

EB1742

PARASITES OF CATTLE

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Internal and external parasites can cause poor performance of cattle and can lead to economic loss for the owner. Cattlemen must understand the types of parasitisms they may encounter and methods for controlling parasites in order to minimize losses.

Prevention and correction of parasitism is based on knowledge of factors that affect both the survival of parasites in the environment and their transmission to the host. Completely eliminating parasites is difficult using present methods of treatment and management. However, you can reduce the severe effects of cattle parasites by using chemical insecticides and dewormers in conjunction with sound management programs. Cattle in the Northwest have a number of important internal and external parasites. The critical internal parasites are: (1) stomach worms, (2) liver flukes, (3) lung worms, and (4) coccidia. The critical external parasites are (1) grubs, (2) lice, (3) mange mites, (4) ticks, and (5) flies.

Each of the parasites mentioned above can cause measurable loss under certain conditions. You must determine when treatment will be economically beneficial. This is easy to predict for some infections, but difficult to predict for others.

Identifying Parasites

Stomach Worms. These parasites are a particular problem when pastures are irrigated and in areas of high rainfall. Deworm cattle that graze irrigated pastures or lush, moist pastures or serious infections might develop. In other types of pasture, economic response to deworming is often difficult to demonstrate. The cattle may be better off without the worms, but the cattle producer may not actually make money by deworming. Make the decision in the latter case with the assistance of a veterinarian. The veterinarian can estimate worm numbers by counting parasite eggs in manure samples and thus predict success based on an accurate diagnosis. Signs of gastrointestinal parasitism include poor growth, anemia, "bottle jaw," diarrhea, weight loss, weakness, rough hair coat, dehydration, poor appetite, and unthriftiness.

Gastrointestinal parasitism is often present as a subclinical infection which can cause subtle loss.

Some parasitologists estimate that average numbers of worms reduce weight gains by 10–20%. Economic losses are greatest in young growing calves.

Liver Flukes. These parasites are common in the Northwest and often become a problem where irrigation water or heavy rainfall causes flooding of low-lying pasture land. Flukes are also a problem in low, marshy areas or areas adjacent to lakes, ponds, and streams. Flukes damage the cattle's liver. Signs of fluke infection include weakness, diarrhea, anemia, and unthriftiness. Affected livers are condemned at packing plants, reducing earnings. Also, red water disease is sometimes an aftermath of fluke infection.

Lung Worms. Clinical lung worm infections occur sporadically in cattle in the Northwest. When they do occur, treat them promptly. Signs of lung worm infection include difficult breathing, weight loss, and a husky cough. Not all dewormers are effective against lung worms, so check the chart at the end of this publication to be sure the product you are using is suitable.

Coccidia. These protozoan parasites infect the intestines of cattle and can cause a severe diarrheal disease called coccidiosis. This condition is most often seen in young animals when they are grouped together and stressed. If the problem occurs, treat it. If it is anticipated from previous experience or stressful conditions, take prophylactic measures, such as feeding coccidiostats.

Grubs. These parasites are actually fly maggots and very common in the Northwest. Most cattle are infected during the summer by adult flies which lay eggs on the cattle's legs and abdomen. The eggs then hatch and the maggots or grubs migrate through the animal, appearing on the cattle's backs in late winter and spring. Migrating grubs cause decreased weight gains and damaged hides. "Grubby" cattle are often discounted by the packer. It pays to routinely treat grubs in the fall of the year.

Lice. Several types of biting and sucking lice are found on cattle. They cause cattle to spend a great deal of time scratching, which results in loss of weight. Infestations, which sometimes become quite

troublesome, are most common in the winter. If lice are a problem, they can and should be controlled.

Mange. Three different types of mange are found in cattle. These are psoroptic mange or scabies, sarcoptic mange and chorioptic mange. Psoroptic mange is of most concern. It was nearly eradicated ten to fifteen years ago but has made a dramatic comeback. This is unfortunate because it is a severe clinical disease. Sarcoptic mange also appears to be increasing in prevalence. While not as contagious or pathogenic as scabies, it is still serious. Chorioptic mange is the least pathogenic of the mange conditions but you should treat it. All cases of mange must be reported to the State Veterinarian. Treatment of exposed animals is required.

Ticks. Cattle can be infected with several types of ticks. Infestations usually are not severe and, in many instances, do not require treatment. When large numbers of ticks are observed, appropriate treatment is recommended.

Flies. Control of flies is worthwhile but difficult. Drugs currently approved as sprays and dusts for fly control have little residual effect so constant attention is required to reduce numbers of these pests. Insecticidal eartags also may be helpful. They remain effective in the Northwest although resistant flies have developed in most other regions of the United States.

Controlling Parasites

Combine parasite control in cow/calf operations with other management procedures. That is, treat animals when they are worked for other purposes whenever possible. Recommendations are as follows:

Treat stomach worms and other gastrointestinal parasites when necessary. On irrigated operations, treat before animals go on pasture and as often as necessary thereafter. Treatment may not be necessary in nonirrigated situations. Several drugs are available and effective (see chart). If the cost of treating all cattle is prohibitive, deworm cattle under 2 years of age.

Treat liver flukes with clorsulon when they occur. To make progress against this infection, one treatment in mid-winter or 2 treatments, spring and late fall, are needed. Two drugs currently are available for this purpose (see chart).

Lung worms are a problem only on rare occasions. Several drugs are available for use when needed (see chart).

Coccidiosis can cause severe losses. If expected, treat it by adding decoquinate to feed or amprolium to drinking water. After an outbreak has occurred, administer amprolium in water. Treat all animals in a lot where this disease has been found whether they are showing signs or not.

Always treat grubs. Ordinarily this is done in the fall when cows are being tested for pregnancy. The compounds used are organophosphates administered as pour-on preparations or ivermectin. Always use the correct dose. Administer before grubs have entered areas of the body where their death may cause unwanted reactions. Information on the label indicates critical dates in your area.

Lice are treated by many producers. The pour-on for grubs or ivermectin will reduce numbers of lice in the fall, but, in some instances, a second treatment may be required in midwinter.

You must report mange. The State Veterinarian will institute control measures. Ordinarily treatment consists of spraying, dipping, or treating with ivermectin.

Ticks are not difficult to treat. Spray or dip infected cattle in an effective drug or inject with ivermectin. One type of tick (*Otobius*) is found in the ears of cattle and is more difficult to treat. Always get the drug into the ear when you use sprays or dips to treat this parasite.

Flies present a substantial control problem. Compounds available for use today have little residual action so spraying only gives temporary relief. Use dust bags and eartags impregnated with insecticide for best results.

Selected Cattle Wormers Available in the United States

Generic Drug Name	Stomach Worms	Dormant Larvae	Small Intestine Worms	Large Intestine Worms	Lung Worms	Flukes	Dosage Form	Remarks
Albendazole							Drench	Do not use during first 45 days of pregnancy
Clorsulon							Drench	Only effective for flukes
Fenbendazole							Drench, Paste	Effective against dormant larvae at twice the recommended dose
Ivermectin							Injectable Pour-on	Kills grubs, mange mites, some lice and ticks
Levamisol							Pour on, Bolus, Drench, Gel, Injectable, Feed mix	Can't use with pour-on for grubs. Not effective against dormant larvae.
Ivomec-F							Drench	
Oxfendazole							Rumen injection, Drench	Safe for cattle in all stages of pregnancy

effective
 not effective



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