# POST-ERIZING LANDSCAPES 

You can provide your landscape clients with an additional service if you've got someone on staff who can design and/or build attractive wooden fences. They not only add beauty to the home, but value too.

by Ronald C. Smith, Ph.D.

Early settlers found more wood than they'd ever seen when they arrived on the American continent. Coming from timber-short Europe, they used wood for virtually every building purpose imaginable: ships, homes, barns, schoolhouses, bridges, factories and fences.

The poet Robert Frost wrote, "Good fences make good neighbors." Abraham Lincoln got his start supply-
ing fence rails, and Tom Sawyer conned his friends into painting his Aunt Polly's fence. Today wood fences are increasingly popular with the homeowner to mark his boundaries, protect a swimming pool or provide privacy.

A well-designed and installed wood fence becomes a positive landscape asset, providing an attractive picture frame for a home or property. Fences come in all sizes and heights,
and most require only basic carpentry skills to construct.

However, before installing a wooden fence, check with the local building code office; there may be height and/or construction limitations. If the fence is going to be put along a property line, don't guess! It is worth the investment of a few dollars to get an accurate survey of the property: opinions between neighbors do


not count should a court battle result. Speaking of neighbors, if a propertyline fence is being considered, encourage your client to talk it over with his neighbor to review what is planned and see if a possible cost division can be established.

## Woods and posts

For competitive, aesthetic and durability reasons, most wood used in fences is constructed of cedar, redwood, or cypress. Some wood products may be pressure-treated pine impregnated with a registered wood preservative to give it longer life. This treatment adds to the cost and, in the case of some pine, may not result in a fence that would stand up to the elements any better. The contractor should use the readily-available material, at competitive prices; wood his clients will accept.

The posts should be pressuretreated with a preservative. Brushing or dipping the posts into a preservative does not give long-term satisfaction; it may be considered an illegal use of a pesticide. Other fence components can be treated with a legal brush-on preservative before painting or, if staining, treated with a preservative added to the stain. Rot starts in joints where boards are fastened to
framing, so take special care to treat these areas before the fence is built.

Posts are usually 4 in . by 4 in ., and up to 8 ft . apart. If, however, the fence is going to be higher than the standard 6 ft ., or is subjected to high winds, then $6-\mathrm{in}$. by $6-\mathrm{in}$. posts would be a better investment. A good rule of thumb is for the post to be buried $21 / 2$ ft . into the ground. With most posts being 8 ft . long, the post available for nailing stringers and other members is about $5^{1 / 2} \mathrm{ft}$.

To allow the moisture to run off, customize the tops of the posts in some manner so that a bevel exists. Speaking of nails, make sure all hardware, including nails, screws, gate hinges and straps are of stainless steel, aluminum alloy or hot-dipped galvanized steel. For maximum holding power, use annular or spiral-Shank nails.

To reduce splitting, pre-drill a pilot hole about three-quarters the diameter of the nail. For dense or brittle wood, grind sharpness from nails or blunt the points by striking them carefully with a hammer. Blunt nails cut through; sharp ones pry apart.

Posts can be set in gravel, concrete, set on concrete and braced with strap iron, or simply stabilized in the ground by digging a hole big enough to
have crosscleats of 2-by-4s below ground (see sketch 10). Setting posts in concrete is a popular option as it provides the greatest stability and longivity. Be sure the top of the concrete is sloped away from the post to provide good drainage, and that the bottom of the post does not have concrete placed under it (see sketch 11). This would be a site for water to collect and accelerate wood rot.

Gravel-set posts should be provided with 6 in . of gravel beneath the bottom of the post to provide for good drainage. In all cases, make sure the posts are absolutely straight by using a carpenter's level and then bracing them temporarly for support until they are permanently set. Nothing will detract from a fence quicker than one which is out of vertical or not level.

The horizontal supports (stringers) for most fences are 2 in by 4 in . Use three supports in solid fences 6 ft . or higher. The third rail gives added stability and nailing surface. Stringers should be considered carefully, as overloaded 2 -by-4s are a very common cause of fence failure or sag.

When in doubt, three are always better than two, and the method of attachment is very important. While nailing may be quick and appear to be

SKETCH 9


## SKETCH 10


satisfactory, in time the nails may loosen or pull out as they are exposed to the weather.

Use either a counter-sunk carriage bolt for attachment or a steel angle bracket to attach to the posts. If nailing is still preferred, then use the annular or spiral-shaped ones for maximum holding power.

## Facing detail

Fences have many purposes, but most are installed for privacy or some degree of security in a hopefully aesthetic manner. One of the best fence styles to meet these criteria is the board-on-board or alternate board style. In addition to aesthetic features, this style allows the air to pass through, spreading out snow drifts for faster melting. The real bonus of this fence is that it looks great from both sides.

A solid, stockade-type fence may offer a little more privacy and security, but it provides the greatest wind resistance, causes deep snow drifts to form, looks good from only one side and is usually quickest to deteriorate. Additionally, heat zones can build up on south or west exposures which can kill some plants or at least accelerate plant desiccation.


Let your imagination run free in selecting a design-virtually anything can be done, which is a major advantage of working with wood (see sketch 4).

## The gate

Since gates will be getting the most wear and tear, their construction should be especially sturdy. Here, the posts should be 6-by-6 set in concrete and assembled with screws rather than nails, for greater strength. The minimum width for gates is 3 ft ., with 4 ft . being preferred. The larger opening allows for the easy movement of small garden and constrution equipment.

Like fence panels, gates are usually a matter of design preference.

Every successful gate has good frame construction and good hinges used to hang the gate. There are any number of hinges available, but the hinge must be matched to the weight of the gate. As a rule, gates should be supported by at least 3 hinges, particularly if there is a chance that any excess load will be put on the gate, soft metal hinges should be avoided. Small children are one of the most common excess loads. Kingpin and flat hinges made of heavy duty, hot
dipped galvanized steel are commonly used and re-bolted to the gate, rather than nailed.

## Finishing it off

Many people prefer to allow their wood fences to weather naturally. Most pressure-treated wood will weather to a pleasing gray color. Should the wood be painted or stained, be sure it's dry before any type of finish is applied.

If a paint is to be applied, be sure to cover with a good wood primer first, then paint with a good grade of outdoor house paint, either oil or latex based. Once done, repainting will be needed every 3 to 5 years depending on exposure and weather conditions.

If staining is preferred, there are three basic types:

- Penetrating stain - These are usually oil-based and are transparent, highlighting the wood grain in the fence. They also mellow with age if a protecting top coat is not applied.
- Latex stain - These are waterbased, making clean-up much easier. They are semi-transparent and will mask some of the wood grain. Latex stains do not penetrate wood as deeply as a penetrating stain, and they too, will mellow with age if no protective coating is applied.
- Varnish-based stains - These stains combine a penetrating stain with varnish for protection; they are available in both gloss and semi-gloss finish.

Wood fences open a vista of opportunities for landscape ideas. Most truely do create a microclimate for growing plants that might have been too tender for the location. In some cases, fences can provide protection from the extremes of sun or wind allowing for the installation of small fountains or reflecting pools. LM


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