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BCU 2 Star Award

N.B. This article covers the kayaking section of the BCU 2 Star Award and is based on using closed cockpit kayaks.

The Two Star award is designed for improvers and covers more advanced paddling skills including moving the boat sideways, preventing a capsize and rescue techniques.

The award is divided up into four parts:

A. Personal paddling skills

B: Safety and rescue skills

C: Safety, Leadership & Group skills

D: Theory

A: Personal paddling skills:



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Lifting and carrying:

The key to handling any heavy or bulky objects is to practice good lifting and carrying techniques. Always ensure that any lifting/carrying is done with a straight back, using the leg muscles as required. General-purpose kayaks can initially feel very bulky (being almost the same length as a family car) and we therefore need to ensure that we do get assistance when lifting/carrying the boat to the water.

Good lifting technique is simply about using a few basic principles. There are a couple of words we can use to jog our memory every-time we are about to lift something:

SAFE:

S Stop

A Assess the situation

F Formulate a plan of how to safely lift the equipment

E Execute that plan

Another word which is a useful check before we lift something is:

LITE:

L Load - look at the load

I Individual - Can the individual(s) safety lift the equipment?

T Task - Is this a reasonable task?

E Environment - Is the environment safe? (I.e. go round slippery banks rather that over them if necessary).

The following principles are also very helpful when thinking about lifting:

- 1. Wherever possible, always share the load.
- 2. Keep the spine in line
- 3. Slide and glide rather than lift if possible
- 4. Make sure the load is properly balanced.

Always work on the basis that we only have one back so protect it!!



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Efficient forward paddling:

To paddle a kayak forwards efficiently, we need the boat set up correctly. We then need good paddling technique and correct body movement/positioning to produce a smooth and powerful forward paddling stroke.

Boat set up:

The kayak needs to be set up correctly so when our feet are on the footrest, our legs are slightly bent and our knees are comfortably placed under the cockpit rim/thigh braces. The balls of our feet should be resting on the footrest(s).

Paddle skills:

- Place your hands on the paddle shaft about a shoulder width apart. Your hands should be an equal distance between the paddle blades.
- Lean forward slightly and maintain this forward leaning stance throughout.
- Twist from the waist, and stretch forward with the top arm as far out as is comfortable.
- Place the paddle blade in the water.
- Power from the first part of the stroke comes from untwisting the body as you pull the blade through the water.
- Finish the stroke by pulling with your arm muscles.
- Clip the blade out of the water level with your hips
- Lift the blade up to shoulder level and "punch" forward, twisting from the waist and perform the stroke on the opposite side.
- Remember to push forward on the footrest on the same side, whilst you are undertaking the stroke.





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Manoeuvring the kayak:

We can break down the main techniques for manoeuvring the kayak into the following strokes:

- Sweep strokes
- Reversing
- Stopping
- Stern rudders or "Ruddering"
- Low brace turns

Sweep strokes



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Sweep strokes- Forward and reverse

The basics of sweep stokes have been covered in our BCU 1 Star kayak article, here we learn to use them dynamically.

Forward sweep strokes are an excellent stroke for either keeping the kayak on course without loosing momentum, or turning the kayak.

- Paddle forwards in a straight line
- Perform a forward sweep stoke on one side.
- Allow the boat to turn until it points in almost the desired direction and then perform another sweep stoke on the opposite side to stop the boat from turning.
- Continue paddling forwards. Practice this exercise on both sides and work on directional accuracy.
- Paddle backwards in a straight line, perform a reverse sweep, (using the back of the paddle blade), on one side.
- Look over your shoulder towards the side you are turning and allow the boat to turn until it points in almost the desired direction and then perform another reverse sweep stoke on the opposite side to correct the turn.
- Continue backward paddling. Practice this exercise on both sides and work on directional accuracy



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Reversing

Reversing



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Reversing the kayak:

Reverse paddling is an essential skill and is often used on moving water to maintain position, giving time to checkout the line down the river or just to keep an eye on the group on flat water when leading from the front.

It can be broken down into body movement/position and paddling technique.

- Sit upright
- Twisting from the waist, place the paddle blade in the water as far behind you as is comfortable
- Untwist from the waist and push the blade forwards
- Clip the blade out level with your knees
- Twist round and repeat the stoke on the opposite side
- Look over your shoulder regularly to check your direction
- Aim to paddle accurately in a straight line, adjusting your steering using reverse sweep strokes as necessary
- N.B. Your top arm should be fairly high and the paddle shaft nearly vertical.
- Remember to use the back of the paddle blade



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Stopping.

Paddlers should at 2 Star level be able to stop the kayak quickly and efficiently ideally within four paddle stokes (two each side).

- Build up lots of forward speed
- To stop, twist <u>slightly</u> from the waist and place the blade in the water just behind the cockpit.
- Do two reverse stokes on both sides in quick succession
- Aim to stop the kayak within four strokes
- N.B. The main differences between reverse paddling and stopping are that the stroke is shorter and quicker which helps maintain stability under pressure!
- Remember to use the back of the blade!

Stopping:



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Ruddering



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Stern Rudders - Ruddering

Stern rudders or Ruddering is an ideal technique to keep the kayak tracking in a straight line. It's very useful to glide the boat through a narrow gap that's too tight to paddle through, or to keep a boat running straight when enjoying a little surfing.

- Build up some forward speed
- Twist from the waist and place the paddle blade in the water behind you.
- The blade should be completely submerged and vertical with the drive face of the blade facing the boat.
- The top hand should be extended across the kayak and at around chest high to allow the paddle shaft to be parallel with the centre line of the kayak.
- The paddle blade can then be pushed away from or pulled towards the kayak as necessary to keep it running in a straight line.



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Low Brace Turns

Low Brace Turns:



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Low Brace Turns:



Water moving from left to right of picture
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Low Brace Turns:

In some situations, we want to both turn the kayak and support the kayak on edge at the same time. This is most essential when we are learning to break into moving water.

The Low Brace Turn allows us to support the boat on it's edge whilst allowing the fast moving water we are entering to slip under the kayak. (see lower picture).

To practise this on flat water, we need to:

- Build up lots of forward speed
- Apply a sweep stoke on one side to start the boat turning.
- Place the paddle blade on the surface of the water on the opposite side about level with the rear of the cockpit.
- Make sure that you roll your wrist backwards so the front edge of the paddle blade tilts slightly upwards.
- This allows the water to run under the paddle blade and gives support and a turning effect at the same time.
- Please see our white water article for further details on breaking into white water.



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Moving the boat sideways - Draw Stroke



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There are two basic methods of moving a kayak sideways from stationary, the **Draw stroke** and the **Sculling Draw**.

The Draw Stoke:

- Twist from the waist and place the paddle blade in the water a few feet away from the boat. Your top forearm should be just in front of your forehead
- The paddle shaft should be almost vertical, and the paddle blade facing you with the drive face facing inwards.
- The paddle blade should be about level with your hips
- Now pull the blade in towards the boat.
- When the blade is about 6" from the boat, rotate your wrist forwards and keeping the blade submerged at all times, slice the blade away from the kayak.
- When the blade is a few feet from the kayak, rotate your wrist backwards and repeat the stroke.
- If the bow of the kayak turns towards the paddle blade, adjust the stroke by pulling the paddle in slightly further back.
- If the stern of the kayak turns towards the paddle blade, adjust the stroke by pulling the paddle in slightly further forwards.
- Remember the paddle should always be pulled in at right angles to the kayak.
- Try to edge the kayak away from the paddle blade whilst performing this stroke to allow the water to be "pushed" under the kayak.



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Moving the boat sideways - Sculling Draw



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Sculling Draw Stoke:

- Twist from the waist and place the paddle blade in the water a few feet away from the boat. Your top forearm should be just in front of your forehead.
- The paddle shaft should be almost vertical and the paddle blade facing you with the drive face facing inwards.
- Now rotate your wrist backwards slightly so the paddle blade is at an angle of about 30 degrees to the boat with the drive face pointing forwards.
- Slice the blade forwards keeping it submerged at all times.
- When the paddle blade is almost level with your feet, stop slicing the blade forwards, rotate your wrist forwards so the paddle blade is at an angle of about 30 degrees to the boat with the drive face is pointing backwards and simultaneously start slicing the blade backwards.
- Slice the blade backwards keeping it submerged at all times
- When the paddle blade is a few feet behind the cockpit rim, rotate your wrist backwards so the blade is at an angle of about 30 degrees to the boat with the drive face is pointing forwards and simultaneously start slicing the blade forwards.
- Repeat this sequence several times to pull the kayak sideways.
- The paddle blade should slice through the water parallel to the centre line of the kayak.
- When slicing the paddle blade through the water, it should be "set" at a fixed angle.
- At the end of the forward and reverse movements, the blade angle is adjusted by "flicking" the wrist to set the return angle. This maintains maximum effectiveness throughout the stroke.
- Try to edge the kayak away from the paddle blade whilst performing this stroke to allow the water to be "pushed" under the kayak.
- When performing this stroke, your control wrist should be your lower wrist.



Preventing a capsize

Low Support Stroke



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<u>High Support:</u>



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There are two types of support strokes we can use to prevent a capsize, a **Low Support** and a **High Support**. We would use the low support where we are a little off balance, and a high support where we are a lot off balance!

Low Support

- Hold the paddle shaft across the cockpit of the kayak
- With your wrists and elbows above the paddle shaft, raise one paddle blade a couple of feet above the water
- Edge the boat over slightly by raising the opposite knee.
- Push down firmly on the surface of the water using the back of the blade.
- Recover the boat by raising the knee on the side you are supporting as you push down on the surface of the water.
- Recover the paddle blade by rolling your wrist backwards 90 degrees and slicing it out of the water.

High Support:

- Hold the paddle shaft across the cockpit of the kayak
- With your wrists and elbows below the paddle shaft, raise one paddle blade high above the water
- Edge the boat over by raising the opposite knee.
- Push down firmly on the surface of the water using the drive face of the blade.
- Recover the boat by raising the knee on the side you are supporting as you pull down on the surface of the water.
- Recover the paddle blade by rolling your wrist forwards 90 degrees and slicing it out of the water.
- Always ensure you perform this stoke at right angles to the kayak and with a bent elbow to protect your shoulder.



Low Sculling Support:



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In some situations, we need to be able to keep the boat on it's edge, typically this would be in a stopper (see lower picture).

We can keep the boat off balance by using either a Low or High Sculling Support. If we only need to keep the boat a little off balance, we can use a Low Sculling Support, and if we need to keep the boat more off balance, we can use a high sculling support.

Low Sculling Support:

- Place the back of the paddle blade on the surface of the water at right angles to the boat, a few feet out.
- Make sure your wrists and elbows are above the paddle shaft.
- Rotate your wrist backwards so the front edge of the blade tilts upwards slightly.
- Slice the paddle blade across the surface of the water.
- When the paddle blade is almost level with your feet, stop slicing the blade forwards, rotate your wrist so the rear edge of the blade tilts upwards slightly, and slice the blade backwards across the surface of the water
- When the paddle blade is a few feet behind the cockpit, rotate your wrist backwards so the front edge of the blade tilts upwards slightly and repeat the stroke.
- Repeat this sequence several times and edge the boat at the same time, gradually applying more weight to the blade as it sculls across the water.
- N.B. When slicing the paddle blade across the water, it should be "set" at a fixed angle
- N.B. At the end of the forward and reverse movements, the blade angle is adjusted by "flicking" the wrist to set the return angle. This maintains maximum support throughout the stroke.
- Control the blade angle by rotating your wrist on the same side as you are performing the stroke.



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High Sculling Support:

- Place the drive face of the paddle blade on the surface of the water at right angles to the boat, a few feet out.
- Make sure your wrists and elbows are below the paddle shaft.
- Rotate your wrist backwards so the front edge of the blade tilts upwards slightly.
- Slice the paddle blade forwards across the surface of the water.
- When the paddle blade is almost level with your feet, stop slicing the blade forwards, rotate your wrist so the rear edge of the blade tilts upwards slightly, and slice the blade backwards across the surface of the water
- When the paddle blade is a few feet behind the cockpit, rotate your wrist backwards so the front edge of the blade tilts upwards slightly and repeat the stroke.
- Repeat this sequence several times and edge the boat at the same time, gradually applying more weight to the blade as it sculls across the water.
- N.B. When slicing the paddle blade across the water, it should be "set" at a fixed angle
- N.B. At the end of the forward and reverse movements, the blade angle is adjusted by "flicking" the wrist to set the return angle. This maintains maximum support throughout the stroke.
- Control the blade angle by rotating your wrist on the same side as you are performing the stroke.

High Sculling Support:



Pictures and text copyright Kent Canoes: At Two Star Level, this is practiced on flat water.

Proprietor: Grant Scamell B.C.U. Level 5 Coach



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Returning to the bank:



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Returning to the bank:

Try approaching the back using a combination of the strokes described above, for example, a low brace turn followed by stopping, followed by a sculling draw.

Try not to use your paddles when getting out since this can damage the blade or shaft, but remember to keep them close at hand in case you need them.

Securing the boat:



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Securing the boat:

Securing the boat onto a roof rack or trailer correctly at the end of the paddle is essential for safety.

Most paddlers tend to use purpose made straps when securing a boat to a roof rack and trailers.

It is also well worthwhile investing in a quality roof rack, particularly if you intend to carry several boats at a time. One boat can normally be carried on a roof rack upside down as shown in the photo.



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B: Safety and Rescue:

Pictures of follow

Picture to follow

Self rescue:

- At Two Star level, candidates need to be able to capsize the kayak with the spray deck in place and perform a fully controlled capsize without any signs of panic.
- Once in the water, quickly gather up the paddle, swim to one end
 of the boat and tow it to the shore. It is essential that you do
 not try to right the boat, since this will break the air lock and
 fill it with water. On reaching the bank get help emptying the
 boat, which will be quite heavy because of the extra water in it.
- Once you have got the kayak to the bank, you will need to empty it. The general lifting principles outlined above should be applied here, and whenever possible, seek help emptying a kayak. Kayaks should all be fitted with rear air bags, which radically reduces the amount of water that gets in them. This means that all we need to do is gently lift the front end of the boat and allow the water to drain out. Take your time and take it gently, and you will find that the boat empties easily.

Peer rescue:

The most commonly used method of peer rescue is known as the \boldsymbol{X} rescue.

- Get the capsized paddler to grab their paddles and hold onto the bow of your kayak. Encourage them wrap their legs around the front of your kayak in conditions are difficult.
- Grab the bow of their boat, tip your cockpit rim over slightly, and place the bow of their boat on the your cockpit rim.
- Now level your boat using your leg muscles. This will raise the bow of their boat and drain the water out.
- Little if any water will be in the stern of their boat if it is fitted with air bags (as it should be).



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B: Safety and Rescue: - Continued

Peer rescue: - continued:

- Rock their boat up and down a couple of times to make sure
 it is empty and then turn it over whilst it is still across your
 boat.
- •
- Now place their boat alongside yours with the stern facing you.
- Ask the paddler to pass you their paddles, and hold these either in a paddle park if you have one, or across your kayak between your body and arms.
- _
- Hold their boat tightly at the front of the cockpit and ask the paddler to slide between the two boats until they are just behind their boat's cockpit.
- Now ask them to lift their legs into the cockpit of their boat and slide in.
- If you feel they may have difficulty with this, the alternative method is to ask them to get into the boat from the side.
- Ask them to get to the edge of their boat furthest way from you.
- Facing forwards, they need to swing their outside leg across the deck of their boat and into the cockpit.
- This will mean they are facing downwards looking at the stern of their boat. All they need to do now is swivel round and drop their other leg in the boat, slide in and sit down.
- Don't forget to help them with their spray deck and return their paddle before releasing them!

Pictures of follow



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C: Safety, Leadership and group skills:

Paddlers at BCU Two Star Level should be able to plan and execute a simple journey taking into account all the relevant safety, leadership and group control requirements for that journey.

Listed below are the basics that needs to be considered:

- 1. Start and finish locations:
- 2. Knowledge of river and likely river conditions at that time of year
- 3. Weather report for the day
- 4. Kit required including first aid kit
- 5. Transport/shuttle arrangements
- 6. Access situation
- 7. Timings
- 8. Contact details of all those taking part including parental/guardian consents if required
- 9. Plan B if plan A isn't feasible.

D: Theory:

At BCU Two Star Level you need to have a good general knowledge of kayaking and associated subjects.

Listed below are the types of sample questions the BCU suggest you will need to knowledgeable on.

- 1. Equipment What materials are most modern boats made from?
- 2. Safety What cloths would you wear in cold weather?

Why is the wind direction and strength important?

Which side of the river should you paddle on when other craft are around?

- 3. Hypothermia/first aid Ideally attend a first aid course
- 4. Access Are you allowed to paddle on any river?
- 5. Environment Why is "seal launching" not recommended?
- 6. Planning What is a shuttle?

That's it for the BCU "Star Award, please remember that this article covers the kayaking section of the BCU 2 Star Award and is based on using closed cockpit kayaks. Please feel free to us this article as handouts if you wish. Feedback on this article is always welcome.

Written by Grant Scamell - BCU Level 5 Coach.