Parasites adapt, so rethink strategy

PENINSULA HORSEPLAY

Karen **Griffiths**

IN THESE DAYS of hearing buzz words like "parasite resistance," do you wonder if your deworming program is effective?

Well scoop that poop, bag it, tag it and give it to Sally — **Sally Coats** of Port Angeles to be exact.

The retired medical lab technician's mind has a field day as she examines horse manure under her powerful microscope.

Her venture into nematodes started in December when her horse had a life-threatening bout of colic (severe abdominal pain), which ended after an emergency truck, trailer and ferry ride to Pilchuck Veterinary Hospital in Snohomish.

There she learned that parasites can cause colic.

"I was one of the "old horse owners" who was trained to think worming should be every eight weeks," said Sally.

"I really am not too good at staying on top of that, but it turns out there's evidence horses should be wormed no more than necessary because parasite resistance to wormers is getting to be a serious concern."

I must be an old horse owner, too, because I remember the days when a veterinarian stuck a rubber tube through the nostrils to send the gut a toxic amount of deworming medicine.

The ease of just popping the lid off a tube and squirting the now taster medicine in the horse's mouth, and holding the head up until the goop is swallowed, is so much easier.

But if we don't make a radical change to the current recommended schedule of deworming every six to eight weeks, we are going to lose the battle.

Parasites are organisms that can adapt to and triumph over man-made insecticides or selection pressures.

Because most adaptations have a genetic basis, future generations of worms may not be susceptible to the same interventions that have killed their grandparents.

The changing patterns of resistance among target nematodes lend an element of urgency to making major changes in parasite control strategies.

Parasites can cause colic, weight loss, poor growth, anemia, hypoproteinemia, loss of condition and rough hair coats.

Also, large numbers of immature worms from the gut wall can cause severe and potentially fatal diarrhea.

As far as the parasite life cycle is concerned, the weather here on the North Olympic Peninsula makes for an ideal breeding ground. Spring and fall months are their most productive.

Efficacy of deworming is determined by performing what is called a fecal egg count reduction test, which is based on pre- and post-deworming fecal egg counts.

This is where Sally's lab expertise comes in.

She bought a refurbished high-quality microscope, a quantitative fecal egg count kit, donned her old white lab coat and set up shop offering egg counts for the layman at $12,50 to $15 a horse.

"It's not a very difficult test, but it does require a scope and calibrated [McMaster] slide, so it is a bit of an investment and does take a little know how," said Sally — who also is willing to teach others how to perform the test on their own horses.

By the way, deworming medications are toxic, so be sure to keep your dogs from scarfing down those tasty road apples for a day or two after deworming.

Pilchuck Veterinary Hospital recommends deworming adult horses twice a year, to be timed with the spring and fall equinox (March and September).

Recommended products are ivermectin, moxidection (Qwest) or Panacur Powerpac.

KAREN GRIFFITHS/FOR PENINSULA DAILY NEWS

Sally Coats examines horse manure for strongyle, an oval parasite of about 90 microns, under a microscope to determine the egg shedding level of a horse so it can be dewormed accordingly. Actively monitoring parasites is key helping to thwart resistance to worming medications.

One treatment should include praziquantel for tapeworm control.

Pilchuck also advises performing a fecal count at least once a year to classify horses by egg-shedding level: low shedders (less than 200 eggs per gram), only twice a year; moderate shedders (200 to 500 EPG), deworm March and September, plus either June or December (depending on time of highest pasture exposure); high shedders (more than 500 EPG), four treatments a year based on egg reappearance.

Geriatrics, hard-keepers, horses with high exposure to parasites and horses with Cushing's disease should be tested more frequently.

Horses on a daily dewormer (pyrantel tartrate) still need to be dewormed with an ivermection-based product in March and September with at least one of those treatments including praziquantel, for the tapeworms.

Consult your veterinarian about deworming pregnant mares, breeding stallions and foals.

After spending a couple of hours showing me how to perform the test and letting me examine my own horse's poop under the microscope, Sally asked me if I thought I'd want to perform my own tests in the future. She was willing to help me set up my own lab at home.

While her enthusiasm for all things parasites is beguiling, my answer was a resounding, "NO!"

In truth, I'd rather pay her than spend hours playing with, I mean, examining, fecal material.

For more information about the advantages of performing a quantitative fecal egg count test, phone Sally at 360-457-1626.

Events

■ May 22, 10 a.m. rideout. Backcountry Horsemen Peninsula Chapter ride at Miller Peninsula. Contact Tom Mix at 360-582-0460.

■ May 22-23. Equine dental clinic with Dr. Richard Vetter at Jefferson County Fairgrounds. Hosted by the Jefferson County 4-H Horse Program, Vetter also will give an equine dental presentation on Thursday, May 20, at 7 p.m. in the 4-H building at the fairgrounds. To schedule an equine appointment, contact Betty Mysak at 360-379-6931. Everyone is welcome, either with your horse or just to watch and learn.

■ May 29-30, 10 a.m. Patterned Speed Horse gaming show at Quarter Moon Ranch on West Runion Road in Carlsborg. Contact Waynora Martin 360-683-6902.

Karen Griffiths' column, Peninsula Horseplay, appears every other Wednesday.

If you have a horse event, clinic or seminar you would like listed, please e-mail Griffiths at *horse play.kbg@olympus.net* at least two weeks in advance. You can also write Griffiths at *PDN*, P.O. Box 1330, Port Angeles, WA 98362.