

Lincoln University Field Research Centre Pasture Enclosure Cage Design

Pasture cages are used to exclude livestock from an area of pasture required for measurement of pasture growth and/or composition. Our pasture cages are made from 75 mm x 75 mm x 4 mm steel reinforcing mesh and are designed so that either 2 (large) or 3 (small) cages can be cut from each large sheet (4.65 m x 1.99 m) of the mesh.

The finished cage has sloping sides (1:8), an angle-iron strip on the 4 external corners, a 10 mm reinforcing rod strip around the base perimeter and a short peg (10 mm rod about 20 mm long) on each corner, 150 mm up from the ground. The angled sides facilitate the stacking of the cages and reduce the incidence of stock rubbing on cages. The 10 mm rod strip adds strength to the base and the short rod on each corner reduces the chances of the cages jamming together when stacked up for storage or transport. After construction the cages can be galvanized to inhibit rusting, although this step is costly and not essential.

The larger cages are taller and more suitable for pastures such as lucerne, while the smaller cages are ideal for grass pastures. They can be pinned to the ground with metal pegs to stop stock shifting them.

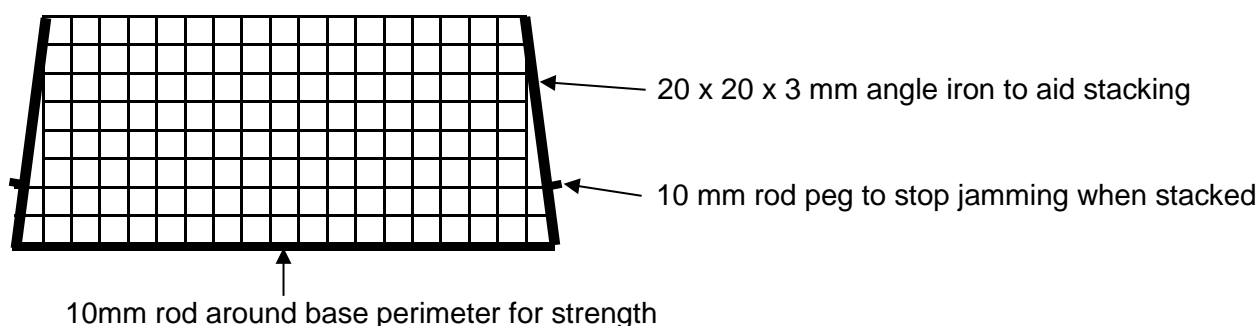
The cages have the following dimensions:

	Small cage	Large cage
Base	1100 x 720 mm	1140 x 760 mm
Top	980 x 600 mm	980 x 600 mm
Height	415 mm	640 mm
Slope of sides	1:8	1:8

Materials 75 x 75 x 4 mm mesh (each mesh sheet is approx. 4.65 m x 1.99 m)
10 mm round reinforcing rod – for base perimeter
20 x 20 x 3 mm angle iron – for each external corner

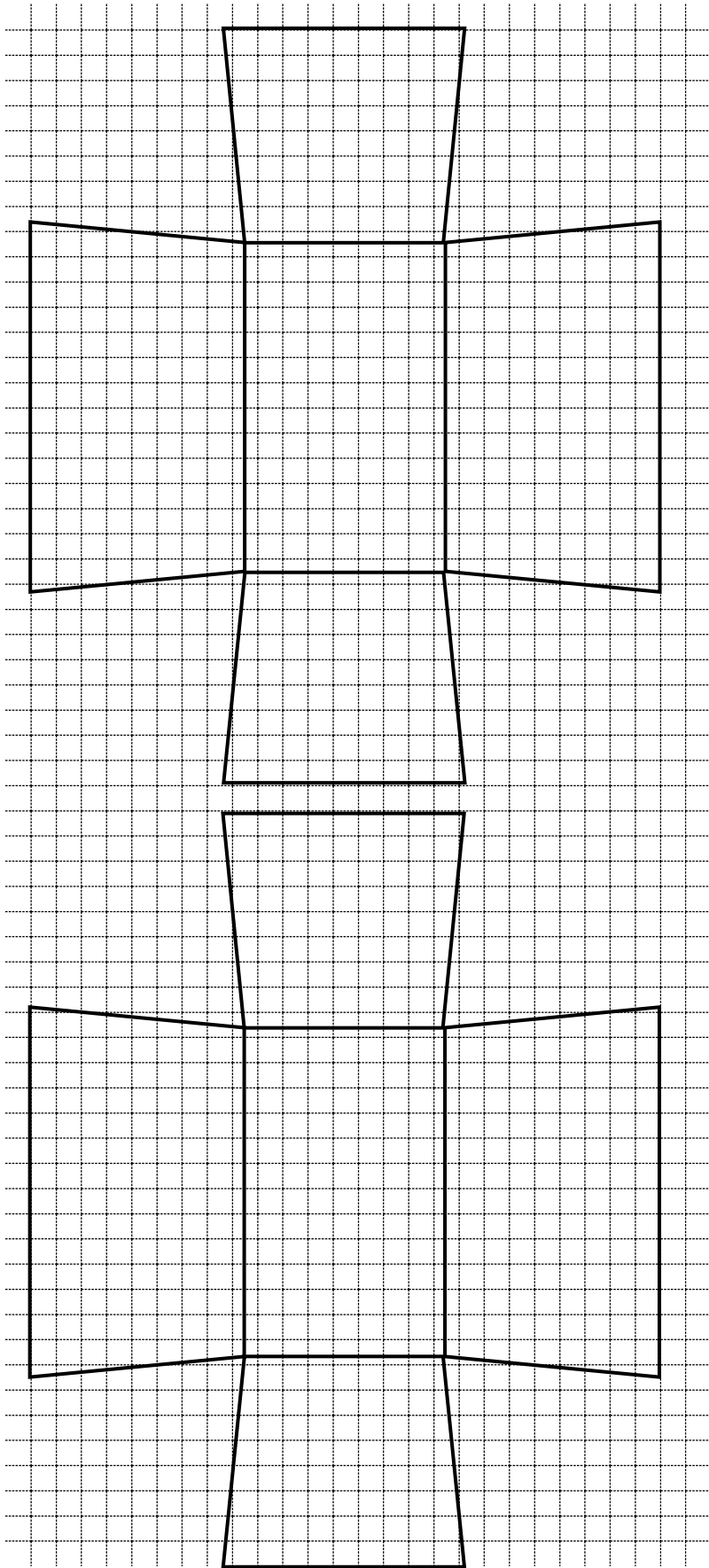
General comments

- Dimensions are approximate – must fit in with mesh size
- Most important that each cage is identical, for ease of stacking



NB: the patterns on the following pages are drawn to scale, so if you print a copy and cut along the dark lines of one of the cages, you can fold it to shape to get a better idea of what they will look like when finished. The photograph on page 4 shows the final shape, the angle iron on the corners and the 10mm rod pegs to stop jamming.

Pattern showing how to cut 2 large cages from 1 sheet of 75 x 75 mm steel reinforcing mesh



Pattern showing how to cut 3 small cages from 1 sheet of 75 x 75 mm steel reinforcing mesh

