

29er Tips for Heavy Teams

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A bit of History:

Of the 7 world champions, I'm guessing only 2 were under 135kgs (=297 lbs). The light ones were the British team that won the Canadian Worlds and the current WC's, The Argentineans.

But neither of those were anywhere near 107kgs (235lbs). *Think Pink* (the Pom) was mid 120kgs as were the Argys. The crew that won in San Fran (Euan and Jacqui), Jacqui is 52kgs (115lbs) and Euan is mid to high 70 even into the 80s. Scott Babbage is in high 70's and Siljia Lehtinen, 63.

Herman and Euan: Herman went on a huge diet to get under 70 so they would have been 140-143kgs.

Anyway, there is no way you are going to beat a couple of light air flyers. All you can do in that stuff is try and stay with them and accept that when you get 10 knots you will blow their socks off.

How to Sail a heavy Team in Light air:

First is to move forward in the boat, if you have bubbles or a disturbed wake then you are too far aft. As a crew you should be gybing, tacking, setting spinnakers, dousing them all in front of the mast.

You need to learn to do that smoothly,. Far more than a Corinthian boat, a shake or a judder will cause flow separation off your sails and it takes 3 cords (about 30ft) to re-establish it.

Next is as a skipper, you need to stay still, get your self comfortable and let your crew move while you steer accurately and you will probably also play the sheet as you need to leave your crew free to move seamlessly to balance the boat.

A couple of points here, as a crew, don't get in the slot, stay low when in front of the mast and as a skipper, you need to position yourself in such a way that you don't force your crew into the slot. Also when a gust dose come, ease the sheet to give your crew enough time to respond without shaking the boat, its all about acceleration. But you don't want to accelerate too much, think about VMG, before and after the gust, as the gust hits, you will be significantly lifted as the gust becomes more dominate in the Apparent Wind [AW] calculation, so luffing and easing sheet is not just a good thing, its mandatory. Plus if you accelerate like mad, then on the other side of the gust the AW will virtually be head on as the Boat Speed [BS] becomes dominate.

I can tell you a story in Canberra (terrible place to sail) Light with a dirt big mountain in the back ground, light wind with gusts, what happened, both upwind and downwind is the 18teen accelerated in the gusts, so much that when the gust disappeared, the AW was head on regardless, so the best thing you could do was aim at the next mark while you slowed down again so there could be some angle to the AW. We went further and modified our approach to minimize the acceleration but maximize the gain (depth or height) from each Gust.

So upwind, luff the boat and ease the sheet with each onslaught, as your crew moves then trim the sheet back, then as it goes away, the crew moves back and the skipper come back down to a reasonable course probably with the windward tuffs just lifting till you slow back down again. don't try and out pace them, modify your technique to maximize your weight and your situation. They will out accelerate away from you, if they are 30kgs lighter then they are over 10% lighter in terms of total system weight. There is a overwhelming desire to pull away and blast past them!!! when you have enough grunt, sure, go for it, but only when you have enough wind, THINK VMG. 6-7% of camber in the lower main is just fine, that's a bit bigger than a man's fist width. You don't have a overlapping jib so it won't hurt you till you are over powered. Top hole in the jib, 1-2% here can make 5% there which leads to a couple of minutes around the track.

Down wind, same thing, as the gust hits, come away 10 degrees and ease the sheets, give yourself max opportunity to come up to a reasonably sheet and trim very well, all 3 sails, ease the downhaul, ease the out haul, trim the jib properly, make it all work for you, you have tufts, use them, if you don't have leach ribbons, get them. As the gust goes, trim in quite hard, maximize the period that you can keep going deep, only come up when you back down to speed, use your ears to judge speed and don't get caught in luffing wars.

Lastly, when it becomes available, there is a graph in there about the % difference in drag as a effect of weigh and as a effect of surface. The effect of surface preparation is 5-6 times more important than weight in terms of drag reduction. Before you get there, make sure the bottom of you hull is perfect, polish it with a light cutting compound to a gloss then wax it with Star Bright or something like Turtle Wax (that's my favorite). Do the foils also, Leading edge are particularly critical, front 20% of the foils or hull is a lot more important than the back.

Second last, rig tension, back it off, if your fatter, you need fatter sails, sagging F/Stay fattens the jib, also dose not compress the mast so much, makes the boat feel better, plus you can carry more sheet more often and main-sheet with affect F/Stay sag more than anything. Same with the spin, A tight luff rounds (increases the camber) the LE of the Spin, a loose luff rolls it out and flattens it. Use it, if you want depth, pull it tight and no stoppers in the line, get one of the new pole ends, it gives you another 50mm of tension (had not thought about that before).

Lastly, sail the boat flat, +/- 5degrees is just acceptable, +/- 3 degrees is 10 times better.

And stay calm, sail you race, not there's and when it blows, have a ball.