



# hurdles



## what are they?

Hurdles are wooden fence panels. There are two types – wattle hurdles and gate hurdles. Wattle hurdles have a longer history than gate hurdles, and are made from woven rods of coppiced hazel or willow; gate hurdles are made from split wood of various types – often sweet chestnut or oak.

They were traditionally used as moveable agricultural fencing, and to pen livestock, especially sheep. They were common on chalk downlands, and much of our surviving workable hazel coppice is situated close to those downlands – in Dorset, Hampshire, Surrey and Sussex, although there are pockets all over the country. Young trees are cut back to ground level in a regular cycle, the length of which depends on the species. Many shoots will reappear from one stump, providing a lot of new material in a relatively short time.

Archaeologists have uncovered the remains of hurdles on the Somerset levels from neolithic times. They were used as walkways through the wetlands and were preserved because they were pressed into the peaty, wet soil. The primary product of coppicing was fuel. Before oil, gas or electricity, everyone burned wood to keep warm. Woods were coppiced for thousands of years, producing material for basketry and wattles as well as firewood and hurdles.

Hurdles had two traditional uses for the sheep farmer. Firstly, they were used to make lambing pens. Four hurdles make a quick, easy pen to keep a ewe and her lambs out of the worst of the weather, and close together so they can bond properly. Secondly, they were used to make larger pens to contain sheep at night on arable land. Their dung fertilised the fields, and they were released back to the downs to graze the next day. Sheep hurdles were often made with a 'twilling hole' in the middle so that the shepherd could carry four or five hurdles over his shoulder with his crook through the hole.

Farmers don't tend to buy or make them these days, but use metal hurdles instead. Traditional hurdles are still used by some smallholders, but mostly they're used in gardens as windbreaks or fencing, as people tend to like their rustic appearance.

Willow has historically been coppiced on a one-year rotation, producing round rods for basketmaking, and so willow for hurdles is a product of that form of management, and therefore round. Hazel is grown on 6-8 year coppice rotation, and so the resulting, larger rods are cleft in two down their length to produce the material for hazel hurdles.



*A cleft hazel hurdle.*

## what are the benefits?

Hurdles offer an alternative to the classic larch-lap fence panels found in garden centres, which aren't wind-permeable, and so the wind can blow them down, and eddy over the top and damage plants behind them.

Hurdles are wind-permeable – the wind filters through the gaps with no eddies created, making them very effective wind breaks.

Hurdle-making is a great skill to learn, and like most of Lowimpact.org's topics, can form the basis of a small, sustainable business using locally-produced, natural materials.

But you can't make hurdles without coppicing, and it's the production of the raw materials for hurdles via coppicing where we find most environmental benefits.

Coppicing is the ultimate form of sustainable woodland management – especially coppice with standards, where coppiced trees are mixed with mature specimens.

Ideally, trees within a coppice are harvested in rotation, so that different trees will be harvested each year. This provides a regular supply of material and means that there will be lots of trees at different points in their rotation, meaning more different habitats and greater biodiversity.

The opening up of the woodland allows in light, and with it a greater variety of flowers, butterflies and birds.



Typical hazel coppice woodland.

## what can I do?

A big problem might be sourcing the raw materials. Most coppice in the UK is in a band along the south of England, so it will be easier to get coppiced rods there. Contact your local Wildlife Trust or conservation organisation to see if they do coppicing for habitat management. You can buy hazel or willow products from the Coppice Products website (resources). If you have land, you could establish your own coppice. There's more demand for coppice products than there are coppices to provide them, so the opportunity is there if you want woodland work as a way of life.

If you decide to make your own hurdles the way to start is to attend a course. It's hard work, so it's great exercise (most beginners find putting the 'twist' in hardest - a tricky technique and physically demanding). There are 3 key things to learn:

1. how to split hazel rods - commonly done with a hook-nosed billhook
2. how to put the twist in, so that the rod can turn back on itself at the edge of the hurdle, which prevents it from falling apart
3. how to start off and finish the hurdles; i.e. the sequences at the beginning and the end

Here's an overview of how to make wattle hurdles:

1. they're made on a 'mould' board with nine holes drilled into it to take the uprights
2. the uprights (or sails) go into the mould board
3. lay in a starting sequence of small round rods so that there are no loose ends hanging out
4. then build up the height of the hurdle with split rods (hazel hurdles), twisting the tip of rod round the end of the hurdle and weaving it back in to hold it together

5. finish with a sequence of round rods at the top - again, with no loose ends
6. then trim the finished hurdle and take it out of the mould board

Saws or loppers may be useful, but the only essential tool is a bill-hook.

Gate hurdles are made from cleft logs. Many types of wood can be used, but sweet chestnut and oak contain tannins that provide durability. Logs are split with an axe and pulled apart until they're the right size. Splitting rather than sawing provides strength and water-resistance. The uprights have pointed ends that can be knocked into the ground, and cross-pieces are fixed to the upright with mortice/tenon joints and braced. They are strong but lightweight, and can be moved around easily to provide temporary fencing or pens.

You can also often buy finished hurdles from Coppice Products - see below.

You can use your hurdles on your smallholding for penning animals, filling gaps in hedges or fences, or as windbreaks around your vegetable plots. They'll last 6-8 years outdoors, but indefinitely if you keep them under cover when not using them.

## resources

- see [lowimpact.org/hurdles](http://lowimpact.org/hurdles) for more info, courses and books, including:
- Rebecca Oaks & Edward Mills, *Coppicing & Coppice Crafts*
- Ray Tabor, *Encyclopedia of Green Woodworking*
- [coppice-products.co.uk](http://coppice-products.co.uk) - directory of hurdle-makers and other woodland workers
- [gardenstew.com/about27996.html](http://gardenstew.com/about27996.html) - how to make a willow garden screen / hurdle



A traditional gate hurdle – used as a fence panel, not hung as an opening gate.

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