



by Heather Smith Thomas

Parasites that have the greatest economic effect on cattle during winter are lice, grubs and worms. Lice populations often increase dramatically in cold weather unless treated. Grubs — immature stages of the heel fly, overwintering inside the body — negatively affect weight gain and also damage the hide when burrowing out in the spring. Worms spend most of their life cycle inside the animal, robbing it of nutrients and sometimes causing other health problems. Most producers and feeders routinely treat cattle in the fall to rid animals of these free-loading parasites.

Jack Campbell, entomologist at University of Nebraska Research and Extension Center, N. Platte, Neb., says that most new insecticides are broad spectrum, killing internal parasites as well as lice.

“Most people treat all new cattle coming into feedlots, as a general principle. Timing is important, however, for best effectiveness,” Campbell says. “In a cow-calf operation or stocker program, cattle are often treated too early in the season, if cattle are being vaccinated or preg-checked early.

“You can’t expect the treatment to last all winter long, in those instances, particularly for lice. Our recommendation for stocker or range cattle is to check those in late December or early January — even if they were treated in the fall — to see if lice are building up. If so, they need to be treated again, and you don’t necessarily need to use a systemic product that would kill all internal parasites; you just

need a treatment for lice. There are a number of products that work for that. At that time of year, I would go with whatever product is cheapest. Most of them are effective for lice control,” he says. “Some of the old grubicide pour-ons will do a good job and are cheaper than the new products. As long as the residual effect of the product will last 14 days or so — long enough to get the late-hatching lice — you will be OK.”

Most of the oil-based pour-ons for lice have a good residual effect unless it rains or snows on the animal, Campbell explains. The oil-based products work against both biting and sucking lice, and travel through the hair coat like a natural body oil; they were developed with this principle in mind.

To check for lice, look closely at the hair around the neck, face and back of the animal. “They are a little hard to see on dark-skinned animals, but if you have a flashlight you can see them,” Campbell says. Any new animals brought into the herd should be treated, unless there is a treatment record on them, since this is the most common way to reintroduce lice into a herd.

Treatment methods

There are a number of treatment methods available for parasite control — dust bags, ear tags, sprays and pour-ons — but the easiest method for most people seems to be the injectable or pour-on, ivermectin-type compounds. Since cattle are usually being worked in the fall anyway, this is an ideal time to use them, and a way to make sure that every animal

gets treated. The ear tags and dust bags (targeting fly control) have some effect on lice, but don’t eliminate them like the pour-on products.

“One problem with the advertisements for systemic insecticide products is that they tend to exaggerate how long the treatment will last for lice control, because companies are so competitive. We get complaints later in the season because the cattle get lice again. I think they will soon stop making those claims, because their guarantee is that they have to replace it with new product if the cattle get lice again before spring. I’ve seen it happen where the company had to re-treat the whole herd for free, because cattle were treated in late August or early September, and by January had lice again,” says Campbell.

Sometimes treated cattle become reinfested because they are later mingled with untreated cattle. Perhaps neighbors’ cattle get in and intermix, or a producer forgets to treat a bunch of heifers or does some groups of cattle at a later date. After cattle are treated, there is usually a residual effect for a while, but if cattle are in contact with lousy cattle they may become reinfested.

Most of the products are fairly good at controlling parasites, but can’t give yearlong lice control. “In our trials, which are always done at the same time of year, in early January, there was no difference between the new systemic products; they all do a good job. We’ve also used other products with equal success, such as the old Warbex, which some people still use,” Campbell says. “One problem with most of the endectocides is that early on, when people were using ivermectin as an injection, it didn’t get the biting lice, just the sucking lice. So we had a buildup of biting lice on our herds until the pour-on formulations came out. Some people still use the injections, however, since they feel that those give a better kill on internal parasites, and the pour-ons are better for external parasites. I don’t know if that’s been proven, but we do know that the injection is not as effective for chewing lice as it is for blood-sucking lice.”

Internal parasites

Regarding internal parasites, there is controversy over the best time to treat. It may depend on where you live. "If you are in Mississippi or Louisiana, you probably need to treat both times. In our country, the general consensus is that it's better to treat in the spring for internal parasites on pasture cattle. This is not true for feedlot cattle. If those are treated in the fall for grubs and lice, this will also be killing any internal parasites at that time," Campbell explains.

Usually internal parasites are a more serious problem in wet pastures, since eggs pass out with manure and some types hatch into larvae that crawl up onto forage plants to be eaten.

Greg Johnson, Montana State University (Bozeman) entomologist, says most producers in his area are using the ivermectin-like products for parasite control. Less people are using Warbex and the older products.

"We have some very effective broad-spectrum ivermectin-type products that work extremely well on internal

parasites as well as on external parasites. Some of these products are doramectin (Dectomax), eprinomectin (Eprinex), ivermectin (Ivermax, Ultramectrin, Ivomec) and moxidectin (Cydectin). One of the positive benefits of Eprinex and Cydectin is that they have no restrictions for dairy cattle, whereas many of the other products have restrictions," Johnson says. "You need to use a pour-on for control of biting lice, so you need to determine which kinds of lice you have to choose the right product. For grub control we don't recommend treatment until after a killing frost, so there will be no more heel flies and no more eggs laid," he says.

There's also a risk in treating for grubs too late in the season, when they are migrating through the body. One species travels to the esophagus wall and the other goes next to the spinal column. After that they both travel to the back and spend their warble stage in tissue beneath the skin. If the grubs are killed when they are next to the esophagus or the spine, the

swelling and inflammation created can be dangerous to the host animal.

A "downer" animal can be treated with anti-inflammatory drugs to minimize swelling and inflammation from this reaction. Such reactions are uncommon, only about a .1% incidence in feedlot cattle treated in winter after the cutoff date, Campbell says. The benefits of grub treatment, even midwinter, usually outweigh any problems with reactions.

To be on the safe side, if you are doing a midwinter treatment just for lice control, it's best to use a contact insecticide rather than a systemic product, says Johnson. The cutoff period for grub control will vary, depending on how far North you live or how soon you have cold weather.

For a good control program, it's best to work closely with your local veterinarian to set up a health management program that includes parasite control. **HW**