

# Fencing Guide

Types of  
Fences, Fencing  
Materials,  
Setting Fence  
Posts, and  
More!

**COUNTRYSIDE**  
& Small Stock Journal

[iamcountryside.com](http://iamcountryside.com)

# Index

---

<b>Introduction .....</b>	<b>3</b>
<b>Find the Right Fence for the Job.....</b>	<b>4</b>
<b>5 Fencing Mistakes to Avoid .....</b>	<b>6</b>
<b>Fence Installation and Maintenance .....</b>	<b>11</b>
<b>Proper Fence Post Depth to Build Strong Fences .....</b>	<b>13</b>
<b>Additional Resources.....</b>	<b>16</b>





---

**W**hen properly constructed, sturdy fences, sheds, and barns provide a great deal of peace of mind to the modern homesteader. When put up poorly, no greater headache ever came to a homesteader. Fencing is essential to maintain healthy relationships with neighbors, but more importantly, to maintain healthy pastures and healthy herds.

When tackling a DIY fence installation project, the saying goes, “make your fences horse high, bull strong, and hog tight,” and *Countryside* founder JD Belanger adds “water tight” if you are goat farming. From electric fencing for horses and livestock to building the ideal garden fencing, there are many considerations for homestead fencing. According to Gail Damerow, author of *Fences for Pasture & Garden*, here are five ways to properly install fencing:

- Choose the right fencing material from the beginning
- Make sure to anchor down the anchor posts
- Carefully consider the placement and sizes of gates
- Review the property line to make sure your fence is on your property (not your neighbor’s)
- Before you dig, locate underground structures/ utilities

Fencing and gates require proper maintenance to serve you for years to come. For example, you can fix a sagging metal or wooden gate by putting a small wheel on the moving end of the gate. The wheel takes all the weight and supports the gate. It cannot sag any farther and also enables it to move easily when you open or close it.

Homesteaders are always on the lookout for low cost construction techniques to build quality fences, outbuildings, barns, and even primary residences such as earthship homes. *Countryside* readers have learned (and shared!) their tutorials on topics that include how to make a cheap greenhouse and how to build a chicken coop from recycled materials and a few hundred bucks in your pocket.

Good luck installing and maintaining fences on your homestead, no matter what your budget is.

---

# Homestead Fencing

## Find the Right Fence for the Job

*Livestock  
and Garden  
Fencing  
Ideas*



BY NANCY PIERSON FARRIS

**F**ifty years ago, when we started developing our two-acre land, we had no fencing. Don built a tiny chicken coop with a small “run” for our flock of three. Our dog entertained friends from around the neighborhood, and we often found dog tracks in the garden. During the next five years, while Don worked full time and I birthed and tended three babies (using cloth diapers), we had limited time for building fencing.

We built a small wood frame barn, increased our flock to six chickens, and acquired an Alpine goat. We enclosed a chicken yard with standard poultry netting stapled to wooden posts. The goat wore a mule collar to which I attached a 25-foot length of chain every morning. I led the goat out to an unplanted area and fastened the chain

to one of the stakes Don had driven into the ground at intervals. The goat grazed on grass and weeds in a circle around the stake. By evening, her udder was full of rich milk and she stayed in the barn overnight, chewing her cud.

After having a couple of dogs killed on the roadway, we decided to install fencing in our backyard to protect our toddlers and the dog. For that, we used five foot high, 14-gauge, 2 x 4 mesh, welded utility fence, locally referred to as “dog wire.” We attached the fence to treated wooden posts spaced 10 feet apart.

Fast forward two decades. We had used concrete blocks and clapboard to build a larger barn with stalls for two goats, plus a milking stand; space for raising meat chickens each year, plus a

dozen hens and 20 rabbits.

Setting a few fence posts a week, we had created separate yards accessible from five openings in the building. During those years, we learned a lot about fencing.

Our original enclosure of poultry netting disintegrated. We replaced it with utility fence. A gate at the end of the hens’ run opened into a fenced garden plot. We created a six-foot wide lane along the backside, so the goats could pass behind the chicken yard to browse along a drainage ditch at the rear of our property. It seemed expedient to install a gate between the lane and the garden. In years that we use that plot for summer vegetables, we can allow the goats to go in and eat the spent cornstalks, bean plants, and so forth. Then we open the gate to the chickens and they scratch

up the soil, mixing in mulch, and eating weed seeds and insects.

When the fence came loose from a post, we observed that the goats often leaned on the fence. We tried three different deterrents: old boards or poles cut from downed trees, fastened about two feet above the ground; or a strand of barbed wire tacked about two feet above the ground. All keep the goats off the fence.

To fatten a feeder pig each year, we needed a different type of homestead fencing. We poured a concrete slab about five feet square, and enclosed it with sturdy posts. Pigs don't jump over fences, but they do go under. When tackling fence installation projects, it's best to make your fencing "hog-tight," as they say. "Hog wire" has smaller mesh at the bottom, and we found four feet high adequate. We first used logs along the bottom; but in hot, humid Lowcountry South Carolina, any rotting wood becomes housing for termites. Pigs easily shove through rotting logs and they like termite larvae. We acquired a few old railroad ties to put around the edge of the pen, stapling the bottom of the fence firmly to them. After that, our pigs stayed in their designated area.

Over the years, our country location has changed. A nearby farm was sold as building lots and much wildlife habitat was destroyed. One day when our three-year-old grandson was helping us in an unfenced garden plot, we saw a deer track. As Don voiced his annoyance, the little boy said, "You need a fence, Grampa."

We realized the child was right. Out came the posthole diggers and my packing stick and at a rate of two posts a day, Grandma and Grandpa built six-foot high garden fencing. Since the barn lot formed one side of the plot, we put a gate there. As we rotate crops, every third year we plant spring greens, cole vegetables, and green peas in that plot. When heat builds and the early garden wilts, we open a gate for a cleanup crew of ever-busy hens. In the years that corn and beans grow in that plot, the goats get first chance at the spent plants.

Recently, another pesky animal has invaded our garden. We enjoyed Peter Rabbit tales when we were children, but Peter does not amuse us when he eats a whole row of sprouting bean plants in our garden.

We tacked 30-inch poultry netting along the bottom of our fences. Rabbits

don't climb well, and they can't squeeze through the small mesh.

As our bodies have accumulated mileage, we have found fences useful inside the garden. Thirty-inch poultry mesh keeps spring peas up off the ground. It takes only a few minutes to set plastic "step posts" and fasten the fence to them. Picking is much easier when we don't have to bend so far to reach the pods.

We still grow some bush beans, because they start producing earlier, but our main crop now comes from pole beans. For these, we use five-foot utility fence clamped to "T-posts." These easy-to-install metal posts withstand summer heat without buckling.

We also use fences to support curbits. Planting cucumbers, spreading type squash, melons, and even pumpkins along a garden fence saves space and gets vegetables up off the dirt. Pickleworms, which come up out of the ground to bore holes in cucurbits, can't get to vegetables hanging on a fence.

We use 4 x 4 mesh utility fence to make tomato cages. Don cuts a four-foot length, and bends it into a circle to enclose a plant. The larger mesh allows us to reach through to pick the tomatoes. We sometimes use a cage to support a cucurbit. One year, we grew snow peas around cages.

Whether the need is to confine livestock, deny access to wildlife, protect pets and children, or support spreading/vining crops, it makes sense to use the right fence to tackle your fencing projects.

**When the fence came loose from a post, we observed that the goats often leaned on the fence. We tried three different deterrents: old boards or poles cut from downed trees, fastened about two feet above the ground; or a strand of barbed wire tacked about two feet above the ground. All keep the goats off the fence.**



# 5 Fencing Mistakes to Avoid

## Selecting and Installing the Right Fencing



BY GAIL DAMEROW

**N**o matter what project my husband and I decide to tackle, it nearly always comes down to the same thing: fencing. Garden fencing to keep groundhogs and cottontails away from our vegetables. Fences to keep our dairy goats away from our fruit trees. Fences to keep our chickens in and the neighbor's dogs out. And just when we think we've tackled all of our fencing projects, we decide to add another poultry house or to give the goats new grazing ground, so up go more fences.

As we travel around the countryside we often take note of new fences being built and old fences, or not so old fences, tumbling down. The all-time record for the latter was a newly constructed fence that lasted all of three months before it began to sag and crumble.

Here are five fencing mistakes you can easily avoid when tackling DIY fence installation projects.

### 1) Choosing the Wrong Kind of Fencing

Buying materials and putting up homestead fencing is an expensive and time-consuming proposition, so it pays beforehand to do plenty of research and planning. The first place to start is with your city or county planning commission. Since local zoning laws may restrict your choice, find out if any regulations pertain to fence design or construction in your area. Putting up a fence that doesn't conform to local restrictions can result in having to take down your newly built fence and possibly pay a fine as well.

Even where no local regulations restrict your choice, selecting the best fence isn't always easy, since each system has inherent strengths and weaknesses. At our place, for example, the goats' grazing area is fenced with high tensile electric fence, and cross fenced with temporary electric polywire that can be easily removed when the paddocks need mowing. We use post and plank fence along the driveway, stock panels to control breeding bucks in season, and chain link to protect our poultry and garden. We've learned, you see, that there is no right fence only the right fence for the job.

Exactly which fencing system will do a good job for you depends on what you are trying to accomplish: keep animals in, keep animals out, or both. It also depends on what kind of animals are involved, how big they are, and how motivated they are to get in or out. Among livestock, dairy cows and beef cattle are the easiest to contain. Horses are only a little less so. Next come pigs, sheep, goats, and game animals, in that order. Poultry, on the other hand, present special challenges because they can be small enough to slip through some fences or light enough to fly over.

Knowing the habits of your animals will help you select the right fencing system to keep them in: are they climbers, crawlers, diggers, chewers, or back rubbers? What are their seasonal characteristics like the ability of baby animals to slip through an otherwise sturdy fence or the propensity of breeding age stock in season to bash a fence down.

More difficult than keeping stock in can be keeping predators out, whether to prevent hungry coyotes from getting

at the sheep or deterring groundhogs from nibbling on the ripe tomatoes. Here again, know the habits of these animals. Coyotes, for example, tend to be less adventuresome than dogs about getting through a fence, but once they have a taste of what's on the other side you'll have a devil of a time keeping them from coming back.

So determine exactly what the purpose of your fence will be. Know the habits of the animals you wish to keep in and keep out. Select a style of fence that can best withstand the demands of the most determined fence crashers. And make sure your chosen style fencing conforms to local regulations.

## 2) Failing to Anchor Down Anchor Posts

A fence is only as strong as its posts, making posts the most important part of any fence. They're also the most expensive part. It makes good sense, therefore, to take time and care in selecting and installing them. Most fences require at least two different kinds of post, according to their role within the fence.

You'll need stout posts at key spots such as corners, curves, dips, rises, and gates. Posts in these positions are called anchor posts, since they anchor the fence, giving it strength and stability. Anchor posts generally are larger in diameter than line posts and are longer so they can be set deeper into the ground. Most fence failures result from anchor posts that are not set deeply enough into the ground, not properly braced for the style of fence being erected, and not set in concrete. Even when anchor posts are set in concrete, if you don't wait a couple of days for the concrete to set before attaching the fence, your anchor posts will wobble and eventually fail.

Line posts are the evenly spaced posts between the anchor posts. They need not be as strong as anchor posts since they incur much less stress. Their primary purpose is to position the homestead fencing material. The taller your fence, the longer your line posts should be, not just to accommodate the higher fence but also so you can set them deeper to support the fence's weight.

The type of fence you choose to install will determine the necessary distance between line posts, which may be as close together as 8' for a woven wire fence or

**Exactly which fencing system will do a good job for you depends on what you are trying to accomplish: keep animals in, keep animals out, or both. It also depends on what kind of animals are involved, how big they are, and how motivated they are to get in or out.**

as far apart as 50' for high tensile fence installation on level ground. If your soil is sandy or moist, you keep animals in close confinement, or you space your line posts farther apart than usual, you'll need stouter line posts than otherwise.

Both anchor posts and line posts should be as straight as possible. Besides looking bad, crooked posts place extra strain on fencing material. And run a string to ensure your line posts are set in a straight line between your anchor posts; even a small deviation in the position of your line posts can put a big strain on your fence.

Using trees as fence posts is a bad idea for several reasons. First, trees attract lightning, which can seriously damage your fence. Second, as a tree grows, the fencing material will grow into the trunk, damaging both the fence and the tree. Finally, some future woodsman may not know the tree has been embedded with wire, staples, or nails, with possible dire consequences to life or limb when saw hits metal.

So do the job right. Take extra care with your anchor posts to ensure they are sturdy enough for your chosen fence style, buried deeply enough for your soil type, set in concrete, and well braced. Use line posts that are strong enough, and set close enough together, to adequately support your fence material.

## 3) Gates In All the Wrong Places

Discovering after your fence is up that your gates are in the wrong places can be annoying at best and downright inconvenient at worst. Moving gate posts can be difficult, time-consuming,

and expensive, so give serious thought beforehand to where you'll put your gates. Place them in well-drained areas to avoid muddy conditions. Keep them out of the path of erosion, since through traffic will only make matters worse.

Take into consideration your normal patterns of movement and put gates where they'll be the most convenient. If you are fencing a pasture or large garden, a gate near the corner will encourage vehicle or foot traffic to move along the fence instead of cutting down the middle. If you're confining livestock, a corner gate lets you drive animals along the fence and out.

A gate that opens onto a roadway should be set far enough back so you can pull your vehicle off the road while you get out to open the gate. A generous setback is especially important on a narrow road with little or no shoulder.

Just as important as proper gate placement is proper size. A gate designed strictly for foot traffic should be wide enough to admit your favorite wheelbarrow, garden cart, or riding lawnmower. In general, four feet is the minimum width for foot traffic.

For larger equipment or livestock, a 10- to 12-foot gate is more appropriate. For vehicles and machinery, 14 feet should be wide enough, although a 16-foot gate may be necessary for major farm machinery, especially if the driver has to turn at the entry.

If you have any doubts about what size gate you need, play it safe and go to the next larger size. The gate's height should, of course, match your fence.

A gate gets more wear than the rest of the fence, so it should be strong and made of top quality materials. To keep the gate from sagging and being difficult to operate, set and brace your gate posts the same as you would any anchor posts.

#### 4) Fencing Someone Else's Property

Among the worst fencing horror stories are those involving carefully putting up an expensive fence only to learn it is over the property line and has to be torn down. Sometimes the mistake is discovered right away; other times it isn't discovered until years later, when one or the other property is surveyed prior to being sold.

So if you put up a boundary fence, make sure you know where your property line is, even if you have to hire a surveyor to find out. Local setback restrictions may dictate how close to your property line you can place your fence. You'll also want to talk with your highway commissioner and check your deed to make sure you won't be putting the fence inside a right of way or across an easement.

If you want to put a fence right on your property line, and local regulations allow you to do so, your neighbor may be willing to share in the cost and maintenance. Get an agreement in writing, detailing all the specifics. Where long-term maintenance is involved, record

any agreement that allows you to enter the neighbor's property to repair your fence. You and your neighbor may be best friends now, but tomorrow some old grouch may move in next door.

In the event you can't get a written agreement, build your fence sufficiently inside your property line that you can mow and otherwise maintain both sides. At the least, allow enough setback so concrete footers and other protruding parts won't encroach on the neighbor's land. Some future challenge to the placement of your fence could end up in a costly court battle requiring subsequent moving of the fence.

#### 5) Digging Into Underground Utilities

Before digging your first post hole, make sure your fence won't interfere with any underground structure, such as a septic tank and its leach lines. If you're putting up any kind of metal fence beneath overhead power lines, seek safety advice from your local power company. Finally, find out if your planned fence will interfere with any underground utilities.

The depth of utility lines varies, and sometimes multiple utility lines are buried together. Furthermore, each state has different rules and regulations governing digging. To keep from doing damage to utilities, causing service interruptions, experiencing bodily injury, and possibly having to ante up for a fine and repair costs, your best insurance is to dial 811 and tap into the free national call-before-you-dig service. (For online information on this service visit [www.call811.com](http://www.call811.com)).

Your call will be routed to the appropriate utilities center. Tell the operator where you plan to set your fence posts. Any affected utilities companies will be notified about your intent to dig. In a few days, at no charge to you, a utility locator will come out and mark the locations of your underground lines, pipes, and cables. Now you can start building your fence, having the peace of mind of knowing where you can safely dig.







**Live Wire Products, Inc.**  
PROFESSIONAL FENCING SOLUTIONS

**FREE**  
Shipping  
on Qualified  
Orders

**Free  
Catalog**

**True pioneers in the  
electric fencing industry!**



**Call now: 530-432-8028**

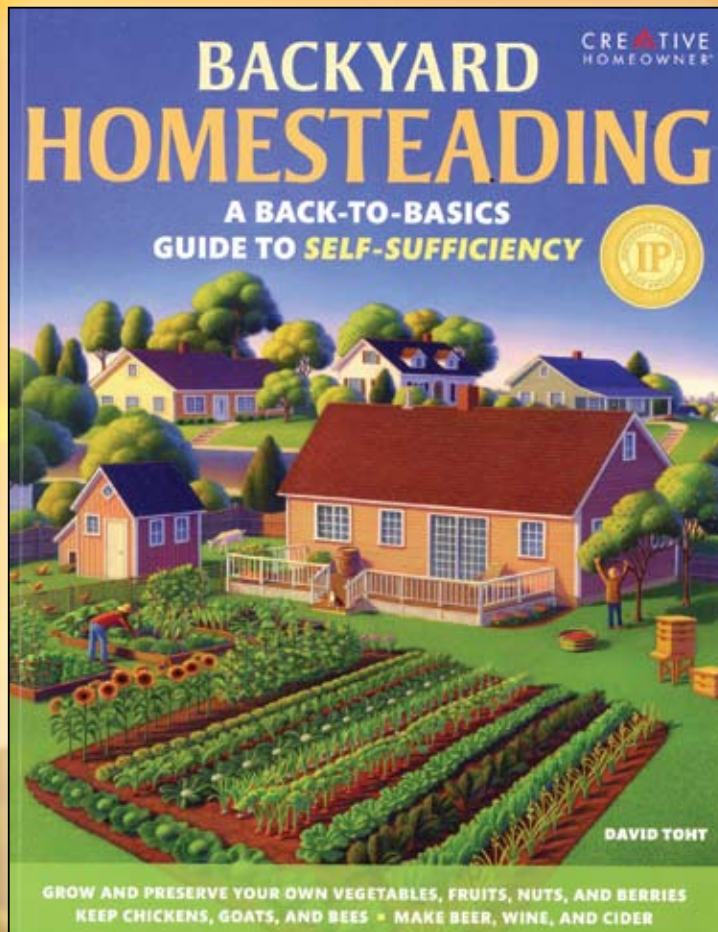
**or order online at:**

**[www.livewireproducts.com](http://www.livewireproducts.com)**

**10187 Commercial Ave, Penn Valley, CA 95946**

A Back-To-Basics Guide To Self-Sufficiency

# BACKYARD HOMESTEADING



---

*Backyard Homesteading* addresses the needs of many people who want to take control of the food they eat and the products they use—even if they live in an urban or suburban house on a typical-size lot. It shows homeowners how to turn their yard into a productive and wholesome “homestead” that allows them to grow their own fruits and vegetables, and raise farm animals, including chickens and goats. *Backyard Homesteading* covers the laws and regulations of raising livestock in populated areas and demonstrates to readers how to use and preserve the bounty they produce.

---

To order visit:  
[iamcountryside.com/shop/backyard-homesteading](http://iamcountryside.com/shop/backyard-homesteading)

Or call: 970-392-4419

# DIY Fence Installation and Maintenance on the Homestead

## Tips for Building Livestock and Homestead Fencing

BY HEATHER SMITH THOMAS

When building a new fence, you need to consider whether to go with DIY fence installation or hire it to be done. Probably the most crucial part of fence maintenance is whether the fence was put up well, with quality materials. Then it will last longer, and cost you less time and money to keep it going.

“If this is something you are not completely comfortable doing because you don’t have the experience you may not do it correctly,” says Dr. Bob Coleman, Extension Specialist at the University of Kentucky. “It’s wise to price it all out and put a value on your time.” Regarding maintenance on existing fences, to extend their life and reduce the maintenance or replacement costs, many fences can be helped by keeping the animals from chewing, leaning, or rubbing on them. Putting up a hot wire inside the fence can often serve this purpose. “This will keep them back away from the fence. It’s often quite easy to just put up an electric wire, and the animals will leave the fence alone,” he says. This will protect a wooden fence from chewing by horses, or keep any fence protected from livestock rubbing on it or reaching over or under. Keeping them away from it will help prolong the life of any fence.

Fence maintenance is no different than changing the oil in your vehicles or machinery. It needs to be done regularly and on time. If you see a post with a problem, fix it, before an animal gets out or gets hurt or a longer stretch of fence is compromised, adding to your expenses. If wires get loose or a post is leaning, eventually a lot more of the fence is in need of maintenance. Timely repairs save time and expense later.

It is often prudent to buy things you know you will eventually need for fence installation or maintenance, when the price is lowest. “You may want to buy a few extra posts, even if you only need a couple right now, if the price is reasonable. This might be the time to have a stockpile of things you know you will need later,” says Coleman. If you need it right now, and you already have it, you are more apt to go fix the fence in a timely fashion, rather than putting it off till the next time you go to town. It’s wise to have a plan about what you might need and when you might need it, and keep those things on hand, purchasing ahead of time at the most favorable prices. Store the extra supplies in a handy, weatherproof place so they will be useful and easy to access when you need them. It’s nice to have an extra rail, so you can fix a board that breaks.

“It also pays to do some scheduled maintenance, to make repairs before something breaks or comes loose,” he says. This is where many people fall short, waiting until something is a real problem before it gets attention. If you can do periodic scheduled maintenance, a lot of things can be taken care of swiftly and easily before they need a major repair on any homestead fencing.

Walking your fences should be done at least twice a year, such as every spring and fall. If you go around the pastures and pound in all the nails that came loose



A metal pilot post.

over winter, or retighten any sagging wires or mesh, this will keep your fence safer and lasting longer. "It may save additional costs or a vet bill. It also pays to monitor fences that go through trees, in case limbs or trees fall over the fence. It's great to have the trees for shade, but you may need to prune off some limbs or take out a dead tree before it falls down and takes the fence with it."

Regular maintenance in spring and fall will go a long way toward prolonging the life of a fence and saving money in the process. All types of fence eventually need maintenance. Wire fences need to be re-stretched occasionally, regardless of how well you put the corner posts in. Sometimes wildlife stretch or break the wires, or a tree falls down over a fence, or your animals rub on or lean over a fence.

The sturdier the fence, the less often it will be stretched or broken, but over time, most fences will need some repairs. Even though PVC (plastic polymer) fences and/or wide strip fences require less maintenance than wire or wood, they still require periodic checking and maintenance, to make sure all the clips and suspensions are in place and will withstand the winter, or the extensive livestock use in the summer. Electric fencing for horses or any livestock presents a different range of challenges. It needs to be checked frequently because it has insulation and connections, and you have to make sure these are all intact and working properly. Just like any other type of fence, you need to carefully address the construction, regarding durability. Also make sure that the fence is well-grounded, or moisture and weeds, etc. will present more problems.

### Fencing in Rocky Ground

DIY fence installation can be a challenge in rocky terrain, making it difficult or impossible to dig postholes. Michael Thomas, a rancher near Salmon, Idaho has been building fence in very rocky country all his life and also doing contract fencing. He generally uses a post-pounder wherever terrain is feasible (not too steep) to take a tractor. An innovative tool he uses in rocky ground is a metal pilot post to make a hole for the wood post.

"The pilot post is only three to four inches in diameter. The bottom three feet is solid steel with a sharp tip; the



Worm fence.

top part is hollow well casing so it's light enough to carry around, and the top has a solid cap for the driver to slam down on," says Thomas. "You can drive it into just about anything but solid rock, since it pushes aside most rocks. You drive it in as far as you can, then pull it out, insert the wood post and drive it down into the slightly smaller hole, and that wood post will be very tight and secure," he explains.

When it comes to DIY fence installation in rocky ground, sometimes it might be easier to dig the holes for large brace posts with a backhoe. If the terrain is solid rock, some fence contractors use a jack-hammer to create the post holes. A small rock drill is more portable than a jackhammer, since it doesn't need compressed air. This tool is a large electric drill, used for drilling holes in or breaking up concrete, and has various bits including 1-1/2 inch chisel bits for drilling into solid rock. It can be run off a small, portable generator. "This drill rotates and drills at the same time and makes a hole exactly the right size for a metal fence or metal T-post," says Thomas. "In solid rock you only need to drill down about a foot and drop the metal post into the hole, and it is completely tight and secure because there's no give in the surrounding rock. For a brace post you can make a deeper hole using extra long bits that can go down about 30 inches. With a little more work you can make a hole large enough diameter for a wood post. For horses, you can use smooth wire on metal T-posts, and safety caps on top of the posts. In solid rock, this is often a feasible option for making a secure but inexpensive fence." If terrain is very rocky and you don't want to deal with a lot of post holes, it's often nice to build a suspension fence. The posts

can be a long way apart, with stays in between to help keep the wire tight and properly spaced.

In some instances, you may opt for a jack fence (buck fence) rather than dig post holes in solid rock. In windy country, however, a strong gust of wind can tip over a whole section of fence unless it's well anchored. "To keep it from blowing over you can hang a large rock under one of the jacks every so often, or make a small rock basket under some of the jacks, with the jack secured to the basket," says Thomas. To make a jack fence safer for horses, you can saw off the top of the inside jack a little more flush with the fence so a horse won't run into it. Another option is a "worm" fence, created of logs or large poles, set upon one another in interlocking fashion at right angles. Where terrain is too rocky for setting posts, with lots of rocks strewn on top of the ground as well, any fence can be easily braced with a rock basket instead of posts set in the ground. "Gather and stack the rocks and then secure them with net wire, or make the wire cage/basket first and fill it with rocks," says Thomas. "Rocks are heavy enough that a cage about three to four feet in diameter/width (and however tall you want it) is very adequate to make a solid anchor for any wire fence."

*Good luck with your next DIY fence installation project!*

# Proper Fence Post Depth to Build Strong Fences



## Frost Heave Prevention for Fence Posts

BY JEREMY CHARTIER

**F**ence post depth, size, and anchoring systems can make or break your fence line. Despite what some people believe, making a long-lasting fence is not always as simple as sinking a post in the ground and moving on to the next post. There are a few great tricks you should know before you start making holes with your post hole digger.

### Choosing The Right Post

Picking the right post for the job is just as critical as setting your fence post depth correctly; possibly even more so. Cedar poles are a great way to hang fence wire. Depending on your needs, you could investigate the use of fiberglass fence post rods and steel T-posts if your application permits. Economics will likely play a big role in your decision making.

Classic cedar poles make for a good low-cost construction technique, but they're not up to the task of supporting

and bracing your corners or gates. The corner posts, posts stationed at rises and valleys, as well as posts that your gates hang on are under much more stress. Compared to your interstitial posts that simply support your fencing from flopping or drooping, these posts need to be more substantial.

For fence posts charged with important tasks like these, bigger is better. Overkill as it may be, I've found that local farmers in New England who use retired telephone poles for their high-stress points have great long-term success; especially at corners, bar-ways and gate openings. If you're in the market for telephone poles, look on your regional Craigslist.org website, freecycle.org, or talk to linemen you may know.

If you don't have any luck procuring retired phone poles, then my alternative favorite is 6x6 pressure treated landscape timbers. These can be found at your local big box store for a reasonable cost and are

widely available. In a pinch, you could select, cut, and shape a tree from your property to use as a post, but that could result in premature replacement because of relatively quick rotting. Additionally, this method takes time, tools, and effort you may not have.

### Frost Heave Prevention

Ever notice that telephone poles are thicker at the bottom? This is the natural shape of the trees they make them from, but the tapered shape also helps keep them seated in the face of frost heaving. Posts that are improperly buried can work their way out of the ground, but if we sink our posts with the fat end down, the tapered shape will actually help keep the post from rising over the years of frost-thaw cycling. Cedar poles have this shape too, so be sure to bury them correctly with the thicker end down.

Frost heaving occurs when the water in the soil freezes and expands. The pres-

Fence Post Depth Chart				
Post length	Min. Depth	Max. Depth	Exposed Min.	Exposed Max.
3'	1'	1.5'	2'	1.5'
4'	16"	2'	32"	2'
5'	20"	2.5'	40"	2.5'
6'	2'	3'	4'	3'
7'	28"	3.5'	56"	3.5'
8'	32"	4'	64"	4'
9'	3'	4.5'	6'	4.5'
10'	40"	5'	80"	5'

- Use rot-resistant posts like cedar, pressure treated timber, or good quality steel if your application warrants it.
- When pouring a proper post anchor, do your best to make it bell-shaped to take advantage of the frost heaving pressures to keep your post seated. Water will rot your post eventually, the grade of metal or wood you use simply dictates how long it takes to rot.
- You can prolong that rotting time by having your cement anchor peak above the ground to reduce the amount of groundwater that seeps between your post and concrete, and having a gravel base for water to escape into will also extend the life of your post.



sure caused by this expansion forces soil upward and anything within it, including your posts. When posts are set correctly, the tapered shape makes it harder for them to be pushed out. Think of it like a watermelon seed between your thumb and pointer finger. If you squeeze your fingers the seed goes flying away from you or toward your palm, depending on which side of the middle you squeeze. The same principle is in play here.

When we bury the fat end of a post down, the frost heave pressure will push the post further into the ground. This downward pressure locks it against the frozen ground below, and your post stays put. Conversely, putting the skinny end of your tapered pole into the ground lets the frost heave push it right out of the ground. You don't want all your estate fencing popping out of the ground after all the time and effort you spent putting it there, so make sure you bury your posts fat end down.

### Anchoring Posts

In northern climates with significant heaving or with posts that are supporting a significant weight, consider cementing them into place. Wood that contacts cement is notorious for rotting quickly, so when you're anchoring your posts in cement, be sure to follow some basic rules.

- Be sure to add gravel to the bottom of your hole for water drainage. Fence post depth, size, and anchoring systems can make or break your fence line.
- Make sure your cement anchor is tall enough to end above ground, preferably in a tapered shape to shed off groundwater.

### Fence Post Depth

Unlike a footing or poles for a pole barn, fence posts don't typically extend past the frost line. The rule of thumb for setting your fence post depth is this; not less than one-third the overall length of the pole and not more than half the overall length. More is actually okay, it's just overkill. Setting your fence post depth to one-third the overall length is bare minimum, since you run the risk of it giving way to lateral pressure, such as livestock rubbing against it, heavy winds or snow drifts.

This is not an either/or rule. Depending on how much post you need above grade will largely dictate your fence post depth, and as long as it's depth is somewhere between one-third to one-half the overall length, you should be just fine.

Take into account how much post you need to have above grade when purchasing fence posts. As an example, if you want 4 foot tall posts you have a choice of buying a nominal overall length post of 6', 7' or 8' long. Most people like to have fence post tops level with each other, but the grade of the land may not cooperate. If you run the minimum length of 6', you won't have "wobble room" to make that happen, but if you use a 7' or 8' long post, you'll have plenty of length to compensate. To achieve that professional look of level post tops, either painstakingly adjust your fence post depth to fit your level line, or set all your posts to the same fence post depth, snap a level line and cut the excess post to length once they're set in place.

**Timeless**  
**FENCE** system™  
Proudly Made in the U.S.A.



*this Post **is** the Insulator!*

**No Insulators Ever Needed!  
Eliminate "Outs"  
Never Rot - Never Rust**

**Keep your money on the farm - Don't send your money to town.**

Did you know...You can become an Authorized Reseller of the Timeless Fence System?

Call us about how to receive exclusive rights to your county and adjoining counties as an Authorized Reseller.

*"I first heard about the Timeless Fence System from a friend of mine who was also a reseller. I will admit at first I was not sure how well the product would do in my area. I was really surprised by the positive response I got from my customers. In just my first year as an Authorized Reseller my sales grew so much that I finished in the top 5 of all Timeless Fence System Authorized Resellers!*

*Timeless Fence System products solve many of the common problems farmers and ranchers have with building and maintaining fences. No rust, no rot and no insulators causing shorts. I would highly recommend this product and enjoy working with Timeless Fence System as an Authorized Reseller."*

*~Amos Yoder, Yoder Supplies  
Leroy, MI*



*"I like that these posts are pre-drilled, making installation very simple. There's no need for cotter pins, clips, or insulators. This fencing is half the cost of a wooden fence."*

*~Caleb Hostetler - Hostetler Fencing - Iowa*



**Call for  
current offers!**

**[www.plastic-innovation.com](http://www.plastic-innovation.com)  
(800) 788-4709**

# Additional Resources

---

## **Installing Fence Posts and Keeping Them Secure**

Red Brand Fencing offers tips on DIY fencing installation techniques to ensure your fencing is strong for years to come.

Visit: [iamcountryside.com/fences-sheds-barns/installing-fence-posts-keeping-them-secure](http://iamcountryside.com/fences-sheds-barns/installing-fence-posts-keeping-them-secure)

---

## **Quick Tips for Fixing Metal and Wooden Gates**

Contributor Heather Smith Thomas offers tips for mending sagging gates and how to deal with gate latches that fall out of alignment.

Visit: [iamcountryside.com/fences-sheds-barns/quick-tips-fixing-metal-wooden-gates](http://iamcountryside.com/fences-sheds-barns/quick-tips-fixing-metal-wooden-gates)

---

## **Deer Fencing Tips to Protect Wildlife and Gardens**

Contributor Marissa Ames provides advice on how to prevent deer from consuming your garden or fruit trees.

Visit: [iamcountryside.com/fences-sheds-barns/deer-fencing-tips-protect-wildlife-and-gardens/](http://iamcountryside.com/fences-sheds-barns/deer-fencing-tips-protect-wildlife-and-gardens/)