

Hoop Mania!

No. I'm not talking about the hoops that you dance and exercise with, I'm talking about garden hoops that you use to extend the growing season in both directions. There's nothing really new under the sun about hoops, except maybe that the Department of Agriculture will give you a giant hoop house for free if you cooperate with their research program. Alaska is fortunate to be well funded for this program, and Homer growers are to be congratulated for ponying up the significant up front cash to join in this effort. Hey, it's a good lick, and we will all benefit from the increased early and late production of produce for the Farmer's Market. However, having your garden (or farm) under a plastic roof may not appeal to everyone, or even be efficient for everyone. Fortunately, we have many options.

First, not all hoop structures are the same. Low tunnels do not serve the same purpose as high tunnels. Mid-size tunnels, often called "quick hoops", are different than either. Low tunnels are extremely versatile, portable, and can be used with a variety of covers. They are very inexpensive, easy to set up and use. Here at Watership Farm, we've used low tunnels, formed from heavy galvanized wire, for 25 years - the same hoops! These were originally fashioned by Dave Schroer, God knows how long he used them before he passed them down to us. We stick them into the ground at three foot intervals, tie them together with baling twine purlins, and cover them with agribon, or plastic, or both, depending on the crop. We hold the covers on with beach stones or just heavy clothes pins, depending on conditions. Ventilation is accomplished by opening the ends of the tunnel, or raising the sides using clothes pins again to secure the cover. The wires are six feet long, and when held to a 36" base, will be about two feet tall. They could be taller or shorter depending on how you set the base. Remember, low tunnels concentrate heat. They can easily reach over 100 degrees on a sunny day under plastic, so they must be managed accordingly.

High tunnels are really just unheated greenhouses with passive ventilation. They keep your crops warmer than ambient temperatures, and protect them from wind and rain. However, without rain, you must organize an ample supply of water, and a delivery system to irrigate your beds. In the early 70's, we built a house like that, wood framed, out of locally rough cut spruce, and covered with "visqueen" which was what all clear plastic sheeting was called in those days. It was 12 ft. x 20 ft, pretty basic, but we sold tomatoes all summer long to the canneries at Seldovia and Port Graham. In Homer, many houses were built like that, heated and unheated, really big commercial ones too. Nowadays, we like hefty 2" galvanized tubing and 6 mil. greenhouse grade, UV protected plastic covers. 20 ft. x 40 ft. seems about the right size. Believe me, those high tunnels are to die for, if you can afford them, or the USDA is picking up the tab. I guess the pertinent question is, "What do I really need? One of the advantages of high tunnels is they are big enough to put low tunnels inside if you really need some heat. Because of their relatively high peak and no active

ventilation to pull the heat off the ceiling, crops that need more heat might need additional protection on some days to flourish. Except for the biggest growers, something like 12 ft. x 20 ft, might be more efficient (and way less expensive!) Also, in Homer, I don't think we have a "mine is bigger than yours" mind set. Size is only relative to need and use.

Then there's the build it yourself question. The USDA program ordains that you buy a kit from a commercial builder, probably far, far away. Why do they always do things that way? I found out that you can build perfectly wonderful, highly engineered hoop houses of every size and shape, right in your back yard with locally available (well kind of, you'll probably have to drive to Home Depot for some items) pieces and parts. Now, if you are lusting after one of those really huge high tunnels, it might be best to buy a fully engineered kit, unless you have engineering skills yourself.

Your options are many. Medium, 6 ft. wide "quick hoops" tunnels out of 1/2", 3/4" or 1" EMT galvanized electrical conduit, configured in endless variations, and with leg extensions to make them taller. Larger houses can be built with chain link fence top rail tubing, which is 1 3/8" galvanized tubing and very strong. It comes in 10' 6" sticks with swaged ends that are easily bent and joined together, 2 or 3, to make hoops 10 to 20 feet wide at the base. You can add purlins galore, cross bracing, sidewall ventilation, whatever. And because you own this house, you can add short or long term heating or powered ventilation, or fan inflated double layers, because, you-own-this-house.

Now this is my deal. Start with "quick hoops." Forget about pvc tubing for this type of tunnel. Galvanized electrical conduit, 3/4 or 1 inch for strength, is the ticket. The tubing comes in 10 ft. sticks, and 3/4" sells for \$3.99 a stick. All you have to do is bend it into uniform arcs and you are ready to play. But, how do you bend it? Easy! You use my bender! I bought a "quick hoops" bender from Loy Robinson of Lost Creek Farm down in Mineola, Texas, (HoopBenders.net). He was a bridge builder who invented the hoop bender concept more than 20 years ago. Johnny's Quick Hoops Bender is Loy's tool, manufactured and sold under license. I urge you to visit his site for more information on this subject than is gathered in any one place on the internet. You can order a variety of benders and supplies directly from his site. I will have my bender for 1/2", 3/4", and 1" galvanized EMT conduit at the Farmer's Market sometime in August. You will be able to bring your conduit there and bend it on the spot for a small donation (like a buck per hoop) to cover my costs. You will also be able to do this by appointment at my farm.

After you master the principles of bending on EMT, you will be ready to move up to 1 3/8" top rail tubing to build 10', 12', 16', or even 20' wide houses with ease. The sky's the limit when you are empowered and in control.