Basic Coxswain's Knowledge

September 25, 2021
Rev 1
Coach Jon

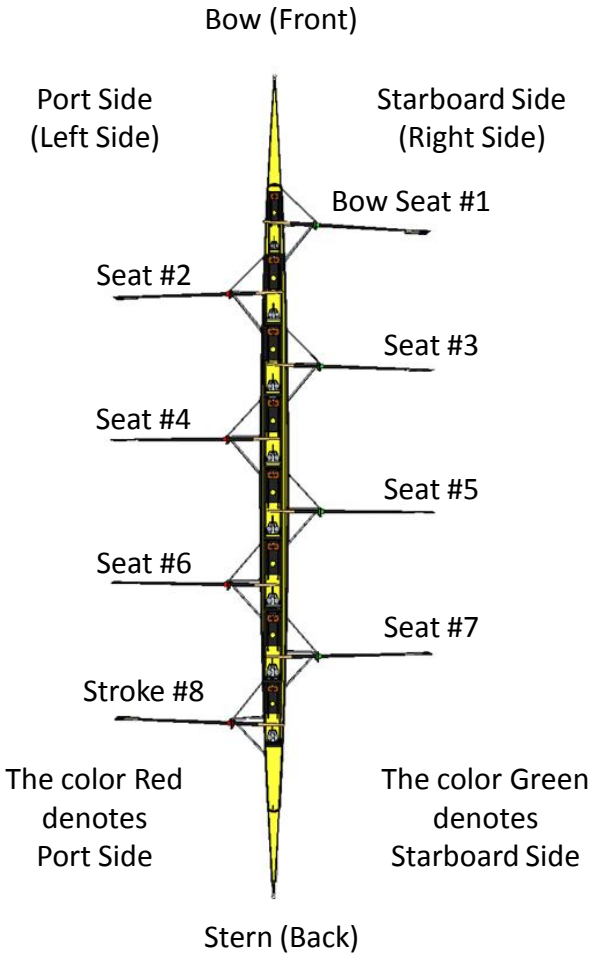
The purpose of this training material is to provide some basic information for a coxswain. For a more in-depth level of information refer to the book, "The Short and Snarky Guide to Coxing and Rowing."

The **First** two priorities for a coxswain:
1) Keep your rowers and yourself safe.
2) Keep the equipment safe.

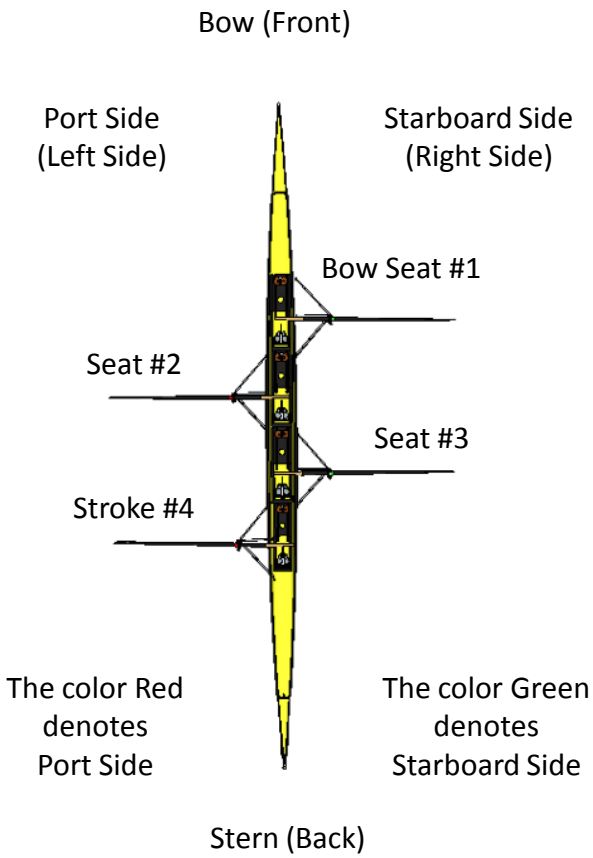
The Shell (Boat)

A rowing boat is typically called a shell. The types of shells that our club has are shells that can hold 4 rowers or 8 rowers with a coxswain. The 8 man (rower) shells and one of the 4 man (rower) shell have a stern coxswain. Two 4 man (rower) shells have bow coxswain. My preference is a stern coxed boat, because the coxswain can see the rowers and help them with their stroke.

8 Man



4 Man



Steering a Shell

The shell has a small tiller underneath it which can be used to steer the shell to the left or right

If you are coxing a shell from the back of the shell (Stern) there will be a rope that runs along the sides of where you sit in the coxswains seat. The rope will cross from one side to the other side just in front of you. You will notice a piece of tape on the rope. When the tape is in the center of the shell the tiller is straight.

Steering a Shell cont

If you want to turn LEFT, grasp the rope with your LEFT hand and push your LEFT hand forward.
If you want to turn RIGHT, grasp the rope with your RIGHT hand and push your RIGHT hand forward.

If you are coxing a shell from the front of the boat (Bow) there will be a lever in front of you. When the lever is straight and in the center of the boat the tiller is straight.

If you want to turn LEFT, push the lever to the LEFT.
If you want to turn RIGHT, push the lever to the RIGHT.

My preference is to have coxswains only steer the shell when the oars are in the water during the drive phase of a stroke. During the recovery phase when the oars are out of the water the tiller is put in the straight position. So the sequence would be steer, straight, steer, straight, steer, straight, etc. Some will argue that it doesn't matter when you steer. I will argue that it does, having rowed the stroke position in front of a coxswain. I could tell when they were steering because the set in the shell would change. You can also use rowers on one side of the shell to help you steer, more on this later.

Coxswains:

- Be Smart – Know where coach wants you to stop, but also use your head. Be aware of wind and tide conditions along with obstacles such as channel markers. If you do not think it is safe to stop there call coach on the radio.
- Get in position for your next piece of work before you take a break. Do your turn first, then break. You want to be in the correct spot to start the next piece without coach having to remind you.
- When you are sitting getting ready for the next piece don't let your shell drift out of position. You don't want to have coach tell you to get your boat lined up.
- Look around – all around. Before you stop, do a 360 degree check for other boat traffic and obstacles.

Steering a Point:

When steering a point, a coxswain finds some distant object on the horizon (a tree, a utility tower, the arch of a bridge) and heads toward that object. The coxswain lines that object up, looking over the stroke's left shoulder. If the shell gets off from that point, the coxswain adjusts the steering. If you are coxswain from the bow, use the bow ball to line up on the object. It takes a few months to master this techique. Steering a point is used in the spring sprint races where multiple shells will race side by side.

Steering a Line:

When steering a line, the coxswain navigates off the edge of a body of water or edge of a river and keeps his or her shell a set distance from that point. For example, a coxswain steering a line would keep the shoreline of a river 20 feet off his or her starboard side, maintaining that distance as the river curves.

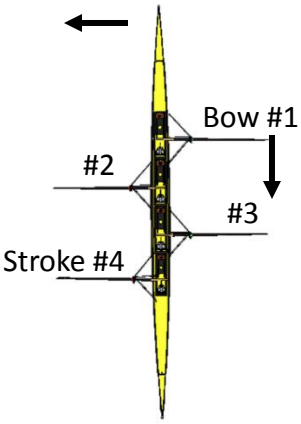
In a Head Race a Coxswain has to use Both methods:

The coxswain needs to review the course and needs to know where to switch between the two methods. Generally, steering a line would be used down the course. However, if the course goes under bridges, at an appropriate distance to the bridge, the coxswain must switch to steering a point. Find the middle of the opening and use that as your steering point. You want to pass under the bridge through the middle of the opening. While going under the bridge make only small steering adjustments. Once clear of the bridge, return to steer a line.

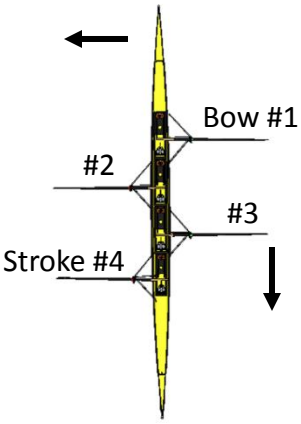
Moving the Bow Left or Right

Sometimes the shell will drift out of position and you will need to move the bow of the shell to the left or to the right. Moving the bow of the shell can be done from the bow or stern of the shell. Which method you use depends on where you are. If you are out in open water just use the bow. However, if you are somewhere with space to maneuver or with obstacles you have to use a combination of techniques to keep the shell in position. It is very important to learn the amount and type of reaction that occurs, and how it affects the shell, when you give a rower a command. The following are illustrations of action – reaction. I have used a 4 man shell for space reasons but the same applies to an 8 man shell.

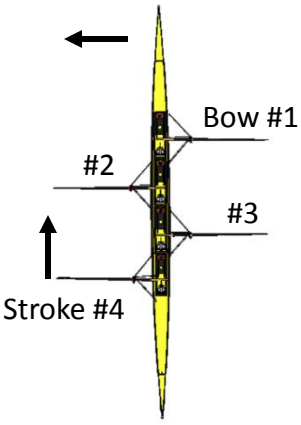
Move the Bow Left



Bow take # strokes or Row
Most effective
Bow will move quickly
Stern tends to follow the bow and not drift to the right
Shell will move forward

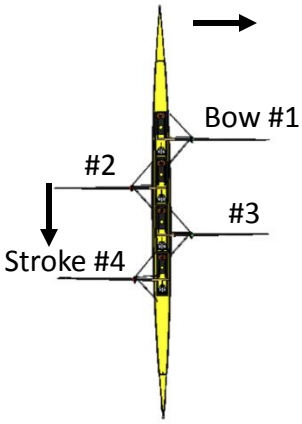


#3 take # strokes or Row
Bow will move
Stern will move more to the right
Shell will move forward

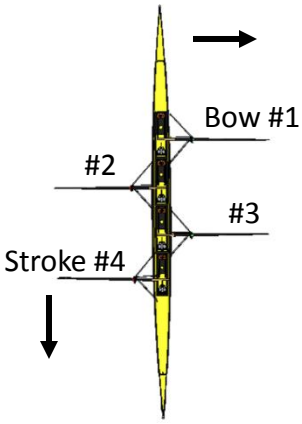


Stroke #4 back stroke
Bow will appear to move but the stern is moving
Stern will move hard to the right
Shell will move backwards

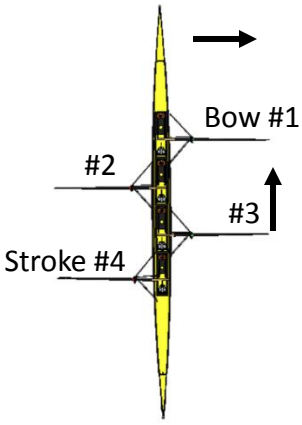
Move the Bow Right



#2 take # strokes or Row
Most effective
Bow will move quickly
Stern tends to follow the bow and not drift to the left
Shell will move forward



Stroke take # strokes or Row
Bow will move
Stern will move more to the right
Shell will move forward



#3 back stroke
Bow will appear to move but the stern is moving
Stern will move hard to the left
Shell will move backwards

Turning a Shell Around

There are two basic ways to turn a shell around:

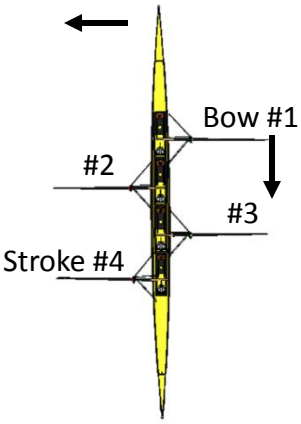
1) Pull the shell through a half circle. This will change the position of the shell after the turn is completed.
2) Turn the shell in its current position. The shell turns while keeping its current position.

Which one you use depends on where you want your shell to be after a turn. Typically I like to keep a shell in its current position when turning. If you have multiple shells in the same area it is easier to manage the position of the shells. Additionally, the turn in current position technique is quicker.

WARNING: Never turn a shell using one side rowing all at the same time. When the rowers come into the catch and the oars become more parallel to the shell there is a greater risk of rolling! You always want to have an oar setting the shell with the oar perpendicular to the shell.

The following are illustrations of turning the boat around to the Left and to the Right.

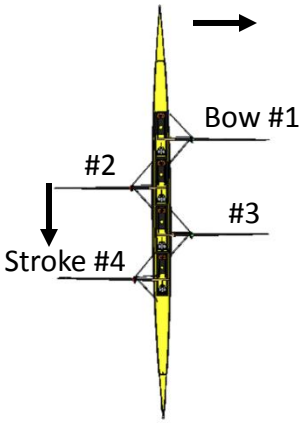
Turn to the Left – Half Circle



Bow Row
In an 8
Bow or Bow & #3 would row

Path – Follows half circle
Wind and tide can have a big impact

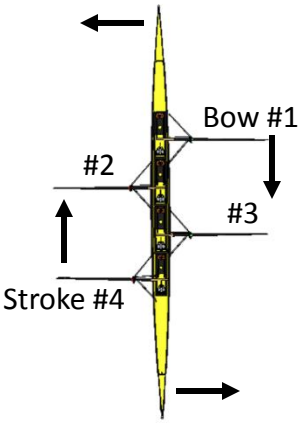
Turn to the Right – Half Circle



#2 Row
In an 8
#2 or #2 & #4 would row

Path – Follows half circle
Wind an tide can have a big impact

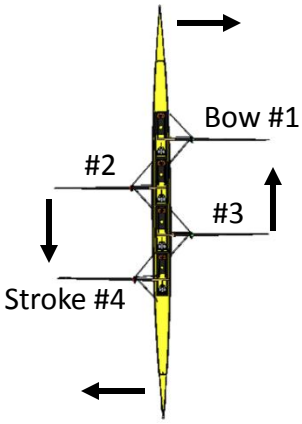
Turn to the Left – Current Position



Bow row, Stroke back stroke
In an 8
Bow row, stroke back stroke
Faster turn: Bow&3 row, Stroke & 6 back stroke

Path – Shell stays in same position. Wind and tide will have an impact

Turn to the Right – Current Position



#2 row, #3 back stroke
In an 8
#2 row, #7 back stroke
Faster turn: #2&#4 row, #5 & #7 back stroke

Path – Shell stays in same position. Wind and tide will have an impact

Understanding Wind, Tide and Current

Wind, tide and current can all have an effect on how the shell responds to steering inputs. Wind, tide and current can all have an impact on where you should stop, where you should turn and which direction you should turn.

Where we row there is a tide. Before going out on the water you should always know (ask coach) whether the tide is coming or going out. By understanding the tide you will know which way the water to flowing. If the tide is coming IN as we first row out we will be rowing AGAINST the flow of water. If the tide is going OUT as we first row out we will be going WITH the flow of water. If you were to stop the shell, the shell would drift with the flow of water.

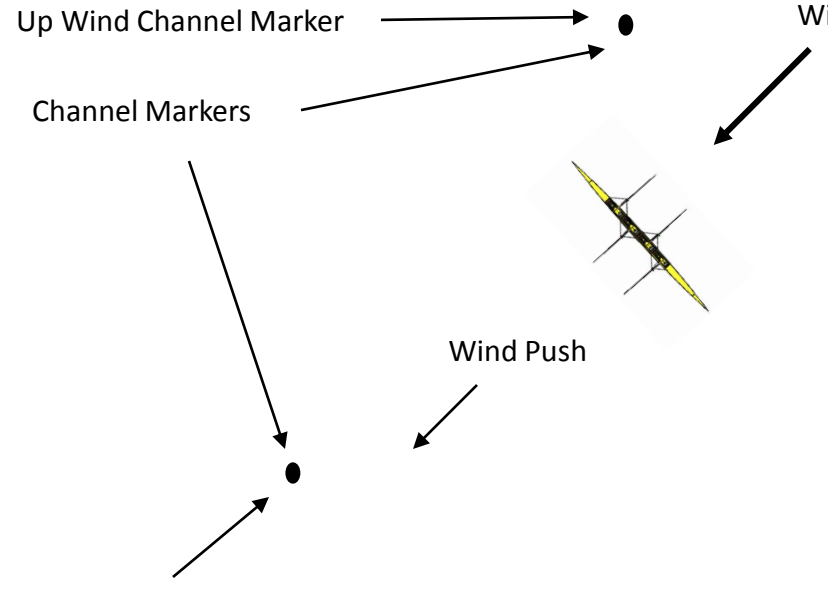
Head races are on a river. A river has a current which flows in one direction. Typically, head races are with the current. ALWAYS ask and make sure which direction the race goes and the direction of the current is in the river.

Rowing shells are long measuring approximately 45 feet and 65 feet long. Wind has a tremendous impact on a shell. The more perpendicular the shell gets to the flow of wind the greater the impact. If the wind, tide or current pushing on a shell in the same direction the coxswain must has to stay on top of it. The greater the wind speed the greater the impact. Controlling an 8 man in strong winds can be very challenging.

Generally speaking, if you are going into the wind, tide or current then a shell will have a SHORTER response time to a steering change. For example, if you need to move the bow to the right, you move the tiller half way and the shell makes the correction you want in <u>one</u> shell length of travel. If you are going with the wind, tide or current a shell will have a LONGER response time to a steering change. For example, you need to move the bow to the right, you move the tiller half way and the shell makes the correction you want in <u>two</u> shell lengths of travel.

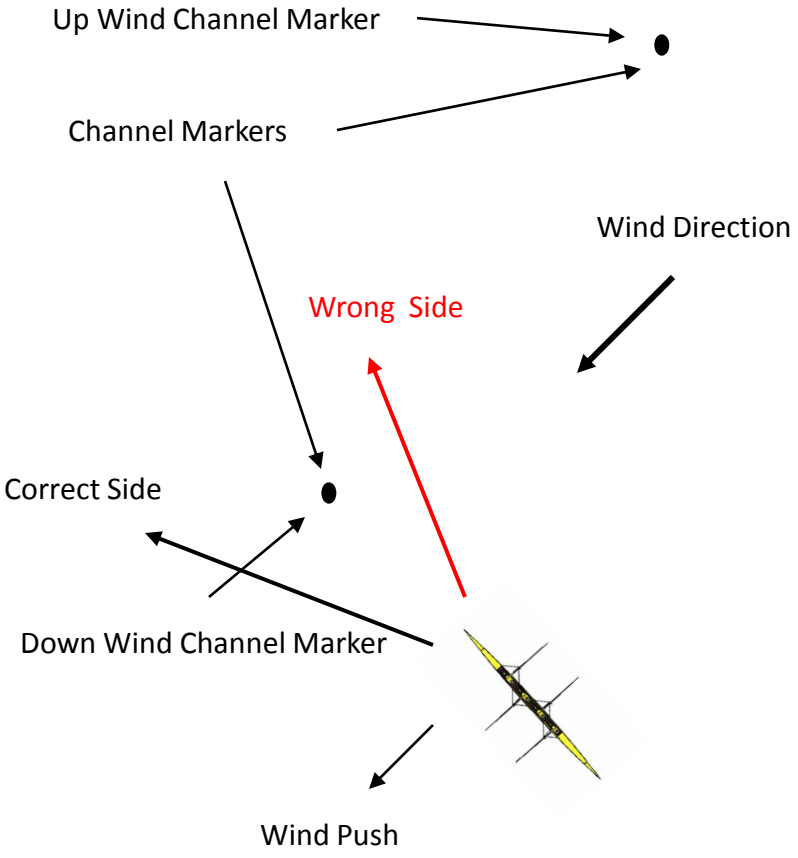
<u>Rule of Thumb: If you are traveling in the same direction as the wind, tide or current start your steering change early. You can always ease off if you need to, but once you get late your late.</u>

The following are illustrations and examples of how to position a shell with wind, tide and current. In my experience how much a shell will drift with tide and current is predicable. I focus on the wind and the effect the wind will have on the shell.

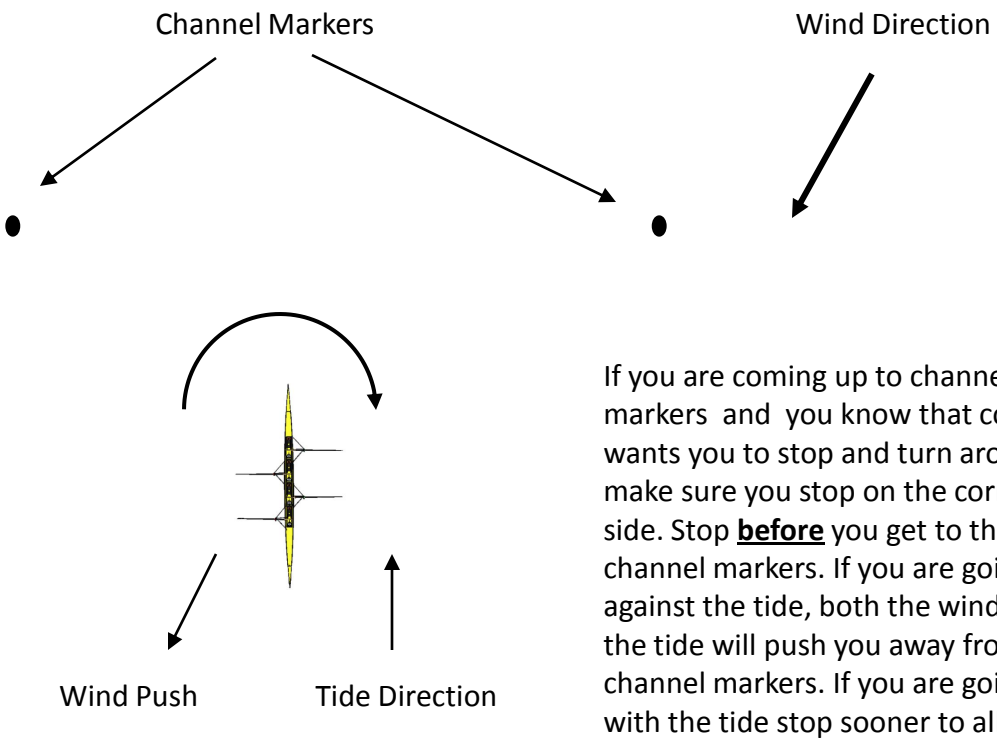


If you are going through channel markers with a cross wind you want to steer close to the up wind channel marker. The wind is going to push you away from it. The tide will typically be flowing parallel to the boat. It is the cross wind that will have the greatest impact on pushing the shell sideways. **<u>Stay away from the down wind channel marker</u>**.

Understanding Wind, Tide and Current

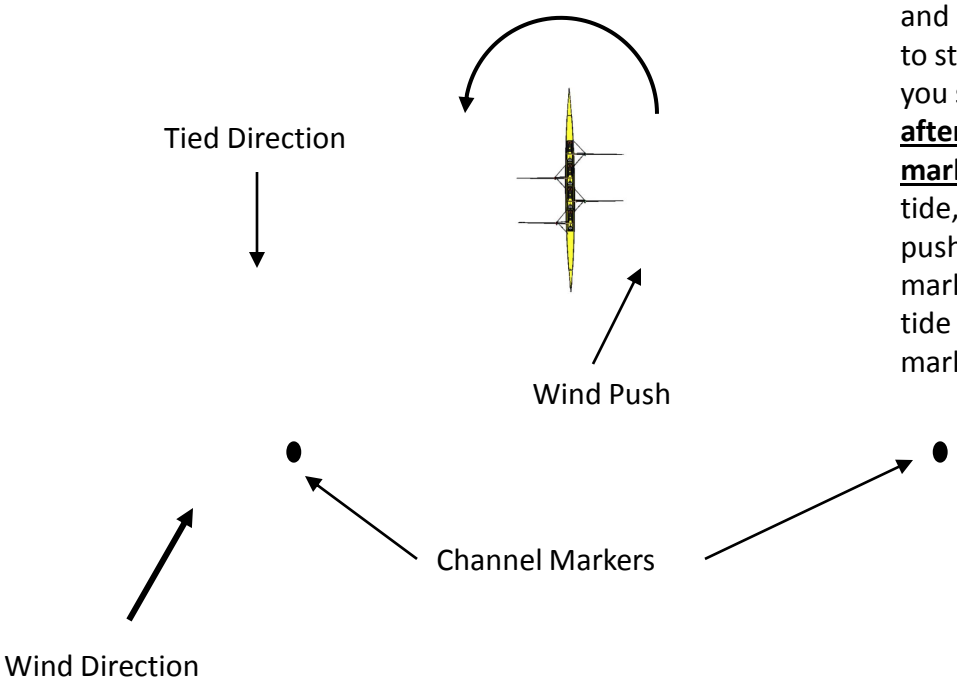


If you are approaching channel markers with a cross wind and you find yourself out of position, **go left of the down wind channel marker**. Do not try and go right of the marker. The wind is going to push you into the marker. The tide will be typically be flowing parallel to the boat. It is the cross wind that will have the greatest impact on pushing the shell sideways.



If you are coming up to channel markers and you know that coach wants you to stop and turn around make sure you stop on the correct side. Stop **before** you get to the channel markers. If you are going against the tide, both the wind and the tide will push you away from the channel markers. If you are going with the tide stop sooner to allow you extra room for the turn.

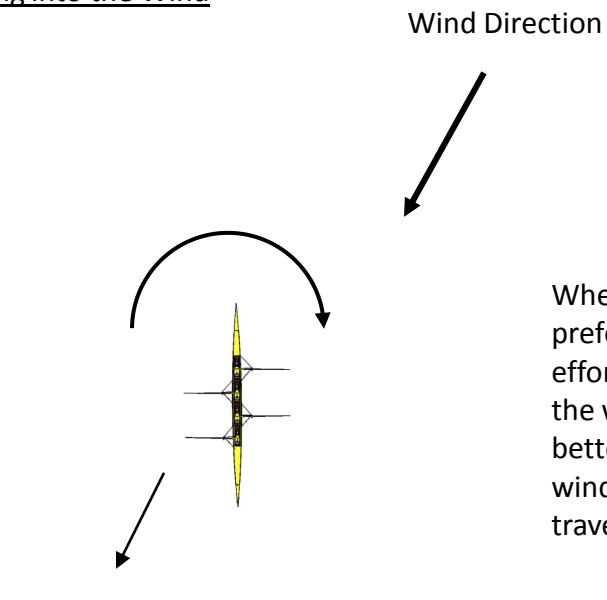
Understanding Wind, Tide and Current



If you approaching channel markers and you know that coach wants you to stop and turn around make sure you stop on the correct side. **Stop after you go through the channel markers**. If you are going with the tide, both the wind and the tide will push you away from the channel markers. If you are going against the tide stop further past the channel markers to allow you extra room .

Understanding the wind push that will occur on the shell is critical when approaching any obstacle. There is only one way to pass an obstacle and that is knowing the correct side to be on to keep the shell safe. You always want the wind pushing you away from the obstacle when you pass it.

Turning into the Wind

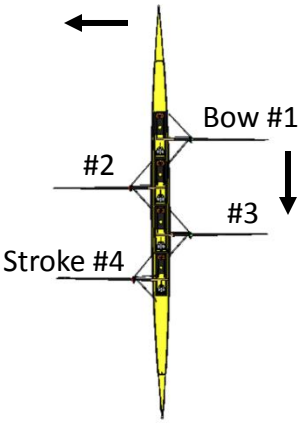


When turning around, if possible, I prefer turning into the wind. The effort to turn the boat helps to offset the wind push and the shell stays in a better position. Turning with the wind the shell will have drift and travel from its current position

Using Rowers to Help Turn the Shell

Having the rowers on one side of the shell pull harder or one side ease up will assist in turning the boat in a desired direction. There will be times when you will turn the tiller full to one side and the shell will no turning fast enough for you. In this situation you have to utilize the rowers to assist you in the turn. Typically you would call for one side of the boat to pull harder to make the turn. If you are still not making the turn then you have to have one side pull hard and one side ease up.

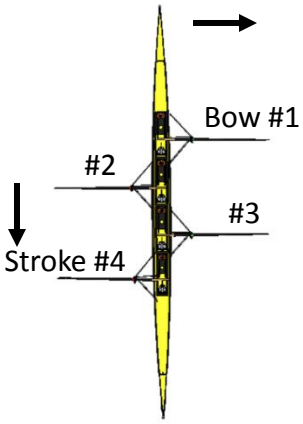
Turn Left



Starboard side pull harder

After you make your turn, row evenly

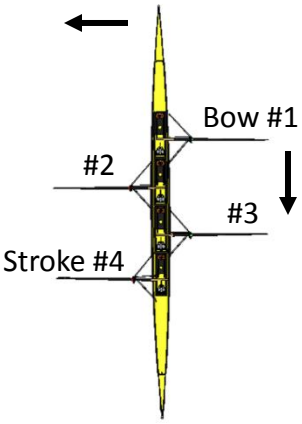
Turn Right



Port side pull harder

After you make your turn, row evenly

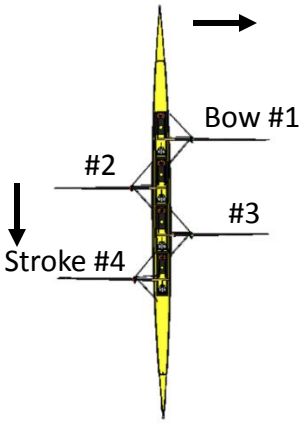
Hard Turn Left



Starboard side pull harder
Port side ease up

After you make your turn, row evenly

Hard Turn Right



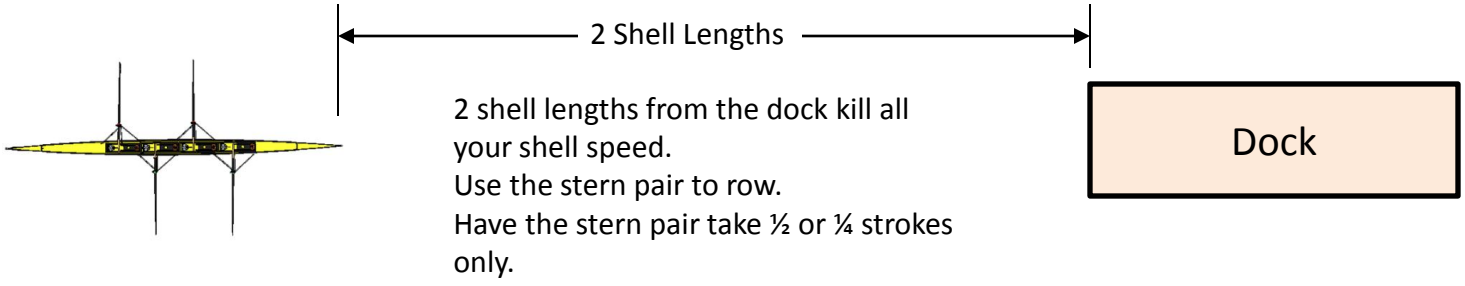
Port side pull harder
Starboard side ease up

After you make your turn, row evenly

Docking a Shell

Incorrectly docking a shell can damage a shell. I have seen shells have their bow rammed right into a dock. Key to docking is doing it slow and easy and understanding which way the shell is going to drift from the wind, tide or current. **Do not ever come into a dock HOT and FAST.** I do not care if someone on the dock is pushing you to get your shell in. Slow and steady is the way to go.

Being good at docking takes practice. When you are out on the water waiting, instead of just sitting there, practice moving the shell with the stern pair using ¼ and ½ strokes. Practice turning the bow with just the stern pair. Practice into a bow head cross wind. Get a feel for how much the shell moves. Practice with a stern cross wind. Get a feel for how much the wind pushes the shell and increases the speed.

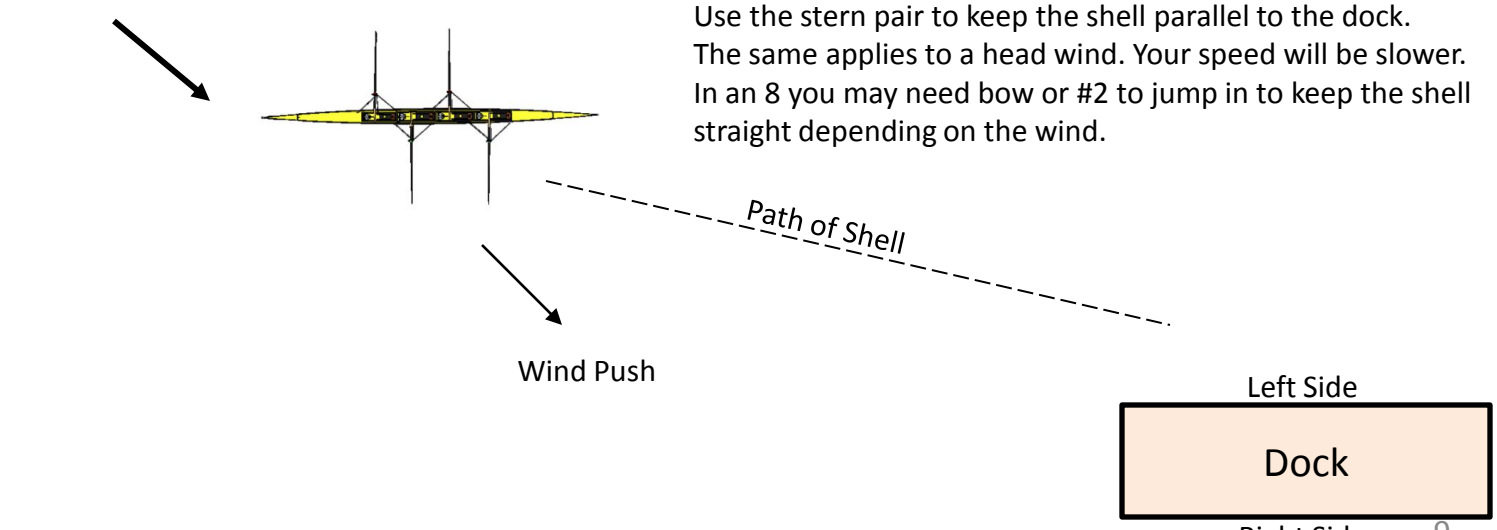


2 shell lengths from the dock kill all your shell speed.
Use the stern pair to row.
Have the stern pair take ½ or ¼ strokes only.

Wind Push from Behind on the Stern

Docking on the Left Side

If you have a cross wind let the wind help push you into the dock.
Start high and plan for an angled path to the dock due to the wind push.
If the wind is on the stern watch your speed! The wind will increase your speed coming into the dock.
Use the stern pair to keep the shell parallel to the dock.
The same applies to a head wind. Your speed will be slower.
In an 8 you may need bow or #2 to jump in to keep the shell straight depending on the wind.

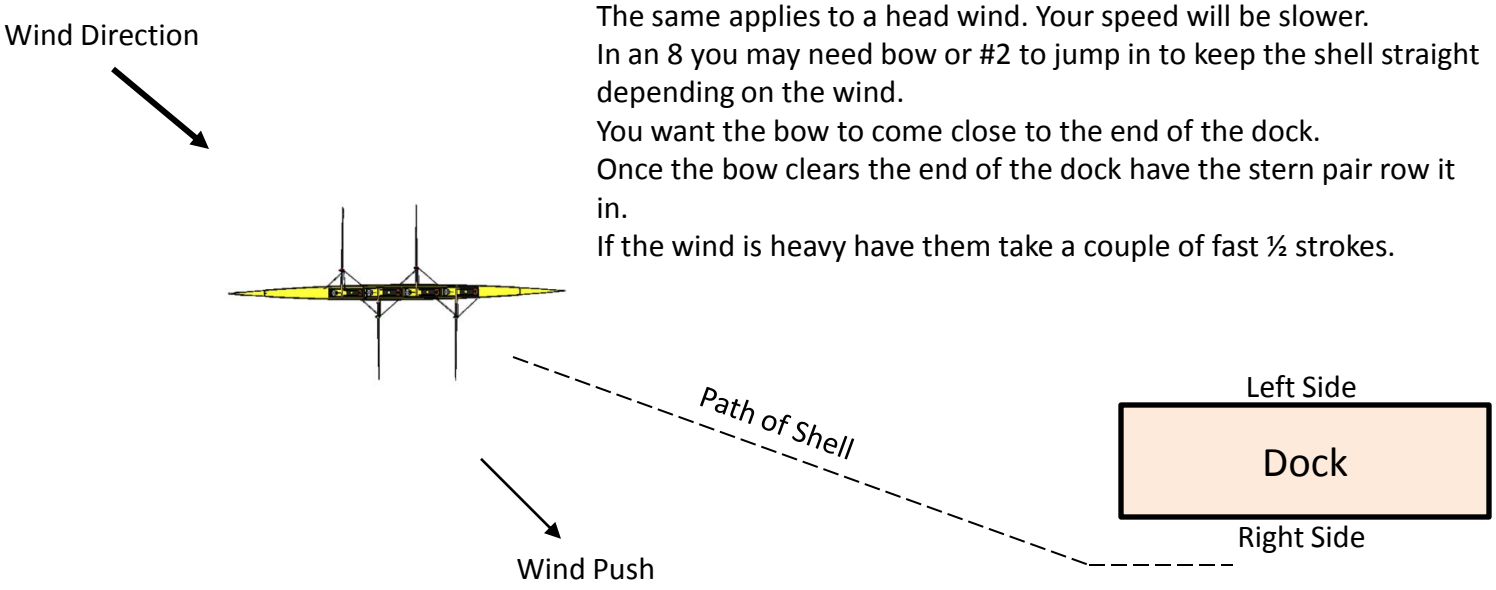


Docking a Shell

Wind Push from Behind on the Stern

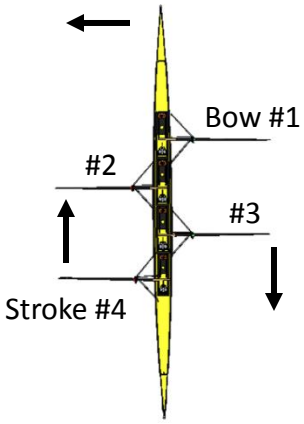
Docking on the Right Side

If you have a cross wind let the wind help push you into the dock.
Start high and plan for an angled path to the dock due to the wind push.
If the wind is on the stern watch your speed! The wind will increase your speed coming into the dock.
Use the stern pair to keep the shell parallel to the dock.
The same applies to a head wind. Your speed will be slower.
In an 8 you may need bow or #2 to jump in to keep the shell straight depending on the wind.
You want the bow to come close to the end of the dock.
Once the bow clears the end of the dock have the stern pair row it in.
If the wind is heavy have them take a couple of fast ½ strokes.



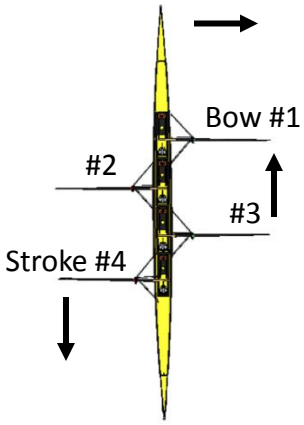
There will be times that you will need to move the bow of the shell without bringing the shell closer to the dock. To do this have one side row and the other side back stroke. They have to do it together. Again only using ¼ or ½ strokes. See illustrations below.

Bow Left



Stroke to back stroke
#3 to row
(#7 in an 8)
Do it together
¼ or ½ stroke only

Bow Right



#3 to back stroke
Stroke to row
(#7 in an 8)
Do it together
¼ or ½ stroke only

Commands

Giving Commands on Land:

First and foremost, you have to be heard by all your rowers. If your rowers are talking tell them to shut up. Speak loudly, slowly and distinctly.

If any rower tries to give a command, stop them. Emphasize to the crew that only you will give commands and the only commands they should follow are yours. Unless, the coach intervenes.

Make your rowers accountable for following your directions. You are responsible for the safety of the shell.

Always call it in 2. 1,2 up to shoulders, etc

Make your rowers accountable for executing at the correct time when you call it.

When you are moving equipment on land, the following are critical to success:

- You are doing things that are safe and that make sense.
- You have the attention of your entire crew before you start moving anything.
- Your rowers are focused on you and are not talking or offering divergent opinions. (If your crew is not focused do not make a move.)
- Everyone knows the plan before getting hands on.

The best thing you can do to learn is watch and listen to experienced coxswains moving boats around on land. Ask questions, and write down appropriate sequences. Ask about typical obstacles and hazards.

If you have questions, ask before you do. Do not find out after you do.

The Two most important command's for a coxswain:

1) "Way Enough" - Tells the rower to stop doing what ever it is that they are doing – rowing, moving equipment, anything.
2) "Hold Water or Hold Water Hard" – Emergency Stop – It instructs the rowers to square their blades in the water to stop the boat.

Standard Commands:

1) "At the catch" – Command to tell the rowers to put there oars in the water in preparation to start rowing.
2) "Check it/her down" – Square the oars in the water to stop the boat.
3) "Count Down" – Tells the crew to call out their seat number, starting at the bow, when ready.
4) "Down on port/starboard" – Means that the boat is leaning to one side or the other. Rowers on the side that is down must raise their hands and the other side must lower their hands.
5) "Easy" – Tells rowers to stop rowing hard.
6) "Even it out" – Tells the rowers to pull with even pressure on both sides.
7) "Hands On" – Tells the rowers to grab the boat next to their seats so the boat can be moved.
8) "Hard on port/starboard" – The rowers on that side of the boat must row harder and the opposite must row slightly easier in order to facilitate a sharper turn.
9) "One foot up & out" – The command for exiting a team boat.
10) "One foot in & down" – The command for entering a team boat.
11) "Ready all, Row" – Begin rowing.

Commands cont

11) "Roll it" – Tell the crew to flip the boat over, in unison, from above their heads.
12) "Swing it" – A command used when carrying a boat to start turning either bow or stern.
13) "Up/down to shoulders" – Tells the rowers to move the shell from its current position to their shoulders.
14) "Up/ down to waist" – Tells the crew to move the shell from its current position to their waist.
15) "Up and over head" – Tells the crew to raise the shell above their heads.
16) "Watch your blades (side)" – Tell one side to look at their and take action to prevent them from possibly hitting something.

For a complete list of commands refer to the PA Crew Rowing Glossary of Terms

Launching and Retrieving a Shell

Putting a Shell Into the Water from a Dock:

- Before taking a shell onto a dock you must ensure the shell is correctly lined up with the dock. The shell must be in the middle of the ramp and in a straight line with the dock.
- As you walk the boat onto the dock, if you have an option of which side to put the shell in, clearly indicate to your crew which side they will be using.
- As a coxswain, you should be standing at the skeg (at the stern) with your hands on the boat as it is rolled down and in, guiding the skeg away from the dock. Your big job is to ensure that the skeg does not get ripped off while the boat is being put into the water.
- If the boat is not up and over heads – then – Up and over heads in 2 – 1, 2, up and over heads.
- In the middle of the dock down to the waist in 2 – 1, 2, down to the waist.
- Toes to the edge of the dock.
- Lean it away and set it in the water in 2 – 1, 2 ready down.
- Whichever side has its riggers on the dock – Starboard (or Port) two hands on the rigger. In this example Starboard has their riggers on the dock.
- Port – get oars.
- Starboard – unlock your oar locks.
- Port – place starboard oar in first.
- Starboard – lock your oar locks.
- Port – set your oar down next to your oar lock.
- Port – unlock your oar locks and place your oar in the oarlocks.
- Port – lock your oar locks.
- Port – If needed – remove your shoes.
- Port – relieve Starboard, two hands on the rigger.
- Starboard – If needed – remove your shoes.
- Port – Oars out.
- At this point your cox box should be plugged in, power on and tested.
- Hold for coxswain – you should now get into the boat.
- Count down when read.
- Seats back.
- One foot in (pause for the rowers to get their foot in), And Down
- Listening to an experienced coxswain is the best way to learn this along with coach's help.

Launching and Retrieving a Shell cont

Placing the Oars:

When the oars are taken down for practice they are to be placed in a specific pattern to improve the efficiency of launching the boats. Make sure you know how the oars are to be placed and that your rowers know the correct way to pick them up. Additionally, the oars should come onto the dock in the following sequence 2, 4, 6 and 8. This will minimize the need to step over oars. When the rower places the oar in the oar lock they place the Starboard oar first (which will be in their right hand) followed by their Port oar (which will be in their left hand). Note: the following sequence applies to a Port stroke rigged boat.

Retrieving a Shell from the Water on a Dock:

- Port (or Starboard) should have their hands on the dock, holding the shell.
- You should be the first one up and out of the shell. Your cox box should be turned off and disconnected.
- Which ever side has their riggers on the dock are the first ones up and out. Port (or Starboard) up and out two hands on the rigger. In this example Port has their riggers on the dock.
- Starboard – up and out.
- Starboard – pull your oars in.
- Starboard – reach out unlock your oar lock, take your oar out and set it down, lock your oar locks.
- Starboard – get your shoes on.
- Port – unlock your oar locks and remove your oar. Note this is only done after everyone is out of the shell.
- Port – lock you oar locks.
- Starboard relieve Port at the rigger. Two hands on the rigger.
- Port – get your shoes on.
- Port – haul oars.
- Port and Starboard, hands on the boat. Make sure you indicate which hand should be on the far side of the shell.
- Up to waist in 2 – 1, 2 up to waist.
- Move to the center of the dock.
- Up and over head in 2 – 1, 2 up and over head. If the dock permits go up to shoulders.
- Walk off the dock slow and easy.
- When appropriate, down to shoulders in 2 – 1,2 down to shoulders.