COSTLY MISTAKES

By R. F. Shumard[1]

Besides intensive research with animal diseases, one of the major functions of the Department of Veterinary Science is diagnostic service. The majority of the diagnoses are of diseases that are directly caused by, or are indirectly influenced by, the presence of parasites. During the course of the diagnostic procedure it is vital to secure a good history of the case as it is many times essential for differentiation among a group of like diseases.

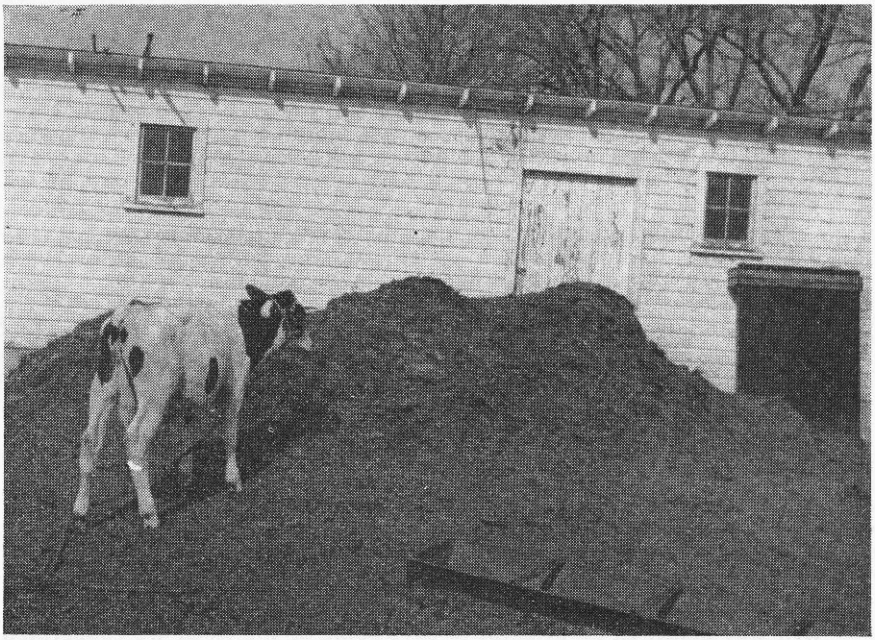

FIGURE 1.—*Even though an adventuresome dairy heifer likes to climb like a mountain goat, there still is no justifiable reason to have a mountain of manure beside the barn door, making a haven for livestock parasites and a reservoir of disease germs.*

Following are some of the histories that have been collected where **costly mistakes** in parasite control were made. They are recorded here, along with comments with the intention of helping prevent more of these costly mistakes.

Case 1.

A young man eagerly entered the sheep raising business with a healthy flock of purebred ewes and rams. His pasture land was good but not as succulent as he desired. The first year was very successful; a good crop of ewe lambs was retained and profits from the wool clip more than paid for his operating costs. He was not yet satisfied with the succulence of his pastures.

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Knowing that he could improve his pastures with fertilizer and that sheep manure usually makes good fertilizer, he conscientiously saved all the manure during the winter and, in the spring, spread it on his pastures. The succulence of the pastures was greatly improved but his new lamb crop began dying a few weeks after lambs were weaned. His yearling ewes also began to lose weight.

When he consulted this department, he had already lost 80 per cent of his lambs and 20 per cent of his yearling ewes. The diagnosis by post mortem examination was acute parasitism due to stomach worms, large-mouth bowel worms, and bankrupt worms. He had spread the young of these parasites on his pastures when he spread on the manure. It does not take many worms to highly contaminate the feces of their host when a single female worm lays between 5,000 and 10,000 eggs per day.

Case 2.

Parasite problems in a large purebred beef herd had been encountered before but had not been of a serious nature. In previous years manure from the wintering barns had been composted and then spread on the pasture. However, the compost heap became depleted and, for two years, the practice was to spread the winter's manure the following spring. The young animals did not gain as well as they should have done, and it became an impossible task to fit some of the animals for show.

Fecal examinations were made and revealed a moderate parasite load. With treatment and a strict parasite control program these animals are once more healthy, gaining weight and winning at livestock shows.

Case 3.

It is very discouraging to have disease problems in your own herd or flock, but it is even more discouraging when disease is purchased in additions to the herd or flock.

A pair of young farmers purchased a flock of 300 ewes to breed them to their purebred rams for a feeder lamb crop. Instead of purchasing the best ewes available they purchased second grade animals with the thought that they could fatten them up before breeding, after treating for parasites. Most of the ewes refused to respond after treatment even though the amount and type of feed was highly satisfactory.

After breeding, some of the ewes died. A veterinarian was called and, upon post mortem examination, a diagnosis of heavy lung infestation was made. In an attempt to save some of the flock we cooperated with the veterinarian in treatment of the ewes. This type of treatment, developed by Dr. D. F. Eveleth of this department, is radical in that a mixture of alcohol, glycerine, and phenothiazine is injected into the trachea (windpipe). During treatment, five animals died.

Despite treatment, many of the ewes died and some that did lamb were unable to support these lambs. Total loss was estimated at more than $2,000. These men bought their trouble when they bought lungworms with their ewes.

Case 4.

A feed lot operator with a large operation routinely allowed several pigs to run in his beef feedlot so that they could clean up the undigested corn and other nutritionally valuable substances from the dung of the cattle. Through some means, unknown in this case, coccidia were introduced into the feedlot. The action of the pigs rooting in the dung exposed more of the coccidia oocysts to favorable conditions so that more of these oocysts became infective and resulted in an outbreak of acute coccidiosis and the loss of several valuable animals. Moreover, treatment costs for infected animals were extremely high.

While the coccidia that infect cattle do not infect pigs and those that infect pigs do not infect cattle, the pigs scattered the oocysts especially into the drinking water of the cattle.

It must also be remembered that the infective eggs of the large roundworm of pigs will hatch in the intestine of a bovine and the young worms will migrate through the liver and lungs and may cause serious damage.

Case 5.

Some farmers follow a rotating system for their livestock as well as their plant crops. This system can oftentimes be advantageous but not when parasites are involved. Some of the parasites of sheep are infective to cattle and vice versa. One of the more dangerous is the large stomach worm.

A farmer with limited pasture facilities had considerable trouble with stomach worms in his lambs. After early treatment he satisfactorily raised the lambs and sold them in late August as feeders. The weather had been wet for the area and the pasture was in good condition.

After waiting for two weeks for a good growth, he turned his beef herd into the pasture. Within a month the young animals began to lose weight and became anemic. When a parasite control program was started the animals recovered and gained back much of their lost weight. However, they did not finish out as they should have, and considerable expense was necessary to bring them to satisfactory slaughter grade.

The cases cited here are common mistakes that are often made. If the following rules are strictly adhered to, worm parasites should not be a problem.

1. **Treat all of your stock (sheep and cattle) at least twice a year, preferably with a phenothiazine drench. It is best to treat them before turning them out on pasture in the spring and when taking them off pasture in the fall.**
2. **Treat again whenever worm parasites are suspected.**
3. **Feed low-level phenothiazine in the salt or feed throughout the year.**
4. **Be sure you are getting the best for your money when you buy additional or replacement stock.**
5. **When you buy stock, keep them separated from your present stock for two weeks and treat all of them for worms. Also watch for other diseases.**
6. **Do not spread manure on your pasture land unless it has been composted for at least two years. If you spread fresh or nearly fresh manure, put it only on fields that will be plowed for crops and not used for grazing.**
7. **Keep all of your animal habitats (barns, sheds, etc.) in as sanitary condition as possible. There is no drug or treatment that will replace proper sanitation.**