

Rare Cattle Breed Making A Comeback

Phil Lang's rare breed Randall cattle are a unique heritage breed in not being a standardized breed. What makes them Randalls is that they were a closed herd kept for more than 80 years by a family named Randall. As a landrace breed, they represent common, local, multi-purpose cattle found in New England in the late 1800's. That's just fine with Lang.

"Their multi-purpose nature fits the philosophy we farm by at Howland Homestead Farm," says Lang. "Like the farm, they are subsistence, low-input animals that provide meat and milk."

Unlike other breeds, Randalls haven't been selected for production traits of meat or milk. The focus since the rescue has been on conserving the entirety of the gene pool. As numbers grow, there will be more opportunity to select for production characteristics. While they are dairy-type animals, there are few defining physical characteristics for the Randalls.

"Mature animals can range from 600 pounds to 1,000," says Lang. "What is key for Randalls is that we don't care if they're big or small or how much of the type of milk they produce."

Lang has kept records on his herd, and it varies considerably. He admits that size and milk qualities tend to be more uniform within family lines. However, feeding can play a big role as well. His herd receives only forage. He describes them as easy keepers and suggests most breeders are looking for family cows

and prefer the smaller sizes. However, he notes that Randalls kept for oxen can reach 1,800 lbs.

"There is a very strong market for Randalls for use as oxen," says Lang. "They are extremely intelligent and very easy to train. They recall their training even if not used daily."

The herd's variability is due to the fact that Samuel Randall of Sunderland, Vt., liked them that way. He and later his son Everett kept the family's herd isolated from other cattle. If any single trait was selected for, it may have been the colorsided lineback pattern. Most rescued animals were black or blue-black over white colors. As the breed has started to expand, other colors are being seen, including mahogany, blue, gray and recessive red.

Initially, Lang and his wife Dianne sought out Randalls to help save the breed. Cynthia Creech had already rescued many of the original Randalls after a dispersal of the original herd in 1985. Working with her, the Langs attempted to rescue the few that remained. For the past 30 years, Creech and the Langs, along with other dedicated breeders, have been breeding and expanding numbers from the original 20 head that were saved.

Lang estimates there may be as many as 500 Randalls today. Although a Randall registry was set up in 2001, there is no association of Randall breeders. Creech and the Langs maintain the registry and encourage Randall



A unique heritage breed, Randall cattle were kept as a closed herd for more than 80 years. Many animals have the colorsided lineback pattern.

breeders to register births. Lang estimates there may be 30 breeders total, some with only a few animals.

A second breed registry for Randalls exists, but it appears to have only one large breeder involved. It is largely derived from Randalls rescued by Creech.

The Lang's herd numbers about 25 head, having been downsized some in recent years. When he has extra animals, he tries to place them with people dedicated to building the breed without changing it.

"Randalls are in short supply because most breeders are trying to expand their herds," says Lang. "They often have a waiting list of buyers. It can take as much as 5 years to

get animals."

Lang usually sells his excess as calves not yet weaned from a bottle. Although he has sold heifers for \$900 and bull calves for \$450 in the past, prices vary among breeders. He suggests interested readers contact the registry for a list of breeders or visit the RandallCattleForum on Facebook to find breeders and available breeding stock.

Check out the video of Randalls at www.farmshow.com.

Contact: FARM SHOW Followup, Phil and Dianne Lang, 175 Geer Mountain Rd., South Kent, Conn. 06785 (www.howlandhomesteadfarm.com; www.randallcattleregistry.org).

Robot Programmed To Kill Weeds

Farmers across the U.S. and Canada may soon get a glimpse of BoniRob, a multi-use robotic platform about the size of a small car. The device may soon be used for plant breeding, weed control and other advanced agricultural tasks.

BoniRob is the product of a public joint project funded by Germany's Federal Ministry of Food and Agriculture that saw experts from Bosch, Osnabrück University of Applied Sciences and the agricultural machinery manufacturer Amazone join forces. The Bosch startup company Deepfield Robotics took over further development in 2014.

Deepfield spokesperson Birgit Schulz says that BoniRob uses laser positioning and satellite navigation to find its way around fields. Accurate to the closest centimeter, BoniRob will be able to detect the size, shape and color of leaves to distinguish between good plants and weeds. The weeds will be mechanically eliminated while the good plants are preserved.

BoniRob moves around with 4 independently steerable drive wheels. It

has the ability to adjust its trackwidth on the go. BoniRob runs on batteries or can be connected to a generator.

In its current design, BoniRob can be navigated autonomously along plant rows and carry its application tools as it moves. Environmental sensors, inertial sensors, wheel odometry and GPS can be mounted for row detection and navigation.

Schulz says that BoniRob's weeding mechanism is meant to structurally destroy weeds before they have a negative effect on the growing crop. Used in carrots, the machine's "death stick" was 90 percent effective. The fact that it's completely mechanical, meaning no herbicides are used, is a distinct advantage. Schulz says a group of BoniRobs could greatly reduce hand weeding and help ensure an optimal harvest. Another application would have BoniRob helping other growers by applying nutrients and determining optimal harvest times. The company believes that in the next few decades BoniRob will completely change the face of vegetable farming as it's known today.



About the size of a small car, the BoniRob is a multi-use robotic platform that may soon be used for plant breeding, weed control and other advanced farm tasks.

Plant scientists think that BoniRob may also be useful in plant research. The robot could easily check the size, shape and density of leaves and look for signs of insect infestation on crops being evaluated for seed production. Recently Deepfield presented its 4D-scan system that's capable of creating a "patient's record" for growing plants. BoniRob recognized each individual sugar beet on a test field by using cameras and the plant's position, storing the plant's properties, such as leaf/stem size, over time. Although BoniRob's automation may eventually

put some farm workers out of a job, the environmental benefits of using less or no herbicides along with better quality crops may outweigh those worker losses. Schulz says the automation in plant research is an example where a robot accomplishes tasks beyond a human's capabilities, allowing for significant improvements in plant breeding.

Contact: FARM SHOW Followup, Deepfield Robotics, Robert Bosch Start-up GmbH, Benzstr.56, D-71272 Renningen, Germany (www.deepfield-robotics.com).

Remote-Controlled Pickup Cover

A new retractable cover from Pace Edwards opens or closes in 30 sec. with a remote control and lets you lock it in place anywhere along the track.

The Bedlocker aluminum cover wraps up tight in a 1-sq. ft. housing across the front of the bed. Installation takes about an hour and requires no drilling or bed alteration. Rails simply clamp in place.

Bedlocker offers intermittent locking. A built-in electromagnetic brake locks the cover at any position along the rails to allow for cargo that sits partially above the bedrails.

If power fails, the Bedlocker cover can be operated manually. The rigid aluminum panels are powder coated black with a textured finish. The result is a durable, long lasting finish less likely to scratch.

Standard rails sit flush with the top of the box. Optional explorer rails feature above cover access for attaching recreational and work-related storage racks. Securely cover supplies or tools in the box while carrying bikes, ladders or other items above.

The Bedlocker kit comes with everything needed for fast DIY installation. Regular list price starts at \$2,610.62. However, authorized online dealer prices were recently as much as \$600 less. Check with the company for local dealers.

Contact: FARM SHOW Followup, Pace Edwards Co., 2400 Commercial Blvd., Centralia, Wash. 98531 (ph 360 736-9991; toll free 800 338-3697; www.pace-edwards.com).



Remote-controlled pickup cover opens or closes in 30 seconds and can be locked in place anywhere along the track.