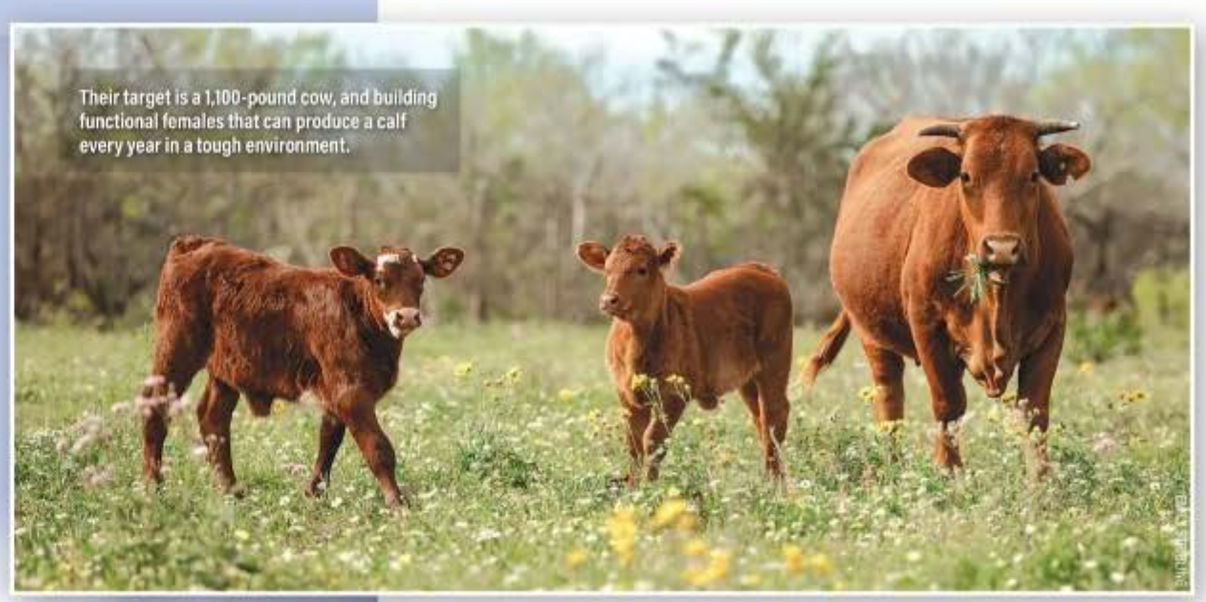
BUILDING THE IDEAL SOUTH TEXAS COW

The East Foundation knows it takes a tough cow to handle a tough environment, so they're building one.

BY BURT RUTHERFORD



Their target is a 1,100-pound cow, and building functional females that can produce a calf every year in a tough environment.

Whether you're a cow or a coyote, South Texas is a tough place to make a living. It's hot, often really hot. It's dry, sometimes really dry. It's a tough country, sandy and rocky. Forage potential is boom and bust, depending on rainfall.

It does have some upside, however, according to Garrett Stribling, ranch business manager with the East Foundation. "We don't have to deal with many blizzards."

The East Foundation is a hybrid — a working ranch and a living laboratory; a profit-producing ranching operation contained within an agricultural research organization that conducts research in ranch management, rangeland health, wildlife management, and related fields. It's an educational institution as well, passing along what they learn to other land stewards.

The Foundation manages more than 217,000 acres of native rangeland across six ranches, making it one of the largest ranch holdings in Texas. The ranchlands owned by the East Foundation were acquired by the East family over a period of about 100 years. They ranched mainly across the Wild Horse Desert, a region known also as the South Texas Sand Sheet and the Coastal Sand Plains.

CATTLE OPERATIONS

When the East Foundation took over ranching operations about 10 years ago, the land was populated with cattle well adapted to the South Texas environment over many generations. The cow herd was composed primarily of crossbred females, with about 50% Brahman influence, that had been raised on the ranch with few additions of outside heifers. Beefmaster and Santa Gertrudis bulls were used to continue to produce primarily red calves with a relatively high proportion of Brahman influence. While having cattle adapted to the ranch environment is the first order of business, the cattle also have to consistently produce calves that yield the quality beef today's consumers desire.

To that end, Foundation staff set out to develop cattle that are better at both.

It took a few years to upgrade the infrastructure — fences, working facilities, and the like. With that effort largely accomplished, ranch staff set about developing the ideal South Texas cow.

"We make better decisions when we have data, so we manage by experiment," according to Jason Sawyer, Ph.D., chief science officer for the East Foundation. "Part of our management objective is to try things at a small scale with one group of cows or a couple sets of yearlings, and evaluate that compared to our current standard."

According to Stribling, "The major shift was going into 2021 when the calves hit the ground. The bull turnout

Their target is approximately 25% Brahman influence, with the balance composed of British breeds, complemented with the use of American Red bulls, a cross between Red Angus and Santa Gertrudis.

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in '20 was the first real genetic shift from the native cattle; we had to try to make something different when we introduced the Red Angus bulls."

That produced a calf with a touch of ear, something absolutely necessary in a hot environment. And, because of how they selected the bulls, it produced replacement heifers ready to go back into the cow herd.

"The Red Angus bulls we've been selecting haven't been top of the growth curve, top of the carcass traits by any means. We're focused on creating that female," Stribling said. "Our target of approximately 25% Brahman influence, with the balance composed of British breeds, means that we can't keep using Red Angus exclusively, or it will reduce the adaptability of the cows. Instead, we complement this with the use of American Red bulls, a cross between Red Angus and Santa Gertrudis."

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The summer of 2023 was especially hot and dry, but Stribling is pleased with what he sees this year. "The cows are holding condition well and they've got some really nice calves." That's true for both the Red Angus-sired calves and the half Santa Gertrudis / Red Angus calves sired by the American Red bulls. "Both types capitalize on the hardiness of our prior cow herd, but yield a female that is about a quarter ear and the other three-quarters is a carriable combination of Red Angus, Shorthorn, and Hereford from the Beefmaster and Santa Gertrudis in the original cows."

Breed-up was a little better for the Red Angus-sired heifers and cows, but Stribling attributes that largely to the fact that *Bos taurus* cattle mature a little earlier than *Bos indicus*. On the other end of the spectrum, however, the cows with more ear will likely stay in the herd a little longer.

Time will tell. Going forward, they'll continue their 'management by experiment' mindset with targeted breeding of heifers and cows. "We sort them in the chute phenotypically," Stribling said. "If they're showing more Brahman phenotype, those are going to get Red Angus bulls back on top of them. Whereas the ones showing a Red Angus phenotype, they're going to get those American Red bulls back on them."

Overall, Stribling sees more uniformity. "It's really about building that female. Our target is a 1,100-pound cow, building functional females that can produce a calf every year in a tough environment."

This circles back to the conundrum of how much ear do you really need to build a functional cow that can raise a marketable calf in South Texas? "I think we've done a really good job building these cows to stay moderate, to really fit this environment," Stribling said.

In fact, he said the steers are almost a byproduct of their efforts to build the ideal South Texas cow. However, they're a byproduct that produces the cash flow to keep the experimental wheels turning. While they aren't chasing growth and carcass traits in their bulls at the expense of strong maternal traits, the steers have performed well in the feedyard.

Looking ahead, Stribling says the Foundation's goal is to be a source of replacement females, either open or bred, for other ranchers to use. Stribling sees it like this: "We're spending a lot of time and effort to build a functional female that fits our environment. And I would argue if she can perform in our environment, she can perform just about anywhere."

WILDLIFE IN THE MIX

"Successful ranching and resource management is not all about cattle,

The East Foundation is a working ranch and a living laboratory operating as an educational institution.

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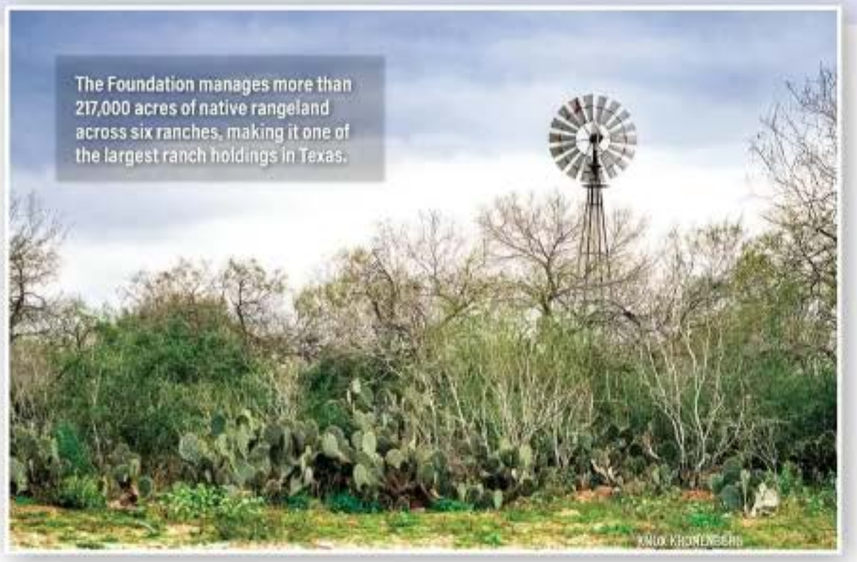
even though cattle are the central revenue driver on the producing side of the business. Instead, it is about how we manage the ranch resource for multiple benefits," Sawyer said in explaining the other main focus on the ranches the East Foundation stewards.

"Wildlife creates a lot of economy, particularly in our region," he said. "And so, our science program is geared around land management questions, wildlife management questions, and livestock production questions that should better enable decision-making by management."

Indeed, as ranchers look for ways to stay on the land, monetizing all aspects of the operation, not just the cattle, becomes crucial. That's true not just for the obvious and sometimes long-standing practices of leasing hunting and fishing opportunities, but other aspects as well — bird watching, mountain bike riding, camping, and other hospitality opportunities, to name a few.


The Foundation manages more than 217,000 acres of native rangeland across six ranches, making it one of the largest ranch holdings in Texas.

"We think that the long-term resilience of the resource is important for our sustainability. Will the business persist? That depends on how well we manage the land," Sawyer added.

While it starts on the ground and even below ground, the mindset must be all-encompassing, Sawyer believes. "Sometimes we get caught up talking about, 'We manage this many acres or this kind of ground.' But really, we're charged with managing a really complex ecosystem. That makes it harder because it's complicated. But it also makes it more interesting. You start to see other opportunities in that."

Wildlife research on the East Foundation ranches goes beyond the South Texas staples of white-tailed deer and bobwhite quail. Take ocelots, for example.

Fewer than 80 of these secretive wild cats are known to live in the U.S. and most of them live on private ranches in South Texas. The Foundation's El Sauz Ranch is one. More than 30 ocelots have been documented to live there, meaning the ranch is home to one of only two known ocelot breeding populations in Texas.

So, does research on how to maintain and preserve habitats so ocelots can remain an important part of the landscape benefit livestock production? Yes, as a matter of fact.

If it's true that a rising tide raises all ships, then a cattle ranch is much more than just a cattle ranch. It is, as Swayer described, a complicated ecosystem. Because it's a complex system, everything ties to and relates to everything else on the landscape. In a complex system, tweaking a management activity in one place produces consequences in many other, often unrelated, areas.

So, managing with an ecosystem mindset means managing for the benefit of the resource, not just the cattle. In turn, the cattle benefit along with everything else.

In Sawyer's mind, that's all part of striving for continuous improvement. "Which, by definition, means you can't always just keep doing the same things, right?"

Striving for continuous improvement means resource managers need to make incremental changes in how they operate, how they develop efficiencies, and in new approaches to old problems. "If you really want to manage for continuous improvement, you have to be willing to change," he stresses.

The hard part is, what things do you change? What's working now and how do you decide where to change? That's a conundrum that can keep a ranch and a land steward locked down.

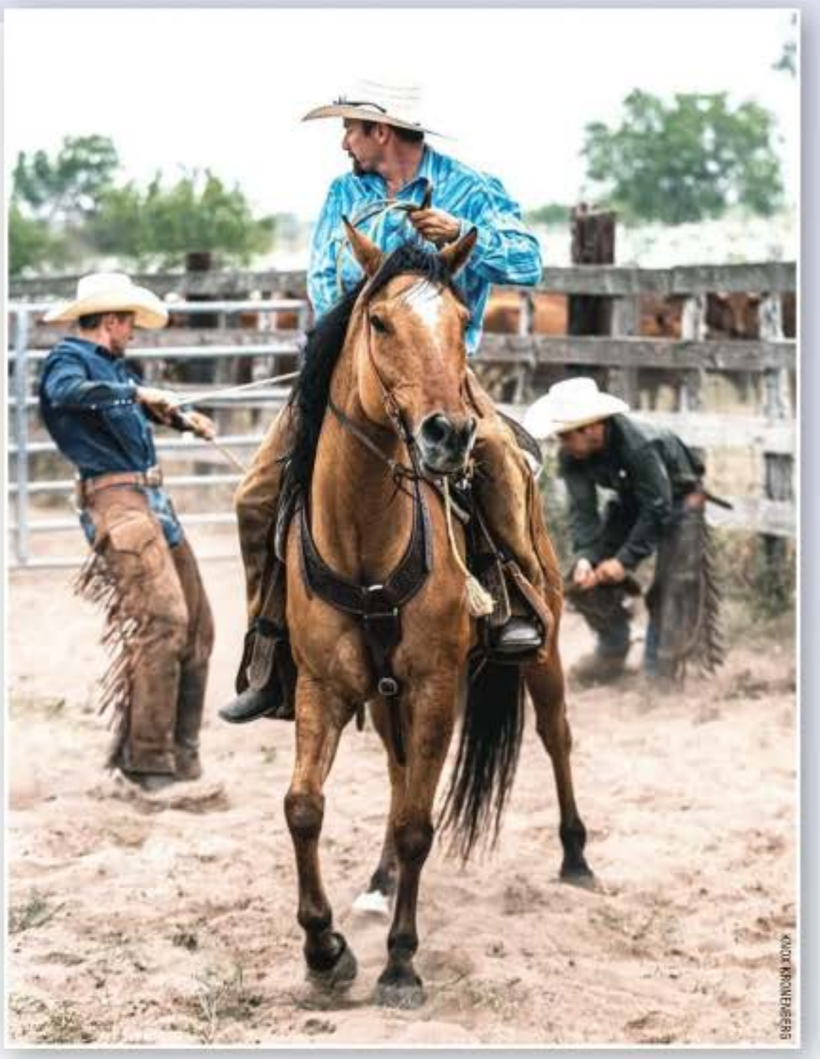
"It's risky to make wholesale change," Sawyer admits. "To me, that's the management conundrum in ranching. I want to make a change. I want to get better, but there's a risk in change when I've worked really hard to get to where I am."

Helping answer those questions is where the East Foundation sees its purpose. "Our central mission is to advance land stewardship," Sawyer said. "But our mission isn't to advance only our own land stewardship, it's to advance land stewardship period."

That's where the educational arm of the Foundation and the managing by experiment concept comes in. "By learning and finding out and being very open and transparent about that, we want to enable more effective decision-making by all land stewards," Sawyer said. "If we manage by experiment, not everything's going to work. Can we be honest about that so that somebody else can make better decisions? That's our goal."

However, both Sawyer and Stribling stressed that their intention isn't to tell other ranchers how to run their ranch. "Our goal is to help other people make their own best decisions," Sawyer said.

"I think you should always try to improve your cow herd. Should you do it exactly the way we're approaching it? I don't know." Sawyer said. After all, every ranch is different. "But here's how we're doing it and here's how it's working for us. Here are the good and the bad. And with all that, hopefully you can make the best decision for yourself about your business." WR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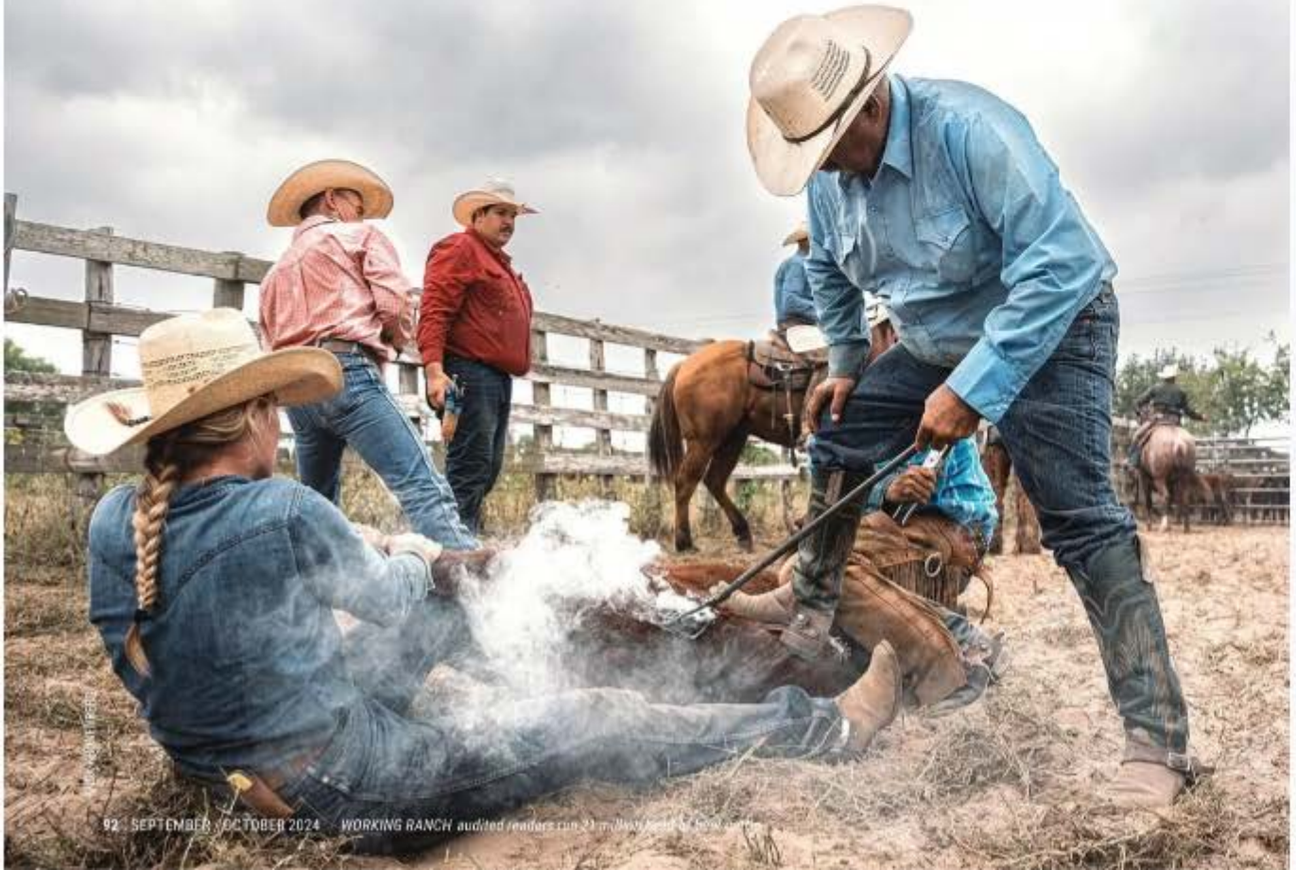
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