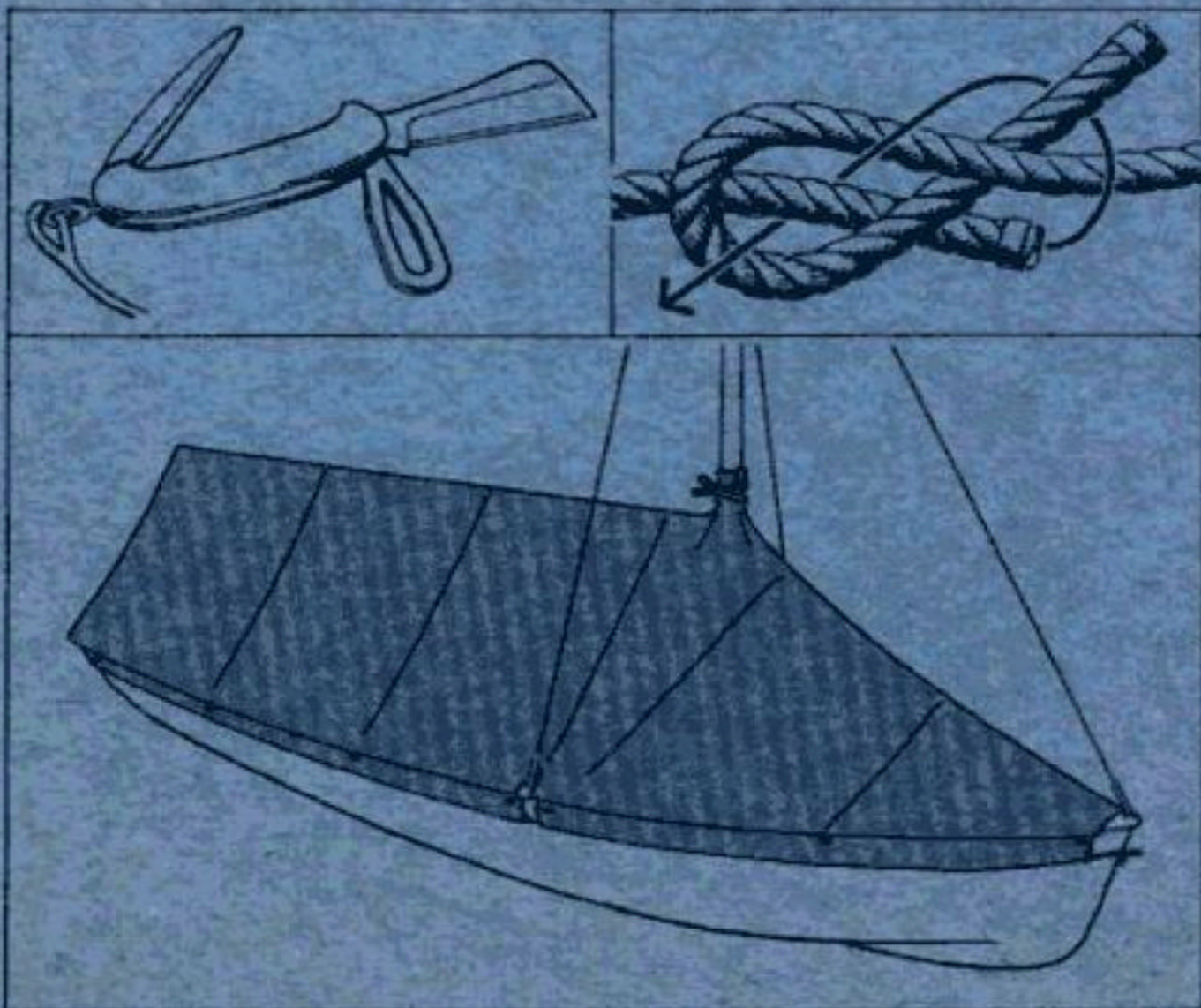


# *Dinghy Cruising with Phillips*

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*An experienced dinghy cruiser shares the pleasures  
and shows you how to avoid the problems  
of open-boat sailing, for a day, a week or more*



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## *Acknowledgements*

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The Ontario Sailing Association provided a grant to the Canadian Wayfarer Association to cover the cost of typing and copying.

Alan Phillips  
Hamilton  
February 1981

*Uncle Al's note: Thanks also to Ken Elliott who not only did the wonderful illustrations in this book but also paid from his own pocket to have this work published.*

## Chapter 1: Introduction

When you have learned to sail a dinghy, there are several things you can do. You can enjoy yourself simply sailing around a harbour, small lake or bay in whichever direction the wind favours you. If there is another dinghy in sight, you can race it. You can join a club or Class Association and have a great time racing each other "around the buoys". Apart from trading up to a bigger boat, the other thing you can do is to go cruising.

The first time you decide to sail from the place where you launch to a beach a little distance away, or to go and have a look at another landing, or to sail around your island, you have started cruising your dinghy. From small beginnings, you can work up to making a twenty- or thirty mile cruise in a day. You can venture from the sheltered waters of a harbour, out on a lake, make open water crossing, take camping gear and go for a weekend, week, or weeks at a time.

Adventurous dinghy sailors have made ocean crossings of several hundred miles, doing their sleeping, cooking, and eating on board. A dinghy has been sailed from Scotland to Iceland, and from Scotland to Norway. This booklet is not concerned with that kind of high adventure, though we can learn a lot from the people who have done such cruises. It is concerned with day-sailing from point to point, camping by dinghy, or sailing from one port to another. These journeys may be in sheltered or open water, but sailing at night will not be discussed except incidentally because you might be becalmed or delayed and so happen to be out after dark.

Most cruising is done in cabin boats, but there are some advantages to cruising in a dinghy. The biggest advantage is something intangible: the intimate and informal relationship which you can develop with the waterways and the country in which you are cruising. There are also very real advantages due to smallness, lightness, and shallow draft: the gear is easy to handle, and no one sail will be more than you can manage on your own. You can paddle or row when you are becalmed or when you need to manoeuvre in a narrow space. If you happen to go aground, you can usually pole off, or step out and push off. You can beach and pull the boat out of reach of breakers, manhandle her through shallows, or even portage. This way you can enjoy many peaceful coves where bigger boats cannot go. You can unstep or lower your mast and row under a low bridge. Finally, everything on a dinghy is smaller and costs less.

Against all this, however, you have the obvious disadvantages of small accommodation and stowage space and there is less protection against the weather. But the only really important disadvantage is that if you should be caught out in a severe storm, even with all care and good seamanship, you might be swamped or capsized. You have to be able to self-rescue, but this may be tough. There will be damage to stores and possibly loss of equipment. Of course a storm can sink any boat, but in a dinghy your "survival conditions" come at least one Beaufort Force lower than in a cabin boat, given equal care, luck, and good seamanship. However, you are less likely to suffer irreparable hull or rigging damage in a dinghy than in a larger boat.

Much of your thought and preparation should go to guarding against capsizing, but such an accident is extremely rare, and is nowhere near as high as the risk of collision with commercial craft. My wife and I have cruised every one of the Great Lakes during the 1970's and have covered thousands of miles including whole day and whole night open water crossings yet we have never been anywhere near capsizing, nor have any of the friends who have cruised with us.

Ontario summer weather is usually pleasant. We have dropped our mainsail for a sudden squall or thunderstorm only once or twice. We have never dropped all sail for the weather, and have not used our sea anchor except to test it. Only a few times have we stayed ashore for a whole day because of a strong wind, rain, or fog, and never for two days in succession.

Nevertheless, I shall put a good deal of Dinghy Cruising emphasis on equipment and precautions for heavy weather, although such are rarely needed. If you are well prepared, you are very unlikely to be in danger. Most dinghy cruising is fun and very relaxing.

Dinghies are usually sailed by a skipper and one crew member but there have been successful dinghy cruises done with three, or with small families, as well as many single-handed cruises. (I do not think any child should be taken in a dinghy unless he or she can swim.)

It is my hope that this booklet will encourage others to start out, and start out safely, to try the type of vacation that we have enjoyed so much. After our first major dinghy cruise, we both said we had not enjoyed a vacation as much since our honeymoon, 20 years earlier.

## Chapter 2: Planning

**Areas to Cruise.** Your own home waters may be all you need to start cruising. But with a trailerable dinghy, all the accessible waters of North America are open to you. Ontario in summer may well be the finest area for dinghy cruising in the world. Its waters are notably free of sharks, crocodiles, alligators, piranhas, and other deadly creatures. You will appreciate this, as in a dinghy you are very near the water indeed. There are many areas of the Great Lakes with off-shore islands and thus sheltered waters between the islands and the shore. The scenery is magnificent, especially when you can be so closely surrounded by it as you are in a dinghy. In the uninhabited areas, you can camp or picnic almost anywhere. Where there are cottages, there are usually occasional uninhabited islands, or National or Provincial Park areas. Certainly I would choose an area with islands, for cruising on the Great Lakes.

There are the "Thousand Islands" east of Kingston at the beginning of the St. Lawrence River, the "Thirty Thousand Islands" on the eastern side of Georgian Bay, and the many islands of the North Channel. Lake Superior has some wonderful areas, though its water is so cold that it is not safe for the inexperienced.

Reading books about these cruising areas is a fine way to spend time in the winter. Some excellent books are listed in Appendices, as well as a library of logs of other people's cruises by dinghy, which can be borrowed by mail. Look at nautical charts, too. It is not difficult to teach your self to read charts so that you get a good idea of the shoreline, the depth of water close to shore, the nature of the bottom, and what shelter there will be for anchoring and camping.

Do not skimp on buying charts. They are not very expensive and are well worth the cost. If you have an interest in an area, buy the chart at once and study it. Get into the habit of getting out the chart when a friend drops in and starts to talk. Having the chart on hand at the right moment may lead to planning a wonderful vacation. You certainly cannot do it properly on road maps.

When you have decided on an area, you will need all the relevant charts including the largest scale available to get the details, and the smaller scale, wider area charts to get the general picture. (The experienced dinghy cruiser can usually do without the large scale harbour charts). It makes sense to take along charts of adjacent areas, in case you change your plans and want to go further, or perhaps sail on downwind and hitch a ride back to your car.

The prevailing winds in the Great Lakes area are from West and South-west. Plan your trip with this fact in mind. Choose the more eastward direction for open-water crossings. A long exposed beat is tiring and wet in a good breeze, tedious in a drifter. Plan to finish any cruise travelling eastward rather than westward.

**One Boat Alone, or in Company?** For many, the choice between sailing alone or with other boats will be automatic because of circumstances, temperament, and number of friends who are interested. We have cruised mainly in company, but after one ambitious week's cruise alone, we felt the following factors should be considered.

With a single boat, you are free to start off in the morning when you are ready, stop when you like, or go on to all hours and skip supper if you wish. In company, even if you are tired and ready to stop, you may be unwilling to inflict a possibly uncomfortable campsite on other people. Alone, you can accept a small or inconvenient anchorage if you prefer, rather than go on and look for something better.

When you are sailing a single boat there is no pressure to keep up with others. You can take a few extra minutes to get the boat ship-shape before you move off, you can heave to and reef in a leisurely fashion instead of having to keep on, you can reef as early as you like if the wind is freshening, or you can decide to take shelter without asking anybody. If the crew is busy on something else or asleep, you can leave the jib hauled in too tight and it does not matter that you lose a bit of speed. Or if you want to, you may go on as fast as you like and not be held up by slow-pokes. In a calm, you can decide to row or sit and wait, as you wish. And especially when sailing alone, there is freedom from the anxiety you can suffer when one boat gets out of sight ahead or lags behind.

On the other hand, sailing in company provides companionship and we have made long-term friends cruising. There is the double-check on navigation and compass courses, and ready help in the event of equipment failure or for making incidental repairs. If you should have a big misfortune or even lose your boat on the rocks, such close help may be vital. We have once or twice felt, while cruising alone, that we were at risk of being molested at an anchorage or campsite by thieves or vandals. There may also be a problem if you want to leave your boat at a dock or beach to go shopping, which sailing in company would solve.

When cruising in company, our preference is for two to four boats only. This would not apply to cruising resort or areas in which there are many campsites. But, in uninhabited areas, we tend to look for very small sheltered coves in which to camp, and more than three or four dinghies may not be able to beach or anchor together.

If dinghies sailing together are not all of the same class, it is important that they should have very nearly the same speed in all wind conditions, and on all points of sailing, especially the same speed on a beat, in order to stay together.



**Choice of Dinghy.** At this point you may have your own dinghy, and are not about to change. But, if the choice is still open, consider looking for the following desirable features:

**Stability.** It is good to be able to stand on the decked bow of a dinghy, and to be able to walk along the side decks, to fix the tent for example. This requires high initial stability, which means a broad beam and a relatively flat bottom with a hard chine.

**Water-tight Lockers.** These are very valuable both as storage space and for providing flotation if swamped. Water-tight or not, storage space is a most important consideration. There is never quite enough of it in a dinghy!

**The Sole.** If you are going to sleep on the sole or floorboards, you must have enough room to stretch out full-length, plus a bit of margin. A dinghy will usually sleep one on each side of the centreboard trunk, and you need sufficient width for your hips and height to turn over without unshipping the centre thwart. Floorboards over a bilge space are an advantage, so that there is not a puddle of water at the lowest corner.

**Self-Rescue.** It is essential to be able to right yourself (with the help of crew if carried) in the event of capsizing. There is no crash boat on a cruise, and in conditions that make capsizing possible, your friends in the other boats are going to have their hands full looking after themselves. It is also essential that your boat will not sink under any conceivable circumstances, including for instance, capsizing after getting a hole in one of the lockers by hitting a rock. Carry extra flotation securely fixed in the boat.

**Mast.** A pivoting mast is useful for going under bridges because it can be lowered while you are afloat. We prefer a wooden mast and boom, so that in the event of damage we would be more likely to be able to repair or jury rig it. Frank Dye, famous in England for his ocean passages in a 16-ft. dinghy, had his mast broken in a North Sea storm. He

cut away the broken section, then butted, splinted, lashed and stayed the two ends to make a shorter mast, and sailed on 200 miles to Norway.

**Distance.** Once you are out of your harbour or cove and in open water (which may be an hour or more after you set sail) you can hope to make four to five knots with a favourable wind, two to three knots when beating against a moderate wind, one and a half knots rowing in a calm. We count 20 nautical miles as a fair day's sail, though we often sail considerably more. If we have over 15 miles planned, we would have alternative stopping places noted on the chart. Remember that the pleasure and the success of a cruise is not proportional to the distance covered. Be content with distances you can manage easily in the time available. If you are lucky and have a favourable wind, you will have an extra bonus of being able to go on further than planned, or spend time ashore and have unscheduled stops.

**Flexibility.** Make a flexible plan, whether for one day or for a holiday of several days or weeks. Allow at least one day "lay over" for every four days' sailing. Each day, have alternative plans in case too little or too much wind prevents your covering the distance you hoped. Study the chart for shelter or ports of refuge along the way. Plan a round trip cruise in such a way that if you have to abort part way round, there are places where you can land and hitch-hike or take a bus to the place you have left your trailer. If you have let yourself get into a situation in which you are forced to sail back to your trailer on a certain day, you may be pressured into sailing in bad weather and so run into danger.

**Yacht Club Membership.** If you are hoping for hospitality and use of facilities at other Yacht Clubs, it is only fair to have your own membership paid up, and to carry your membership card.

## Chapter 3: Equipment

### Legal Requirements

These vary from time to time and from place to place. Before cruising any area, you should check the local requirements.

- \* In Canada, contact the Canadian Coast Guard at <http://www.ccg-gcc.gc.ca/>
- \* In the U.S., the requirements may vary from state to state

A brief summary of current (2001) Canadian legal requirements for Wayfarer-size dinghies is provided below:

#### Personal protection equipment

- \* one approved personal flotation device or lifejacket of appropriate size for each person on board
- \* one buoyant heaving line of not less than 15 m in length

#### Boat safety equipment

- \* one manual propelling device or
- \* an anchor with not less than 15 m of cable, rope or chain in any combination
- \* one Class 5BC fire extinguisher, if the pleasure craft is equipped with a fuelburning cooking, heating or refrigerating appliance
- \* one bailer or one manual water pump fitted with or accompanied by sufficient hose to enable a person using the pump to pump water from the bilge of the vessel over the side of the vessel.

#### Navigation equipment

- \* a sound signalling device or a sound signalling appliance
- \* navigation lights that meet the applicable standards set out in the Collision Regulations if the pleasure craft is operated after sunset and before sunrise or in periods of restricted visibility

#### Distress equipment

- \* Powered boats not more than 6m in length (an outboard motor on a Wayfarer) must carry distress equipment: a watertight flashlight or 3 Canadian approved flares of type A, B or C
- \* A reminder from Dick Harrington that the U.S. Coast Guard is very "sticky" about its requirement: "A minimum of 3 approved and currently dated distress flares."

**Lights and Horn.** If you are under way after sunset running lights<sup>1</sup> are required, i.e., red and green port and starboard lights, and at least a light to shine on the sails. If you ever anchor where anyone might be navigating at night, an anchor light<sup>1</sup> (360°) must be hung in the rigging. We have a "man-overboard" light that doubles as anchor light.

<sup>1</sup> According to Canadian Coast Guard Boating Handbook, these lights are not required by boats under 7 metres long; but a white light must be shown in the direction of an approaching vessel "in time to prevent a collision".

While you are not required to carry a fog signal or bell at all times, if you should be out in fog, either anchored, adrift, or under way, you must have an "efficient means" of making a noise. A horn blown with your own breath is the most reliable. It is easily stowed in a clip on the hull or bulkhead and also comes in handy for attracting the attention of your companion boat or calling people for meals, etc. You will need it if you are going to try to get a swing bridge to open for you.

**Radar Reflectors.** There are quite strict regulations regarding radar reflectors, but the requirements "need not be met if they are not essential for the safety of the pleasure-craft, or are impracticable". I presume therefore that

you would not be penalized for not carrying one, but if you were run down by a commercial vessel, you might have trouble with your insurance company if a radar reflector could have prevented the collision. Carry a collapsible reflector, ready to be assembled and hoisted, in case you cannot avoid being in a commercial shipping lane in a fog or at night. It should give a big enough echo to look like something that might dent a freighter. When assembled it is essential that the three reflecting planes are exactly at right angles<sup>2</sup> and stay so while aloft. It should be flown in the oblique ("catch rain") position.

<sup>2</sup> reflector with an inexact right angle, more than 2° off, is worse than a sheet of foil the same size.

**Equipment that is not legally required but is advisable.** Most of the following items are desirable or essential for a camping cruise depending upon the amount of open water you plan to cross and the conditions you might encounter. A good deal less would be needed if you were going to make only a five-mile sail across the bay.

**Oars.** Get the longest oars you can, as the longer they are, the easier it is to row. The limitation on this will be convenient stowage, which usually has to be on the sole of a dinghy. Oar-locks should be placed as far outboard as possible, and about 15 inches aft of the centre thwart.

**Paddles.** Although oars are best for a long haul, and essential if you have to pull against a current or a strong wind, a paddle is handier for manoeuvring to or from the dock, or in a crowded anchorage. I also keep a paddle with a telescopic handle in one of the closed buoyancy compartments, as a reserve in case of a capsize and loss of gear.

**Anchors.** For a major cruise you need two anchors. You will use both when riding out a strong blow, and you need a reserve in the event of losing one, which can happen easily. A cruising sailor's attitude to anchors should be to take the heaviest he can stow, not the lightest he can get away with. As you are taking two, they may as well be different types, for example, a Danforth or a CQR (plough) for a good holding bottom, and a grapnel for rock. I carry a nine-pound Danforth and an eight-pound grapnel, each with six feet of chain and 100 feet of rope. The main function of the chain is to spare the rope from damage on rocks. Also it cushions the initial shock when the rope comes taut, and it does not foul around the stock during a quiet evening.

**Ground Tackle.** The rope should still be thick enough to withstand a good deal of chafing. Use half or three-eighths inch synthetic rope although its tensile strength when new is above what is needed. Chafe (which of course should be guarded against) requires a very large safety factor here. Such a quantity and weight of ground tackle seems ridiculous on a summer afternoon. It does not seem ridiculous when you are sleeping afloat in your tent and the wind picks up to gale force, whether you have a rocky shore or open lake in your lee. Wire all shackle pins. Splice the rope securely round the thimble, or, if you use an anchor bend or bowline, seize the end by whipping to the standing part. Always leave the bitter end of the rode tied to the boat, and you are more likely to finish the cruise carrying the same two anchors you started with.

**Inflatable Boat Rollers (1 or 2).** Boat rollers are invaluable for dragging a dinghy up the beach, and can be carried inflated as extra buoyancy. Imagine the weight of one of them filled with water. This same force acts in reverse when filled with air, considerably increasing your boat's buoyancy. They must be securely lashed in position.

**Fenders.** The boat rollers can be used as fenders, but they are expensive items to expose to damage. Also, after using them in this manner, you may forget to lash them securely when you sail away. It is probably better to buy separate fenders, or to parcel up old life jackets if you have any. Never use your in-service life jackets.

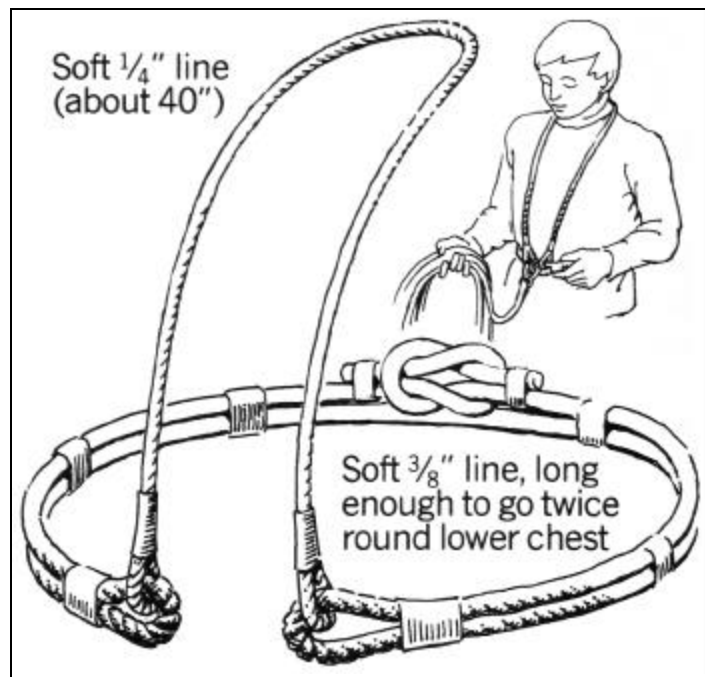
**Compass.** One mounted and one hand held compass are required. Positions for mounting the boat's compass will be discussed later, as this can be quite a problem.

**Sea Anchor.** A sea anchor is useful only in a strong wind with heavy seas, and requires plenty of sea-room. A drogue of 18- or 24-inch diameter, with swivel, is usual. (You do not often meet anyone who has actually used one.)

**Bailers.** You need two buckets tied to the boat in addition to Elvstrom or transom bailers if fitted. Bucket handles must be rugged and securely fixed. One bucket with a well-fitting lid is handy to carry things that need to be kept dry.

**Bilge Pump.** A good supplement to the essential buckets is a small hand-held pump, with a suitable intake hose to slip under the floorboards, and a discharge hose to go overside or into the centreboard trunk.

**Safety Harness and Life Line.** Many people do not carry a safety harness, but to have one on and securely tied to the boat may save your life. In the event of capsizing, the boat may drift faster downwind than you can swim, or if you fall overboard, big waves might hide you from your crew. A lifeline is even more important for the skipper if the crew is not an experienced helmsman. Suppose the jib is poled out, or spinnaker flying, when you fall overboard; the crew will take a little time to stop the boat, let alone trim sails and beat back to you single-handed. He might even forget the centreboard in the stress of the moment. It is better to have your life-line attached, then you will stay within shouting distance. You can buy a commercial harness, or you can make one out of webbing or rope. Think carefully which is the weakest link (often a D-ring) and be sure it is strong enough. Test it by hauling yourself up with block and tackle. Metal parts ought not to distort at all under your full weight.



**Home-made Safety Harness.** Put one arm through, pass harness around back, put the other arm through, like putting on a jacket. Then attach the life-line by snaphook or bowline that holds loops together.

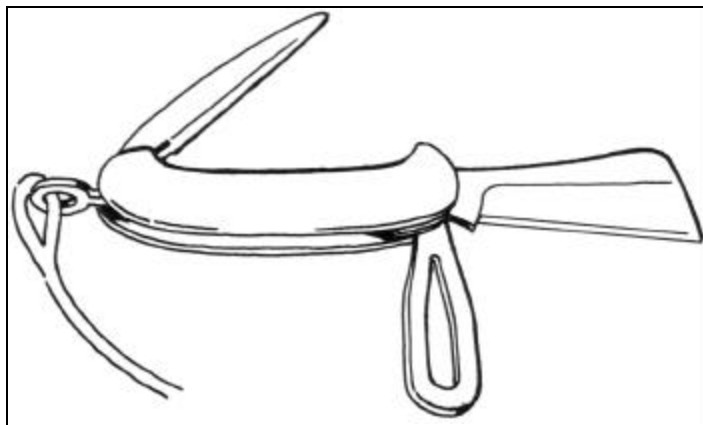
**Life-line.** 16-20 feet of 3/8-inch synthetic rope tied with bowline or fisherman's bend to the centre thwart, skipper to starboard, crew to port, and always pass that way in the boat to avoid tangling. (N.B. I have had a bowline come undone while moving around with the line slack, using braided synthetic rope. This must not be allowed to happen.)

**Water Containers.** For ocean sailing, a supply aboard of fresh water is a vital necessity. Containers must be securely lashed, and protected from damage. Water is the most essential item of stores. When sailing on fresh water, even

polluted, you are never going to die of thirst. Where the lake water is drinkable, you need carry only enough for 24-48 hours, which you may need at a campsite where the local water is unfit for drinking. Replenish your water containers when you are out on open water. In more populated areas, carry enough for three or four days, as not all places where you camp will have good water. Two or three smaller containers are better than one large one, for ease of handling.

**Flashlights and Spare Batteries.** Even for a one-day sail, carry a flashlight. For a camping trip you need two or more. The right-angled kind that clip on to the belt are very handy. It is convenient to use the same size of battery for flashlights, radio (if carried), running lights etc. Fewer spares need be carried this way.

**Whistles.** A whistle that will not break (and that has been tested when wet) should be carried by each person in case he falls overboard, or gets lost or injured in the bush when ashore.



**Knives.** Every sailor should carry a knife, preferably with marlin-spike and shackler, for many everyday uses. Once in a lifetime you may have to cut a line fast in emergency, so it should be sharp, always. (Also it is more useful that way, every day.)

## Chapter 4: Rigging and Sails

THE stresses on the rigging when cruising are usually less than when racing. The wear, though, during a long cruise, is much greater, and so is the tendency of fastenings to work loose. Turnbuckles should be tightened and wired, or replaced with lanyards, or perhaps bypassed with a lanyard, in case of failure of the turnbuckle screw. Shrouds and forestay must be examined and if any single wire is broken or badly kinked, the shroud should be replaced. One Wayfarer sailor doubles his shrouds for ocean cruising. All screws, bolts, rivets, tangs etc. on the mast must be checked, and replaced or repaired if damaged. Cotter pins should be taped. Your masthead pennant will be up there for the duration of the cruise, so make sure it will not work loose. Check the bow fitting and make sure it is secure.

Look at the chain plates and their fastenings to the hull or knees. Weaknesses in the attachments of the standing rigging may be very difficult to correct, and that may be the designer's or the builder's fault, but the safety of boat and crew is the sole responsibility of the skipper. In the event of failure of a fitting, and a consequent disaster, it is not of the slightest value to be able to blame someone else. So weaknesses have to be corrected before you start.

Check spreaders and spreader fittings; tape their outer ends and anyplace where the sail is going to chafe. Spreader are important for the security of the mast and if one comes adrift, sail must be shortened immediately to reduce lateral stresses. Look closely at the mast step, pivot, and tabernacle, and strengthen if necessary. Also examine the rudder and centreboard for cracks, and make sure their fastenings, pivot bolt, and pintles are secure.

If you anticipate lowering the mast while on the water, it may be worth splicing a rope tail to the forestay and leading it through a block or smooth shackle back to a stout

cleat behind the wave breaker that you can reach from the cockpit. Then you can lower the mast without going on the foredeck, provided that the lowest two piston hanks of the jib are not attached (they will foul the rope-tail splice). Incidentally, and this is a heavy weather problem, if you have to take the jib down and sail under main alone, make sure you tack down the jib halyard to the bow fitting so that you have, in effect, a double forestay. It may prevent a broken mast!

For halyards we prefer rope to wire, because wire can wear the sheave, and can jump off it and jam. The rope should be durable yet keep stretch to a minimum. We take a spare length of line long enough for a main halyard. We also carry and reeve the spinnaker halyard, even though we do not usually carry a spinnaker when cruising. The spinnaker halyard can stand in for a jib halyard or replace a broken shroud, provided one uses reduced sail. It is also handy for hauling up the laundry.

**Sails.** During most of the cruise, there will be either enough wind or too little, and for both cases you will want your full racing sails. The dinghy will be more heavily laden, and it would be a mistake to go off with small sails just because you are cruising.

**Mainsail.** A cruising mainsail can be simplified by dispensing with battens. The only purpose of battens is to prevent leach flutter in a sail cut with a large roach and the only purpose of the roach is that extra tenth of a knot when racing. You lose very little speed by cutting off" about two-thirds of the roach, and dispensing with battens.

Leave a little roach, or you get a light leach. A sail-maker would do this for you, but on our Wayfarer mainsail, we did it ourselves and came out with a sail that sets well. We

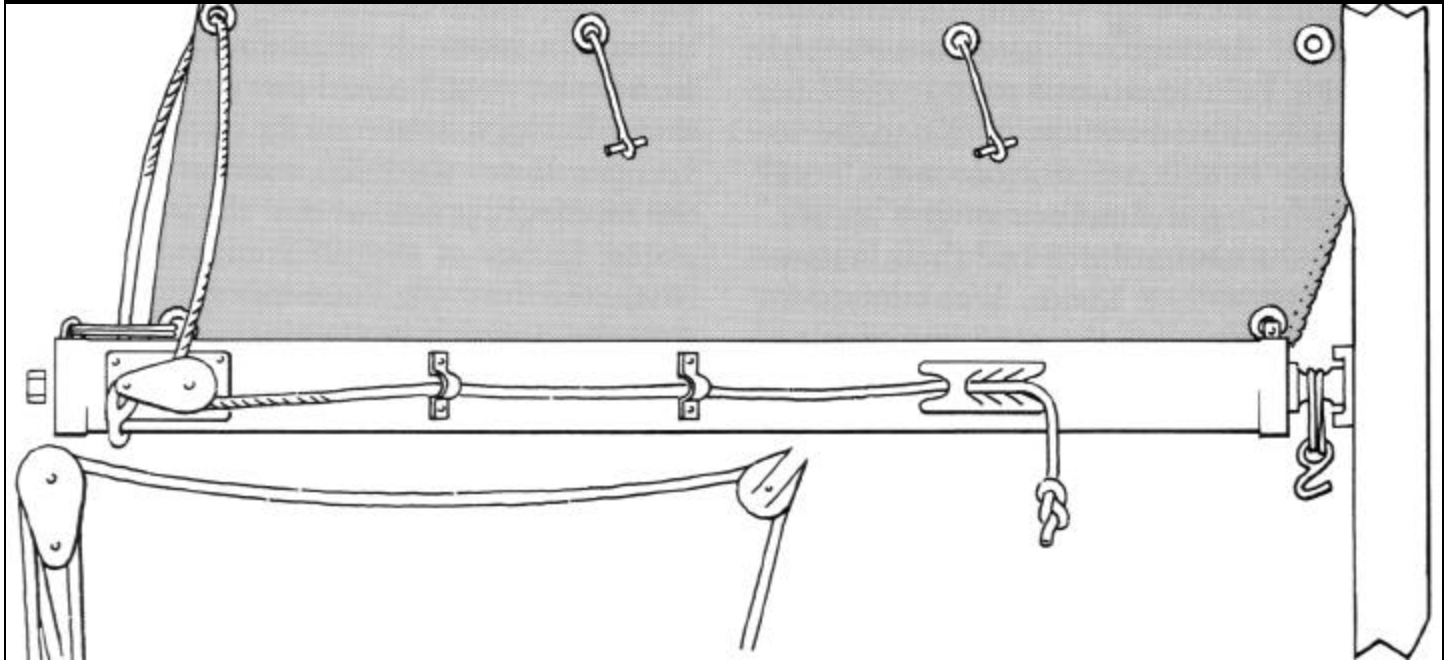


appreciate being able to drop the sail into the boat and not worry about treading on the battens. It also makes reefing easier, and simplifies rolling the sail around the boom for the night.

**Reefing.** *The ability to reef is essential, not optional,* for open water cruising. If racing gear or fittings prevent it, they must be removed. You have got to be able to reef on the water in a blow and you may not have a great deal of

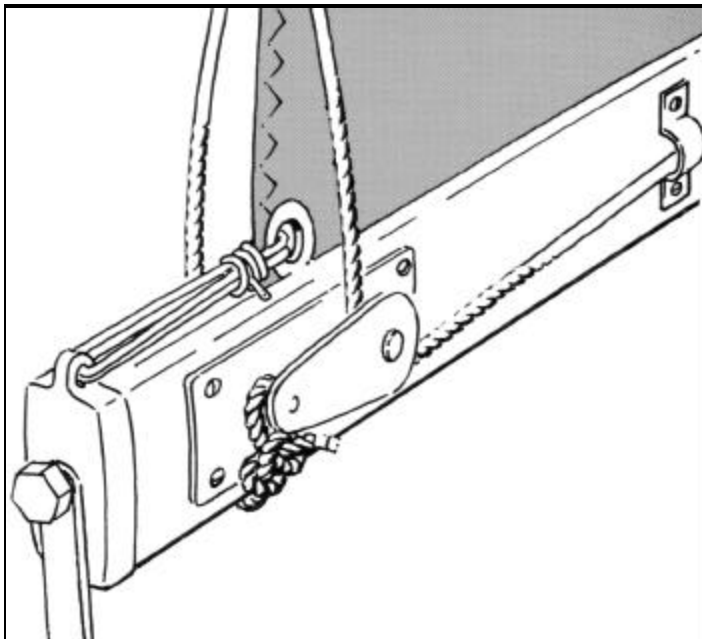
sea room. Thus it is important to be able to do it promptly and without too much drifting.

Most people find that jiffy or slab reefing is quicker and easier than roller reefing. (A significant disadvantage of roller reefing is the torque on the gooseneck when sailing hard while reefed. I have twice broken the gooseneck this way.) We installed reefing cringles ourselves with a kit. Or you may like to get a sailmaker to do it. The illustration shows the fittings and their relative positions.

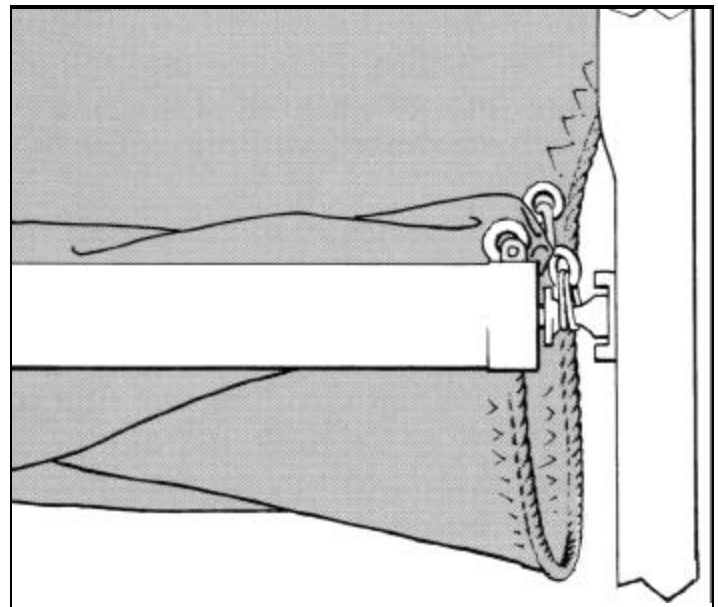


*Slab or Jiffy Reefing (not to scale)*

The first reef should reduce the mainsail area by about thirty percent. The leech and the luff cringles take practically all the strain and the intermediate reef points can be quite thin line or shock cord with only singly reinforced grommets. The points merely keep the bunt of the sail from flapping. The luff reefing cringle can be secured with a hook permanently attached to the gooseneck.

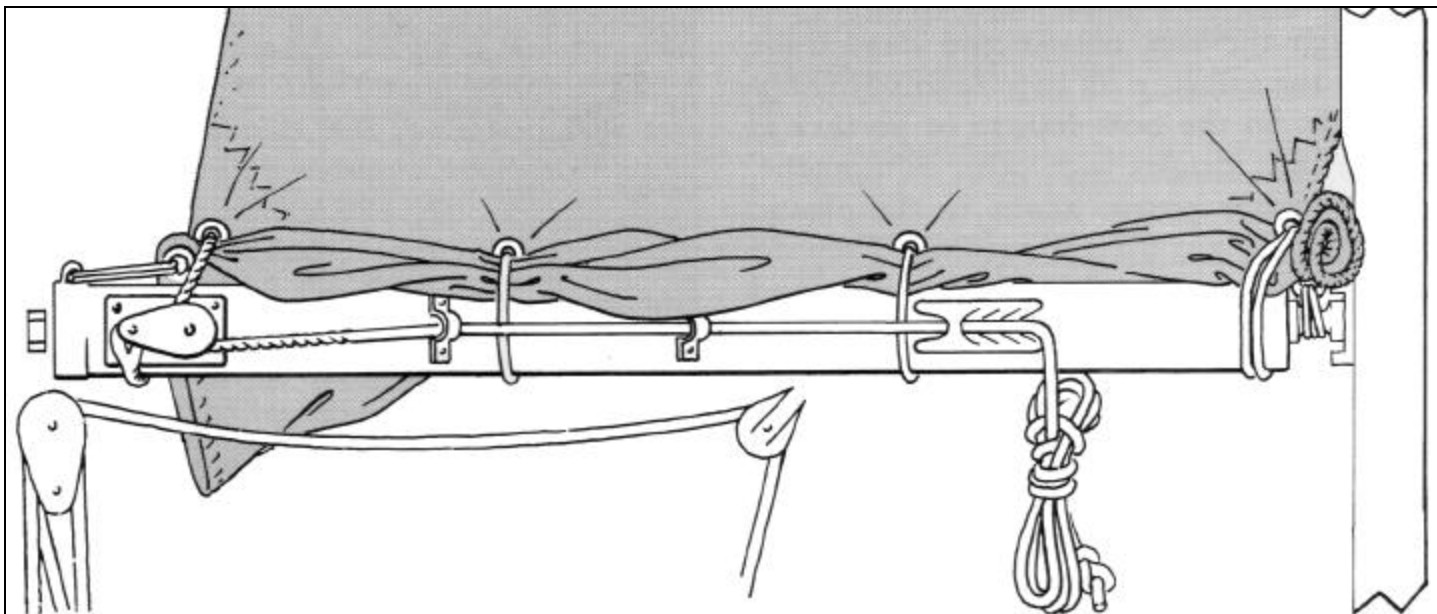


*Before ...*



*... during ...*

Jiffy reefing can be performed in about thirty seconds without change of direction or loss of speed. Tidying the canvas from the tack aft takes a little longer, depending on the circumstances. The slack canvas at the tack should be secured with a lashing through the luff cringle. The clew, unless you heave-to, is, of course impossible to secure and we usually leave it, providing it is not fouling the main-sheet. The result looks untidy but is extremely effective.



... and after reefing.

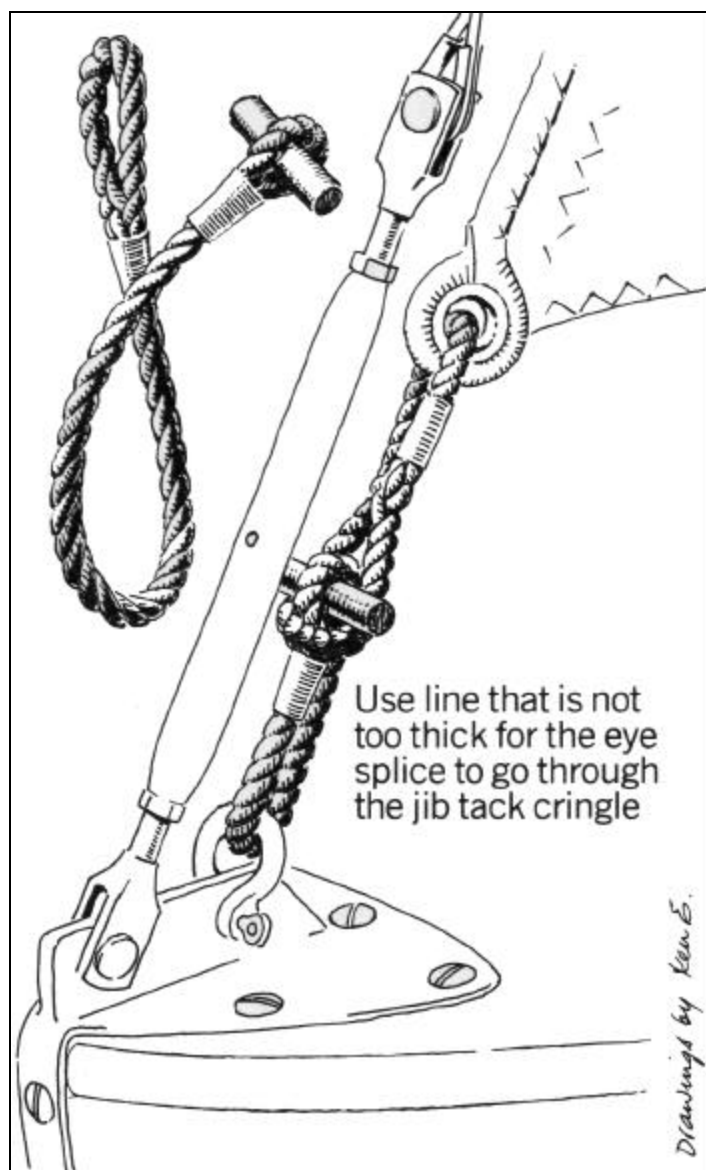
To un-jiffy reef takes more time and may require rounding up into the wind to hoist sail again. (A further advantage in this rig is that the main may be partially scandalised in calm weather, to give headroom to a rower.)

If you are on a long open water cruise and unable to reach shelter before a real blow arrives, it is well to be equipped to pull in a second reef, or else to continue with roller reefing on top of the first slab reef. Our second reef reduces the mainsail to forty percent of its original area.

Sailhead flotation or masthead flotation is recommended to prevent turning turtle if capsized. Enough styrofoam (or cellular plastic sheet) sufficient to displace 10 lb. of water (e.g. a triangle of two to three square feet, one and a half inches thick) in a pocket at the sailhead should suffice. Several thin sheets of foam are more flexible than a single thick slab. Be sure the foam is "closed cell" and not a sponge!

**Foresails.** The regular racing foresail or genoa is fine for cruising. The plastic window is amazingly robust - ours is over 15 years old, and has not cracked or worn through its stitching. When sailing with a reefed main, the genoa may be too much foresail, and taking it down altogether leaves the boat unbalanced with a heavy weather helm and too much strain on the rudder, tiller and helmsman. A genoa can be reefed at the foot, with luff and leach cringles and one or two reef points. Alternatively, a working jib about half the area of the genoa is a useful sail to carry.

It is important to make things easy for the crew shortening sail on the foredeck, as he will be doing this when the wind gets up and there may be quite a sea running. Replace the tack shackle with a strop that fixes with a toggle and eye as shown in the illustration. It is very easy to release and to fix when the tension is off the halyard, and has no shackle or pin to drop in the water. If you want to make the strop, the toggle can be secured by whipping, very tightly indeed; and an eye can be made the same way.



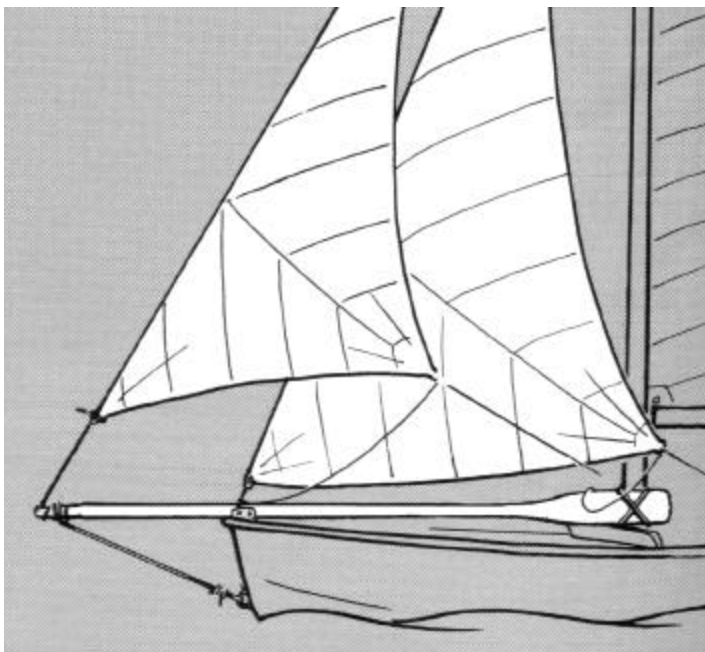
Splicing both is better and is good practice. We use a longer strop for the working jib than for the genoa, and

each sail's strop is left through the tack cringle and stays there when the sail is in its bag. A sturdy snap shackle on the bow fixture or jib tack is faster, but tangles with other equipment.

We prefer piston hanks to the plastic ones which are used for racing. They do need to be kept oiled and in good condition.

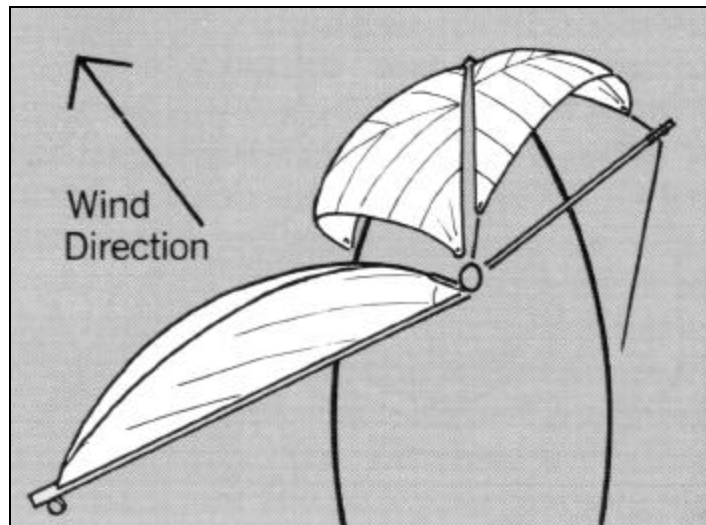
**Spinnaker.** Some people like to cruise with the spinnaker and try to plan for long down-wind passages. We find we so rarely get an opportunity to use it that it is not worth the space it occupies, and we do not carry one. For down-wind passages in strong wind and with a sea running, the safest and most comfortable way is to lower the main and wing out two jibs on poles. This greatly reduces the risk of broaching, but you cannot stop quickly. Don't fall overboard without a life-line attached.

**Trysail.** The working jib doubles as storm trysail if the following adapter is made to run up the mast track: a narrow strip of canvas, the length of the luff of the jib, with a bolt rope sewn in along one edge to suit the groove in the mast, and along the other edge eyelets to suit the jib's piston hanks. The boom is not used. Fairleads for the sheets are necessary and the spinnaker sheet fairleads may serve. This "try-sail adapter" idea is from an English sailor named Peter Clutterbuck. I do not know how often he has used it himself. In conditions that warranted a storm trysail, I would probably be lying to a sea anchor with the mast down, or lying on a beach in a sheltered cove if I had listened to the weather forecast.



*Improved cutter rig.*

**Light Air Sailing.** More often than a storm, you will have to contend with light airs. If you are carrying a working jib, you might as well use it in addition to the genoa. It can be rigged out forward on a paddle or oar, or it may be worthwhile to make a bowsprit that lies along the foredeck. On the Wayfarer, the inboard end of the bowsprit is wedged



under the wavebreaker and a bobstay runs to the bow ring at the stem. The working jib is set as a flying jib, using the spinnaker halyard. This arrangement is complicated to tack and it seems to add very little speed when hard on the wind. It does help noticeably on a reach, if you are not up to hull speed.

With a quartering wind, you can try a main and two fore-sails, with the smaller guyed to windward on the whisker pole with a downhaul.

**Auxiliary Motive Power.** We do not carry a motor; nor have we cruised with anyone who does. Oars and paddles are more reliable, cleaner, lighter, less expensive, less magnetic and do not require potentially explosive fuel. If you have to travel up a river you might think it worthwhile taking a motor, otherwise I recommend oars.

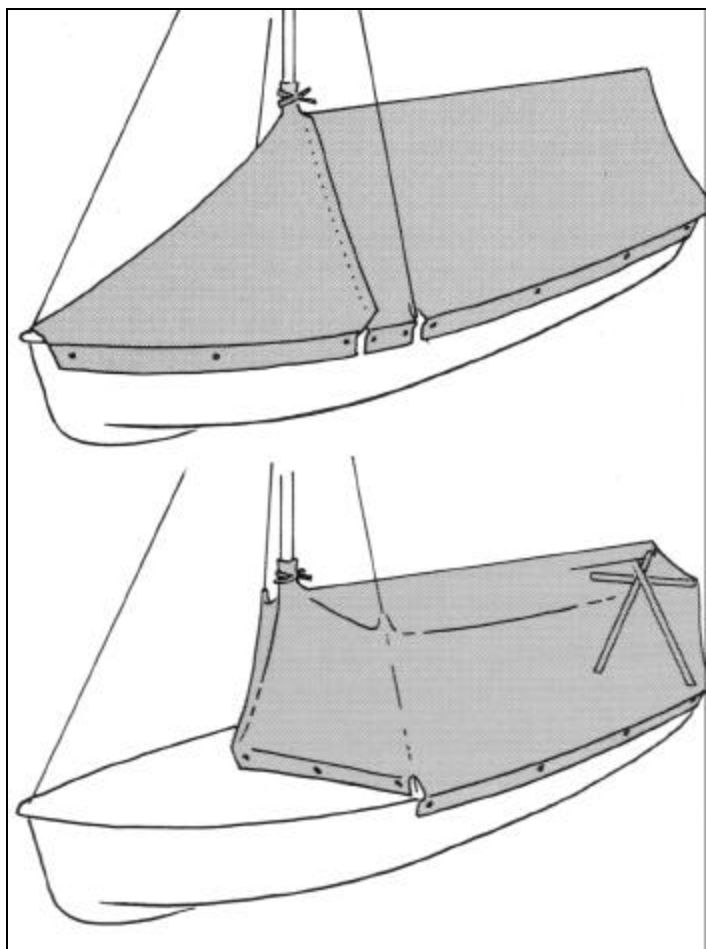
Rowing five miles, without hurry, in ten to twenty minute shifts is not hard work. We can make about two knots but one and a half is sufficient and easier. You can sing "The Volga Boatman" or "The Skye Boat Song" if you like. There is no call to hurry cruising but there is reason to think ahead. That is, to realize in good time that you will need to start rowing if you want to be in before dark. It is essential to wear gloves for a row of more than a few minutes, unless your hands are already used to it. Leather sailing gloves without fingers are excellent. Any leather or work gloves that will stand up to the wet will do well.

## Chapter 5: Camping

You can sleep ashore in a small tent, or in the boat under a "boom tent" which will be described below. Generally, it is better to plan to sleep on the boat unless you know there will be somewhere ashore to camp. In the areas you do not know, and in uninhabited areas, sleeping on the boat is usually advisable, but there is no harm in taking along a small land tent as well. Many areas of the Great Lakes are too rocky to drive in tent pegs, and you will need to tie guy ropes to trees or weight them down with rocks. (Al's note: Free-standing tents, which are practically the norm these days, are a good solution.) An advantage of sleeping on the boat is that your stores and equipment, and the boat itself, are there with you and you are better placed to protect them from damage by wind, sea, marauding animals or humans.

We usually sleep afloat, either swinging at anchor or tied to trees with a stern anchor to hold the boat off. Pulling the boat up a sand beach is an alternative, but be sure the hull is well supported along its length and not perched on a rock.

**Boom Tent.** The illustrations show two different types of tent design suitable for a dinghy. The first is a simple ridge tent which can be slung over a crutch-supported boom. Fastenings around the mast and shrouds need to be tight to keep out the rain. The skirt of the tent can be secured beneath the rubbing strake with velcro, press studs or



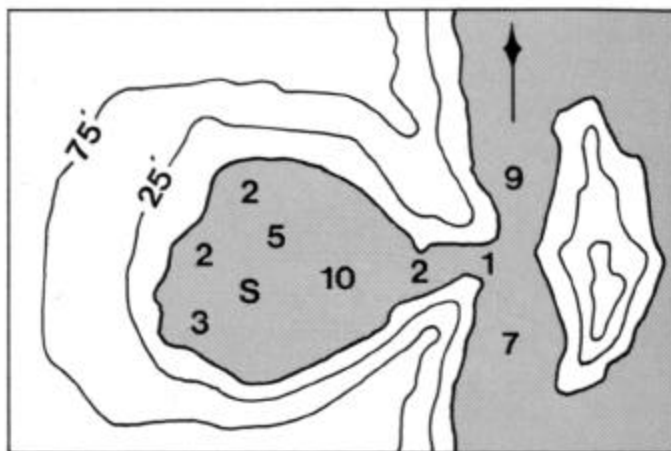
hooks. As additional security for extreme conditions, tangs or grommets may be sewn into the tent so that lines can be passed under the boat to hold the tent down in two or three places.

The tent may be designed to come right to the bow of the dinghy, or just forward of the mast. The longer bow gives good storage space protected from rain, but has the disadvantage of making the dinghy swing more at anchor in a wind. The second tent (supported by the shrouds and a spreader on the boom crutch) allows sitting room at the sides whereas in the first, you can sit only amidships.

Most dinghy tents are made of canvas, which is durable and relatively easy to repair, but is heavy and shrinks if stored when damp, and grows mildew if damp for a long period. There is frequently heavy dew on a summer night and unless you are willing to delay your start far into the morning, it is usually impossible to dry the tent before stowing it.

We are experimenting with ripstop nylon, which is lighter and takes less stowage space. It should be less subject to shrinking and less affected by mildew. (Al's note: An excellent source of advice here would be our resident expert cover and boom tent maker, Hans Gottschling at [eg@gottschlingboatcovers.com](mailto:eg@gottschlingboatcovers.com)) It may be possible to design your tent so that oars are used as struts or side battens. (It is almost a principle of dinghy cruising that every piece of gear should have more than one use.) Entrance to the tent may be over the bows, at the shroud, or at the transom. Factors to consider are configuration of your boat, and whether you can safely stand on the bow when afloat.

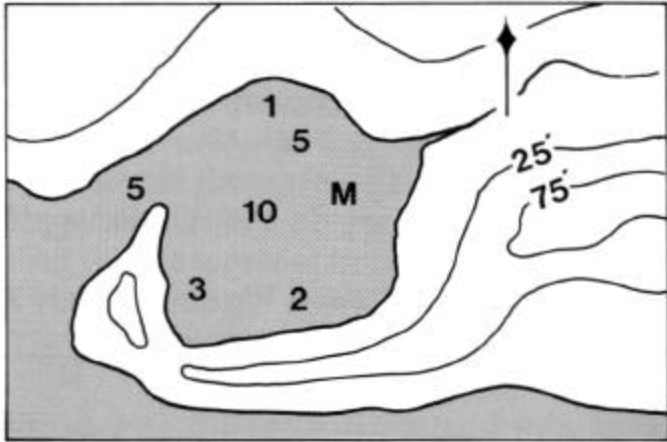
**Choice of Camping Spot.** The first and really the only essential in camping is sheltered water. You can compromise on almost every other factor. A great deal can be



*An ideal cove.*

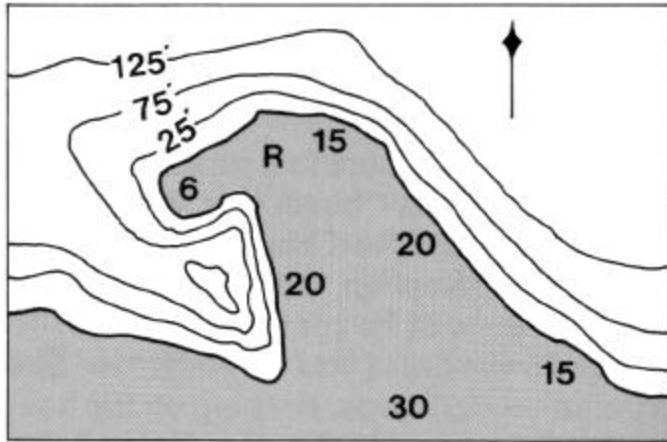
judged from a large scale chart. You do not often see a cove like the above but if you do, it is ideal. Nothing else

can get in: no waves, no swell, no wind, no big sailboats, no powerboats. Only a dinghy! The cove has a sandy bottom and probably a sandy beach.



*A good cove in any wind.*

The cove in the drawing above is also good, as any waves that come in through the narrow entrance will dissipate in the wide basin and on the shelving beach, and there is a hook to lie behind if the wind comes in at the opening.



*This cove would be untenable with a swell from the south or with the wind between southwest and east.*

The cove shown above is likely to be terrible if waves or swell are from the SW to E, as they will increase in amplitude in the funnel-shaped entrance to the cove, and reflect off the steep-to N shore into the one spot that looks to be sheltered.

If you cannot find a well protected cove, look for a beach that you have to approach up-wind, i.e. a "weather shore". This can be acceptable if the weather is settled with no threat of windshift. Often there are purely local windshifts after dusk and in the late morning - the land and sea breezes - but these will not usually get up much wave action. Beware of any shore on to which a swell is coming from the open lake. Listen to a weather forecast before you pick your camping site in the afternoon, and form some idea of what windshifts can be expected. If, for

example, SW winds are forecast, and you are enjoying a north or east wind that the weather bureau does not seem to know about, what you are experiencing is probably a local sea-breeze caused by convection over hot land, and the SW wind will come in after nightfall.

Look for protection by shoreline, islands, or a shallow bar, trees as a windbreak, or a sandy beach or at least some shingle or fore-shore free of trees so that you have somewhere to cook. Reeds are excellent protection from waves, but often the shore behind them is marshy. Avoid cottages, Indian reservations, sewage outflow (beware of creeks in inhabited areas), rocks and boulders just below the surface, grazing cattle, poison ivy. An island is often more peaceful than the mainland.

Think of the need for toilet. In an uninhabited area it is permissible to use the outdoors but bury everything with a trowel, or a few small rocks. This is legal and does not upset the ecology.

Beaching. You may have been out all day in the wildest weather, but the biggest risk of damaging your boat occurs when you are coming in to land. Avoid coming in to a lee shore, that is, with the wind blowing onshore, except in light airs, or to a sandy beach that you know is free of rocks. In any case, come in very slowly with the mainsail ready to drop and the jib ready to fly. Beating up to a weather shore is much safer and it does not matter if you have to row or paddle the last few yards.

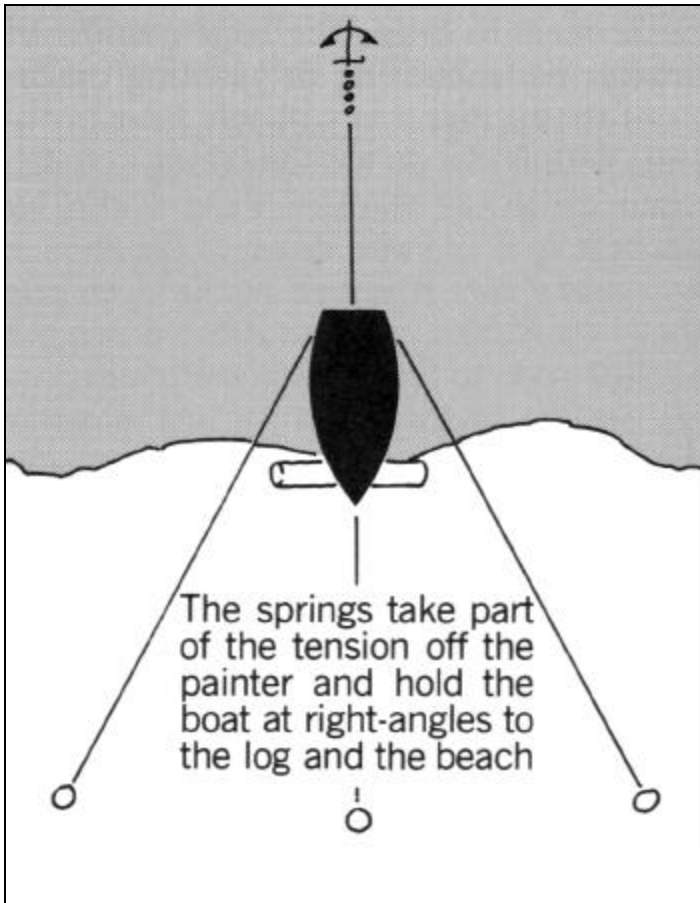
Judge when you are something less than 100 feet off the beach and drop an anchor from the stern. Pay out the anchor rode and use it to stop as your bow nears the beach. The rode can then be secured to a cleat near the transom, to the traveller rail if this is robust, or by a hitch around a stout stick wedged across the transom cutout. (The bitter end of the rode, of course, must be tied to the centre thwart or to something solid that it can't slip off, before you let go the anchor.)

Then take a bow line ashore, carrying a spare length to bend on, if the nearest tree, heavy log or large rock is too far for the painter to reach. When there is even the slightest swell coming in, or a cross wind, you will need spring lines from the quarters to run ashore and perhaps an extra line from one or both sides of the bow.

Unless the beach is soft sand, and free of rocks, it is essential to prevent your boat from working on the bottom. Safe mooring should be the skipper's concern while the crew is getting out the stove or lighting a fire to make coffee. The bow of the boat can often be lifted on to a piece of driftwood. Look under the boat for rocks sticking out of an otherwise smooth bottom.

When beached, or anchored close to a rocky shore, remember the possibility of an occasional large wave, or the wake from a nearby power boat or a distant freighter, surging your boat towards the beach or bumping her on the





A good mooring on a shingle or gravel beach. O.K. for supper and even for the night in very calm water.

bottom. If you cannot be sure the boat is safe as beached, then pull off by means of the anchor already set astern, into a foot or two of water, and accept the fact that you are going to have wet legs wading to and from the boat.

If the beach is sand, mud or fine shingle and if you have one or preferably two boat rollers, you can drag the boat up the beach. (Al's note: One thing you never want to do is beach your boat such that the centreboard is directly above your boat such that the waves breaking onto sand. The sand can get washed up between the box and the board and make the board impossible to pivot!!) A tackle secured to a tree or to a well-set anchor can help with this. Your main sheet tackle is probably not strong enough, but the boom vang tackle may be. If you are forced to camp where there is an onshore wind, and if the beach is suitable, consider rolling the boat up stern first so that waves coming in hit the bow and not the stern. They are less likely to lift the bow or to break into the boat.

**Anchoring.** In a sheltered spot, the boat can probably ride safely with the bow beached during supper, but for the night it is often best to pull off into a few feet of water. Mosquitoes are quite often less troublesome if you anchor some distance off-shore than if you are very close in. If you are going to swing at anchor, then it is necessary to check that you will not hit anything, whatever wind-shifts may occur.

It may be well to set two anchors with a "Bahamian moor" (two anchors over the bow set parallel to the stream) or whatever system you fancy, so that if the wind shifts, your rode does not foul the anchors and cause them to drag. The large number of articles on anchoring in yachting magazines shows that many people have problems with it. So do we. One thing you can often do in the shallow water a dinghy anchors in, is to swim down to the anchor and make sure it is well set, or even pile rocks on it. You can also climb down the anchor rode to free it. Beware of anchoring among rocks or dead-heads in water too deep for you to get to the bottom; you have not got much leverage or power on a dinghy to help you bring up a fouled anchor.

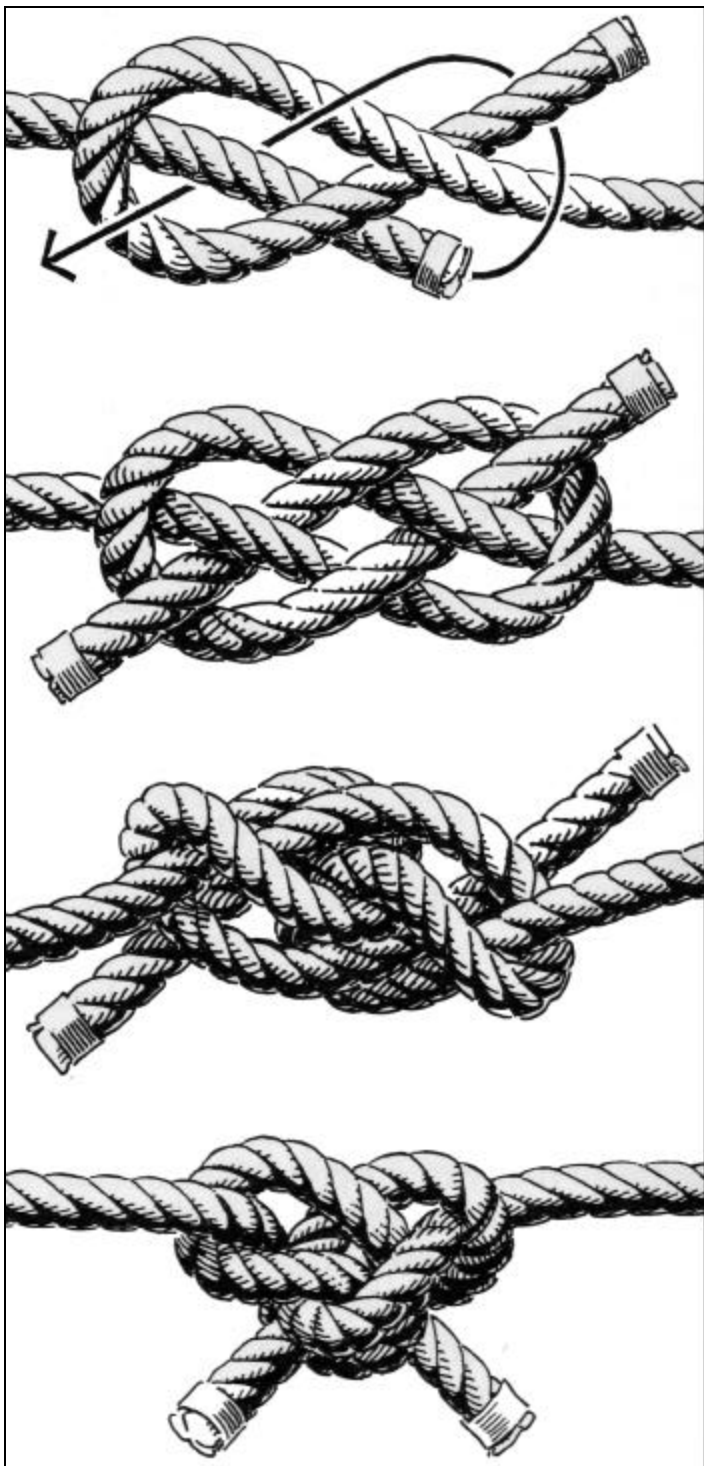
In a dinghy, it is difficult to gain sufficient sternway to set the anchor, if you have dropped it in the usual manner head to wind. Try sailing it in, by letting it go over the stern while you are sailing down wind. When enough scope is out, snub it to a cleat near the stern (or take a turn around the thwart with a bight of the rode). The rode should already have been led through the bow chock and round to the stern on the side opposite to the boom, "outside everything". Once the rode is snubbed and the anchor is set, clear it from the stern cleat (or take the bight off the thwart) and let the bow chock take the strain, which will swing the boat head to wind and allow you to take the sails down.

When anchored, if you take lines to the shore and the boat is not free to point head to wind, strain on the moorings and anchor is considerably increased in a cross-wind. This type of mooring needs long lengths of line and you may need to join two or more. Join them with a carrick bend, or an anchor bowline tied into an eye splice or into another bowline. The carrick bend (*next page*) is less subject to wear and weakens the rope less.

A reef knot is unsafe, and I would not trust a sheet bend unless I could be sure it would be continuously in tension. I have never known a carrick bend, once pulled good and tight, to have come undone accidentally. Also it is never jammed in the morning even if it has been wet all night. Carry plenty of long lines suitable for mooring. Except where subject to chafing, quarter inch synthetic line is strong enough. Don't forget to unship the rudder and raise the centreboard.

**Night time.** We usually use sleeping bags on air mattresses, one each side of the centreboard trunk. The weather is often too hot when you go to bed, but in the cooler small hours of the morning it is good to have sweater and socks within easy reach. Always have your shoes at hand, rubber boots, foul weather gear, and a flashlight.

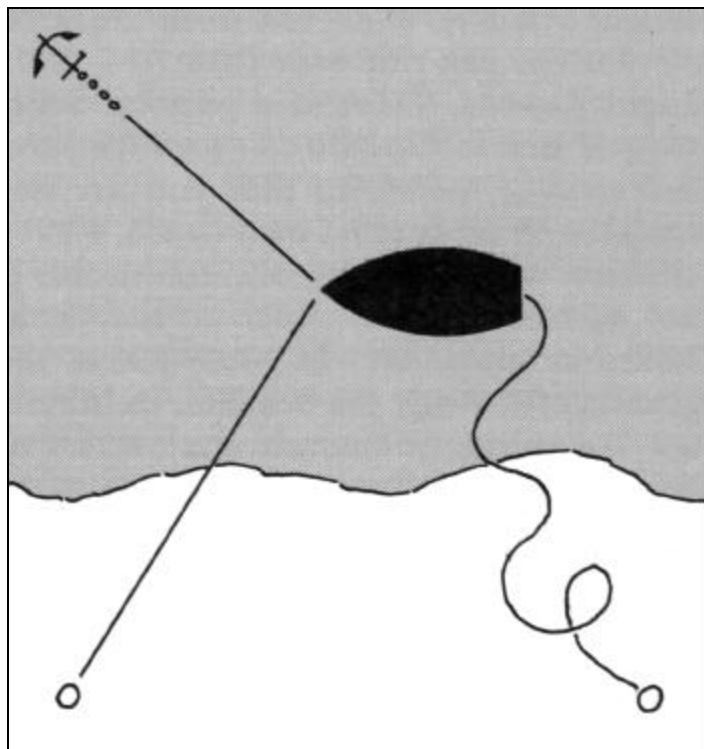
A thunderstorm on a summer night can pack winds that would shake almost any mooring. Also know where your paddle is, as anchors have been known to drag. A small thing to remember is a shock cord from a shroud round the halyards to keep them from slapping against the mast. If a stormy night is expected it is well worth while making a



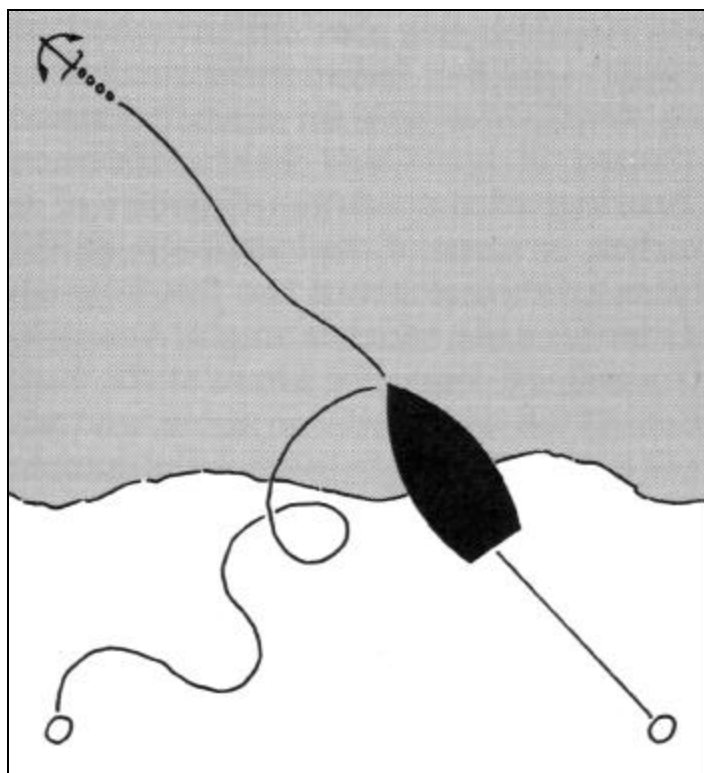
thermos of hot drink before you turn in. We usually sleep with the tent window open, protected with its nylon mosquito net, and we leave a mosquito coil burning at the stern and any place where the little devils can get in. These coils seem to smoulder away very safely as long as they are on a piece of foil to catch the hot ash. Sprays or skin mosquito repellent are alternatives but be sure that the sprays will not damage your tent or equipment, and that repellent on your skin is not going to harm your eyes if it gets rubbed in during the night.

Items left ashore overnight can get wet or blown away. Animals can get at food or do damage searching for it among gear that has the smell of food about it. In some

areas one must be aware of the possibility of theft or vandalism. A basic rule is not to leave anything ashore which you could not afford to lose. This means that there is not much that you can leave ashore.



**Night Position.** Bow line has enough slack to avoid excessive strain in crosswind. Bow line and anchor rode are both led through bow eye and secured inboard. Stern line is slack.



**For morning.** Pay out anchor rode and pull in stern line to beach the dinghy.

Before it gets dark, check your moorings carefully. When you expect a blow, double the lines that will take the strain. Think which way your boat will move if the wind shifts, and be sure there is no way it can bump a rock. Even if you are up and out of your sleeping bag before damage is done, it is, at best, unpleasant and difficult to alter your moorings in the middle of the night.

The dinghy is thus free to swing head to wind, but cannot float over the anchor to foul it, nor pull it out backwards after a major windshift. All three lines should be of a material that sinks, or have a small weight attached a few feet from the boat, so that she can ride over them.

**Legal Aspects.** There is a popular belief that no one in Canada can own the foreshore, and, therefore, that you

are not trespassing by landing on a beach. I have checked with a lawyer, and found this is not necessarily true, either on the Great Lakes or elsewhere. In some places the government owns the beaches, in others, the Township. Sometimes the owners of the properties fronting the lake were offered title to the foreshore. Some took it up but others did not. So the fact is, you cannot tell, and, quite apart from the unpleasantness, it is useless to get into an argument with the owner of the land behind the beach.

If you are a "distressed mariner" and have to land on someone's beach, you theoretically have a right to stay for 24 hours if you need to. This has not been tested in Ontario courts, but it might be worth knowing about if the occasion should arise.

## Chapter 6: Cooking and Catering by Joy Phillips

This chapter clearly falls into three parts:

- \* something to cook on
- \* something to cook in
- \* and something to cook

In our experience, no stove beats an open fire. When circumstances permit, this is undoubtedly the most economical way to cook. It gives the widest range of temperatures, is the most fun, and saves on the fuel you have to carry in your boat. By "open fire" we do not mean a blazing bonfire. There is no point in risking life, limb and the forest, for the sake of a cup of coffee. An old saying goes: "White man build big fire—sit far; Indian build small fire—sit close".

Materials for a small fireplace abound in our Great Lakes wilderness. Two logs of a maximum diameter of six inches, or some of the local rock, quickly form a fireplace about two feet long and six inches wide, which is ample. As a sailor you will, of course, be aware of the direction of the wind even on shore, and you will set your fireplace to catch the draught. As a responsible user of the wilderness, you will put it close to the water's edge and away from the forest. (But you may have no choice: when the water is high, the beaches are narrow.)

There will be times when you camp where it would be foolhardy or illegal to light a fire—or even impossible. We had one overnight stop on a beach about two feet wide, and we cooked on our little stoves with one foot in the water. For such occasions, and for wet days, you need to carry a stove. Over the years, we have sailed with people who carried an astonishing variety of camp stoves. We have tried several ourselves, and our last is the nearest to satisfactory. Considerations in order of importance are:

1. Compactness
2. Safety
3. Convenience in use and speed of heating
4. Fuel: weight and bulk of containers, and availability of supplies where you will be cruising.

Most people take a two-burner stove; with our preference for open-fire cooking, we carry a single kerosene-burning Primus or Optimus as auxiliary. It fits in a securely closed gallon paint can. We also carry a kerosene-burning hurricane lamp as a source of warmth and comfort, and for drying the inside of the tent. Gasoline we regard as too dangerous to carry because of the risk of explosion in any space where it could leak or a few drops could spill. The compressed gases (butane, propane etc.,) require heavy containers which are also magnetic, but with a suitable stove they are very convenient and give good heat.

For cooking in the tent you require a stove that will not flare up and set fire to your tent or melt the sail wound around the boom. No one stove has all the advantages and you have to choose the best compromise for yourself. If you ever cook on the boat inside the tent, you should have a fire extinguisher, type B1. Remember to have the matches in a separate waterproof container, with more dry matches in reserve.

Compactness and light weight are also considerations in choosing your cooking pans. Rejects from your kitchen may be cheap, but very inconvenient to stow in the dinghy lockers. A set of nesting cooking pots is a good investment. Ours packs a lot into a small space—three cooking pots, two Teflon-coated lids which double as frying pans, two handle-grips which fit all these, a coffee pot, four aluminum plates and four plastic cups. (To keep the outsides of the pots fairly easy to clean after use on an open fire, the old campers' trick of smearing them with soap works well.) You need knives, forks and spoons, and it is a good idea to pack these in a roll similar to that used for tools—a straight piece of cloth with pockets to slip the items in, a flap to fold over, and the whole rolled up with a rubber band to hold it. Ours is made of terry-cloth so that everything comes out dry even if it went in wet.

Your choice of kitchen utensils is up to you, but there are some we find invaluable:

- \* tongs, which double as fire tongs
- \* a rubber scraper, which gets the last gram of chicken à la king on to your plate and not in the dishwasher
- \* a big sharp knife (you will have a sharp pocket knife as all good sailors do, but it is sometimes not quite big enough for a homemade loaf or the canned ham on Sunday), and
- \* a corkscrew.

Don't forget the can-opener. These are items from our standard list, which goes on from year to year with changes dictated by experience. Such a list will vary with individual preferences, but some more "don't forgets" are:

- \* detergent
- \* dish-brush and tea-towel
- \* aluminum foil; and, surprisingly,
- \* a few paper towels (in a plastic bag)

Food is such an individual thing that it is not easy to say much about it, but if ever there were a place for convenience foods, a cruising dinghy is it. Cans of food are bulky and magnetic, but unavoidable if you are serving a conventional diet. (One couple we sailed with went on a vegetarian diet and opened only two cans in two weeks, both of them milk.)

Tear the labels off, write the contents on the ends of the can with a grease-pencil, and stow them under the floorboards. Keep a record in the log-book of what's there, port and starboard, and think ahead when you have gone to the trouble of lifting one floor board, so that you get out supplies for two or three days.

Many "perishables" are surprisingly long-lived without ice:

- \* margarine in tubs keeps under the floorboards for two weeks or more
- \* bacon (in a Ziploc bag) keeps for three or four days
- \* cheese keeps a couple of weeks, especially when it is in the sealed package as it comes from the store—don't let the cheese itself get wet
- \* eggs keep well if protected from breaking

Milk and raw meat are the two perishables which have to be used up within thirty-six hours, if you are lucky enough to find somewhere to buy them.

Anything stored under the floorboards must be securely packaged. The packages will be in water part of the time, and if the contents get out, it will be a mess, and may clog the bailers or bilge pump.

Bread can go mouldy. Ours is homemade, and I bake it longer than usual and at a lower-than-usual temperature when it is destined for a cruise. Our pride and joy in the bread department is Anadama bread (see Appendix C for recipe). The story goes that there was once a salty old sea-captain in Maine, whose wife was named Anna, and he

always referred to her as "Anna, damn 'er". Anna had one great talent - she could make bread that did not go mouldy as fast as the bread that other wives made. Her recipe has come down to us as Anadama bread, and it does keep longer than ordinary bread, whether white or whole grain. You would not want it as a steady diet, for it has a robust flavour, but it is very welcome towards the end of a two-week cruise when there have not been any stores. Apart from store-bought crackers, crispbreads and hard-tack, another bread substitute is griddle scones (see App. C).

That brings us to staples:

- \* Flour has many uses, and is more versatile than pancake or biscuit mix. Just take flour and make your own mixes as you need them. This will mean that you will need a small moisture-proof container of baking powder.
- \* Sugar and salt you will have anyway, also moisture-proofed. An old spice jar is fine for salt, and a few grains of rice in it will help to keep it dry.
- \* For quick casserole-type suppers, noodles and quick-cooking rice are good, with instant soup for flavouring, and canned meat or fish and canned vegetables to complete the dish.
- \* Garlic powder and Italian seasoning perk up dull canned food.
- \* Pepper, of course, and onion flakes and dry mustard are handy. Mustard brings out the cheese flavour in any cooked cheese dish. (At the end of a two-week cruise, we once heated a canned ham, basted with a mixture of its own juice, adding the juice from a can of pineapple, salt, pepper, mustard and brown sugar, for a gourmet farewell supper. There's a lot more to cruise food than canned stew!)
- \* Most vegetables have to be brought along in cans, though we have found it well worth while to carry fresh potatoes and onions. Dried potato flakes are acceptable in an emergency, but need to be doctored to be enjoyed (with bacon fat, garlic powder, or whatever strikes your fancy).
- \* Fresh carrots carry well, celery lasts a few days, and we have even had a romaine lettuce that stayed fresh and crisp in its plastic bag through an 18-hour car journey and three days in the boat. But do steel yourself to find alternatives to salads unless you come upon a settlement with a grocery store.
- \* Tomatoes look pretty sad after a couple of days on board. We have intended to try drying vegetables (straight from the garden) but have not yet got around to it. These would be lighter than cans, and non-magnetic. The only fresh fruit we have found satisfactory is oranges. Everything else is too fragile.
- \* Take lots of instant drink makings—coffee, teabags. hot chocolate, soup. Nothing is more comforting on a wet chilly day than a hot drink.
- \* Take lots of coffee whitener—you'll be surprised how much you use when it serves for many different drinks.
- \* Take a can or two of milk even if you don't use it in tea; it adds richness to soups and top-of-stove casseroles.
- \* Take a thermos: you can fill it with boiling water at breakfast time, and use it any time for a choice of instant drinks. If you don't use it, nothing is wasted, and there is no messy flask to wash at day's end.

Lastly, forget your diet. You are using so much energy, especially in camp, that the chances are you will lose weight even if you eat like a horse, so take plenty of snacks. A mixture of dried fruits and nuts, including candied papaya if you can get it, is a treat. We always have ample supplies of light fruitcake and some other sturdy

cake such as gingerbread, and generous supplies of cookies. Take candy - a toffee is comforting on a wet day when the rain is seeping round the hood of your foul-weather jacket, and a peppermint or fruit drop goes beautifully with a fine sunny day. You're on holiday - relax and enjoy yourself.

## Chapter 7: Communication

*AI's note: As you are reminded in the thank-you below, the information in this chapter dates back to 1981. My thanks to CWA Cruising Secretary, Tim France, who, in 1999, gathered together many useful addresses and web site URL's (see Appendix F). It would be wise to check out for yourself, any information - such as legal requirements, product prices, etc. - that might have become dated by the time you read this.*

I am grateful to Mr. Ronald Brillinger of Shortwave Marine Electronics Ltd., Mississauga, for information regarding suitable compact radio equipment. Prices are approximate "list", February 1981, and discounts may be available.

**Communication Between Boats.** Dinghies cruising together ought to keep within sight of each other if they are in unfamiliar and uninhabited areas, or if the weather is uncertain enough to give the slightest risk of a mishap. There will, of course, be a rendezvous for the night, or perhaps for a lunch stop; but what do you do if one boat does not turn up at the expected time? To start a search at night or in bad weather would endanger yourself or others, while the missing boat might easily be holed up safely, waiting for the weather to clear. It is therefore very important to keep in touch at all times, and preferably to keep within sight.

When we first went to Lake Superior as a little fleet of four dinghies, we arranged a system of visual signals by means of red flags flown at port and starboard spreaders. The signals were rarely needed or used. However, on one or two occasions prompt responses were obtained. Generally, however, the system did not work well, because we did not keep close enough to each other, and did not look for the flags on the other boats as a regular routine. In good weather you do not see any need and in bad weather you have enough on your hands looking after your own boat.

If you decide to try flag signals, our code was:

- \* Both flags flying: "all well".
- \* Flag: down-up-down-up-down-up: "all well; please come within hail".
- \* Either flag down: "come"; "help!"

Within earshot, a mouth-blown foghorn is an excellent way of attracting attention, but the sound does not carry far to weather when the wind is whistling in the rigging.

Two-way radios of the "Walkie-talkie" type should do well over water, but you need a certain discipline to keep a reg-

ular listening schedule. A good quality VHF such as the "Apelco AF6" transceiver by Raytheon (\$400) would be better for range and reliability. With its own battery, it measures only eight by four by two inches and provides Channels 16, 6, and up to four others of your choice. You need an operator's license, which is not hard to get but does require an examination on rules and procedures. My personal preference is to rely on keeping within sight and to avoid carrying the extra equipment, which may go out of order in the sometimes wet rough-and-tumble of dinghy cruising. However, the VHF transceiver may be the best way to get VHF weather forecasts (see below).

**Weather Information.** To get reliable forecasts when you need them is not as easy as you might think. We have carried a little VHF weather receiver for several years and we bought a large expensive multiband "Transoceanic" but have stopped carrying it. On the North Channel and parts of Georgian Bay, we have often had difficulty in picking up any marine forecasts. A small portable A.M. radio and knowledge of the wavelength of the nearest city's commercial station is often more effective than the specialized equipment.

Within range (visual + 20%) of the C.N. Tower or one of the U.S. continuous weather forecasting transmitters, you can get the current forecast (not always updated as often as you would think reasonable) on a crystal-controlled receiver such as the "Forecaster" (\$30) or "Weatheralert" (\$100). The frequencies are 162.475 MHz (C.N. Tower), 162.40 and 162.55 MHz (U.S. Stations). The "Weatheralert" can be left on standby and gives an alarm signal when there is a warning about to be broadcast.

The pamphlet, "Marine Weather Services", issued annually (free) by Environment Canada gives information on many other stations that transmit forecasts, including the Coastguard continuous weather service on VHF Channels 21 (161.650 MHz) and 83B (161.775 MHz). Do not be afraid of the broadcasts in "MAFOR" code. After decoding with the key a few times it is easy, and when reception is weak you may manage to read the code while the plain language is hard to catch. It is also easy to write down the two or three groups of five figures, which give the whole 24-hour forecast for your area. Then there is no doubt later about exactly what was forecast. The "Bearcat Handheld" receiver (\$200) is a 4-channel instrument suitable for these frequencies; or of course the appropriate crystals can be installed in the "Apelco AF6" transceiver. The cost of good equipment (radio and other) may seem a large initial out-



lay, but you are going to acquire them gradually as you try a more ambitious cruise each year, and good equipment is going to last many years. If you compare the cumulative cost of motel and resort bills, meals out, etc., over even three or four vacations, your good boating equipment will not seem too much.

To be independent, we carry a barometer and keep a record of its reading four times a day in the log. You cannot do as well as the weather bureau, but with a basic knowledge of meteorology you can tell fairly well what is going on. The barometer also helps you to know when to expect the officially predicted changes, which often come earlier or later than the forecast says.

**Radio Direction Finding.** (*ed. note: No GPS in those days!*)

You are unlikely to need R.D.F. while cruising by dinghy. If you were crossing one of the Great Lakes, and got blown off course by a storm, and if it were night or poor visibility by the time things had settled down and you were ready to start sailing, you would be glad to have it. For most cruises, I would regard it as an unnecessary luxury. The "Space-Age Pocket R.D.F." from England measures six by three by one-and-a-half inches, with a luminous compass, and is a good one (\$180). Avoid radios with rechargeable batteries (like the "Sea-Spot 2" R.D.F.) for dinghy cruising or you are likely to be stuck with a flat battery, and they will not take dry cell spares.

**Communication with Friends and Relatives Ashore.** Many articles and books recommend leaving a "flight plan" equivalent, and imply that someone will start a search for you if you do not arrive when planned. I have not found that very easy to put into use and I like to be free to change my plans without inconveniencing anyone else. The Coastguard would not welcome a large number of calls every morning from dinghy sailors saying where they plan to go and when they plan to report in safe. But in the Eastern Georgian Bay area, the Coastguard have told us they would check on us if we filed a plan.

When sailing with other boats, arrange a telephone number ashore to receive messages, in case a boat gets separated, and is forced to put in at some other port away from an agreed rendezvous. This is rarely needed, but might occasionally save a lot of anxiety and prevent an unnecessary search. The same applies for the journey to the launch site by car, which is the most hazardous leg of the whole cruise.

Call your family at intervals if you can get to a phone. They can become anxious while you are basking in sunshine and

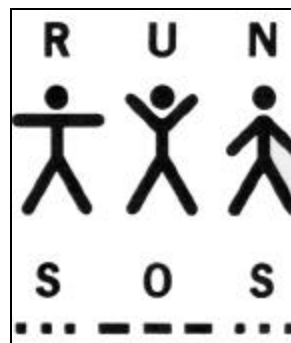
gentle breezes. Let them know when, and from where, you might phone again and remind them that you might be delayed by lack of wind or might change your plans.

**Distress Calls.** If you are in trouble and out of sight of your cruising companions, you are probably going to have to get yourself out of it without any help. Give a lot of thought to reliable equipment and spares, good seamanship, careful navigation, and avoidance of dangerous situations. Don't spend much time thinking how to send out distress signals.

If you have any way of contacting the outside world by radio, know your position and tell them clearly and precisely, with cross-checks. (There are lots of islands, headlands, etc. with the same or similar-sounding names.)

**Within visual range, standard signals of distress:**

1. Stand on deck and semaphore repeatedly RUN (*below*)
2. Morse SOS by sound, light, or any ready means
3. Ensign flown inverted, or black shape, etc.
4. Red flares at intervals of thirty seconds
5. Smoke or fire signals



Red flares - like SOS or MAYDAY - must never be used unless life is in danger, and if a ship comes in response to your call, you must be prepared to abandon your boat and be rescued. Do not count on anybody seeing your red flares, however. If your boat is above 18 feet, you are legally required to carry six. My boat is only 16 feet, but a few years ago I bought six flares. You cannot keep the package dry all the time cruising in a dinghy, but you'd think they ought to be proof against a little damp. Six months before the "expiry date" printed on them, I went out to a farm where I could safely fire them off. Only two out of the six worked. In three the firing chain was weakened by rust and broke just inside the casing. So much for flares.

There are various "EPIRB" transmitters advertised (Emergency Position Indicating Radio Beacon). I am told that only one has Canadian Government "Type Approval", the "NARCO" (\$320). Some have been found unreliable. If you had one that worked as advertised, that might indeed be the right thing to use to summon help, providing you are prepared to abandon your boat and be rescued. A search is going to cost (the tax-payer) much more than the value of your dinghy.

## Chapter 8: Navigation

**Chart Reading.** Nautical charts are wonderful. They convey a wealth of information, and are much more interesting than road maps. It is not difficult to teach yourself to read a chart, but many people like to take a Power Squadron course, or read a book on piloting. When you are using the chart on a cruise, you should look at every little detail, every letter, every number and line that is printed along the course you are cruising. The abbreviations are all listed in "Chart No. 1" published by the Canadian Hydrographic Service, Department of the Environment, Ottawa. Get this useful booklet (it is not a chart at all) many months before you cruise, and browse through it with one or two charts in front of you. A lot of the abbreviations have two or more meanings and have to be taken in context.

Most of the complexity of chart theory is due to the curvature of the earth's surface and can be entirely ignored for dinghy cruising over distances of a few score of miles. Charts can therefore be regarded in practice as ordinary maps of a flat surface, with north to the top, east to the right, all angles correct and the scale the same all over. You do not need to know whether your chart is a mercator's projection, polyconic, or any other. The longitude lines run exactly north and south; the latitude lines run exactly east and west.

The scale is marked on the chart, but it is easiest to work in nautical miles. One nautical mile is approximately 1 and 1/7 land miles, and is exactly 1/60 of the distance between two latitude lines which are 1° apart. The latitude scale is marked at the side of the chart, and the latitude lines are usually drawn at intervals of 10 minutes, 20 minutes, or 30 minutes. You can quickly see which of the little hatched spaces at the side of the chart represents one nautical mile. i.e. one minute of latitude. Never use the scales at the top and bottom of the chart as these are longitude and their relative distance changes with distance from the Equator.

Depths may be measured in feet or fathoms, or on some of the new Canadian charts, in metres! The printing style is slightly different for each of the three, and the unit is always stated on the chart right under the title that tells you the area covered. Always be sure in what units the depth soundings are recorded on the chart you are using. It makes a lot of difference.

**Compass.** A compass is the most important instrument to have on board and is even more important than the chart. I like to have two compasses, one mounted in the boat, and the other a hand-bearing. You can get a boat compass which can be lifted out and used as a hand-bearing but the instrument is so important that it is wise to have two so that one can be used to double check the other.

There are many kinds of hand-bearing compasses. I use one made by Silva, which lies flat against my chest on a

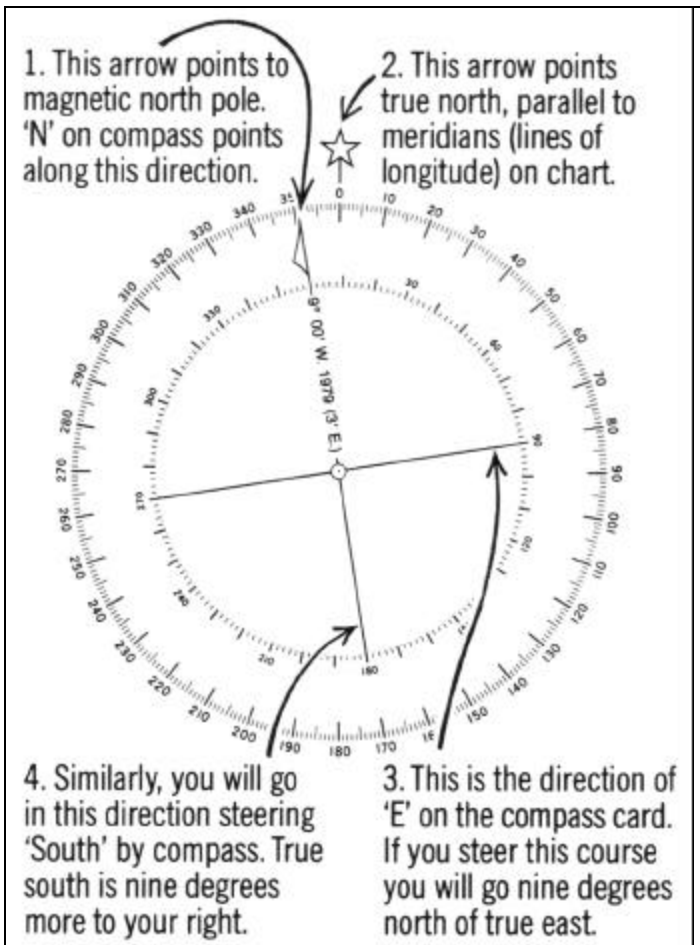
lanyard, and has a mirror which can be used in shaving or applying makeup and, I suppose, could also be used for signaling in sunshine. The compass card can be set off to correct for magnetic variation, and thus give true bearings directly. This is very useful if your practice is to plot true bearings rather than magnetic ones on the chart. Then you have only to remember to use the variation when using the boat's compass. If your practice is to use magnetic courses and bearings on the chart, then set the correction to zero and leave the hand bearing compass to read magnetic.

Choosing where to mount a dinghy compass is difficult. Cruising practice is to have the compass three feet from any iron or steel that might cause magnetic deviation. In a dinghy, this is almost impossible. The articles that have to be kept away from it include the following: anchors, tool roll, stove, canned food. utensils, flashlight (battery casing is often steel), spare batteries, camera (especially the light meter), A wooden or fiberglass bulkhead between gives no protection. Your own pocket knife or steel watch band will also deflect the compass if it comes too near. After many trials, we now mount the boat compass on the mast, just below the lowest position of the gooseneck. This is stainless steel and almost non-magnetic. The mast track is aluminum and all screws are either stainless or non-magnetic. The problem with this position is that the compass is far from the helm, but we find it better to have to lean forward to see it, than to have it close, but unpendable.

There are two factors for which correction must be made: "variation" and "deviation". "Variation" is no problem if you remember it—the north magnetic pole is not at the north pole itself but somewhere in the Canadian Arctic (Prince of Wales Island). The compass needle points to the magnetic pole, and therefore, over most of the Great Lakes, points a few degrees west of true north. The variation is clearly marked on the compass rose of the chart, and over the distance you will cruise in a dinghy it will be same, within a degree, for your whole vacation.

"Deviation" is another matter entirely. It is the compass error caused by nearby iron and electric currents. On a large boat, provided movable magnetic objects are kept away from the compass, deviation can be corrected by special magnets, and a deviation card prepared for the remaining error. It is not constant like "variation" but varies with the boat's heading. In an empty dinghy built of wood or fiberglass, with wood or aluminum spars, the deviation is nearly zero. But once you load a dinghy with cruising and camping gear, there can be a large deviation that varies not only with the boat's heading but with exactly where everything is stowed, and thus may change from day to day. Also, you cannot keep all movable things more than three feet from a dinghy compass. The only solution is to keep magnetic things as far from the compass as possible and always be aware that there may be an error. Check from time to time with the hand bearing compass,

and remember your pocket knife or watchband and even your eyeglasses, may affect this reading too.



Once you grasp these ideas, you may not need to memorize the rules that tell you when to add **W** variation and subtract **E** (or vice versa)

Given all these problems, and the way a dinghy yaws with the waves, you will do well if you can steer within 5° of your course at any one time. With care, you should be able to average rather better than this during an hour's run on a constant course. An error of 5° gives you a one-mile error in your landfall after a crossing of 11 miles. This is not bad when visibility is adequate and you can pick up your objective from a few miles out.

**Instruments.** To use a chart for navigation, the necessary instruments are a pencil and a parallel rule. You do not really need dividers, which are used in accurate navigation for measuring distances. For dinghy navigation, because there are other, larger, sources of error, a thumb nail on your pencil or straight edge is good enough. Parallel rules are not easy to use in a bouncing dinghy. We prefer a "course plotter" which is a tough transparent plastic ruler four inches wide by fifteen inches long, marked with a series of parallel lines and with a protractor centred at the middle of one side. We thus have a protractor and parallel rule in one instrument and can lay off courses and bearings either from the compass rose if it happens to be handy, or from any line of longitude or latitude using the protractor. Such devices can be found in marine stores; I prefer the simplest type, with no moving parts.

**Piloting.** It is a good idea to take a Power Squadron course in piloting. A few points relevant to dinghy piloting will be mentioned here. First, fold your charts. It is hardly possible to control rolled charts, or to use them opened out on the centre thwart of a dinghy. Keep either to nautical miles or land miles. We always use nautical miles for the convenience of using latitude as a scale of distance. It is also good practice to stick to either true compass bearings or magnetic compass bearings, for plotting on the chart. It is strictly correct to use only "true" on the chart, but whether you use true or magnetic, it is a mistake to mix them.

Piloting, as taught, makes use of the speed of the boat for dead reckoning positions, expected time of arrival, etc. Speed is difficult to predict in a sailboat, but it is useful to know your average speed over the past hour. With practice you can guess it fairly accurately, but you need to have a method of measuring if you are going to practice judging it effectively. This can be done with the use of a float at the end of a piece of light line of known length (we use a pierced tennis ball). The length of the line is decided as follows: determine a period of time for which it will be easy to keep a constant course and speed, such as twenty seconds. The length of the line is then the distance that the boat will travel in twenty seconds at a speed of one nautical mile per hour (1 knot), which is thirty-four feet. The free end of the line is looped to slip over the crew's wrist. The crew fakes out the line on the side deck and, holding the float close to the water, drops it when the helmsman reaches zero in a countdown or starts a stopwatch. The crew calls "stop" when the line tugs his wrist. The speed in knots is then equal to twenty divided by the number of seconds it took for the thirty-four feet of line to run out. If you work in land miles, use a string twenty-nine feet long, and the speed is in m.p.h. The time can be estimated to about half-a-second with care, and at four or five knots, calculated speed is accurate to ten percent.

Many navigational errors can be avoided, particularly when sailing parallel to a coastline, if Expected Times of Arrival are regularly worked out and the actual time of arrival off each headland or feature on a coast is checked against the ETA. If the actual time of arrival is much different from expected, the likeliest error is that some feature that is quite inconspicuous on the chart (such as a small headland) is being mistaken for the feature you thought you had reached. This can happen easily, even in good visibility. In poor visibility, ETA's are invaluable both for coastal and for open water courses.

Write freely on the chart in soft pencil. It can easily be rubbed out later. A hard pencil might tear a damp paper. Charts should be kept in a transparent plastic case so that they can be read without exposing them to spray. Some people use a tight-fitting plastic cover and plot courses on it with a grease pencil. Either way, it is best to mark a series of positions on the chart and the time you were there. Then, if you need to know where you are because of a change of weather or visibility, you can find out quite

easily from your last known position. Plot fixes for practice frequently, and compare them to your dead reckoning position. The hand bearing compass gives you bearings on ends of islands, water towers or other landmarks ashore. Make use of "ranges" as lines of position when two objects such as the left hand end of one island and the right hand end of another come into line. The more often you do this when conditions are good, the less likely you are to be lost when conditions become difficult.

Piloting a dinghy on a constant course off the wind is fairly easy. You must be aware of leeway due to wind and sometimes drift due to a current which you may not have expected. After leaving your point of departure, look back and check several times in the first half hour to see whether the point of departure is exactly over the stern when your heading is correct. If it is to one side or the other, you are not making good the course you thought you were. Usually the point of departure will appear somewhat to windward, and the angle it is off gives you an estimate of your leeway. You can start to correct for it right away. True leeway is usually negligible in a dinghy on a beam reach or better. However, if the wind has been in one

direction for many hours, there may be a surface current on the water which gives the same effect. Naturally there are currents to be aware of at the major rivers entering or leaving the Great Lakes. There are often counter-currents along the shore over many miles, as along the south shore of Lake Ontario. There are no true tides on the Great Lakes, but the "seiche" can cause big movements of water due to wind and barometric pressure changes, and this results in significant currents, particularly at a narrow junction of two wider bodies of water.

When you are hard on the wind, piloting is much more difficult. Allow 5° for leeway, or more if there are big waves. The problem is that you cannot keep a constant heading. The wind is usually shifting through at least 5° and often much more, and it is not realistic to hold your course rigidly when you can easily head up. Get in the habit of averaging your compass course, and tack at fixed intervals, making no more than two tacks every half-hour. The table shown below gives the time to spend on each tack for different courses to windward relative to the average wind direction.

<i>TACKING TABLE assuming heading 50° off true wind, and 5° leeway</i>						
<i>Angle between wind and desired course:</i>	0°	5°	15°	25°	35°	45°
<i>Angle between better heading and course:</i>	50°	45°	35°	25°	15°	5°
<i>Time on favoured tack:</i>	15 min.	16	18	20	22	26
<i>Time on less favoured tack:</i>	15 min.	14	12	10	8	4
<i>Total distance sailed for 10 mi. made good:</i>	17.4 mi.	17.3	16.8	15.7	14.2	12.2

## Chapter 9: Heavy Weather

<i>Beaufort Scale</i>	<i>Wind Speed in Knots</i>	
<i>Force 4</i>	<i>11 - 16</i>	<i>Consider reefing or changing to working jib.</i>
<i>Force 5</i>	<i>17 - 21</i>	<i>Reefed main and working jib.</i>
<i>Force 6</i>	<i>22 - 27</i>	<i>Reefed main only, or double reefed main and working jib.</i>
<i>Force 7</i>	<i>28 - 33</i>	<i>Considerable care needed to go on sailing: double reefed main only, or, off the wind, working jib only.</i>
<i>Force 8</i>	<i>34 - 40</i>	<i>Survival conditions for a dinghy on open water. Sea anchor.</i>

The amount of thought that must be given to preparing for heavy weather is out of proportion to the number of times you will encounter it. You may expect to be out in Force 5 winds a few times on a cruise even if you listen to the radio and avoid going out when strong winds are forecast. I would not call this "heavy weather", however. Force 5 winds normally require a reef, and probably a change from the genoa to the working jib. This should become an easy routine through practice.

Often it is best to reduce the jib first before the sea gets up. Some people find a jib down-haul helpful. To make one, run a piece of line through the piston hanks from the head down through a shackle on the bow fitting and back to a cleat. The line is also handy to tuck the sail under when it is down. Head-shackle and all piston hanks can then be easily reached and the crew can lie on the fore-deck for all the finger work involved. The helmsman can control the halyard. Once the working jib is up, if the wind continues to increase and you need a reef, the easiest procedure is to heave to. This can be done by pulling the jib across to windward, or by going through the motions of tacking but leaving the jib on the new weather side.

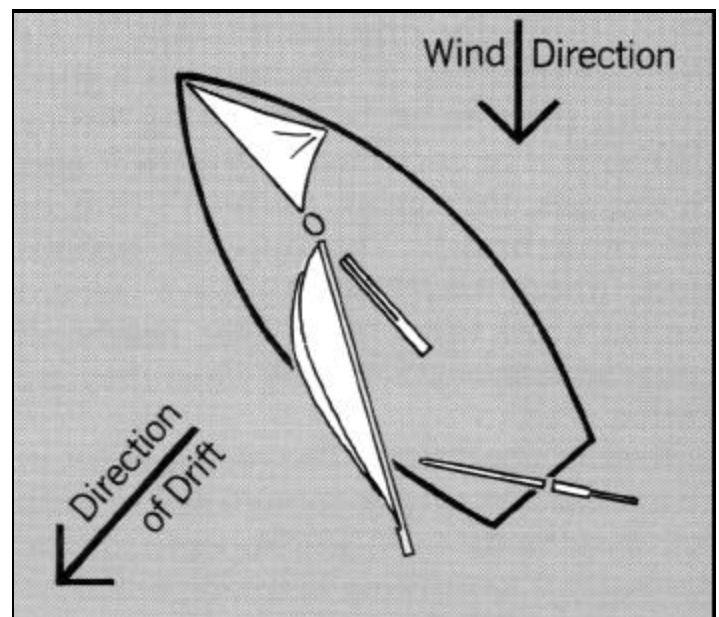
**AI's note:** I have tried the latter method twice and found it too violent. I now always heave to as follows

1. luff the sails to lose speed on a beam reach
2. raise the centreboard completely unless a nearby lee shore could be a problem in which case half down or even more is good
3. sheet the jib in to windward as tight as is reasonably possible while sheeting the main in to about the beam reach position
4. see <http://www.angelfire.com/de2/WIT/efficient4.htm> also

With the main-sheet adjusted, the centreboard raised one third and the tiller held down to lee with a shock cord, the dinghy will be quite peaceful, bobbing on the waves, mak-

ing some leeway and heeling very little. Now you can easily reef the main. With slab or jiffy reefing, it is easiest if you heave to on the tack that leaves the boom fittings on the weather side. The procedure is to slacken the main sheet, haul in the leech line and cleat it, then let off the halyard and haul the luff line until the luff cringle is close to the boom, and secure it. Another pull on the leech line brings the leech cringle down to the boom. The halyard is then tightened and secured, the mainsheet can be hardened in again, and while still hove-to the reef points are tied along the boom. Let go the weather jib sheet, and you are underway again.

**AI's note:** For more on Jiffy Reefing you might also check out <http://www.angelfire.com/de2/WIT/JiffyReef.htm>.



Heaving to gives you leisure to reef, bail, "get organized, or stop for a snack in heavy weather. It is surprisingly peaceful. Heave to any time you want to stop and think.

**AI's note:** If you want even more peace while hove to,



make sure that you vang the main. This not only reduces wear on the main leech, but also reduces the nerve-wracking flapping sounds. Board full up increases the rate of leeward drift but has two benefits:

- \* It reduces even further, the already extremely remote possibility of a capsize in a vicious puff, and,
- \* it eliminates the need to tie the tiller to leeward.

In a 20-knot breeze, which makes racing exciting, a dinghy laden for cruising and reefed to 70% of mainsail area can be sailed comfortably with no particular concern about the weather. We do not usually hike out, but sit on the gunwale with sheets in the hand. You have probably got plenty of time to get to shelter before the wind strengthens further; if not, you can take down the jib altogether. It is rarely necessary to do more, but if it is essential to go on sailing in still stronger wind. You may have to use the second reef points in the main, and thus reduce sail still further. It may be necessary to bring the sail down entirely in order to add roller reefing over an existing Jiffy reef. Try this out to be sure, before you need to do it in a strong blow.

**Sail balance is important.** The likeliest cause of a broken rudder is fighting a weather helm in a strong blow, especially if a tired shock-cord allows the rudder to swing part way up. Instead of fighting it, ease the mainsheet before anything breaks, check that the rudder is fully down, and then consider whether you should take any of the following actions which reduce weather helm:

- \* reef the main
- \* raise the centreboard a little
- \* move weight aft
- \* improve the trim of the foresail
- \* increase foresail area, or
- \* rake the mast forward.

If, on the other hand, there is lee helm while sailing to windward in a good breeze, there must be something wrong that should be corrected promptly. It may be the sails, the rigging, the boat's trim, or the centreboard. The opposite actions from those mentioned above would reduce a lee helm. Note that nearly all boats have a weather helm when they are heeled to leeward.

**Al's note:** The faster the boat goes through the water, the more the angle of heel affects your helm. Remember that while the boat is moving forward:

- \* more heel to leeward = more weather helm
- \* too much heel to windward (or, one supposes, not enough heel to leeward) = lee helm

**Reef in good time.** The racing sailor in gusty weather carries enough sail to keep full speed in the lulls, and hopes to survive the puffs. The cruising sailor, on the other hand, should reef so that he sails comfortably in the puffs, and should not be concerned about loss of speed in the lulls.

Sailing in the lee of a hilly shore is a situation where you should shorten sail early to reduce the risk of capsizing.

You may get very sharp gusts with a downward element in them. Thunderstorms can also pack dangerous gusty winds with strong downdrafts. The trouble with a downdraft is that it does not spill over the top of the sail when you heel far over, as the level blow of a strong wind does. Keep a look-out for thunderstorms, and if one hits, lower all sail until you see what it is going to do. Alternatively, if you feel confident, you can carry on with reduced sail but have the main halyard ready to let go, and be sure that it will run free. Hold the jib sheet in hand, ready to release. Flapping sails in a strong squall only make a terrifying noise; the only danger lies in a turn of the main sheet round your ankle, a jib sheet caught on a cleat, or a halyard that tangles and jams.

**Al's warning:** I have to beg to differ here. On at least two occasions, I have capsized in thunder squalls - slowly but surely - when the wind resistance of my flapping sails made the boat heel more than we could hike flat whereupon the wind got under the side of the hull and flipped us the rest of the way over. My son and I also very nearly capsized in a squall that hit the fleet during the 2001 Canadian Nationals when we did not get the sails down before the nasty stuff hit. What saved us was my diving to jam the board full up. This gave me enough of a breather to get the sails down. After that, we just sailed along "under bare poles" with the board half down and maintained reasonable control of where we were going - always generally downwind, of course. If I were cruising and saw anything that looked like a squall coming, I would always take my sails down good and early - or if there was little sea room and a shore to leeward which I did not wish to hit, take down the jib and reef the main as much as possible, and try to sail my way out of it.

There will be no big waves in a sudden sharp blow and there is no great need to keep head to wind if your sails are down. If you are temporarily lying across seas with breaking tops, lift the centreboard to avoid the tripping action that can occur when the hull is carried along by a wave top while the board is down.

When the wind has been blowing for a few hours and strengthens too much to carry any sail, it is essential to keep head to wind and sea. The sea anchor or drogue is the proper equipment for this. If you carry one, practise using it in a moderate wind. Be sure you know how it will go out, how the line will be led, and how it will be secured. Remember to unship the rudder, as you will be drifting stern-first. The actual pull in a dinghy is not terribly hard and you do not have the problems that cruising yachts have with regard to strain on the sea anchor and its rode. The rode needs a swivel, and should be a good one; we use a spare jib swivel shackle. This is fixed to the bitter end of the Danforth anchor rode, and it is normally snapped to the standing part around the thwart. For the sea anchor we use the rode in reverse, snapping the swivel shackle on to the yoke of the drogue. You need a good bow chock, with overlapping horns. (This is also important if you are being towed.) Everything should be arranged so that the sea anchor is easy to use. When you are in a survival situ-

ation, it is not safe trying to do something difficult that you have never done before. You may be forced to, but it is better to plan ahead.

An alternative to the drogue is to float the mainsail out on its boom from the bow and allow the boat to drag to the lee of this. The sail is said to smooth the waves as well as hold the head of the boat to windward. If you plan to use this method, it is important to practise it and to be sure how you will secure the yoke to the two ends of the boom and to a stout line running to the boat. This would be difficult to improvise at the time it is needed. It is of course important not to lose your mainsail, as you will need it to get back to shore after the gale. If possible, double the rode.

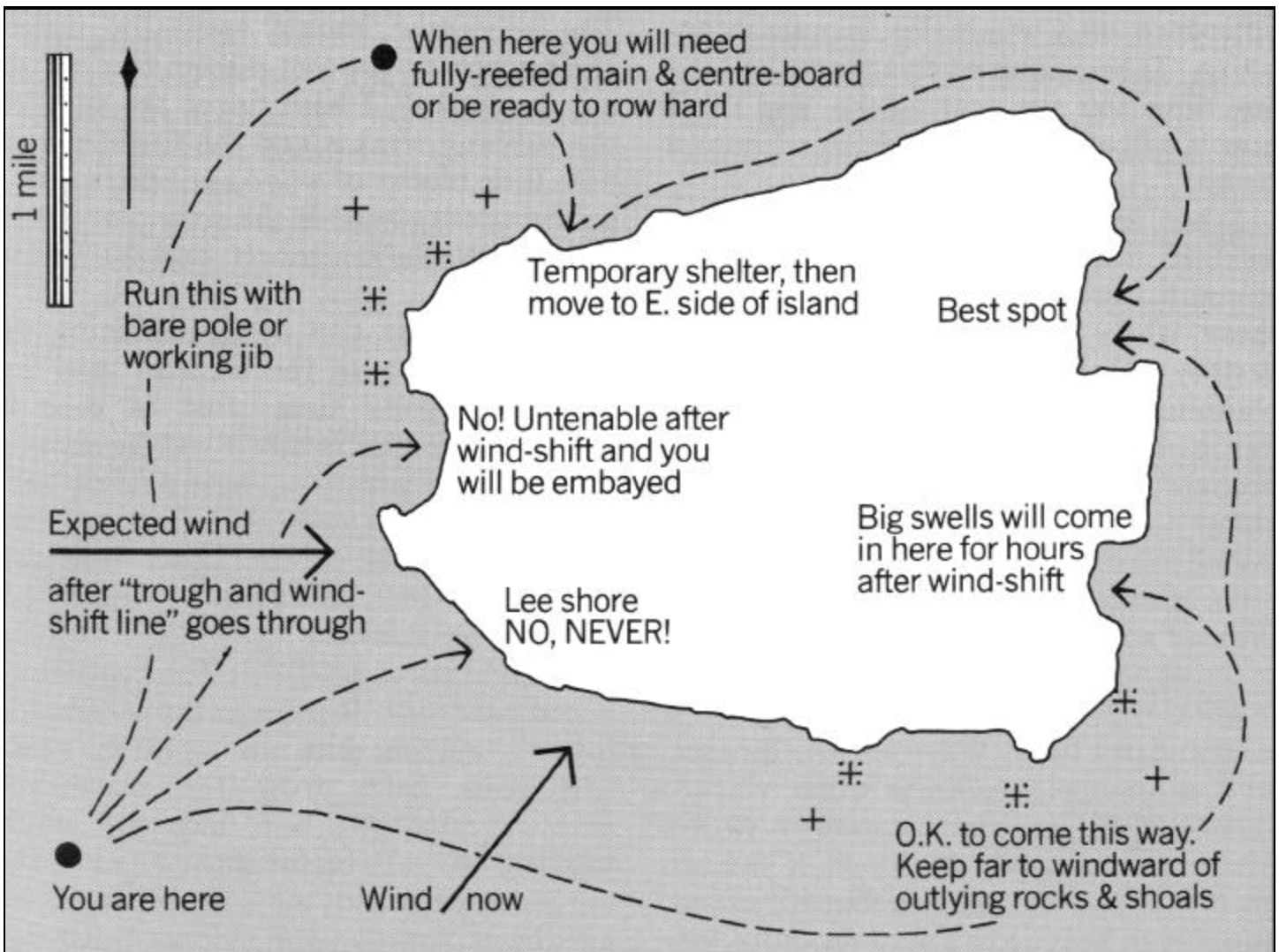
Once you have the boat head-to-wind and everything is secure, it is time to think about chafing gear at the bow chock and any other place where the rode may chafe. "Freshen the nip" occasionally.

If the boat does not come head to wind lying to the drogue or to the mainsail floated out, you may have to improvise some windage near the stern. An alternative is to lower the mast, which may be desirable anyway to increase sta-

bility. You may lower the mast onto the boom crutch if you know it will fit. Otherwise the mast can be lowered on to a pad of fenders, etc. on the afterdeck or transom. It must be secured laterally, otherwise the leverage as the boat yaws and rolls will severely damage the tabernacle. During the lowering process, there is a risk of just this accident. Choose a relatively smooth moment to do the lowering.

Now, having the boat head to wind and sea, the mast down, and chafing gear fitted, there may be wave tops coming into the boat. Some sort of cover, even improvised with a sail, should help. We have had a special cover made for this duty, and it doubles as a shelter so that the watch below can sleep during night sailing. For shelter while sailing, the cover fits over the fore part of the cockpit as far as the centre thwart, and is held up (but clear of the boom) by a boat roller on end. With the mast down, however, the cover goes right over the mast and shelters the forepart of the cockpit.

I should emphasize that all these preparations are not necessary for dinghy cruising in sheltered waters, or when shelter can be reached within an hour or two. For fierce winds of short duration, such as summer thunderstorms, the waves will not be big enough to endanger a stable



Looking for shelter in a strong blow, with wind-shift predicted.

dinghy. Wind alone is not likely to capsize a dinghy with all sails down.

To sail in a fresh breeze, and to go safely offshore at all, the essentials are:

- \* the ability to shorten sail by reefing,
- \* reducing jib area, and
- \* taking down either one or both sails.

The boat and rigging should be tidy and orderly, so that sheets run freely when released and halyards run freely at need. A spinnaker is a dangerous sail to have flying in gusty winds and stormy conditions.

If a full gale is forecast you should not be sailing out of reach of shelter. Preparations for lying to a sea anchor should only be necessary if you are planning a major open water crossing. Strong winds of long duration can always be forecast at least several hours ahead, so always try to get a weather forecast before embarking.

**Lee Shores.** A "lee shore" is one towards which the wind is blowing. A "weather shore" is one where the wind is blowing off the shore towards the lake or sea. The difference, on a windy day, is quite astonishing. Take a look at this from the land any time you are near a lake, and think how it will affect your planning when you cruise.

When looking for shelter from severe weather, it is important that you do not commit yourself to beaching on a lee shore, where the breakers would certainly destroy your boat. Keep this in mind when planning the day's trip. If there is nothing but a rocky shore which is likely to become a lee shore in a blow, you will sail along it at your peril. A deep cove in it might provide shelter, but the entrance is often dangerous. Off-shore islands can provide some degree of shelter, but rocks in the approaches, easily seen and avoided in good weather, are a lethal hazard off a lee shore in a blow. When coming for shelter it is important to know where you are and to read the chart carefully to see where you can safely approach. If you can get into the shelter of a headland or island, and row or beat up to a weather shore, you will find it a marvellously peaceful place to be in a strong blow.

**Tacking.** In strong winds, wind and sea may stop the boat as she comes head to wind. Avoid this by sailing a few degrees below closehauled to attain maximum speed, choose a relatively smooth patch, push the tiller down (leewards) firmly, sheet in the main tight as she comes up, and have the crew hold the jib momentarily on the new weather side to help pay off quickly. If caught in irons, reverse the tiller as soon as the boat starts to drift astern. On the new tack, ease the main sheet and steer a little low until you pick up speed.

**Gybing.** Gybing may be the safest method to come about in very heavy winds. Turn downwind, with the centreboard up. The boom vang should be attached (and the crew must

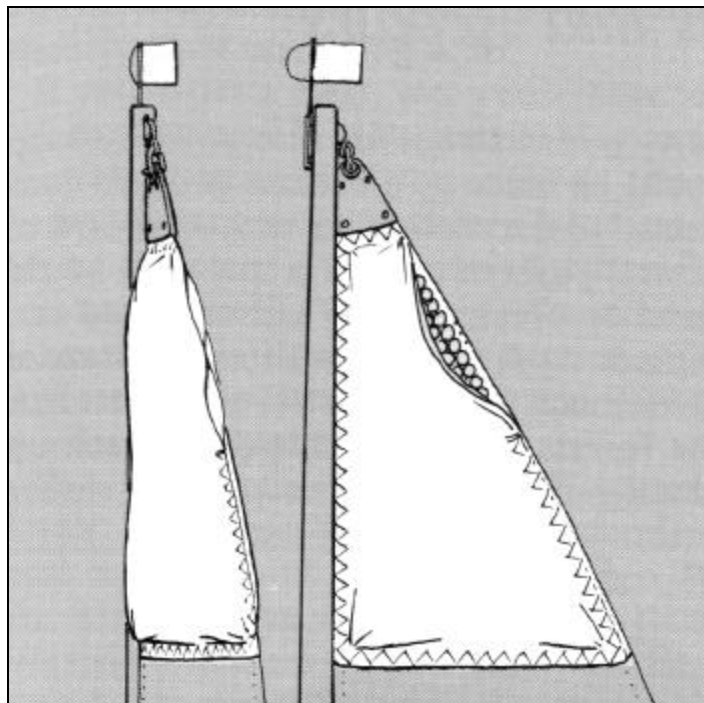
keep clear as it sweeps across the boat). With the boom right out, put the rudder hard over and sail more and more by the lee, until the wind is almost abeam. Do not help the boom across, but wait for the wind to do it. After the boom comes over, the sail will be almost empty of wind, and can be sheeted in gradually. (Uffa Fox suggested this method in his book *The Crest of the Wave*.)

**Al's note:** The "put the rudder hard over" part of the above makes me nervous. I would suggest the far safer S-gybe as outlined in my article *Miscellaneous Manoeuvres* at <http://www.angelfire.com/de2/WIT/efficient4.htm>

The helmsman should assist the mainsheet across to prevent it from fouling on any projection. I have faired the ends of the rubbing strakes and the traveller rail with little blocks of wood and epoxy resin, so the rudder-head is the only place that could catch the mainsheet, and there I lift it over.

**Capsizing.** You can avoid capsizing by carefully watching the weather and by reefing in good time. Just in case it happens, the drill is this: First, be sure to grab a line (if you do not have a safety harness), and do not swim after floating gear. The boat may be drifting faster than you can swim. Never, never leave the boat and try to swim ashore.

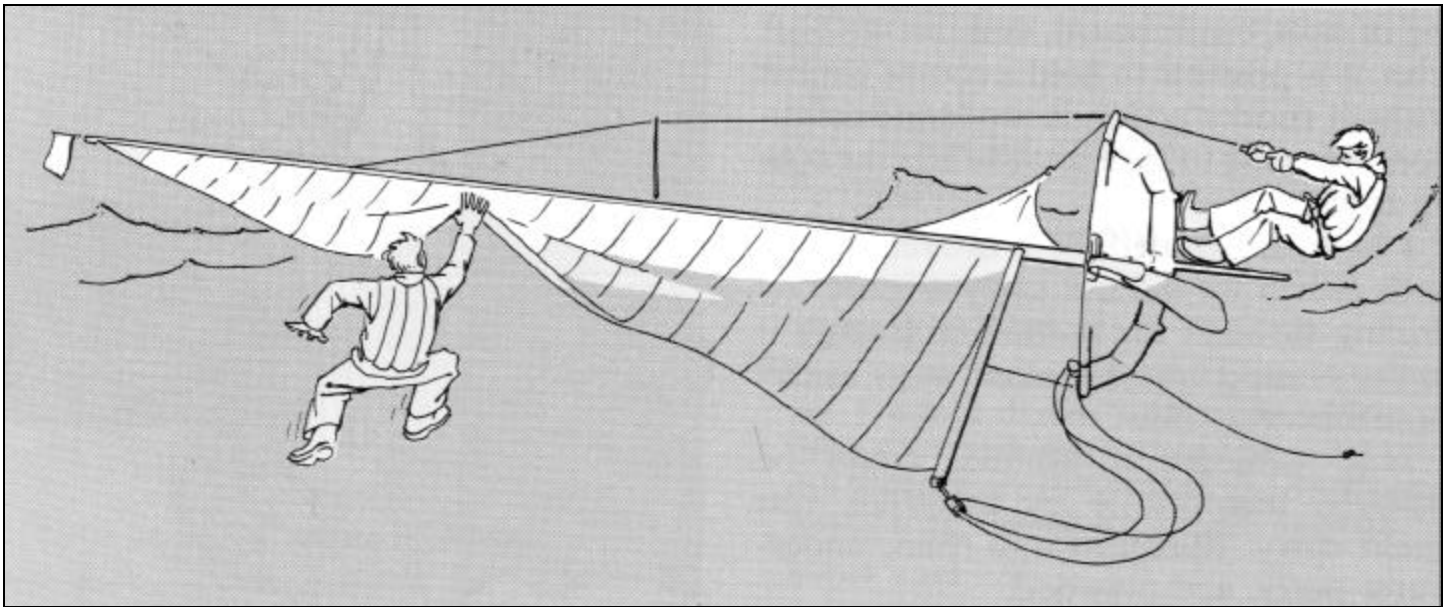
To right the dinghy, stand on the centreboard near the hull and lean far back holding any line that does not impair the sails. The crew helps from the masthead, manoeuvring the bow into the wind, pushing upwards on the shroud and working his way towards the boat.



*Sail-head buoyancy.*

If there is no masthead flotation, the skipper must not climb up and over the high side to get to the centreboard but swim around. And the crew should stay clear, buoying the mast and thus avoiding being trapped under a turtled boat.





*Crew supports mast while skipper leans out from centreboard close to hull.*

Al's note: With all due respect, I have vast capsizing experience and would recommend the simpler methods outlined at <http://www.angelfire.com/de2/WIT/SelfRescue.html>. I personally don't like the thought of sending the crew out swimming to the mast head, etc.

Only when there is leverage on the centreboard should any attempt be made to release the main halyard. (This is a last resort in getting the dinghy upright.) To keep a swamped boat pointing into the wind the crew goes to the bow and lets his body hang vertically, acting as a sea anchor. (He may have to push himself down to counteract the buoyancy of his life jacket.)

Al's note: You should only go to the bow and move it head to wind, if the mast is pointing anywhere near windward - see <http://www.angelfire.com/de2/WIT/SelfRescue.html>

The skipper will clamber in as the dinghy comes up, (watch out she doesn't roll over with his extra weight, to the opposite side) and, if necessary, jam a sailbag or shirt into the centreboard trunk.

Al's note: bringing the board **all the way up** as a first priority after getting one person back into the righted boat is good enough and makes a second capsizing during the bailing process much less likely!

Then he starts bailing hard. (The bailer was firmly attached by a line, remember.) Two hundred good heaves makes the craft stable enough for the crew to come aboard.

Al's note: With the board full up and the sails ragging, the boat will sit nicely sideways to the wind and the crew can/should come aboard at that time. It's an easier climb

than with the boat largely bailed, and in some cases may avoid hypothermia! Besides, this way the crew can help with, or do, the bailing while the helm locates the (medicinal) scotch!

A short spurt across the wind with auto-bailers open will empty the craft of water.

Capsizing your dinghy, weighted as if loaded for cruising, in home waters, if you have never done so. Get the feel of these various manoeuvres and acquire a confidence that you can right her, bail out, and go on sailing.

**Lightning Protection.** In a two-week summer sailing vacation, you can expect to encounter one or two thunderstorms. Very rarely do they do any damage, but they can be alarming, and the possibility of a lightning strike is always present. Only once have I seen a dinghy struck by lightning. The skipper and crew were unhurt, and the damage to the dinghy was repairable.

There is no reason to suppose that lighter-gauge conductors would be less effective on a dinghy than those that are required on a larger boat. (See C.P.S. and Government publications for recommended conductors.) The full precautions may not seem feasible. We clip auto "jumper cables" to the shrouds, and hang them in the water, and we are careful to keep well away from the standing rigging during a thunderstorm. An aluminum cooking-pot hung from the jumper cable increases the grounding area.

Al's note: There is considerable difference of opinion about what should be done in an electrical storm - see <http://www.angelfire.com/de2/WIT/LightningExchange.html>

## Chapter 10: Spares and Repairs

There is no redundancy in dinghy design, and if something breaks far from civilization you must be able to repair it yourself. It is worth thinking about the ways in which you would tackle different problems.

A broken centreboard could be one of the worst problems. We have considered carrying a spare (one per fleet), but it is really too big. If it broke near a lee shore, you would probably have to row off, or perhaps by using oars or paddles as leeboards you could try to work to weather under reduced sail. (It would be interesting to try this on home waters, some day.) Given ample time, it might be possible to remove the pivot bolt, plug the holes, and slide a floor-board or other piece of board down the centreboard trunk. This would not be as strong as the centreboard, and it would be necessary to reduce sail considerably.

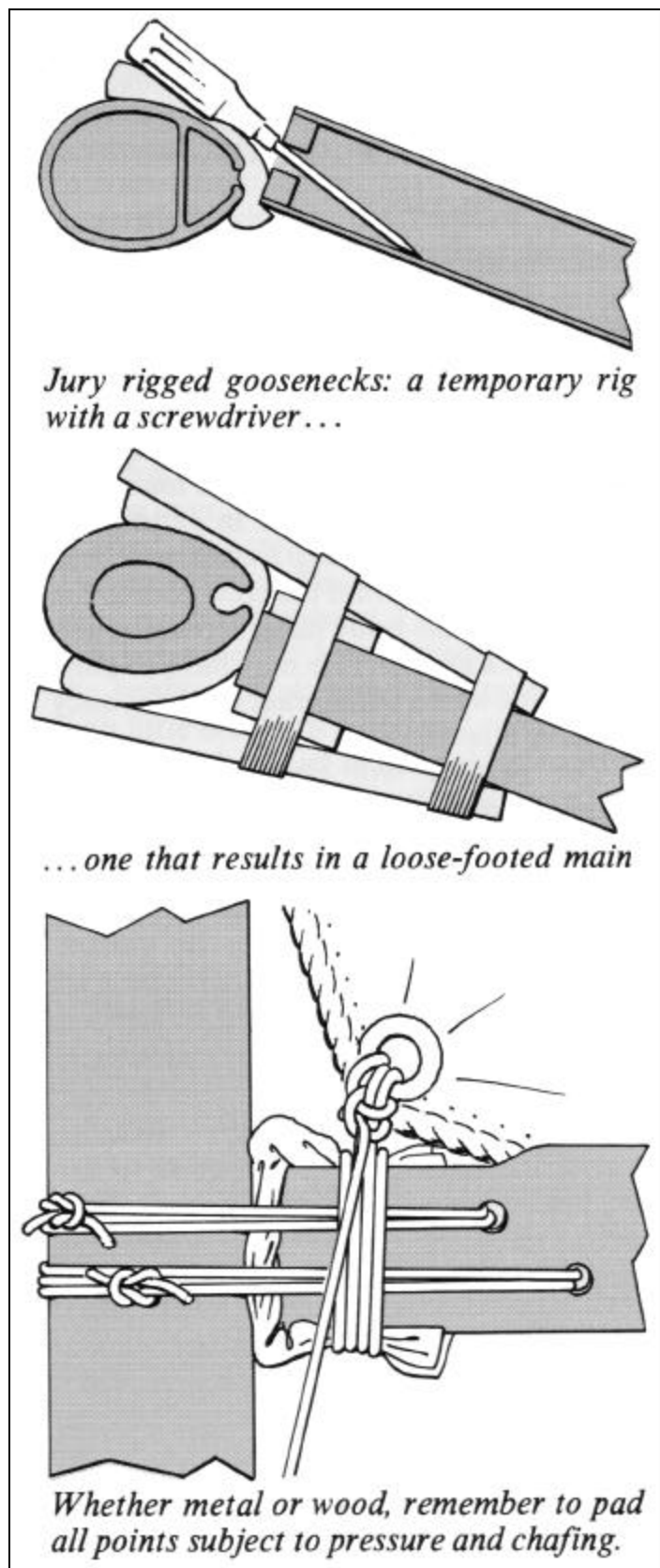
If the rudder blade is not fully down in heavy wind and sea there is a big risk of its breaking. For open-water sailing some skippers drill the rudder blade and cheeks, and insert a pin or bolt to prevent the blade from rising should its hold-down system yield. One sailor drilled a hole near the bottom of his rudder and put a safety line through it and attached it to the rudderhead, so that if his rudder should break, he would at least still have the pieces. To substitute for the rudder, an oar lashed to the transom can serve, but steering with it is said to be hard work. By careful balancing of sails, centreboard, and fore-and-aft trim, it is possible to hold a course almost without rudder action in moderate conditions. Heeling to lee always brings the bow up to weather.

**Al's note:** Tim France suggests fibreglassing rudder blade and centreboard, and I wholeheartedly agree. I have been giving heavy use to my two centreboards and two rudder blades (none of which are under 20 years old!) and not had a single incidence of breakage in over 25 years. When one looks at the scenarios painted by Alan above, the relatively easy job of putting a layer or two of fibreglass (I use West epoxy for this) over the stripped blade or centreboard, seems a small price to pay for a virtual guarantee that you will have no breakage. This of course is always assuming no excessive abuse of such gear.

I have substituted for a broken gooseneck (when we did not carry a spare) by drilling through the boom and lashing it to the mast. There are other ways as circumstances permit.

Hull damage, if limited, could be repaired temporarily by materials you could carry; fibreglass and resin, underwater putty, and plywood.

It is worth carrying a spare shroud, made to length with swaged loops. I also carry screw clamps for wire, so that a loop could be made at a broken end and connected to the chain plate with a lanyard of several parts of rope. If a spreader should bend or break, reduce sail until you can

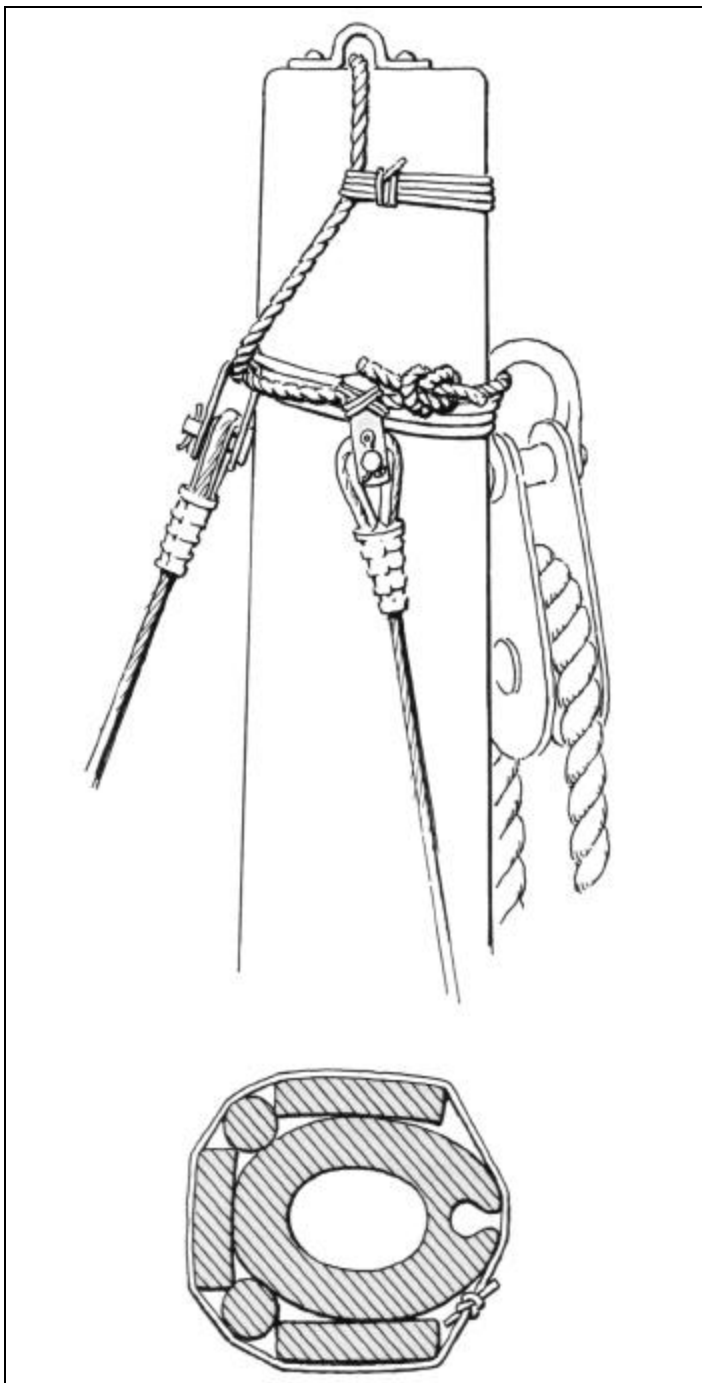


replace it. A shroud without a spreader gives much less support to the mast. For the forestay, the jib halyard is a back-up already in place; as I mentioned earlier always tack it down to the bow fitting when you are not flying a jib.



If you broke a mast, you would have to rig something. If not repairable, you would have to see what you could do using the boom as a mast, an oar for a boom and maybe the Jib as a loose-footed mainsail. On uninhabited shores in the Great Lakes, there is usually drift wood, as well as growing conifers, so you should not be at a loss for a spar.

In his book *Ocean-Crossing Wayfarer*, Frank Dye describes how his wooden mast was repaired after being broken at sea. All splintered wood was cut out, thus shortening the mast by six feet. Splints from boom crutch and whisker pole were lashed on the front and sides (with spacers between to stop them slipping). The spreaders were removed completely. The illustrations show details of the cross section and masthead.



Detail of Frank Dye's mast repairs.

loose (the track was blocked by lashings) the rig was strong enough to work to windward.

A sail repair kit, including adhesive repair tape, should be carried, and perhaps a spare mainsail per fleet.

Thinking over the above and other repairs that might be necessary should give you a good idea of what tools to carry. You cannot carry everything. A multiple-bit screwdriver is very useful, and if the bits are carried in a compartment in the handle, put some oil in it to combat rust. A wood saw — either wire-and-frame or folding — and a small hack saw are worth taking. Channel-lock pliers save carrying a full set of wrenches. You must be able to undo or tighten every screw and nut in the boat. The following list may be helpful:

#### Tools

- \* Screwdrivers for all screw heads
- \* Pliers
- \* Channel-locks or adjustable wrench
- \* Hand drill and bits
- \* Wood saw (wire or folding)
- \* Small hacksaw

#### materials

- \* Hull repair kit
- \* Plywood
- \* Sail repair kit (tape, dacron or linen thread, beeswax, needles, thimble, off-cuts of sail cloth)
- \* Air mattress repair kit
- \* Tent repair kit
- \* Duct tape
- \* Velcro
- \* Oil
- \* Talc or wax for zippers
- \* Epoxy glue
- \* Safety wire (mild steel)
- \* Whipping thread
- \* String or marline
- \* Line and rope: plenty, good variety, but 1/4 inch dacron will do almost everything (3-strand rather than braided if you can splice or are going to learn). Include one length long enough for a main halyard.
- \* Shock cord
- \* Screw clamp (for shroud wire)
- \* Shackles
- \* Cotter pins
- \* Bolts, nuts, washers (stainless steel or aluminum), one or two each of several sizes
- \* Wood screws (bronze or stainless steel) two or three of all sizes used in the boat, and oversize

#### Spares

- \* Gooseneck
- \* Mainsheet block
- \* Mainsail (one per fleet)
- \* Rudder blade (one per fleet)
- \* Shroud

## Chapter 11: Clothing, Personal Items, First Aid

We do not change clothes every day. We try to do the laundry in camp or at a laundromat once or twice a week.

### Fair Weather

- \* T-shirt, shorts
- \* Swimsuit
- \* Cap or hat
- \* Sunglasses and spares
- \* Shoregoing clothes — one set good enough for supper ashore, stowed separately

### Cold Days, Evenings

- \* Long underwear, trousers
- \* Sweaters
- \* Wind-proof jacket
- \* Footwear
- \* Sneakers or boat shoes, and spare pair
- \* Socks, including knee socks
- \* Rubber boots (for launching, going ashore in a marshy place or among poison ivy. And for wet weather)

### Sleeping Gear

- \* Pyjamas
- \* Sleeping bag
- \* Air mattress and means for inflation (we use our lungs, but it is a chore). There is a fairly expensive self-inflating mattress made from open-cell foam which we are trying: ("Therm-a-Rest": Cascade Designs, Inc., Seattle).

### Wet Weather and Flying Spray

- \* Foul weather gear, 2-piece with hood, bright orange or yellow. It would be good to have an outside pocket on the trousers, but such do not seem to be made so we have added our own pocket.
- \* Neck towel
- \* Wet suit is usual for racing in cold water.
- \* Many people prefer not to wear a wet suit for sailing all day, but immersion in cold water is dangerous. An alternative to a wet suit is UVIC or similar flotation jacket.

### Miscellaneous Essentials

- \* Toothbrush, comb, shaving equipment
- \* Soap and towels
- \* Toilet paper and trowel
- \* Sunscreen cream (Pabafilm or any cream with para-aminobenzoic acid in it)
- \* Hand cream
- \* Mosquito repellent, cream or spray
- \* Mosquito coils (Pyrethrin)
- \* Gloves
- \* Shackler knife and whistle for each person
- \* Binoculars
- \* Sewing kit

### Amusements

- \* Books, cards, chess, Scrabble
- \* Stamps and writing paper
- \* Camera and film
- \* Fishing tackle

### First Aid Kit

- \* Solarcaine
- \* Elastoplast Dressing Strip (narrow and wide)
- \* Antiseptic or antibiotic powder
- \* Aspirin, Tylenol, 222 tablets or Tylenol #1
- \* Graval
- \* Kaopectate
- \* Antihistamine tablets, e.g. Chlor-Tripolon
- \* Eyedrops, e.g. Murine
- \* Clove Oil for toothache
- \* Bandages
- \* Strapping
- \* Elastic bandages
- \* Personal medicines
- \* **if your doctor agrees:**
- \* Prescription pain pills
- \* antibiotic tablets
- \* Cortisone (Aristocort D cream) for poison ivy

Check with your doctor whether you need a tetanus booster before you go.

## Chapter 12: Stowage

The principles for stowage are these:

1. Heavy things low down, not too far forward or aft, and well secured so as not to move when heeled (or capsized). Sharp things (anchor flukes) padded. Cans of food or drink under floorboards, but be sure the floorboards are taking the crew's weight and not transmitting it through an oversized can to the hull. Hard and heavy objects should be secured on floorboards, or padded if resting on the hull to avoid damage when pounding in rough seas.
2. Extra buoyancy not too low down (or the boat is even more unstable when swamped) and as well secured as the heavy equipment.
3. Bedding, spare clothes, and some emergency food in a water-tight compartment.
4. Everything in the cockpit aft of the decking will get wet in a brisk beat, so binoculars, camera, charts, all go under foredeck, hung up, and preferably in water-tight bags as well.
5. Area around and below the compass should be free of iron. The worst offenders are anchors, flashlights and batteries, tools, tin cans, stove, camera.
6. Anchor stowage is important. You may need to drop the anchor on short notice, and a snarled rode can cause many problems including a shouting match between skipper and crew within hearing of watchers ashore. We start by securing the bitter end to the centre thwart. Then we fake out the rode in figure-8 coils on the floorboards. The chain

comes on top of the fake and the anchor on top of the chain. The whole pile is then tied down with light line whose ends are knotted through holes in the floorboards. The anchor can then be carried out either forward or aft, and the rode runs out easily either way.

7. Things needed only once a day or less can be stowed in the least accessible places; but note that the tent may be wanted in a hurry during a sudden shower when already beached.

8. Things that tend to be needed in a hurry should be readily accessible: binoculars, camera, horn, paddle, boat hook, bilge pump, foul weather gear, life-jackets and a spare one to throw, chart in use (and the next one), log book, snacks and drinks, flashlight and white flares (at night). In light airs, when commercial shipping may be encountered, or on a river, the oars (or motor) must be immediately accessible. Similarly, in poor visibility, the radar reflector should be either mounted or ready.

Clips, Velcro, shock cord, and nets mounted under side decks, are all useful for stowing all kinds of small and light items. In the after locker, varnished cardboard cartons or plastic dishpans of different colours, keep stores from getting jumbled. Try to put things away in the same place every time. There is scope for much ingenuity arranging neat stowage in the cramped space of a dinghy. One skipper rigged a shelf three inches below the foredeck, and carried his shore-going clothes folded on the shelf, held down by shock cords. We have spare clothing and shore-going clothes in a separate duffel bag stowed well forward and only opened when needed.

## Chapter 13: The Record

There are two quite distinct purposes of keeping a record of a cruise, whether long or short. The first is so that you always know, or can work out, where you are. Then if you lose sight of landmarks, you can plot your position on the chart and lay a compass course to your destination, or a course to keep clear of danger until conditions improve. The second purpose is to give a basis of fact to weave your memories around when you tell the tale and relive your vacation in that armchair on winter evenings.

In sight of a well-known coastline in settled weather and good visibility, there may be no need to keep your log of course, speed, departure time and fixes along the way. It is, however, a good habit to work out and write down (or tell your crew) the ETA at your destination, as soon as you get on course and have an estimate of your speed. A rough calculation in your head is good enough, and there is no way you can predict your speed with much accuracy in any case. If you do not do the calculation, it is surprising how often you think you should have arrived when you are nowhere near, and vice versa.

On a day's sail in unfamiliar waters, or even in your home bay when visibility is poor, it is important to keep a log for fixes and dead reckoning. This may be done in the logbook itself, but is better entered directly on the chart. Remember to record your time of departure from the harbour mouth, or the last channel marker. If you are close-hauled, wait five or ten minutes before recording your course. When you tack, record time and course before turning but again wait a bit before recording the new course. Often you have to estimate an average heading.

An idea I picked up from an English Wayfarer sailor is to paint the after 18 inches of each side deck white, have a grease-pencil handy, and use this as a "deck log". The grease pencil will write when the deck is wet, and does not wash off (you avoid sitting where you have written). We find this less trouble than getting out the logbook or plotting on the chart every time we tack, or pass a landmark, or record a change of course, speed, etc. Then, if we need a dead reckoning position, we can plot our course on the

chart; if we do not, we can rub the whole thing off using a rag or tissue moistened with kerosene; or transcribe the interesting parts into the logbook to include in the story we write after the cruise.

The second purpose of the log – the story – is well worth the effort of writing down what you do and see each day of your cruise. Include wind speed and direction, point of sailing, weather changes, etc. We enjoy typing out a story when we get home. The editor of your class association magazine or club newsletter can always use a condensed version. The biggest pleasure is that you can refresh your memory and run through the cruise later with family and friends.

Photographs also are a fine record. We always take a camera along, even though it is not easy to keep it dry and safe. There is something to be said for using an underwater camera.

A movie, if you manage to make a good one, is great for showing at a yacht club winter get-together. The making of one tends to become a major project on your cruise, though. Bulky, fragile and expensive equipment is at risk of a wetting or mechanical damage. It needs quite a lot of

practice, or a natural skill, to make a presentable movie. If you succeed, you will enjoy it for years and forget the problems of making it.

Another form of record is magnetic tape. Small battery-operated tape recorders have survived many cruises with our friends, and last summer I took one. Some people find it a lot easier to talk into the recorder than to write in a logbook. You have to be rather good at it for the result to be worth playing back to your friends without editing, but as a basis for writing up the story, it is a great help.

One way or another, bring back a record. It extends your own pleasant memories, and can give pleasure to others. In Appendix A is the Canadian Wayfarer Association Cruising Library Catalogue: stories written by cruising people in Wayfarer and other dinghies over the years.

These are available for borrowing. In the Wayfarer class, there are three trophies awarded annually: The *Viking Trophy* presented by Frank Dye for the best log of a cruise, world-wide; the *Ted Davis Memorial Trophy* presented by Don Davis for the best from a member of the Canadian Wayfarer Association; and the *George Smith Trophy* for the best in the United States Wayfarer Association.

## Appendix A1

### The C.W.A. Cruising Log Library

(last updated: 31 March 02)

**Cruising Librarian: Doug Gilchrist,  
230 Bedford Drive, Stratford, ON N5A 7A1  
R:519-273-1571 <dgilchrist@cyg.net>**

#### **How the Wayfarer Originated by Ian Proctor**

#### **Hugh Thomas starts Canadian Wayfarer cruising**

*The First Annual Wayfarer Cruise (Muskoka Lakes, 1970)*  
by Hugh Thomas W921

*A "Short" Summer Cruise* by Don Davis W460

*Cruising Georgian Bay in a Wayfarer* by Jim Phillips W866

*The Aquatic Cruise (Georgian Bay: 30,000 Islands)*  
by Jim Wickson W2276

*The Cruise: A Post Mortem* by Al Schönborn W852

\*\* *The Log of Cara Mia (Round Georgian Bay, 1972)*  
by Don Davis W460

*Wayfarer Cruise 1974 (Round Georgian Bay)*  
by Jim & Isabel Wickson W3136

#### **More cruises on Georgian Bay**

*Round Georgian Bay Anti-Clockwise, July 1973*  
by Don Davis W460

*Round Georgian Bay, 1973* by Joy Phillips W866

*Georgian Bay: Half-Round, July 1976* by Don Davis W460

*Forty-Mile Crossing* by Joy Phillips W866

*The Laughing of the Loons* by Margaret Dye

*Manitoulin Madness* by Gordon Laco (Albacore)

*Round Georgian Bay 1980* by Don Davis W460

#### **More Cruises on Georgian Bay Vol.II**

*The 2nd Great Georgian Bay Mirror Dingy Cruise*  
by Mike Hicks

*East from Tobermory* by Bob Anglin (CL 16)

*Pointe-au-Baril to Manitoulin Island* by Bob Anglin (CL 16)

*Ten Years on: Round Georgian Bay, July/82*

by Joy Phillips W866

*Cruise in South Georgian Bay* by Michael Gale

*From the Adventures of W3119* by Marian Ashley W3119

*Gunkholing: Killarney to the Bustards* by Marian Ashley

*An Unscheduled Trip to Parry Sound* by Don Davis W460

*The Voyage of the Ancients* by Don Davis W460

#### **Other Georgian Bay Logs**

*A One-Way Wayfarer Cruise on Georgian Bay /98*  
*Killarney to Pengallie Bay (near Parry Sound)*

by Tim France W3136

*Lost and Found and Fooling Around McGregor Bay*

by Al Schonborn W7222

#### **Wayfarers on the North Channel**

*Wayfarers on the North Channel* by Don Davis W460

*The Saga of the Long Distance Wayfarer Cruise*

by Pete Hanson W720

\*\* *Round the North Channel, 1974* by Joy Phillips W866  
*The First Voyage of Nomad* by Alan Keith W1355  
*The Voyage of the Mutineers, 1977* by Joy Phillips W866

### **Wayfarers on Lakes Superior and Nipigon**

*Open Boats Take to the Great Lakes* by Joy Phillips W866  
\*\* *The Superior Cruise, 1975* by Joy Phillips W866  
*Wayfarer Cruise Lake Superior, 1975* by Don Davis W460  
@ *The Warmth of Superior (1978)* by Joy Phillips W866  
*Goulais Mission to Michipicoten* by Don Davis W460  
*Farthest North Yet (Lake Nipigon, 1983)* by Joy Phillips  
*A Cruise on L. Nipigon* by Christine Wilkinson  
*Reading Beaches* by Christine Wilkinson

### **Some Open Water Crossings**

*And the Wayfarer can Cruise, Too (Toronto-Youngstown)*  
by Mike Schoenborn W276 with Alec Lowenthal W151  
*Wayfarer Cruise News (Toronto to Oshawa)*  
by Jim Wickson W2276  
*Across Lake Ontario (Toronto to Port Dalhousie)*  
by Don Davis W460  
*Another Cruise (Toronto to Niagara-on-the-Lake)*  
by Jim Wickson W3136  
*Bronte Harbour to Toronto Island and Return*  
by Ross Mills W286  
*To Toronto by Night (Bronte Harbour to Outer Harbour)*  
by Alan Phillips W866  
*To the U. S. Nationals by Water (Port Austin to Tawas,  
Lake Huron)* by Joy Phillips W866 with Ken Elliott W2276  
*Wayfarer Goes Night Sailing (Grimsby to Toronto;  
Hamilton to Grimsby)* by Alan Phillips W866  
*Hamilton to Kingston Non-Stop*  
by Alan Phillips W866 with Ken Elliott W2276  
@ *July 1980: Wayfarer Across the Lake (Toronto to  
Rochester)* by Ken Elliott W2276

### **Western Anthology**

*The Way of Wa-Goosh (Vancouver to Brigade Bay)*  
by Selwyn Fox W 1857  
*Cruising in British Columbia (Strait of Georgia)*  
by Michael Guard W3036  
*Across Georgia Strait Singlehanded*  
by Wayne Moore W7310  
*Island Hopping in B.C.'s Gulf Islands*  
by Wayne Moore W7310  
*Wayfaring in British Columbia's Gulf Islands*  
by Tony Balding & Betty Lording  
*Hollyburn Sailing Cruise, Strait of Georgia, B.C.*  
by John Millen W6280

### **Quebec, Maritimes**

*165 Miles Down the St. Lawrence*  
by André Laframboise W4675  
*Recollections of Eastern Seaboard Sailing* by Frank Dye  
*Taylor's Head to Shut in Island* by Jim Fraser W8328  
*East Coast Cruising, Around Isle Madame* by Jim Fraser  
*Eastern Passage to Port Dufferin* by Jim Fraser W8328  
*Eastern Passage to Chezzetcook Inlet* by Jim Fraser  
*Port Dufferin to St. Peters, Nova Scotia* by Jim Fraser

**1979 Sailing** (these logs also were lost in a mail-out to a member - if anyone has them, please return!!)  
@ *Jordan Harbour Buoyancy Test; Supper on the Lake;  
Toronto Weekend; Pointe au Baril to South Benjamin;  
Hamilton to Grimsby by Night; Grimsby to Bronte and  
Back.* A. & J. Phillips W866  
*How to Hit a Rock* by Ken Elliott W2276  
*Back to Georgian Bay, 1979* by Don Davis W460  
*Thunderstorms over Hangdog Reef* by Chris Emery W884

### **U.S. Logs**

*Let's Sail Over to Canada for Breakfast (Across Lake Erie)*  
by W.B. Quayle W1330 with Bill Biddlestone W786  
*Two Wayfarers Cross Saginaw Bay (Lake Huron)*  
by Alan Phillips W866  
*Kingfisher Log, July 1970 (Night Sailing in Saginaw Bay)*  
by Alan Phillips W866  
*The Journey of The Wayward One (Prairie Lake, WI, And  
Duluth, Lake Superior)* by Bob & Milly Frick W1931  
\* *Potagannissing Bay, Lake Huron*  
by Catherine Reeve W2957  
\* *The Mackinac Island Cruise* by Peter Every W1918  
*Les Cheneaux, 1978 (Lake Huron)* by Catherine Reeve  
*Cruising the Chesapeake*  
by Nancy & Graham Purchase W2238  
*Greenhorn Round the Sound (Long Island Sound)*  
by Guy Beaumont W1492  
\* *A Cruise in Bucks Harbor, Maine*  
by Richard Tomkins W1634  
*The Great Cruise (L.Erie)* by Martin Cooperman (Sprite)  
*A Rowboat, a sea Kayak, & L. Erie* by Martin Cooperman

### **Canada & U.S.A. Coasts and Rivers Vol. I**

*Down the St. Lawrence into Yesterday* by Marian Ashley  
*Annapolis to St. Michaels* by Ed Kyle  
*Christmas in the Mangrove Swamps* by Margaret Dye W48  
*Round Southern Florida, Christmas/81* by Margaret Dye  
*Christmas Cruise* by Alan and Joy Phillips W866  
*North from Nain on the Labrador Coast* by Geof Heath  
*Christmas Aboard Wanderer Florida Keys* by Margaret Dye

### **Canada & U.S.A. Coasts and Rivers Vol. II**

*Foreigners in Florida* by Margaret Dye W48  
*Wayfarer to Labrador* by Geof Heath  
*Baby on Board (Prince Edward Island)*  
by Michelle Bull W286  
*Key West to the Marquesas*  
by Clyde & Peggy Giesenschlag W48  
*More Wayfaring in U.S.A.* by Frank Dye

### **British Isles: Coasts and Rivers Vol. I**

*Voyage Around Raasay* by Robin Sutherland W3146  
*A Cruise to Lundy* by Ken Hughes W793  
*Harbour Hopping in Cornwall* by Ken Hughes W793  
*Six Days on the Fal, Cornwall* by Bill Lindsley W3687  
*Round the Isle of Wight* by Pippa and Tony Davis W2254  
*Chichester to Wareham*  
by Mike Gale and Christine Wilkinson W1856  
*Scotland, Oban Area* by Peter Grainger W1151  
*Shannon Cruise, Eire* by D. Kite W84

### **British Isles; Coasts and Rivers Vol. II**

*East Coast, Scotland and Solent Cruises*

by Ann Devine W382

*Norfolk to Cornwall* by Margaret Dye W48

*A Christmas Present* by Margaret Dye W48

### **British Isles: Coasts and Rivers Vol. III**

*Summer Days (Chichester to Poole)*

by Barrie Sprules W5499

*Wanderings on the West Coast (Largs to Oban)*

by Hazel & Peter Grainger W1151

*A Winter's Solent (Christchurch to Isle of Wight)*

by Frank Dye W48

\*\* *Hebridean Magic (Skye to St. Kilda)*

by Ken Hughes W793

*From Cornwall to the Isles of Scilly* by Ken Hughes W793

\*\* *A Summer Cruise—Salcombe to Poole*

by Peter & Hazel Grainger W1151

### **Scottish Coast and Islands Vol. I**

*Voyage to Cromarty* anon

*Log of Sgiathanach (Cape Wrath)*

by Roderick Stuart W3390

*Oban - Sound of Mull* by Catherine & John Dobson W6480

*Plockton to the Small Isles* by Clare & Brian Symes W545

### **Scottish Coast and Islands Vol. II**

*Round Mull* by Peter & Sarah MacKay W315

and Bill & Coby Paterson W7432

*A Little Sail Around The Minch* by Jerry Eardley W6999

### **Miscellaneous cruises:**

*Cruising for Beginners* by Michael Gale W1856

### **Across the English Channel and European cruises**

*Away in a Wayfarer (Isle Glénans to Marseilles)*

by Peter Clutterbuck

*Fit for Sea* by Peter Clutterbuck

*A Visit to Yokelfjord (Norway)* by Frank Dye W48

*Cruising a Wayfarer Abroad - Europe*

by Pippa Davis W2554

*Through Europe in a Wayfarer* by Piers Plowman W1981

*To Poland with a Dinghy* by Piers Plowman W1981

\*\* *Weymouth to the Channel Islands*

by Peter Hamblin and Tony W2034

*Wayfarers in Greece* by Margaret Dye

*A Wayfarer Weekend on Lake Mjosa in Norway*

by Hugh Riley W5440

*Two Wayfarer Worlds Sail to Denmark: Part 1,2,3*

by Ralph Roberts and Cedric Clarke W9885

and Bob and Clare Harland W9933

*In Search of the Riddle of the Sands*

by Robin & Maggie Cooter W 4726

*Cruising in Brittany* anon

*To Denmark and German Baltic*

by Robin & Maggie Cooter W4726

*To the Dutch Delta* by Robin & Maggie Cooter W4726

\*\* ***Winning Entry: The Viking Longship Trophy***

***@ Winning Entry: The Ted Davis Memorial Trophy***

***\* Winning Entry: The George Smith Cruising Trophy***

### **Loan of Log Anthologies**

Any of the anthologies may be borrowed by mail for a period of four weeks (approximately three weeks in your home, and one week for return mail). Write to Cruising Librarian, Canadian Wayfarer Association:

Doug Gilchrist, 230 Bedford Drive, Stratford, ON N5A 7A1  
R:519-273-1571 dgilchrist@cyg.net

Enclose a cheque for \$10.00 made out to the "Canadian Wayfarer Association" as a guarantee of prompt return.

The cheque will not be cashed, but returned intact, provided the log anthology is received back by the due date. (Service charge of \$1.00 per week if late.) Please give a second choice of anthology in case your first choice is out on loan.

## **Appendix A2: Wayfarer Cruise Logs on line**

for the most recent postings, mostly complete with better photos than the book-form cruise logs, go to

<http://www.angelfire.com/de2/cruise>

<http://www.angelfire.com/on4/cruisehall1>

<http://www.uswayfarer.org>

<http://www.wayfarer.org.uk/cruising/CruisingLogbook.htm>

Some examples from the CWA site:

*The 2001 North Channel Cruise as seen and experienced by Uncle Al:* <http://www.angelfire.com/de2/cruise/01NCcruiseindex.html>

*Nova Scotia Cruise 2000* by Jim Fraser (Ted Davis Trophy Winner): <http://www.angelfire.com/de2/cruise/2000JFindex.html>

*Maine Cruise 2000* by Alan Parry and Dick Harrington: <http://www.angelfire.com/on4/cruise2/Maine2000index.html>

*Lost and Found and Fooling Around McGregor Bay:* Uncle Al and Doug Gilchrist report their experiences from the 1997 North Channel Cruise led by Tim France (Ted Davis Trophy Winner): <http://www.angelfire.com/on4/cruisehall1/97cruisecruiseindex.html>

*McGregor Bay Revisited in '99* by Doug Gilchrist/Uncle Al: <http://www.angelfire.com/on4/cruise2/99Cruiseindex.html>

*Bill Fyfe meets Frank Dye in Sept. '99:* <http://www.angelfire.com/on4/cruise2/FyfeLog.htm>

*First North American Cruise Rally (2000) Report:* <http://www.angelfire.com/on4/rallies/2000RallyIndex.htm>

*Second North American Cruise Rally (2001) Report* by Tom Graefe: <http://www.angelfire.com/on4/rallies/2001Rallyindex.html>

... and many more!!!



## Appendix B: Book List

BAIRD, David M. *The National Parks in Ontario: A story of islands and shorelines*, The Queen's Printer, Ottawa. 1963

BARRY, James. *Georgian Bay*, Clark Irwin, Toronto.

BRAZER, Marjorie Cahn. *Well Favoured Passage: (The North Channel)* Peter Martin Associates, Toronto 1975.

CAPE BRETON DEVELOPMENT CORPORATION. *Cruise Cape Breton (Bras d'Or Lakes)*, Department of Tourism, P.O. Box 1330, Sydney, N.S. B1P 6K3.

COLEMAN, Eric. *Dinghies for all Waters*, Hollis & Carter, Toronto, 1976.

DESOUTTER, Denny. *Small Boat Skipper's Safely Book*, Hollis & Carter, Toronto, 1977.

DYE, Frank & Margaret. *Ocean-Crossing Wayfarer*, David & Charles, Newton Abbot, 1977.

DYE, Frank & Margaret. *Open-Boat Cruising*, David & Charles, Newton Abbot, 1982

ELLAM, Patrick and MUDIE, Colin. *Sopranino*, W.W. Norton & Co. Inc., New York, 1953.  
(This is superb and well worth searching the libraries for.)

FOX, William S. *The Bruce Beckons*, University of Toronto Press 1952.

GIBBS, Tony. *Practical Sailing*, The Hearst Corporation, Motor Boating & Sailing Books, New York, 1971.

HARLE, Philippe. *The Glénans Sailing Manual*, John de Graff Inc. Tuckahoe, N.Y., 1967.  
(This is the best book on dinghy handling.)

NICOLSON, Ian. *Dinghy Cruising*, Bosun Books #17—Adlard Coles Ltd., London 1963.

SMITH, Hervey Garrett, *The Marlinspike Sailor*, John de Graff Inc. Tuckahoe, N.Y., 1971.

STUART, Oliver. *Bad Sailing Made Good*, Adlard Coles Ltd., London, 1971.

WATTS, Alan. *Instant Weather Forecasting*, General Publishing Co. Ltd., Toronto. 1968. (This is excellent.)

WATTS, Alan. *Instant Wind Forecasting*, Dodd, Mead & Co., New York, 1975.

WELLS, Kenneth McNeill, *Cruising the Georgian Bay*, Kingswood House, Toronto, 1958.

WELLS, Kenneth McNeill, *Cruising the North Channel*, Kingswood House, Toronto, 1960.

WELLS, Kenneth McNeill, *Trailer Boating: Where the North Begins*, (Muskoka Lakes Area.) Kingswood House, Toronto, 1961.

See also the extensive bibliography comprising the O.S.A. pamphlet *Cruise Ontario* by Robert S. Anglin (1979).

## Appendix C: Recipes

### Anadama Bread

Makes 2 large loaves

- 7-8 cups all-purpose flour
- 1 1/4 cups yellow cornmeal
- 2 1/2 teaspoons salt
- 2 pkgs active dry yeast (= 4 teasp. bulk yeast)
- One third cup softened margarine
- 2 1/4 cups very warm water (120°-130°F.)
- Two thirds cup molasses (at room temperature)

1. In a large bowl thoroughly mix 2 1/2 cups flour with cornmeal, salt and undissolved dry yeast. Add margarine.
2. Gradually add water and molasses to dry ingredients and beat 2 minutes at medium speed of electric mixer, scraping bowl occasionally. Add 1/2 cup flour.
3. Beat at high speed 2 minutes, scraping bowl occasionally. Stir in additional flour to make a stiff dough. Work remaining flour into dough with hands.
4. Turn out onto lightly floured board, and knead until smooth and elastic, about 8-10 minutes. Place in greased bowl, turning to grease top. Cover; let rise in warm place, free from draught, until doubled in bulk. (Try one hour.)
5. Punch dough down; divide in half. Roll each half into a 14"X9" rectangle. Shape into loaves. Place in two greased 9"X5"X3" loaf pans. Cover; let rise in a warm place, free from draught, until doubled in bulk. (Try 45 minutes.)
6. Just before rising time is up, pre-heat oven to 375°F. Bake about 45 minutes, or until done. (Loaves sound hollow when tapped.) Remove immediately from pans and cool on wire racks.

### Joyflakes

Makes 9-10 cups, or about 30 servings.

- 4 cups rolled oats (large-flake are better)
- 2 cups wheat germ
- 1 cup coconut, preferably unsweetened
- 2 tablespoons brown sugar
- One third cup salad oil
- 1/2 cup honey Or light corn syrup
- Nuts, 1/2 cup or more, to taste
- Raisins, 1 cup or more, to taste

1. Pre-heat oven to 325°.
2. Mix oats, wheat germ, coconut and brown sugar in large bowl.
3. Make a well in centre and pour in oil and honey or corn syrup. Mix thoroughly. This is a sticky business and is most easily accomplished by starting with a fork; you will need to finish with your fingers.  
TIP: In step 3, estimate the oil in a half-cup measure. (It is two thirds of a half-cup.) Then measure the honey/corn syrup in the same measure without washing it. Honey slides out easily and without waste.
4. Stir in nuts.
5. Pour mixture on to a baking pan and bake for twenty minutes, stirring every five minutes.
6. Remove from oven and stir in raisins. (If you bake the raisins, they come out like lead shot.) Cool, and store in screw-top jars, preferably plastic ones for a dinghy cruise.

### Yorkshire Spice Cake

Makes one very big cake

- Three-quarters cup shortening
- 1 1/2 cups brown sugar

3 eggs  
3 1/3 cups flour  
4 tsp. baking powder  
1/2 tsp. salt  
Ground nutmeg and allspice (about 1/2 tsp. each, or according to taste)  
1 cup milk  
3 cups currants  
1 cup raisins

1. Beat shortening, sugar and eggs
2. Add dry ingredients, sifted together
3. Stir in milk.
4. Stir in fruit.
5. Pour batter into greased 14"X9" tin and bake in pre-heated 325° oven for 1 1/2 -2 hours. (Check it after one hour; ovens vary, and if yours tends to be hot, it would be better to line the tin with greased paper, bake for a shorter time, and/or try a lower temperature next time.)
6. Remove from tin; peel off paper if used. Cool on wire rack. When completely cool, cut into three rectangles for easy handling, wrap each in waxed paper and a plastic bag, and store for at least a week before using. Keeps well.

*... and two for the camp-fire*

### **Corned Beef Fritters**

Batter:

1/2 cup flour  
Pinch salt  
An egg if you can spare one  
½ tsp. baking powder  
Water (makes a much lighter batter than milk)

1. Mix dry ingredients. Beat in egg if used. Mix in enough water to make a thick batter.
2. Slice a can of corned beef and dip slices in batter. Fry in hot oil or other fat. Serve at once, with vegetables.

It is said that flat beer makes a beautifully light batter. There never seems to be any on our cruises. If you filch some from an unsuspecting sailor, leave out the baking powder.

### **Griddle Scones**

Makes 8 scones.

2 cups all-purpose flour  
1/2 tsp. salt  
2 tsp. baking powder  
2 or 3 tsp. sugar if you want them sweet  
(1/4 cup dried milk)  
2 tablespoons margarine or other shortening (= one quarter of a quarter-pound square, or Grandma's "the size of a walnut". No need for laboratory accuracy.)  
Water or milk.

Mix flour, salt, baking powder and sugar in one of your cooking pots. Rub in margarine. If you are using dried milk, stir it in now. Add enough water (milk if you choose to use it rather than dried milk) to make a stiff dough. Pat out into a round, half to three-quarters of an inch thick. Cut into eight segments. Bake on a dry frying pan, sprinkled with flour, until the scones are done in the middle and brown on the outside. Turn to brown both sides. This takes a low heat; on an open fire, hot ashes are just right.

## Appendix D: Addresses

(Tim France and Uncle Al have done their best to update addresses  
and add links as of Jan. 2002 but these of course are subject to change!)

Canadian Hydrographic Service Chart Distribution Office, Ottawa, Ontario K1G 3H6.  
**(613) 998-4931** [www.chs-shc.dfo-mpo.gc.ca/](http://www.chs-shc.dfo-mpo.gc.ca/)

Charts

Sailing Directions

The Canadian Aids to Navigation System (their "Information Bulletin #1" is the catalogue,  
and also lists chart dealers in all major cities.)

Radio Aids to Maritime Navigation

List of Lights, Buoys and Fog Signals

Canada Centre for Inland Waters, 867 Lakeshore Road, Burlington, Ontario

**(416) 637-4337** <http://www.cciw.ca/nwri/cciw-map.html>

(5 day week, short business hours, closed lunchtime and all holidays)

Boating Safety Infoline **(1-800-267-6687)** [www.ccg-gcc.gc.ca](http://www.ccg-gcc.gc.ca)

Canadian Coast Guard Boating Handbook: Safe Boating Guide

Canadian Government Office of Tourism (Department of Industry, Trade and Commerce)

235 Queen Street, Ottawa. Ontario K1A 0H5 [http://www.canadatourism.com/en/ctc/ctc\\_index.cfm](http://www.canadatourism.com/en/ctc/ctc_index.cfm)

National and Provincial Parks in Canada <http://canadaonline.miningco.com/cs/parksincanada/index.htm>

Ontario Ministry of the Environment, General Inquiry, 135 St. Clair Avenue West. Toronto. Ontario M4V 1P5.

**(1-800-565-4923)** [www.ene.gov.on.ca](http://www.ene.gov.on.ca)

Ontario Ministry of Tourism **(416) 744-6391. (1-800-668-2746)** [www.tourism.gov.on.ca](http://www.tourism.gov.on.ca)

Ontario Travel Information: [www.ontariotravel.net](http://www.ontariotravel.net)

Where to go and how to get there: Road maps of North America and the world.

[www.mapquest.com](http://www.mapquest.com), <http://www.expedia.com> and [www.multimap.com](http://www.multimap.com)

*Tim's notes:*

1. St. Lawrence Islands National Park - I have replaced with web page for all National and Provincial Parks.

2. I have changed 'Transport Canada' to 'Canadian Coast Guard Boating handbook.' Charts etc. come under 'Canadian Hydrographic Service Chart Distribution Office.'

## Appendix E: Buoyancy Testing

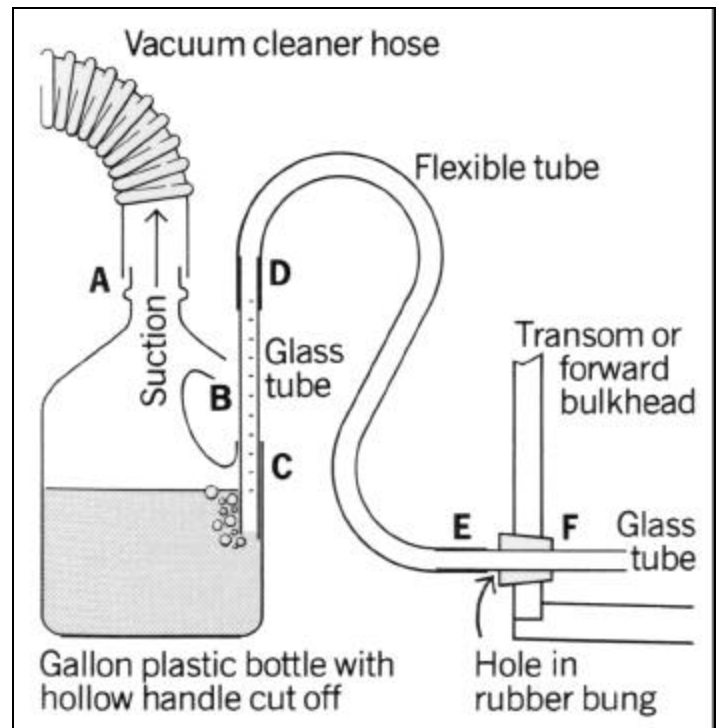
The following applies to dinghies that rely in part on watertight compartments for buoyancy. Each watertight compartment should have a drain hole and inspection cover so as to be able to check that it is not full of water, and that it does not leak. Testing can be done either "wet" or "dry". You should do a "wet" test before you go out on open water, but you will prefer to do it only once. This involves capsizing the boat and sitting on the upper gunwale for five minutes each side, and then keeping her upright and swamped (water level above the top of centreboard trunk) for ten minutes. The boat must still have some freeboard, and the buoyancy compartments should have taken in little water (less than 1 1/2 gallons in the Wayfarer). The wet test is a direct test of buoyancy. It should show you that your boat will neither sink nor float too low to allow you to self-rescue. But it is a cold job early in the season, which is the time you have to do it; and if the compartments leak, it is almost impossible to find out where, and to seal the leaks.

The "dry" test is carried out ashore, on trailer or dolly, and measures air-tightness. Here is a fairly simple method: times and pressure differences are taken from the Wayfarer Class Rules.

Take a 1-gallon translucent plastic bottle with a hollow handle. Cut off the handle leaving two short stubs. Fill the bottle with water (coloured if necessary to make it more visible) to just below the lower cut. Insert through the lower stub of the handle a vertical glass or clear plastic tube so that it dips well into the water, and extends upwards about ten inches. (Pack it with a strip of rag if the fit is too sloppy.)

The vertical tube is then connected by flexible tubing to another glass tube that is inserted through a bored rubber bung into the buoyancy compartment via one of the drain holes. Only these tubing connections and the bung need to be airtight. The others may be left open or loose. The principle is to reduce the pressure in the bottle only slightly.

Plug any other drain holes in the compartment with their regular bungs, secure the hatch cover and cautiously apply suction with a vacuum cleaner over the top opening of the bottle. A stream of bubbles from the bottom of the vertical tube shows that air is being sucked out of the boat's locker. After a time, turn off the suction, and if the compartment does not leak too badly, water will instantly rise in the vertical tube, and then fall again, fast or slowly depending upon the amount of leakage, to the original water level.



*Openings or joints A, B and C can remain open or loose. D, E and F should be airtight.*

Set up a ruler beside the vertical tube, with its zero at the level of the water in the bottle. Suck for long enough so that the water rises well beyond the five-inch mark. Time it as it falls: to pass the Wayfarer rule it must take at least thirty seconds to fall from the five-inch mark to the two-inch mark.

Beware of applying too much suction! You can suck water into the vacuum cleaner if you clap the hose on tight to the top of the bottle. You can cave in the compartment if it is watertight and you suck for too long. (That's why the top hole of the handle may remain open.) A vacuum cleaner has much more suction than you need, but it is easy to control by bringing the hose down to the bottle gradually, with the motor already switched on.

To find where the leaks are, paint joints and all suspect areas with soap solution, apply positive pressure (from lungs, bicycle pump, foot bellows, or whatever) and look for bubbles. Be careful not to apply more pressure than a few inches of water, or you may damage the compartment.

The Dry Test is a good deal more stringent than the Wet Test. If you manage to get the measured time up to ten or fifteen seconds, and cannot do better, the buoyancy may be good enough to pass the Wet Test.

## Appendix F: Boating Safety Information

### Where to go for general boating safety information:

Contact the Boating Safety Infoline at 1-800-267-6687

### Where to find the closest Canadian Coast Guard accredited basic boating safety course provider:

Visit the Office of Boating Safety web site for a course provider directory at [www.ccg-gcc.gc.ca](http://www.ccg-gcc.gc.ca) or call the Boating Safety Infoline at **1-800-267-6687**

### Where to find the closest regional Canadian Coast Guard Office of Boating Safety:

#### *British Columbia, Yukon Territory*

Office of Boating Safety Pacific Region  
25 Huron Street  
Victoria, British Columbia V8V 4V9

#### *Alberta, Saskatchewan, Manitoba, Ontario, Northwest Territories, Nunavut*

Office of Boating Safety  
Central and Arctic Region  
201 N. Front Street, Suite 703  
Sarnia, Ontario N7T 8B1

#### *Quebec*

Office of Boating Safety Laurentian Region  
101 Boulevard Champlain, 2nd floor  
Quebec, Quebec G1K 7Y7

#### *New Brunswick, Nova Scotia, Prince Edward Island*

Office of Boating Safety Maritimes Region  
Foot of Parker Street, P.O. Box 1000  
Dartmouth, Nova Scotia B2Y 3Z8

#### *Newfoundland*

Office of Boating Safety  
Northwest Atlantic Fisheries Centre (NAFC)  
East White Hills Road  
P.O. Box 5667  
St. John's, Newfoundland A1C 5X1

### Where to obtain Compliance Plates:

Office of Boating Safety, Headquarters  
Canadian Coast Guard  
200 Kent Street, 5th floor  
Ottawa, Ontario K1A 0E6  
(613)991-3128  
(800)267-6687

### Where to obtain nautical charts, tide and current tables, Sailing Directions, The Canadian Aids to Navigation System, Radio Aids to Marine Navigation, and List of Lights, Buoys and Fog Signals:

Canadian Hydrographic Service  
Chart Distribution Office  
Ottawa, Ontario  
Tel.: (613) 998-4931  
Web site: <http://www.chs-shc.dfo-mpo.gc.ca>

Canadian Hydrographic Service  
Chart Distribution Office  
Institute of Ocean Sciences  
Sidney, British Columbia  
Tel.: (250) 363-6358  
Web site: <http://www.ios.bc.ca/charts>

**Under an exclusive agreement with Nautical Data International Inc official digital raster charts from the Canadian Hydrographic Service are now available. These charts are an electronic picture of the paper version that includes every detail of the official paper charts. To obtain more information about official electronic charts, contact:**

Nautical Data International Inc. (NDI)  
(St John's, Newfoundland)  
Tel.: (709) 576-0634  
Web site: <http://www.ndi.nf.ca/>

### Where to obtain application forms for licensing vessels:

Addresses and telephone numbers of Revenue Canada can be found in your local telephone directory.

### Where to find marine weather forecasts:

Weather forecasts can be obtained from the following sources:

- channels 21B, 25B and 83B on the Atlantic Coast and Great Lakes;
- channels 21B and Wx1, 2, 3 on the Pacific Coast;
- in Vancouver, Toronto, Montreal and Halifax, VHF broadcasts from Weatheradio Canada (Environment Canada);
- [http://www.weatheroffice.ec.gc.ca/canada\\_e.html](http://www.weatheroffice.ec.gc.ca/canada_e.html)
- regular AM and FM radio channel forecasts;
- television weather channels and telephone services, where they exist.

Published by: Fisheries and Oceans Canada,  
Coast Guard,  
Ottawa, Ontario K1A0E6

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