

## Miniature Bull Riding Catches On

At 4-ft. tall, Zebu, Dexter, Herford and Lowline Angus bulls are awfully "cute." But slip on a flank rope and strap in a pre-teen rider, and they'll start bucking just like their big bull cousins. Mini bull riding competitions have been cropping up all over the country for youngsters from 8 to 13.

In the past, children interested in bull riding started out riding dairy calves.

Chris Bryant is a miniature bull breeder and organizer of the Xtreme Mini Bull Riding Tour ([www.extrememinibulls.com](http://www.extrememinibulls.com)), which started in Texas in 2007. He and other members of the Miniature Bucking Bull Breeders of America (MBBBA) say the new competitions give aspiring bull riders a stepping stone to the real thing.

MBBBA Executive Director Shane Daniel of Rocky, Okla., raised full-size bucking bulls since he was 15. Now 33, and after serving in the Marine Corps, he switched to miniature breeds in 2004.

"They buck like big bulls, but at a speed kids can handle," he explains. "In my opinion, kids getting on dairy calves doesn't teach the fundamentals of bull riding. Mini bulls are for advanced riders who plan to stick with

bull riding."

Miniature breeds come from European stock, and MBBBA regulations require they can be no taller than 4 ft. Miniature bulls typically sell for \$750 to \$1,500. Miniature cows start at \$500.

They require the same care as standard bulls, but not as much food or space. "A 40-acre setup is good," Daniel says, but Bryant notes even five acres is enough to raise a few mini bulls.

Many MBBBA members are former bull riders, while others are just fascinated with the breed. As the organization grows, it hopes to put on more events, which are run the same as big bull competitions.

He and Daniel encourage anyone interested in raising miniature bucking bulls or becoming involved in competitions to contact them.

Contact: FARM SHOW Followup, MBBBA, Shane Daniel, Rt. 1, Box 117, Rocky, Okla. 73661 (ph 580 660-0064; [midrangelcattle@aol.com](mailto:midrangelcattle@aol.com); [www.mbbba.com](http://www.mbbba.com) or [www.midrangelcattleco.com](http://www.midrangelcattleco.com)); or Chris Bryant, 3319 FM 1568, Campbell, Texas 75422 (ph 214 251-9115; [chrisbryant@koyote.com](mailto:chrisbryant@koyote.com); [www.badlittlebuckers.com](http://www.badlittlebuckers.com)).



"They buck like big bulls, but at a speed kids can handle," says Chris Bryant, a miniature bull breeder and organizer of the Xtreme Mini Bull Riding tour.

## He Rakes And Bales In One Pass

Finding a way to rake and bale at the same time became a necessity for Gary Burks after his son graduated from high school and left the farm. His first try at a front-mounted V-rake was, in his words, "a wreck!" Due to difficulties transporting it between fields and problems keeping it out of fences or turns, Burks set it aside.

"I needed something that would work in small fields and tight areas and move from one field to the next quickly and easily," he says.

His solution was simple and effective. At the time he had a 540 Hesston baler and two Ford 513 right-side delivery rakes. He designed and built a hitch that attached to the baler axle, allowing him to tow the rakes in-line behind the baler on the road and off to the side in the field.

He welded a length of 4-in. square tubing to the axle of the baler, just missing the right wheel by an inch or two. It extended just past the end of the baler. A length of 3-in. steel

tubing connects to the end of the 4-in. tubing with a pivot pin. This allows it to pivot away from the baler at a right angle or back behind the baler at a left angle. A short length of chain welded to the 3-in. tubing secures it in both positions. At the end of the 3-in. tubing, he mounted a 1 7/8-in. ball.

To tow the rakes down the road, the 3-in. tubing is swung behind the baler and locked in place with the chain.

The first rake hooks to the ball hitch. Burks mounted a two-wheel dolly to the hitch of the second rake and trails it directly behind the first.

"When I get to the field, I drop the rakes, pull the baler up and swing the 3-in. tubing out to the side," says Burks. "Once my brace bar is in place, I connect the chain and hook the first rake to the ball. I swing the second rake to the outside of the first and pin it."

Burks makes a single pass without the baler working, raking two windrows together. On his next pass, he begins baling. If the hay crop



Hitch attaches to baler axle, allowing Burks to tow two right-side delivery rakes behind baler. They swing behind baler for road travel.

is light, he can simply shut down the baler every other pass and bale four rake widths at a time.

"The only problem is that I have to back the baler up to kick the bale to the right of the first rake," says Burks. "I just do that while putting on the twine so I really don't lose any time."

A side benefit includes raking at slower speeds, which reduces wear and tear on the rakes. Raking behind the baler also enhances drying, as opposed to baling right in front of the rake, notes Burks.

Contact: FARM SHOW Followup, Gary Burks, D'Air Farms, 440 Burgin Rd., Starks, La. 70661 (ph 337 743-5487).

## Putting Water Power To Work

Paul Cunningham builds micro hydro systems, but stresses they aren't for everyone. "If you don't know how cheap commercial power is, you will when you produce your own," he says. "People think a micro hydro system will save them money, but it's not necessarily the case. Our usual customer is one who is facing high costs to bring commercial power to a remote building site."

However, if you have water power available, Cunningham has a micro hydro system to match. Key factors to keep in mind are the head (the distance water falls before striking the turbine), the flow rate in gallons per minute (gpm), the distance the water has to be piped and the climate. The greater the head and the greater the flow rate, the more power that can be produced. Distance and climate have a direct cost effect on installation.

The Stream Engine model is capable of outputs over 1 kW and can produce power from heads as low as 6 ft. to as much as 300 ft. It starts at \$2,345. The LH1000 has a maximum output of 1 kW, but can produce power from heads as low as 2 ft. and as much as 10 ft. It's priced at \$2,975. Both systems use brushless, permanent magnet alternators, but

different water turbine designs. The Stream Engine uses up to four nozzles to direct water onto a single turbine wheel. The LH1000 directs water through a guide vane assembly to turn a propeller attached to the generators.

A low flow system called a Water Baby can be custom ordered. It uses the same design as the Stream Engine, but it will produce power at as little as 3 gpm flow rate. However, it requires at least 100 ft. of head.

All three systems are designed for use with battery storage, though they can be used for AC direct if sufficient water energy is available. The DC system allows electricity to be generated at a steady rate to be available at a higher rate as needed.

"We have people who run a pipeline up to 2,000 feet to get sufficient drop," says Cunningham. "In a cold climate, they may have to bury it. I have run a 1,600 ft. pipeline that gives me a head of 130 feet all winter without a problem here in New Brunswick, but I will be burying it anyway."

Cunningham expects to produce about 300 watts of continuous power with one of his Stream Engines attached to the pipeline. He says 300 watts is the magic number for run-



Stream Engine produces 300 watts of continuous power, enough to run a house with lights, well pump, refrigerator and other appliances.

ning a house with lights, well pump, refrigerator and other common appliances. Energy efficient appliances and lights can lower the power needed to as little as 200 watts.

Contact: FARM SHOW Followup, Energy

Systems and Design, P.O. Box 4557, Sussex, New Brunswick, Canada E4E 5L7 (ph 506 433-3151; [hydropon@nbnet.nb.ca](http://hydropon@nbnet.nb.ca); [www.microhydropower.com](http://www.microhydropower.com)).