

SPRING LINES

Some boaters have got into the habit of mooring using one rope at each end of the boat, or even just one in the middle. Neither is sufficient, if you want to avoid being disturbed by passing boats or having your mooring pins pulled out. This is because mooring lines need to control not just movement of the boat away from the bank, but also that along the bank.

A rope at right angles to the boat, or nearly so, is called a “breast line”, and it can do only the former. No matter how tight it is, it will allow the boat to move along the bank a little because the force needed to make the first little change away from the right angle is so small. Once some slack has developed this way, the boat can gather momentum as it moves, which can jerk mooring pins out when it is brought to a halt by the breast lines, or discomfort those on board when it bangs against the bank.

The solution is to use springs. These are mooring lines (just ordinary ropes, despite the word “spring” in the name) nearly parallel to the bank. Two are needed – one to a point on the bank astern of where it is secured on board, and one to a point forward. These limit fore-and-aft movement of the boat, and are effective because the forces they control are along the rope, not at right angles to it.

The spring lines should be tied tightly, to minimise momentum from movement along the bank. However, the breast lines should be looser so they don’t get “snubbed” by the moving boat before the springs take effect.

When a boat is moored like this, those on board will feel only small effects from other boats passing, even large ones moving at a considerable speed in a restricted channel. There will be little temptation any more to shout “Slow down!”. Better for everyone.

So remember -- tying up a boat effectively always needs four lines – two springs anywhere on board, plus a breast at each end.