

NUTNET FENCE DESIGN

NOTE: This description is somewhat schizophrenic because science works in metric units, but US hardware stores work in English units. Forgive the mixing and matching, here.

Basic design:

In all cases, fences are 7' high and 6 m on each side. 10' t-posts are pounded in 3'; 4' hardware cloth is folded to make ~3' sides wired to the t-posts and a ~1' skirt on the ground. It is best if the ground around the fence can be cleared of most vegetation and levelled so that the skirt can be effectively secured to the ground with 6" staples or tent pegs at regular intervals to discourage entry by digging. Installation of fences when the ground is wet can improve this contact.

Corners are cut at an angle for folding, and extra hardware cloth is used to secure the corners (Fig. 1 and 2). 5 strings of barbless wire are strung at 1' intervals with the bottom wire woven into the hardware cloth for extra strength (Fig. 3). The top 4 wires are tensioned using an inline strainer on each wire. The door is a vertical piece of rebar wired to the hardware cloth and secured by separate wires to a corner t-post (Fig. 3).

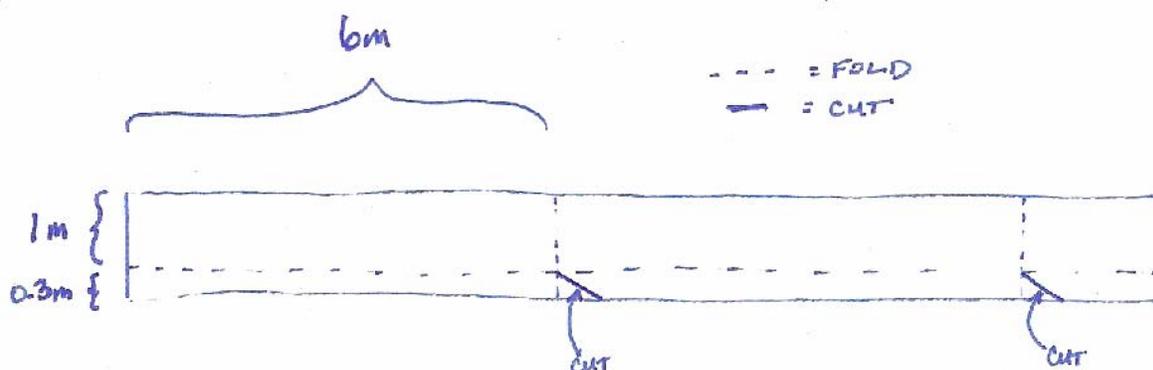


Fig. 1. 80' (~24.3m) of 4' wide (1.3m) hardware cloth is cut and folded as shown. The bottom fold provides a skirt around the fence perimeter that is secured to the ground to reduce ground access to the fenced plots. The fence has 6m long sides surrounded by ~0.3m of skirt.

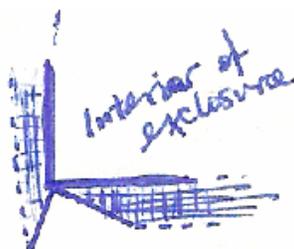


Fig. 2. Bird's eye view of an enclosure corner. A rectangle of extra hardware cloth is wired and secured on top of the cut region to complete a 0.3m skirt around the fence.

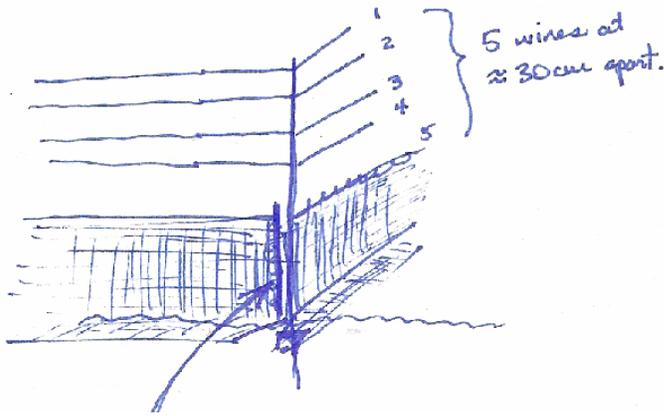


Fig. 3. Diagram of the access door at the final fence corner. 4 wires are strung above the hardware cloth ~30cm apart, and one is woven into the top of the hardware cloth. The door is a piece of rebar wired to the hardware cloth (arrow). This is then secured to the t-post with wires or clips. The guy wire securing the t-post is not shown here.

Corners:

There are two fence options that differ only in their corners. We assume most NutNodes will use Corner Option 2, but we provide the first as a stronger design option. If pesky jumpers at some sites still get into these enclosures, individual NutNodes can choose to add further jumping disincentives onto the tops of their fences. You'll know you need to do this if you see new hoof prints inside your enclosure...

Corner support in option 1:

T-posts are set up like a big, sideways “z” with a 10’ rebar in the corner (middle post, Fig. 4), pounded in 3’. Attached to this are 2-10’ t-posts (making the hypotenuse), and secured to a 5’ t-post (shown here as 10’ posts) in line with the fence with collar, sockets, and wedges. For additional strength, each corner has a guy wire secured by a piece of rebar on the outside of the fence.



Fig. 4. This photo is to demonstrate the sideways “z” corner construction, only. NutNet fences will be constructed with smaller mesh.

Corner support in option 2:

Corners do not have the “z” setup; corner t-posts are secured only with guy wires.

For the base model (corner option 2), you will need:

80' (or 24.3 m) of 4' wide ½" hardware cloth

4 – 10' t-posts (wood will work, too)

5 – 3' pieces of rebar

4 – in-line strainers

Box – 6" staples (these generally come in a box of 1,000); tent pegs should also work

1 – tubular post driver

1 – ¼ mile roll of barbless wire (this is the standard length)

1 – ratchet handle

Prices and weights are guess-timated below.

NUTNET APPROXIMATE FENCE PRICES

Option 1: Fortified corners

| Tool/Material | Quantity | Weight (lbs) | Approx cost |
|---|-----------------|---------------------|--------------------|
| 10 'T- posts (or wood posts) | 12 | 266 | \$200.00 |
| 5 'T- posts (or wood posts) | 8 | | \$50.00 |
| 4 ft. tall Hardware cloth/poultry fence (approx 100') | 1 | 87 | \$120.00 |
| T-post brace wedge | 12 | 6 | \$20 |
| T-post brace collar | 12 | 6 | \$20 |
| T-post brace 60° socket | 16 | 8 | \$25 |
| 3 ft. Rebar stake - one door | 5 | 20 | \$5.00 |
| In-line strainer | 10 | 1 | \$60 |
| Total for one enclosure | | 393 | \$440.00 |

One-time expenses for up to 4 fences:

| | | | |
|--|-----|-------------|-----------------|
| Tubular Post Driver | 1 | 20 | \$25.00 |
| Wire Cutter/Fence Tool | 1 | 2 | \$15.00 |
| 6 " Staples or tent pegs -- come in box of 1000 | 100 | 8 | \$35.00 |
| Barbless Wire (avail. only in 1,320 ft/roll in US) | 1 | 68 | \$59.99 |
| Ratchet handle | 1 | 0.5 | \$11.75 |
| Total for one enclosure | | 98.5 | \$146.74 |

Option 2: Guy wire corners

| Tool/Material | Quantity | Weight (lbs) | Approx cost |
|---|-----------------|---------------------|--------------------|
| 10 'T- posts (or wood posts) | 4 | 90 | \$40.00 |
| 4 ft. tall Hardware cloth/poultry fence (approx 100') | 1 | 87 | \$120.00 |
| 3 ft. Rebar stakes - to secure guy wires for 4 corners and one door | 5 | 20 | \$25.00 |
| In-line strainer | 10 | 1 | \$60 |
| Total for one enclosure | | 198 | \$245.00 |