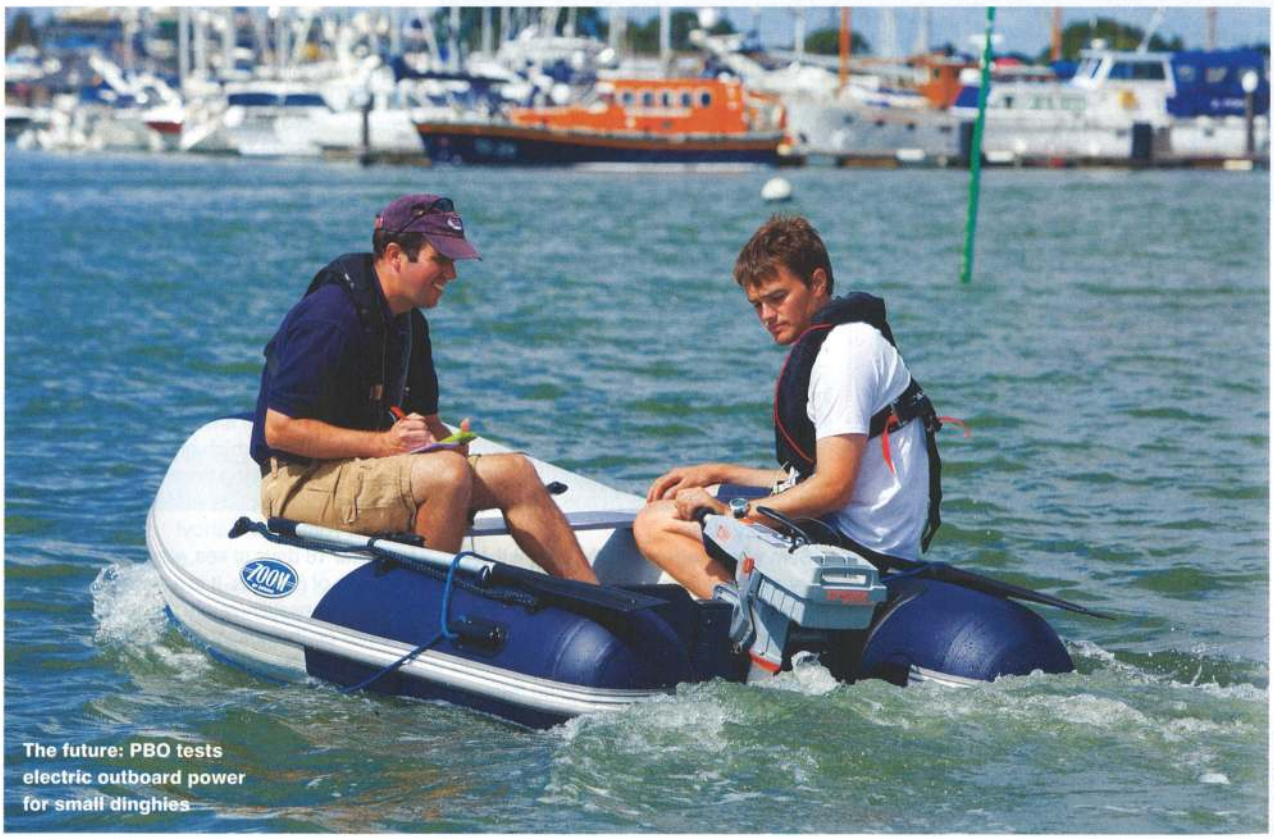
Top tender tips

From boarding to sculling, hull type and maintenance, John Tylor shares some sensible advice about using small dinghies



The future: PBO tests electric outboard power for small dinghies

David Harding

From getting on and off the yacht to collecting supplies, visiting friends or simply going fishing, tenders play an important role in a boat owner's life. Here are some of the things I've learned over the years:

Board with care

On a mooring or at anchor, getting aboard a boat can be a challenge. One time, a friend of mine reached for the boarding ladder, and gave a slight push off from the dinghy. Naturally, the dinghy moved away from the yacht leaving my friend in an extremely undignified position before getting very wet. Another time my wife stepped onto the gunwale instead of the centre of the dinghy, ending up in the sea.

Perhaps the most dangerous mistake I witnessed was an ageing friend step into the dinghy forward of the seat wearing a backpack full of food and wine. The sudden movement caused the bow to slew and the dinghy tipped, dumping him into the water. The backpack floated, forcing his face down, making it difficult to get back on board. By the time we reached him the backpack was filling with water. Quick action by a nearby friend helped us rescue him and get him back aboard his yacht.

TIPS

- Secure the dinghy, or have someone hold it against the hull while you board
- Stand in the centre of the dinghy, not the gunwale
- Leave your backpack at your feet

Size matters

Their small size makes dinghies sensitive to movement so balance is critical; many are wide so to load or unload anything you'll likely be standing off-centre. Standing (even lifting something as small as a bag of wet-weather gear and the day's food) raises our centre of gravity. This is a particular problem with round bottomed dinghies with low freeboard. Catamaran hulls are slightly more stable and of course RIBs and inflatables are most stable – although without a keel some inflatables can slide sideways all too easily.

Jim Kidd/Alamy

GRP or timber dinghies are usually much easier to row than inflatables

Another danger occasionally ignored is 'free surface effect'. This occurs when a surprisingly small amount of water collects in the dinghy and moves with the motion of the boat, making it less predictable and more unstable.

TIPS

- Take care when standing
- Bail out collected water

'A passing ferry caused a momentary unbalance, he let go of the yacht and found himself with no oars or working engine in the middle of the moorings'

Pros and cons

Each type of dinghy has its inherent strengths and weaknesses. Most inflatable boats have three chambers; two make up the sides and one for the floor. Some also have an inflatable keel, improving rowing performance. In wind and sloppy waves inflatables can be a challenge to row as most lack a keel while the pontoons have relatively high windage. However their incredible stability and reasonably light weight makes them popular despite being easier to puncture than a rigid dinghy.

A rigid-hulled boat, or Rigid Inflatable Boat (RIB) offers the best of both worlds with its ability to run up on the shore without puncturing the bottom. The soft sides add buoyancy and stability and do not scratch the yacht's topsides, but the increased weight can make them more difficult to handle out of the water. Having davits on the yacht solves this problem.

GRP or timber dinghies are mostly much easier to row and with good fenders can also be gentle on topsides. Under some circumstances they can be less stable than an inflatable but are rarely dangerous. All dinghies should be unsinkable; foam and sealed chambers can provide enough flotation in rigid dinghies to keep them afloat, allowing time to bail out.

TIP

- Think about usage: do you want durability, stability and/or ease of rowing?

Maintenance

While inflatable dinghies are inherently safe as long as they are not punctured they do deteriorate with age. They need little maintenance but can leak air around the inflation valves so keep these clean, free of sand and regularly check the O-rings. Be careful with the inflation pressure, especially in summer where the high daytime temperature can increase the internal pressure beyond the dinghy's ability to survive. Heat can cause joints to soften and, if the inflation is uneven, for internal baffles to rupture as the pressures in the dinghy increase unevenly. Only use proper inflatable boats; lightweight toys should never go in open water.

Some dinghies can be sailed too, adding to the fun.

TIPS

- Keep inflation valves clean
- Regularly check O-rings
- Check the pressure in hot temperatures

Single-handing

I keep my yacht on a mooring and often go out by myself so when I take tools, fuel or water I do not try to lift the heavy items from the dinghy onto the deck. I climb aboard then hoist the heavy objects by rope from the safety of the deck. I also have my man-overboard retrieval system which can be used for this purpose, but have rarely needed it.

With heavy objects balance is critical; load the dinghy to keep it trimmed flat. If this means making two trips then do it for your own welfare. I spread the load around the floor towards the stern of the dinghy as this is where it has maximum buoyancy. With me sitting in the middle, the boat is trimmed and easy to row.

TIPS

- Be prepared to do more than one trip
- Load the dinghy to keep it trimmed flat
- Hoist heavy items aboard from the yacht itself

LEFT Well balanced for easy rowing
BELOW All good fun but this dinghy is grossly overloaded

Under power

It is different when I use the outboard motor; a tiller extension allows me to sit where it is trimmed by moving the load more towards the bow. When I reach the yacht I tie on immediately to a centre cleat. This makes positioning the dinghy next to the side boarding ladder simple. I then run a stern line from the dinghy transom to a cleat on the yacht, this holds it next to the boarding ladder and steadies it fore and aft while I load or unload.

Dropping the boarding ladder is occasionally interesting. Mine folds down and when not in use is held in place by a line tied off with a slip knot. This allows me to untie it and drop it should I ever fall out of the dinghy.

If I need to load a lot of heavy gear or

Jim Kidd/Alamy

Be prepared to make more than one passenger trip if you're weighted down

David Harding

Jim Kidd/Alamy

visitors I motor over to the public wharf. A long painter fixed to the dinghy bow helps when tying up to a congested wharf or pontoon; it is easier tying up and leaves more room for others to tie up.

TIPS

- Use a tiller extension
- Use a centre cleat and stern line
- Make the boarding ladder easy to untie
- Have a long painter at the bow for busy wharves

Have an emergency plan

If we leave the boat to explore an inlet by dinghy I think carefully about how to get back on board in strong tidal currents. For example, I'll plan an escape route we could row to if the engine stopped, and approach the boarding ladder aft parallel to the yacht while gauging the current.

On one occasion all went well but to keep alongside the yacht I had to keep almost full power on the outboard until the passenger in the bow hooked onto the midship cleat. We allowed the dinghy to fall back to the boarding ladder while the passengers climbed out.

TIP

- Before exploring make a plan for returning to the boat

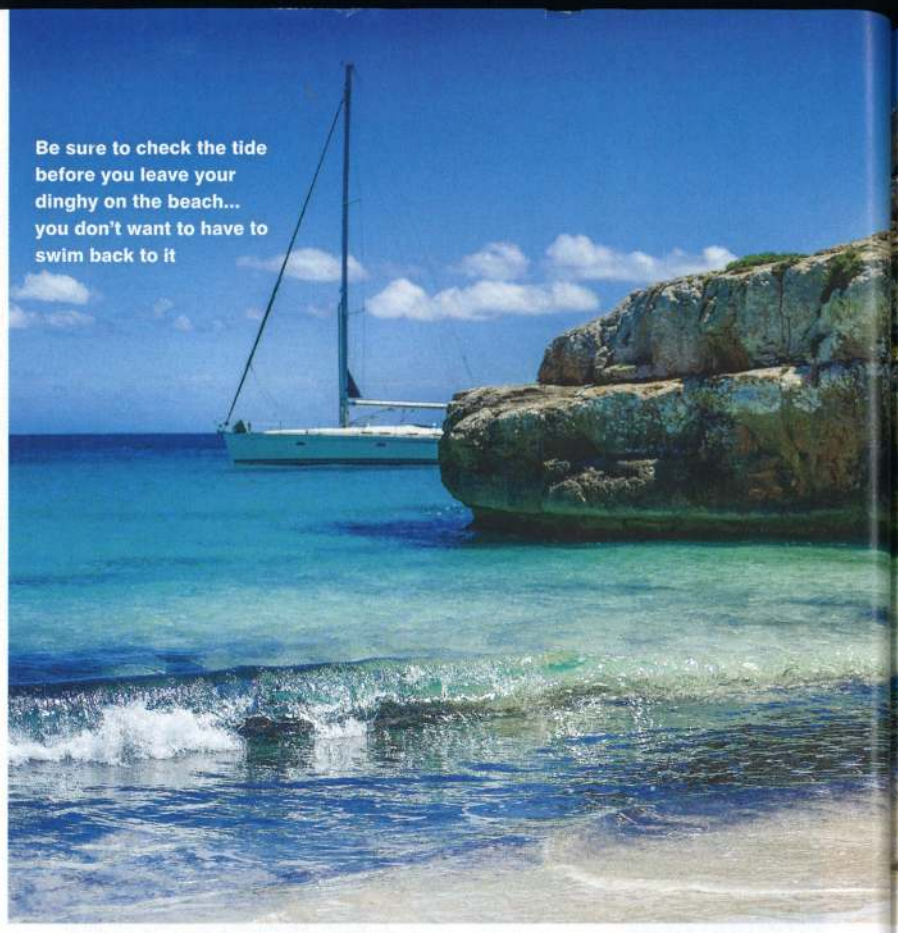
A reliable outboard

Our outboard motor, though reliable, was over 15 years old, so when we decided to go cruising in an area with strong tidal currents I took the advice of a knowledgeable friend and bought a new one, allowing a few hours to run it in. I now have absolute confidence in my engine. Fresh and clean fuel is crucial so I installed a filter in the fuel line; this proved a sensible move as we got some terrible fuel on one occasion.

TIPS

- Have confidence in your outboard
- Install a fuel filter

This inflatable dinghy can be rowed or sailed, which adds to the fun



Be sure to check the tide before you leave your dinghy on the beach... you don't want to have to swim back to it

I never travel without oars attached as an engine failure could be more than an embarrassment.

Around the moorings in my river I carry the minimum gear (oars, bailer and line) but when in more open and remote conditions I beef up the safety gear (see panel, far right). As I am now on the wrong side of 70, I'm not as strong as I once was, especially in my arms and shoulders, so I am now much more cautious.

Even though I can still swim reasonably well I always wear my inflatable lifejacket as it is compact, comfortable and cool, but when near rocks I prefer a buoyancy aid as it will still work if I puncture it while climbing over oysters; a buoyancy aid also makes it easier to get back into the dinghy if I fall out.

Oars

While teaching a granddaughter to row we dropped an oar. Fortunately the rowlocks are fixed to the oar so we only had to quickly retrieve the errant oar and resume rowing. Had we lost the rowlock it would have meant, instead of rowing, we'd have had to paddle, not so easy in a hard catamaran dinghy.

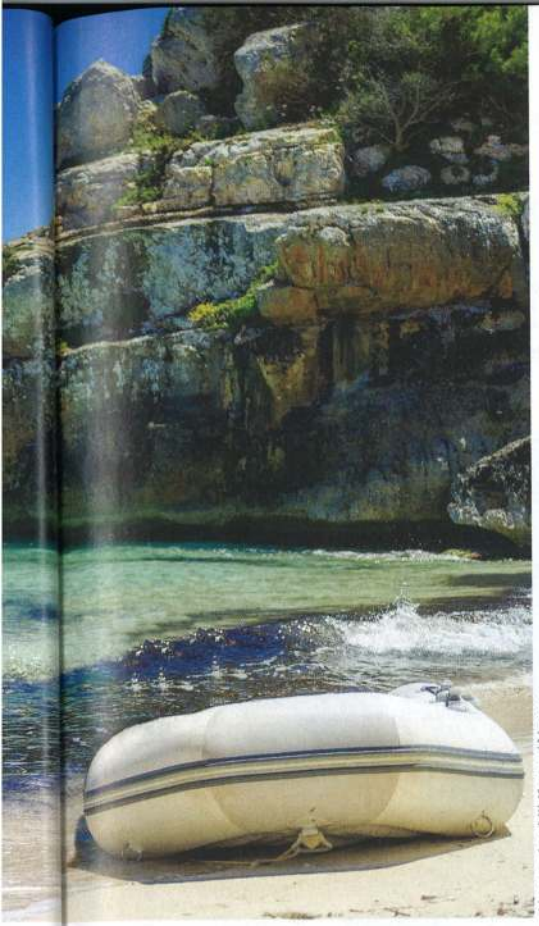
To learn how to manage with one oar I spent a fascinating afternoon with a one-armed friend who taught me how to scull. This is easier than I thought and while I have not yet had to use this skill in anger it remains an option. The principle is that thrust is developed by moving the oar at an angle (about 50° to 60°) from side to side in a figure eight pattern; use your wrists to create this movement; keep the oar blade well under the surface. If it is possible to stand up safely you can use your body weight; if sitting it is all arm and shoulder movement which can be more tiring.

For a more detailed guide to sculling turn to page 47.

Motoring

The effects of wind, wave, tide or current are very noticeable in small dinghies. While motoring, match the engine's speed to any waves. Try to avoid pounding, especially with irregular wind and waves.

A couple of youngsters were racing around our moorings in a small aluminium dinghy. With both sitting in the stern they hit a wave while powering to windward and the bow reared up. Fortunately gravity came to the rescue in time and they recovered – just – but as soon as the dinghy was level off they went again. This was simple inexperience and an unhealthy



Alexander Nikiforov/Alamy

Fun for all the family in safe water near shore

dose of bravado, but to someone with more experience (and fear) it was a useful reminder.

TIPS

- Avoid pounding
- Match boat speed to the waves

Once, while using my light inflatable, a strong sea breeze came up suddenly whilst we were ashore. On returning to the boat, the flat-bottomed dinghy slid sideways, and the engine, a 2.5hp outboard, was not strong enough to point us head to wind. We had to motor past a nearby yacht, 'gybe' the dinghy in its lee then point in the right direction to reach the safety of our anchored yacht.

TIPS

- Look out for strengthening wind while you're ashore
- Use the lee of other boats to manoeuvre in strong winds

Arriving at the yacht is not the end of the battle. One yachtsman fumbled his arrival with potentially serious consequences. He reached the yacht and before tying up placed the oars and engine safety/kill cord on the deck; a passing ferry caused a momentary unbalance, he let go of the yacht and found himself with no oars or working engine in the middle of the moorings rapidly drifting in the wrong direction. Fortunately he'd had the sense to wrap the cord from his jacket around the kill switch and returned safely to the yacht – valuable lessons learned! As with any water activity let the conditions decide when to go and when not to.

'I was caught out when I arrived at low tide and had to swim to the dinghy when the tide came back in'

Man overboard!

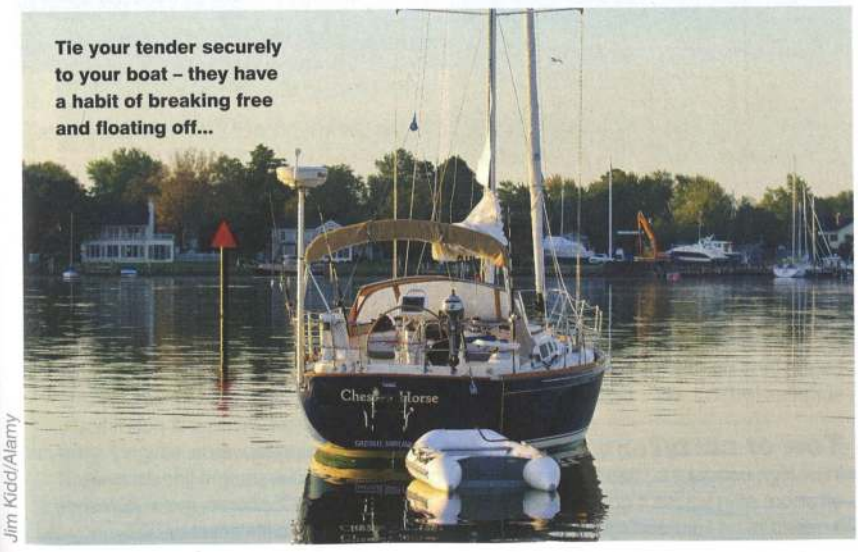
Falling into the water is an obvious danger because we can drown. With immersion we can suffer a 'gasp reflex' and this is particularly dangerous in cold water. The body's initial reaction to the shock of entering cold water is to take a rapid breath – the gasp. This can suck water into the lungs, can make us hyperventilate (rapid breathing) and experience muscle spasms which can make it difficult to climb out or even swim. The heart is also affected with significant changes in pulse rate and blood pressure.

Fortunately the effects of cold water shock can pass relatively quickly, so simply floating for a short time can help regain control breathing, greatly increasing survival prospects. Cold shock is a particular risk for older people but everybody will be affected to some extent.

Having survived the shock, we now have to get back onto the yacht. A boarding ladder that reaches at least half a metre under the surface will make it easier to stand up and greatly increase our chance of getting back out.

TIP

- Float to become accustomed to the cold water shock
- Ensure your boarding ladder reaches at least half a metre under the surface



Tie your tender securely to your boat – they have a habit of breaking free and floating off...

Jim Kidd/Alamy

SAFETY KIT

In a wilderness anchorage I augment the basic safety kit. I carry spare fuel in a container that allows filling the tank while the boat is bobbing about and a knife to remove anything that could tangle the prop.

The tool kit supplied with the engine includes a spare shear-pin, spark plug and propeller, and I also pack a handheld radio, a waterproof torch, waterproof pouch for the mobile phone, some flares, bailer, a small first aid kit, an anchor on 6m of chain and another 10m of rope. If I have my inflatable I add a pump, puncture repair kit and duct tape.

And there's still room for us!

Ensure your dinghy has a long enough painter to tie securely to a jetty or pontoon while avoiding other boats

Jim Kidd/Alamy

Going ashore

Once at the shore we need to consider tides and security. Recently a friend had his dinghy stolen despite it being on a well travelled path. He now has a long length of stainless steel wire to padlock the dinghy and engine to a tree or similar fixed object in the hope that a future thief will find it too much work to bother.

Around our home waters of Sydney Harbour, it is not usually necessary to be concerned with tides, but further north and especially with a long, sloping beach the dinghy can be left high and dry when the tide goes out. I was caught out when I arrived at low tide and had to swim to the dinghy when the tide came back in. Not recommended in northern waters where sharks and crocodiles lurk!

When it's time to leave the beach someone needs to get wet!

Rowing into waves is tricky but lowering the outboard while a crewmember is holding the transom pointing the dinghy into the waves exposes that person to the dangers of the propeller. I have poled the dinghy out into deeper water then rowed further out giving room to lower and start the outboard safely.

Coming ashore alongside a pontoon or wharf is generally safer than a beach landing. Slipways or ramps may look attractive from the dinghy but the gentle slope is often covered in slime.

Where possible, coming alongside at the top of the ramp is a safer bet.

RIGHT Dinghies are essential when tides or depth mean you have to anchor off
BELOW On the perfect tropical beach look out for crocodiles

Sailing Ula/Stockimo/Alamy

TIPS

- Carry a lock for your dinghy and engine
- Ensure your dinghy won't float away at high tide
- A pontoon or slipway are preferable to a beach landing, but look-out for slippery surfaces

Tow or carry?

In benign conditions I tow the dinghy but off shore or in waves it goes on deck. So, it needs to be light enough to muscle onto the deck in front of the mast where it fits snugly. The spinnaker halyard is positioned in just the right place.

TIP

- Is the tender light enough to manhandle on deck?

Fun for the children

Children love dinghies, and the challenge of steering the motor is a great exercise in coordination as is the experience of learning to row. While it is not difficult, actually going forwards is highly satisfying and going in a straight line an even greater joy. Of course, make sure they always wear a lifejacket or buoyancy aid.

How to scull

Ben Meakins gets some tips from champion sculler Glyn Foulkes

Here's an example of a pram tender being sculled while the skipper is sitting down. INSET LEFT A thick leather lining to the sculling notch keeps noise down and prevents wear to the oar

Jim Kidd/Alamy

Single oar sculling is the art of propelling a boat with an oar over the stern. It's a useful way of moving a loaded dinghy that's too laden for you to use both oars. Another usage is when coming alongside in an inflatable dinghy. This works especially well with flat-bottomed, traditional Avon-style dinghies, which you can simply scull sideways using the normal rowlocks.

In a sailing dinghy it means you can make headway even if the boom is too low or furled sails prevent rowing. It's handy for making headway up a channel that's too narrow for a pair of oars, between moored boats, or in busy harbours where standing up and looking over your shoulder allows you to see where you're going. It's a useful 'get you home' skill in case you break an oar. Try sculling and you'll soon find that once mastered, it's a traditional skill that is immensely satisfying.

Many people scull sitting down, either because their boat is not stable enough to stand, or because they're more comfortable sitting. Some people find it easier to scull one-handed, and If you're struggling to scull with both while sitting down, learn the movement with one and add the second hand once you've got the hang of it.

To alter course while underway, simply work the blade to one side, with a shorter lateral movement, until the bow is pointing the right way. To make bigger course alterations, you just need to 'row' the stern around until the bow is pointing the right way.

Sailing Ula/Stockimo/Alamy

1 Start by placing the oar in the water with the blade vertical.

2 Move the oar to one side and twist your wrist so that the blade ends up at around 60° to the vertical.

3 Now move the oar across the boat, rotating your wrist so the blade is twisted 60° to the other side. Repeat back and forth in a figure-of-eight movement.

4 To gain extra speed, give the blade a positive 'flick' at the end of each stroke to complete the twist: this gets maximum thrust from the blade. You should find that the movement of the oar, scything through the water, provides enough of a downward force to keep it in the notch.