

Length in Feet Equals Crew Weight in Stones ...

Keith Muscott



NOTHING WE HAVE PUBLISHED over the years has provoked more apoplexy than the DCA Safety Recommendations. I think this is because there is a belief that we can be absolutely precise in what is really a 'pick n' mix' bag of general advice to cover an immense variety of boats. The Holy Grail of all-embracing accuracy will always be sought and it will always elude us.

Isolated suggestions in the Recs have often sent readers into meltdown. I recall that Ed Wingfield would start biting the carpet when he was reminded that 'Equipment for Cruising' should include 'a spare lifejacket'. Well, that's been jettisoned now and I feel sorry for it, washing around in some deserted fishing harbour among the flotsam and sloppy detritus on the oily surface. But it probably deserved no better. However, nothing has grated so much, it seems, as note 2.3: '... at least one stone of crew weight for each foot of LWL (20kg/metre)'.

It was not until I read the book again recently that I remembered that the idea came originally from Allan Earl's *Dinghy Cruising*. Now this in itself sheds light on human caprice, as the most vocal critics of 2.3 tend to be big Allan Earl fans.

Be that as it may, let's look at the reference, right at the start of Chapter One (my italics here, of course):

'... let us consider some of the features which I have found to be desirable in a dinghy which is intended to be used for cruising.

The size is governed by the weight and number of crew, and whether it is intended to sleep in the boat or in a tent on the beach.

For single-handed work the overall length of the boat should be between ten and thirteen feet; as a rough guide, the length of the boat in feet

should equal the weight of the crew in stone.* A light man should not have a large boat, as the seaworthiness of a dinghy depends largely on the way the crew sit her up, and he will not have the weight to keep a large boat under full control unless she is under-canvassed. It is also probable that he will not have the strength to pull her up a rough beach. Provided the centre thwart is not too low, it is possible for one man to sleep in a ten-foot dinghy by putting all the gear one side of the centreboard case and himself the other, but it is a tight fit.

With a crew of two, a dinghy between twelve and fifteen feet overall is advisable; here again it is just possible for the crew to sleep in the smallest size recommended, but unpleasantly cramped. It is obviously possible for a crew of two to use a boat larger than fifteen feet, but I consider that *anything over this length is outside the realms of dinghies.*' Allan Earl

If you have read Kathleen Earl's letter to Richard Crockatt (*page 11*) you will have caught the interesting reference to Eric Coleman's pilgrimage to AE's door, and his declaration that *Dinghy Cruising* was 'his Bible'. As he was the presiding genius of the DCA at the time, it's easy to see how the words were transplanted *verbatim* from the book to our BOAT Recommendations – as they were called then.

I believe there is nothing wrong with Earl's advice in the context from which he writes. He is talking about light sailing dinghies in the mid-20th century, which contained nothing like the ballast carried by Victorian sailing canoes, for instance. It's all relative, of course, and these days we are not likely to consider an open clinker-built boat as 'light', whatever its size, but under sail it will certainly rely on disposition of crew weight – as do many big yachts, too, though not to the same extent. We've all seen ocean racers with their crews sitting along the weather rail sharing the latest gossip like swallows on a line.

AE drew conclusions from his own boat and his own experience in it. He was not a big man, and a ten-foot dinghy suited him perfectly. His description of his boat, printed in the last issue, reveals that it was not only firm-bilged but carried a steel plate. In themselves, these features do not reduce the importance of crew weight much, even though they make the boat a lot steadier to sail.

The biggest factor contributing to dinghy stability is beam, which also works in partnership with crew disposition to an extent, enabling them to sit out more comfortably in a beamy boat.

* Note: he is applying this guide to a single crew

We have avoided any more prescriptive formulae for beam, except indirectly by recommending that the crew should be able to sit on the gunwale without inducing a capsize. But there are no more guides of the sort, 'The beam should not be less than the cube root of the load waterline in feet, squared'.

(When I apply this formula to my Cruz I get a recommended minimum beam of 5.80878573356 feet.

.80878573356 of a foot is 9.70542880272 inches, so the resultant total is about 2.3 inches short of its actual beam of six feet – so I'm all right then? Well actually I'm not, because the Cruz has a sporty hull with a lot of flare, so the beam narrows quickly down to the waterline. It's quite easily capsized, though it's possible to stand on the gunwale without doing so, thus meeting a different criterion. This is a good example of how being hyper-rational about safety recommendations makes fools of us.)

Correct use of crew weight remains an essential factor for safety and efficient performance, even though it has long been a marker of old-school die-hard DCA sailors who frown on exaggerated 'hiking' or 'sitting her out'.

I'm not sure that the crew weight

recommendations of the dinghy class associations helps us a great deal, either, as they apply to racing, when full sail is carried far longer than it would be on a cruising boat.

AE also makes an important point in explaining why a light crew should not sail a large dinghy: it would be under-canvassed if it had to be reefed down to be safe in nothing more than a fair sailing breeze. Efficient progress is another way of saying safe progress, of course.

Ironically, Eric Coleman went on to design boats for the DCA which were increasingly large and so less reliant on deployment of crew weight. In the DCA now we have a wide variety of craft, which I frequently praise as a good thing, and some have the scantlings of a Brixham trawler. Any definition stretched past its limit becomes absurd, and applying Earl's guide to long vessels that can weigh in at about a thousand pounds/456kg makes it sound utterly stupid, as one writer pointed out in the last issue.

Recently it was suggested that if a sailor *believes* he is dinghy cruising in his boat, then dinghy cruising he is. I have no problem with that, but if he is sailing a really big, heavy, well-ballasted boat, I have objections to its being called a sailing dinghy.

I know that the English language is an organic thing and that meanings of words change all the time, but there is no pressing need to distort this one. From its first adoption into English from the Hindi *dengi* or *dingi* it implied a light, handy craft – with or without sails. FitzRoy endorsed its use in the RN to replace the old term 'jollyboat' which was bastardised from the Dutch/German *jolle*, and usually signified a bigger sort of harbour craft anyway, that on a warship pulled six oars on three thwarts. And *reductio ad absurdum* applies in reverse: imagine referring to your Drascombe Drifter or Cape Cutter as 'my dinghy'. There's nothing wrong with 'boat', surely? (*Old English, cognate with Old Norse*).

So why the continuing controversy? –

'Adequate for the dinghy: at least one stone of crew weight for each foot of LWL (20kg/metre)'

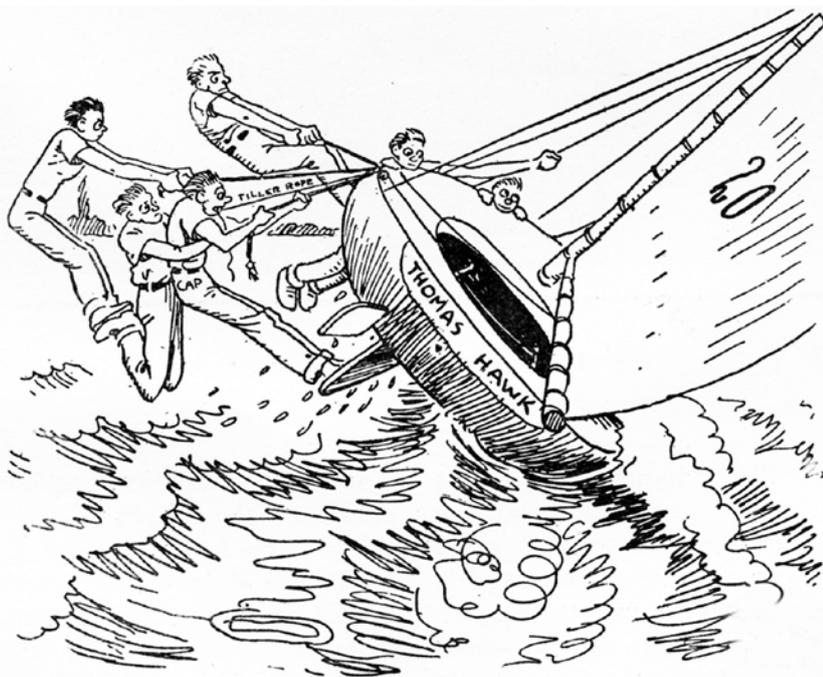
'Ideally' has become 'at least', which answered one of Len Wingfield's objections. The problem remains that everyone reads 'dinghy' in their own way. And AE's cautionary phrase, 'as a rough guide' has gone, which makes the 'guide' more prescriptive – more a 'rule'. We should at least suggest that Earl's rule of thumb ought not to be applied to big, heavy, ballasted boats. My suggestion?

'An unballasted dinghy relies on crew weight to be sailed safely and well: as a guide, at least one stone (14lbs/6.3kg) for each foot of length, which is 20kg per metre.'

You'll notice that I've gone for Allan Earl's 'length of the boat' rather than waterline length and retained his 'as a guide'. I await objections ...

With the inclusion of his son Brian Earl's Noggin-winning cruise account in this issue, I have come to the end of what I can find and publish on this man, who has had an incredible influence on the DCA and its development up to the present day. If any fresh material appears, I'll print it.

The cartoon (*left*) comes from *Yachting Monthly*, 1914. This is not a new topic, then. But don't worry, we'll get there eventually ... 2114 perhaps? KM



"... Correct disposition of crew weight is essential for safety and efficient performance ..."