

Sail Tell Tails – Have a Routine to successfully sail upwind
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Reading Tell Tails

Reading Tell Tails is probably the most powerful tool you have to ensure you have your sails adjusted correctly and are getting where you want to go most efficiently. There is a lot going on when sailing and developing consistent habits and routines will help your boat run smoothly. Sailing is dynamic and requires constant adjustment.

The biggest mistake when getting started sailing

Most people who end up significantly downwind of the committee boat need to **pull their sail in more**. You cannot go upwind if your sail is out several feet because you have no power. AND you end up in IRONS if you try to go upwind with your sail out. Understanding the basics of the physics of sailing helps with realizing why you are not getting to where you want to go. Here is a nice video explanation of how a sailboat works.

<https://www.youtube.com/watch?v=FCcKeOmYHFY>

Reading Sail Tell Tails

1. Inside and Outside Tell tails
 - a. The Inside tell tail is the tell tail on the sail side closest to you
 - b. The Outside tell tail is the tell tail on the back side of the sail
2. Tell tails should be flowing pretty much straight back like a small flag.
3. Why?
 - a. They tell you if your sail and boat direction is set correctly
 - b. They indicate if the air flow over the sail is smooth and that your sail is creating the lift you need to move forward through the water
 - c. The reliable range
 - i. Is from a beat to a Broad Reach
 - ii. Downwind – Tell Tails on a sail are pretty much useless
 - d. If tell tails are not flowing straight
 - i. You will be uncomfortable
 1. May be moving slow
 2. End up in Irons
 3. Heeling up too much
 4. Puffs are crazy
 5. Hard to steer
 - ii. 2 options to correct it
 1. Adjust the sail
 2. Change your heading
4. What are the Tell Tails telling you?
 - a. Inside Tell Tail
 - i. Rely on to tell you if the sail angle is too close to the wind direction
 - ii. Typically, the
 1. Tell tail will drop, or spin
 - iii. Note: If the sail is far away from the wind direction, typically the
 1. Tell tail will flow smoothly or may stand up or even spin in circles
 2. It isn't a reliable indicator

Sail Tell Tails

- b. Outside Tell Tail
 - c. Rely on to tell if the sail entry is far away from the wind direction
 - i. Tell tail will drop, or spin
 - d. Note: If your sail is too far off the wind direction, typically the
 - i. Tell tail will flow smoothly or may stand up or even spin in circles
 - ii. It isn't a reliable indicator
5. What to do
- a. Inside Tell Tail is dropped or spinning
 - i. Heading to Windward
 - 1. Possible Causes
 - a. Either your sail is too far out
 - b. OR – your heading is too high and you are “pinching”
 - 2. Possible Solutions
 - a. Verify the sail is in enough
 - i. It should be pulled in to off the back quarter of the boat
 - ii. Light Air – Sail may need to be 6” to 12” off the quarter
 - iii. Medium to heavy air – Sail could be over the boat some
 - iv. The pulled in sail will look different on Port and Starboard
 - v. Starboard – sail will be further out
 - vi. Port – Sail will be closer in
 - b. If the Sail is pulled in enough, then the boat is headed to high into the wind (pinching)
 - i. Head away from the wind direction
 - ii. This may only be a few degrees
 - iii. Look at the inside tell tail and stop heading down when it is flowing straight back
 - ii. On a reach
 - 1. Possible Cause
 - a. Your sail is out too far
 - 2. Solution
 - a. Pull the sail in
 - b. It may only be a few clicks or inches or it may be more
 - c. Look at the inside tell tail and the sail is set correctly when the tell tail is flowing straight back
 - b. Outside Tell Tail is standing up, spinning, or dropping
 - i. Heading to Windward
 - 1. Possible Causes
 - a. Either your sail is in too far
 - b. OR – Your heading is too Low
 - 2. Possible Solutions
 - a. Verify your heading is where it should be – Approx 45 degrees to the wind direction
 - b. Head towards the wind direction

c. You should ease the sail to get the tell tails flowing while you change direction and then pull the sail in as you adjust your heading

- c. Sometimes the sun prevents us from seeing the outside tell tails
 - i. In this case, quickly ease the sail about 6" or so
 - ii. If the sail front gets soft or bubbles, you are headed high enough
 - iii. If its still hard, you most likely should head closer to the wind
 - iv. Don't forget to pull the sail back in!

Routine – My biggest game changer is having a routine, so I stay focused on what matters. Write your routine key words on your deck in pencil. Here is my routine:

- a. Look at the traveler to boom main sheet distance to verify its where it should be for the conditions
- b. Check sail tell tails and the front of the sail to make sure I was steering as upwind as I should be
- c. Observe around me to make sure I manage the boat traffic and make decisions about where to go – header/lift, pressure/lull, layline etc.
- d. Then repeat

IRONS – Irons are frustrating and happen to everyone. Here's a few ideas

- 1. Irons happens when the sunfish is no longer moving forward
 - i. Can you steer if a car isn't moving forward?
 - ii. Sunfish stall easily
- 2. Irons prevention – These things can cause stalling
 - i. If your sail is out too far
 - ii. If your sail is in too far and the boat is choked
 - iii. If you head too high into the wind for too long (Sometimes this is a few seconds)
- 3. Getting out of Irons
 - i. Often you start going backwards or start going forwards and then slipping into moving backwards if you are in Irons.
 - ii. Settle things down by purposefully going backwards
 - iii. Hold the rudder to one side and ease your sail out a LOT and wait (and wait more and then wait even more)
 - iv. The boat will turn 90 degrees to the wind in the direction of your tiller
 - v. At that point, you can start pulling your sail in gently to get some forward motion
 - vi. The boat may want to round up (head up) and you may need to force the bow down wind (pull your tiller towards you). Again, do this gently at first
 - vii. You may even need to "goose it" a little by filling the sail and then letting it out a bit while steering your bow down off the wind a little and repeating until you get enough forward motion to steer.
- 4. Alternate way to get out of Irons
 - i. A more efficient way to get out of irons is to let your sail out and pull your centerboard up $\frac{3}{4}$ or more way up
 - ii. The boat will turn 90 degrees to the wind
 - iii. Then put the board down and then you can sail forward as described in the section above.