

## Dealing with Weather Cocking

by Rick Wiebush

All paddlers repeatedly experience weather cocking. It is sometimes mildly annoying, sometimes frustrating and, in stronger winds, can be physically exhausting. When we weather cock, it seems like our bow is turning up into the wind. While that's true, the actual cause of weather cocking is that a beam wind is pushing the stern of the boat downwind, resulting in the bow turning toward the wind. The stern gets blown downwind more than the bow because as a boat moves through the water, there is more pressure created on the bow than on the stern. This pressure differential means that the bow has more lateral resistance to the wind than does the stern – the stern is in "looser" water and gets blown downwind while the bow does not.

There are several different strategies for dealing with weather cocking, some good and some not so good.

Stern rudders. Many paddlers use a stern rudder on the downwind side of the boat as a correction stroke. They also tend to push out on the blade that's in the water, like a pry. This action pushes the stern of the boat back in line with the direction you want to go, but it also results in a significant loss of speed, often to the point of stopping the boat. This gets frustrating very quickly.

Sweep strokes. This is probably the first choice of many paddlers for dealing with weather cocking. Using a sweep on the upwind side of the boat pushes the bow back into your intended direction of travel. This strategy will suffice in lighter winds. But with stronger winds, the constant use of sweeps as a correction stroke is irksome and can get very tiring. You can also use an extended paddle to sweep, which will give more power to your correction. However, this involves constantly shifting your grip (easier with a Greenland stick) and still has the annoyance/fatigue problem in stronger winds.

Rudders. A rudder can be very useful in controlling weather cocking. Essentially, the rudder is providing the lateral resistance that is needed to prevent the boat's stern from being pushed downwind. But the other problems that come with having a ruddered boat (e.g., over-reliance on the rudder for turning, potential mechanical failure) may not make this the best choice.

Skegs. When deployed properly, a skeg works extremely well to counter act weather cocking. It's the same principle as a rudder – the skeg provides lateral resistance to the wind and keeps the stern from sliding. Skegs are also effortless to use and will work in stronger winds. However, I know several people (me included) who have skegs that never seem to want to actually deploy when you need them! So we need alternative strategies.

Edging. Simply edging the boat is a very effective way of countering weather cocking. Edge toward the wind. That is, if the bow is turning to the right, shift your weight onto your right buttock (and your left knee will come up). The boat will then turn back to the left. The sooner you notice the weather cocking and put the boat on edge, the easier it is to make the correction. If the winds aren't too strong (say less than 15 knots), this is a very easy way to keep your boat going straight. When the winds are slightly stronger, combining edging with a periodic sweep stroke on the upwind side will usually do the trick.

Pushing with your foot. This is surprising helpful and easy to do. All it involves is giving a real strong push (more of a pop) on the foot peg on the upwind side of the boat. Do that a couple of times when you take a forward stroke on that same side of the boat. You are literally pushing the bow back on track. This works very well, but may need to be combined with other strategies in stronger winds.

Keyhole stroke. This is a combination stroke that also works well. It involves linking a forward stroke with a stern draw on the upwind side of the boat. When your forward stroke is about at your hip, continue to rotate your torso and slice the blade back and outward at about a 45 degree angle. The blade remains in the water – you are just slicing it into position for a stern draw. When the blade is in position (roughly 3-4 feet from your boat), just draw it in toward the boat. It's all one smooth move – forward stroke, right into the slice, then right into the draw. The draw serves to pull your stern back in line and you have made the correction without losing any speed.



Keyhole stroke—Forward



Slice out



Draw

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Next time you're out in some wind, give these last three things a go. Try them one at a time and then in various combinations. You may be surprised at how easy they are to do and how well they work.

**REVIEWERS' COMMENTS**

Hank McComas: Most boats are inherently imbalanced by their design shape, tending to turn into the wind. All the techniques Rick mentioned compensate by increasing the resistance of the water in the stern with a rudder or skeg, decreasing the resistance of the bow by tilting the hull or by providing compensating forces with a paddle. By putting things on the foredeck or loading more weight in the back hatch, we can change the amount of weather cocking. But if we load heavy in front and pile the back deck high with bulky gear, we may need all these techniques to get where we want to go.

Kevin Black: Rick's article certainly covers the stuff you need to know to deal with the frustration of finding the balance between course correction and forward glide in beamish winds. Becoming familiar with the theory, techniques and strategies will certainly making paddling life more fun. Focusing on developing a smooth keyhole stroke and stern draw can open up a lot of other ideas for controlling your boat in interesting conditions. Think of it as learning how to wiggle your stern with control.

*Rick Wiebush is an ACA L3 Instructor Trainer, BCU Level 2 Coach and BCU 4\* Leader. He is also an ACA L2 canoe instructor. Rick runs Cross Currents Sea Kayaking. He has participated in several expeditions to Baja including a month-long, 400 NM unsupported trip. Rick also has been fortunate enough to have paddled in the Exumas, Greenland, England, Wales, Australia and New Zealand. He lives in Baltimore and works mostly in Australia for his "real" job.*

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individual club members the responsibility for applying those standards to determine whether specific activities are official CPA activities.

**The Coordinator** shall have overall responsibility for administration of the club and will be a primary point of contact for the club. S/he shall chair general club membership meetings and meetings of the Steering Committee. The Steering Committee may direct the Coordinator to perform other duties consistent with the bylaws. The Coordinator is the only person authorized to speak for the club. This authority may be delegated by the Coordinator.

**The Treasurer** shall perform all the duties generally incident to the office of Treasurer, subject to the control of the Steering Committee and the oversight of the Coordinator. The Treasurer shall have custody of all the funds and securities of the club, and s/he shall keep full and accurate account of receipts and disbursements. Such records shall be the property of the club. S/he shall deposit all such moneys and other valuables in the name and to the credit of the club. The Treasurer shall disburse the funds of the club consistent with Section seven of these bylaws. S/he shall provide financial information to the Coordinator or the Steering Committee in a timely fashion as requested.

**The Secretary** shall perform all duties generally incident to the office of Secretary, subject to the control of the Steering Committee and the oversight of the Coordinator. S/he has primary responsibility for maintaining club membership records, but may delegate day-to-day administration of that task to another club member. S/he shall give notice of all meetings of the general membership or the Steering Committee and all other notices required by these bylaws. The Secretary shall record the proceedings of all meetings of the general membership and of the Steering Committee. All records of the Secretary shall be the property of the club.

Our webmaster, Steve Bethke, have created an online form you can use to enter nominations. Nominations must be entered **BEFORE OCTOBER 1**. Use it at

<http://www.cpakayaker.com/index.php?page=nominations>

Persons nominated can use another online tool to accept or decline their nomination, and to post a "Stump Speech" giving their experience and reasons why members should vote for them. These will be printed in the October issue of *The Chesapeake Paddler* and viewable online. If you see someone already nominated who you would support in November, then second their nomination by clicking on the text at the bottom of their nomination that says *Second Them!*. For each additional confirmation, the nominee will get a blue star to show their popularity. Note that nominations are NOT the same as voting. Nominations will show who is favored for an office or for the Steering Committee, and will eventually lead to the ballot for voting on positions in the coming year. This year, in addition to mail-in ballots and voting at the November Annual Meeting, there will be an online mechanism for voting, and you will need your CPA member number to authenticate your vote. The votes will be tallied at the Annual Meeting and will determine which individuals will hold which positions for the coming year. So, throw your paddling hat in the ring, or throw someone else in the ring, but let the best candidates win!

*Ralph Heimlich is the Coordinator of the CPA.*