



SWITCHING FROM FLOOD TO PIVOTS QUADRUPLES RANCH YIELDS

Lonetree Ranch lies in southwest Wyoming at a 7,600-foot elevation. It's an organic cow/calf operation, run by Bob Taylor and his foreman Zac Schofield, who is also his son-in-law. While their primary operation is cattle, Lonetree Ranch also grows hay and grass for feed.

Taylor used flood irrigation his entire life, until his NRCS (Natural Resources Conservation Service) representative persuaded him to try a pivot.

Taylor said he was never going to try a pivot and now he says that his NRCS representative can't retire until he's able to get all of them installed.

Why the change of heart? Taylor installed his first Valley pivot – a six-tower machine that irrigates nearly 30 acres – about four years ago, and he saw the yield for that field quadruple.

"It went from 1,500 pounds of hay per acre to 6,000 pounds per acre, just by using the pivot," he says. "Irrigating with the pivot is much more effective, and it saves me tremendous labor costs."

Saving money and adding efficiency

Setting up for effective flood irrigation is a huge undertaking on the ranch's sloped fields, requiring hours of manpower. Taylor estimates that his one pivot saves the operation \$12,000-\$15,000 per year on labor alone.

When he saw the increase in yield and the decrease in labor costs, Taylor decided to add more pivots. This year, he's having one installed on 160 acres, and he plans to add three more to cover 450 total acres.

"Once I have all my pivots installed, we should be able to take care of all our hay needs to feed our cattle," he says.

That's especially impressive because as a certified organic operation, Lonetree Ranch cannot use any pesticides, herbicides or fertilizer. Only cow manure can be used for natural nitrates.

Seeing results at the roots

Lonetree Ranch has done a great amount of soil sampling over the years, and they sponsor a soil health study each year. Last season, they used the field under his pivot to test.

"Even though it about killed me to do it, we dug a four-foot deep ditch to measure moisture, microbes and root depth," he says. "It was very impressive. The roots went down three feet."



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BOB TAYLOR



Dealing with water rights

Water rights issues are always at the forefront of Taylor's mind. Their rights go back as early as 1876 on some of their land.

"Wyoming water rights were established using seniority," he explains. "During last year's drought, if a (person's) land didn't have water rights established before 1901, they didn't get any water for irrigation."

Taylor says he probably spends more time on water rights issues than on pivots. "We have to work with a water engineer to co-mingle water rights with all the different ages of our fields, and then have the state approve our water usage."

Even though they have a river running right through their ranch, they are unable to pull directly from it. Instead, they divert water from Beaver Creek and Henry's Fork, using a ditch that travels three miles to get to their pivot. Every drop counts – and that's just another reason Taylor prefers pivot irrigation.

"You lose less water to evaporation with pivots than with flood," he says, "and we have so much more control over where it goes. I never would have thought it would make such a difference."