Good afternoon and thanks for choosing across the fence I am will Mikell in for Judy Simpson. Homemade Christmas begins with a tree and across the stayed there are plenty of places where you can cut your own. Our tiny stage has quite a reputation for Christmas trees. Growers and now open for business offering a 100% homegrown product. Across the fence is Keith solo tells us more.

Bob: The biggest thing for us is taking care of cars. People are easy the trees are easy but cars it takes for people to hail the cars here.

As the cars stream off from Route 15 they are met by the farm's owner Bob White. And then it's off to the business of choosing and cutting the perfect Christmas tree.

Bob: Everybody has a good time a few people want to see a very specific tree. They want one that smells or they want one that has needles that never fall off doesn't matter what they do and we send them into the Frasers a little more. A lot of people are just looking for a nice tree and a good time. Vermont Christmas tree growers sell over 150,000 trees each year according to the Vermont agency of agriculture. The sale of trees and wreaths brings $10-$12 million annually to Vermont’s economy. But it's the experience of choosing and cutting a Christmas tree that is truly priceless.

We come out and cut our tree just because it's fun and it's festive and a something to do with your family and now she's getting older she likes to run around.

Bob: You have got to make an effort into it. You have to get out of your car get a saw and cut down a tree. A lot of folks aren't used to that but once they've done that they seem to enjoy the whole lot. Choosing a tree is one thing but when it comes time to cut there are a variety of techniques. And experts willing to lend a hand.

Bob: The saws were pretty good usually for most folks that it is a challenge for some folks to cut a tree! If you're cutting on one side it's kind of nice to be pushing the other way a little bit so the song goes through easy. If there isn't 2 feet of snow on the ground it's always a lot easier but so do it when there isn't 2 feet of snow and when it isn't raining and isn't miserable and you'll be pretty good. Snow or no snow using a slide to haul a tree is always a good idea.

Bob: We want to make sure that nobody drags the tree on the gravel. When their snow dragging a tree is easy but the tree is kind of like a person if you drag me without any close across the gravel I probably wouldn't have too much hide left by the other side of the parking lot. So we try to get everybody to carry a tree or pole in a sled. That works pretty well.
Cutting baling and shaking that goes on at White's tree farm during the holiday season happens only a few weeks each year. It's the months leading up to this time when the trees really need the most attention.

Bob: Our season starts in April every year. The trees are very needy. If you want to grow a good-quality tree or what tree farmers call a good-quality tree. Nice and green fall they look good but take a lot of care. You have to feed them well enough to understand how to feed them you have to keep the weeds down and away from them. You have to keep the disease away from them and you do that by base or pruning them and keeping the grass mowed so they get their drainage. There's a lot of things like that but you have to play with. Trimming leaders takes close to a lifetime to learn how to do. It's the simplest thing in the world but especially a Fraser fir we didn't understand how to do it and we just started to understand how to do it to make the trees do what we want to do. Balsam furs and old friend of mine told me you can just about beat them with a baseball bat and make them look good but a Fraser fir is a very difficult tree to understand how to prune and grow.

Choosing and cutting a Christmas tree is a tradition for families.

We came to cut a tree down but really we have a party every year with some of our friends for the holiday season we get together and share cookies cut down trees.

We call it the tree chop and cookie swap.

Visitors to a tree farm often leave with more than just a centerpiece for the holidays.

Bob: Usually when you come to the farm you get an experience. Most of the time is good but you might go out and meet a rabbit in the fields or you might see a birds nest in a tree. There's different things you'll see and do in a farm.

When it comes to choosing a Christmas tree there is a lot to see and saw down on the farm. In Essex I am Keith Silva with across the fence.

Thank you Keith. From trees to skis with the winter season getting underway entrepreneurial students at the University of Vermont are becoming the east coast's premier of incoming ski company. Rebecca Gollin tells us about HG Skis a company that's gunmen start out of the garage in Burlington

It's well known that college students in Vermont will occasionally skip class to go skiing. Less common is a college student who slacks off in order to make Ski's. I built one Pair of skis and that I screwed up in school and had to put Ski's on the back burner for a while.

Harrison Goldberg has been enthusiastic about building Ski's since he was in high school. This pair right to your is actually the very first pair of skis I ever built. I got started building Ski's my senior year of high school for senior project and I guess I had opportunities to do whenever I want and somehow I got in my head that I was going to build Ski's which at the time seemed like a ridiculous idea but I decided to go for it anyway and I built my first pair of skis and it actually worked which was amazing and was a great experience for me.

It's not surprising that Goldberg found some like-minded individuals at the University of Vermont. I actually build a pair in high school as well even though I'm from Minnesota and Harrison is from Massachusetts.

Me and Harrison lived on the same floor sophomore year. I always knew what he was trying to do the was building Ski's had a city company and I'm a park kid I only ski in the terrain park. I noticed he
did not have a Park ski so I was immediately was like you should make the park ski and I could see it for you.

Goldberg got fellow engineering students Conner hater and Ryan fuller on board with his fledgling ski production company HG skis. The three were your round designing developing and testing their prototypes. We don't go out and deliberately try and break them only definitely don't ride to take it easy. We push them as hard as we can.

This is actually a soft plastic material. It comes off a roll its called UHMW plastic. It stands for ultra-high molecular weight plastic.

A team of riders put every ski to the test returning with feedback that makes each generation better. Try to get out 4 to 5 times a week to ski and test Ski's in terrain Parks and everywhere else. Trying to develop a better ski.

We have three riders now. One of them breaks a lot of skis is great feedback because of them in a four week. Our ski has changed a lot and on the lot better.

I use the riders as input. We'll try and use the tell us what they like tell us what they don't like and my job is to keep the things they like and minimized or get rid of the things that don't like.

As the skis are developing so too does the company.

Last year when a lot of really big strides. We went from it being me who make Ski's for fun to us starting a company.

What's really cool about HG Ski's is that we're pretty much the only ski company I think we are the only ski company on the East Coast right now. So it's a really cool opportunity for us because niche skiing is really in. What I mean by that his small company is that are specific to that region so for us particularly in were specific to the East Coast which is cool because we're developing Ski's for the East Coast.

While making the best deferred East Coast conditions is a goal Goldberg hopes HG skis will go much further.

Every so often there's a revolution in skiing. First it was from wood to more of a plastic construction than people were buying metal edges and in the nineties we got shapes Ski's and in the beginning of the two thousands we got twin tips. Nobody really knows what the next evolution in skiing is but I think that's what we're looking to find so that's what we're trying to do.

I could've never dreamed of this happening when I chose my school but it's great that it is. I am 100% sure that we're going to have a legit ski company.

Building a company from scratch these UVM students are not only looking for the next revolution in skiing but also designing their own future one piece of fiberglass at a time. In Burlington I'm Rebekah Gollin across the fence.

Thanks Rebecca. With the growing demand for local food farmers are extending the growing season by using greenhouse is. But in the cold weather a greenhouse needs to be heated. That's where the University of Vermont extension greenhouse biomass furnace project comes in. Across the fence is Keith Silva explains.

Green houses give vegetable farmers a job on the growing season. Protection from chilly springtime temperatures comes at a cost.
Vern Grubinger: Greenhouses can be really expensive especially for those that start early so few trying to keep these big plastic bags warm in February and March it takes a lot of energy. University of Vermont extension vegetable in berry specialist Vern Grubinger helped to develop the University extension biomass project. Through a cost share incentive Grubinger is working with greenhouse vegetable growers to decrease dependence on fossil fuels well also literally reducing greenhouse gas emissions.

Vern.: This costume is part of an educational program that is linked to a R&D. on the farm so by making some payment to the farmer not only to reduce risk but also to ensure that data is collected about how these units work how much fuel they consumed what the payback is that allows us to share information with additional growers so that if the systems work well enough they will be able to be more widely adopted because people know what it's going to take to make it work well.

Andy Jones.: For the first couple months we thought this is a huge lemon.

Andy Jones is the farm manager at the inter veil community farm in Burlington.

Andy.: Our first year we had a lot of challenges getting nothing set up getting a burning right. We had the chimney according to spec in the Manual but it didn't end up working in a greenhouse environment so there was a lot of tinkering with if to make the system run well. This year it's been great we couldn't be more excited to have it. It's a little bit like keeping the wood stove let on a hot day.

Jones is heating of corn supplied by a farmer in Addison county. Other farmers in the project are using wood pallets or a mix of corn and wood as a fuel source. No matter what fires the furnace the money that is saved by burning biomass instead of fossil fuels is substantial.

Andy.: The furnace is probably helping us with reducing or eliminating 80% or so of our propane use. We used to run the greenhouse on a couple propane unit heaters. It's amazing because 80% is significant especially when you look at and consider the cost of propane vs. the cost of these other fuels. It's not quite half the cost but if for shaving 40% off our fuel cost that's pretty attractive. The biomass unit here who at the inter veil are community farm home cost a little less than $6000 to install. That's three times was similar propane unit would cost. Has a lot of money but consider this fuel expenses for Vermont farms have doubled in the last five years from 15,000,000 in 2002 to over 32,000,000 in 2007 that's according to the latest report from the United States census of agriculture. Additional factors that this data did and take into consideration are the sustainability of fossil fuels and the overall cost to the environment.

Verne.: The thing that I really like about this approach is that it's a win win situation where you're addressing a lot of concerns at once and I got into renewable energy in part from a climate change program I was involved in and realized people may be concerned about that that it's hard to spend money to do something for that reason only. When you can reduce your fuel costs give some measure of security about future fuel costs and have some control over what they might be. Maybe get a marketing advantage because you're consumers are excited about what you're doing to use less fossil fuel. Then it all comes together in a package that makes more sense as far as changing human behavior.

Andy.: I believe it's about 20 bushels.

Jones has worked with his local municipality to cut energy costs on the farm but having a project that's backed by UVM extensions experience working with farmers gives this project a significant edge.

Andy.: The fact that this really was an extension lead program to begin with I think really did help us out because it set up a program that really related to the needs of a greenhouse. It helped us talk
to people who are in the industry. It's people who are using the furnace and the same application and we are and there's no substitute for that.

This UVM extension project is lighting the way for reducing fuel costs increasing sustainability on the farm and protecting the environment. In Burlington I'm Keith Silva with across the fence. You can get more information on extensions greenhouse biomass furnace project by calling the number on your screen its 802-257-7967 that's 257-7967. And also find information on the web by using the web site listed on your screen. And that's our program for today we know you have choices so Thanks for choosing us I'm will Mikell inviting you to join us each weekday afternoon for another visit across the fence.

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