

Producer Profile

Wayne Tuck - Lavoy, Alberta

Farmers in the parkland area of East-central Alberta are learning to capitalize on the benefits of growing winter wheat. Wayne and Geri Tuck have found a fit for the crop on their farm near Lavoy, Alberta. Together with their son Daryl, they manage 3600 acres of productive clay loam soils in a continuous cropping system. For the Tucks, winter wheat is an opportunity to reduce the number of acres they have to seed in the spring and to expand their harvest window in the fall.



One of the biggest challenges in this part of the province can be getting enough dry weather to harvest. "We usually have hot, dry days in July," says Wayne. "By the third week of August, we often have wet weather which can stretch through the fall. Winter wheat on our farm can be ready two weeks earlier than our spring seeded crops. If we can get some crop off dry before the middle of August, that's a real benefit for us. Growing winter wheat is our opportunity to target that window."

Winter wheat also has potential to increase economic returns. "Winter wheat averages a lower cost of production than spring wheat," Wayne explains. "Reduced costs for weed control and higher yield potentials make winter wheat a good alternative to spring wheat."

Although winter wheat yields do not always exceed spring wheat yields on the Tuck farm, some years they do. This combined with the potential to avoid an application of wild oat herbicide has made learning to grow winter wheat a worthwhile endeavor. "Weed control is simplified with winter wheat," says Wayne. "Wild oats aren't the problem they are in spring-seeded crops. We use a pre-seed burn-off to stop the invasion of winter annuals and spray in-crop for broadleaf weeds."

"We try to keep a balance of what we can get seeded successfully to winter wheat with our spring crops," says Wayne. "It takes planning and management to grow winter wheat successfully, but there are trade-offs that make it worth the effort."

In addition to economic trade-offs, winter wheat provides habitat for waterfowl and upland game. "Undisturbed cropland becomes a nesting place for ducks and so there is an environmental benefit there too," says Wayne.

"In 2002, Dale Soetaert from Ducks Unlimited Canada encouraged us to do an on-farm comparison of spring wheat and winter wheat. We tried Osprey winter wheat and it yielded 70 bu/ac compared with the Barrie spring wheat which yielded 60 bu/acre. What impressed us more was another quarter we had seeded to winter wheat that yielded 100 bu/acre. We were excited about the potential for high yields, the opportunity to avoid an in-crop application of wild oat herbicide and the chance to reduce our spring workload. Even with lower prices for winter wheat compared to spring wheat, winter wheat showed a lot of potential."

Happy with their success, Wayne and Daryl seeded 400 acres to winter wheat in the fall of 2003. "On August 18, 2004, we tried to combine our winter wheat," says Wayne. "It was testing 18.6% moisture as there was some green in it. We swathed it to try and hasten maturity but that was a mistake. It rained and stayed wet and the winter wheat sprouted in the swath."

"Winter wheat germinates in the presence of very little moisture," Wayne explains. "This is good for getting a crop established but also means that grain left out in the field can sprout easily. A stand-



BENEFITS OF GROWING WINTER WHEAT:

EQUIPMENT & LABOUR EFFICIENCIES

By using seed drills, combines and labour outside of their traditional busy times, there is an opportunity for lower demands on equipment and operators.

DIRECT SEEDING

Leaving your stubble helps save your soil from wind and water erosion.

MOISTURE UTILIZATION

What better way to take advantage of snow-melt moisture than to have your crop already in the ground. Winter cereals begin growing very early in the spring and can use the early spring snow-melt moisture.

EARLIER CASH FLOWS

Winter cereals are harvested earlier than other spring cereals and can therefore be marketed earlier, creating some much needed cash flow on the farm in early harvest.

ing crop is able to dry out much quicker than a swath. The lesson we learned is to always straight-cut winter wheat to preserve the quality of the grain."

"Last year we seeded 560 acres of winter wheat into solonchic soil in the Bruce area. Excessive spring runoff, followed by a heavy rain and hailstorm on June 18th drowned out about 25% of the field. July's weather was hot and dry. Winter wheat fared better than barley and oat crops in the area. The winter wheat that survived was successful yielding 40-45 bu/acre on the remaining acres."

"In our area, it can be a challenge to have something harvested early enough to seed winter wheat," Wayne admits. "We grow Invigor 5108 canola which is an earlier maturing Argentine variety. We seed it first and we are usually able to get it off early enough to seed our winter wheat. In 2004 we didn't have anything off in time to seed winter wheat."

"Seeding winter wheat in our area is best between August 20th and September 15th," says Wayne. "We don't recommend seeding later than that as the weather gets too cold and the plants do not develop enough before winter. This year we seeded 630 acres of the winter wheat variety Radiant. We had it in by the end of the second week of September and it's in good shape. We hope to see it at the 4 leaf stage going into the winter which is ideal for winter survival."

"Another key for winter survival is to seed into standing stubble," says Wayne. "We grow winter wheat on canola stubble. Most years we have good snow cover but not always. On the years we do, the standing stubble holds the snow on the land. This protects the winter wheat from the harsh, cold winters we can have in the parkland region."

"Winter wheat has to be seeded shallow," Wayne explains. "Winter wheat has a very short coleoptile which is the first leaf above the ground that forms a sheath around the stem tip. Seeding 1/2 - 1 inch deep is ideal. It allows the crop to emerge and establish itself before winter."

Seeding rate is essential to success in growing winter wheat. "We seed at least 2 bu/acre," says Wayne. "We want the crop to mature evenly so having a good plant stand is important. More plants/acre reduces the number of tillers. We've found that too many tillers can delay maturity of the crop. A late season

rain can produce heads on tillers that are too late to mature which puts green kernels into the sample."

Fertility is also important for winter wheat production. "We soil sample and try to place 60-70 lbs of N for each 50 bu/ac of yield," Wayne explains. "We adjust the target yield and rate of fertilizer according to the productivity of the land and field conditions."

"Research has shown that placing all of the fertilizer requirements in a one-pass seeding operation is an economical practice. Separation from the seed is required for higher rates of fertilizer. We use a Flexicoil air-drill with a double shoot seed boot that we make ourselves, which places seed and fertilizer on opposite sides of the same row."

Winter wheat is used in both the export and domestic milling market as well as for feed grain and ethanol production. "The marketing we have done so far has been into the feed grain market and the CWB Select program," says Wayne. "The CWB was offering a \$10/tonne premium for select grade winter wheat as well as a storage allowance and protein premiums. We are seeing historical highs in prices for winter wheat on the futures market so there is good opportunity. Starting in February of 2008, forward pricing contracts will be available for 2008 production. This may be a good opportunity to help winter wheat growers to cover some of the downside risk."

Growing any new crop has its challenges and winter wheat is no exception. "We're still learning!" says Wayne. "But we've found that when we commit to growing winter wheat and prepare for it, it can work out pretty well."

WAYNE'S KEYS TO SUCCESSFULLY GROWING WINTER WHEAT IN THE VEGREVILLE/VIKING AREA:

- ▶ Seed between August 20 and September 15.
- ▶ Seed shallow into stubble.
- ▶ Seed at least 2 bushels/acre.
- ▶ Ensure adequate fertility.
- ▶ Straight cut at harvest.

▶ **For more information** please contact one of our winter wheat specialists at Ducks Unlimited Canada:

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