

Capsizing

Three articles on how to avoid capsizing and what to do if you do.

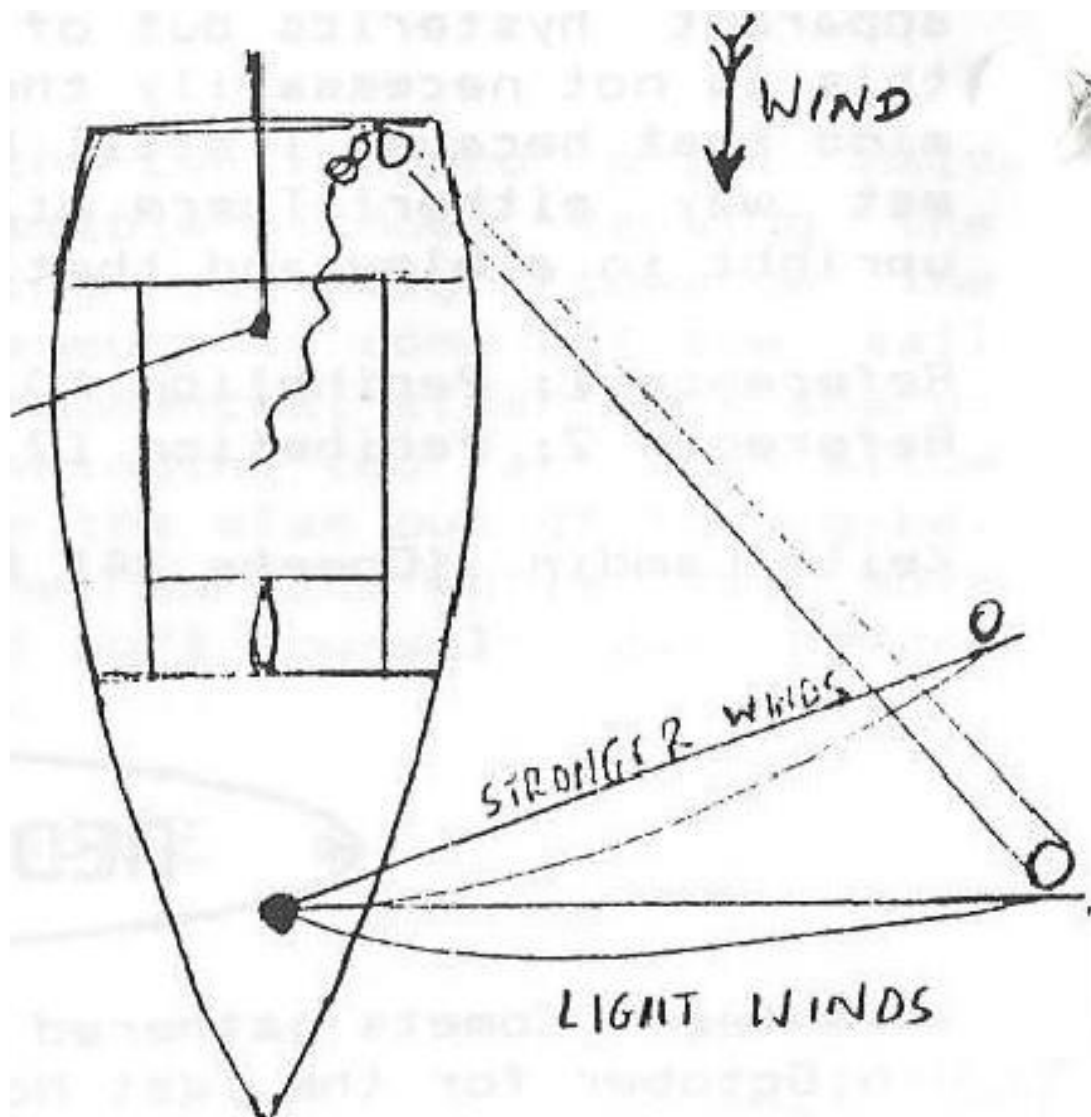
Comet Capsize Avoidance

Richard Smallwood. Perihelion 33

My credentials for writing this centre on a particularly windy open meeting at Stamford in September when I seemed to be the only one not capsizing at fairly regular intervals. Most of the capsizes were happening downwind, or on the gybe, so what advice can I offer?

Firstly, downwind the mainsheet should be long enough for the boom to go out to 90 degrees or a bit more in light conditions. I would add that the figure of eight knot should be tied about 1.5 metres from the end so that the very end is always available when you need to grab it. Rolling the boat a bit to windward then brings the forward driving force (the sail) over the centre of resistance (the hull) and allows minimum rudder to be used to keep straight.

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Most Comet sailors who venture forth in winds over force 2 are familiar with the "death roll" which occurs when sailing dead downwind or, as often on inland waters, a bit "by the lee" with the wind varying either side of dead astern. The simple solution is to pull in the mainsheet until the boom is out at only 70 degrees or so. Steering a steady course, especially in gusts, should then ensure that you stay upright. The forces trying to capsize the boat will always be towards the side that the boom is on, and application of body weight should counteract this adequately. Remember also to keep your weight well back in gusts or strong winds to prevent the bow burying.

The problem with having the boom right out at 90 degrees in strong winds, or when gusts strike, is that the flow over the sail can alternate between starboard-going and port-going thus inducing the aforementioned "death roll". When sailing at my home club, Shearwater, where the wind strength varies wildly, I

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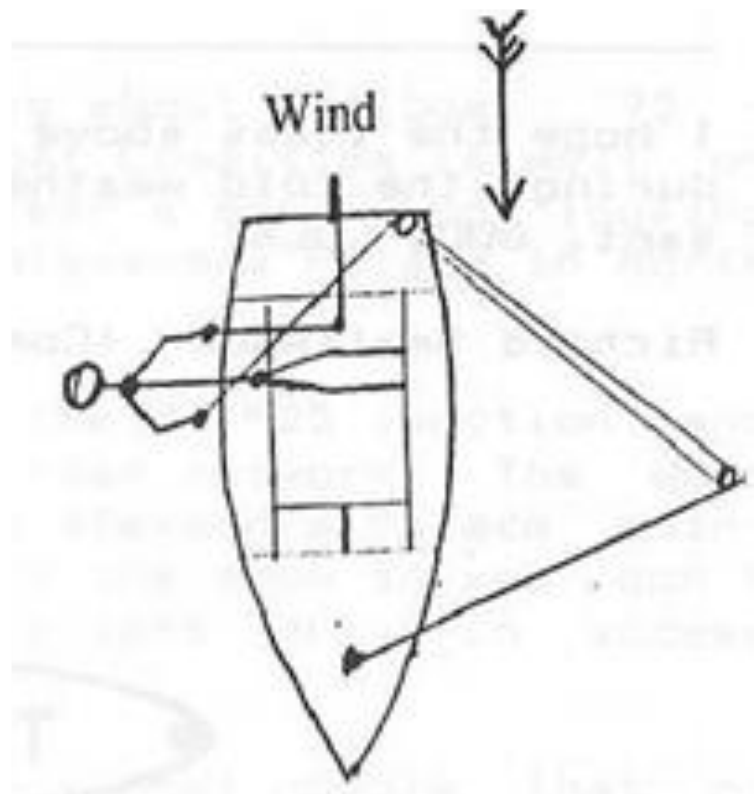
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often sail on the run with the boom right out at 90 degrees for maximum efficiency while the wind is light, but I keep a wary eye out for gusts from astern and will pull the boom in to 70 degrees before the gust arrives ! It invariably works, and I take off downwind under control when the wind increases. Another idea which many Comet sailors advocate is to use full plate to aid stability when sailing downwind in stronger winds. My reaction to a downwind gust is therefore "IN SHEET - WEIGHT AFT - DOWN PLATE" (but get the plate up again before the gybe)!

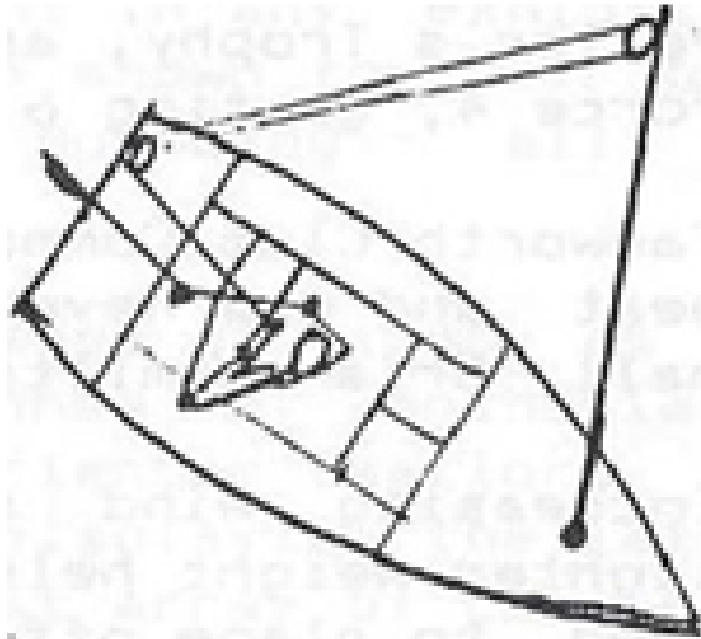
Now for the strong wind gybe which seems to scare so many of the less experienced Comet sailors. I have analysed my technique and hope that the diagrams and explanation below will help. I would emphasise that practising in a wide variety of conditions is a sure-fire way to improve and stay dry!

1. Start with boom out at 70 degrees or so, and maximum ONE THIRD PLATE Weight fairly well aft.

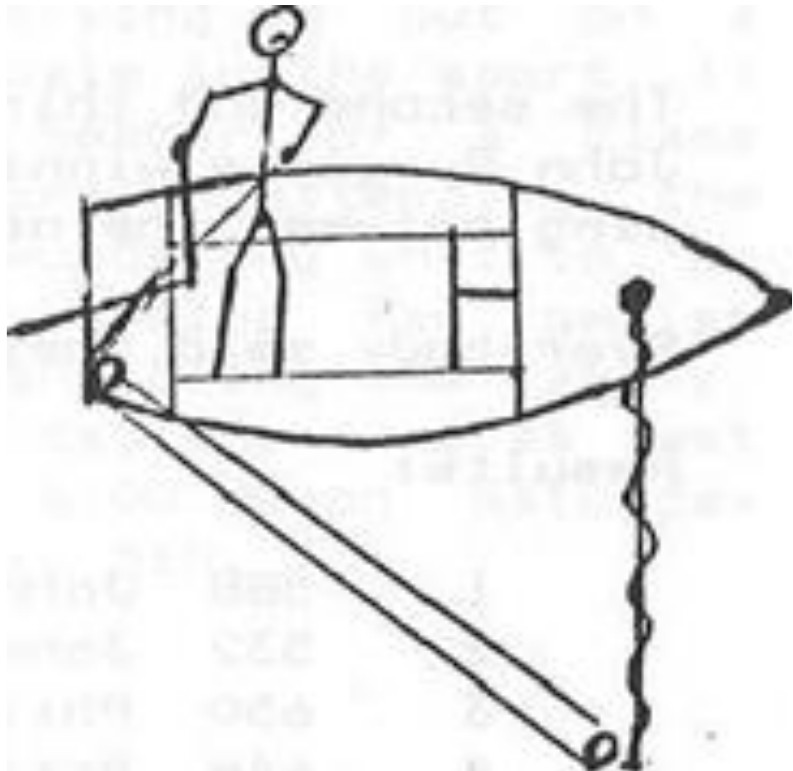


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2. From a starboard tack, turn gently to port. Adjust body weight accordingly. Prepare to move quickly when the boom comes a cross, to stop the end of the boom hitting the water.

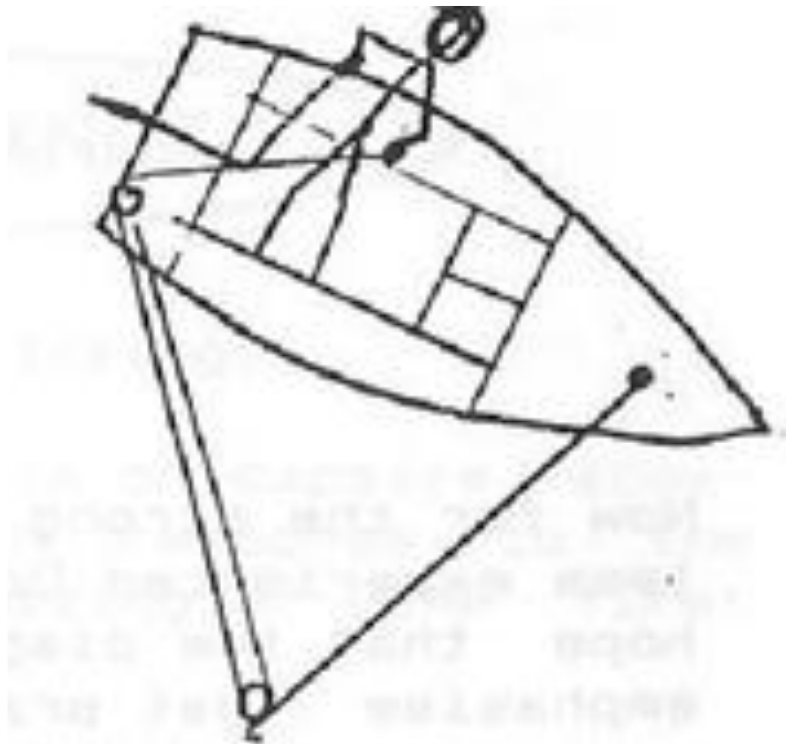


3. Keep low as the boom comes a cross. LET BOOM OUT TO 90 DEGREES. Pull tiller to port just enough to stop turn with wind on beam. **BALANCE THE BOAT!**



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4. When the boat has steadied, pull in the sheet and set up the sail for the next leg of the course.



I hope the ideas above will help some of you to keep a bit drier during the cold weather when capsizing is particularly unpleasant. GOOD LUCK!

Richard Smallwood, 565, Shearwater SC

Don't Just Fall In – “Walk on Water”

Brian Welham, *Perihelion* 82

Having survived the strong winds at the Nationals, capsized 7 times and sailed away 6 times without getting wet, I thought that my technique may be of interest to those who still have trouble getting back into the boat. There are many devices that are currently used from the first grab handles offered by Andy Simmons and the current more elegant recessed handles to lines attached to the rear of the toe straps and those that go from the mast to the stern. All of these are designed to pull you back on board.

However, none of these overcome the "problem" with the Comet in that it comes upright before you can climb onto the centreboard. It also floats very high after righting and to get the side deck low enough to pull yourself in the boat it easily rolls back over onto you and you have to start the process over again. All this time you are losing hundreds of yards in the race and/or expanding vital energy needed for sailing.

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A completely inverted boat is easier to deal with as it is easy to climb onto the hull and pull it into the horizontal position stand on it and step over as it comes up. The technique to use is in all the books so I will not detail it here.

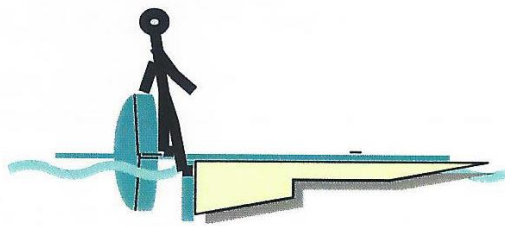
Unless you capsize to windward, you have the opportunity to use the boom as a stepping stone to get to the mast and step over the hull with one foot to prevent the boat inverting (or as is more likely putting the masthead into the mud where it stays). Once you are onto the bottom of the mast with one foot over the hull you can step onto the centreboard and use your weight to bring the boat upright and "fall" in. I have found that I only get my boots wet using this technique.

The process is:

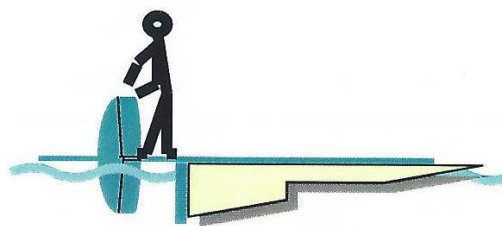
1. As the boat goes over to leeward wait until the mast hits the water.
2. Look down and put your front foot onto the boom.
3. Immediately turn towards the bow and take a stride to put your other foot onto the mast below the boom. This is the walking on water part.
4. Bring your other foot to the mast. You will then have both feet on the mast and be facing the boat with your weight balanced across the hull. The boat will now be balanced and the mast will not sink. Steps 2, 3 & 4 take less than half a second and the sail will prevent the boom from sinking more than a couple of inches even for those of you who weight 14 stone. At this stage you can pause to gather yourself.
5. Balancing on the hull, straddle the side deck facing towards the stern with one foot still on the mast.
6. Stand up and put your other foot onto the centreboard and then bring the trailing foot onto the centreboard.
7. You are now in the classic "standing on the board" position ready to pull the boat upright as you would have done in any other dinghy.

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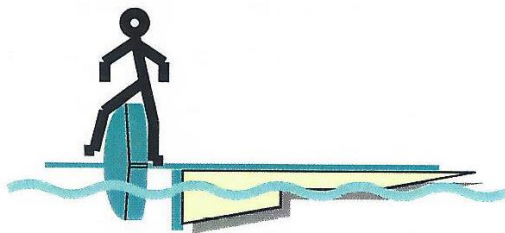
Walking on Water Capsize Recovery



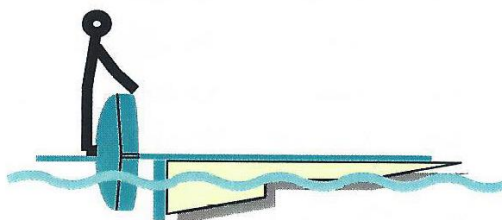
Process 1 & 2



Process 3 & 4



Process 5 & 6



Process 7

The whole process takes about 5 seconds with another 5 seconds to get all the gear in place and get the boat going again. There are other techniques for getting onto the centreboard but most require the agility of a child and are not suitable for us more mature mariners. I hope you are able to follow my descriptions and it will help you find a faster and drier way to right the boat after the occasional capsize.

Brian Welham, 711

Capsizing and Recovering

Brian Welham, Perihelion 101



I don't claim to be an expert, in fact I am poor at getting back into the boat if I am thrown into the water as my efforts at both Cransley and Portland have shown.

However, I was sent a set of photos that illustrate how to get back into the boat if you are agile enough to walk along the boom and climb over the hull from the mast onto the centreboard.

These were taken at Cransley during the Association championships where I was unable to continue after Race 1 but I must have recovered the boat at least once before disaster struck and I had to be rescued! You will note that 711 has 4 reefs in the sail which still didn't make it easy to control!

Brian Welham, 711