

Dear all,

Please bear in mind these notes are my own experiences of rolling and teaching rolling. I am more than happy for others to comment or disagree with my assessment.

General rolling considerations:

1. For efficient learning, try to do mental rehearsal (visualisation) of the roll on dry land and again before you actually do your roll to ensure you are clear about the key points and what you are trying to do.
2. Until you have a bomb proof roll, always roll on the one side. Don't try to learn on both sides at once.
3. When learning, do '180 degree' not '360 degree' rolls, ie go in on one side and come up the same side until your roll is bomb proof. Going for a 360 can confuse the brain a little if you're not used to it!
4. Never rush your roll. Allow the boat to stabilise upside down before organising yourself to roll. A common problem for people transitioning from successful rolls in the pool to the 'real' cold water world is that the cold water shock and anxiety to get out the water quickly causes them to rush things. You need to slow down and calm down before getting organised and attempting to roll. Less speed more haste. Use of a mask or goggles in cold water can help to calm nerves when practising in real conditions, but ultimately you have to jettison those at some point to reflect real world conditions. Perhaps try a roll with goggles at the end of trip followed by another roll without goggles, eventually getting rid of goggles altogether?
5. White water paddlers have a raised 'bump' on their paddle shaft around the hand to assist with 'feeling' paddle blade angle orientation to allow setting up the blade angle more quickly, especially as they might not be able to see when upside down because of silty or 'frothy' water. This is probably not really necessary for sea kayakers but does help with setting up for rolling more quickly. In my experience it makes no difference to general paddling if I have that raised paddle shaft, ie it is not any less efficient, and not uncomfortable, in fact it feels odd to me when that raised grip is not on my paddle!

There are a number of different types of rolls ranging from hand rolls to Put Across rolls, but I will primarily focus on the roll that is used by most people, ie the Screw roll. The screw roll (along with the back deck or Steyr roll) sets you up after rolling to be able to perform instant support strokes or paddle away normally without having to adjust your hand position on the paddle in some way; useful if out in choppy or white horse conditions!)

The following applies to ALL rolling where the roll finishes lying on the back deck.

- **You cannot sit up in your kayak unless the boat is sitting flat in the water the right way up!** This simple fact is often missed by rolling beginners. Many will try to sit up, ie come off the back deck before the kayak is sitting upright towards the end of their roll, ie while the kayak is still partly on it's edge. (A nearly failed roll where the boat is on it's edge slightly can be recovered far more easily if your centre of gravity is low by sculling at the end of the rolling cycle while lying on the back deck. However a good solid roll should generally not require that at all.)

Useful tip: when **learning to roll, think of the finishing point of your roll being when you are lying on the back deck**, not after you are sitting up. When you are paddling about normally, you can stop and lie back no problem at any time because your boat is sitting upright. So it helps to think of the end point for your roll as being when you are lying on the back deck and the kayak is upright because this helps prevent you from sitting up too quickly at the end of your roll.

(Note: If you think about it, if you are standing in a pool, it is far easier to right a person who is upside down in a kayak if the person is lying on the back deck than it is if they are sitting upright upside down because, as they come out the water, their centre of gravity is low. The same applies re the forces required with your paddle in getting you upright from being upside down. Low centre of gravity gives extra 'reserve' in terms of those forces, to allow you complete a roll effectively and consistently. It's also useful if you are tired after a long paddle and fall in!)

- **The 'hip flick' is crucial in all rolls.** It helps the kayak find an upright orientation. The timing of that 'flick' is also quite important; if it's too early your roll will likely fail; if too late, you are already most of the way through the paddle 'support' cycle.

Note: I wouldn't get too bogged down on this point at the moment. It is a very important point but hopefully my explanations further on will help with the timing of that 'flick'.

Ok to the **Screw roll** in more detail....

As I said above, it is better to practice rolling **on one side only**.

If we consider the paddle stroke actions and sequence step by step. If you can imagine the side of your kayak being divided into hours of the clock, so that 9 o'clock is the bow of your kayak and 3 o'clock is the stern of your kayak and the hours are the relative angles of your paddle shaft relative to a straight line between the bow and stern of your kayak, 12 o'clock being when your paddle shaft is perpendicular to your kayak along the surface of the water, or near as dam it.

So the steps I think about when learning are as follows (the steps for real are not far away from this sequence either to be honest!):

1. Set up my paddle before I fall in, and fall in on the side on which I am going to roll up. Bear in mind that as soon as my paddle blade hits the water it will likely be twisted out of position for maximum rolling efficiency so might need to be re-orientated.
2. Let my boat settle upside down before trying anything.
3. Tap the bow paddle blade on the water surface next to the kayak and move the shaft/blade a little between 9 o'clock and 10 o'clock (repeatedly if necessary to get the blade angle correct) pulling down slightly on the shaft to see if the blade is going to track sharply downwards deep into the water causing an instant roll fail, or give me support as I track/pull it around to the 12 o'clock position away from the kayak. Re-orientate the blade angle if required. **The blade angle will remain at this angle throughout your roll.**
4. Once I am confident about the blade angle, begin tracking the shaft/blade from 9 o'clock towards 12 o'clock, gradually feeling the supporting sculling action of the paddle as it goes along or near the surface of the water. If you cannot feel that sculling support action of the paddle, take it back to 9 o'clock again and twist your paddle shaft so that you feel you are getting more support. Otherwise, continue tracking the paddle around to 12 o'clock.
5. Once you hit the 12 o'clock angle, momentarily, and slightly slow the tracking of the paddle so that the next movement converts to a combined support type stroke and scull simultaneously with the paddle. At the same time, vigorously flick your hips to get the kayak to sit upright, using the leverage and support given by the paddle.
6. Continue the tracking of your paddle beyond 12 o'clock. In doing so it partly allows your body to naturally fall into a leaning back on to the back deck orientation, increasingly so as the paddle moves towards 1 o'clock, maybe 1:30 or so, as well as the paddle giving support in it's own right. I would not take the paddle much beyond that point as by then the kayak should be pretty much upright with you lying on the back deck. Also try to lean your head back on to the back deck too to help keep that centre of gravity as low as possible.
7. If you are on the back deck but the boat is not quite upright (when it should be by then!) you can try to recover the roll further by staying on the back deck and sculling for support while lying on the back deck. As I said, it shouldn't really be necessary, but is an additional backup in case you've not quite made it. I would not recommend that your normal roll should be relying on sculling at the end of the rolling cycle. If this is something you are relying on all the time, your roll must have weakness in another part of the rolling sequence.
8. Once you are sure the boat is stable and upright, only then should you sit up.

Obviously the better you get at rolling you will know that the roll is a good roll and you will sit up pretty much straight away at the end of the cycle, but if your roll is weak and you are learning, then stay low until you are sure the boat is properly stable upright.

Note: a variation of the standard screw roll is an extended shaft screw roll which gives you more leverage. All that is involved in that is shifting your hand positions on the shaft so that there is more distance between your pulling hand on the shaft and the blade. It's half way to a Pawlata roll. Because the paddle is 'longer' for the roll, everything slows down especially between the 9 o'clock and 12 o'clock positions and the 12 o'clock position will be a little longer, giving more support and time if it is not rushed.

At the end of the day, if you think about it, if a person can hand roll a kayak it is clearly about technique and not 'grunt'! If you need 'grunt' you are probably not doing it right and are more likely to fail your roll, especially if you are tired after a long paddle.

Good luck on the water folks. If you would like any pointers in real time during sea sessions or otherwise, just let me know. I'm happy to help. Happy to receive comments and discussion around the above. I see rolling as a relatively simple thing if done properly. It is horrendously difficult to get successful consistency if done badly.

Cheers for now.

Gordon (Burns)
2-9-2021