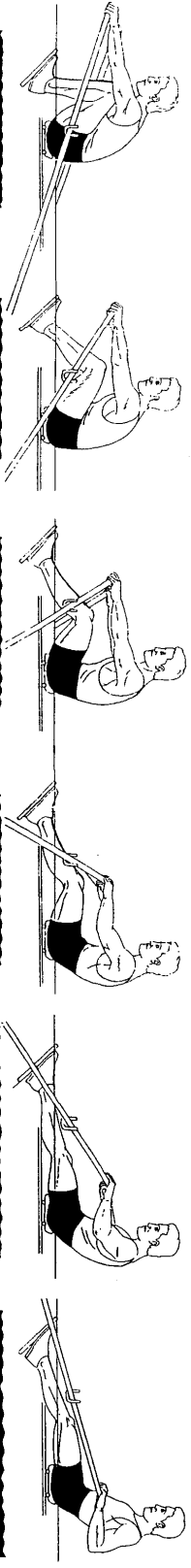
1 Direction of travel



2. Rowers should observe the above traffic flow with particular notice paid to the 'SAFETY ZONE'. Avoid rowing in the Safety Zone.
3. Crews being overtaken should alert by shouting the overtaking crews and move aside as soon as practicable to avoid collision.
4. When changing direction crews are to proceed to the opposite side in the shortest possible route and give way to all traffic.
5. Official competition boats have right of way during designated regattas, for the length of the competition course.
6. At the completion of a Regatta race – do not obstruct other boats by stopping on the finish line or immediately beyond. Retire to a safe distance.

# Rowing Equipment & Technique

# BASIC SCULLING TECHNIQUE



**CATCH**

- No stop of the hands or seat.
- Blades catch the water smoothly, continuously and directly.

**EARLY DRIVE**

- Inlet drive with legs through a strong body.
- Shoulders same height.
- Extension of knee and hip joints.

**MID DRIVE**

- Legs and body in powerful hang position - suspension of body weight between handle and feet.
- Arms straight, shoulders directly above seat.

**MID LATE DRIVE**

- Hands at cross-over position.
- Shoulders and arms start to draw.
- Shoulders behind the seat.
- Legs work vigorously down.

**LATE DRIVE**

- Shoulders behind the seat.
- Shoulders and arms draw in the accelerating handle.
- Attempt to finish handle simultaneously with the leg drive.

**FINISH**

- Powerful position of the body, arms and shoulders.
- Wrists flat.
- Forearms horizontal.
- Elbows/Shoulders pulled back.
- Hands ready to circle down.

2-7

**RELEASE**

- Body does not move.
- Hands move down to release blade, then feather (see GRIP below).
- Shoulders and elbows same as finish.

**HANDS AWAY**

- Hands move away approaching the CROSS-OVER (see below).
- Legs straight and relaxed.
- Arms straight and relaxed.

**EARLY RECOVERY**

- Body swings over.
- Knees allowed to lift.
- Centre of gravity between seat and feet for stable, balanced position.

**MID RECOVERY**

- Forward body swing continues.
- Seat moving at constant speed.
- Blade starts to square.
- Roll handle into base of fingers.

**LATE RECOVERY**

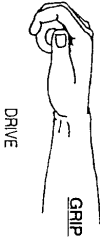
- Body swing complete.
- Arms fully extended, wrists flat.
- Blade almost square.

**FULL REACH**

- Full compression toward water.
- Arms vertical.
- Chin above knees.
- Chest on thighs.
- This may be slightly more upright than sweep oar.
- No stop of seat or hands.

**CATCH**

- Enter blades in the water with hand lift only - both head and shoulders remain same height.
- Legs compress but not stop.
- Catch is quick but not hard.



DRIVE

- Flat wrist in square (vertical) blade position.
- Handle is held in base of fingers and top of palm.
- Second joint of fingers is most distant from body and half way around the handle.



RECOVERY

- Wrist is flat in the feathered (horizontal) blade position.
- Handle is rolled out into the fingers AFTER depressing the handle to release the blade from the water - note slight gap between handle and palm.
- Third joint of fingers is most distant from body.



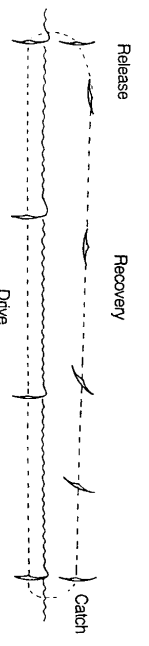
SIDE VIEW

- Left hand is above and slightly astern of the right hand.

DRIVE PHASE CROSS-OVER



ABOVE



BLADE-WORK

## MRC Beginners Handout

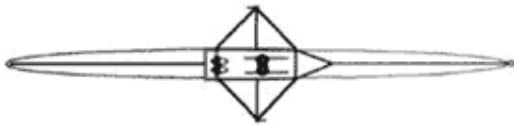
### Oars

Oars are attached to the boat by adjustable outriggers and are hollow to reduce weight. The size and shape of oars is unrestricted, the average length of a sweep oar being 3.81m (12 feet 6 inches) and of a scull being 2.98m (9 feet 9 inches).

### Boats

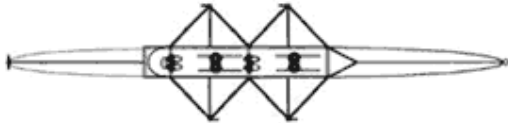
Boats or shells were traditionally made from wood, but are now mostly fabricated from carbon fibre and plastic (eg. kevlar). They are 597 to 622 mm wide, and from 8.2 metres to 19.9 metres long. A small fin is fitted at the bottom for stability. A washboard prevents waves from splashing water aboard. Seats are fitted with wheels which roll on tracks called slides.

## Guide to Boats



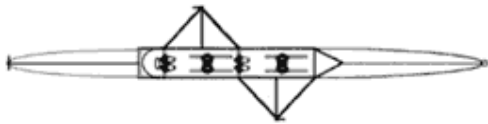
**Single Scull:** smallest of all rowing boats. It is used by one athlete, with a pair of sculling blades (one in each hand).

Approx length:8.2 m Min Weight:14 kg



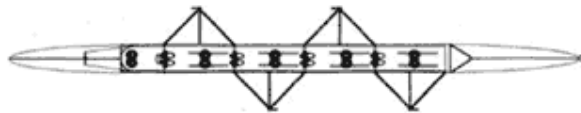
**Double Scull:** two rowers, each using a pair of sculling blades.

Approx length:10.4m Min Weight: 27 kg

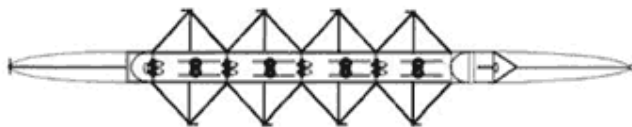


**Coxless Pair:** rowed by a pair of rowers each with a single sweep oar.

Approx length:10.4 m Min Weight: 27 kg

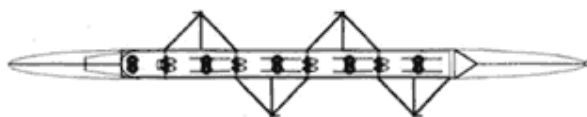


**Coxed Four:** four athletes rowing, each with a single sweep oar. A coxswain is on board to steer the boat.

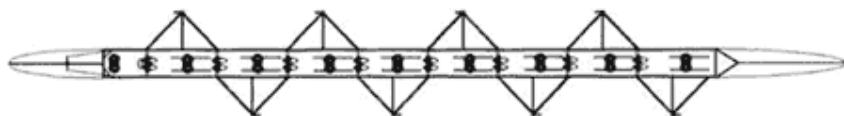


**Quad Scull:** four athletes on board, each with a pair of sculling blades.

Approx length:13.4 m Min Weight:52 kg



**Coxless Four:** four athletes on board, each with a single sweep oar. No coxswain is on board to steer the boat - the athlete at the stern of the boat steers via a cable connecting the rudder to his footstretcher.



**Coxed Eight:** is the largest of all boats used in racing. There are eight rowers on board, each with a single sweep oar. A coxswain does the steering. Eights are constructed in two sections which bolt together (for transportation). The maximum length of a section of an Eight is 11.9 metres. Approx length:19.9 m, Min Weight: 96 kg

<b>Blade</b>	Flattened or spoon-shaped end of oar or scull; often used as term for oar
<b>Bow</b>	Forward end of boat
<b>Bow</b>	The person in the Bow seat of any coxless crew assumes primary responsibility for the safety of that crew. That person becomes the lookout. When there is a coxswain in the boat, then the bow person shares responsibility with the coxswain. Remember, sometimes the coxswain's vision is temporarily obscured
<b>Bow ball</b>	Safety ball fitted to sharp stem of racing boat
<b>Bowside (starboard)</b>	All rowers whose oars are on the right hand side of the boat when viewed from the stern
<b>Button</b>	Plastic sheath on oar or scull to prevent it from slipping through the rowlock
<b>Canvas</b>	The canvas on fore and aft decks of a boat
<b>Catch</b>	The part of the stroke when the blade is put in the water
<b>Coxswain</b>	Steer the boat from the seat in the stern or a lying position in the bow
<b>Crab</b>	Occurs when the rower fails to get the oar out of the water at the end of the stroke; can result in the rower being ejected from boat to water
<b>Crew</b>	Rowers who man a boat
<b>Drive (Pull-through)</b>	The part of the stroke between the catch and the finish
<b>Feather</b>	To turn the blade parallel with the water surface at the start of the recovery to reduce resistance
<b>Fin</b>	Small flat plate perpendicular to the bottom of the boat to aid steering a straight course
<b>Finish (release)</b>	The part of the stroke just before and as the blade is taken out of the water
<b>FISA</b>	Federation Internationale des Societes d'Aviron; the International Rowing Federation
<b>Gate</b>	Bar across a rowlock to retain the oar
<b>Gunwale</b>	Horizontal plank at the top of the hull running the length of the boat
<b>Hands away</b>	The act of dropping the oar handle at the finish of the stroke so that the blade leaves the water and is feathered at the start of the recovery; sometimes referred to as "out of bow"
<b>Inboard</b>	The distance between the far end of the handle of an oar or scull and the face of the button. The remainder is called the out board
<b>Length</b>	The length of a boat (ie "They won by one length")
<b>Oar</b>	A lever approximately (360cm) long by which the rower pulls against the rowlock to move the boat through the water
<b>Rating (beat)</b>	The rate of stroking, or the number of strokes per minute that a crew is rowing
<b>Recovery</b>	The part of the stroke cycle between the finish and the catch in which the oar is feathered and the seat is returned to the aft end of the boat
<b>Regatta</b>	A competitive event raced in boats
<b>Repechage</b>	A second heat to afford another chance of qualifying to those running second best in preliminary heats
<b>Rhythm</b>	The proportion of time occupied on the recovery to the time taken on the pull through
<b>Rigger</b>	A metal framework or a carbon-fibre reinforced arm to support the rowlock which is placed approximately 760 mm from the centre of the boat
<b>Rowlock (oarlock)</b>	A bracket which swivels on the end of the outrigger to support the oar
<b>Rudder</b>	Steering device attached vertically to the stern or under the hull of a shell
<b>Run</b>	The distance a boat travels in one stroke
<b>Sculling</b>	Using two oars or sculls
<b>Slides</b>	Parallel rails in which the seat moves on wheels
<b>Stern</b>	The rear or aft of the boat
<b>Stretcher</b>	A frame with straps or shoes to anchor the rower's feet
<b>Stroke</b>	The complete cycle of moving the boat through the water using oars or sculls
<b>Stroke</b>	The rower seated nearest the stern
<b>Stroke side (port)</b>	All the rowers whose oars on the left hand side of the boat when viewed from the stern
<b>Washing out</b>	Occurs when the blade comes out of the water during the pull-through, <i>before</i> the finish