

## RURAL ENTERPRISE SERIES

RES-03

### Holiday Greenery Enterprise

The holiday greenery industry has exploded into a multimillion-dollar industry. About \$12 million dollars in sales pass through the hands of Maryland Christmas Tree Association members. (4.2 million trees are planted yearly with 368,000 harvested.) The market is also growing in New England and the mountainous regions of the mid-Atlantic. The Virginia Department of Forestry estimates that about two-thirds more acres of white pine plantings for tips are needed to sustain the industry's growth rate, so there is plenty of room for newcomers.



There are essentially three markets within the industry of holiday greenery: raw tips, undecorated wreaths, and decorated wreaths. The budget for each of these will be somewhat different. Decorated wreaths are value-added products, but they require more materials, labor, and creativity to produce. Your revenues and business operations will also depend on the species of tree you tip. Fresh boxwood tips bring more per pound than do white pine tips, but if your site is better suited to white pine, it's best to go with that because lower quality greenery does not bring premium prices.

#### Skills and Time Needed

To run a successful holiday greenery enterprise, you'll need a person on your team who likes to be outdoors to plant, tend, and tip the trees. Planting labor will be needed in the spring of the establishment year. Tipping labor will be needed from about the second week of October through December. Wreath-making labor will be needed in November and December. You can choose to sell wreaths wholesale or retail, plain or decorated. By decorating the wreaths, you'll be able to sell them at a higher price per wreath. If you choose this route, you'll need a person who is creative and has a flair for decorating. This work could potentially disrupt traditional Thanksgiving and holiday preparations and plans, so be sure to consider how important things like that are to your team members before you start.

How you choose to market your greenery will affect how much time sales will take. If you plan to sell retail at craft shows, consider the transit time and the time spent at the fair. If you plan to sell wreaths from your home, you or another member of your team will need to be at the house throughout each late November and December weekend to make the sales. This

could put a crimp in your family's holiday preparations. Many tip growers sell unprocessed tips direct to wholesalers by weight or volume. Some wholesalers purchase tips on the tree on an acre per year basis.

#### Equipment Needed

You'll need some or all of the following equipment, depending on your personal work preferences and the scale and type of operation: clippers or a sharp knife, wreath rings, wire, a place to assemble the wreaths, a wreath-making machine, and a truck or van. You may need a mower or bush hog to keep competing plants down. Tips can be stored for a short time, provided that there is sufficient cool air flow.

#### Financial Picture

The table below provides an example of a nine-year enterprise budget for a white pine wreath-making operation in Virginia. The budget assumes that the landowner is cutting all tips from his or her own land and bundling them into undecorated wreaths for retail sales and wholesale.

In this example, all costs and revenues are averaged over a 3-year period when the operation is producing wreaths. Assumptions on tip volumes are based on a 3-acre white pine plantation. All wreath revenues take place in years 7, 8, and 9, and all variable costs occur in years 7, 8, and 9, except stand maintenance and labor, which occur every year. No tips are purchased and the calculations do not account for reimbursements from cost-share programs that may assist with tree planting. Taxes are not considered in this example.

Deciding whether establishing a white pine plantation and producing wreaths is a good investment will require a careful consideration of production costs, expected returns, how much your time is worth, and whether you would prefer to make use of the time and money in some other way. Trees take much longer to grow than traditional crops, and your money will be invested for 7 years in this example before you earn any return on it. The returns you receive from wreaths in years 7, 8, and 9 will come from trees planted in year 0 and maintained through years 1 to 9. Therefore, the income and costs must be discounted because a dollar received tomorrow is not worth the same as a dollar received today. Whether “a bird in the hand today is worth two (or even three) in the bush tomorrow” depends on your time preference for money and your risk evaluation. Tipping can provide income while you wait for timber to grow to merchantable size, which is the assumed end point for the trees in this example. According to people in the industry, there is tremendous opportunity for more tip growers.

**Physical and natural resource costs**-Site preparation costs for the landowner/grower will depend on the previous use of the site to be planted in pine. Costs on abandoned agricultural fields can range from \$0 to \$100 per acre, depending on the need for chemical or fire control of multiflora rose, briars, autumn olive, and other species that compete with small pines for sunlight, nutrients, and water.

White pine seedlings from the Maryland state nursery cost \$115 per 1000 trees, or \$57 per acre (500 trees) if planted on a 9' x 9' spacing. Costs in surrounding states were similar.

**Labor and management costs**-Both hand planting

and machine planting costs average \$50 per acre, again assuming planting on a 9' x 9' spacing. Landowner cost-share incentive programs can greatly offset site preparation and establishment costs incurred by the landowner. If obtained, cost-share assistance will greatly increase the returns from an investment in growing white pine for tips. You will need to allow a lot of time in late autumn for tipping and making the wreaths. If you can't commit a lot of time during this period, this enterprise may not be for you. Labor for wreath-making costs about \$6 per hour. The amount of labor involved in wreath-making of course depends on the scale of your operation. If you will pay someone to sell the wreaths from your home, don't forget to account for that in your budget.

**Site maintenance and equipment costs**-Like site preparation costs, site maintenance costs will vary depending on previous land use. If the last use of the site was forest, then pine trees will likely need to be sprayed with a chemical herbicide about three years after planting to kill hardwood stump sprouts and other competition. This spraying costs around \$50 per acre. Mowing may be sufficient to control plant competition if the site was previously in agriculture. Mowing costs are typically about \$20 per acre. Growers must remain vigilant for pests and diseases and control for these factors when present. Chemical treatments for pests generally cost \$50 per acre. When managing white pine for tips, few other costs are incurred before tipping.

**Wreath-making costs**-Wreaths are produced by hand either with or without the use of a wreath-making machine. Simple wreathing machines consist of a foot-operated device that clamps greenery into the wreath frame or ring. Simple wreath-making machines cost \$150 to \$200. The cost of wreath rings varies depending on diameter width; 10-inch frames (which yield a 16- to 18-inch finished wreath) cost about \$1 per unit. Buying rings and other supplies in bulk will significantly reduce the per-unit cost of these items. Each wreath takes about 6 pounds of tips. Other costs include a quality pair of hand clippers (\$25) and greenery preservative (\$35 per 3-gallon jug). You may need to purchase refrigerated storage space to



“Double Clamper” Wreath Machine courtesy of northwoodvevergreen.com.

keep your greenery fresh. If you are producing decorated wreaths, add in costs for ribbon, dried flowers, and other decorations and books and/or magazines for instruction and design ideas.

**Tip revenues**—The price landowners receive for their tips depends primarily on who harvests them. You will receive the most for your tips if you harvest them yourself, but figure this price against your own cost of labor and transportation. Tips must be fresh and free of large stems to receive top dollar. On average, white pines produce between 10 and 13 pounds of tips per tree per year, which translates into 3,000 to 4,000 pounds of tips per acre per year (assuming trees are planted on a 9' x 9' spacing, but only 60 percent of trees have quality tips). Also, on average, any given tree will only be tipped twice, so a "tipping rotation" equals 2 years.

Given the above assumptions, prices received for tips in the southern Appalachians averaged \$1,000 to \$1,400 per acre per tipping rotation or \$0.18 per pound harvested and delivered to the production facility. However, the price may be as low as \$0.04 per pound (\$240 to \$320 per acre per rotation) for poor quality tips. Boxwood tips can bring \$0.30-0.35 per pound. Contract prices for buyer-harvested white pine tips from landowner-planted and grown trees varied between \$300 to \$450 per acre per tipping rotation, or \$0.05 to \$0.08 per pound, depending on the distance of the site from the production facility and on tree quality. Contract prices for buyer-harvested tips from buyer-planted trees were about \$100 per acre per tipping rotation, with the landowner keeping the trees and having no further obligations to the tip buyer who planted the trees. From the above figures, it is obvious that even small variations in site productivity and price will

have a large effect on tip revenue.

**Greenery revenues**—Retail prices for wreaths vary depending on size, decoration, and freshness. Assuming the wreath is fresh, a simple 16-inch white pine wreath may be sold for \$10 to \$15. However, highly decorated 16- to 18-inch wreaths can bring as much as \$40. Simple white pine wreaths may be sold wholesale for about \$6 to \$7. Retail prices in southwest Virginia and northeast North Carolina during the 1998 season averaged \$0.22/foot (75-foot white pine rope) and \$0.40/foot (75-foot Fraser fir rope).

**Cost-share programs**—Many federal, state, and private natural resource agencies have financial assistance programs designed to help landowners establish and maintain trees on private property. Examples of "cost-shared" practices include: site preparation, tree purchasing, tree planting, and control of competing vegetation. If available, cost-share assistance can greatly increase the profitability for any forest product enterprise; usually by reducing establishment costs. The availability of some forestry cost-share assistance will depend on the *final* product for which trees are grown. That is, trees grown solely for tipping that are harvested after age 14 may be viewed as an agricultural crop and may not qualify for forestry cost-share. However, trees tipped and then grown for pulpwood or sawtimber products may qualify for forestry cost-share assistance. Because the requirements and availability of cost-share programs vary greatly by state and year, details of specific programs are not listed here. Check with your local state forestry office and Agricultural Service Center for details on cost-share programs and availability in your area.

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**Information Resources**

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<b>WHITE PINE HOLIDAY WREATHS ENTERPRISE BUDGET</b>				
Production time frame: 9 years				
<b>INCOME (3-year average for years 7, 8, 9)</b>				
	Unit	Amount	Price Per Unit (\$)	Avg \$/yr
Sale of wreaths, retail (16" wreath)	pieces	250	\$20	\$5,000
Sale of wreaths, wholesale (16" wreath)	pieces	150	6.50	975
<b>Total Income</b>				<b>\$5,975</b>
<b>VARIABLE COSTS (3-year average for years 7, 8, 9)</b>				
Transportation to market	miles	500	\$0.35	\$172.50
Packaging (boxes)	per 25 lb	293	0.5	146.5
Labor-tip harvesting	hr	63	6	378
Labor - hauling	hr	12.5	6	75
Labor - equipment maintenance	hr	10	6	60
Labor - wreath making	hr	50	6	300
Wreath rings	12" ring	300	1	300
Bundling wire, 24 gauge, galvanized steel	250' roll	3	4.5	13.5
Advertising	hr	70	6	420
Equipment maintenance costs	acre	3	70	210
<b>Subtotal variable costs (years 7, 8, 9)</b>				<b>\$2,075.50</b>
<b>VARIABLE COSTS (yearly average for years 1 through 9)</b>				
Yearly maintenance (stand)	acre	3	\$25.00	\$75.00
Labor-stand maintenance	hr	50	6	300
<b>Subtotal variable costs (years 1-9)</b>				<b>\$375</b>
<b>Total variable costs (years 1-9)</b>				
<b>FIXED COSTS (1st year establishment)</b>				
Building (10-yr life)		2500	10%	250
Site preparation costs	acre	3	100	300
Trees (500 trees/ac; \$57/ac)	acre	3	57	171
Planting costs	acre	3	50	150
Tools (clippers, etc.)	pieces	3	25	75
Miscellaneous equipment		1	100	100
<b>Subtotal fixed costs (1st yr establishment)</b>				<b>\$1,046.00</b>
<b>FIXED COSTS (6th year establishment)</b>				
Wreath-making machine (purchase in yr 6)			\$200.00	\$200.00
Storage space (cool box)			250	250
<b>Total fixed costs</b>				<b>\$450.00</b>
(This assumes 7% annual interest rate, 1% annual inflation rate & equal revenue/yr.)				
<b>Assumptions for Enterprise Analysis:</b>				
1) All costs and revenues were averaged over the 3-year production of wreaths.				
2) Wreath revenues occurred in years 7, 8, and 9.				
3) Variable costs occur in yrs. 7-9, except stand maintenance/labor, which occurs every year.				
4) The volume of tips produced was based on a 3-acre white pine plantation.				
5) Six pounds tips per wreath. Plantation produces 4000 lbs. tips/acre/year (x 60% cull rate).				
6) All tips gathered from landowner's Christmas tree farm. None are purchased.				
7) Calculations do not account for cost-share payments or taxes.				