The Rec Rowers Handbook

Foreword

Tees Rowing Club (TRC) offers an off-peak category of membership which allows non-racing members to row at the club weekdays (Monday to Friday) between the hours of 9am and 5pm with a reduction in annual membership rates. The recreational rowing squad (the Recs) runs squad sessions to help rowers with this category of membership to enjoy social rowing in a supportive environment.

The aim of this document is to provide a point of reference as to what the recreational squad offers and the expectations of those joining the squad sessions and support material for the recreational rower.

Who rows with the recreational squad?

The Recs come in all shapes and sizes. Some are very able and/or former competitive rowers who do not want to compete. Some are able rowers and/or keen to improve and are open to competing. Others may be peak time club members who want some additional weekday rowing in company or as a route to recovery from illness of injury, while others just want to have the occasional row with friends or maybe return to the sport after a gap of some years. While the majority are people who have come to rowing later in life, often on retirement, they also include those with child-care responsibilities, those who work shifts or people who are new to the area and want to meet others. What most have in common is a desire to:

- keep fit or get fitter,
- be part of a social group with a common interest
- learn new skills or develop their technique.

The Rec squad does not offer junior rowing routinely although some members bring grandchildren or children down from time to time.

A summary of the history of the Rec squad may be found in the appendices.

What does the recreational squad offer?

Currently, the Recs offer two squad sessions each week on Tuesdays and Thursdays all year round. Unlike all other squads, this provides the option to just turn up on the day for an outing. As such, some peak time members like to join the group for additional rowing particularly in winter when evening rowing is not an easy option or in school holidays if they teach for example. Most of the time, sculling boats are used (i.e. each person has two oars) but sweep oar rowing is also an option. The Recs also row on other weekdays but there are no formal squad sessions. Arrangements to meet may be made during squad sessions.

To join any of the squad sessions, those wishing to row are asked to be in the club room at no later than 08:30 so that people can be allocated to a boat. It is possible most times to meet rowers' preferences for use of any type of sculling or rowing boats. Usually, the squad leader (or one of the coaches or an experienced member of the squad) takes responsibility for allocating rowers to boats. The aim is to start getting out on the water at 09:00. After the outing, people are encouraged to mix in the club room over light refreshments.

Tuesdays: The focus is looking after beginners and early improvers such as "graduates" from TRC's main Learn to Row Programme, or those who have learnt or are learning with the Recs.

Thursdays: The focus is to let the more experienced members of the squad get an outing that is more suitable for their ability. However, those with less experience are welcomed once they have mastered the basic techniques and may be asked to row together, or go out in a stable single (with "scullies" which help to prevent the boat capsizing).

Coaching: The squad tries to provide coaching for all those who want it. It offers tailored "Learn to row" opportunities (see later section) for those new to the sport but also tries to make sure any who want to can keep

learning and improving their rowing ability. It also tries to offer rowers with some experience support with their own rowing, and will also help people learn how to cox or drive a launch.

Currently four BR Level 2 coaches are part of the squad, two of whom also have an additional responsibility for training all TRC launch drivers. There are others who hold historical rowing coaching qualifications.

Support material: See the Appendices for guidance about various aspects of rowing for the recreational rower. This includes health and safety, boat rigging, the rowing stroke, some basic drills, basic coxing commands and what to expect from the early sessions as a beginner.

Other opportunities:

- Participation in a river based capsize practice. The group encourages all its squad members to do this at least once.
- Rowing on any weekday during off-peak hours.
- Use of the gym during off-peak hours.
- The squad runs social rowing events, which generally include a supported row to Yarm in the summer followed by a BBQ, and a Christmas row and lunch. These events are open to all club members.
- As part of British Rowing "Explore Rowing" initiative, exchange visits may be arranged with other rowing clubs. Durham and Lake District trips have been regular features recently.
- Crews from the squad may enter the monthly Sunday mini-head races.
- Crews from the squad have entered (and had success in) Northern Rowing Sunday League events. If people are interested in this, they are supported to do so.
- Squad members are encouraged to support TRC activities. This may range from helping with annual events like the Tees Regatta, serving on the Club Committee, running mini-heads, or supporting boat maintenance or coaching.
- External social events that may include walks, lunches, or film and theatre visits particularly by the women members of the squad.

Expectations of squad members:

We expect people that row with us to

- 1. Turn up on time for squad sessions if you want to be included in the crew arrangements.
- 2. Help each other get boats and equipment out at the start of the session and to clean and put them away at the end.
- 3. Be flexible on who they row with and in what boat.
- 4. *To take an active role with newcomers* when you have either sufficient rowing experience or show an aptitude for coaching.
- 5. *Cox a boat* from time to time.
- 6. Help with the running of the squad. The squad lead(s) need others to help to run it by taking on responsibility for various tasks such as the catering and arranging trips away or special events.
- 7. Complete a river based capsize drill, ideally within no more than 12 months of starting with us if they have not completed a capsize drill previously. This is led by the Rec coaches. Failing this, we encourage rowers to attend a club capsize session.
- 8. Read the BR information on cold water shock and hypothermia or sit through a presentation on this by one of the leaders.
- 9. Learn how to drive the club launches, following the club standard course.

What equipment does the squad use

TRC is one of several clubs across the country with the facilities and expertise to be able to offer both recreational and long-distance rowing. The latter events are fun and sociable but also require stamina and aerobic fitness – a

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great way to keep fit. Tees have a range of boats specifically designed to be more stable than fine racing boats and thus ideal for learning the basic techniques. These are two "Learn to Row" (LTR) coxed Quads, two LTR doubles and two LTR singles. The doubles and singles can be used with floats (scullies) that help minimise the risk of capsize. The LTR boats are highly suitable for teaching the basic skills and for long-distance rowing; moreover, they are useful as a means of technical improvement for senior rowers. As rowers' skills improve, they have access to a wider range of the club boats. The squad has access to the club's launches and these are used for coaching activities from time to time.

Quads are the most popular choice of boats used by the Rec squad (fine and the LTRs) although the group use singles and doubles regularly, and the other boat styles less frequently.

The Rec squad boat booking policy

The Recs may use any unrestricted boats for their sessions without booking during off-peak hours. If there is a wider club need, the Recs may at times be asked to limit its use of a specific boat by the club captain. Crews (or the boat bookers) are asked to check with the Recs before booking unrestricted boats out at times that overlap with the main Rec squad sessions, currently 09:00 to 11:00 Tuesday and Thursday mornings.

Taster sessions and learning to row with the Rec squad.

The squad offers "taster" sessions on Tuesday mornings by arrangement for those who have never rowed before. After this, if a newcomer thinks they want to explore rowing further and cannot join the main club LTR course, the squad offers tailored training on a Tuesday morning. This provides for about 10 sessions for which there is a charge (£100 as of January 2024) which is usually sufficient for people to get a grounding in the basics of rowing and aims to cover key areas based on British Rowing's checklists. After this, if progress has been reasonable and the newcomer wants to continue, they are expected to take up Tees Rowing Club membership. Learning to row with the recreational squad does not mean someone cannot become a peak time club member subsequently. Some "graduates" from these sessions have progressed to row with and race for the main club.

Appendix 1 provides a summary of the basic knowledge all those learning with the recreational rowers are expected to achieve, and what limitations are placed on those learning with the Recs. Appendix 4 provides some more detail about learning to row, or returning to rowing, with the Recs.

The Recs approach to newcomers may be spread over a longer elapsed time than the structured LTR course offered by the club and offers a more individual focussed training plan that may be more appropriate to a recreational rower. The disadvantage of this approach is that it is not always possible to have available the best coaching expertise on all occasions. It is necessary to enlist the assistance of less experienced rowers, but we have found that in such instances, this is not always a bad thing. The person giving the instruction can often identify with the initial problems that newcomers encounter as the experience is much fresher to them.

In order that insurance and safety aspects are in order, newcomers will be required to complete a modified version of the normal membership joining form that will ask for confirmation of ability to meet British Rowing's swimming requirements and to declare any medical conditions which could affect their ability to row safely.

From the outset, newcomers will be encouraged to become involved with the squad and should they so wish, help the smooth running of the club and to maintain its facilities. TRC is a volunteer club and dependent on all members helping to run it and its events.

British Rowing Membership

British rowing membership is not included within the monthly club subscription. All Rec rowers are actively encouraged to sign up for this (see https://www.britishrowing.org/join/), as one of the main benefits is public liability insurance as well as personal accident cover.

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- Health and injury prevention
- Adjustments
- Boat care and maintenance
- Coxing
- Faults and how to clear them
- Exercises for on the water
- Glossary of rowing terms

Appendix 1. Rec rowers' Certificate of Competence, based on British Rowing material



REC ROWERS – CERTIFICATE OF BASIC COMPETENCE

This certificate confirms that the above person has demonstrated the following basic competencies:

SAFETY	
Understands the safety rules of the club	
Understands the procedures to follow in case of an incident	
Knows what to do in a capsize	
Understands the role of the cox	
CLOTHING AND EQUIPMENT	
Understands what clothing to wear when rowing	
Understands personal flotation devices (differences/when to use)	
Is aware of different types of boats found in the club	
Can adjust equipment to suit body	
Can carry out a basic boat safety check	
Can safely launch a boat on the water from the boathouse	
Understands what is meant by sculling and rowing	
TECHNIQUE	
Can sit in the safe position	
Can hold the blade correctly	
Can row away from a spot, turn the boat, and return to the spot,	
while maintaining correct sequence and posture	
Can move the boat forwards and backwards	
Can turn the boat through 360 degrees	
Can carry out an emergency stop	
Can satisfactorily complete a number of techniques for improving	
skills e.g. square blading, blade dips	
TERMINOLOGY	
Can name the parts of a boat	
Can name the parts of the blade	
Understands basic coxing instructions	

Can name the parts of a boat					
Can name the parts of the blade					
Understands basic coxing instructions					
Checklist based on Explore rowing's "learn to row" p	assport				
Signed:					
Date:					

Definition of Rec Beginner

A Rec "beginner" is someone new to rowing. As such, the person will never venture beyond the bounds of the infinity bridge and the Diana bridge unless one of the following is met:

- 1. The novice is in an LTR quad with an experienced rower as cox and at least one other experienced club rower
- 2. The novice is in an LTR double, with an experienced rower. The experienced rower is responsible for determining whether floats should be used or not.
- 3. The novice is in an LTR single with floats, and has been given permission to travel outside the boundary limits by the person in charge of the rowing session.

Rec beginners do not use fine boats whether on their own or with an experienced rower.

A person will be deemed to be a Rec beginner until such time as they have demonstrated the skills outlined in the table above.

Appendix 2. History of the Rec rowing squad at Tees Rowing Club

2006: Recreational Rowing in its current format came into being under the guidance of the then Club President, John Green. Active recruitment of more rowers over the Christmas period. Early helpers and recruits included Phillip Searle, Gordon Pargeter and Pam Rawlinson.

2007/2010: New members join the club including Brian Hanson, Dave Clarke, and Ernie Bland. The first capsize drill is completed in a heated swimming pool (they had it soft in the early days!). Funding is secured for some of the Recs to pass the BR Indoor Erg Level 1 Coaching course. Doug Agar christens the group the wRecKs, a name that many love, but can set the wrong expectations about our rowing standards. Over time, and with some resistance, the squad increasingly becomes known as the Recs. The Club secured funding through Project Oarsome and purchased the Burgashell Learn to Row quads which were named Dick and Janet. Two exinternational event boats, used at the world championships were acquired (Newport and Victoria) (not sure of the year of acquisition by the club). C2C and Malleable also join the fleet, the latter donated to TRC by Phillip Searle, with much of the funding for C2C coming from Gordon's sponsored Coast to Coast walk. Other "early" joiners include John Anderson, who quickly started to help John Green with the leadership of the squad, Bob Tiltman, who would go on to create some memorable rowing songs, Steve Anderson, and John Pattison. The Rec Christmas Party becomes first annual fixture in the Rec calendar.

2011: The number of women rowers starts to increase, as new starts include Victoria Dektereff and Karami Ure, with Debbie Bivens and others following in 2012. Over time, the congregation point for the boating up shifts from the men's changing room to the main function room. Explore Rowing has a facelift, and the squad is an early supporter of, and participator in, the Northern Sunday League Competition. This leads to what soon become regular squad highlights: exchange trips with Durham's Rec squad where each welcomes the other team to a row, and then food. Julian Bunn continues to hit rowing news with his attempts at various indoor erg records, just missing out on a world marathon record for his age group in Devon.

2012: Highlights of the year included Julian winning the Dutch Open Erg Marathon and the first Rec Yarm row and BBQ. Some of the squad qualify as RYA Level 2 Launch drivers.

2013: A Rec crew, comprising Phillip, Ernie, John Anderson, Bob, Doug and Karami win the Northern Explore Rowing Sunday League competition, beating off challenges from a lot of younger crews. Phillip takes on a larger coaching role, but still squeezes in a lot of rowing of his own. Funding was secured to put four of the squad through the Explore Rowing Assistant coaching course.

2014: Phillip drives the squad coaching programme, seeking to move far more of the squad from LTR boats to fine quads and to remove the reliance on more experienced club rowers to give the squad a taste for fine boat rowing. Julian won the first of what would become three gold medals in successive years for the indoor erg marathon in Finland. Karami joins TRC Committee, the first Rec graduate to take on a committee role. She finds herself increasingly helping with leading the squad.

2015: John Green gradually steps back from the leadership of the squad. John Anderson acts as the main lead, supported by Karami and subsequently, Len Small joined the team. Phillip increasingly focusses on coaching. The move to fine rowing continues, with the squad becoming sufficiently proficient to step in and support John Winton's Level 2 coaching assessment when the timing meant his usual crew were unavailable. The squad also starts taking to the water in an 8. Phillip also encourages and signs off some of the squad as Explore Rowing Assistants, having gained permission from BR to do so. The Recs, through Len and Ernie's efforts, take on management of the internal launch training programme for the Club. Two Rec crews take part in the great Tyne row. Ernie goes on a one-man recruitment drive, which sees us running a separate late morning training session for Charlotte, his daughter, and a group of other ladies who earn the name "Ernie's hareem" (sorry Sally!). Panda Pots are introduced. They are awarded either for services rendered to the Recs or as acknowledgement by a coach for improvement or as a "Yarm Pot" award, which is given to any member of the squad who rows to Yarm and back in any single, which has to include rowing under both the Yarm Road bridge and the viaduct.

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2016: Julian wins for the third time in Finland, after a gruelling and very competitive race and he also does well in the Boston Marathon, coming first in his category. The squad hosts a very successful "Tour of the Tees" as part of the Explore Rowing programme, although the number of entrants is quite low. Phillip's coaching focus moves to getting "balanced" crews on the water, which starts to pay dividends. We face up to losing John Anderson as he buys a house in the deep south and use the Christmas Party to bid him farewell.

2017: We said goodbye to Phillip Searle for the last time as the cancer he had fought for so many years claimed his life. He was delighted that just prior to coming down to the club for the last time, he was told we had funding for four of the squad to train as BR Level 2 coaches: he said "I can die happy, I know things can continue". Josie Watson stepped in to help fill the void left by John Anderson. While Josie was not as happy at sorting out boat crews, the catering arrangements for our events all became a lot easier! The trip to Henley was a highlight for many.

2018: Dan Reading becomes Club Captain, the first Rec rower to do so, while Karami takes on the role of Assistant Secretary. Two Rec graduates, Glyn and Will, take on the challenge of rowing the Atlantic as part of the "Row4Victory" team. The Recs feel part of the effort, having been out with, or helped train, three of the crew, and been around for their first outing in the boat they took with them. Stan starts to give coaching to some of the squad. Some of the TRUT Activator Grant bought two new LTR quads, Tornado and Mallard, to replace Dick and Janet, the sale proceeds of which were retained by TRC. The same grant also provided the training fees for 9 Level 2 coaches from TRC, 4 of whom were from the Recs.

2019: The squad said goodbye to Stan, whose contribution while short, was valued by all those who benefitted from his wise advice. Stephen Roe, who felt the Recs were his "home squad" did brilliantly in the Boston marathon and the club's own SBH race. Other highlights included two golds at the "War of the Roses", a win at Ebchester in the over 50s relay, and a really creditable performance by the Ladies crew at the Stockton Games. The Ebchester win was special as it was a composite crew with Durham (they supplied a rower and cox, we supplied three rowers), a great indication of the friendship that has grown between the two Rec groups over the years. The first exchange trip to the Lake District, with rowing on Derwent Water, was a great success, and their rowers were welcomed back to row at Tees later in the year. We hope this can be the start of another regular date in the diary.

2020/2021: Covid stops play for much of these years, and sees the Recs rowing for some of the time in small groups ("Bubbles"). When Covid regulations permit it, some of the group meet for walks led by Len and Alan to supplement the rowing and another group starts to share pictures of wildlife seen during the shutdowns with Mike being a major contributor to this. Josie stands down as a leader of the squad but continues with her catering activities.

2022/2023: The Recs were back to offering 2 squad sessions a week. Weekly numbers remained down compared with pre-Covid with many of the squad rowing less than previously. Ageing, new interests developed during the pandemic, and health issues were three main contributors. John Green returned to row with and coach the group more regularly, while sadly, at the end of 2023, Len decided it was time to hang up his leadership hat. Some tasks were shared out amongst other members of the squad with Karami becoming the sole leader of the squad. The annual events restarted (i.e. Yarm row, the Christmas lunch and exchange visits).

Appendix 3. Rec squad assets

Any profits raised from the post-outing coffee and cakes are retained by the squad to subsidise events (visits by other clubs, the BBQ, Yarm Row and Christmas lunch etc.,) and make any purchases to support the squad that the leadership and/or the squad thinks necessary. As of end 2023, the tangible assets held by the Recs include

- A cash kitty, with one of the squad members acting as banker
- Two sets of adjustable oars, set to a slightly shorter length than the club standard. These are for use by the Recs and supplement the single set of TRC oars that are set up in a similar fashion. The main benefit of such oars is to provide more room at backstop for some of the shorter or less flexible rowers, subject to the agreement of the rest of the crew for their use.
- Some British Rowing "Go Row" handbooks for loan to new rowers.
- Two voice amplifiers.
- A BBQ (kept on the club balcony), some catering equipment and some (donated) cutlery.

Appendix 4. Recreational rowing Learn to Row (LTR) and basic training with the Rec squad

Initially contact and email response

This is generally via email. Often people want a phone call so offer this as an option.

Completely new starts, first session (and taster sessions).

No charge for this. This, and the first few sessions if they proceed, aim to cover a lot of ground.

Ideally, the first session should include

- An overview of the club house, safety board, signing out book, panic alarms. This should also include checking the person's fitness to row and completion of the temporary membership form.
- an erg session. The aim of this is to demonstrate the basic rowing stroke and let the trainee experience this for themselves ahead of going on the water.
- a bit on blade handling. The aim of this is to try to stop any early bad practice (like cranking wrists which may lead to long term difficulties).
- conditions permitting, time on the water. This will include some discussion about boats, their safety features, getting into and out of a boat, adjustments particularly foot stretcher position,
- a debrief session, checking how they feel it when, answering any questions and agreeing their next steps.

There is real value in getting people on the water first time down so this is always an aim of a first session even if this means curtailing other components.

There are guidance notes on how to arrange these first sessions available from the squad lead(s) on request.

Subsequent sessions

These build on the first session with training tailored to the individual. The aim is to get people to being signed off after about 10 weeks. Sign off is by one of the squad's leads or a coach, and generally at least two coaches agree that the standard, based on the British Rowing passport to rowing, has been reached (see Appendix 1). A few learners are quicker. Some are a lot slower. Age has an influence on the speed of learning as well as fitness and co-ordination. Before a person is signed off, it is best if they have been out in a single, a double and a quad LTR boat. Generally, a beginner spends a complete outing doing most things on the list (with a coach) before sign off.

The beginner is presented with a signed copy of the novice certificate of competence when they have been signed off.

There is a book upon which this is based. New starts may borrow copies of these from the squad lead(s) which we ask to be returned. These are also available from British Rowing.

After sign off, or for people completing the TRC learn to row course.

Continue to offer coaching as needed or requested as far as possible. If the person is from the TRC LTR course, the first outing is likely to mirror a first taster session to gauge what level of knowledge they have attained to facilitate appropriate coaching going forward.

First contact by experienced rowers

Often by email but club members may just turn up. A quick discussion quickly determines the most appropriate first outing. This is generally in a double or quad with one or more of the existing coaches. Such rowers are encouraged to join TRC if they like what they see. Guest membership charges for RTWC apply to such visitors.

Training expectations for whole of Rec squad

People that row with us are encouraged to

- **1. Complete a river based capsize drill**, ideally within no more than 12 months of starting with us. This is led by the Rec coaches nowadays, but Greg and others have done this when the Recs did not have suitably qualified coaches of their own. Failing this, we encourage rowers to attend a club capsize session if they have not already done so.
- **2.** Read the BR information on cold water shock and hypothermia or sit through a presentation on this by one of the leaders. (Presentation not been done for a while as the BR stuff works well).
- 3 Learn how to drive the club launches, following the club standard course.

With agreement of the individual, the squads lead(s) keep records of when a person completes sign off, capsize and cold-water shock theory. This information is available for review by the individual on request at any time.

Appendix 5. Guidance material for recreational rowers

To help less experienced recreational rower learn about rowing, a series of technical and instructional guidelines were produced when the group was set up which tried to provide some information for a recreational athlete who wants to improve if not compete at the levels demanded of successful club racers. This was called the Recs toolbox, and information was put together with a recreational rower in mind. It is not intended to be a cover to cover read, but something to dip into from time to time. This Appendix contains some of the original material. Should you want a copy of the original, please ask a squad lead.

The intricacies of the fine-tuning of riggers or high-end fitness training is not for everyone but an awareness of what contributes to good watermanship and an understanding of fault, symptom, cause, and correction is relevant for all rowers that wish to improve.

The British Rowing membership and access to their website is strongly recommended for those who wish to learn more about rowing.

Health and Injury Prevention for a recreational rower

Whatever the level of commitment, rowing and sculling have many common health benefits. Studies have concluded that there are only a small number of major injuries associated with rowing but quite a few mild and moderate injuries. Some of the most frequently encountered are chest (rib stress fractures) and lower back injuries. Most injuries were found to be chronic and not acute reflecting the repetitive nature of rowing. In the world of exercise, rowing and sculling comes second only to swimming for exercising the whole body and on a par with cycling for demanding maximum strength and stamina. This section attempts to identify some of the medical problems that could affect the recreational rower and provide some guidance on injury prevention.

Infection

Moderate aerobic training can, it is believed, improve the body's immune system. Avoid encountering viruses and bacteria and follow sound general hygiene routines. Recreational Rowing is all about moderation. If you are feeling ill and are possibly infectious, please stay at home.

Stress fractures

Stress fractures are common but the cause of these injuries in rowers and scullers is not really known. The most popular theory is that the injuries are the direct result of poor posture whilst rowing and weak lower trunk development. The latter view sites the modern use of carbon in the manufacture of oars and sculls and the corresponding greater force being applied to the athlete's trunk. Until more is known about the cause of these injuries it is important that gearing ratios are proportionate to the athlete's skills and levels of fitness. Ideally, recreational rowers will be supplied with appropriate equipment; should this not be the case then it is important that the coach is aware of the fact and tailors the outing accordingly.

Lower back pain

Limited lower back development, poor technique, and the repetitive nature of the sport all contribute to the possibility of pain in the lower back. A change of gearing and improved technique is often the answer but failure to respond to the first signs can result, at best, in a long lay-off and at worst, a prolapsed disc. The importance of a sound technique cannot be over emphasised. Get it right from the start.

Heat stress

Heat stress whilst rowing or sculling is normally the result of dehydration. An average athlete can expect to lose up to 2 litres of water during an outing through sweating in the warmer months; during winter training a significant amount of water is also lost but this often goes unnoticed. It is good practice to ensure that your body is fully hydrated at the beginning of a session and that water is taken throughout the session in small but regular quantities. A trained athlete would normally drink 1.5 litres for every 1kg of weight lost per session.

Warm up and cool down

All sports acknowledge the benefits of warming up the muscular and cardiovascular systems prior to a training session and understand the need to cool down upon completion. Warming up increases blood flow to the muscles making

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them more flexible and less susceptible to injury. There is no need to go over the top at this stage, a light 5minute jog or, some stretches (or very light weight lifting if you expect to be working a particular muscle group), is all that is recommended for the recreational rower. The ergometer can also be used successfully to warm up all the major muscle groups. Normally the exercises that should be undertaken at the start of most dry and water-based sessions are all that is necessary. Sadly, many club rowers ignore the value of warm up.

Cooling down is also frequently ignored and people wonder why they are stiff the day after. The are two key reasons why cooling down is important and why it should be taken seriously. Firstly, it releases tension in ones' muscles and secondly, it flushes out the waste products that build up during a session. Recreational rowers need allocate no more than a few minutes to the cooling down process; if your session has been strenuous then 5 minutes light pressure on the ergometer will suffice. On the other hand, if your coach has been gentle with you, 5 minutes stretching will be all that is required.

Stretching and flexibility

Stretching and flexibility should not be confused as being the same thing. Stretching is the act of lengthening a muscle until the muscle receptors tell you to stop at which point you hold the position for 15 - 20 seconds and then relax. Flexibility is the range of movement that you have in a specific joint or group of joints. To give an example, one person may have to bend forward and place the palms of their hands on the floor to stretch their hamstrings whilst a second person could achieve the same result by just reaching their knees with their fingertips. The first person has greater flexibility but both have stretched their hamstrings correctly. A great deal of dedication and time is needed in to improve flexibility and needs to be undertaken correctly if injury is to be avoided.

General well-being

Problems like being overweight, having a drink problem, smoking and generally feeling depressed all take time to address and unfortunately the problem of inertia (can I be bothered to do it today?) is felt, to a lesser or greater extent, by us all. The good news is that it is well established that active involvement in a group or team activity can go a long way in helping to ease the problems of day-to-day life. Recreational rowing is an ideal way to face the world and win.

Rigging and Adjustments for those not very interested

Boats are manufactured for a specified weight of the crew that will use it. A boat intended for elite club rowers is more weight sensitive than a boat for general club usage. If a lightweight crew uses a boat designed for heavy-weights then the boat will sit higher out of the water and consequently be less stable. There are adjustments that can be made to improve the situation but no amount of adjustment can compensate for a large weight differential. The Rec squad make use of the club's unrestricted boats (fine and learn to row). The LTR boats are designed to be stable in all weathers and suitable for athletes of all weights and are robust. The LTR doubles do not have a full range of the most common adjustment points and there is also a limit as to what can be achieved using club boats if changes are limited to those permitted by the equipment manager. The following notes cover those adjustments that may be relevant members of the Rec squad. The main aim of any adjustment is to try to achieve the correct rowing position comfortably. This includes being able to sit at backstops with the spoon(s) just covered and the oar or scull handles touching the third rib up. If your hands are too high at the finish you will be inefficient and as your arms tire, they will drop and the spoon will no longer be covered at the finish. This is called "washing out."

Within a club, environment, boats tend to be "rigged" to suit an average user. In theory, rowing boat rigging can be adjusted to suit anyone and any crew combination (i.e. can accommodate different shapes, flexibility, height, weight, etc.). It can be tweaked to account for the type of rowing to be undertaken (winter strength training outing or head race) together with other variables such as water conditions. If you are not an average sized / shaped user, you can make a limited number of adjustments which may help when using a club boat. Those adjustments which are allowable under the present Equipment Manager guidance are covered below. We have more information if you would like a deeper exploration of this topic.

Permitted adjustments

Foot height on the stretcher (1): The aim is to have vertical shins at the catch. Adjusting the feet height on the stretcher can help with this. All TRC's unrestricted boats except the LTR doubles known as Victoria and Newport allow this adjustment. Some rowers may have lost some of their flexibility or have increased their girth over the years. If you fall into either of these categories, adjust the height of your feet to a level that permits you to get your shins as near to vertical as is possible and comfortable. This generally means the stretcher will be towards its lower setting. If you are flexible, or exhibit hyper-mobility, take care not to take your shins beyond the vertical position. You may need to set the feet at a high position on the stretcher.

Foot height on the stretcher (2): The size of the shoe on the stretcher will also affect the height of your feet. If the shoes cannot be adjusted to fit your feet and they are too large, it is possible to purchase heel sponges that can be easily fitted for an outing to lift the height of your foot. If you have large feet and the club shoes are generally too small, talk to the equipment manager as you can be provided with a pair of shoes for use during outings.

The seat height may be adjusted by use of one or more (padded) seats. (The reality is that most of the Rec squad use padded seats for comfort rather than height adjustment). The use of a seat is a good fix for those rowing in an oversized (for them) boat, or if you are a person with long legs compared with your body trunk.

Stretcher placement: When sitting at backstops, there needs to be room to execute the "tap down" i.e. extract your spoons from the water. In a sculling boat, your hands need to be about 1-1.5 hand widths apart. Altering the position of the foot stretcher should assist in providing enough space. If you are of lesser stature, the stretcher is likely to need to be set towards the bow of the boat. It you are tall it is likely to be set towards the stern. The "correct" position for the foot stretcher will vary from boat to boat and even, from seat to seat in any given boat. The position may also be affected by the tightness (or otherwise) of your ham strings.

Swivel height (absolute). Some of the club boats are fitted with "popper" washers which allow for relatively easy adjustment of the swivel height. To increase the swivel height, remove one of the popper washers from the top of the swivel and replace it below the swivel. Both riggers need to be adjusted in a sculling boat. (A reduction in height of the swivel is achieved by removing a washer from below the swivel and replacing it above.) A reduction in the swivel height may be helpful if you are in an oversized boat.

Swivel height (relative). In a club sculling boat, the swivel on your left when sitting in the boat should be 0.5-2cms higher than that on the right. If popper washers are fitted, it is easy for the relative swivel heights to become incorrectly set (if a popper is removed and put back incorrectly for example). It is easy to check the relative heights of the swivels (there is a tool to assist with this in the boathouse). If you have trouble during an outing in keeping your hands at the correct level throughout the stroke, it is a check worth making. If necessary, inform the equipment manager if you think the settings are wrong so they can be checked and set to normal (if adjustment using a popper washer is not possible).

Inboard and outboard setting. Clip-on Load Adjusting Mechanisms (Clams for short) provide an easy way of increasing the inboard setting of the oar, which reduces the gearing. They slot onto the oar next to the collar. This has the effect of reducing the loading on the oar which can be of use for some rowers within a crew and for all rowers in some circumstances e.g. heavy headwind. They can easily be fitted while on the water and are available for all rowers to borrow should they so wish. Be careful to make sure that the Clam(s) selected fit your oar(s). (Only one clam is required for a sweep oar.)

"Short" oars: Experience has shown that some rowers struggle to make allowable adjustments to the boat using the changes outlined to provide themselves with sufficient space at backstops. The club has one set of shorter oars, (with appropriate adjustment to inboard and outboard settings whilst maintaining similar gearing). This is a quick fix for an outing in a club boat to give you more room at backstops, particularly if rowing in an oversized boat (for you). As the Rec squad has some rowers who struggle to get enough space at backstops, they have two private sets of oars, also set up with shorter inboards for use by the Rec squad members. Always check your crew is happy with you rowing with shorter oars before you do so.

Seat runner position: This does not routinely require adjustment, but if you run out of slide at either the catch or the tap-down, the slide position can be adjusted easily using the wingnuts fitted below the deck (adjustment may also help prevent your calves hitting the deck on the drive if you have your feet set low on the stretcher).

The recreational rowers' handbook. Revised January 2024.

Boat care and maintenance

ISSUE	QUESTION	ANSWER
Boat Handling.	When does an outing start?	Before the boat is lifted off the rack.
	When does an outing finish?	When the boat is back on the rack.
Responsibility.	Who "commands" a boat (adults only) and the	In order: coach, cox, bow, unless the cox is being
	outing?	trained when the stroke may be asked to assist.
Equipment Condition.	What equipment checks are undertaken?	 Pre row checks: Heel restraints serviceable and correctly fitted. Riggers/nuts correctly tightened and undamaged. Seat runners clean and seats in good working order. Bow ball serviceable. Steering mechanism serviceable (if fitted). Hull undamaged. Oars/sculls matched to boat and serviceable. Buoyancy tank(s)- undamaged and with drainage plugs and/or safety hatches in position and/or buoyancy bags inflated. Washboard undamaged. Rudder undamaged. Post Row: Ensure all equipment is clean. Check for damage.
		 Report any damage found to equipment manager and safety advisor. Ensure nothing has been left outside.
	What constitutes damage?	Any puncture to the gelcoat/varnish however minor. Any new scratches to the gelcoat/varnish. Any components that are broken/bent/badly worn. Any missing items.
	What should I do if I notice damage?	Report all damage to the equipment manager and the safety advisor. Simple straightforward repairs are allowable. If appropriate attach a "Do not use" sign.
Signing In/Out.	Why do we sign boats out/in?	Provides a register of boat usage. It informs others of who is on the river.
	Who is responsible for signing a boat out?	The cox or bow.

ISSUE	QUESTION	ANSWER
Removing a boat from rack to water.	Who is responsible for a boats transfer?	The cox or person responsible for steering.
	How should a boat be carried?	The crew should be positioned evenly up the length of the boat, ideally opposite their riggers when the boat is inverted (unless the boat is a multi-oared scull in which case a position alongside the rigger is taken) Only one voice should be heard unless a member of the crew identifies a hazard. A grip is taken on strong items e.g. shoulders. Take care with cross members: not all are strong enough to be used in this way. The weight of a boat should be evenly distributed; it
		should not be carried just by its ends.
Getting into and out of a Boat.	How do I get into and out of a boat without causing it damage?	When getting in always place outside foot between the slides unless indicated otherwise. Do not stand on the slides or the hull of the boat. In a sweep oar boat support your weight as you lower your body on the shoulders (of the boat), not on the fragile saxboards. In a sculling boat you adopt a similar position with the feet but this time your weight is distributed between your outer hand which is holding both sculls and your inner hand which is resting lightly on the pontoon side rigger.
		Getting out of the boat is the reverse of getting into the boat.
	In what order do I get into a boat?	In a sweep oar boat, the side whose blades are away from the pontoon should always get in first whilst the remaining crew support the riggers. In a multi oared sculling boat there is no set order although it is normal to start from one end with an inexperienced crew.

Coxing: Give it a go

As a member of the Rec squad, you will be encouraged to take a turn at coxing. Being a competent cox adds a further dimension to rowing. Sitting in this seat gives you the opportunity of seeing what is going on and can help explain why the coach is often so persistent in getting one to perform in a certain way.

These notes are not intended to cover the more technical aspects such as racing and the motivational/psychological demands of coxing. However, if coxing is to your taste there are many ways in which you can take this interest up to the next level. Coxes' services are very much in demand by crews at all levels of accomplishment. Whatever the level, the cox's responsibilities remain the same:

- The safety of the crew and the equipment being used.
- Crew discipline.
- Navigation.
- Steering the boat.
- Communication of the Coaches instructions.

Safety

As cox, you are responsible for keeping the rowers, the equipment and yourself safe. "Safety always comes first".

The cox must always wear an approved lifejacket or buoyancy aid whilst on the water. Club guidelines prefer a lifejacket.

Clothing: An outing starts with a risk assessment of the conditions including the weather and water flow-rate. An assessment of what clothing is appropriate for both yourself and your crew should follow. In winter the cox can expect to get cold and frequently wet. The club has some suitable waterproof outer clothing but this will not necessarily keep the core body temperature comfortable. Ideally you should wear some thin layers under your outer clothing rather than a single heavy item like a jumper. Heat loss through the head and the hands can also be significant so wear a hat and take with you a pair of thermal gloves. Heat pads that can be kept in the pocket can also be useful. It is very difficult to dictate to a crew as to what they should wear particularly if they are more experienced than you. The ideal clothing allows the body to flex, provide some protection against the wind and rain, is visible on the river and, most importantly, is temperature appropriate. If someone is ill-prepared, it is your responsibility to say something involving the coach or senior member if necessary. In summer, it is usually a few degrees colder on the water so although you may not need to wear winter clothing, be prepared for any eventuality. This could include a hat with a long peak/visor to protect against glare from the sun and possibly a lightweight rainproof jacket. Again, your crew will have their own idea as to what is appropriate for them and this will often be based on the type of outing planned. Rowing topless, particularly through the centre of Stockton, is discouraged. The only point worth mentioning is for you to remind your crew of the dangers of unnecessary exposure to the sun particularly if the outing is to be lengthy. Sunglasses come in handy. Sun cream is recommended. Finally, the crew should carry water to ensure they can rehydrate if needed particularly on warm days.

Equipment. Do not allow your crew to take to the water until you have checked the equipment allocated for the outing (see previous section) and you are satisfied that it is in safe working order. You (and the crew) start your inspection before the boat has been removed from its rack (no significant damage to the hull) but the main checks are

while it is on the trestles. One final word on equipment, as you gain experience you will find that your list of "must haves" increases exponentially but a good minimum is a rigger jigger, a phone, water, a safety blanket or foil jacket, any emergency medication you may require on the water.

Water Safety. Capsizes are rare but if you should capsize it is important that you know what to do. The first rule to remember is "stay with your boat." Rowing boats are designed to stay afloat even when full of water and with the sax boards below the water level. Staying together is the best way of ensuring that everyone is accounted for and safe.

Crew discipline

Discipline is not something confined to the junior members of the club. It is a necessary factor at all levels of rowing. Without discipline, rowing can be dangerous and the risk of personal injury high. Moreover, damage to expensive equipment can occur if there is not order.

Discipline starts with club rules and policies which set the expectations of all club members and which all members are expected to read and understand. Slightly further down the line we come to the coach/instructor of the day and then the cox, or in a coxless boat the steersperson or person appointed by the coach/instructor. From the moment the crew gathers in the boathouse to collect a boat to the moment that same boat is returned to its rack there should only be "one voice" giving orders.

If you decide to take your coxing up a level e.g. enrolment on one of the British Rowing Coxing courses then you will find that a significant amount of time is spent looking at the various ways commands/orders are given and you will learn to differentiate between instructional, technical, and motivational orders. You will also learn how to project your voice and how to put sufficient weight on the words being used. At this stage, however, it is sufficient that you appreciate the need for discipline, have the confidence to be able to steer the boat in the correct direction and have a basic understanding of the commands used in rowing.

Navigation

The river has its own "Code of Practice" with which the cox/steersperson should be familiar. Whilst each river will have its own distinct requirements there are some common practices. In general

- You should always stay on the right side of the river (the opposite to driving a car).
- Sailing boats without a motor should be given navigational priority since they can find it difficult to change direction quickly.
- While the rules of the river state motorised craft give way to rowing boats, larger cruisers (and locally the Teesside Princess) cannot change direction easily, nor can they stop quickly. Keep out of their way. The Teesside Princess makes good use of its horn.
- If you need to overtake another boat do so towards the middle of the river, unless the boat being overtaken is a long way out of position in which case undertaking is acceptable.
- If you are being overtaken do not obstruct the faster boat; keep to the nearside bank as much as possible (unless you are out of position in which case hold your line), while maintaining sufficient distance from the bank to avoid trapped logs and overhanging trees.
- Warn other boats that are closing in on you by calling out "Ahead Sculler/Pair/Four/Eight".
- If you decide to stop, choose a place that is safe. Avoid places where you are unseen.

TRC has guidance on which arches to use when passing under bridges: please be aware of these.

When navigating, a good principle is to imagine the river is divided into three equal lanes. Position yourself in the third of the lane that is closest to the shore on the side in which you are heading. The middle third should be kept empty. The final third, which is furthest away, is for boats heading in the opposite direction to yourself.

Steering the boat

Steering a boat gets easier with practice. Allow time to adjust to the peculiarities of the rudder and the fact that it is often hard to see what is ahead. If the sun is low, or you are in an eight, it is acceptable as a Rec rower to ask the person at bow to a look out as well. It is worth pointing out at this stage the few things which can affect steering:

- Rudder: only works when the boat is moving.
- Wind: can be head, tail or cross.
- Water conditions: the strength of the current and the condition of the water surface, bends in the river.
- Direction of travel: the resistance felt on the rudder is affected by direction of travel e.g. up or down stream.
- Boat speed: the faster the boat the quicker the reaction to the rudder.
- Permanent structures: large structures like bridges can affect the water currents which in turn affects steering.
- The wake from other boats can have an impact.
- The size of the boat an eight is slower to respond than a quad (eg turning, stopping, etc).

Other factors can and will affect the boat's direction including poor balance and unequal pressure between stroke side and bow side blades.

There are some key rules when steering a boat.

- Keep a good lookout
- In normal conditions the rudder toggles/strings should only be moved 5cm in either direction or 45 degrees of rudder turn.
- Steering should be little and often.
- The boat does not respond immediately to the rudder direction being altered. Look ahead and start to make early corrections.

Rudder Control. It may take a few minutes for you to get to know which toggle or string to pull to change the boat direction. Take time for it to become a natural. Do not panic if it all goes wrong. If necessary, halt the crew whilst you have a re-think. As soon as the basic is mastered, give thought to the following:

- Ideally, only apply the rudder when the blades are in the water. This may require a series of small direction changes rather than one large correction. This only works if the preferred path for the boat is chosen well in advance of any changes being made. Failure to anticipate may mean full rudder is applied at the last moment and may cause the boat to lurch to one side and throw the crew off balance.
- It is often necessary on the Tees (tight corners) to take corrective action when the blades are off the water.
- Develop a light touch on the rudder toggles/strings.
- If about to apply a large amount of rudder, warn the crew. ("Rudder Going On.")

- The boat continues to turn after the rudder has been straightened. Anticipate this to avoid a further correction being necessary.
- As you approach a corner, position the boat correctly. If you are out of position, your boat may be in the direct path of an on-coming boat.
- At a tight corner, you may have to tell the crew to assist you in getting around the corner. An appropriate command is "Lighter on Bow Side, Harder on Stroke Side" or vice versa.
- Be prepared to reduce the speed of the boat as you approach a corner particularly if you are new to the river. Remember, the bigger the boat the longer it takes to slow down.
- If in doubt at any point, execute an emergency halt by shouting "STOP".
- Use part of an outing to hone your steering skills. Use buoys to practice rudder control and to establish how reactive the boat is to your touch. (Ensure that the crew are aware of what you are doing!)

Communication of the coach's instruction

Before getting afloat, agree the target for the outing with your crew and your coach. The coach may brief you explicitly on specific duties during the outing. As you become more experienced, expect the coach to give you more responsibility. This could involve you in taking the crew through a series of exercises or controlling a complete outing. The following tasks/responsibilities are typical of what a cox may do.

- Act as the deputy to the coach. (This requires the cox to fully understand what is required.)
- Provide the coach with (useful) feedback.
- Identify problems and crew reactions to various training routines.

Coxing commands

A cox's command needs to be

- Clear, concise, and given with authority.
- Heard, which is not always that easy.
- Timed in a manner that ensures smooth transition between actions. Key words such as "go", "now", "change" are executive commands and need to be given at precise parts of the stroke in order that rhythm is not compromised.

A table on the website gives example commands for a cox to use in many situations they may encounter. (See documents under rowing guidance: https://www.teesrowingclub.co.uk/club-documents/#searchwp-modal-652ea0d21b1427a1bfa685e40d9bc1de)

Faults and how to clear them:

This section concentrates on some of the technical faults that are encountered in rowing. The identification of a fault is the easy part, what is more difficult to identify is the cause of the fault and then to be able to suggest ways in curing that fault. **Not all adjustments that could solve problems are permitted with club boats.** However, they are

included for completeness. Phillip Searle also produced a very comprehensive book of coaching exercises for sculling. This is available electronically from the squad lead(s) if a copy is required.

FAULT	SYMPTOM	CAUSE (S)	SOLUTION
Skying at the catch.	The blade is raised at the catch instead of being lowered to just above the waterline. 1 Dropping the head as treaches front-stops.		Look at the head of the man in front or, concentrate on an object in the distance.
		2 Over-reaching at the catch.	Mark the saxboard, using coloured adhesive tape, the ideal position of the hands at front-stops. Practise body position exercises.
		3 Hitting the water with the blade during recovery phase can result in overcompensating whilst squaring.	Practise square-blade paddling and blade control exercises. To maximize the benefit of square-blade paddling consider maintaining the position for the complete outing.
		4 Rigging set too high.	Check rigging height and adjust if necessary.
Timing late at the catch.	Blades not covered and locked-on at the catch in time with stroke.	1 Poor arms and leg coordination at the catch.	Bring problem to the attention of the crew. Concentration often goes as outing progresses. Ensure that blade height is the same at the catch. Concentrate on driving with the arms and legs at the same time.
		2 Lack of control as the body reaches front-stops.	Slow recovery on the slide avoiding crashing into front-stops. Squaring the blade early thus ensuring time available to prepare correctly for the catch. Practise rhythm exercises – establishing a sound ratio will assist slide control.
The short stroke.	The arc of the blade is less than others in the boat. It may be short at the catch or the finish or both.	1 Incorrect stretcher position.	Check and adjust if necessary and possible on water.
		2 Incorrect gearing ratios	Check and adjust if necessary.
The two-part stroke.	The blade slows down in the middle of the power/drive phase then accelerates to the finish.	1 Bum Shoving.	Practise blade-control exercises.

FAULT	SYMPTOM	CAUSE (S)	SOLUTION
		2 Over-gearing.	Check that the gearing (both blades and pin position) is suitable for the type of boat and size of the crew. Under ideal conditions, adjust to suit each crew member.
		3 Uneven power is applied through the stroke from catch to finish.	Make crew aware of problem and introduce exercises which assist in accelerating the blade evenly through the stroke from catch to finish.
Backsplash	Water being knocked back towards the bows by the blade at the catch.	1 The blade is entering the water slower than the speed of the boat.	Increase the speed of the catch by practising paddling at front stops and up to half slide.
		2 The blade is entering the water at the incorrect angle.	Check that the pitch on the pin is correct. Ensure that the handle is being held correctly. Blade upon entry to water travels both downwards and towards stern of boat.
Looming.	Blade going too deep with water coming beyond the spoon and up the loom.	1 Lifting arms and shoulders too high at the catch.	Ensure that catch is not taken predominately by the upper body. Ensure that the catch is taken with the head up and the body not over stretching. Ensure that the draw of the upper body is horizontal and not vertical. Practise front stops paddling.
		2 Blade not squared at the catch.	Check grip on handle(s). Practise square blade paddling.
		3 Insufficient positive pitch.	Check pin and adjust as necessary.
Blade clipping water during recovery.	The blade hits the water whilst travelling from the finish to the catch.	1 Height of work inadequate.	Check height of work and adjust at the pin or by use of a seat if necessary.
		2 Poor balance.	Practise balancing exercises.
		3 Poor blade control.	Check grip on handles. Ensure handle(s) are moved parallel to the saxboard. Check correct arms, body, slide sequence.
Over reaching at the catch.	Poor catch position with body slumped over the feet and hands too low.	1 Incorrect stretcher position.	Check position of stretcher and adjust if necessary.

FAULT	SYMPTOM	CAUSE (S)	SOLUTION
		2 Trying too hard.	Ensure that the body angle obtain during the first part of the recovery is maintained and not altered at the catch.
		3 Not using the entire slide.	Concentrate on using full slide particularly when the body becomes tired.
Washing out.	Blade rising out of the water before the stroke is complete.	1 Incorrect (too much) pitch.	Check and adjust pitch.
		2 Incorrect height of work.	Check gate and adjust if necessary.
		3 Failure to draw hands up into the	Identify correct position at the finish -
		chest at the finish.	spoon(s) covered (just) and handle(s) aligned with third rib from the bottom. Consider marking the spot with tape.
		4 Leaning away from the rigger at the finish (sweep oared boats only)	Twist into the rigger at the finish.
Dirty finishes including diving deep (catching a crab).	Unable to release the blade at the finish – blade feels that it is being dragged down.	1 Insufficient height of work.	Check height of work and adjust if necessary.
		2 Insufficient pitch.	Check and adjust if necessary.
		3 Poor balance.	Introduce balance control exercises.
		4 Blade being feathered whilst	Practise dropping the hands at the finish
		spoon still under the water.	before feathering the blade. Practise square blade rowing.
		5 Pinching the boat at the finish.	Check stretcher position. Check blade(s) have sufficient inboard.
		6 Poor release at the finish.	Ensure that blade is being accelerated at the finish.
Leaning out at the catch (sweep oar).	Outside shoulder dropped at catch.	1 Poor balance	Practise balance exercises.
		2 Too much inboard.	Check and adjust.
		3 Body not following arc of blade.	Ensure that the shoulders are parallel to the oar handle as they approach the catch.
The bent arm catch.	Arms are not straight as the blade enters the water.	1 Incorrect recovery position.	Ensure arms are straight immediately the recovery phase starts. Maintain the straight-arm position as the body approaches front stops. Do not let the seat overtake the hands. Reinforce the "hands-body-slide" drill.

FAULT	SYMPTOM	CAUSE (S)	SOLUTION
		2 Attempting to take all the pressure at the catch on the arms.	Check hand positions. Ensure hands are in the soft position (fingers hooked around the handle and not grasping) Aim to get a feeling that the hands are being left behind as the legs drive from the start resulting in feeling the arm's stretch.
Legs not driving evenly through the stroke.	Knees not flattening together at the end of the stroke.	1 Unequal pressure on the stretcher during the drive.2 Poor balance.	Check physical problems. Leg-drive exercises. Balance exercises.
Shooting the slide (bum Shoving)	Seat moving towards backstops before the blade is covered at the catch.	1 Starting leg drive too early.	Essential that speed blade enters the water is equal to the speed of the leg drive. Try backstops, half slide and front stops paddling.
		2 Weak trunk muscles unable to hold body firm during the leg drive.3 Legs being driven faster than	Strengthen trunk muscles in gym or by general fitness training. Concentrate on co-ordinating hands and
		speed at which the blade(s) are being pulled by the hands.	leg actions. The speed that the seat travels should match the speed that the blades are travelling.
		4 Overstretching at the catch.	Identify ideal front stops position and mark on saxboard. Do not reach beyond this point when taking catch.
Lack of slide control.	A general feeling of being rushed – rating always looks and feels faster than it is.	Poor rhythm.	Exercises which vary the rating. Square early. Long pieces at low rating. Eyes shut rowing — use ears to help set rhythm. Cox to call timings.
Excessive lay-back at the finish.	Shoulders too far behind the hips at the finish.	from the line of work.	Check and adjust if necessary.
		2 Insufficient height of work. 3 Drawing with the arms after seat reaches backstops.	Check and adjust height of swivel. Practise extracting the blade as soon as the leg drive is completed. Concentrate on finishing the leg drive and the arm draw at the same time.
Gripping the handles too tightly.	Poor balance, early fatigue in the forearms and either diving-in to deep or washing-out at the catch.	1 Lack of confidence, fear of falling in.	Confidence exercises including: Capsize Drill. Playing the piano.

FAULT	SYMPTOM	CAUSE (S)	SOLUTION
		2 Incorrect pitch.	Check and adjust.
Hands too far apart (sweep oar).	Hands more than shoulder width apart.	1 Too much inboard.	Check inboard/outboard ratio.
		2 Stretcher positioned too far away from line of work.	Check and adjust stretcher position.

Exercises for on the Water

Crews often ask "What exercises should we do?" The answer will often be "It depends what you are trying to achieve?" (Is the crew just starting to learn how to row, is it seeking to compete at club standard, is it trying to correct basic faults and so on?) The table below gives a summary of exercises that are often of value within the recreational setting. The squad leads have an electronic copy of a more detailed document prepared by Philip Searle for any who want to learn more.

SITUATION	EXERCISE	DURATION	PRESSURE	TEACHING POINTS
Start of outing, crew	Fixed seat – arms only	20 strokes	Light	Square blades
needs to warm-up				Sitting up, trunk just behind hips
				Relaxed hands
				Hands away fast
				Arms straight
				Move on to next exercise without stopping
	Fixed seat – arms and	20 strokes	Light	As for arms only plus
	body only			Trunk does not move until arms are straight
				Trunk angle comfortable and not extreme
				Head level
	Quarter slide	20 strokes	Light	As for arms and body plus
				Legs to remain flat until trunk (body) has swung over hips
				Ensure travel along slide is restricted - just break the knees
	Half slide	20 strokes	Light	As for quarter slide plus
				Ensure travel along slide restricted – knees approx half bent
	Three quarter slide	20 strokes	Light	As for half slide plus
				Ensure shins have not reached the vertical
				Movement along slide to be controlled and not rushed
	Full slide	20 strokes	Light	As for three quarter slide plus
				 Ensure that rating is low – not above 20 spm
				Move into next exercise without stopping
	Full slide - feathering	10 minutes	Light	Maintain good technique
				Look for rhythm
	Full slide - feathering	100 strokes	Half	Maintain good technique
				Blades in and out of water together
				Puddles of equal size

SITUATION	EXERCISE	DURATION	PRESSURE	TEACHING POINTS
Concentration drift - during a steady state piece it has become apparent that concentration is falling	Catch	20 strokes	Decided by the piece being undertaken	 Body at correct angle, arms straight, shins vertical, head up Blade at correct angle - already squared Blade at correct height above the water Hands are raised, blade dropped into water – spoon only covered
These exercises concentrate on a single aspect of the stroke for a short period before moving on to the next aspect	Drive - initial	20 strokes	As for catch	 Delay drive until spoon covered Feel pressure on toes Feel weight coming off seat Arms remain straight Delay opening of trunk until approximately half slide
	Drive - final	20 strokes	As for catch	 Start opening trunk as slide reaches half way Continue opening trunk until shoulders pass hips Maintain speed of blade by use of trunk and arms
	Finish	20 stokes	As for catch	 Forearms held parallel to water Body angle not excessive – do not lean back too far Tap hands down to extract spoons before feathering
	Recovery – initial	20 strokes	As for catch	 Hands –body (trunk) – slide sequence Straight arms, relaxed grip Complete body swing before raising legs Start to square blade
	Recovery – final	20 strokes	As for catch	 Controlled recovery – do not rush to front stops Complete squaring of blade before reaching front stops Ensure that arms are still straight with wrists flat Do not over stretch – keep head up
Weak catch – initial drive not being taken with legs	Legs only, arms straight	3 – 6 sets	Light/half	 Maintain good trunk and arm posture throughout exercise Essential that spoons are covered before applying leg pressure Feel "suspended" between hands and feet Straight arms at all times Start 6 inches from front stops (recovery) Finish 6 inches from front stops (drive) Continue for 20 strokes before changing to: Starting 12 inches from front stops (recovery) Finishing 12 inches from front stops (drive)

SITUATION	EXERCISE	DURATION	PRESSURE	TEACHING POINTS
				 Continue for 20 strokes and easy. This completes 1 set Repeat exercise but at half pressure to complete set 2 Alternate light and half pressure for up to 6 sets
Blade handles being gripped too tightly causing blade to enter the water at an incorrect angle	Open palm sculling	To benefit from this exercise it needs to be maintained for a long period, ideally half to a full outing, particularly if fault is significant	Varied	 After extracting blade from water, feather and then open fingers and rest grip (handle) under first set of knuckles. Relax forearms and shoulders whilst sliding forward As handle (s) pass over shins put fingers back around grip and square blade in readiness for catch Keep wrists flat with palms open Keep an outward pressure throughout with thumbs on end of grips
Blades being skied, of unequal height above the water or placed in the water too late or too slow	Square blade rowing	As above for open palm sculling	Varied	 Ensure that blades are being held in the hands at the correct angle Ensure that when arms are straight the wrists are flat Lower blade height until just clipping water and then lower hands half an inch - note position of hands Ensure that blades on both sides of the boat are at the same height
	Double square blade rowing. Not for beginners. Useful in improving dexterity and relaxation during the recovery	20 – 60 strokes max, may be repeated after completion of further exercise(s)	Half pressure maximum	 Keep rating below 20 spm Recovery up the slide as slow as possible Sequence: feather – square – feather- square – catch Aim for maximum relaxation with arms, shoulders, and hands Ensure that blades are either squared or feathered, not somewhere in between
Body sequence on the recovery suspect, catch hurried and run on boat between strokes jerky	Arms only sculling Followed by Sculling with arms and trunk Followed by Sliding to quarter slide	40 strokes 40 strokes 40 strokes	Light to half	 Sit tall in finish position with shoulders behind hips Left hand to be slightly ahead and above right hand Ensure blades have consistent (spoons only covered) depth Arms straight before trunk rocks over Maintain horizontal draw of handles throughout drive sequence Maintain correct arm, body, and legs sequence Ensure same length of slide on every stroke

SITUATION	EXERCISE	DURATION	PRESSURE	TEACHING POINTS
	As above but with a pause at forward position: Arms only Arms and body only Arms, body and quarter slide only	10 strokes 10 strokes 10 strokes	Light to half	 3 – 5 second pause between each stroke Move into next 10 stroke sequence without stopping 30 strokes count as one set. Aim to complete between 3 and 6 sets Key points as above
Poor transition from initial drive to opening the trunk	From the catch, legs only for 12 inches	20 strokes	Light to half	 Start with boat still and crew in catch position (blades square) and sitting approx 12 inches from front stops On command "go" crew slide to front stops, drop blades into water and drive with legs back to the 12 inch position Trunk remains at catch position and arms remain straight After 20 strokes pause and then go into next exercise
	From the catch, legs only for 12 inches and then start to open trunk - stop at half slide with the body nearing vertical and arms still straight	20 strokes	Light	 Maintain teaching points from previous exercise Ensure that leg drive does not go beyond the half slide point Ideally the trunk at the half slide position is just reaching vertical, ensure that it has not passed over the hips Blades are still squared. At the half slide point extract the blades by dropping the hands (arms still straight) After 20 strokes pause before going on to next exercise
Poor transition from the finish of the leg drive to the introduction and completion of the arm draw	Complete the movements from the previous two exercises and then activate shoulders to commence the arm draw as trunk passes over hips	20 strokes	Light	 Maintain teaching points from the two previous exercises Aim to maintain the momentum/power from the leg drive Shoulders should be held low and relaxed Hold arms straight until the trunk has passed over the hips On final part of the arm draw keep elbows in and forearms parallel to the water
Feathering under water	With boat stationary practise tap down Square blade paddling	3 x 20 5 to 30 minutes	Light Variable	 Check position of hands Ensure problem is not the result of 'low rigging' Maintain blade propulsion Encourage idea of 'sending' the boat away at the finish
Extraction messy	Exaggerated finish	5 to15 minutes	See teaching points	 Ensure that rigging is at correct height before undertaking exercise The concept of this exercise is a light catch followed by a firm finish

SITUATION	EXERCISE	DURATION	PRESSURE	TEACHING POINTS
				The blade propulsion is built-up during the drive Aim for a smooth drive and clean extraction (no snatching)
Spoon too deep with water up the loom	Square early	5 to 15 minutes	Variable	Check 'hands, body, slide' sequence Ensure that the slide phase is not rushed and that the blades are squared early - the blade(s) should start to square as the hands come over the shins
	Maintenance of body angle during first phase of the drive	5 to 15 minutes	Variable	Ensure that body angle does not change until the legs have completed approx. 50% of the drive In a multi oared boat the exercise can be practised in pairs. See the comments/exercises for "poor transition from initial drive"

Glossary

This provides a basic definition of common rowing words

BLADE - Spoon, at end of loom, that is placed in the water.

BOW - The forward section of the boat.

BOW PERSON - The rowing/sculling position closest to the bows.

CATCH - That part of the stroke as the blade enters the water.

COCKPIT - That part of the boat where the sculler/rower sits.

COLLAR - Part of the oar that pushes against the swivel.

COXLESS BOAT - A boat which does not have a coxswain.

COX(SWAIN) - Steersperson.

DOUBLE-SCULL - A two person sculling boat.

DRIVE PHASE - That part of the stroke when the body propels the boat.

EIGHT - A rowing boat propelled by eight persons each holding one oar.

ERGOMETER - The rowing machine, also known as the Ergo.

FEATHERING - Rolling the oar until the blade is parallel to the water.

FINISH - The extraction of the blade from the water.

FOOT STRETCHER - Where the sculler/rowers' feet are attached.

INBOARD - Distance from end of handle to blade-side face of collar.

OAR - Term used to describe the equipment used to propel the boat.

OUTBOARD - Distance from tip of blade to blade-side face of collar.

OVERLAP - The amount by which the hands cross over each other.

PAIR – A sweep boat propelled by two people, each with one oar.

PIN - The vertical axle attached to the end of the rigger.

PITCH - Angle of the blade away from the perpendicular.

PORT - Right-hand side of boat as you sit in it.

QUAD - A 4-man boat, each person having 2 oars (sculls).

RECOVERY PHASE - That part of the cycle between finish and catch.

ROWING - Propelling a boat with a single oar held in both hands.

SCULLING - Propelling a boat by holding an oar in each hand.

SCULLS - A pair of sculling oars.

SINGLE SCULL—A one person boat propelled by a single pair of oars SPREAD - The distance between the two pins on a sculling boat.

SQUARING - Moving the blade from the feathered position 90 degrees. STARBOARD - Left-hand side of boat as you sit in it.

STERN - The aft or rear section of the boat.

SWEEP OAR - Rowing with one blade as opposed to sculling with 2 blades.

SWIVEL - The part of the rigger that holds the oar.