



BASIC HOUSING & EQUIPMENT

Fulfilling basic housing and equipment requirements is a major concern for the upcoming goat owner. Below are a few tips compiled from various sources to help you along.

SHELTER:

- Goats require at least 10-15 square feet of space per goat in an open housing situation.
- In confinement housing, each goat requires a minimum of 20 square feet of space, in addition to 30 square feet of pen space.
- In Texas, 3-sided shelters are usually adequate. In Central Texas, shelters should face East, as it shields the goats from most of the winds and rain. If you use a 3-sided shelter, more space should be given than is required for each goat, as sun and rain can come in to the front 1/3 to 1/2 of the shed, depending on the height. An 'eyebrow', or slight overhang on the front of the shed, will reduce this drastically

FENCING:

- When determining whether to keep goats in a pen or pasture, there are several factors to consider (besides the room you have available!). Goats are naturally browsers – given a choice, they tend to reach *up*, and feed off of overhanging leaves. God has designed them this way. Since they are more susceptible to internal parasites, browsing prevents them from consuming any significant quantity of them, as parasites dwell on the ground. When man brings them into confinement, and forces them to graze, then they begin consuming large quantities of parasites, and parasite burden becomes a major problem. Therefore, there are 2 major options:
 - PEN: A pen small enough that no grass grows prevents goats from consuming any great number of gastrointestinal nematodes (a.k.a. stomach worms), since they are mainly ingested when eating grass. A small pen situation does greatly increase the problems with coccidia, however, in young goats.
 - PASTURE: Good pasture mostly relieves any coccidia problem, but gastrointestinal nematodes become a concern. Pasture rotation (as explained in Basic Parasite Control) can be used to manage this. Pasture with plenty of browse is the ideal condition for goats since it is their natural habitat, and when properly managed usually results in decreased feed and hay bills and healthier, more productive goats.
- For pens and working areas, 4x4 panel is a good choice. 4x4 panel is similar to cattle panel as it is rigid and made out of an extremely heavy-gauge wire; the openings are smaller, however, measuring 4"x4". It usually comes in 20' long panels, and can be 4' or 5' tall. 4' is adequate for most situations.
- For large pens and pastures, most people prefer high-tensile net wire with 12" spacing between the vertical wires (NOT field fence). When using net wire for perimeter fences, the horizontal spacing should gradually get smaller at the bottom to prevent the escape of kids off of the premises. Net wire with larger horizontal spacing is less expensive, and may be used

for internal fences. High-tensile wire is ideal, as it is much more durable and will remain tight longer than regular wire.

- Many people recommend a strand of barbed wire at the top of the fence to minimize goats hanging their heads over the fence, and one at the bottom to prevent predators digging in. It must be noted that barbed wire can easily harm goats, and frequently inflicts painful scratches to the owners.
- Completely barbed wire fences are not suitable for goats, as goats *will* rub against the fence and attempt to stand on it, cutting themselves in the process. It is also much easier for them to escape from a barbed wire fence, no matter how many strands it is, than from a panel or net wire enclosure.
- Some people use a strand of electric wire on the outside near the bottom, on the inside at about chest height (a goat's chest), and at the top. This prevents predators from digging in, goats from sticking their heads through the fence and breaking it down, and goats from standing on the fence and hanging their heads over, respectively. Electric wire can be useful, but should not be used in pen situations. The risk of death to small children or trapped goats should be considered before using electric fencing.
- Buck pens should be built stronger than doe pens, as the bucks may try to escape because of boredom or does in estrus (heat). More wooden posts, reinforced panels, and 5' tall fences are necessary in many cases.

- ***NEVER*** use cattle or hog panel, or any panel with openings larger than 4"x4". In addition, never use field fence or hog fence, or any net wire fence with openings larger than 4"x4", unless the vertical spacing is 12".

Openings larger than 4"x4" allow the goats to slip their heads through the fence. Once through, however, they cannot pull their horns back out, and are prone to predators, mean boss goats, and starvation, dehydration, and overheating. *In our travels across the state, we have seen goats hung in field fence, dead.*

Small openings (4"x4" or less) prevent the goats from slipping their heads through (although when goats are kept in a pen situation, for a few weeks the kids will slip their heads through and get stuck). Net wire with vertical spacing of 12" allows the goats to pull their heads back in after they slip them through. If the horizontal spacings are small enough at the bottom, the kids will not escape, either. This is the type of fencing we prefer for most situations now.

- **REMEMBER:** If you are building new fence, remember to plan for feeding (goats should not be routinely fed in their pens, as they will scrounge after the meal and pick up an overload of parasites; neither should they be fed near their drinking water, where moisture and a concentration of fecal material result in a location where coccidia thrive), weaning, pasture rotation (see Basic Parasite Control), separation of bucks and does, as well as a few individual pens for separating sick goats or expectant does, or quarantining newcomers.

EQUIPMENT:

- **FEEDING:**
 - *Troughs* – a must when you have more than 2 or 3 goats. 6" PVC pipes cut in half lengthwise and then cut into 4' or 5' sections work well as they are easy to move and clean. These troughs can then be inserted into stands to keep them up off the ground, or hung on a fence.
 - *Pans* – individual metal hog pans or plastic pans that hang on the fence work well for a few goats, and are handy to have in the event that you must separate a

goat or two. Two slits can be cut in the 'hanger' of the plastic pans that hang on the fence to adapt them to hang on 4x4 panels.

- HAY – If goats are not kept out of their hay, they will quickly scatter and contaminate it, wasting most of it and rendering it unsuitable for consumption.
 - *Square bales* are simple, as a piece of 4x4 panel may be attached directly to a wall or fence at the bottom and attached at the top with wire, chain, or cable at each side in such a way that the top hangs about 2 feet away from the fence or wall. This forms a suitable hay feeder.
 - *Round bales* are more economical, but much more difficult to deal with. A hay feeder that keeps the hay off the ground and at eye level for the goats is ideal, but not practical for many of us. A suitable alternative is to cut 4x4 panels into 40" sections and use chain links (individual links that screw down to close) to connect them together around the bale. If this system is used, you must create 5 or 6 4"x8" horizontal access holes in each panel by cutting out 5 or 6 horizontal 4" wire segments. These holes prevent all but the smallest goats from sticking their heads in, and allow better access to the hay. Remember to go back and remove panels and re-tighten the remaining panels as the hay bale is consumed to ensure continued free access to the hay.
- WATER:
 - *Troughs* – good for more than a 2 or 3 goats. The 4' long, 2' deep galvanized steel water troughs work well, and are readily available at most feed stores. This size allows most any goat old enough to drink to access the water, and usually holds enough for one day (water should be changed once a day).
 - *Buckets* – 2 gallon for a small goat, 5 gallon for a larger goat work well for temporary individual confinement. If you use buckets, however, be sure to remove the handle or secure it to a fence or wall so that the goat does not get its head stuck in the handle and choke. If new kids are in the pen (or expected!) an elevated 5 gallon bucket should be used so that the doe will not accidentally deliver them into the water bucket and they will not inadvertently stumble into it – new kids can drown in only a couple of inches of water.

Note: Premier 1 Supplies specializes in fencing, and has many superb tips and recommendations for goats. In addition, Onion Creek Ranch has an excellent article on fencing at www.tennesseemeatgoats.com.

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