

How to anchor like an expert



Chris Beeson talks to eight experienced cruisers to find out what ground tackle they have, their tips and techniques, and what they do when it all goes wrong

Anchoring is always a hot topic with cruisers. You're entrusting the safety of your boat and crew to a piece of metal on the seabed and a length of chain or rope connecting it to the boat. In most cruising grounds you can't inspect your own anchor's set, much less those of the boats to windward. All you can do is pick a good spot, back her up, dig it in and hope it's all OK.

That's why it excites opinion: there are no guarantees. We have to trust our kit to keep us

safe, which means the decisions we make about ground tackle and technique are often emotional rather than logical. Some will swear by one type of anchor; others wouldn't give it locker space, let alone use it. Who – if anyone – is right?

Those who anchor most often

'You're entrusting your boat and crew to a piece of metal on the seabed'



Though science is involved, anchoring is definitely something of an art. This is your masterclass

PHOTO LEFT & RIGHT: GRAHAM SNOOK/MM

are best placed to know what works and what doesn't, so we spoke to eight highly experienced cruisers who've dropped a range of hooks everywhere from the South Pacific to the Northwest Passage, on boats from 27ft to 46ft, in winds over 50 knots. We asked them what kit they

use, how they decide where to anchor, how they drop, any tips and tricks they use and what happens when wind or tide changes. Interestingly, there are differences of opinion among our panel of experts, but where they agree, you can be certain you're looking at best practice. ➔



Anchoring is escapism. Dropping the hook lets you leave behind the crowds and bask in the wonders of nature – a world of your own

OUR EXPERT PANEL, THEIR BOATS AND GROUND TACKLE

Alastair Buchan

Has cruised around Britain three times and completed two Atlantic circuits



Boat Dockrell 27
Cruising ground North Sea
Bower anchor 15kg Delta on 20m of 8mm chain and 30m of 12mm anchor plait
Secondary anchor Fortress FX23 on 15m of 8mm chain and 30m of 10mm kernmantle warp; 15kg CQR on 10m of 8mm chain and 30m of 10mm kernmantle warp. Extra 30m of 10mm kernmantle warp
Windlass Manual

Vyv Cox

Spends six months a year living aboard in the Med, mostly lying at anchor



Boat Sadler 34
Cruising ground Mediterranean
Bower anchor 15kg Rocna, 60m of 8mm chain.
Secondary anchors Delta 16kg, Fortress FX16, 5m of 8mm chain and 50m of 16mm anchorplait, small grapnel and rope.
Windlass Maxwell RC8 1kW with capstan

Ken Endean

Has cruised widely from Scotland to Ireland and down to Biscay



Boat Sabre 27
Cruising ground UK and France
Bower anchor 10kg Delta, 60m of 8mm chain.
Secondary anchor 10kg Delta, used with rope at a scope of 4-5 times the depth (any mooring warp of the right length, usually with a chum on the rope rather than a length of chain).
Windlass Manual

James Stevens

Spent 10 of his 23 years at the RYA as Yachtmaster Chief Examiner



Boat Hallberg-Rassy 34
Cruising ground English Channel
Bower anchor 15kg Bruce with 40m of 8mm chain and 30m of 14mm braided warp.
Secondary anchor 8kg Danforth with 9m of 6mm chain and 20m of 10mm laid warp.
Windlass Electric with capstan

Bob Shepton

Cruises the Arctic Circle and has sailed the Northwest Passage twice



Boat 33ft Westerly Discus
Cruising ground North Atlantic and Greenland
Bower anchor 20kg Delta with 70m of 8mm chain (40m and 30m joined together)
Secondary anchor 20kg CQR, or 11kg Bruce with 6m of mixed 6+8mm chain, and 60-90m of multiplait anchor rope
Windlass Electric with capstan

Nigel Calder

Has lived on boats in Europe and the Americas for over 30 years



Boat Maló 46
Cruising ground North Atlantic coasts
Bower anchor 33kg Rocna on 50m of 10mm chain
Secondary anchor Fortress FX 37 with 8mm of 10mm chain leader and 50-100m of 12mm nylon rope, bronze Fisherman with a similar cable to the Fortress
Windlass Lighthouse 1501 with capstan

Tom Partridge

Is two years into, and half way through, a round the world voyage



Boat Hylas 46
Cruising ground Circumnavigation
Bower anchor 33kg Rocna, 90m of 10mm of chain. Automatic anchor cable counter in cockpit.
Secondary anchor 20kg Delta with 10m of 10mm chain and 50m of three-plait nylon rope.
Windlass Maxwell 2200 2.2kW with capstan

Jess Lloyd-Mostyn

Is four years into a round the world voyage



Boat Crossbow 40
Cruising ground Circumnavigation
Bower anchor 30kg Bruce, 60m of 10mm chain spliced to 60m of octoplait nylon rope.
Secondary 18kg stainless steel Bügel anchor with 6m of 10mm chain and 55m of three-strand nylon warp. Also 16kg CQR, 16kg Danforth and 90m of 10mm chain
Windlass Lofrans Tigres 1.5kW with capstan

‘What is your anchoring technique?’

Alastair Buchan

I make sure there is enough chain and warp on deck and that it will run freely, then stop the boat where I want to set. As the wind and tide start carrying me backwards, I begin lowering the anchor by hand.

I usually let wind and tide dig in the anchor though I sometimes burp the engine astern for reassurance. Once I am satisfied that the anchor is set and I'm not going to move, and before taking anchor bearings, I take a couple of visual transits, using daymarks or suitable shore lights at night, and log these along with the anchor bearings. Using transits means I can look around and check all is well without having to reach for the handbearing compass.

Vyv Cox

I'll motor up slowly to select an area clear of weed, stop the boat and lower the anchor using the windlass – I never flake chain on deck – and our anchor invariably lands the right way up. Our preliminary scope is 4:1, the crew runs out the correct amount of chain while I motor slowly astern or let the wind blow the boat down. To dig in, I motor astern at 2,500rpm for at least 30 seconds, watching transits or sometimes the bottom, then I assess whether 4:1 is sufficient for expected wind, increase if necessary, then rig a snubber. Usually the snubber will be from the forward cleat to just below water, around 2m long, but if strong winds are forecast I use the midships cleat to get a longer snubber. Almost always I dive to check that all is well.



Some swear by ranging the correct rode on the sidedeck before dropping

Ken Endean

First, range the correct length of chain on deck and secure the inboard end. Lower gently when stationary and then pay out the chain by hand as the boat moves astern, aiming to lay it in a straight line without much slack. Use a backed mainsail or gentle power to dig in the anchor. After assessing the initial set, more sail or engine power may be used to thump the anchor in deeper. We never set an anchor alarm.

James Stevens

Under power, stop the boat and use transits to confirm this. Many skippers go head to wind but if there's a tidal stream, point into that. I then lower the anchor with the windlass, it touches bottom in a few seconds by which time the

PHOTO: COLIN WORK

bow is blowing off. If there's little wind, use a short burst astern as the cable is laid out. If the bow comes off the wind or tide too far, snub the chain temporarily. Once the right scope is out, feel the chain to detect the juddering of a dragging anchor and check a transit ashore. If it's a short stop I don't use the engine to set the anchor. For an overnight stop I use a short burst of astern.

Bob Shepton

When stationary or beginning to move astern, I release the windlass clutch and let the ground tackle fall. Sometimes, if I can manage to set up a depth alarm, I'll set an anchor alarm.

Nigel Calder

Bring the boat to a stop and drop the anchor. Let the bow blow off and pay out rode until required scope is out, then snub up and have a cup of tea while the anchor works its tip into the bottom. After tea, load up with two-thirds power astern once the anchor has had time to achieve an initial set. We occasionally set an anchor alarm, if a wind shift is likely to swing us into hazards.

Tom Partridge

After discussion, we'll pick a spot and put it into the plotter. Bottom is important. Mud requires around 20 minutes to get the anchor buried, much slower than sand. We agree depth and scope, then consider swinging room.

Under motor we check depth and look for obstructions. Then we approach slowly into wind or tide, whichever is stronger,

stop, then drop anchor using the windlass and ideally hold the boat in position until the anchor hits bottom. Then we move slowly astern while Susie indicates the angle of the chain. With a long scope we stop short of dropping it all to help set the anchor. If the chain counter is working I call the amount, if not Susie counts the coloured tags every 10m. We use hand signals as the windlass is noisy.

We let the wind blow us back then start reversing, slowly increasing the revs up to 2,200-2,500rpm with a solid burst at the end – higher if strong winds are forecast. Susie has her foot on chain to feel for dragging.

I swim and check the anchor before the snubber is rigged. We log our position, take three transits in different directions and check our track on the plotter for 30 minutes. We always set an anchor alarm on the first night.

Jess Lloyd-Mostyn

I stop the boat at our chosen position and James drops anchor manually to the depth of water we're in, plus a bit. Wind, tide or motor takes us back whilst he pays out more chain, by hand to 'feel' the anchor on the bottom.

We like a large scope, 5-7:1 in 5-10m, and dig it in at 1,000rpm, then 1,500, while James puts a bare foot on the chain to feel for any vibration and I check my transits and the GPS. We log position, depth and state of tide before turning off the engine so we can check position on the GPS if it blows at night. We always wake if strong wind comes.



Several of our experts prefer to handle ground tackle manually

PHOTO: COLIN WORK

‘What are the worst conditions you've anchored in?’



In anything over a Force 6, many boats start yawing and snatching: prime conditions for dragging

Vyv Cox

Before my Rocna I had a Delta. I was lying to that in Vliho Bay, Lefkas, when a microburst brought winds gusting to 50 knots in variable direction. We dragged three times in an hour. I trapped a finger between chain and windlass so, with blood on the foredeck, I motored astern upwind, into the mud, and took lines ashore. Then we sat in the

cockpit with a beer and watched others dragging.

In Cala di Lupa, Sardinia, we had four days of 30-45 knot winds. The sandy bottom shallows gradually, and we anchored in little more than 2m, drawing 1.4m. Ultimately we had 35m of chain out, a scope well over 10:1. After a couple of days I put out the kedgie too, with about the same scope. Life

on board became much more comfortable, with yawing cut from 140° to about 90°.

Nigel Calder

We had 50 knots on the beam while anchored in weed in Sweden. The side decks rolled under but the anchor held. The most frustrating was Nassau Harbour, where we dragged and reset seven times

with a manual windlass and still never got a good set.

Tom Partridge

We had over 40 knots in Bequia on Christmas Day 2013, which resulted in local flooding and deaths. We started dragging and hauled the anchor up to find we had spiked a pop bottle. How we didn't drag the night before with winds over 40 knots, I've no idea.

PHOTO: ALAMY

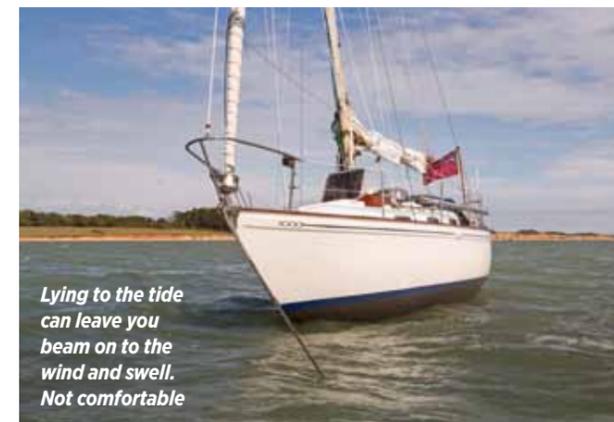
‘What are your pre-anchor checks?’

Ken Endean

An anchoring plan should be like a passage plan, starting with an analysis of the likely weather, including wind shifts. The two most important factors are shelter and seabed.

In a very strong wind, most of the force on the anchor will come from wind rather than waves, so the ideal anchoring position will be protected by windbreaks such as nearby cliffs – even better if the ground is wooded.

Then assess the seabed using the chart, pilot book, personal knowledge, channel formation, local geology, leadline and Mk1 eyeball. In clear water the bottom may be visible, so that the anchor can be placed clear of rocks and positioned to allow adequate swinging room.



Lying to the tide can leave you beam on to the wind and swell. Not comfortable

There are other factors to consider. Even though the best shelter may be in shallow water, greater depth will allow a longer catenary (length of chain clear of the seabed), which will reduce

snatching. Avoid sloping seabeds as they're more likely to be rocky with poor holding. Some deep scour holes tend to collect loose seaweed and/or boulders, which are equally unhelpful.

Nigel Calder

When choosing an anchorage, protection is key, especially from swells as we get seasick if the boat rolls. I check for hazards on the lee shore, and other hazards if the wind shifts. If necessary, we lay a second anchor to windward of the anticipated wind shift. We also plan an exit strategy if things blow up at night.

Jess Lloyd-Mostyn

We always seek out the most sheltered spot in line with the coming forecast. We prefer to anchor in sand or mud, and avoid rocks, coral heads and very deep anchorages. While sailing in the South Pacific, the deepest we dropped the hook was 22m, and only when the conditions were fairly mild. ➔

PHOTO: COLIN WORK

PHOTO: GRAHAM SNOOK/YM



For security, give the engine a solid blast astern to get the anchor set



A windshift in Loch Beag left Nigel Calder close to this rocky lee shore. He raised anchor and followed his inbound plotter track to avoid lobster pots and rocks, and reach safety

‘What are your top anchoring tips?’

Alastair Buchan

Shortening the warp once the anchor is set may be good manners in busy anchorages but needs constant vigilance. An unexpected change of wind direction overnight in Porlamar, Venezuela, swung all the boats through 180°. Anchors failed to reset for boats with shortened scopes and they dragged, picking up the anchors of other boats that had not shortened their scopes. Chaos. The concept of catenary may be discredited but I have always found that a tendency to drag disappears when I put out more scope. If I have anchored in weed or some other unsuitable bottom, the safest cure is to go and find somewhere better.

In prolonged strong winds the anchor may be so well set that I can't recover by hand. First I try the windlass, then I motor over the anchor, which usually works.



Weed and kelp offer notoriously poor holding because they prevent the anchor digging in

Vyv Cox

If the anchor is bouncing over the bottom, the chain vibrates. Once set, a hand or foot on the chain can detect smaller drags. We mark transits from the cockpit as convenient, then extend the snubber if needed. We have

proved photographically that motoring astern at 2,500 rpm for 30 seconds or more causes the anchor to set more deeply than winds of around force 6. Motoring at 2,000 rpm is far less effective.

Ken Endean

The foredeck crew places a hand on the chain at the bow fairlead, after it is all paid out but before it comes taut, to sense vibrations and to note whether the anchor drags before setting. When selecting anchor transits, it is important to assess their likely divergence when the boat swings and tidal height changes, otherwise these normal variations could prompt unnecessary panic.

James Stevens

The hardest part is choosing the spot – good holding, good shelter, clear of other boats. Actually anchoring is simple

by comparison. Study the forecast, read the pilot, and if the water is clear and bottom sandy, choose a spot without weed. If I'm unhappy I move straight away, it's much better than stressing in my bunk.

I don't have a retaining pin on the bow roller so I secure the chain with a warp between the bow cleats. I remember a sail training yacht getting seriously damaged once, when the chain jumped off the gypsy and started sawing through the bow as it ran over the side.

Bob Shepton

Zoom the plotter right in. The track lines will still show, plotting the ship's course swinging to the anchor and an anchor watch can be kept in the warm at the chart table most of the time, with only the occasional check 'upstairs'. If the track line

suddenly moves downwind from the black smudge of tracks, you are dragging.

Our bower anchor chain is in two parts: 40 and 30m. They are shackled together and then tied with strong line as a failsafe. If we did lose the main anchor (we nearly did once when it got stuck under coral – in the Arctic!) we could unshackle, ditch the remains of the first chain and still use the second.

Nigel Calder

We have a set of hand signals for the person dropping the anchor to instruct the person driving the boat. It is important not to have to talk to one another, and for the foredeck crew to be in charge.

Keep your track on the plotter. I was anchored off a rocky shore at the head of Loch Beag when the wind shifted 180° overnight and rose to gale force. The rocky shore

was now immediately behind us with heavy rain and near-zero visibility, and I had seen lots of crab pots in the narrow, rocky passage on the way in. I had kept our inbound track on the plotter and simply stayed on the line to get back out without fouling rocks or pots.

Tom Partridge

If there are risks of swinging in a crowded anchorage or dragging in strong winds, we put fenders out. I've never understood why it's thought 'uncool' to protect your boat with fenders at anchor?

Always sit on your boat and watch for at least an hour to make sure the anchor is properly set. Relax or tidy up the boat. If you are worried about your boat while ashore, ask someone to watch her and ensure they know how to rescue her if needed. At Fatu Hiva, in the Marquesas, we

agreed with another crew to watch each other's boats.

In crowded places, use a buoy to mark your anchor and always mark a stern anchor. Dinghies and water taxis will avoid the bow but not always the stern.

Always use an anchor light. We've arrived at night in anchorages and nearly collided with unlit boats. Solar garden lamps on the bow and stern are a good idea in addition to the mast anchor light.

Jess Lloyd-Mostyn

We trusted our Bügel anchor until it dragged badly in part-grass when the wind was only around 20 knots, which was surprising as we'd been anchored in the same spot with the same wind direction for more than a week. This made us keen to acquire a heavier anchor of a different type, which is why

we now use the Bruce as our bower. This has coped well, even with grass, and we've sat comfortably and securely with winds of up to 40 knots.

If winds are strong we may rig two snubbers. While we were ashore our chain jumped off the gypsy in a bouncy anchorage: 60m of chain and 50m of rope went over the bow and the rope had almost chafed through when we got back on board. We've no idea what happened to our snubber. Now we cleat off the chain as well.

We only ever turn off the engine and log the position once we're both happy. If one of us is slightly unsure about how we've ended up then we pick up and re-drop, no matter how much of a hassle it may seem. It's important for a good night's sleep for you to both be confident with set and position.

PHOTO: COLIN WORK



Forget your anchor light and you could be hit by a yacht coming into a dark anchorage



Jess nearly lost her boat when the chain jumped off the gypsy, so she cleats the chain and snubs

PHOTO: JESSICA LLOYD-MOSTYN

‘How do you handle changes in wind or tide?’

Vyv Cox

I stern-kedge quite often, and take lines ashore if appropriate. However, we have proved many times that our Rocna resets efficiently after 180° windshifts.

Ken Endean

On a good seabed, we would expect our Delta to reset without dragging. If an unpredictable

wind shift leaves us more exposed, we move. A Bahamian moor is probably more useful for a change of tide, although in a channel with strong tides we choose a spot with wind across the channel, when a single anchor should suffice.

James Stevens

I would only use a Bahamian moor if space is restricted. I would rather

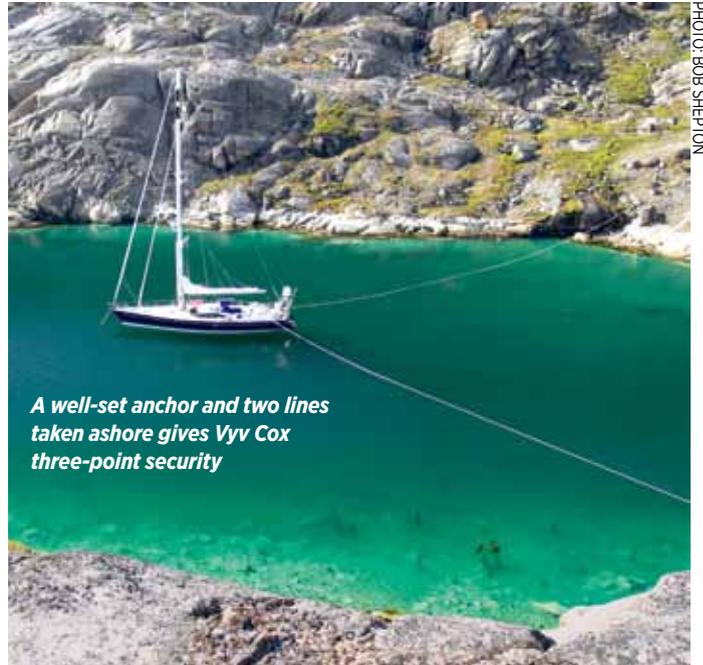


PHOTO: BOB SHEPTON

A well-set anchor and two lines taken ashore gives Vyv Cox three-point security



PHOTO: TOM & VICKY JACKSON

A Bahamian moor: two anchors laid off the bow, on two cables joined by a snatch block. It's secure, but hard to lay and recover

the weight is taken on the bower anchor and chain. When the tide turns and the anchor has to reset, in anything but calm weather I put my head out to check the yacht has settled. At night, chain moving across the seabed usually wakes me up.

Tom Partridge

I haul up and reset. If we expect a wind shift that would leave us on a lee shore, we move. If there's

no other option, I'll make sure I'm clear of the shore and set alarms for overnight.

Jess Lloyd-Mostyn

We consider tide changes before we drop anchor, to ensure that we'll have enough swinging room. We also check whether anyone has a stern anchor, and what boats are around us. Multihulls tend to be more skittish in a breeze than our heavy monohull.

‘What do you do if a gale's expected?’

Alastair Buchan

I do not use a chum and I've never used tandem anchors. I would be reluctant to lay two bow anchors, as I have seen the tangles caused by the boat turning. I only use a second anchor to haul the stern round so that I lie bow to the waves for a decent night's sleep.

Vyv Cox

I've no belief in chums or tandem anchors, but twin anchors, the Rocna and Fortress, have held superbly. Yawing, which is probably a contributor to anchor dragging, is greatly reduced. Major windshifts are a problem with twin anchors, as they can lead to considerable tangles.

Ken Endean

A chum is the most useful precaution. It enhances holding, damps snatching and yawing, and it's easy to recover if I have



PHOTO: GRAHAM SNOOK/VW

Ken Endean swears by his chum's ability to boost holding power – and it's quick to retrieve

to move. Complicated underwater gear that may have to be unrigged in the middle of the night is thoroughly undesirable.

James Stevens

In strong wind, I use more chain. Get as close to the weather

shore as possible, tidal range permitting, because there's less yawing in sheltered, shallower water. Using twin anchors or a chum becomes more important if the rode is chain-and-warp rather than all chain.

Nigel Calder

I've never had to use a chum or set tandem or twin anchors. We only use a second anchor to avoid swinging into hazards.

Tom Partridge

We let out more chain and add rubber snubbers to our rope snubber. We yaw a lot and I'd love a riding sail to reduce that.

Jess Lloyd-Mostyn

We may double up the snubber, or put on our 10kg chum. In very strong winds, we may use the dinghy to lay a second anchor at the bow, although we haven't had to do this often.



PHOTO: TOM PARTRIDGE

Tom Partridge uses twin snubbers for double security, giving a less anxious ride at anchor



PHOTO: COLIN WOKK

If the rope snubbers are at their limit, Tom Partridge adds rubber snubbers to absorb the snatch