

# Solve Common Pointing Problems: Five Ways to Sail Higher



Can't point without pinching and losing speed? This is a common complaint. For this article, we collected everything we could find on how to solve common pointing problems. The experts are quite consistent, and what they say matches our experience. Here are five tips, in priority order.

## **#1. Trim harder**

Many sailors with pointing problems don't trim hard enough. The experts agree that the mainsail leech is the biggest trim factor to improve your pointing. A tight leech powers up the aft portion of the main and makes the boat turn up. A loose leech de-powers the main and makes the boat turn down.

The statement below is a nice summary of how to trim the leech to improve pointing.

*Except in very light air or extra bumpy conditions, you start by making sure the mainsail is trimmed so that the boom is absolutely up on the centerline of the boat when the **mainsheet is trimmed hard enough so that the telltale on the leech at the top batten is stalled out some of the time in any condition where you are not overpowered.***

*In light air, under 6 knots, it will be stalled most of the time. Once you get into the 7-10 range it will be stalled maybe half the time and in over 10 it will be stalled only occasionally, but you need to have the leech sheeted as tight as you can without being over powered. Once you get into the real overpowered range, over 12 knots, you still need to keep the leech very tight for pointing but you may drop the traveler down so the boom is just enough to leeward to reduce extreme weather helm ...*

### **[Help ... I Can't Point](#), Elliot-Pattison Sails**

Here are some additional tips on trimming to maximize pointing:

- **Top batten.** The top batten on the main is a good visual reference. Trim to get the aft portion of the batten parallel to the boom in most conditions.
- **Test trim.** If the boat feels good, try trimming the main a little harder. If the boat responds, great! If not, ease back.
- **Traveler.** Keeping the traveler high helps you point, but it's just as important to keep the boat moving – on its lines, with minimal weather helm. Don't be afraid to drop the traveler when overpowered.
- **Cunningham.** Cunningham tension pulls the mainsail draft forward. Too much cunningham can reduce pointing in two ways:
  - Flattens (opens) the leech. As discussed in tip #1, an open leech reduces pointing. This is more pronounced in some boats.
  - Makes the sail fuller at the luff. A fuller luff makes the sail more

forgiving, but reduces pointing ability.

- Outhaul. Loosening the outhaul tightens the lower leech. If you're not overpowered, a looser outhaul may help pointing. Don't loosen too much and let the lower leech stall excessively. A telltale on the bottom batten is helpful.

## #2. Steer for pointing and speed

*Once you have the sails trimmed in the rest is all about driving the boat.*

***Help ... I Can't Point, Elliot-Pattison Sails***

*Every nuance of variation in wind strength or wave size requires an immediate luff or bear away so as to keep the boat high on the wind, at a constant angle of heel, and at full speed.*

***Stuart Walker in Speed to Windward in Heavy Weather (Sailing World)***

*The skipper winning the most races inevitably is going to be the one with the best touch. I call touch the simultaneous coordination of steering and sail trim with wind and sea conditions.*

***Bruce Goldsmith in Sail Trim & Speed (Rebel Class Website)***

These quotes make strong statements about the second most common pointing problem – steering. Let's break these statements down into specific tips.

- Build speed first. A boat needs to go fast before the underwater foils can develop enough lift to keep the boat tracking to windward. If you're slow, bear off and ease your sails to get going.
- Test to windward constantly. Once you have speed and are trimmed in, try pointing higher in flat water or if wave conditions allow. You probably can head up further than you thought. If you start to lose

- speed, head back down. Repeating this as a cycle is called scalloping.
- Feather slightly while you ease in puffs. You must ease the sail to control heel angle and accelerate in puffs. Some excellent sailors ease, **then** feather – building speed before heading higher. Others feather **and** ease together – letting the tiller follow the slight increase in weather helm from the puff. My most trusted sailing advisers have convinced me that feather **and** ease is best.
  - Use luff telltales to steer. If you have pointing problems, the windward and leeward sail telltales near the luff can help you steer accurately. The leeward telltales are most important: if they're stalling, and your sail trim is right, you're sailing too low. The windward side telltales can and should stall, unless you're under-powered for the conditions. See our post [Mainsail Telltales – A Better Approach](#).
  - Don't take unnecessary "downs." The primary problem for most sailors is bearing off in a lull. Instead of bearing off, sail a straight line or just feather down slightly. We covered this in our posts [Sailing Lulls Tips](#) and [Sailing Lulls Tips Part II](#).
  - The next level. Master the above tips first, but then try to move to the next level – constant interplay of steering and trimming to match the constant changes in wind and waves. The [Bruce Goldsmith article](#) quoted above gives a good hint at the skills, as does [The Ugly Side of Pinching](#), by Vaughn Harrison (International Sailing Academy). We'll explore these in a future article.

### #3. Maximize foil effectiveness

Your centerboard (or leeboard) and rudder provide lift to keep the boat tracking to windward. They work best when the flow over them is **fast, smooth**, and when their **effective surface area is largest**. Let's break these three factors down.

- Fast flow. We discussed the importance of speed in tip #2. To further reinforce this, perhaps you have seen cases in which another boat

footed off below you and ended up sailing faster and higher, leaving you behind and to leeward. The additional speed made the other boat's foils more effective.

- Smooth flow. You've probably noticed the negative effects of disturbed air on your sails. The same is true for underwater foils. Every time your angle of heel changes or you steer abruptly, the flow over your foils is disturbed and you lose distance to windward. Sail at a constant angle of heel!
- Effective surface area. More foil surface area means more lift. To realize the full surface area intended by the designer, you must sail with the designed angle of heel and board depth.
  - Angle of heel. The board has the maximum effective surface area when it's vertical in the water. Sail with the angle of heel that makes the board vertical.
  - Board depth. Find out what board position constitutes full down for your boat. In the MC Scow, a full-down board is flush with the top of the deck. (If you can't see the top of the board, it's full down when there is a 1/4 – 1/2" gap between the leading edge of the board and the board trunk.) Don't be afraid to raise your boards from the full down position as the breeze builds, as discussed on our post [Setting Leeboard Height to Reduce Windward Helm.](#)

## #4. Find the right helm balance

Similar to the centerboard/leeboard, flow over the rudder provides some lift to help the boat track to windward. If the rudder is angled slightly to windward, this lift will increase. That's why most top sailors prefer a slight bit of weather helm when sailing upwind.

In our post, [Mark Your Deck to Check Rudder Drag](#), we included a reference to a [Buccaneer 18 tuning guide](#) that provided data showing the beneficial effect of a 2-4 degree weather helm on upwind performance. If your weather helm is greater than this, you're slowing your boat.

## #5. Freshen up your sails

If you're doing everything else right and are still not pointing, it may be time to freshen up your sails. One tip for an old sail is to add a little extra cunningham to counter the effects of aging on sail shape.

I could not find hard data about how to tell when to replace a sail. One of our posts includes [comments from Bill Draheim](#) that you probably don't need to get new sails every year.

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