



## Tips for Plantra Tree Shelters from Red Fern Farm

Edited 5/17/21

Shelters are a great tool, but must be used properly. The instructions below are for Plantra 5 foot shelters and stakes.

**Shade:** The trees at Red Fern Farm are grown in shade houses and are sensitive to direct sunlight. They can get sun scald in 30 minutes if left in direct sunlight between 10:00 AM and 2:00 pm during the summer. Tree shelters will provide protective light filtering. We strongly recommend that you dig your hole, lay out the shelter and stake, then go get your trees for planting. This also protects your trees from rabbits who are waiting in cover for you to leave your tree unprotected for 15 minutes.

**Bent growth:** Sometimes the growing tip of a young tree can get caught in the ventilation screen or on the edge of a punch-out hole, and get pointed downward. This can happen at the time the tree shelter is applied, or later, as the tree grows. It is important to look down inside each tree shelter at least once a week or so, to be sure the growing tip is pointing upward. If you see a growing tip caught and pointing downward, you can use a long, light-weight metal rod or a stiff piece of wire with a hook on one end, to reach in and down, to hook the growing tip and pull it upward.

**Wasps:** Paper wasps often build nests inside of tree shelters. When a seedling gets within 3" or 4" of the nest inside a shelter, the wasps somehow prevent the tree from getting any taller. Raccoons will also tear tree shelters apart to get at wasp nests in order to eat the wasp larvae. Wasp nests should not be tolerated. The easiest solution is to clap your hands hard, with the wasp nest still inside the tree shelter, centered between your hands. This crushes the nest, the larvae, and the adult wasps instantly. Tom has done this hundreds of times, and never been chased or stung. If you have a deadly allergy to bee stings, leave this job to someone else.



Body Pouf unraveled for Japanese beetle exclusion.

**Japanese beetles:** Japanese beetles can be absolutely deadly to young trees inside a shelter. Once the tree grows out the top of the shelter and stops growing leaves inside, you don't need to worry. Japanese beetles can be excluded from shelters by using a barrier made of a fine plastic mesh. One good source of this is a product called a "body pouf" from Dollar General Stores for \$1. When the ties that hold it together are cut, the "pouf" stretches out into a plastic mesh tube. You can cut

this tube into 12" lengths, tie a knot in one end, and slip it over the top of the tree shelter. It will need to be secured so it does not blow off in the wind. You should do this just before the beetles start to show up. The mesh will eventually deteriorate in the sun, but it will last long enough for the Japanese beetle season. An alternative to the beetle barrier is a repellent. **Neem oil** works well for this, but it must be applied before the beetles show up, and re-applied every two weeks or so, for the duration of the beetle season. Probably the fastest, easiest, and cheapest solution to the beetle problem is the use of an insecticide such as **Sevin**. A one-half-second squirt from a sprayer wand aimed down the top of the shelter is all it takes. For smaller trees, Tom inserts the wand tip into one of the side punch-out holes to get the wand tip closer to the tree. A treatment of Sevin will last up the three weeks, but should be re-applied in the case of heavy rain.

**Stakes:** We used Plantra fiberglass stakes on our farm. The next cheapest alternative is 1/2 inch rebar cut into 6 foot lengths. Both of these stakes can be woven in and out of the punch out holes in the shelter. The holes are designed for using zip ties or black twist ties to go through and tie to stakes. We slide our shelters down, in and out of these holes, from top to bottom. This secures the shelter well, is very quick and leaves the nice black twist ties, that come free with each shelter, for other purposes.



All ready for trees

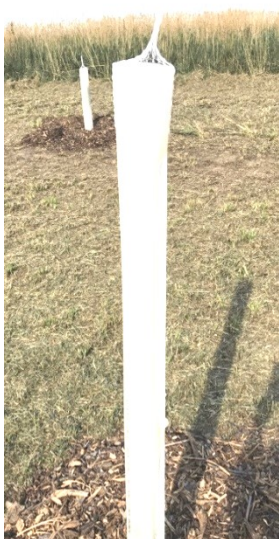


Look for bent growth inside shelter



Look for the shadow of paper wasp nests inside shelter





Shelter with bird exclusion netting and surround by mice discouraging short grass.

**Birds:** Some cavity-nesting birds will fly down inside tree shelters, get trapped, and die. In Iowa it is usually bluebirds that do this, though phoebes and eastern wood peewees have been found dead inside shelters. Plantra tree shelters come with nets to place over the tops of the shelters to exclude birds. When the top of a tree reaches the top of its shelter, the net needs to be removed.

**Mice:** Mice can be a serious problem in tree shelters. If you build up a high mouse population in a tree planting, shelters become a bed and breakfast spot. The best way to prevent this is to keep your mouse population in check. If you keep the vegetation mowed short in between the trees, it leaves the mice open to predation from hawks, owls, foxes, coyotes, and house cats. The mouse population will remain low enough that it does not become an issue for tree survival. As an added precaution, you can drop a moth ball down inside each tree shelter. Mice do not like mothballs.

**Rapid growth:** The rapid tree growth generated by shelters needs to be balanced. You should never let a tree get too tall without producing side branches. When the tree is at least 2',

but less than 3' out the top of the shelter, pinch off the growing tip at the top of the tree. This will temporarily stop the *upward* growth and encourage the tree to start putting on side branches. You may have to go back and pinch off new growing tips once a week, until the desired side branches start growing.

**Removal:** Shelters can be removed when the trunk diameter is more than 1 ½ inches at the top of the shelter. For some people, an easy gauge is to try to wrap your thumb and index finger around the trunk where it exits the shelter. If you thumb and finger can touch, leave on the shelter. If you cannot touch, you can remove the shelter. This varies with hand size.

**Buck protection:** We place black irrigation pipe on our young trees after removing tree shelters. This is to protect the trunk of the tree from rubbing by buck deer antlers. The pipe should be place 10 inches above the ground and continue upward 1 ½ feet. Weeds may hold it in place or you may need to tie string from the top of the pipe to low branches.

While all of this might seem like a lot of maintenance, with a just a little practice you can trim the time needed to monitor each shelter to just a few seconds per week. The added advantage in tree survival and growth will be well worth the effort.

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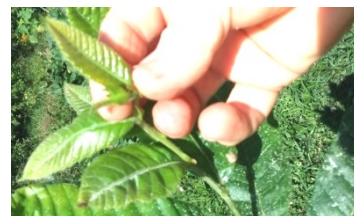
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Lanky, rapid growth - need to pinch growing tip to encourage side branches



Pinching off growing tip



Buck protector



Your goal, nicely developed tree.