Massachusetts Christmas Tree Association
Officers & Directors 2012 -2013

OFFICERS:

President ................................................................. Rob Leab
2 yr term-Expires 2014
3475 Route 43, Hancock, MA 01237
(413) 738-5915
missy@iokavalleyfarm.com

Vice-President.......................................................Daniel Pierce
2 yr term-Expires 2014
431 Chase Rd., Lunenburg MA 01462
(978) 582-4723
piercetrees@verizon.net

Treasurer ...........................................................Joseph Meichelbeck
1 year term
44 Fay Mountain Rd., Grafton, MA 01519
(508) 839-6739
jrm44@verizon.net

Secretary ...........................................................James Colburn
1 year term
104 West Main St., Merrimac, MA 01860
(978) 346-4381
jas.colburn@verizon.net

Immediate Past President.................................Thomas Cranston
2 year term expires 2014
197 Bellus Rd., PO Box 77, Ashfield, MA 01330
(413) 628-3911
tcranston@verizon.net

Massachusetts Agricultural Resources Representative:
Rick LeBlanc
Richard.leblanc@state.ma.usa

DIRECTORS:

Seth Cranston,
372 Baptist Corner Rd., Ashfield, MA 01330
(413) 628-0090
cranstonstreefarm@yahoo.com
1st term expires 2014

Greg Davagian,
19 Merriam Lane, Sutton, MA 01590
(508) 865-3413
davatrees@gmail.com.
1st term expires 2013

Scott Dwinell,
132 Salem Road, Topsfield, MA 01983
(978) 887-2670
tdwinell@verizon.net
1st term expires 2015

Larry Flaccus
1394 Mohawk Trail, Shelburne, MA 01370
(413) 625-6116
farm@kenburnorchards.com
1st term expires 2014

Robert Gauld
14 Meetinghouse Hill Rd., Sterling, MA 01564
(978) 422-0485
rpgaule@verizon.net
1st term expires 2015

Joyce Leitl
P. O. Box 1349, Belchertown, MA 01007
(413) 563-3003
joyceleitl@hotmail.com
1st term expires 2013

Susan Lopes
161 Slate Road, Chicopee, MA 01020
(413) 592-6015
1st term expires 2015

David Morin
92 Aldrich St., Uxbridge, MA 01569
(508) 278-5017
info@arrowheadacres.com
2nd term expires. 2013

Carol Nims
114 Woodard Rd., Greenfield, MA 01301
(413) 774-5742
nims@crocker.com
2nd term expires 2014

David Radebaugh
191 Franklin St., Belchertown, MA 01007
(413) 323-5270
xmasstreess19@yahoo.com
2nd term expires 2013

“SHEARINGS” Editor:
Gloria Ellsworth
246 School St., Northborough, MA 01532
(508) 393-6479
shearings2u@verizon.net

NECTA Representative:
John Coward, 13 Congamond Road, Southwick, MA 01077
(413) 569-6724 jcwh65@msn.com
Are we ready? The season has arrived and thank goodness the weather is trending to cooler temperatures for the sake of our trees, wreaths and greens. The needles have set and we are off and running with our machines humming to a familiar tune. The season will be a week longer or a week shorter depending how vigorous your sale are and the how much or how little consumer spending will be. Once Thanksgiving arrives, its 33 days and counting to Christmas. So get some rest, have your last cup of hot coffee and save the panic for then!

A special THANK YOU from all of us to who attended the MCTA Annual meeting at Radebaugh Tree Farm on September 15. Dave and Diane Radebaugh did a great job as hosts. The well attended event highlighted beautiful trees, challenging insect issues, interesting terrain, and plenty of questions for Dr. Richard Cowles from the attendees. And, enhanced by good food and conversation, making it a full and eventful day.

Thank you Tom Cranston for all effort you put forth in being our President for the past two years. Retirement may not last long once Cindy puts those extra hours to good use.

Congratulations to our new President Doug Leab, VP Dan Pierce. our newest directors, Scott Dwinell, Bob Gauld and Susan Lopes, and thank you to Dave Butt and Casey Vanderwalk for their devoted service to the board. Their time, effort and devotion to the MCTA have been invaluable.

MCTA website is up and running. So far we have 79 entries to the “Win a Free Tree” Contest, which came from the “Big E”. We hope for more entries once consumers start looking for trees. Now is a good time to double check your website to make sure it links correctly before the season begins. Go to the MCTA site and check. If there are any last minute changes to times, dates or errors, now is the time to get the corrected! Have you Google’d your farm lately?

Troops For Troops has a new “PIN-UP” program. If support the Christmas SPIRIT Foundation and are unable to donate trees to the program, the Pin-Up program is a good way help with donations. For a nominal donation ($1-$5 suggested) customers can sign their names to a “Share the Spirit” cut-out and you hang the image in a high traffic area to show support of the Trees for Troops. Funds collected by you go directly to help fund the program.

The USDA has continued the “stay” on the Check-off program, which was “Imposed to give the Department more time to reach out to the Christmas Tree industry and the public to explain how the research and promotion program is a producer driven program to support American farmers”. The Christmas Tree Promotion Now board is hoping the stay will be lifted sometime in 2013.

Email Address: MCTA notices and the “on-line version of Shearings “will be going out via email in 2013. Don’t miss out on important events. If you have not registered an email address with the association please take a few minutes to send it to Dave Morin at info@arrowheadacres.com
# Christmas Tree Contest Winners

## Best of Show

<table>
<thead>
<tr>
<th>Place</th>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>David Butt</td>
<td>Haverhill, MA</td>
</tr>
<tr>
<td>2nd</td>
<td>Crane Neck Tree Farm</td>
<td>West Newbury, MA</td>
</tr>
<tr>
<td>3rd</td>
<td>Carl Flowers, Jr</td>
<td>Groton, MA</td>
</tr>
<tr>
<td>4th</td>
<td>Scott Dwinell</td>
<td>Topsfield, MA</td>
</tr>
<tr>
<td>5th</td>
<td>Herrick Tree Farm</td>
<td>Haverhill, MA</td>
</tr>
</tbody>
</table>

### Fir trees

<table>
<thead>
<tr>
<th>Place</th>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>David Butt</td>
<td>Haverhill, MA</td>
</tr>
<tr>
<td>2nd</td>
<td>Crane Neck Tree Farm</td>
<td>West Newbury, MA</td>
</tr>
<tr>
<td>3rd</td>
<td>Crane Neck Tree Farm</td>
<td>Groton, MA</td>
</tr>
<tr>
<td>4th</td>
<td>Scott Dwinell</td>
<td>Topsfield, MA</td>
</tr>
<tr>
<td>5th</td>
<td>Herrick Tree Farm</td>
<td>Haverhill, MA</td>
</tr>
</tbody>
</table>

### Douglas Fir

<table>
<thead>
<tr>
<th>Place</th>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>David Butt</td>
<td>Haverhill, MA</td>
</tr>
<tr>
<td>2nd</td>
<td>Crane Neck Tree Farm</td>
<td>West Newbury, MA</td>
</tr>
<tr>
<td>3rd</td>
<td>Donovan Nursery</td>
<td>Groveland, MA</td>
</tr>
</tbody>
</table>

### Spruce trees

<table>
<thead>
<tr>
<th>Place</th>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Carl Flowers, Jr</td>
<td>Groton, MA</td>
</tr>
<tr>
<td>2nd</td>
<td>Donovan Nursery</td>
<td>Groveland, MA</td>
</tr>
</tbody>
</table>

### Pine trees

<table>
<thead>
<tr>
<th>Place</th>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Donovan Nursery</td>
<td>Groveland, MA</td>
</tr>
<tr>
<td>2nd</td>
<td>Hansen’s Tree Farm</td>
<td>Haverhill, MA</td>
</tr>
</tbody>
</table>
A special thanks goes to John Coward for overseeing the success of this year’s Big E booth. And, to all the volunteers who set up, manned the booth, judged contests or just gave a helping hand when someone didn’t show up. Thank you from the MCTA.

**CONTEST WINNERS**

**Christmas Tree Competition**

**Grand Champion**
Fir:  Bill Nichols  N.H.
Spruce: Visney CT
Pine: Peter Sweet  MA

**Reserve Champion Lehman**
Fir:  Bill Nichols  N.H.
Spruce: Visney CT
Pine: Peter Sweet  MA

**State Champions**

<table>
<thead>
<tr>
<th>State</th>
<th>Champion</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH</td>
<td>Bill Nichols</td>
</tr>
<tr>
<td>CT</td>
<td>Lehman Visney</td>
</tr>
<tr>
<td>MA</td>
<td>Peter Sweet</td>
</tr>
<tr>
<td>RI</td>
<td>Dave Henry</td>
</tr>
</tbody>
</table>

**Fir Contestants- MA**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Contestant</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd</td>
<td>Tom Cranston</td>
</tr>
<tr>
<td>3rd</td>
<td>Dan Pierce</td>
</tr>
<tr>
<td>5th</td>
<td>Carol Nims</td>
</tr>
<tr>
<td>8th</td>
<td>John Coward</td>
</tr>
</tbody>
</table>

**Spruce Contestants- MA**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Contestant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Peter Sweet Sr</td>
</tr>
<tr>
<td>3rd</td>
<td>Peter Sweet Jr</td>
</tr>
<tr>
<td>4th</td>
<td>Jan Davagian</td>
</tr>
<tr>
<td>7th</td>
<td>Bill Gauld</td>
</tr>
<tr>
<td>9th</td>
<td>Tom Cranston</td>
</tr>
</tbody>
</table>

**Pine Contestants- MA**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Contestant</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd</td>
<td>Peter Sweet Sr</td>
</tr>
<tr>
<td>4th</td>
<td>Bill Gauld</td>
</tr>
<tr>
<td>5th</td>
<td>Tom Cranston</td>
</tr>
<tr>
<td>6th</td>
<td>Peter Sweet Jar</td>
</tr>
</tbody>
</table>

**Wreath Competition**

**MA -Decorated Wreath**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Contestant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Jan Davagian</td>
</tr>
<tr>
<td>3rd</td>
<td>Joe Lemicke</td>
</tr>
<tr>
<td>4th</td>
<td>Cranston’s Tree Farm</td>
</tr>
</tbody>
</table>

**MA - Undecorated Wreath**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Contestant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Jan Davagian</td>
</tr>
<tr>
<td>3rd</td>
<td>Joe Lemicke</td>
</tr>
<tr>
<td>4th</td>
<td>Cranston’s Tree Farm</td>
</tr>
</tbody>
</table>
Freshness of Fraser Fir Greenery in Different Storage & Antitranspirant Treatments

Reprinted from Limbs & Needles Fall 2011. By Jeffery Owen, Area Christmas Tree Extension Specialist, NC State University

Over recent years major wholesale wreath makers have invested wreath makers have invested in state-of-the-art climate controlled warehouses. Other growers have watched and wondered if they too need better storage facilities for their greenery and wreaths. There was enough interest that the NCCTA research committee identified greenery storage and care as a research initiative in 2012. This article summarizes the research study conducted in the fall of 20120 to examine several factors that influence the freshness of greenery.

The purpose of this research was to evaluate the impact of different storage conditions and antitranspirants on the freshness of Fraser fir greenery. Six different storage sites (Table 1) on the Mountain Horticultural Crops research Station (MHCRS) were used to store Fraser fir branches from November 4 to December 10, 2010. Every storage treatment included 30 dry branches held in a Styrofoam seeding tray, 30 dry branches treated with Clearspray antitranspirant held in a seedling tray and 30 branches immersed in water in a large bucket.

In two storage locations, the inside-heated room and outside-full sun location, additional treatments of five antitranspirants were evaluated. Branches treated with antitranspirants were held dry in Styrofoam seedling trays just like the storage treatments. While Clearspray was replicated at every storage site as part of the storage study, the other antitranspirants were stored only in the high stress locations – full sun outdoors and the heated interior space. Two rates of Clearspray, Moisturin, and Croplife were used to evaluate the range of rates recommended on the label. Used at the recommendation of apple researchers at MHCRS, the MCP was a 24 tented gas treatment.

In both cases the storage and antitranspirant studies, a total of 32 treatments were conducted using 960 branches. The thirty trees used for this study were graciously provided by Jeff Vance from his own farm. Assistance in processing oven dry weights was provided by MHCRS and the BRIDGE program.

To minimize the effect of tree-to-tree variation on treatments, enough branches were harvested from thirty trees for each treatment to include a branch from each tree. By doing this, all treatments included exactly the same genetic makeup. Each branch was labeled according to the tree from which it came allowing data to be recorded by tree.

With thirty branches coming from each tree, branches were selected from three year old whorls down to the bottoms of the trees. Branch selection could not be limited to just one or two whorls in the top third of the tree. Research conducted by Drs. Eric Hinesley and Gary Chastagner indicated that moisture content and needle retention can vary among branches selected from different parts of a Christmas tree. However, by randomly selecting branches for treatments from each tree, the influence of this effect was hopefully minimized.

Baseline measurements were collected before treatments were placed in their different storage areas. To determine moisture content, a single shoot was collected from each branch that was weighed fresh and placed in an envelope to be weighted again after being dried in an oven. Each branch was lightly brushed by hand over a tray to induce needle drop. Continued on page 8
The amount of needle drop was assessed according to the rating scale listed in Table 2. Data were recorded by single tree replications. Additional measurements were collected after one week, two weeks, and four weeks. At the end of the study, a subset of flammability tests was made to link moisture content to flammability.

Not unexpectedly, the most profound result of the study was the difference in moisture content between foliage stored with and without water. The branches stored in water did not show any significant differences in moisture content across different storage area or the duration of the study. They retained a high level of moisture approaching that of uncut trees in the field.

Branches stored dry, did lose moisture over time and exhibited very significant difference between storage treatments. Branches retained higher levels of moisture under refrigerated storage and outside shade than in heated and unheated interior or sunny outside storage. Those storage areas that provided more heat and less humidity dried foliage more. After only two weeks, the branches in the south-facing, heated room had dried to the point of being brittle and flammable.

The impact of storage on needle retention did not line up quite as nicely as did the moisture content. The high humidity cooler yielded higher than expected needle loss in both wet and dry treatments. The low humidity cooler yielded the lowest needle loss in both wet and dry treatments. Greatest needle loss among watered storage treatments occurred in the heated room. The sunny outdoor treatment exhibited the most needle loss among dry treatments at the end of the study. The heated room exhibited the most needle loss among dry treatments early in the study but only needle breakage by the end.

This breakage was different from normal needle loss. Dry brittle needles were breaking off mid-needle when brushed – not separating at the natural abscission point on the stem. This needle breakage was similar to needle loss from a very dry tree or wreath. While a dry wreath may hold all its needles until disturbed, no one would consider it either fresh or a safe foundation for burning advent candles.

At the completion of the study a subsample of flammability tests were conducted on selected treatments. With limited time, my idea wasn’t to test the entire 960 branch study but to link moisture content data to an indication of flammability. Three treatments were evaluated to bracket the range in moisture content. The rating system was set up on a 5 point scale as shown in Table 3.

Every branch in the dry treatment from the heated room burned until extinguished. This yielded a uniform flammability rating of 1.0.

Their average moisture content was less than 20 – extremely dry.

At the other end of the spectrum, the dry treatment from the low humidity cooler barely blackened (except for the needles that were directly in the lighter flame) yielding an average rating of 4.5. This treatment represented an average moisture content of 90 – still fresh. The dry branches stored outside in the shade with an average moisture content of 80 smoldered slightly but went out when the ignition source was removed for a rating of 3.3. These branches still contained adequate moisture to be defined as fresh. Only foliage subjected to hot dry...

<table>
<thead>
<tr>
<th>Table 2: Rating Scale for Needle Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3: Flammability Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

continued on page 9
Highlights of MCTA Annual Meeting
September 15, 2012

A well deserve seat for Dave

An attentive crowd to the President’s message

Dr. Richard Cowles doing what he does best

Dave showing us his basel spray techniques

Tom Cranston at his best

Great food for all

Even our four legged friends enjoyed the tour

Minds that Mingle

Absorbing all the good stuff

Standing room only crowd

Digging up the evidence

Hard work begets beautiful trees
conditions in a closed south-facing room was flammable, but how often do unaware consumers continue subject perishable trees and wreaths to similar adverse conditions?

Except for the MCP gas treatment, antitranspirant treatments stored in full sun and in the heated room were statistically similar to the untreated dry branches. The same was true for Cearspray treatments included in all storage areas.

The results for sprayed-on antitranspirants are similar to other research studies conducted that repeatedly have shown no benefit to their use.

The results with the MCP gas treatment are intriguing. The MCP treated branches exhibited slightly lower moisture content than the other antitranspirant treatments by the end of the study. This insignificant difference in moisture content was unremarkable except for the significant difference in the needle retention of MCP treated branches. The MCP treatments yielded the lowest needle loss ratings among antitranspirants – right in line with needle loss of the watered branch treatments. When compared to other cold storage treatments, MCP again provided the best needle retention.

MCP, marketed as Smartfresh, is one of several plant growth regulators that been developed to preserve freshness of stored apples. MCP blocks ethylene reception while others inhibit ethylene production. The response of Fraser fir foliage to these products could provide valuable insights into the mechanism of needle loss in Fraser fir. The positive need loss ratings in this work justify further study with this group of materials.

Perhaps the most statistically significant result of this study, the constant high moisture content of the watered foliage treatments, has limited application to greenery. Wet bundles have the potential to mold-becoming slimy and incurring potential needle loss.

Continued on page 10

<table>
<thead>
<tr>
<th>Table 4: Antitranspirant Treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio</td>
</tr>
<tr>
<td>Clearspray</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Needlehold</td>
</tr>
<tr>
<td>Moisturin</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Croplife</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>MCP</td>
</tr>
</tbody>
</table>

Continued on page 10
In fact, in this study the portion of foliage immersed in water became slimy and lost needles. This occurred just as it will in the bowl of any Christmas tree stand over weeks of saturation. It was most extensive where the branches were wet and warm in a heated room. It had no chance to occur in the dry treatments. Properly chilled dry foliage retained moisture almost as well as the watered treatments. Adequate chilling was achieved in both refrigerated coolers and outdoor shade.

Most growers in Western North Carolina employ storage practices that are similar to (and often better than) the outdoor shade treatment used in this study. Growers combine landscape features with natural and/or manmade shade to provide dark and humid storage conditions on the farm. While refrigerated cooler treatments provided slightly better results in this study, the differences were small. Again, many farms provide deeper natural shade and lower temperatures than we were able to create at the MHCRS—further diminishing the effective difference between natural and artificial refrigeration.

Thus, the question of investing in a climate-controlled warehouse may be less about the science of keeping trees or foliage cold and fresh than about the logistics of harvest. Warehouses are being used in conjunction with palletization. The later stages of harvest are mechanized providing advantages in moving product around the yard into trucks. Further, growers have the chance to resize their harvest operation in warehouses in ways that few pine stands or shade structures can accommodate. Thus, if you are analyzing an investment in a climate-controlled warehouse, consider first what it will do to harvest logistics and costs.

Whether you use a pine stand, a natural cave, a new state-of-the-art warehouse, or an empty industrial building, make sure you think though the best ways to keep your greenery cool, dark and humid.
Dollars & Sense $

Should I Buy It or Should Make It?

By Gloria Ellsworth

Are you outsourcing enough? This was one of the main questions asked by management consultants during the outsourcing boom. Outsourcing was viewed as one of the best ways of getting things done for a fraction of the original costs.

Make or buy decision is always a valid concept in business. No organization should attempt to make something by their own, when they stand the opportunity to buy the same for much less in price. Companies make decisions on what to make internally and what to buy from outside source in order to maximize the profit margins.

In the Christmas tree industry, farms and farm related businesses should first look at basic considerations before making the make or buy decision. These include:

1. Size of tree farm, stand or business
2. Working capital
3. Ratio of trees to wreaths sold at business
4. Availability and quality of raw product
5. Number of employees/workers
6. Storage and transportation costs
7. Quality & quantity management
8. Supply and demand

A Christmas tree farm or retail farm stand must consider two important factors that will influence the make-or-buy decision. The quantitative, such as cost and time, and the qualitative, such as the suppliers’ trustworthiness and the quality of their products.

Four Numbers You Should Know
When you make a “make-or-buy” decision, there are four numbers you need to be aware of. Your decision should be based on the value of these four numbers.

1. The volume
2. The fixed cost of making
3. Per-unit direct cost when making
4. Per-unit cost when buying

There are two formulas that use the above numbers. They are “Cost to Buy” and “Costs to Make”. The higher value looses and the decision maker can go ahead with the less costly solution.

1. Cost to Buy = Volume x Per-unit cost
2. Cost to Make = Fixed costs + Per-unit direct cost x volume

The Reasons for Making

1. Cost concerns
2. Need direct control over product
3. Quality control concerns
4. Supplier unreliability
5. Lack of competent suppliers
6. Volume too small to get a supplier attracted
7. Reduction of logistical costs (shipping etc)
8. To maintain a backup source
9. Political and Environmental reasons
10. Organizational pride

Reasons for Buying

1. Insufficient raw materials
2. Lack of technical experience
3. Lack of time and labor to produce
4. Product or brand preference
5. Consistency of product
6. Insufficient space to produce or store
7. Volume requirements

The Quantitative and Qualitative Factors

In the Christmas tree industry, one of the main factors that influences in making a product is the availability of raw materials. Christmas tree farms have a significant advantage over retail farm stands and tree lots in this regard. They must spend working capital on raw materials, such as boughs and tips, to make their fresh green accessory products.

The second most important factor is the fixed and variable costs of production. Fixed costs include electricity, machinery, buildings, etc. Variable costs related to wages, materials, and utilities in production of the product. Continued
What is your time worth?

The variables in time and labor considerations must include the experience of the person producing the product and the quality of its management of that product. For example: You decide to make fifty 12” wreaths this year. You create the perception that you will save on capital expenses and produce a better quality of product if you make it verses buying it from a supplier.

To determine whether it is profitable enough to make the product (wreaths) in-house, you first must analyze the variable costs of making that product. If you chose to make wreaths yourself, it is important to set an hourly wage for your labor as if you were a paid employee. So, get out the pencil and paper and a good stop watch.

Once you have purchased the wreath rings for production, the next task will be to obtaining the greens by cutting trees or butt pruning. Once at a manageable size, tips or branches must be cut into workable dimensions and cut into a large volume, to make production move quickly and smoothly. Whether you do it yourself or hire someone, the time it takes to produce a workable base product will influence the overall production costs. If someone has experience, the timeline for total production will be kept to a minimum. However, a person with no experience, can double the production time especially during in the early stages, thereby increasing the labor costs.

Analyzing the labor cost is a key component to the Make-It decision process. In Table 1, the per hour rate is based on what you would pay yourself or an employee to produce one unit (one wreath). Production time relates time to harvest greens (by cutting or butt pruning tree), preparation of product, (cutting greens into workable size) and assembly of product (making the wreath). A minimal amount of time is added for ordering base goods. (wreath rings from supplier’s catalog). As shown in Table 1, costs can escalate rapidly when lack of experience and additional time is needed to make a product, thereby reducing it’s profitability in making the item. In our industry, the make-it decision sometimes has to go through the experimental stage in order to figure out the logistics of profitability.

**Table 1**

<p>| Labor Cost to Produce 1-12” Plain Wreath |
|-----------------|----------------|----------------|----------------|----------------|----------------|</p>
<table>
<thead>
<tr>
<th>Production Time</th>
<th>Hourly Wage Rate</th>
<th>Hourly Wage Rate</th>
<th>Hourly Wage Rate</th>
<th>Hourly Wage Rate</th>
<th>Hourly Wage Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 min</td>
<td>$ 5.00</td>
<td>$ 7.25</td>
<td>$ 8.50</td>
<td>$10.00</td>
<td>$15.00</td>
</tr>
<tr>
<td>20 min</td>
<td>1.20</td>
<td>1.81</td>
<td>2.43</td>
<td>2.40</td>
<td>3.75</td>
</tr>
<tr>
<td>25 min</td>
<td>1.60</td>
<td>2.40</td>
<td>2.84</td>
<td>3.20</td>
<td>5.00</td>
</tr>
<tr>
<td>30 min</td>
<td>2.00</td>
<td>2.84</td>
<td>3.55</td>
<td>4.00</td>
<td>6.25</td>
</tr>
<tr>
<td>35 mn</td>
<td>2.40</td>
<td>3.55</td>
<td>4.26</td>
<td>4.80</td>
<td>7.50</td>
</tr>
</tbody>
</table>

A product that takes less time, labor and materials to produce will be higher in profit. In some cases, a staple item, such as a plain wreath, maybe more profitable to buy than for you to make.

The Qualitative Factor

Now that you’ve made your product, what is the quality of that product and how does it compare to a supplier’s product? Is it symmetrical and consistent in size?

Continued to page 13
This second factor influences the decision to purchase the products from outside suppliers. The Buy considerations include trustworthiness of the supplier, the quality of its management, and the quality of its products.

Will they have the product at the peak of the season and on demand? Are they consistent in size, color and durability? Quality of a product can make or break its profitability. How hard is it to sell a wreath that’s falling apart, whether you made it or bought it from a supplier. When buying a product from a reputable supplier, the cost should equal to or be less than, the overall cost for you to make it.

Items such as Christmas bows, as shown in Table 2, are a good example of an item that can be highly profitable when made by an experienced person. Retail markup would be the same.

### Table 2

<table>
<thead>
<tr>
<th>Materials &amp; Labor</th>
<th>Costs Wholesale</th>
<th>Cost of Item</th>
<th>Amount Need</th>
<th>Total Cost to Make</th>
</tr>
</thead>
<tbody>
<tr>
<td># 40 Red Ribbon</td>
<td>$6.25 1 roll/25 yds</td>
<td>$.25 per yd</td>
<td>3.5 yds</td>
<td>$.89</td>
</tr>
<tr>
<td>Wire</td>
<td>$42.00 per 4000 pcs</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td>Scissors</td>
<td>$19.99 per 1000 bows</td>
<td>.02</td>
<td>1</td>
<td>.02</td>
</tr>
<tr>
<td>Storage Box</td>
<td>3.90/box</td>
<td>.39</td>
<td>1</td>
<td>.39</td>
</tr>
<tr>
<td>Labor Avg. $10.00/hr</td>
<td>.166 per minute</td>
<td>.166</td>
<td>3 min.</td>
<td>.49</td>
</tr>
<tr>
<td><strong>Total Cost to Make</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$1.80</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Materials</th>
<th>Cost Wholesale</th>
<th>Cost of Item</th>
<th>Amt Need</th>
<th>Cost to Buy</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-Loop Red Bows</td>
<td>$26.64/8 bows</td>
<td>$3.33</td>
<td>1</td>
<td>$3.33</td>
</tr>
<tr>
<td>Shipping</td>
<td>(estimated)</td>
<td>.50</td>
<td>1</td>
<td>.50</td>
</tr>
<tr>
<td><strong>Total Cost to Buy</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$3.83</strong></td>
</tr>
</tbody>
</table>

Analysis of costs of materials and labor for an experience laborer to make one (1) plain red bow (for a 12" wreath) verses buying one (1) bow from the average supplier.

Again, making an item like bows takes experience and talent. If you do not have those skills and choose to make bows, you will need to invest in training or professional talent to produce a product equal to or better than a supplier, at the same price. Average retail price for one red velvet 8-Loop bow would be between $6.95 and $7.95. It appears to be advantageous to make it, which would equal to a profit of $5.20 at the $6.95 retail rate, but if no one will buy them because they are of low quality, you will have to reduce the price in order to sell them. Buying them brings quality and consistency of product, less labor and raw material expense and storage to you, with no talent or experience required.

**Conclusion**

Review all the factors that will influence your choice to buy or make a product, including but not limited to your age, health and family dynamics. Take time to find quality suppliers ahead of time, when the day comes that you can no longer make-it yourself due to personal physical or business limitations. Take advantage of early buy incentives from wholesaler and suppliers and compare the product and price of product you made in-house to the product they provide. So, what is your time worth?

**References**


Tutorialspoint.com Management the Make or Buy Decision.

Gloria Ellsworth is a Christmas Tree farm owner, floral designer with formal training in marketing. As part of their business, she operates a “while you wait” custom decorating wreath shop. She has been making fresh green products for over 26 years and given seminars on the “Buy or Make” dynamics for the industry.
President Rob Leab: The minutes of the July 2012 meeting were approved as printed.

Treasurer Report:
Treasurer, Joe Meichelbeck, distributed copies and reported on YTD spending against the 2013 budget. He anticipates under spending on the dues/subscription line and overspending on printing/postage due to changes with publications. There is a planned deficit for the fiscal year. Our cash balance will remain in the range of $38K. Budgeted membership receipts are based on 31 members. After discussion his report was approved.

NECTA & Big E Wrap-Up
John Coward reported a very successful “Big E” with many trees and wreaths displayed and high traffic volume throughout the event. Sufficient volunteer numbers to man the display continue to be a problem, especially from the outlying states. Changes on the size and layout of a building for the Christmas tree display was discussed. MCTA hopes to apply for a grant, to build a new building. There has been some difficulty organizing a NECTA meeting, and most members communication is by email and telephone. The grant for a new building proposal will be presented at the next NECTA meeting. The board approved and authorize Seth Cranston to purchase lights for the exhibit in an amount up to $200.

LEGISTATION COMMITTEE:
The Check-Off program for Christmas trees is moving forward and implementation will be in 2013.

MDAR & Government News
Casey Vanderwalk will host the Annual Tree cutting event at his farm.

MARKETING: WEBSITE:
Dave Morin reports we have 79 entrants (Oct 10) so far for this year’s free tree contest. Many MCTA business cards were picked up by consumers at the the Big E.

ANNUAL MEETING
Tom Cranston was pleased with the great turnout at the annual meeting and the Dave’s fertile site that kept Dr. Cowles busy for two hours. Tom reported that CAS (Custom Ag Solutions) one of the vendors at the annual meeting, donated $250. To our organization. A motion was made and approved to contribute $250 to the Connecticut Experiment Station, Dr. Richard Cowles Research Fund and/or mileage reimbursement for Dr. Cowles.

TWILIGHT MEETINGS
The board will strive to hold 4 twilight meetings and one annual meeting each year. Potential twilight meeting locations in 4 different parts of the state, and the possibility of a Saturday meeting for June 2013. John Coward will inquire about a joint meetings with CCTA at the Connecticut Research or other associations for the future.

MEMBERSHIP
Jim Colburn, reported to date 116 members, representing renewals for 114 members and 2 new members. 17 members have not renewed after a second reminder. Follow-up will be done by phone call.

Meeting notes continued to page 16
Basic Tabletop Production

Reprinted from Limbs & Needles, Summer 2011 and written By Brad Edwards, Extension Program Assistant, IPM, NC State University. College of Agriculture and Life Sciences. NC Cooperative Extension, Jefferson, NC.

Tabletop Christmas trees are a Value-Added product many growers are now offering. Several major chain stores carry tabletops as well as many of our smaller mom and pop style retailers. Even tree lots are finding tabletops to be big sellers. Tabletops if given the right conditions will generally return many more dollars per acre than conventional tree growing. Since tabletops have a short rotation and go to market soon, I would hope most growers have a market established before the trees are even planted. Planting large number of tabletops without a definite market can be very risky and costly if they don’t “find a home”.

Site preparation in a tabletop patch is extremely important and can save a lot of money in labor costs. I would recommend preparing a site as much as one year ahead of time. First pull a soil sample and pay close attention to the P and K indexes. I’d rather have a field with these nutrients already built up instead of trying to apply high rates of fertilizer. We know that P moves very slowly through our soils. The truth is that it’s possible the tree will be harvested before being able to benefit from the phosphorus we are trying to feed it. If you are going into pasture or bare ground from an existing tree field, getting a healthy clover crop established prior to planting can pay big dividends. Not only will the clover add large amounts of N which will keep your trees dark green, it will also suppress other weeds. Weeds can be the biggest enemy in a tabletop patch. It is crucial in order to grow a good tabletop tree they need room and very minimal competition. We know what weeds can do in big trees, which is causing weak bottom branches. The same weeds in a tabletop patch will cause the whole tree to be week and unmarketable.

Herbicide and fertilizer rates should be a big concern among growers of tabletop trees. It is important in both herbicide and fertilizer treatments that we understand per-acre rates. It can be very confusing for crews applying products by hand if you don’t explain how treatments change once entering the tabletop patch. The field crews are used to seeing approximately 1700-1200 trees per acre. That is one (1) tree for about every 25 square feet of space. A tabletop patch, planted on a 2 X 2 will have about 10,890 trees with only 4 square feet per tree.

If your crew is use to spraying 3-4 ounces per backpack sprayer in fields that have tree spacing at 5 x 5, they must make corrections in a tabletop patch or they will more than double their rate if they try to spray between every row. One way to solve this problem would be to cut your rate in half. By cutting your glyphosate in half, you are actually covering one half as much ground if the trees are on a 2 x 2 spacing and you wish to spray between each row. Another way to keep your rate accurate would be to use the same rate but spray two rows at a time. This means you will be directly spraying over one row of trees but will be covering about the same amount of ground (4ft-5ft). This can only be done when the trees are dormant or after they have fully hardened off, around the second week in July and beyond. If you have carefully calibrated your sprayers and use 8 oz. of glyphosate per acre or less for your chemical mowing rate, you may be able to over spray in early May as well.

Fertilizing tabletops is very similar to spraying them. Rather than looking at ounces per tree, it will be more beneficial to look a pounds per acre. If at all possible, I’d consider using a tractor or truck spreader the first year getting good coverage right before the trees are planted.

Continued on page 17
“SHEARINGS”
Gloria Ellsworth discussed adding “Shearings” to our website using a secure member login. Advertising rates have been increased for 2013 at approximately 6% and additional ad sizes have been added.

To support Gloria’s efforts to maintain a printed as well as an electronic version of our newsletter two different motions were made, seconded and approved. The first was to discontinue subscriptions for Association members to the Christmas Tree News. This action was also supported by a members’ poll taken at the September annual meeting. The second motion was to continue with both an email and a paper version of our newsletter. The board had previously voted to discontinue the paper version after the August 2012 issue. To further support the newsletter initiatives as well as ongoing Association business an additional motion was made, seconded and approved to authorize the Secretary, Gloria and Dave Morin to meet with the web designer and host, Mouseworks.

OLD Business
Peter Sweet reviewed the results of the member survey conducted at the annual meeting. He noted that the top 4 items of importance in the membership viewpoint were related to things the Association does for the members and certainly things we can control. These were the MCTA Shearings publication, twilight meetings, the annual meeting and our website. The next grouping of 5-10 items, related to sharing information on the things we do such as shearing practices, insect management, fertilization, pesticides, etc. We thank Peter for preparing and carrying out the survey and for his continued efforts at making the Association better and more responsive to our membership.

Meeting notes submitted by Jim Colburn, Secretary MCTA
This will save you labor cost. Once the trees have been planted, you will need to spread fertilizer in a good broadcast pattern. You will find the same amount of fertilizer used on one full size tree now treat about 6 tabletop trees.

Again, you’ll probably get the best coverage when fertilizing two rows at a time and three trees deep. That will be 6 trees or 24 square feet if the tabletops are planted 2 x 2’s.

Tabletops are easily maintained if you have good site preparation to start with. A good stand of clover will definitely cut your labor costs associated with week control. Growers who use high rates of glyphosate and grow tabletops on bare ground often have a tough time controlling Pigweed, Lamb Quarter, and other broad leaf weeds. These summer annual weeds also uses up fertilizer and choke out the trees growers are trying to produce.

Many Christmas tree growers don’t pay a lot of attention to pests in their young trees. Typically there is time before regular trees are marketed to clean up any problems that might develop early on. However, with tabletop, you better stay on top of pest problems because they go to marker sooner. Any pest that is a problem for regular trees can be a problem for tabletops. Make sure they are part of your regular IPM scouting program.

Shearing tabletop Christmas trees is a balance between letting good genetic material grow buds and holding the tree back. With a compressed size and rotation length, you have to hold them back almost from the start or as soon as they start growing long leaders. It is very common to see tabletop tree terminals being cut back to eight inches and sometimes less. The same rules apply as with big trees. Later branches should be half the length of leaders. But don’t cut the tree too hard - you need buds on the branches to fill in the tree.

If the tabletop Christmas tree market isn’t as good as expected, there are some options. The good news about tabletops is they will still make a full size Christmas tree. If every other row is taken out in both directions, you’re very close in have the same pacing required for full size trees. Just another option if needed.
CHRISTMAS TREE RESOURCES

Massachusetts Dept of Agriculture:
   www.mass.gov/agr

Umass Extension Service
   extension.umass.edu/agriculture

Soil Testing Lab:
Soil and Plant Tissue Testing Lab
West Experiment Station
682 North Pleasant St.
UMass, Amherst, MA 01003
(413)545-2311 fax: (413)545-1931
soiltest@psis.umass.edu

UMass Plant Diagnostic Lab
101 University Drive, Suite A7
Amherst, MA 01002
(413) 545-3208 - fax (413) 545-4385
umassgreeninfo.org/

Landscape & Nursery Insects:
Bob Childs, (413) 545-1053,
rchilds@psis.umass.edu

Landscape & Nursery Diseases:
Dan Gillman, (413) 545-3208,
dgillman@umext.umass.edu

Landscape & Nursery Weeds:
Randy Prostak, (413) 577-1738,
rprostak@umext.umass.edu

2012-2013 ADVERTISING RATES

<table>
<thead>
<tr>
<th>Size</th>
<th>Dimensions</th>
<th>One (1) Issue</th>
<th>Two (2) Issues</th>
<th>1 Yr.- (4) Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Page</td>
<td>7.5&quot; w x 10&quot; h</td>
<td>$ 86.00</td>
<td>$ 162.00</td>
<td>$ 304.00</td>
</tr>
<tr>
<td>2/3 Page</td>
<td>7.5&quot; w x 6 ¾ &quot; h</td>
<td>68.00</td>
<td>128.00</td>
<td>246.00</td>
</tr>
<tr>
<td>1/2 Page</td>
<td>7.5&quot; w x 5&quot; h</td>
<td>48.00</td>
<td>90.00</td>
<td>172.00</td>
</tr>
<tr>
<td>Horizontal</td>
<td>3.5&quot; w x 10&quot; h</td>
<td>48.00</td>
<td>90.00</td>
<td>172.00</td>
</tr>
<tr>
<td>Vertical</td>
<td>3 ½ ” w x 5” h</td>
<td>32.00</td>
<td>56.00</td>
<td>104.00</td>
</tr>
<tr>
<td>1/4 Page</td>
<td>4 ¾ ” w x 3 ½ “h</td>
<td>26.00</td>
<td>48.00</td>
<td>92.00</td>
</tr>
<tr>
<td>Lg. Business Card</td>
<td>3 ½ ” w x 2” h</td>
<td>20.00</td>
<td>38.00</td>
<td>74.00</td>
</tr>
<tr>
<td>Business Card</td>
<td>3 ½ ” w x 2” h</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Classified Ads – Non Members
Priced per word

Classified Ads – MCTA Members
Free
25 Words w/contact
Buy-Sell or Trade
Small photo’s allowed

For more information and details or questions please contact: Gloria Ellsworth (508) 393-6479
Email to: shearings2u@verizon.net

Acceptance of advertising in the “Shearings” publication is not an endorsement by the M.C.T.A of any product or service and is not responsible for content or proofing of ad prior to publication.
CHRISTMAS at the FARM

WE OFFER the BEST SELECTION of QUALITY WHOLESALE GREENS, WREATHS, TREES, and ACCESSORIES AVAILABLE ANYWHERE


10 Pleasant St., Lexington, MA • p: 781-862-3900 • f: 781-862-2146 • e: christmas@wilsonfarm.com

online at: wilsonfarm.com/wholesale.html

CONTACT: Jim Wilson or Ken Ford for Wreaths, Greens & Accessories
Denise Quealy for Trees and Ryan Douglas for Our Own Poinsettias
Holiday Manufacturing Inc.

Nobody has a more impressive selection of bows and ribbon

Serving the Christmas Tree Industry for almost 20 years

- The highest quality
- Volume discounts available
- Quick delivery - Next day for in stock items
- Giant bows...8, 6 and 4 feet tall
- Variety...Velvets in 11 different colors and dozens of wired fancy ribbons
- Roll ribbon... #5, #9, #40, #100, 6", 8"

800-665-0378 • www.holidaybows.com