Cactus Cows

An example of production under confinement.

by **TROY SMITH**,

field editor

Cactus Feeders, headquartered in Amarillo, Texas, is not your typical cow outfit. Better known as one of the country's largest cattle-feeding entities, operating 10 feedyards in the Texas panhandle and Kansas, the company feeds roughly 1 million head of cattle annually. The firm's website claims one of every 25 finished beef animals in the United States comes from a Cactus feedyard. Cactus is in the cow business, too, though not in a traditional way.

Kelly Jones, who manages the cooperator cow-leasing program for Cactus, says the company has been aggressively seeking cooperators — cattle folk interested in leasing and managing Cactus-owned cows. The lease program has grown out of the company's own foray into confined cow-calf production. Since 2012, Cactus has been managing a cowcalf operation in its former finishing yard near Syracuse, Kan.

Don't misunderstand: Cactus is not leasing cows only to producers who manage cows under confinement. Jones is just as willing to negotiate lease agreements with stockmen whose operations rely heavily or exclusively on grazed forages. However, some people who want to manage cows — a herd of their own or belonging to others - don't have the range or pasture resources necessary for a grazing-based system. A partial or total confinement operation might be an option, and Jones believes the Cactus cow yard serves as an example of a confinement model that works. The operation might be a source of ideas for producers who, because of the limited availability or high cost of grazing land, may be considering a confinement system.

According to Jones, Cactus management saw opportunity in cows as drought prompted liquidation of many cow herds in Texas and neighboring states. At the same time, the company had underutilized pen space. Taking advantage of the buyers' market, Cactus bought "droughted-out bred cows," originally planning to establish a breeding herd at each of its feedyards.

"That didn't work," says Jones, explaining that integrating cow-calf enterprises within what previously had been exclusively finishing yards proved difficult. "Instead, we consolidated all of the cows at Syracuse, refurbishing the facilities and turning the former 40,000head finishing yard into an 8,500-head cow yard."

At the time, explains Jones, the Syracuse yard was showing plenty of wear and tear. Getting feeder pens and feed and cattle-handling equipment back up to snuff would require considerable expense. Repurposing the facility for cows made more economic sense. Fewer fences were needed, with each large cow pen encompassing the space formerly allocated to five or six feeder pens. A flexible processing area was constructed — one system that could accommodate mature cows or 300-pound (lb.) weaned calves. The old yard's aged

feedmill was torn down and scrapped. "We decided we

could feed whole corn until we could get a 'cracker' installed, and mix ingredients on the feed trucks," says Jones, explaining how a cow ration is composed of the most readily available, costeffective ingredients.

There in western

included ground

Kansas, that has also

cornstalk residue, wet distillers' grains, silage and ground alfalfa. A pelleted supplement and an ionophore round out the ration.

Cactus cows are limit-fed, meaning they receive an amount of feed that will meet nutritional requirements, but no more.

"We have just one consistent, energydense ration for cows. The only change is in the amount fed, which changes according to the cows' stage of production," Jones says. "The objective is to manage nutrition to maintain cows within the range of body condition score (BCS) 5 to 6."

Typically, dry cows in early gestation usually receive 26-28 lb. of the mixed ration per head per day. That amount increases to 30-32 lb. during the second trimester and 32-34 lb. during late gestation. Lactating cows receive 42-46 lb.

Processing simplified

From the start, the Cactus cow model incorporated a plan for genetic improvement and management efficiency using synchronized artificial insemination (AI). Jones calls the feedyard setting advantageous for handling cattle multiple times for estrus synchronization and timed AI — easier than when cattle are on pasture. Of course, the calves have to be sorted off each of the three times their dams are put through the chute. One of those times, usually the day cows are inseminated, the calves will be processed, as well.

Along with spreading production

throughout the year, using three separate 45-day breeding seasons affords more efficient use of clean-up bulls. It also allows management to give cows a second chance. A cow found open at the 45-day pregnancy check can be rolled into the next season. If she doesn't breed that time, says Jones, she is culled.

In the confinement setting, calves will start sampling feed early, if they can reach

it. Jones says a pelleted creep feed is provided by the time calves reach a week of age. When most calves have started nibbling at it, the calf ration is introduced and the pellets are gradually phased out. The standard calf ration is the same as the cow ration, except calves receive alfalfa, instead of silage.

"We made creep areas along portions of the fenceline bunks, lowering the bunk height and stringing our d these areas

simple hot wires around these areas high enough for the calves to go under the wire, but keeping the cows out," says Jones. "We also place woven wire on the (delivery side) of the bunks, which keeps calves from crawling through the bunks and out of the pen, but feed can still be poured through the woven wire and into the bunk."

According to Jones, the calf weaning target is 120 days of age, when calf weights average 300 pounds or so. Weaning typically is accomplished without much fuss. Jones says a couple days of bawling is normal but there is no significant decrease in feed intake. Soon, intake increases and postweaning average daily gains climb to 2-3 lb. per day. Some calves have been weaned just as successfully at 110 days of age, and plans include trying it at 90 days.

"We let the calves set for about a month postweaning, and then sort them for size, into groups of large, medium and small calves. When they reach about 600 pounds, they are sent to a finishing yard," says Jones.

"In our experience, the calves raised under a confinement system do great. They wean easily and reach target weights early. With good genetics, they are performers — real rock-star calves," adds Jones.

Along with pleasing performance of calves, management's goals for reproduction are within reach. These include pregnancy rates of at least 92%, and 80% of calves delivered in the first 30 days of each calving season. However, Jones says that while progress has been made in improving health of baby calves, more improvement is needed.

Increased frequency of pen cleaning has helped, as has use of a modified version of the Sandhills Calving System, which calls for periodic sorting of heavies, and removal to a clean pen. This way, newborns are not exposed to older calves. Still, in the confined environment, periods of wet, muddy conditions are often followed by increased incidence of calf scours.

"We're getting better, but we still lose too many calves," admits Jones. "Maybe the biggest thing helping calf health overall is sending the really sick calves and orphans to a nearby calf ranch. Every problem child is out."

Jones says calves that don't respond quickly to treatment are sent to the neighboring business where they receive special attention. Plus, the sick calves don't spread infection to healthy calves in the cow-calf yard. The calf ranch is paid a set amount for every live, healthy calf returned to Cactus at weaning age. "It's a little embarrassing," admits Jones, but returned calves often outweigh Cactus calves of the same age that have never been sick.

Tips from experience

Based on the experience gained at the Cactus cow yard thus far, Jones suggests the following considerations for producers contemplating a confined cow-calf production system.

- Provide adequate pen space. When calving in confinement, Jones believes bigger pens are better, so a cow can find a corner away from most other penmates. The Cactus yard allows 700-800 square feet per cow in each pen. With a little bit of pasture nearby, Jones says some cows are turned out, and fed in portable bunks while calving on sod, then returned to confinement pens later. Jones thinks that kind of "semi-confinement" model might be ideal.
- Limit-feeding, with a high-energy diet is nearly always the most economical way to go when managing cows in confinement. While a limit-fed ration can meet nutrient requirement with a lesser volume fed daily, cows do not feel as full and satisfied as animals fed free choice.

"They're still a little hungry," says Jones. "We've found that feeding twice a day, instead of just once, does help cows be more content."

• Cows become competitive for feed, so adequate bunk space is a must. Jones recommends starting with 24-30 inches of bunk space per cow, then watching

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September 2017 / **ANGUS BEEF BULLETIN** • 23

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what happens when the feed truck delivers feed. Modifications to pen density can then be made. It is essential that every cow in the pen has bunk access at the same time.

- Cows are not equally adaptive to the system. Jones estimates the productive life of cows in the Syracuse yard at eight years. Some cows remain in production to ages of 10 to 12 years, but others do not adapt as well to confinement and limit-feeding.
- When cattle numbers are concentrated in confinement, health management for calves becomes increasingly important. The old adage applies: "An ounce of prevention is worth a pound of cure."
- Confinement requires consideration for calf safety and comfort. In a western Kansas drylot environment, Jones calls shade beneficial to cows but mandatory for calves. Jones says shade structures accessible only to calves provide a "safe area" too. Otherwise, calves laying in the shade of feedbunks get stepped on when feed trucks arrive and cows rush to the bunks.
- Make sure facilities are calf-friendly. Water tanks and bunks in creep areas must be accessible to calves, and working facilities must be flexible enough to accommodate calves, as well as mature cows.
- Expect milk sharing among calves. Jones believes a high incidence of calves robbing milk from cows other than their own mothers is inherent to the high population density of confinement cow-calf systems.

"It's kind of like a hippy commune, with lots of milk sharing going on," grins Jones, admitting that it's certainly not an ideal situation — "not very efficient," in his words. However, it's also pretty hard to prevent, and maybe not worth the effort.

• Don't discount the drylot. While there is considerable interest in housed confinement systems, Jones reminds both large and small producers that drylot situations with only the sky for a roof can and do work where climate is favorable. Syracuse experiences hot summers and periods of really cold temperatures in winter, but with little snow accumulation. The weather is relatively dry in all seasons.

"We seldom have to, but we spread cornstalks as bedding when the weather is bad," explains Jones, "and the cows end up eating most of it afterward."

"I think our experience shows that this kind of production model is viable," says Jones, allowing that ample credit goes to the Syracuse yard's former manager, Roberto Eizmendi. "Cows have brought the old yard back to life."

From the start, one of the biggest challenges has been maintaining what Jones considers to be a "specialized" labor force. The Syracuse yard maintains a work force of 16 employees and utilizes occasional day-help. Half of the full-time employees are directly involved with cattle care. Jones thinks the ideal employee for a confinement cow-calf system represents a combination of an efficiency-focused feedlot cowboy and a patient cow midwife. It's a combination of employee expertise that's hard to find.

Editor's Note: Troy Smith is a cattleman and freelance writer from Sargent, Neb.