Get It on the Calendar

Plan out your health management procedures.

by Heather Smith Thomas

Cow-calf operations generally have a seasonal schedule for herd management decisions and processes, but this schedule will vary depending on region, climate, calving season and working facilities. If cattle are out on large pastures much of the year, many common procedures can only be done at times when they are already gathered — which might be only once or twice a year — unless portable corrals are utilized out in those pastures.

Most management processes hinge on the calving cycle and the various tasks associated with breeding, calving, vaccinating, parasite control, etc.

While your individual herd health calendar should be developed with the

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VACCINATION
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Vaccinating early-weaned beef calves.

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veterinarian with whom you have established a veterinarian-client-patient relationship (VCPR), we can provide an overview of considerations to discuss with your veterinarian.

Vaccination schedule

George Barrington, professor in the Department of Veterinary Clinical Sciences at Washington State University, says the basic schedules for beef cattle vaccines depend on calving season, time of weaning, etc.

Some producers give calves certain vaccines at birth. Some cow-calf operations give newborn calves vitamin/mineral injections, and some may apply iodine to navels if cows are congregated for calving, with more risk for infections.

Banding male calves in the first day or two of life (usually when the calves are being tagged) is less stressful to the calf than castrating them later in life.

Most operations vaccinate calves at "branding" time (about 2 months of age) even if they don't brand, so calves can start building their own immunities. By that age, the temporary passive immunity they received from their dam's colostrum is about gone, and they need to ramp up their own immune system.

Revaccination preweaning acts as a booster to protect against common diseases calves may encounter during the stress of weaning, and they can start building solid immunity for later in life.

Replacements

Replacement heifers should be vaccinated at weaning age and again before their first breeding season to protect against infectious bovine rhinotracheitis (IBR) and bovine viral diarrhea (BVD). Ideally, they need three doses to give solid protection against those two viral diseases — one at branding, one at weaning, and again before breeding.

"Preg-check for the cows is a good time to do annual or semiannual vaccinations for the cow herd," Barrington says. Depending on when they calve (spring or fall), the cows and especially the heifers might need precalving vaccines to build colostrum with antibodies to protect their newborn calves from scours in the first weeks of life.

Lee Meyring, cow-calf veterinarian at Steamboat Springs, Colo., says timing of vaccines always depends on the operation.

"Plus, we've learned things in the past decade about timing for scours vaccines prior to calving," he says. "We used to say it should be two weeks before cows start calving, but now realize we need to do it four to six weeks ahead."

If a producer has problems with sickness in weaned calves, it helps to vaccinate at branding time and then provide a booster preweaning.

"Some people have never given anything at branding other than seven- or eight-way clostridial vaccines (against blackleg, etc.)," Meyring observes. "It may pay to also vaccinate against pathogens that cause respiratory problems, especially if weaning-age calves are getting pneumonia, or some calves are developing 'summer pneumonia' while still on the cows."

Meyring advises looking at the production cycle and tweaking the timing of vaccines accordingly.

It pays to reduce stress when calves are vaccinated, since stress hinders the immune system, he adds. Stressed calves may be unable to mount a good immune response to vaccine.

Mineral boost

Boosting the calf's immune system with an injectable trace mineral product at vaccination may be of benefit, he says. Minerals are crucial to health and a strong immune system. Most of his clients have a good oral mineral program to make sure copper (Cu) levels are adequate.

"They have me check copper levels in their herd, and some of them — when doing anything stressful like vaccinating, weaning, etc. — give an injectable product," he says.

A good oral mineral program year-round (blocks or a loose salt-and-mineral mix) is important, but cattle may not consume enough during certain times of the year.

If cattle are out on rangeland, it is a challenge to keep mineral in front of them all the time, says Meyring.

"Copper levels in our region are hard to maintain," he admits. "In much of the West, molybdenum ties up copper, and the body cannot absorb enough from the GI (gastrointestinal) tract to have adequate levels."

Parasite control

Parasite control will depend on climate. In a northern climate, cattle generally need to be treated for lice in early winter. In a warm, wet climate or on irrigated pasture, cattle may need to be dewormed.

Barrington says ranchers in the Northwest don't have to worry as much about worms.

"In the South and Southeast, however,

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parasites may be a problem year-round," he warns. "No matter where you live, parasitologists now recommend fewer scheduled dewormings — mainly targeting just the cattle that need to be dewormed."

This strategy helps avoid worms becoming resistant to the anthelmintics, or dewormers.

"We can take fecal samples and egg counts to see whether a herd actually has a worm problem. This is probably cheaper in the long run than simply deworming every animal a certain time each year," Barrington says. "We can do pooled samples, with a subset of the herd, to guide deworming."

The worms of concern will differ by region, says Tom Yazwinski, professor of animal science at the University of Arkansas. "In southern areas our major worms are Cooperia (an intestinal worm), Ostertagia (brown stomach worm) and the barber pole worm (Haemonchus)."

He recommends cow-calf operations treat cows about two months before calving.

"This is usually the only time of year you need to treat them," he says. Calving time is when the cow is most immunologically compromised.

"We can hit worms when the cow needs to get rid of them, and she will milk better. With more milk production, you get a healthier, stronger, faster-growing calf, so you get several indirect effects from deworming the mama cow," he reasons. Killing worms when they are most abundant and active in the cow will also halt most of the egg production and minimize recontamination of pastures.

"Some people recommend treating calves at branding or weaning," says Yazwinski. "Having your veterinarian guide your program is essential, doing fecal egg counts on calves to see how wormy they are. If necessary, calves can be dewormed every spring and fall until they are mature, at which point they'll only need dewormed once a year."

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Since there are no drugs to kill immature liver flukes, producers must rely on seasonal treatment after they mature. That would be fall/early winter in the South and spring or early summer in the North, according to Tom Yazwinski.

The veterinarian can also help guide you regarding products to use and when.

"Some operations have such low stocking rates — with cattle spread over large, dry range pastures — they are unlikely to have many worms," he says, noting that some cattle out West won't need to be dewormed. "In our part of the country, however, we can be sure we'll have wormy calves by weaning; they are grazing intensively on small pastures."

Liver flukes

Some regions also have problems with flukes.

"There are no drugs that kill immature flukes. The host animal has to be infested for at least two months (with immature flukes causing damage as they migrate through the liver) before you can kill them. We can give a seasonal treatment after they mature, which would be fall/early winter in the South and spring or early summer in the North," says Yazwinski.

"You are letting them do two months of destruction in the animal, then killing adult flukes before they have a chance to pass eggs that would recontaminate the pasture," he explains. Over time, this might help reduce the number of flukes cattle pick up.

"I gave some talks in Montana, and those ranchers are more concerned about lice and flukes than intestinal worms. The rest of the country is worried about roundworms; but the Northwest, North Central and Southeast also have to worry about flukes," Yazwinski says. It pays to work with your herd health veterinarian to help guide your parasite program, knowing what the problem is in your region and on your ranch.

Beef cattle are raised in so many different environments that no one can make generalized recommendations. A herd health calendar should revolve around your calving season, to schedule certain procedures and do them when they are most practical and beneficial in that production cycle. ABB

Editor's note: Heather Smith Thomas is a freelance writer and cattlewoman from Salmon, Idaho.

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