



fences



what are they?

Fences are reasonably permanent constructions to demarcate a piece of land – usually to keep livestock in or out (or to keep wild animals like deer or rabbits out). The most common type is agricultural sheep fencing that comes in 50m rolls from agricultural merchants. It's sheep-proof, and it works for other livestock too (not recommended for horses, which might get their feet caught in the mesh). Post & rail (or wire only) fencing can be used for horses or cattle. It looks beautiful, but it's more expensive and limited as to what it can keep in or out – it's no good for sheep, chickens, rabbits or deer, for example.

If you want to protect young trees, deer fencing is easy. It's plastic, 2m high, comes in 100m rolls, and can be tensioned by hand (see 'what can I do?'). It can be taken down and re-used when the trees are big enough to be safe from deer.

Chicken wire can be easily installed and the bottom end buried – for keeping chickens or rabbits in their runs or out of the veg patch.

Electric fencing can be a temporary alternative to putting up a fence. It can be moved around, which is good for mob grazing.

Alternatives to fencing include hedges and dry stone walls, but fencing is much cheaper, easier and faster.

what are the benefits?

Fences delineate the borders of land, and prevent livestock from wandering onto roads etc. However, don't fence across open-access land or public rights of way – or if you do, install a stile so that people (but not animals) can climb over the fence. Fences can protect baby trees, by keeping deer out (see above), although in some cases (irregular or small areas), it might be easier to put deer protectors around individual trees.



Tools and equipment that you'll need for a standard sheep fence: clockwise from top left – crowbar, hammer, post driver, roll of barbed wire, roll of sheep netting, gripple wire joiner (optional), wire strainer, staple.

what can I do?

The standard fence post is tanalised softwood (pressure treated with a copper solution and arsenic), that bugs won't eat, so it doesn't rot easily. They can last for over 15 years. Here's how to put up standard sheep fencing (or strained wire). 2 people can erect 100m of fence in a day, with a 'straining post' at each end, and around 45-50 intermediate posts. Apart from the usual smallholding or DIY tools, you'll need a 'monkey' fence strainer, fencing pliers and a metal bar. You should probably help someone else put up a fence first, so you get the hang of it. Here's the general idea:

First install the straining posts at the end of the fence run. Dig a hole c. 1m deep (straining posts are around 13cm in diameter, so the hole needs to be quite a bit bigger than that). Drop the post in and pack around it with stones, then fill the gaps with soil. Check it's upright with a spirit level. Then attach a bracing post – the same size as the intermediate posts – to the straining post, on the fence side, at 45° to the straining post. Dig a hole for the bracing post, and put a rock in it. The bracing post sits against the rock; cut a nick into the straining post, and hammer the pointed end of the bracing post into it, then nail it in place. Do the same with the other straining post.

Then run a band line between the straining posts (from agricultural suppliers). It's elasticated, so it pulls tight into a straight line to mark the line of the fence between the straining posts. Put in intermediate posts every 2.5m – use a post-driver (see image) – you can get drivers with a motor, or as tractor attachments. Posts are around 1.7m tall and 5-8cm diameter, rough sawn, and also tanalised. Ensure that they're upright, with the outside edge in line with the band line, where the wire is going to be. When they're all in, you're ready to attach the wire. You can get 100m of sheep fencing, but this is very heavy, so for a

100m fence, you could buy two 50m rolls and splice them together. Start at one end (the least accessible end, because you'll need more space at the other to do the straining) – staple the bottom strand of the netting to the straining post firmly – all round the post, so the loose wire at the end can be twisted into the fence. Use large staples for the straining posts (3-4cm). Roll out the netting along the fence line. It will fall flat on the ground, but don't tread on it, and when it's rolled out, prevent it from rolling back up by pinning it to the ground with a garden fork. If you're using two 50m rolls for a 100m run, splice the second roll to the first by overlapping

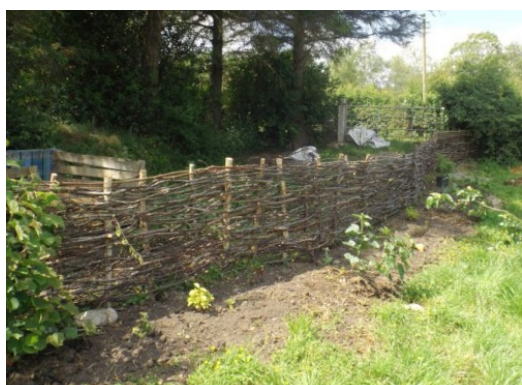
fences



one set of squares and twisting the ends of wire on each roll into the netting – it can be done by hand. When they're spliced, roll the netting out to the second straining post (more than 3 50m rolls together will be too difficult to tension).

Now's use your 'monkey' fence strainer – a ratchet handle with pivoting jaws that grip the wire. Fix one end to something solid, like a tree, metal bar hammered into the ground, or a vehicle towbar. Using the handle of the strainer, move the jaws along the wire. Keep going until the strainers won't pull the wire any more – that's enough tension.

Next transfer the tension from the strainers to the fence, by firmly stapling the tensioned wire to the bottom of the straining post. Hammer a staple over the wire into the post, then another one c. 5cm from the first, which will make the wire curve around the post. There's a danger of snapping the wire here, so take care. When these staples are firmly in, take the tension off the strainer. The tension is being held by 2 staples, so quickly bend the wire around the post and put in more staples – then you're safe. Stand the fence up and put staples over the top wire into a couple of intermediate posts, somewhere in the middle of the run (don't hammer the staples all the way in, so that the wire can move). Then manually tension the rest of the wires, at both ends, with fencing pliers. In the neck of the pliers there's a place to grip the wire. Then put the head of the pliers against the post and pivot, which tensions the wire. When it's tight enough, a second person hammers in a couple of staples. Start at the bottom and work up, but don't over-tension as it will loosen the other wires. If there's absolutely no room to strain the wire onto the straining post, you can leave up to 3m that can be filled in later with intermediate posts and 9 x 4cm timbers.



Keeping chickens out of the garden with a woven birch fence.



Corner of sheep fence, with straining post and two bracing posts.

Once the strands are attached to the straining posts, staple the wires to the intermediate posts (3 per post – top, bottom, middle). Use small staples (1-2cm). Don't go all the way in – allow the wire to move through them, because the wire will expand or contract with the temperature.

If there's a mound, lift the wire and staple the top strand first. If there's a dip, push down the bottom strand, and staple it first. If it's a very uneven field, don't tension on the straining posts too much – allow some slack so you can raise or drop the fence to fit the landscape. You can put a line or two of barbed wire at the top of the posts for extra sheep-proofing.

For a post-and-rail fence, the posts can all be the same size, and you don't need to brace any straining posts. Install the end posts first, and make a line, as above. Don't put all the intermediate posts in at the same time – do them one at a time, to ensure that the crossrails fit. They can be fixed in place with brackets and nails or screws, or if they're going to fit into a hole in the post like a mortice & tenon joint, they have to be put in place before the post is fixed.

Deer fencing can be fixed to posts 3-4m apart, tensioned by hand, without straining posts. It will keep out roe deer, but maybe not muntjak, which might burrow underneath – in which case you can run some chicken wire along the bottom, attached to the same posts, but buried into the ground.

resources

- lowimpact.org/fences – for more information, links, contractors, courses, books, including:
- TCV, *Fencing: a Practical Handbook*
- George Martin, *Fences, Gates & Bridges*
- R Freudenberger, *Building Fences & Gates*
- bit.ly/3nc76mz – building fences on the farm
- bit.ly/3Gm8911 – making fences escape-proof

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