WHAT IS HEAVING TO?

'To lay a sailing ship on the wind with her helm a-lee and her sails shortened and so trimmed that as she comes up to the wind she will fall off again on the same tack and thus make no headway'.

THE BEAUTY OF heaving to

Being able to stop our boat whenever we want is a very important skill to have under the belt. Duncan Wells take us through Heaving To.

PHOTOS: Guy Foan / Duncan Wells


1


2


3


4


5

1: Hove to on a quiet stretch of water for a spot of lunch.

4 & 5: Different methods for lashing your tiller and wheel.

5: Different hull and keel configurations heave to in diffferent ways. In the case of this Hallberg Rassy 352, her displacement and underwater profile lend themself to a hassle free heave to.

WHEN DO WE USE IT?

Any time we want to stop the boat in the water. Heaving to is one of the tactics we use in heavy weather. In fact in very strong winds it may be our survival strategy. But there are other occasions when heaving to is very useful. As long as I am out of the way of traffic and not in a hurrry but with enough sea room I will heave to, to stop for lunch *Pic 1*. I will heave to if things are getting out of hand and I need to settle the boat down. And of course heaving to is Step one in our Man Overboard recovery procedure. When the boat goes into the heave to position, all the bustle and drama of a moments before disappear. She settles and a calm descends. It is the best thing one can do to buy a little time and have a moment to think about things.

HOW DO WE DO IT?

You don't need to shorten sails; If the wind is light you simply tack without touching the headsail sheets *Pic 2*. Leave the leeward sheet as is and once the bow goes through the wind the headsail will be backed *Pic 3*. With the helm 20 to 40° a'lee, depending on hull, rig and displacement, the main will power up, the boat will try to drive to windward and as it does so the backed headsail will bring the bow down again and the boat will remain stationary or very nearly so. Every boat will require adjustment of the sails, the amount of sail, the angle of the rudder and so forth to bring her to a stop. And if she does make any way while hove to, this is known as fore-reaching. Once we have balanced the boat in the heave to position we should lash the tiller *Pic 4*, or helm *Pic 5* or lock it off.

In strong winds of 30+ knots or more where one will probably have a triple reef in the main or a trysail and a storm jib set, the boat may well have sufficient windage in the topsides, furled headsail and the like, that one can heave to without any headsail set at all. One would drop the storm jib, then tack the boat and put the helm down about 20° and she should stop.

Boats with different hull and keel configurations heave to in different ways. At one end of the scale we have heavy displacement boats with long keels and a good deep fore-foot (the point where the stem is joined to the forward end of the keel) and they heave to in a very well mannered fashion. At the other end of the »

6

THE COLLISION REGULATIONS

(International Regulations for the Prevention of Collisons at Sea IRPCS)

Where we are on a collision course – that is to say, two vessel are closing and the bearing is constant – the order of giveway vessels is as follows;

Power gives way to …

Sail gives way to..

Fishing or Trawling give way to…

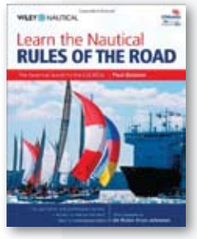
Constrained by Draught gives way to…

Restricted in ability to Manoeuvre gives way to…

Not Under Command

And any vessel overtaking – overtaking being defined as 'coming up with another vessel from a direction more than 22.5° abaft her beam' – must keep out of the way until past and clear.

There are then two further situations that affect us. When both sailing vessels have the wind on the same side, the windward vessel must give way to the downwind vessel. When we are using our engines, whether with sails or not we are deemed to be a power driven vessel and if we have another power driven vessel on our starboard side we must give way.



Price: £14.99
Available at www.wileynautical.com

8

scale are some boats with a very shallow fore-foot and they are often difficult to balance and sometimes can drive themselves out of the heave to position and then you are off.

SEA ROOM

When you are hove to you will be drifting with the tide and the wind and so you need enough sea room to be able to allow for this. Remember if the tidal rate is 3.5 knots you will have been moved 3.5 miles by the tide in one hour. So you need to monitor tidal drift carefully. In the ocean this is less of a problem. Inshore it is crucial.

PRACTICE

One should practice heaving to on a regular basis. Try it in light airs. Try it when the wind has piped up a bit. Notice the difference. One minute you might be pounding to windward and then the next, hove to you will wonder what all the fuss was about.

THE TEST

To see how different hull and keel configurations behave we practiced heaving to with *Dorothy Lee*, a Hallberg Rassy 352 with a long fin and skeg, *Vouvray,* a Westerly Centaur, bilge keeler and *Cosmopolitan* a Jeanneau Sun Odyssey 36i with a short fin keel and spade rudder.

STARBOARD TACK

Bear in mind that if you have the choice you always want to heave to on starboard tack, let's remind ourselves of why with a quick look at the collision regulations. (see *ST* Tip)

So, assuming we are out of any Fairways, Narrow Channels, Traffic Separation Schemes or Prohibited or Precautionary Areas, as long as we are hove to on starboard we are the stand on vessel on all counts. Remember we judge which tack we are on by the side the mainsail boom is, so the headsail, whether backed or not is irrelevant A sailing boat on port has to give way to us. A sailing boat on starboard that is approaching forward of the beam will be the windward boat and has to give way to us.

Any vessel approaching us from more than 22.5° abaft the beam is overtaking and must give way. Of course we know that even though we may be the stand on boat if we see that the give way vessel is not giving way then we need to 'take such action as will best aid to avoid a collision'. However being hove to there is not much we can do at the last minute and we are a bit of a sitting duck. Still I have never heard of anyone having been run down while hove to.

AND THIS IS WHAT WE FOUND

Weather F2/3 Variable sea state calm. The wind was much lighter than we would have liked and so all the boats behaved beautifully.

7

Cosmopolitan - Jeanneau Sun Odyssey, hove to easily and stopped dead ***Pic 6*** and ***7***. The light airs suited her perfectly ***Pic 8***. I suspect that in more wind we would have had to shorten sail considerably to get her to stand still.

9

Vouvray - Westerly Centaur. She had an overlapping genoa which didn't make for such a neat looking heave to ***Pic 9*** but she stopped nicely and registered 0.0 knots through the water, although the just perceptible wake off her stern told us she was moving very slowly ***Pic 10***.

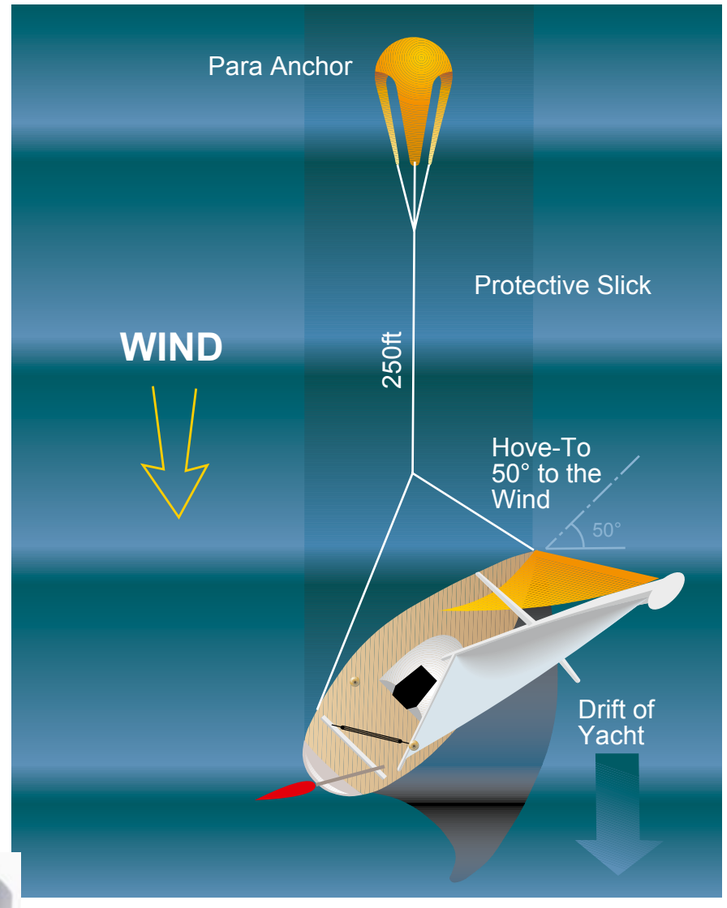
10

Dorothy Lee - HR352. Again she hove to nicely ***Pic 11*** but unlike the Jeanneau or the Westerly she was still making 1 knot through the water according to the log ***Pic 12***.

11

Both *Dorothy Lee* and *Vouvray* lay nearly beam on to the light airs. *Cosmopolitan* managed to lie at about 70 degrees. In stronger winds I would expect them all to lie at 45 - 50° to the wind.

12



WHICH SIDE IS YOUR GALLEY ON?

So if we are going to heave to on starboard tack, well designed boats will have their galley on the port side - to leeward - as it is much easier to work a galley that's to leeward than to windward. Which side is your galley on? You know something? For all the reputation that Hallberg Rassy sailing boats have, and I think it is generally well earned, my 352 has the galley on the starboard side and so hove to on starboard the galley is to windward. You can't have everything I suppose.

STORM CONDITIONS

Heaving to in storm conditions can be part of our survival strategy though opinions on how to deal with storm conditions are contentious indeed and always boat specific. The theory is that with the wind at 50°off the bow and the boat stationary she will slip sideways through the water and create a slick to windward which will protect her from breaking seas.

Lin and Larry Pardey, the acknowledged storm survival experts advocate the use of a para anchor to hold the boat and to allow it to drift slowly downwind to create this protective slick ***Diag 1***. Remember, it is not the wind that will cause you damage in a storm but waves breaking over the boat or breaking waves rolling the boat.

Thank you to First Class Sailing – www.firstclasssailing.com 0203 006 3717 – for their help and the loan of *Cosmopolitan* **and thank you to Ian Collins for his help and the loan of** *Vouvray***.**

About the Author

Duncan Wells is an RYA instructor and Principal of Westview Sailing. For video tutorials on navigation and seamanship go to www.westviewsailing.co.uk and click Reading & Videos.