

Producer Profile

Bryan Noble - Barons, Alberta

Bryan Noble sees the universal challenge of farming - ensuring his cash flow is sufficient to pay the bills - as inextricable from his conservation goals.

"Conservation has to come right up front along with production," he says.

"Scientists have estimated the value of the components of an acre of topsoil at \$145,000. We have to find ways to get some sort of return by working with the land." Winter wheat fits Noble's conservation and production goals for his Barons area farm.

Winter wheat and conservation

"Winter wheat fits our prairie ecology," says Noble. "Its water use pattern matches our climate. It takes advantage of early spring moisture." Noble is so convinced of the benefits of winter wheat, he'd like to seed 40 per cent of his cereal acreage to winter wheat.

Seeding date

A little more moisture and cooler temperatures in spring can keep Noble off the land. This makes his spring crops a little later than he'd like. That, in turn, can make it difficult to seed winter wheat on time. To compensate for this, Noble makes sure he does everything right for the crop. Bryan has seeded some winter wheat crops in late September, but always lowers his expectations for the crop. While late seeding has a few advantages, there are obvious downsides. "Most of the advantages that winter wheat has over its spring counterpart are related to its early start to the growing season," Noble says. "It flowers earlier than spring wheat avoiding the added heat stress of July and generally is maturing before the onset of late season pests and diseases. Sawfly in particular has been a serious problem in the south. While yield potential is compromised by late seeding, winter survival can become an issue as well." The optimum seeding date in Bryan's area is September 5 to 15. Ideally, winter wheat at the three to five leaf stage before the soil freezes will reduce the risk of winterkill.

Seeding rates

"Because I often don't have a lot of tillering in my crop, I want to be sure I have a high enough plant population," Noble says. "I use the thousand-kernel weight and germination rate to figure out my seeding rate. It's usually 75 to 90 lbs." His goal is to seed at a rate that gives him 20 to 22 plants per square foot.

Fertilizer requirements for Winter Wheat

Noble puts only starter fertilizer with the seed. He waits until early spring before deciding how much nitrogen to apply. "By spring, we can get an idea of the moisture available for the crop," Noble says. "I have an idea of the crop's potential in that particular year before I top-dress with nitrogen fertilizer."



Benefits of Growing Winter Cereals:

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.

Weed Control

Weed control in fall isn't usually an option for Noble. He uses 2,4-D early and later in the spring chooses another chemical to suit the situation on each field. "In fall it's usually too dry to get much weed germination, so I don't worry about weed control in fall, except for spot spraying thistle patches. For most weeds, it's more effective to wait till spring. I like to spray for winter annuals early in the year to catch them while they're small," he says. "If crop growth is not vigorous enough to shade out weeds early in the year, I may need to spray broadleaf weeds a second time," Noble adds. Lack of crop competition, due to late seeding, may also necessitate the use of a wild oat herbicide.

Benefits of the crop

Following crops often do better after winter wheat. The winter wheat is off early, so soil moisture can be replenished during the short fallow time in late summer. Over the winter, the heavy winter wheat residue collects snow and conserves a little extra moisture that can help peas or canola the following year.

Noble adds that his winter wheat generally yields 50 or 55 bushels, compared to 30 or 35 for spring wheat and 40 for durum. "And it produces these yields on moderate inputs. That's important - we have to aim for maximum economic yield or optimum yield rather than maximum yield," he says.

New Varieties

Some of Noble's production is for seed, so he has an opportunity to see how new varieties perform. "This year, I thought Bellatrix took the hot, dry summer much better than Radiant, but when they were cleaned, the Radiant yielded 50 to 55 bushels. The Bellatrix, in spite of its reputation for drought tolerance, only went 40 bushels, but it was on pea stubble. I haven't ever had very good luck with winter wheat on pea stubble, probably because of the lack of stubble," Noble says. Both Bellatrix and Radiant are eligible for the Wheat Board's select milling quality program.

Bryan's Seeding Tips

Seed on time. Don't worry if it's dry, seed anyway, even into dry soil. Waiting too long to seed is the biggest mistake you can make with winter wheat.
Seed shallow. Don't seed to moisture. Even a shallow furrow can slough off and cover your seed too deep. Winter wheat that's seeded too deep or buried when a furrow weathers away usually recovers, but it's set back by two or three weeks.
Seed into good cover. Canola stubble looks inhospitable, but winter wheat seeded into it does very well. Cereal

stubble can be good, too.

Keep the crop clean, especially of broadleaf weeds. Don't delay spraying broadleaf weeds in spring. They can get ahead of you in no time.

Watch for green bridges. If conditions allow volunteers or grassy weeds to grow in fall, spray them out before you seed, or choose Radiant. This new variety is resistant to the wheat curl mite that carries wheat streak mosaic virus. If the virus infects your winter wheat the only thing to do is reseed.

Pros and cons

"The conservation aspects of winter wheat appeal to me," says Noble. "Its water use pattern matches our weather and it leaves plenty of straw for soil protection and moisture conservation. Winter wheat is an excellent rotational crop. It gains from some crops and provides benefits as well."



Being able to rationalize his equipment use is also important to Noble. By expanding the season of use for an implement, he's spreading its cost over more grain production.

The bottom line is that Noble sees good net returns from winter wheat. "It has much more potential than spring wheat," he says. "The price is lower, but even at a 30 percent discount to spring wheat, winter wheat pays because it produces about a third more grain. And it produces these higher yields on moderate inputs."

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Alberta Winter Wheat Producers Commission



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