Horse bots treatment control program

By Woods Houghton

This is a little different subject then my normal new paper articles but my master’s degree is in veterinary parasitology so it is something I would like to talk about. After all we have almost as many horses in Eddy County as people if not more. The best time to treat for bots is between mid-October and late November. But back when we tube wormed horses we tried to treat in January, so it is a habit for many horse owners to treat in January. I know of a few horses that have recently died of colic, so I wonder if we remembering to treat for bots.

Three types of horse bots are found in Eddy County: the common horse bot or nit fly, Gasterophilus intestinalis; the throat bot or chin fly, G. nasalis; and the nose bot or nose fly, G. hemorrhoidalis. The adults of these flies resemble small honeybees.

The adult horse bot fly attaches its eggs to horse hairs, principally on the forelegs, but occasionally inside the knees, on the belly, shoulders, and fetlocks. The throat bot adult attaches its eggs to hairs beneath the jaws, while the nose bot fly deposits its eggs on the short hairs of the lips. The incubation period is usually short; however, hatching may be delayed by cold weather and viable eggs may be found on horses long after the adults have disappeared. I have pulled eggs a late as January that were viable. Larvae of the nit fly emerge directly from the egg case into the lips of the horse when he bites himself; other species hatch directly and larvae migrate unassisted to the mouth. Larvae of the nit fly parasitize the tissue of the lips and gums before passing into and attaching to the stomach; other species migrate directly to the stomach.

In the stomach, larvae remain attached and feed on the lining for about ten months. They are then passed in the feces as full-grown larvae. After the larvae reach the ground they pupate in the soil. Adults emerge from the pupae, starting the cycle again. This process generally takes one full year.

The bot fly does not sting the horse, however the fly’s presence annoys the horse and the eggs may cause a tickling sensation that irritates the animal. The larval stage is the most damaging to the horse. While small larval populations generally produce little damage, high populations take nutrients from both the stomach lining and its contents, producing unthrifty horses with lowered vitality, and resulting in emaciation and reduced work capacity. Severely infested animals will show signs of digestive upsets and colic. Serious consequences are possible if bot populations become dense enough to block the passage from the stomach to the intestine. Bots can also stimulate secondary infections of the stomach lining. Death can occur in the unusual event where bot feeding activities cause stomach rupture.

Control

Most horses in New Mexico become infected with bots annually, and bot control is an essential part of good management. Horse bots can be controlled effectively by a combination of environmental management techniques and a general parasite control program. Ideally, bot control programs should begin about 30 days after all eggs have hatched. Mid-October is the earliest horses should be treated in most areas of New Mexico. Because bots can cause significant damage to horses, October-November treatment should be considered essential to an overall parasite control program. It is not too late even though it is now December.

It is impossible to control horse parasites without good paddock and stable management techniques. Fancy way of saying get rid of the manure.

When designing and implementing a drug treatment program, factors such as environment, health of the horses, and the parasites common in your area should be considered. Consultation with your veterinarian is also recommended. To enhance the effectiveness of such a program:

• Include all horses on the premises in a parasite control program.

• Isolate and treat newly acquired or transient animals before they are allowed to come in contact with resident animals.

• Reserve an appropriate time for parasite control measures. Regular, well-timed treatment is imperative.

• Minimize parasite infections in foals by treating brood mares regularly.

• Make good laboratory examinations of manure samples.
periodically to assure the effectiveness of the drug program.

• Read and understand the label on the parasite control agent before materials are administered. Follow all label instructions closely and carefully.

• Alternate parasite control drugs to help delay development of resistant parasites.

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