

There's gold in those trembling aspens

By Brian Bowman

Final approved article

Who would have thought a poplar tree could improve the farm and add another revenue stream? Dave Waterhouse did. Dave works for Ted Mayerle, who farms over 20 quarters of land producing grain and hay in the Tisdale district. Two years ago, Waterhouse heard of a group of producers and related stakeholders in northeast Saskatchewan, called Parkland Agro-forestry Inc., who were growing hybrid poplar seedlings and finding markets for them. He joined, and with Mayerle's approval purchased 500 stools from Parkland Agro and established them near a creek on one of Mayerle's fields where awkward corners made cultivation difficult. The tree plantation straightened out the field and promised to generate some revenue from an otherwise inefficient piece of land.

"The first bed that I started was right on the edge of the creek, a narrow part of the field that just makes extra corners for big equipment. I was able to take one of the bends out and make it a straight corner," he said.

Waterhouse admits he's had some good advice. Parkland Agro's members find and share market opportunities and assist each other in learning about sustainable forest management, short rotation, woody crops and agro-forestry practices. They also work with government departments and agencies to access programs, share information, and provide a land base for research. One of these programs is "The Carrot River Watershed Project," a partnership of federal and provincial departments, agencies and non-profit organizations involved in agriculture and the environment. The project's goal is to develop tools to encourage annual crop producers to adopt beneficial management practices when farming lands adjacent to waterbodies.

Funding for the Project is through the GreenCover Canada Program Technical Assistance Component part of the Agricultural Policy Framework. Working with SIAST, and the Saskatchewan Forest Centre in Prince Albert, Parkland Agro assessed the need for training development in the ag-forestry sector. They formed a co-operative grower group to produce and market hybrid poplar hardwood cuttings and are now moving into the area of silviculture – the management of tree stands with agriculture. This usually involves pasturing livestock in an area containing trees while establishing a forage base within the stand. Under good management the result is three marketable products – forage, livestock and trees from the same piece of land. A fourth product can be added to the mix if one of the product is berry trees which provide an annual harvest. It's a good revenue mix and sustainable. Trees and forage areas can be established to take the best advantage of ground water, runoff and prevailing winds to stabilize and regenerate the soil. Once established, these areas can provide shelter, shade and food for livestock. They can also help cut the wind and control runoff to assist adjacent cropped areas.

"I'm all on my own with this," said Waterhouse, who started with 500 stools and lost about 350 of them the first year. When he asked why, Parkland members told him he was over-watering them and he's since cut back. "A good watering once every two weeks is more than enough to sustain growth," he said. Waterhouse puts that experience down to the learning curve, but the surviving plants from his first attempt produced about 400 cuttings which he sold back to Parkland Agro. It was enough performance to sustain his interest. Last year he purchased another 1,100 seedlings from which 900 grew.

"I've got them planted about four and a half feet each way, so that I can spray them from any direction," he said. "I designed a shroud for the front of my quad and pull an estate sprayer behind it with a boom going up into the shroud, so that as I'm driving along I can spray between the rows."

Another reason for the wide spacing is to ensure against any down turn in the seedling market. "If that happens, I can let them grow and harvest them as mature trees later," said Waterhouse.

While spraying is an effective control measure, Mitchell Japp, Riparian Project Coordinator with the Saskatchewan Conservation Learning Centre at Prince Albert says that seeding a ground cover crop to prevent surface loss of soil and to prevent weed invasion is an effective alternative, especially if the tree

plantation is allowed to mature. “A good spacing between windrows allows you to establish and manage a grass crop,” said Japp. “It’s sustainable and it adds another source of revenue.”

Waterhouse says that each surviving stool produces about 50 cuttings per year. In the fall, Waterhouse cuts the shoots off about four to five inches from the ground. These are then trimmed into 10 inch lengths and sold to Parkland Agro. Anything he can’t sell to them, he replants. “You don’t work them up,” said Waterhouse. “They just keep growing. They’ll produce a whole bunch of new shoots the next year.”

Among the Parkland Agro membership, Waterhouse says there are currently about 20 growers. “We sell the seedlings to people who are basically growing them to maturity,” he said. With these hybrids, maturity doesn’t take long – about 15-20 years. Developed at the PFRA’s Indian Head Experimental Farm, the aspen/poplar hybrids are designed for the climate, are self-pruning and straight growing, and reach up to 35 feet at maturity. The market for these hardwoods is growing rapidly too. This year, Parkland members are building a kiln, which is needed to dry the harvested trees, and they are also developing wood products made from the lumber.

Future plans may include establishing the trees to also act as wind breaks or shelterbelts to assist Mayerle’s farming operation, but right now Waterhouse is more focused on using small areas of inefficient land. He’s planning to establish more plots in the next five years, all in places that are out of the way for productive grain farming. So far, he has identified an additional site he’d like to develop and thinks that three plots altogether would hold 13-14 thousand trees.

“The next stool bed will be about a mile away where there is a slough at the corner of the field. There’s a two acre piece up behind the slough that in the spring you can’t always get into. So I intend to fill that up with trees to save them having to go out and work it every year. It’s often summer-fallowed because it’s inaccessible during seeding,” he said.

Waterhouse says that Parkland sold everything they had last year and he is pretty confident of future markets. “Each cutting goes for about 12 cents,” he said, adding that as Parkland Agro’s production and volume of marketable product goes up, so will their efficiency. He expects the per unit price for cuttings to go to 18 cents in the next few years. And then there’s the market for mature trees. Ethanol production can apparently make use of them and, of course, the demand for lumber is growing, too. Any tree that matures in 20 years, as opposed to 70 – 80 years for other species, is bound to have an edge especially since these hybrids trees have proven commercial value.