Better Cover, More Feed

Washington Angus breeders are ahead of the grazing curve with triticale.

Story & photos by Ed Haag



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▶ Bill Bennet admits flying the triticale seed on is more expensive, but he feels the time he saves pays, allowing him to make up for the added expense in increased production.

ongtime Connell, Wash., Angus breeder and cow-calf operator Bill Bennet and his son Joe don't like seeing bare ground when it could be in production. "If it's fallow it's not making me money," Bill says. "That is why we are right on it with the triticale as soon as we take off the corn silage."

The Bennets winter 3,000 animals on their 5,000-acre family ranch. Most of the land is hill country, good for nonirrigated seasonal grazing. Because of this they make every effort to generate as much feed as possible from their 550 acres of irrigated ground.

"We are looking at 38 ton of corn silage to the acre," Joe says. "We really rely on those irrigated acres to provide us with a good portion of our winter feed."

So when Bill says he is on it, he means it. In late September, as the corn chopper completes its last run on his 200-acre field, Joe is already disking in preparation for seeding the triticale. Once the disking is completed, the seed is flown on to save time. Bill admits that application costs are a little higher than they would be with a conventional seeding system, but he feels that

the time he saves allows him to make up for the added expense in increased production. After the seed is down, Bill goes over the ground with a packer and then applies the

"We are done in about two days," he says proudly.

The triticale will remain as pasture until the first week of May, when it is disked and the corn is planted for silage.

Economic sense

The Bennets are two of a growing number of ranchers who are now double-cropping triticale after their summer silage is in the bunker.

"Our latest estimates are that there were 1.2 million acres of triticale and blends containing triticale planted in the U.S. in 2004," says George Fohner, president of Resource Seeds, the United States' largest developer of proprietary triticale. "Approximately half of that was planted in the Central Plains, most of which is for grazing, but an increasing amount is for silage for dairies and feedlots."

"It just makes good economic sense," says Andy McGuire, ag systems educator with Washington State University (WSU). "Grazing is definitely more cost-effective than feeding hay through the late winter months."

McGuire notes that triticale, the versatile rye/wheat cross, is emerging as a valuable recrop in extended grazing programs from Washington state to Kansas. Unlike other fall-planted crops, triticale does not die back in the winter. Growth slows, but under normal winter conditions the leaves remain green and palatable. This allows beef producers in warmer parts of the country to graze their cattle on triticale throughout the winter.

"Because it carries the characteristics of rye, triticale can grow at cold temperatures," he says. "That means ranchers have the opportunity of grazing a high-quality forage into the winter."

Kurt Braunwart, owner of Progene, an eastern-Washington-based seed-breeding company that specializes in forage annuals, says that new varieties of triticale have opened new options to ranchers like the Bennets.

"In this region it allows you to pasture your cattle during the months you would normally feed bales," Braunwart says. "It gives you at least three more weeks of grazing in the late fall and then three more weeks in the early spring."

Although a mild winter will generate some grazing from the middle of November on into spring, the Bennets expect at least 45 days of late-winter, early-spring grazing,

starting in the middle of March when they turn out 300 head of replacement heifers and fall cow-calf pairs on the 200-acre site.

"The triticale helps us reduce our winter feeding costs," Joe says, adding that with a weight gain of more than 2 pounds (lb.) per calf per day, they aren't sacrificing anything.

Joe estimates that feeding costs run around a dollar per day per animal. By turning the 300 animals out on triticale for 45 days, the Bennets are reducing their direct feeding costs by \$13,500. Subtract from that input costs, approximately \$40 per acre, or \$8,000 in total, and their annual net savings is \$5,500.

Better weed control

In addition to reducing their feeding costs, the Bennets have seen some major changes in weed activity since implementing their double-cropping system around 10 years ago. Prior to then, the 200 acres was left fallow from the end of September, when the silage was taken off, to the beginning of May, when a new crop of corn was planted. "Before the triticale we had a lot more weed pressure," Joe recalls. "We had to spray our corn every year or [weeds] would get away on us."

He adds that opportunistic weeds like kochia, lamb's-quarters and water grass were quick to take advantage of the open ground. In response, the Bennets would apply an emergent herbicide after planting the corn.

Since they started seeding triticale in September, Joe has seen a dramatic reduction in weeds. This he attributes to triticale's ability to compete with the opportunistic intruders. "Now we can skip an application every third year," he says, adding that benefits from that alone amount to a substantial sayings.

At an average of \$21 per acre for application and herbicide, the skipped application saves the Bennets \$2,400 every third year or an average of \$800 per year in reduced herbicide costs.

Other benefits

Frank Hendrix, WSU forage and range specialist, has been researching the use of triticale for pasture since 1990. His estimate of triticale's return on investment is close to Joe's.

"One animal consumes about 25 pounds of hay per day," he says, adding that at a going rate of \$100 per ton, out of the feeder wagon it costs a dollar or more a day to feed a single cow.

But there are other advantages to feeding triticale besides saving on feed and herbicides. Hendrix is quick to point out that the soaring cost of commercial fertilizer is generating more interest in recovering unused nitrogen (N) from the soil after



▶ Bill (left) and Joe Bennet are two of a growing number of ranchers who are now double-cropping triticale after their summer silage is in the bunker.

heavy-use crops like corn and potatoes.

"Double-cropping and grazing triticale offers us the perfect system for picking up nitrogen in the soil," he says. "After the cattle are done with it, they redeposit it back on the surface for the next crop to use."

He notes that research shows that all but 20% of the nitrogen contained within a digested plant is returned to the soil in the form of cow manure.

Nice agronomic fit

Tom Griggs, Extension agronomy specialist with Utah State University, has been working with triticale for more than a decade and continues to identify new applications for the versatile grain. "Here is a specialty crop that we can use to fill the holes in our annual forage programs," he says. "How it is used will depend on regional growing conditions and the specific needs of the grower."

Griggs warns that not all areas are suited to the winter-grazing of triticale. Snow cover and drifting in the Northern Plains states can prevent cattle from accessing the standing forage in the winter.

Other factors limiting triticale's role as a long-term pasture forage are the cash crops that compete with it for the same ground. This is particularly true with irrigated acreage.

Triticale for the Bennets has been an effective but limited tool used to enhance their cropping and livestock system. For others it has become nothing less than a key component in a year-round grazing system.

"We have beef producers in the Northwest who have gone several years without putting up or buying hay," Braunwart says. "They have a year-round grazing plan that uses warm-season grasses in the summer and triticale the rest of the time." Such programs are not exclusive to the Northwest. Bill Roenbaugh, co-owner of Mid Kansas Agri Co., a consulting firm that manages 10,000 acres of irrigated land and 100,000 acres of dryland in the Midwest, knows of Kansas beef producers who pasture their cattle on native grass range throughout the summer and then graze them on triticale the rest of the year.

He adds that although the year-round grazing system works in the Midwest, the most cost-effective and popular use of triticale is in a double-crop system with soybeans or corn.

In a typical scenario, triticale is drilled directly into corn or bean residue immediately after harvest. Stocker cattle, purchased specifically for grazing on the triticale, are then turned onto the new pastures. After five months of continuous grazing, the animals are sent to the feedlots for finishing, and the land is returned to soybean or corn production.

Roenbaugh notes that triticale's excellent growth rate in the spring provides him with the ideal opportunity to concentrate cattle on less acreage as the season progresses. "We go from one animal per acre in the winter to three animals per acre in the late spring," he says. "This allows us to prepare ground on those acres that are going to be cropped back to corn and soybeans."

In recent years, as water consumption has become more critical, Roenbaugh has also seen triticale grazing used in a three-crop rotation with cotton and corn.

"Raising triticale ahead of cotton and after corn is more applicable when water is a limiting factor," he says. "Triticale uses a lot of water in the spring, which is in the same calendar year (water allotment period) as cotton — a low water user."

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