

Sailing and Powerboating In Harmony in Chichester Harbour



Chichester Harbour Conservancy
Area of Outstanding Natural Beauty

Some 10,000 boats share the fabulous recreational facilities of Chichester Harbour. This leaflet is designed to help powerboaters and dinghy sailors understand each others sports, so that everyone can get on and enjoy their time afloat with minimum conflict. To this end yachting journalist Mark Rushall answers questions commonly posed by powerboaters and suggests some ways for sailboat racers to share facilities, without spoiling everyone's fun.



Basically the message is a simple one: 'think of others whilst having fun yourself'.

Information for Powerboaters

I'm always having to alter course or slow down for sailing boats: why can't they steer straight down the right hand side of the channel just like we do?

If they could, sailboat racing would be much simpler! There are two motives for not sailing a straight line course, one practical, the other tactical.

No sailboat can sail directly into the wind. If it tries, the sails simply flap, and eventually the boat blows backwards. Progress against the wind is made through a series of 'tacks': see figure 1. That's the main practical reason for sailing what appears to be a haphazard course. (Modern sailboats have a similar problem when sailing away from the wind: see later!)

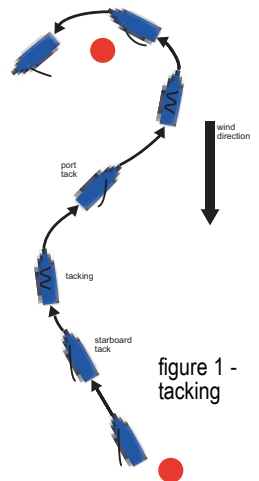


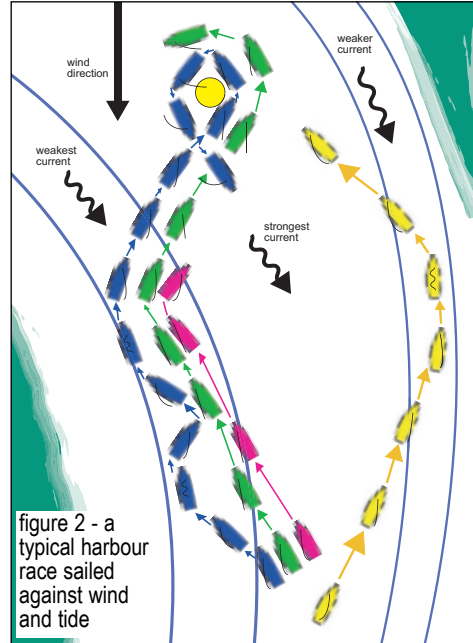
figure 1 - tacking



So why do they always seem to turn right when I'm not expecting it?

Now we come to the tactical bit! Dinghy racing is like sailing an obstacle course. Whenever the wind shifts, the advantage changes from one tack to another. Just a 5 degree windshift (very common when the wind is blowing over the land) can give a 25 metre gain to the boat on the favoured tack.

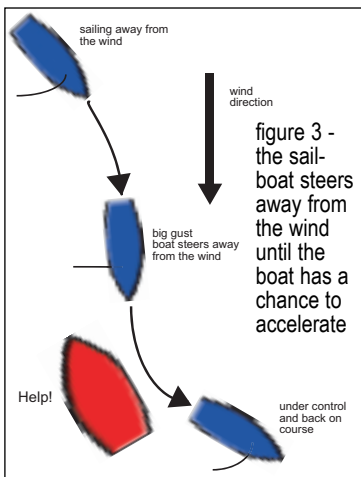
The current in the harbour also has a significant impact on racing tactics. Figure 2 shows a leg of a typical harbour race, sailed against the wind and against the tide. (You can usually tell which way the tide is running by looking at the moored or anchored sailing boats.) The strongest tide is in the deepest water down the middle of the channel: sailing against that is like swimming through treacle! The yellow boat has sailed into the slacker current in the shallower water on the outside of the bend: less current than in the middle, but as you probably remember from school geography, not as slack as the current on the inside of the bend, where the rest of the fleet are jostling for position.



The draft of a racing sailboat is not significantly different from that of an average sized motorboat, typically 2 to 4 feet, but few of the boats racing in the harbour have any instrumentation at all! In light winds and strong current, the tactic might be 'touch and tack', with little time for warning. The keen racer will then be looking for a clear path back into the slacker water... with lots of boats racing, finding a clear 'lane' back into the shallower water is critical, so he'll be paying less attention to passing traffic than he probably should be!

OK, I now understand what is going on against the wind, but I often have the same difficulties when they are racing with the wind: except they are moving much faster!

In a gust, when a sailboat is sailing against the wind, it can prevent a capsizes, by turning the boat slightly toward the wind. This releases the pressure from the sails and lets the boat come upright. When sailing across the wind or with it nearly behind, it's not possible to 'de-power' in this way. Now the sailboat racer will steer away from the wind until the boat has a chance to accelerate (figure 3). It's just like steering a car into a



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skid to regain control on a slippery road and a tight bend. Once back in control, it's possible to resume the previous course. When sailing with a spinnaker (the big curved coloured sail), and big gusts, the course alteration is bigger. The larger the spinnaker and the bigger the gust, the more radical the action. If an obstruction hinders this corrective action, a capsize is highly likely!

Why do some boats with spinnakers sail straight to the mark, while others zigzag around wildly, just as if they are tacking?

The boat with the red white and blue spinnaker (figure 4) is an 'X boat'. You can see that the spinnaker is a fairly symmetrical shape. This sail is very forgiving: it can be used through a big range of wind angles. Boats with this type of spinnaker tend to be relatively slow sailing with the wind, so they frequently divert from a straight line course to avoid the current (as against the wind, see above).



figure 4 - X boat

The boat with the blue and white spinnaker (figure 5) is an International 14. This spinnaker is not symmetrical. Though very fast, it has a very narrow useable wind angle, which changes with wind strength.



figure 5 - International 14

Have you heard the expression 'sailing too close to the wind'? Sail with the wind coming across the boat with this sail, you will capsize! Sail directly away from the wind, the sail will flap, the boat will become unstable, and you will still probably capsize! So sailing with the wind behind, with an asymmetric spinnaker, is done in a series of 'reaches'. With all types of sailboat, changing from one reach to another (the 'gybe') is faster and more dramatic than tacking.

Why do they need so much room as they approach their racing marks?

As with a grand prix circuit, there is always a 'racing line'. The fastest turn is usually a wide smooth approach followed by a tight exit. That keeps speed on and gives the most tactical opportunities for the next racing leg.

Why do they have to set their racing courses right across the main channels?

Many racing boats draw as much as or more than the average powerboat. At half or low tide there is simply no alternative, we have to share what water is there. The Sailing Clubs and the Chichester Harbour Federation have developed a Code of Conduct for racing in the harbour. This seeks to ensure that vessels can still transit safely in the vicinity of main start lines.

Race start lines away from the main channels, where traffic is light, may take up the whole width of the channel. Please wait for the dinghies to start, it should only take a few minutes.

Last summer I thought I had found a nice route through a mass of boats aimlessly sailing around. Suddenly a hooter sounded, and they all accelerated straight towards me! How can I avoid this?



That is a tricky one: it sounds like you inadvertently sailed through their start line! A mass of boats sailing in a small area, especially with sails flapping, usually indicates that a start is imminent. The start line can be between a committee boat and a mark, between two boats, or between a flag pole on the bank near a sailing club; and a mark. Hints of an impending start are guns or hooters, and flags being dropped or raised on a flagstaff. Flag P (blue flag with white rectangle inside) is normally raised with four minutes to go, and lowered with a hoot with one minute to go. At this stage the boats should be lined up, vaguely pointing in their starting direction. You should be able to motor well clear around one end of the start line or the other. Beware: they are highly unlikely to be looking for an obstruction motoring toward them!

Sign-up for the Navigation eNewsletter at www.conservancy.co.uk to receive information on the times of racing in the harbour, which may help you avoid busy start lines. Racing programmes are available on www.chifed.org.

I am very happy to stick to my motorboat! Can you give me some general hints on how to keep clear but still get to my destination?

► Watch the patterns of boats and try to spot the rounding marks in use (usually the spherical yellows). There are often several classes, starting at intervals, sailing similar courses. But be aware that different sailing clubs may be organising separate races!

- ▶ When manoeuvring close to racing boats, make sure that they know that you've seen them.
- ▶ Make your intentions clear as early as possible. An early course alteration, or reduction in speed, should put the sailboat racer's mind at rest and discourage him from making a radical manoeuvre.
- ▶ Be aware of what the tide is doing. That will often enable you to understand the racer's apparently haphazard course changes.
- ▶ Watch out for hand signals: generally sailboat racers aren't trying to be rude; they are trying to suggest a mutually convenient alternative to a collision!



- ▶ If you want to be friendly, try to keep wash down when motoring in front of racing boats. One foot of powerboat wash is the equivalent of binding brakes on an uphill cycle - it hurts! Even better, slow down and pass astern.

Information for Racing Sailors

Some of these powerboats seem determined to run me down... I don't understand why they can't anticipate even our most straightforward manoeuvres!

With nearly 2,000 motor vessels, and 5,000 dinghies registered in the harbour, it's actually quite astonishing how few incidents occur at the really busy times. Responsible sailboat racers owe it to all powerboaters to understand their fears and concerns. Education in an open and friendly way is far more likely to have an effect than aggressive shouting and fist waving on the water!

Having spoken to several harbour powerboaters, with a range of experience, here's a summary of their most useful comments:

- ▶ Sailboat racers know where the bottom shelves through hard experience! It's not reasonable to expect powerboaters to learn about the harbour in that way. Grounding a large powerboat is not only embarrassing, it can be expensive, as there is little protection for propellers and shafts. Though the powerboats draft is similar to the boats we race, they are not generally comfortable straying outside the marked channels.
- ▶ Few powerboaters have had the dinghy sailing experience that many sailboat racers have. Anticipation of forthcoming manoeuvres, understanding relative



Grounding a large powerboat can be embarrassing and expensive

speeds and angles, and subtleties of current and windshifts may not be second nature.

► Yachts experience the same problems when confronted by racing dinghies. They may be constrained by their draft and may be less than manoeuvrable.

► It is really difficult for a non-sailor to spot the ends of a start line

before the gun goes! If the line impacts on a significant proportion of the main channel, it's helpful during the pre-start to keep inside the perpendicular extensions of the limit marks, leaving an obvious thoroughfare for cruising sailors and powerboaters.

The typical powerboat, with its flat bottom, high sides, and rudders aft, makes it much easier to steer at speed. Powerboaters are often nervous of the bow blowing off the wind when manoeuvring at low speeds.

► Close vision may be obscured, if you can't see him, he probably can't see you!

► 'I want to keep clear but I'm not sure what to do!' If you can, make eye contact with the skipper of the powerboat. Make clear, friendly hand signals if they will clarify the situation; 'keep going straight on, we are about to round this mark!'

► The rules which apply between racing sailboats and powerboats are the International Regulations for Preventing Collisions at Sea (IRPCS). In particular, the 'stand-on' vessel is required not to alter course. The rules in full can be found on www.sailtrain.co.uk

► Rule 69 allows severe punishment for gross breach of good manners. Think twice before abusing a fellow harbour user!

► Most importantly, when a powerboater does slow down, or alter course, a wave and a thank you will encourage future co-operation... and he probably has friends, too!



Chichester Harbour Code of Conduct for Racing (Revised 2011)

All racing in Chichester Harbour is coordinated by Chichester Harbour Federation and must comply with their Code of Conduct for Racing. The code restricts the classes of vessels that can race in the harbour and provides

guidance to race officers and competitors. An extract for competitors is detailed below and the full code can be viewed at www.chifed.org



6. All sailors are reminded that when a boat sailing under the Racing Rules of Sailing meets a vessel that is not she shall comply with the International Regulations for Preventing Collisions at Sea (IRPCAS or Col Regs).

Competitors should be aware that under these regulations they are obliged:

- a. to keep clear of any vessel restricted in her ability to manoeuvre or a vessel engaged in fishing, and not to impede the passage of any vessel which can safely navigate only within a narrow channel or fairway
- b. to at all times maintain a proper look-out and, if overtaking another vessel, to keep clear and they shall
- c. have due regard for slower moving vessels which may be constrained by their draught, slow response time or limited manoeuvrability, (particularly relevant to helmsmen of high speed dinghies)
- d. avoid passing too close to a non-racing vessel, failing to make their intention clear and leaving it too late for avoiding action to be taken
- e. normally pass astern of a non racing vessel, not ahead, in a close quarters situation
- f. always be courteous, acknowledging boats that have kept clear even when they are obliged to do so

Text by Mark Rushall, Mark is a racing coach, a yachting journalist and a professional sailor. Chichester Harbour has been his playground for more than 15 years, and he currently has a powerboat and a cruising yacht registered with the Conservancy, in addition to several racing dinghies! See www.rushall.net.



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