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Mini Baler Works Like The Real Thing

Cliff Brandenburg, Beecher City, Illinois, needed something to take to an annual steam engine show. He decided to make a miniature stationary baler.

"It works pretty much like the old-time stationary balers," he says. "But the bales are just 3 by 5 by 8 in. long."

Like the old balers, it has a "grasshopper" to pull hay into the bale chamber and a plunger to pack it tight. But instead of gears to operate them, the grasshopper and plunger run off of two 7-in. concentric cam wheels that he made in his shop. The cam wheels are set on the same shaft, 6 in. off center. One wheel runs the plunger and the other runs the grasshopper.

"Getting the timing right was a bit of a trick," Brandenburg says. "I put hubs on the wheels and fastened them to the shaft with set screws. Then I could move them around until the timing was just right. Once I had them timed, I welded them in place so the baler will never get out of time."

Brandenburg mounted his baler on a wooden handcart frame and powers it with V-belt from a 3 hp horizontal shaft Briggs & Stratton gas engine under the cart.

The engine itself has a 2-in. pulley. The belt from that runs to an 11-in. pulley he took off an old clothes dryer. A second belt from that pulley drives a 20-in. pulley he salvaged from an old combine. The step-down from the engine rpm gives him plenty of torque for the baler, but lets it operate at a slow speed. A lever-operated belt tightener on the second belt allows him to stop the baler without shutting off the engine.

Like the old stationary balers, Brandenburg's machine requires that bales be hand tied with wire. "I made 3 by 5-in. spacing blocks to insert between the bales, and cut grooves in them to thread the wire through," he says.

He didn't put knives in the baler to cut the hay as it's baled, so the bales come out a little ragged. "I use hedge clippers to trim the edges," he says.

Brandenburg says it takes about 4 minutes to make a bale, and he gets about 60 miniature bales from one standard sized square bale of straw.

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To make it enjoyable for visitors to watch hummingbirds on his ranch, Dan Brown built a 15 by 30-ft. air conditioned observation room.

Texan Makes Money "Ranching" Hummingbirds

Rancher Dan Brown isn't your everyday Texas cowboy. He starts out each day in the spring and summer mixing up a batch of sugar water and filling feeders for the estimated 3,000 hummingbirds that reside on or around his ranch. Most surprising of all, he's figured out a way to make money off the little feathered creatures.

Brown and his wife Joann also feed Angus cattle on their 3,000-acre spread near Christoval Texas, but they say it's the hummingbirds that really bring in the bucks.

The thousands of hummingbirds that visit the Brown ranch each year are only exceeded by the number of people. What started out as a hobby with a single hummingbird feeder nearly 30 years ago has become a business attraction with up to 22 feeders that each hold more than half a gallon of sugar water.

"Nature tourism is fantastic in this region, primarily because 97 percent of our state is privately owned and the few parks we have are maxed out," says Brown.

The state of Texas works with Brown and other ranchers to open up the front gates, let the public in and gain a good cash flow. "Nature-related tourism is the fastest growing segment of the travel industry," says Linda Campbell, nature tourism coordinator, Texas Parks and Wildlife Department. "Interest in nature tourism is growing in Texas, as rural communities look for ways to diversify local economies and landowners look for ways to diversify ranch income."

While Brown prefers not to share income figures from the operation, business has been good enough for him to expand. After the San Angelo Convention and Visitors Bureau asked if he would take busload sized tour groups, Brown built a 15 by 30-ft. air conditioned observation room, complete with a bathroom. The handicapped accessible, glass enclosed viewing room seats up to 50 people at \$5 per head and includes reference materials for more serious birdwatchers.

Brown has also built "Hummer House", a two bedroom stone cottage, complete with kitchen, sitting room and bath. Plans are under way for additional cottages. Guests get lodging and access to an equipped and well stocked refrigerator and pantry for rates starting at \$100 for a couple.

Of course, what guests are really paying for is the close-up view of the four species of hummingbirds and countless other wildlife that visit the ranch. Situated in a north/south river valley ideal for migrating birds, the ranch, with its oak trees, old pecan orchard and river shallows, offers perfect bird habitat. Since 1995, nearly 9,500 birds representing



Brown starts out each day in the spring and summer mixing up a batch of sugar water and filling feeders for the hummingbirds that reside on his ranch.



Lines of chairs face observation windows.

97 species have been banded on Brown's property. In the evening, deer and wild turkey come up to the ranch buildings looking for the shelled corn he puts out, still another draw for paying visitors.

"The majority of our clientele are senior citizens," says Brown. "They are looking for a good experience, and we are careful to provide that."

To ensure the experience, Brown mixed up nearly 700 lbs. of sugar with water this past year. He also provided nesting material; unbleached cotton is the hummers favorite, he says. The groups of deer and flocks of wild turkey, sometimes numbering in the hundreds, are attracted by the 25 tons of shelled corn Brown sets out every year.

Brown does very little advertising, letting word of mouth and the regular flow of TV crews and magazine writers who cover his operation provide most of his promotion. Last year he had five different TV crews do stories on his hummingbirds. That is publicity he couldn't afford to buy.

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He Used Caterpillars To Move His House

By C.F. Marley

"I thought FARM SHOW might be interested in how I used a D8 Caterpillar to move our house from some Illinois River bottom ground up to a nearby 250-ft. high bluff. From the front porch I now have a birds-eye view of my farming operation," says Clair Wilson of Winchester, Ill.

Wilson and his family had been living next to a limestone quarry, which was inching closer to their home. "I could see we were going to have to make a move," says Wilson. "I had always wanted to live up on the bluff, so we decided to move the house up there."

To get the house up the steep bluff, Wilson first had to make a roadway up it. Once that was done, he began the move.

"We lifted the house onto a conventional moving gear. A D8 Cat pulled the house up the hill while two Cat 988 end loaders ran behind. They never touched the house but were there just in case the house worked

loose and slid along the beams. However, it never did even though friction was all that kept it in place. At one point the D8 dug into some crumbly soil and slowed down, but it didn't stop."

The house had originally faced east. In its new location, it was turned around so it would face west, looking out over the river bottom. Wilson set the house on top of horizontal steel beams raised high enough to make room for a two-car garage at the back side of the house. He also added a 1,400 sq. ft. addition to the house.

"During the move all the kitchen appliances stayed put. We didn't even take the furniture out of the house. We started out at about 11 a.m. and by 1:30 p.m. we were up the hill," notes Wilson.

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