Bowser's Patent Grows From Christmas Tree Operation

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LITITZ (Lancaster Co.) Most people think the season for Christmas trees is over, but for growers such as Lew and Jackie Bowser, the big event of the year is the winter meeting and trade show of the Pennsylvania Christmas Tree Growers Association, Jan.12-13.

Although the Bowsers operate a "Mom and Pop" Christmas tree operation, their main emphasis is designing equipment to make the job easier.

In fact, Lew recently received a patent for what he calls an auger transporter. The five-year process required "lots of paperwork and bucks," for the Bowsers' Christmas Tree Equipment Mfg. (CTE Mfg.)

The Bowsers operate their business on part of the family farm, which had been purchased in 1938. In 1985, Lew put in a few trees to satisfy his yen for what he thought looked like a fun, easy way to make some extra money. He found out that growing Christmas trees requires more than planting the seedlings and forgetting about them until ready to harvest seven years later.

"Customers are knowledgeable and picky. When they say they want a perfect tree, that's what they are looking for, and they won't be satisfied until they find it," Jackie said.

That means trees must be sheared and pruned, something Lew does almost weekly throughout the summer.

In the beginning the Bowsers made the mistake of not completely killing off the alfalfa before planting the seedlings. The alfalfa battle required persistent hoeing by hand.

They also made the mistake of planting Douglas Fir in a low spot that was frequently wet. This variety does not like wet feet and eventually died. The Bowsers replaced them with Colorado Blue Spruce, which does well in low areas.

They now have 6,000 trees, mostly Blue Spruce, Douglas Fir, and Canaan Fir.

The Bowsers said that the Canaan Fir, which is disease-resistant and has long-keeping nee-



Lew and Jackie Bowser operate much more than a "Mom and Pop" Christmas tree farm. Lew designs equipment, which they market year-round, and ship from their Lititz location.

dles, is similar to the popular Fraser Fir, but is easier to grow in this area.

At first, the Bowsers did not use any chemicals, but a needlecast disease hit the Douglas Fir and spraying was necessary to save the plantation.

'Growers are also required to have a pesticide license in order to control fungus and critters that can wipe the farm out in one season or close it down for quarantine," Lew said.

Spraying equipment is a big investment, and sprays need to be applied under strict conditions to be effective. Information on pesticides and insecticides changes constantly, and tree growers must keep up-to-date on the latest information.

From the beginning, Lew designed equipment to make the job easier. He laid out a grid on a field with trees in straight rows with five feet on all sides.

"That's essential to keep

weeds at bay and make a neat appearance for customers," Jackie said.

"You must work to get the best trees in the shortest amount of time in order to make a profit," Lew said. "With proper soil conditions, weather, and fertilization, a seven-foot-tree can be grown for harvest in six or seven vears.'

To keep grass under control, a tractor with a mower deck that slides underneath the trees will work. Another method is to band-spray the tree row with a herbicide so that you only need to mow the center between the rows. Although this method saves labor costs, it increases the cost of herbicides tremendously.

Some growers sell to outlets but the Bowsers decided on a "choose and cut" farm. Although they love the interaction with the customers, the hectic pace requires long hours.

Many customers tag trees in the fall and call to have trees cut down on the day they want it. The Bowsers cut these trees before business opens at 8 a.m.

Because of the long hours,

Jackie said, "Nobody is happier to see Christmas Eve than a Christmas tree grower."

But when Christmas is over, the Bowsers clean out the garage and gear up to ship out orders for the auger transporter that recently received a patent.

Lew explained that it was through need that he developed the auger transporter. Although Christmas trees can be planted easily in the first planting, it is impossible to maneuver big equipment into the space to replant in a choose and cut operation.

Not only is it difficult to transplant trees, but a problem called j-rooting can develop. According to Lew, j-rooting results from not getting roots straight and the dirt packed tightly around the roots during replanting, which leaves air pockets and will eventually kill the seedling.

"It's a well-known fact that augured holes increase the survivability of young plants by helping eliminate J-rooting and air pockets, while creating a water reservoir," Lew said.

But augers already on the market had their drawbacks.

"Using them beats you up, throws you around, and sprains wrists," Lew said. "I thought there has to be an easier way."

Lew grew up fixing things, and building equipment has always been his interest, first on the farm and then in the Army. But it wasn't until Lew was recuperating from cancer treatments during the winter of 1995-1996, that he drew the plans and prepared many prototypes in perfecting the auger transporter.

"I lost lots of sleep, because I'd think up ways to improve it," Lew said of months of perfecting the model.

He is really pleased with the results and said, "I don't think it can be improved. It's a Cadillac – in finish and strength — and it's problem-free.'

A side benefit also was that Lew recently passed a five-year cancer free exam.

In addition to developing the auger, the project required writing safety manuals and operating and parts manuals. This is where Jackie's talents came into play. She is a local newspaper reporter and wrote the instructions. The Bowsers also worked closely with patent attorneys.

The steel pieces are manufactured locally and powder-coated before the Bowsers assemble and ship the orders. Because they couldn't find strong enough cartons for shipping the auger, Lew makes the cartons himself.

"You must learn everything vou need to know about shipping, freight rates, e-mail, and manufacturing when you're in this business," Jackie said.

Surprising to Lew is that vineyards in addition to Christmas tree growers are buying the augers for planting.

"They work great for big-time growers and the small ones,' Lew said. "I knew the need, but I am amazed at the demand."

"Even a woman can operate the auger transporter," Jackie said. "And it's built to last a lifetime."

CTE also manufactures what they call a Kneel-Easy, designed for planters and gardeners to make it easier for getting up and down.

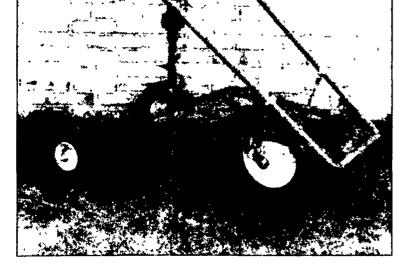
Although 70 years old, Lew is working on several other ideas to make tree-planting easier. "But I may sell plans rather than seek the patent for myself," he said.

Their website address is www.christmas-tree-equipment.com.



COLUMBUS, Ohio - For tinue to get questions about varimany people, estate planning is a ous tools to use and processes to confusing subject. The variety of follow in estate planning, and options can cause a lot of murki- with this workshop we're trying

People are encouraged to register early, as the workshop will be limited to the first 60 registrants. Registration for the three days is \$60 per person or two people for \$108. The price includes beverages, lunches and two Ohio State University publications: Who Gets Grandma's Yellow Pie Plate and Estate Family Considerations for Ohio Families. The cost for attending only one day is \$25 per person. Deadline for registration is Jan. 17, 2001. For registration or additional information about the Estate Planning Workshop, people interested should contact the Licking County office of Ohio State University Extension at (740) 349-6900, or toll free at (888) 838-0219, Ext. 6900.



The auger transporter patented by Lew Bowser required about five years of perfecting, a myriad of paperwork, and lots of money. But the demand for the auger transporter exceeds the Bowsers' expectation.

ness in peoples' minds, said Howard Siegrist, agriculture and natural resources agent at the Licking County office of Ohio State University Extension.

To help people learn more about estate planning issues and the types of probing questions they will need to ask professionals while developing their plans, **Ohio State University Extension** is sponsoring an Estate Planning Workshop. The workshop will take place on Wednesdays, Jan. 24, Jan. 31 and Feb. 7, 2001, from 9:30 a.m. to 3 p.m. at the Granville Inn in Granville.

'The workshop is intended to elevate the knowledge and understanding of people before they enter into the estate planning process," Siegrist said. "We conto package everything together so people can see and evaluate all the tools that exist."

The first day will cover the legal framework in which estate planning takes place in Ohio and some of the basics, he said. Topics include data people need to know before meeting with an attorney, asset listing, balancing estates for married individuals, federal estate taxes, Ohio estate taxes, wills, gifting and durable power of attorney.

The second and third days will discuss the nuts and bolts of the various types of estate planning tools, Siegrist said. Trusts and life insurance are the topics for the second day. Long-term care insurance and distribution of personal property will be covered on the final day.