

Limitless Adventures

River Leadership Supplement

Introduction and Rationale

The content within the document is based closely upon what I deliver on British Canoeing leadership courses and bespoke courses aimed at developing personal safety and awareness when leading or paddling within a group.

Even if you are not in a designated 'leadership' role, I believe that all paddlers should be continually developing their understanding and application of skills/techniques in the dynamic and often hazardous environment they operate in.

That said, this document is by no means a comprehensive guide to planning/delivering safe river trips and it does not claim to be one. It is certainly not a replacement for personal experience or further guidance from the number of high quality coaches, providers, or paddlers currently active within the paddlesport industry.

The content included within this document is sourced and adapted from books, articles, guidance notes, and input from fellow paddlers, coaches, and providers. Although I am sure that I do not stand alone in my beliefs, for the purpose of this booklet any opinions, advice, or recommendations stated are based on my own experience as a paddler, coach, and provider.

Nothing within this document is new or ground breaking, and I am certain that there are differing opinions, thoughts, and ideas from other paddlers and coaches currently operating in the UK. I fully accept the range of opinions and beliefs between differing paddlers, coaches, and providers and I am by no means trying to discredit or question the validity of those with beliefs or opinions that differ to mine.

Fortunately, finishing this document further confounded my original reasoning behind starting it in the first place, with so much content to consider when trying to plan and deliver a safe river trip, an expectancy that all the following information will be retained without any additional support could be considered somewhat ambitious. That said, I never intended for it to become a 20+ page novel!

I suppose the ultimate aim of this booklet is to promote safety when on the river and having an aid to try and further enable this can only be positive thing, right?

Rich Tyler

Disclaimer

Paddling is an inherently dangerous sport with risk of personal injury or death. Participants should be aware of the associated risks and accept responsibility of their actions, and the actions of those under their guidance or supervision.

The majority of the skills, strategies, and techniques described within this document are intended to be deployed in specific scenarios/circumstances and environments. Seek professional guidance if you are not confident in your ability to safely utilise any included skills and techniques without risk to your, or others river users health.

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Your Role

As a leader/guide you are in a position to plan and deliver river trips for both paddlers that you know, and those you haven't met before. The following sections on planning/facilitating a trip, and information gathering/profiling, covering the key aspects you should consider when looking to organise or deliver a river trip.

Planning/Facilitating a Trip

As a 4 star leader/club member/peer paddler you may be tasked with planning and delivering a trip, below are some important points to consider when looking to organise a trip:

Who is going – what paddlesport experience do they have, do they have any relevant knowledge that can be used to help your planning/delivery, what is their current ability level (obviously this is based on their personal opinion), how old are they (implications of paddling with under 18s), what are their fitness levels, are there any medical issues that you need to be aware of, who would they like you to contact in an emergency?

How many paddlers are going – what is your recommended ratio/how many paddlers can you safely manage, is sufficient transport available?

What equipment do they have – what can you provide, is their kit suitable for its intended use, does the groups' equipment affect your plan for the day/trip?

Where would they like to go – river and section, river grade (linked to your remit/personal ability/group ability), access agreements, current/ideal river levels, weather forecast, shuttles.

What are the expectations from the trip – what are the group looking for, what are they expecting from you, what can you offer?

Note: You need to ensure that you manage the groups' expectations from the very beginning of the planning phase, if the group are looking for multiple rivers in a day/coaching sessions/paddling harder rapids/etc. and you cannot facilitate this, you need to be upfront and clear with the group to avoid any potential disappointments.

Contingency plan – what is your plan if your intended river section is not suitable (group ability/river levels/etc.), do you re-arrange the trip or change your plan and paddle somewhere else?

Information Gathering and Profiling

Information gathering and profiling can be defined as the process you complete as a leader/guide to assess your groups' wants/needs, experience, ability, knowledge, and psychological state. This can begin from first contact with the group, likely to be the morning of the river trip, or from the questioning you have utilised during the planning phase.

If you have been asked to deliver a trip the questions you ask during the planning stage can be tailored to begin profiling the paddlers you will be working with. If your initial meeting is on the day of the trip see the 'Briefing' section (Me and You) for potential questions/discussion points to begin individual/group profiling.

Along with your planning/initial profiling questioning you should continue your profiling throughout the rest of the day, on the following page are some additional profiling opportunities and ways to continue profiling (with a few examples) after your initial morning chat:

Visual assessments - what clothing and equipment individuals have? E.g. members in wetsuits are more likely to get hot/cold, paddlers in playboats may need more breaks to stretch their legs, brand new kit could raise some questions (bought to replace old kit/never been used before/etc.), wearing additional throwline belt/cowstail (have they been on a WWS&R course?), etc.

Continued questioning – question anything that you pick up on from your visual assessment or throughout the day (how long have they had their boat/why do they carry certain items/do they have any trips lined up/what rivers would they like to run in the future/have they completed any rescue courses/etc.). Making an effort to chat with your group is a good way to build rapport whilst gathering relevant information, even on formal assessments you should consider your groups' enjoyment levels, being ignored all day won't be enjoyable...

Initial on water profiling – all the information you have gained prior to getting on the water is valuable but until you have actually seen the group paddle you are basing everything on questioning and equipment assessments...

Below are a few options for on-water profiling:

A flat water warm-up - Either delivered by you or self-managed. Think about what skills are going to be needed for the trip (edging, driving the boat, etc.) and assess the group against this criteria. Even if you are not coaching you can avoid potential hazards later in the day by understanding your group's strengths and weaknesses (e.g. choosing suitable lines for individuals, leadership/group eddy selection, potential portages, etc.).

Random manoeuvres – utilise venues early in the trip (time permitting) to get the group to complete moving water manoeuvres. Progressive challenges (ferry glides, specific eddies, surfing, etc.) can be used to build a picture of what moves you can expect the group to make later in the day, you would be foolish to rely on individuals making a grade 2 ferry glide if they were inconsistent on a grade 1 ferry glide earlier in the day...

Eddy hopping – a great way for you to consolidate your river signals in context from the start of the day (and iron out any issues if necessary). Eddy hopping also enables you to select the eddies you want the group to make, you can start making progressively harder manoeuvres to see where individuals begin to make mistakes, this may affect your choice of leadership style/strategies later in the day.

All of the above options can be delivered progressively and individually to help build a bigger picture of everyone's ability within the group.

Note: Your choice of venue will ultimately dictate what profiling tasks you can complete with your group.

Effective profiling will enable you to tailor your delivery, leadership styles/strategies, and individual/group challenges to try and maximise paddler enjoyment/development during their time with you.

Note: When looking at the CLAP model (see 'Leadership' section), the avoidance element of this framework begins with your initial profiling, the information you gather (or fail to gather) can be utilised to avoid potential issues later in the day.

Briefings

There are many structures and formats that can be used to complete your safety brief prior to getting on the water, it is important to consider what information you want to give/receive (bearing in mind how much information you can realistically expect someone retain) and in what order you wish to do this.

Below is an easy to remember briefing format (**M-Y-A-B-C-D-E-F-G**) that covers what I deem to be key (also information in a logical order):

Me – information about me (you if you are briefing), my approach, experience, philosophy.

You – information about the group (continuation/beginning of profiling): names, where they are from, favourite river (and why), details of last swim, when and where they last paddled, expectations/concerns/what they want from the trip. These questions are very useful to build a bigger picture about the individual paddler within your group.

Area – plan for the day (timings/lunch/shuttles/weather forecast/etc.), river information (length, grade, levels, key features, and potential hazards).

Boats and Equipment – who is carrying what (especially important if you are planning on splitting emergency/rescue/leadership kit between the group), what everyone should be carrying. Actually seeing what everyone is carrying is advisable, especially with an unknown group.

Communication – signals and their intended use (see CLAP within leadership section for more details on the signals I use). If working with a new group or unknown paddlers you may want to adopt their signals for the day to reduce the amount of information you are giving.

Doctor and injury prevention – a chance to gather any medical information. Give everyone the opportunity to disclose any medical issues or concerns privately before getting on the water. Also, highlight the safe manual handling principles to reduce the risk of injury .

Emergency Procedures – swim brief and rescue protocols. Make it very clear what you would like the group to do if someone has swim (both as a swimmer or group member). A demonstration of the defensive/aggressive swimming positions in relation to the river/flow is advisable.

Final Checks – an opportunity to ensure the group (and you!) are carrying everything required for the day (covered in more detail in the 'Equipment' section). A final chance to check that all group members are following the 'clean' principle and free of any unnecessary snag hazards. You can complete a top-to-toe check or use a 'buddy system' to do this.

Get warmed up/on the water – you may wish to run your own pulse raiser/stretch session or alternatively manage the group whilst they complete their own personal preparations (either on the bank or water), if you are running your own warm-up session ensure you are not unnecessarily making the group do anything that could heighten the chance of an injury occurring (improper stretching/etc.). Depending on venue, you may also want to consult the group considering where they would like to launch their kayaks and set initial boundaries for them to paddle within (you still might not have seen them paddle yet!) Continue profiling!

Note: All of the above can be covered relatively fast, do bear in mind that the final bits of information that you give are those most likely to be remembered.

Leader/Group Equipment

Below is a list of key equipment I would recommend a river leader to carry. It should be stored sensibly in your boat considering the effect the additional weight will have on your kayaks trim. We don't have the luxury of space when paddling kayaks to equipment needs to be carefully chosen and stored effectively.

Note: Any kit recommendations are based purely on personal experience and use (I am not affiliated to any brands/sponsors). *Recommended items that all group members should carry.

***Throwline** – suitable length for intended use (generally argued that UK rivers are not wide enough to warrant long throwlines but also consider its use for mechanical advantage rescues). Stowed for quick access and clipped in. Recommended: HF Compact Syntec (20m), HF Compact Alpin (20m), HF Weasel (18m).

***Knife** – stored in buoyancy aid (and can be easily accessed/opened with single hand if required). Some paddlers choose to tether their knife to their BA, consider the pros/cons of doing this before making your decision (you won't lose it if you drop it/you can't give it to someone else to use if they need it, etc.). Recommended: NRS Co-Pilot, NRS Captain.

***Sling (4m+)** and Karabiner – again, this needs to be easily accessed without raising the risk of potential snags (there have been several incidents attributed to slings falling from BA/waist loop and becoming snagged). I use a Palm wire gate karabiner as its larger gate opening also fits over a paddle shaft for rescues. Also remember that an open sling can become a closed sling, a closed sling can't become an open sling... Recommended: Palm safety tape/480cm climbing sling cut open, Palm wire gate karabiner.

First Aid Kit – labelled clearly on drybag/container. Consider what incidents you are likely to deal with on the river if/when customising your first aid kit. I carry the following: 2x latex gloves, cohesive bandage (Vetrap), 2x triangular bandage, 2x mini crepe bandage, 5x steri-strips, 1m fabric plaster strip, waterproof plaster roll, duct tape, scissors, sterile eye wash, ibuprofen, paracetamol, head torch, and spare batteries. Obviously feel free to add/remove any additional items but consider the injuries you are likely to encounter on the river and what your first aid capabilities are. Recommended: Making your own kit (mine pictured below) and storing in a drybag, pre-assembled kits generally have too little/much in them.



Group Shelter (4-6 person) – think about the number of paddlers you can safely manage on a river (or your award remit) and select an appropriate size. Group shelters take up a lot of space, considerably more than normal if you carry a 10-12 person one! Recommended: Rab group shelter 4-6 bothy (packs down small for a medium sized shelter).

Map and Compass – it is very common now for people to substitute a map and compass (or compass at least) for a GPS/grid reference app on their phone, just consider your back up options if your battery runs out or you lose your phone. Laminated map sections are a good way to save space but ensure they still include potential emergency road access points, and grid reference numbers. It goes without saying, if you carry a compass you should be able to use it (for a 6 figure grid reference, and to access the closest road). Recommended: Silva type 4 compass, 1:25k OS map.

Phone – fully charged and carried with you in a waterproof case (it wouldn't be much use stored in a drybag in a lost boat...). Recommended: Aquapac to store phone in.

Note: A text letting everyone know you are alright (or need help) can save a lot of time and effort when dealing with emergency situations.

Repair Kit – think about the type of repair you are likely to require and how long it needs to last for (generally a few hours until you reach the get-off). I carry: flashband (works well for split patching), turbo flame (to heat flashband), prussic chord, cable ties, bung, and multi-tool. A more comprehensive long-term repair kit can be left in the car. Recommended: Make your own repair kit with items specific to your boat, you can't be expected to carry every nut and bolt type for all boat types. I paddle a Jackson which doesn't use any nuts or bolts (hence my minimal repair kit below)!



Pin Kit – The only additional piece of equipment I carry for my 'pin kit' is a DMM revolver karabiner (reduced friction compared to standard karabiner). Alongside the throwline/karabiner, and sling/karabiner already being carried a 3:1 or 4:1 mechanical advantage/haulage system can be created from these items. Recommended: DMM Revolver/Boa as your additional karabiner.

Splits – the environment you are operating in should dictate the quality of the split paddles that you carry. In the moderate environment (grade 2/3) your splits do not need to be the highest quality but you do need to be confident using them as a replacement for your standard paddle. Recommended: Werner 4 piece splits (powerhouse/players/etc.).

***Lunch/Drink/Emergency Food** – slow burning carbohydrates for long lasting energy and water/squash for hydration. Performance is affected massively if you are unfuelled and/or dehydrated. Emergency food may be used for group members so potential allergies should be considered, also check expiry dates if emergency food is going to be left in a drybag for long periods.

Additional Clothing – I carry an x-large synthetic (still works when wet) jacket, small paddlers still fit into large clothing, large paddlers do not fit into small clothing. Also a thermal jacket/blanket.

Below is a picture of all the kit mentioned above (first aid kit in green drybag), both in and out of my watershed bag, this is stored directly behind the seat of my kayak. Also pictured are my 'luxury' items (hand warmers).



Watershed Ocoee drybag (expensive but durable and 100% dry!)

Leadership Framework

Before looking in more detail at the varying leadership styles and river running strategies it is important to introduce, and further detail, the acronym often utilised for river leading, C.L.A.P.

C Communication	L Line of Sight	A Avoidance	P Positioning
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Communication

Any signals (see designated 'Signal' section for more details), instructions, or briefings you use need to be clear and understandable. Remember it is likely that limited information will be retained so ensure you do not overload your group with unnecessary information (especially if there are key points for the group to remember). The communication you are intending to use and how you choose to deliver it should be clarified early in the day, an open forum where the group are encouraged to ask questions if unsure should be aimed for, this can help avoid any potential misunderstanding later in the day.

Line of Sight

There are 2 aspects when maintaining line of sight.

1 – You need to have line of sight of what river features are coming up. This ensures that you do not run any features 'blind' (without knowing if they are safe to navigate before committing to paddling them). Remember that you need to clarify that the **whole** feature/rapid is safe to run before committing to running it, reefs/weirs/stoppers/drops/etc. all present issues as you often cannot see the base of the drop due to the low sitting position in your boat.

A '2 eddy rule' is recommended when trying to establish if a river section is safe to run from your boat, this ensures that you have a back-up eddy should something go wrong trying to make your initial eddy. If you are unsure of what features is coming up, and you are not happy that you can make a key eddy (with a back-up eddy after it), it may be wise to hop out of your boat and have a look from the bank (see 'Scouting' section for more details).

2 – You need line of sight of all your group members (through other group members if necessary) to ensure that all everyone is safe at all times. Maintaining line of sight with your group also ensures that the communication chain is maintained. Brief you group on what you would like them to do if they lose line of sight with all other group members (generally wait until you return), this can happen easily if you are dealing with a rescue.

Your boat positioning and choice of eddies will ultimately dictate how effective you are at managing the above line of sight elements.

Note: You will often have to move far ahead of you group to fully see what features are coming up, this can obviously cause communication issues if you end up positioning yourself too far away from your group when scouting from your boat...

Avoidance

As previously mentioned, avoidance of potential issues should begin from your initial contact with your group (see 'Profiling' for more details).

Additional ways to avoid potential issues include:

Effective group control – selecting suitable strategies and styles to manage river features, checking all group members are following the 'clean' principle to minimise potential snagging/entrapment hazards, having clear and concise signals, giving clear briefs without unnecessary information, continually assess group happiness (are they hot, cold, thirsty, hungry, tired, nervous, etc.).

Promoting group awareness – the more knowledgeable you group are the more effective and safe they are on the river (both on the day and in the future), group members can spot hazards/issues making your job easier in the long run.

Knowing your venues – knowing the lines/eddies on a river can make life a lot easier for you, still ensure you follow your 2 eddy rule and **always** check lines are safe before committing to rapids. Different groups may also require differing approaches, tailor your leadership styles/strategies to suit the group you have on the day.

Having effective rescue protocols – see the 'Rescue' section for more details.

Positioning

Positioning can be split into 2 aspects, firstly there is your positioning as a leader, and secondly there is deciding where you choose to position your group members.

Yourself – as mentioned in the line of sight section, where you choose to position yourself will dictate how much future water you can see, how many members of your group you can see, and how effective your communication will be. Ensure you separate leadership eddies from group eddies

Different features will require you to adapt your positioning as a leader to manage the most probable hazard, e.g. you may be more effective positioning yourself above the group on a section with a high chance of pinning a boat, or below your group on a section with a sticky stopper.

Group – individual rapids and features will also require you to adopt differing approaches when it comes to positioning your group. Remember there is a difference between leadership eddies and group eddies, not all the eddies you use to manage the river will be suitable to put members of your group in. Clear signals established at the start of the day should enable you to position individual group members where you would like them to be. Your profiling should also give you an idea of the eddies your group are capable of making, 'key' eddies (those that must be made by everyone to maintain line of sight) need to be very carefully selected to maintain line of sight at all times.

Utilising the above acronym will give you a solid foundation to work from as a river leader, the additional 'blocks' you put on top of this foundation are the aspects that can make the difference between you being an effective or excellent river leader. The following few sections look at these aspects in more detail.

Leadership Styles

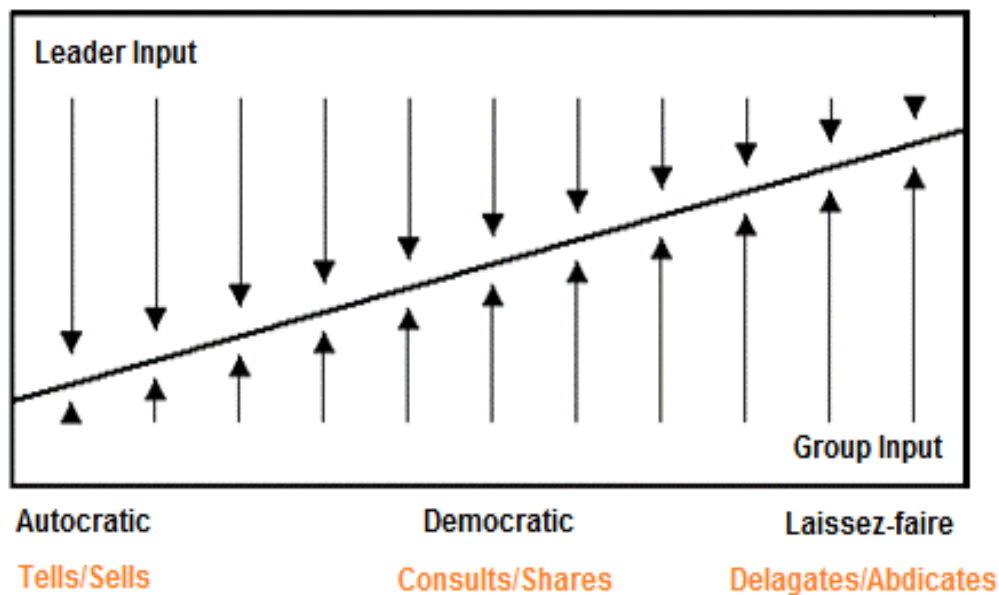
An understanding of differing leadership styles, and knowing when they are most effective, will make you a more rounded and adaptable leader on the river. Below is a basic description of the main leadership styles you can use, and a diagram to show when they are deemed most effective.

Autocratic – leadership styles towards the autocratic end of the spectrum are based around the leader making all the decisions and having full control of the groups' actions.

Democratic – this style is based around the leader and group both being involved in the decision making process, everyone's thoughts, wants, and needs are considered before decisions are made.

Laissez-faire – the opposing end of the spectrum to autocratic. Individuals and/or groups are allowed to make their own decisions with little or no guidance from the leader.

The diagram below highlights the amount of input from the leader/group in relation to the type of leadership style being utilised. Situations that require quick and clear decision making from the leader (e.g. rescues) are best dealt with adopting a more autocratic approach, shared decisions (e.g. choosing individual lines down rapids with guidance) would suit a more democratic approach, and individual/group based decisions (e.g. when and how long they would like for lunch) are best suited towards leadership styles towards the laissez-faire end of the spectrum.



Note: The amount of risk can also play a role when deciding what type of leadership style to adopt, higher risk environments will require clear direct instruction from the leader (autocratic end of the spectrum) whilst low risk environment should require little input from the leader (more relaxed laissez-faire end of the spectrum). Predominantly adopting a leadership style in the democratic range will enable you to transition up and down the spectrum as required. Groups will soon tire of a leader utilising an autocratic approach all day, or begin to question why the leader is there if they adopt a laissez-faire approach all day. Search 'COLT outdoor leadership theory' for more information on this subject.

Leadership Strategies

Leadership strategies are the group management tactics that you utilise to safely negotiate yourself and your group down the range of differing rapids and features commonly found on rivers. A range of strategies will be discussed below with reference being made to their speed and safety.

Group all paddle together

The fastest way to make your way down the river with/as a group. This strategy works well on easy features that are well within the groups' capabilities, and obviously on flat sections between features. Brief the group on suitable spacing (3-7 boat lengths depending on the environment) between members to avoid them getting in each other's way.



[Group all moving together on a comparatively easier section of the Middle Guil](#)

As this strategy is fast moving you can soon find yourself at the start of the next feature/rapid, because of this you may still want to position yourself at the front of the group to continually be scouting future water, also paddling ahead if necessary enables you to ensure that the river is clear and there are sufficient eddies for the group to make above upcoming features if required.

Potential 'All Together' Issues:

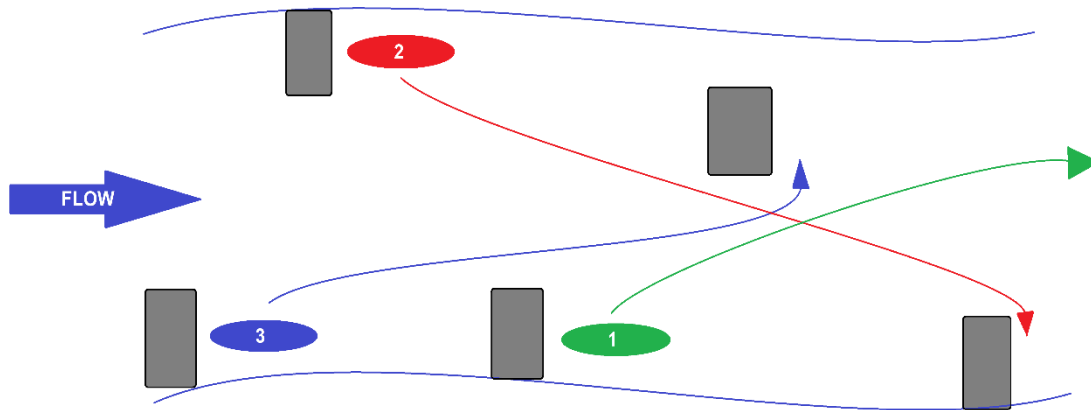
The group naturally bunches together to chat, not an issue on flat sections but can cause issues on 'easy' fast moving water (getting in each other's way/stuck on unseen rocks/etc.).

As you move ahead to scout future water the group naturally speed up to stay close to you. This can reduce your decision making time, options, and amount of eddies you can use above features to position your group in.

The group will need immediate instruction on what to do before you can deal with a swimmer.

Leapfrogging

The basis of leapfrogging is the person at the back of the group (when everyone is waiting in an eddy) makes their way to the front selecting the next new leadership eddy to wait in. This process is then repeated with all group members waiting in their selected eddies whilst the new 'backmarker' moves ahead of them into another new leadership eddy.



- Paddler 3 (backmarker) moves past the whole group (on signal) into the next suitable eddy ahead of Paddler 1 (the previous leader).
- Paddler 2 (new backmarker) moves past the whole group (on signal) into the next suitable eddy ahead of Paddler 3 (the previous leader).
- Paddler 1 (new back marker) moves past the whole group (on signal) into the next suitable eddy ahead of Paddler 2 (previous leader).

This process is continued until the group reach the end of the feature/rapid or the leader decides to change their strategy.

As everyone takes turns as leader/backmarker you need to be confident in your groups ability as the leadership and decision making is shared amongst the group. This strategy can also be a tricky one to manage as you will find yourself in a range of positions within the group (which can affect your line of sight (group and future water) and rescue positioning), this is not generally an issue if you are paddling with peers/known groups, but with unknown paddlers you are putting a lot of faith in their ability and judgement to select appropriate eddies and make/stay in them...

This strategy works well in small competent groups on rapids that only have small eddies. If the river gets easier you can consider getting everyone to paddle together as a group again, if it gets harder you may want to consider on of the following strategies.

Common 'Leapfrogging' Issues:

New leader selecting an eddy too far ahead of the previous leader and running a section 'blind'.

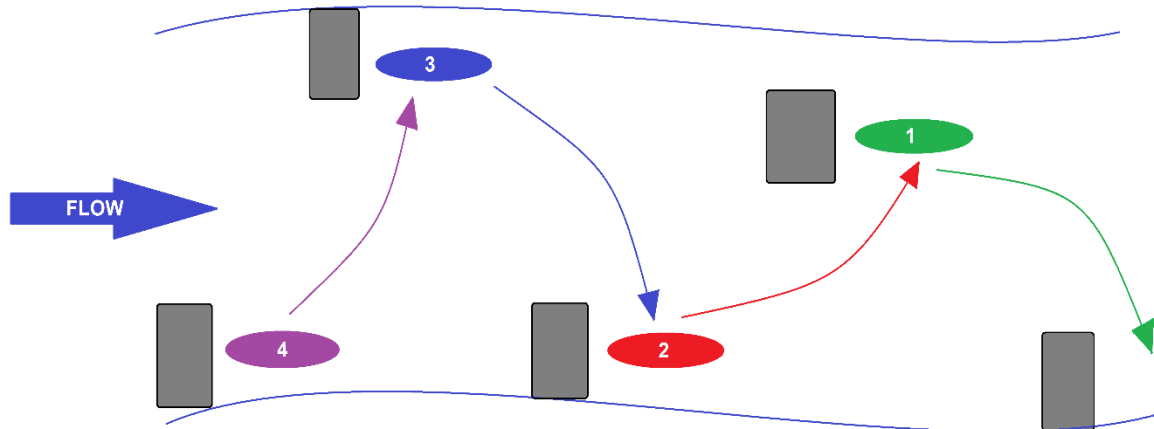
The group becoming too stretched out effecting communication and line of sight.

Individuals becoming confused/complacent about their individual (and continually changing) role which can result in multiple paddlers moving at the same time or not moving at all.

The group will be left to wait in their eddies whilst you deal with a swimmer (it may be difficult for you to regain line of sight again on a prolonged/extended rescue).

Eddy Hopping

The basis of eddy hopping is the leader continually selecting and moving down to the next suitable eddy (that **all** the group members are able to make), and once in the next eddy the leader signals the person in the eddy above them to move down one place into their next pre-selected eddy.



- Paddler 1 signals Paddler 2 then moves into the free eddy.
- Paddler 2 signals Paddler 3 then moves into the eddy that Paddler 1 left.
- Paddler 3 signals Paddler 4 then moves into the eddy that Paddler 2 left.
 - Paddler 4 moves into the eddy that Paddler 3 left.

This process is continued until the group reach the end of the feature/rapid or the leader decides to change their strategy.

This strategy works in similar environments to leapfrogging but enables you to select all future eddies (as you are always at the front of the group and the descent order doesn't change). You may want to facilitate eddy hopping on easy rapids at the start of the day (or during 'eddy hop' profiling) to iron out any issues before fully committing to and relying on this strategy.

Note: This strategy is based upon all group members sending and receiving signals and making their next intended eddy.

Common 'Eddy Hopping' Issues:

Individuals move to their next eddy without relaying their signal to the next person, leaving someone without line of sight of any other group members.

Someone misses an eddy (bad luck by the paddler or poor eddy selection by the leader), this can split the group effecting communication and line of sight.

The group will be left to wait in their eddies whilst you deal with a swimmer (it may be difficult for you to regain line of sight again on a prolonged/extended rescue).

One at a Time

As simple as it sounds, you select a suitable leadership eddy to position yourself in and either signal individual paddlers to come to you, or past you/into a specific eddy. Positioning will be an important factor when utilising this strategy, the best position to deal with rescues doesn't always leave you with line of sight of the group, be prepared to move around to manage this.



Leader utilising 'one at a time' and positioned beneath a stopper for potential rescues.

One at a time is the safest way to manage a group through harder features/rapids (bar portaging) as your full focus can be on rescuing the only moving paddler past a feature if something goes wrong. It also leaves little room for confusion as you *should* have briefed you group (who are all generally waiting in an eddy for their turn) prior to paddling the feature and it only relies on a single signal.

Note: You may want to think about the order in which your group descend a feature/rapid, stronger paddlers first may be useful to aid rescues, nervous paddlers may suffer if they are made to wait a long time for their turn...

Common 'One at a Time' Issues:

Being overcautious with your group and continually using 'one at time' to negotiate easy features.

Having to rush later in the day (sometimes on harder features) as you have been moving too slow utilising 'one at a time' earlier in the day on easy features.

Your group can be left waiting a long time before their turn if there are rescues/etc. not always ideal (both psychologically and physically) before paddling a harder/tricky section.

Portaging

Portaging is used when you/your group have to walk around a rapid/feature (fallen tree/specific rapid/etc.). This can be a decision taken by you as the leader, or by individual paddlers depending on the specific rapid/features. You are still responsible for the group during a portage.



Group portage.

It is common (and sometimes awkward) not letting individuals/groups paddle a specific river section if you don't think you can safely managed it or they cannot safely negotiated it. Making your position as a leader (responsible for the groups' safety) clear at the start of the day to help avoid any potential issues. Also consider your responsibility as a leader (and legal stance if you were to end up in court...) before rushing any tricky decisions, continually going against your better judgement (often why you are the leader for the day) will ultimately result in an accident sooner or later...

Note: Your award remit may also play a part when decision making if you are working commercially or under British Canoeing insurance.

Common 'Portaging' Issues:

Selecting the best place to get off and back on the water (often awkward/limited bank space to use).

Managing a group split between the bank and the water (some paddlers are fitter/more efficient that others getting in and out of their boat).

Injuries can be common if carrying boats and equipment across often uneven or slippery ground.

Strategy Round-Up

Throughout the day you will utilise a range of leadership strategies, selecting the best suited strategies to use on specific features/rapids comes from experience working with a range of groups on varying river types. Below is a basic diagram highlighting the associated speed of each of the previously mentioned river running strategies:



Considerations that should also affect what leadership strategy you use includes the difficulty of the river, the groups' ability, and the amount of visibility on the specific feature/rapid.

Note: Some features/rapids may seem best suited to a specific strategy but in reality they are not, don't fall into the trap of using the 'easiest' strategy rather than the most appropriate.

Setting Challenges

Another aspect rarely seen that can make the difference between being an effective and excellent leader is setting and managing group/individual challenges throughout the day. Challenges are a good way to slow down the group and make the most of the river, they can also make the day more enjoyable and help facilitate the development of paddlers technical and tactical skills.

Below are some challenges you may decide to use depending on your group/individuals and river features/conditions:

Maximum eddies – as simple as it sounds, you just set the boundaries and manage groups' safety.

Upstream attainments – moving upstream is a great way to make relatively easy rapids harder.

Leapfrog next eddy – an eddy making challenge to be completed in pairs, the aim is to leapfrog your partner attaining the next downstream eddy immediately below their position, this can be used on both easy or challenging rapids.

Individual challenges – set challenges (eddies/ferries/manoeuvres) relative to individual abilities.

Races – offers a differing approach as it is based around using river features to maintain boat speed. You can either run individual time-trials, or have multiple paddlers racing at the same time.

Gold/Silver/Bronze eddies – good with competitive groups or individuals. When descending a river, get the group to score their (or even other paddlers) entry positions into each eddy as either Gold (high attainment position), Silver (standard attainment position), or Bronze (low attainment position). This can also be done using as a point scoring system (Gold – 3 points, Silver – 2 points, Bronze – 1 point), with scores tallied up compared amongst the group at the end of rapids. Tailor to suit group/individuals abilities, probably not an ideal game if signals still require consolidation.

King of the wave – a surfing challenge where the aim is to knock other paddler off the wave and take their place, the last paddler remaining on the wave wins!

River Signals

Briefly mentioned in the 'Communication' section of C.L.A.P. Using river signals is a key component of river leadership, ensuring your group are all using the same signals, and understand what each signal means, is vital when looking to manage a river trip safely and effectively.

There are a wide range of signals commonly used by paddlers across the UK and although there isn't necessarily a right or wrong, there are certainly benefits and limitations associated with the differing river signals you, and others, decide to use.

With so much information already being covered (with the expectancy that will be remembered) in your initial brief, I only utilise what I deem to be **key** signals when working with an unknown group, additional signals can always be added later if you wish once the key ones have been established and consolidated. Ensuring that you use these signals right from the start of the day (you can even start using them during a well thought out warm-up) will help your group retain them for when they are needed at a point later in the day.

Below are the signals that I **use** when leading river trips highlighting the reasons why I use them and any potential issues associated with them.

Note: Before introducing the following signals you may want to see what signals your group already use and adopt their signals for the day (it will be easier for you to adopt your groups' signals than it will be for them to learn and adopt yours).

One person down/to next eddy – raised arm with an open palm. This cannot be confused with any signals that rely on counting fingers or with 'stop' if you are not using a stop signal. You can hold the signal in place until the intended paddler repeats it back to you to ensure it has been received.



Keep your open hand raised until the signal is returned.

All down together – one fist raised and ‘pumped’ up and down repeatedly until the group confirm it has been received by returning the signal. Often accompanied with a ‘Whoop Whoop’!!! Your group should have been briefed to follow your line and maintain a suitable distance between each other if all moving together.



Repeat this motion several times to signal all paddlers down together.

Note: Some leaders use 1 ‘pump’ to signal 1 paddler down, but if the signal receiver is not paying attention or only glancing in your direction fleetingly (they are in a small/unstable eddy, talking to group, etc.) you may find yourself repeating the signal several times in the hope they will see it, this can obviously cause issues if other group members assume you are signalling ‘all down together’!

Go left/right – Signal which way you want your group to go (generally away from hazards). You can make fast jabbing motions in the direction you want your group to go if it is a matter of urgency.



Signalling the paddler to move to their right (direction of leader’s signal)

Note: There are several horror stories of European paddlers using the ‘go left/right’ signals to point towards hazards, not away from them, you can imagine the trouble/confusion this could create!

Eddy out – a circular motion with a raised finger (like a cowboy lasso) followed by pointing at the eddy you would like the individual/group to go into. I use this signal as a replacement for a ‘stop’ signal (the circular motion with a raised finger indicates that all group members should eddy out and await further instruction).



Several ‘lasso’ motions with finger raised, then point at the eddy you want the paddler to enter. If the paddler is distant for the first signal you can repeat it with verbal instructions as they get closer.

Come to me – pat the top of your helmet with one hand several times. I wouldn’t consider this a ‘key’ signal but it is certainly useful! Combining the previous 4 signals should enable you to position your group where you would like them across the river but a quick ‘come to me’ signal does come in handy if you want a chat with a specific individual or the whole the group.



Repeat this motion several times.

Note: Be very clear with your group that if they are unsure of what the signal is, or they miss it, they should wait until it has been repeated and they are sure what they need to do. **No signal = no move!**

The previous 5 signals can also be combined (used in order) to give more specific instructions if required, e.g. one person down into a specific eddy, all down together staying to the left, etc.

The signal debate...

Stop signals – seen by many as a vital signal to stop a group proceeding further down the river, if you are deciding to use a stop command consider what the signal should look like and how easily it can be relayed (or if it could potentially be confused with any of your other river signals).

Paddle signals – useful if far away from your group or in poor visibility (but it could be argued that if you are relying on paddle signals you are too far from your group). Also useful if you are at the bottom of a horizon line and don't have clear sight of your group, a quick brief about raising your paddle for the next person to go can be used, you may inadvertently send a signal though if you accidentally raise your paddle. If using paddle signals you need to be very clear of their use and when you intend to use them, paddle signals can, be easily misinterpreted by groups.

I have clearly planted my flag in relation to this debate as I have already stated that I do not use 'stop' or 'paddle' signals, this does not mean that I disagree with their use (both certainly have their place), I simply prefer not to use them through personal preference.

Note: Whistles do not have to be limited to use only in rescues, they can also be used to send signals when river running. Although more likely to occur in an advanced environment, a quick whistle blast to signal one person may be useful in some rare situations where line of sight is not possible.

With paddlers/leaders/coaches/guides having clear differences in opinions when it comes to what river signals they consider to be appropriate, there is obviously credence to both sides of the debate. There are clearly benefits to all the mentioned communication methods, and although I have highlighted my preferences, it is up to you to decide what your opinion is on the matter!



Whatever signals you choose to use, clarify them with the group at the start of the trip, look to consolidate them early, and be clear!

Scouting

When scouting (assessing future water) you have 2 options, to scout from your boat, or to scout from the bank.

Boat based scouting – if you intend to scout from your boat it is important to maintain the ‘2 eddy rule’ (previously covered in C.L.A.P – line of sight), this method is far quicker than scouting from the bank but does have some potential pitfalls.

Scouting from your boat often only gives you glimpses of what features are coming up (also with limited visibility being based from river level). It is also easy to keep committing further into rapids to try and gain more information, this can lead to extended distances between you and your group (potentially losing line of sight and communication), and not being able to easily make your way back up to your group.

You can make life easier for yourself by splitting eddies into one of the 2 following categories:

Leadership eddy – a small eddy or feature that enables you to stop or slow down enough to have a quick look at the future water, these eddies are not always suitable to put group members in if they are hard to get in/out of, or only well positioned for scouting purposes.

Group eddy – a large or easy to make eddy that you can rely on your whole group making a high percentage of the time. These eddies have to be carefully selected depending on your groups ability, and well positioned to maintain line of sight and the communication chain.



Group leader positioned in a ‘leadership eddy’ to scout future water from their boat. Note the potential difficulty they may have trying to manoeuvre upstream (either in or out of their boat) back to their group if the future water scouted is hazardous, or may require a closer look/portage.

Bank based scouting – this is far more time consuming than boat based scouting but does have several benefits. Scouting from the bank will often enable you to see the whole rapid coming up with features/hazards/eddies/lines all visible often from an advantageous elevated position. Whilst scouting from the bank you can also easily make it back up to your group without the concern of committing to a rapid or feature ‘blind’.

Note: If scouting from the bank you have 2 options: to scout alone, or to take your group to look as well. Obviously taking the whole group will prolong this process even more but at times it is necessary for everyone to see what is coming up (to choose lines or make a decision about paddling or portaging the rapid).

Rescues Principles

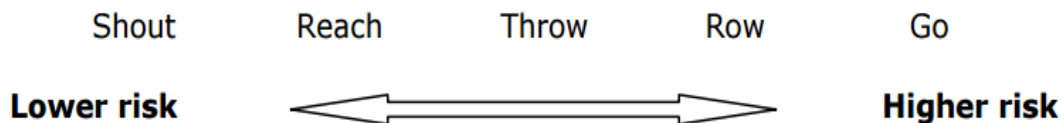
The following section is based around the safety and rescue principles paddlers generally follow.

Although it is easy to get caught up in the moment and jump straight into rescues, you need to try and refrain and assess the situation first to prevent the situation escalating. Before dealing with a swimmer you need to assess if it is safe for you to help, you also need to make sure your group are safely positioned (and know what you want them to do), once this has been dealt with you can then look to rescue the swimmer (victim) and before finally sorting out their equipment.

Order of Priority

Self → **Team** → **Victim** → **Equipment**

Following the above order of priority should reduce the possibility of there being further casualties before you commit to a rescue, once you are happy that it is safe for you to proceed (and your group are not at risk) the following framework highlights your options to aid a swimmer (and the associated levels of risk).



Shout – shout at the paddler to encourage a self-rescue, from the bank or the boat you will have better visibility than the swimmer so you can direct them to safety.

Reach – useful when a short bank based rescue is required, reaching with a paddle or sling/tape is unlikely to miss, you need to be well positioned to complete a reach rescue.

Throw – utilising your throwline. Consider your positioning (where the paddler is likely to capsize, resurface, and be ready to receive a throwline) and likely pendulum arc once they have caught the line. You will need to decide whether to be dynamic or static for this depending on the environment.

Row – once again, establish if it is safe for you to help the swimmer from your boat before committing (water difficulty, future water, swimmers emotional state, etc.). Encourage the swimmer to be proactive and help you rather than relying solely on the boat based rescuer.

Go – live bait. Used when the swimmer is unable to self-rescue/swim to aid their rescue. Ensure the rescuer has the correct equipment (also double checked) before entering the water to aid the swimmer. Additional bank based rescuers will be required to aid the rescuer on end of the throwline (live bait), they need to be well positioned and braced to prevent further casualties.

Note: panicked swimmers can pose a high risk to rescuers, try to maintain a safe distance from the swimmer until they have made it to safety (unless absolutely necessary).

Casualty Management

This section will not cover administering first aid, it will merely look at a basic incident management framework that can be followed if necessary, it is your responsibility as a leader to ensure you hold a valid first aid certificate and are confident that you can deal with any potential issues that are likely to occur whilst on the river.

Note: As with rescues, before helping a casualty you need to ensure that it is safe for you to do so, that you group are safe, and their condition is not going to deteriorate whilst you aid the casualty (follow your order of priority).

Phase 1 – Get the casualty to the bank and assess the situation.

Phase 2 – If injured administer first aid or call for emergency services (if they are required). You should be aware of your limitations as a first aider and any potential medium/long term casualty issues associated with the situation when making this decision.

Phase 3 – Evacuate the casualty back to personal vehicles or to road access for emergency services. If you cannot safely move the casualty (or they have suspected back injuries etc.) **do not** attempt to move them. Keep the casualty and your group warm/stable and wait for emergency services (you can mention that you may require mountain rescue when initially call the emergency services).

Phase 4 – recover casualty equipment. Depending on the situation you can take all the equipment with the casualty (if safe to do so), or store it somewhere safe to be collected at a later point (at your own risk...). You may want to leave a note that the kit is being collected/everyone is safe

Phase 5 – continue trip if safe to do so (you have suitable group, the casualty is safe, and appropriate logistics in place) or evacuate the group. This decision will ultimately depend on the individual circumstances of the situation.

Retrieving Equipment

As with casualty management this subject will not be covered in vast detail as there are a range of courses specifically based around paddlesport safety and rescue. It is your responsibility to ensure you are up to date and capable of performing what could be required of you when dealing with the associated issues (whether operating in the moderate or advanced environment in kayak or canoe).

Rescuing paddles is generally a simple matter, it is retrieving pinned boats that requires more knowledge and practice so this is what this section will focus on.

Below is a simple framework to follow when looking to retrieve a pinned boat.

Phase 1 – Getting a line on the boat. Clip a line to a suitable attachment point on the pinned boat.

Phase 2 – Pull on the line to try and move the boat (use group members to help pull if necessary).

Phase 3 – Apply a vector to the line. To do this you will need to anchor the boat to a fixed point on the bank. Pulling on this line (from an upstream position at a 90 degree angle) will apply high amounts of force on the boat and bank based anchors (so choose this point wisely).

Phase 4 – Utilise a mechanical advantage to try increase the amount of force you can apply to the line. Read on further for descriptions and pictures of 3 differing types of mechanical advantage.

All of the following methods can be created using 3x karabiner, 1x throwline, and 1x sling/tape (mentioned in the 'Leader/Group Equipment' section), a designated 'pin kit' is not required.

Note: a pinned boat often only has to be moved a small distance for it to become free, once it is no longer pinned it should be relatively simple to retrieve the boat to the bank.

Before covering mechanical advantages, below are a few bank based anchor considerations to make before looking to apply any weight/force.

Size of the anchor – bigger is generally better (both trees and boulders) if your sling is long enough.

How solid the anchor is – big boulders on a loose base can move, dead trees are usually rotten...

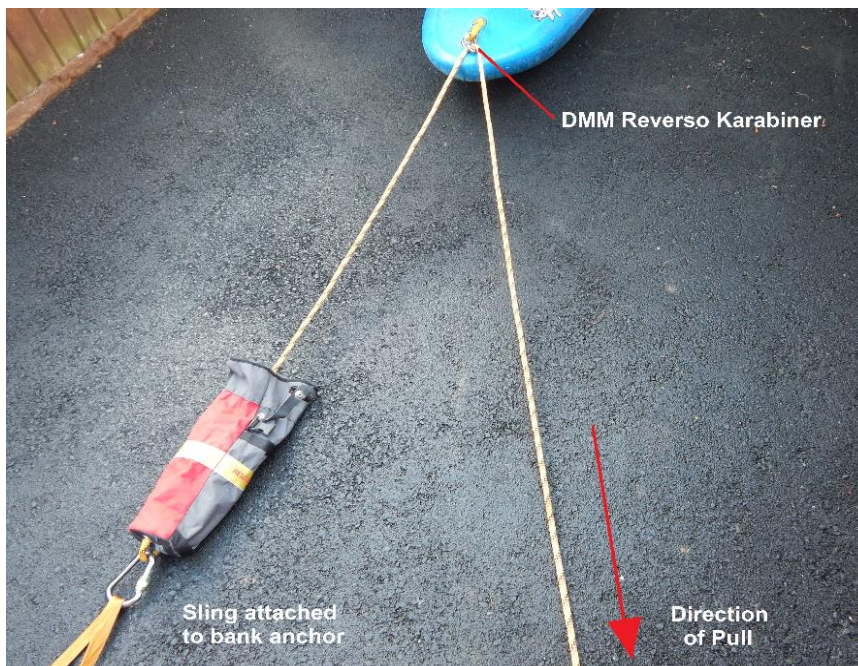
Anchor positioning – in relation to direction of pull, length of throwline, freed boats pendulum, etc.



Left: Open sling fed behind the tree then tied. Centre: Open sling fed behind a tree ready with ends ready to be joined with a karabiner. Right: A tidy overhand knot with long 'tails' after the knot. Move the knot out of the way of the karabiner before using your anchor.

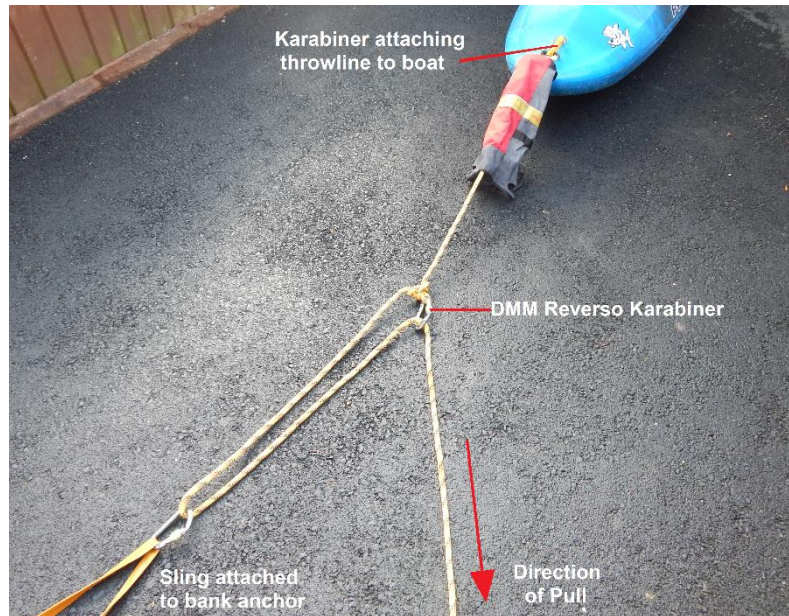
2:1 System

Every 2m of rope you pull through boat will move 1m. For a 2:1 system to be created the rescue line has to be fixed to the bank based anchor with the rope fed through the karabiner on the boat and back to the rescuer. If this is the other way around you are still using a 1:1, just changing the direction of pull. The DMM revolver is used on the point where you want to reduce rope friction.



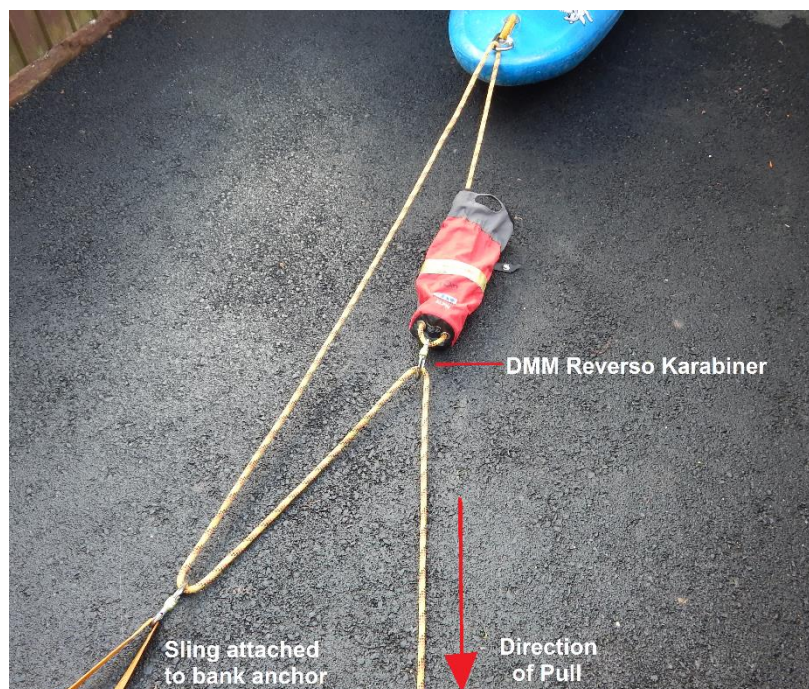
3:1 System (Z-Drag)

Every 3m of rope you pull through the boat will move 1m. For a 3:1 system the rope needs to be fixed to the boat, fed through the karabiner attached to the bank based anchor, then finally back through an additional karabiner attached to the rescue line. You can re-attach the final karabiner (DMM reverso in picture) back to the throwline with an overhand, figure of 8, or alpine butterfly knot (each with pros and cons), or carry an additional prussic with you to avoid any knots in the line.



4:1 System (Roving)

Every 4m of rope you pull through the boat will move 1m. The 4:1 system shown below does not require the throwline to be fixed to the boat or bank based anchor. The rope is fed through all 3 karabiners used in this system, it effectively creates a 2:1 system on a 2:1 system.



Note: If you cannot move a kayak on a 4:1 system you may want to consider your direction of pull!

About the author

I intended to write this in the 3rd person but it was just too awkward, guess I have to write in the 1st person and sound big headed instead!



I have been paddling for approximately 10 years now (as of 2015), and working commercially for the last 7 years. I am in the fortunate position that I get to be my own boss (sometimes at least through Limitless Adventures) whilst also delivering practical and theoretical sessions on outdoor programmes through the University of Worcester and Herefordshire and Ludlow College.

Qualification wise I hold the UKCC Level 3 coaching award alongside the Advanced Water Endorsement (AWE) in Whitewater Kayak, Whitewater Canoe, and Open Water Canoe. Additional to paddlesport qualifications I also hold a range of land-based qualifications in climbing and mountaineering and a BSc (Hons) in Outdoor Adventure Leadership and Management.

It does sound pretty big headed reading all that back...

Have fun and stay safe out there!

Rich Tyler

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