

## A Short Description of Plastic Tree Shelter Use by PA-TACF



**Figure 1. If adequate deer protection is not available, we employ the use of 4 foot tall Doublewide tree shelters for the first couple of years of growth.**

In this case, you need the "SuperWide" tube (Figure 1). However, these do not protect trees from deer completely. Once the tree reaches the top of the tube, you'll need to put on an extension, which is a 2 foot Miracle Tube. This will probably stay on for 1-2 years, while the tree gets to 6 feet + in height. At that time, you can remove the 4 footer and



**Figure 2. Chestnut trees in 2' Double Wide tree shelters after the 4' tree shelter has been removed.**

drop down to the 2 foot tube (Figure 2). We keep the 2 foot tube on in order to protect from herbicide damage, rodent damage (primarily groundhog), as well as buck-rub. An additional advantage to the two fiberglass stakes is that they also deter deer from rubbing on the trees.

The initial set-up process for this method of planting is laborious and expensive. You need two stakes to hold the tube. At least six ties. And then some bird-netting on the top. To plant the orchard in Figure 1, it took a crew of 11 people from 9am until 2pm to plant 150 seed. That's a long time!

We use plastic tree shelters (tubes) so much in PA-TACF because 1) our deer population is so large; 2) we get fiberglass stakes to hold them up for free (the white oak stakes just don't cut it. In my experience, they only last for about 2-3 years, if that), and 3) we have a lot of left over 5 foot tall narrow tubes (the "standard" tubes from Treessentials and TreePro).

Don't get the tall TreePro *protectors* unless you plan on cutting them down to a maximum of 2' in height<sup>1</sup>.

1. If you are using tubes for deer protection, then you need a tall tube.



**Figure 3. 1.5 foot tall plastic tube surrounding a 1 year old BC3F2 seedling planted by seed in 2004..**

<sup>1</sup> If you use cut tree shelters higher than 1' in height, you'll need to cover the top edge with some sort of protection to keep the tree from rubbing on the cut edge. Duct tape lasts only about 1 season. Plastic surgical tubing cut lengthwise works best. We haven't perfected this method, yet. Might be best to just get 2' shelters as opposed to cutting them down from 5 or 6 feet in height.

2a. In areas where we have adequate deer protection (i.e. fencing), we use 1' or 2' tree shelters that are held up by either bamboo stakes or by the free fiberglass stakes we have.

If we are not going to use herbicide at a site, and instead employ the use of landscape fabric, we simply use a 1-1.5 foot shelter (Figure 2). We use these in lieu of aluminum flashing because we have them left over. We have cut down a substantial amount of 5' brown plastic shelters. In this case, we simply cut down the old tubes, drill two holes in the tube, and then slot a bamboo stake through the holes.



**Figure 4.** Use of 2 foot plastic tubes within a fenced area.

The bamboo stakes, much like the white oak stakes, will break down in about one or two years. You'll need to drive them into the ground with a mallet of some sort, and also drive the tube down into the ground as you would aluminum flashing.

2b. If herbicide will be used at a site (we do not use black plastic or landscape fabric where we use herbicide), we use 2' plastic tree shelters (Figure 4). This will protect the leaves and stem from any spray back. This is becoming my preferred method of planting chestnuts. I like having a fence -- either 8' woven wire galvanized steel fencing or black plastic fencing (Figure 5). We just started exploring the use of the latter. I'm not sure how the cost holds up just yet, but as the cost of steel has been rising over the past 1.5 years, the black plastic fencing has become very attractive in price. Here is our contact for the plastic fencing.

<http://www.bennersgardens.com/>

We have arranged a pretty good deal with the dealer, arranging below retail cost because of our non-profit status. And, hey, Joan Rivers uses it!

### **Bottom Line**

Do not use tree shelters taller than 3 feet in height if they are also of small diameter, i.e. less than double the standard diameter as seen with TreePro's DoubleWide line of shelters.

I recommend fencing, herbicide control of grass and weeds, and short tubes to protect the seed, seedling, and sapling. If you use short tubes, the diameter is not nearly as imperative as when using taller tubes, but I highly recommend using the widest diameter tube possible. This makes maintenance easier, and is also kinder on the resulting tree.



**Figure 5.** Plastic fencing at Thorpewood Orchard in Thurmont, MD. Although in a fairly high deer traffic area and surrounded on two sides by a wood lot, the plastic fence has held up very well for 3+ years.