

New Parasite Control Strategies / Wormer Resistance Worries

Most people today are aware of the problems associated with the emergence of antibiotic-resistant bacteria; so called “super-bugs” which can no longer be killed by any of the traditional antibiotics. MRSA (methicillin resistant Staph. aureus) infections in hospitals have made the news regularly by claiming more lives each year. There is a similar problem in veterinary medicine, which is not in the news as often. In addition to antibiotic resistant bacteria, veterinarians have grown more and more concerned about the problem of internal parasites becoming resistant to common de-wormers. Internal parasites can cause a variety of problems, ranging from severe colic to life-threatening anemia, anaphylactic shock, pneumonia, and death. We have been fortunate during the last twenty years to have had an arsenal of many effective de-wormers at our disposal, which made health problems associated with internal parasites rare. However, due to overuse of these drugs, under-dosing of these drugs or inappropriate use of these drugs, resistant parasites are emerging which can not be killed with any of the standard de-wormers, and animals are literally dying due to our inability to treat them for these previously preventable problems. New drugs are being developed, but resistance is developing faster.

Due to these developments, Black Pond Veterinary Services, together with the American Association of Equine Practitioners (AAEP) and the American Association of Small Ruminant Practitioners (AASRP), have started recommending a revised de-worming strategy. Rather than blindly de-worming horses every 6 to 8 weeks whether or not they have any parasites, and randomly rotating de-wormers, animals should be tested for internal parasites with fecal exams twice a year, and only treated if they are actually infected. This reduces the amount of unnecessary medication the horse or ruminant is exposed to, as well as decreasing the selection pressure on the parasites to develop resistance. Additionally, in horses, regular fecal examinations are also a great opportunity to check for sand passed in manure and evaluate the risk of sand-colic and the need for a psyllium-based supplement. If the parasite load is high, the fecal exam can be repeated to assess if the de-worming was effective, or if further treatment is necessary. If many horses or ruminants on the premises have high numbers of parasites on a regular basis, this may be due to management practices that are unwittingly perpetuating the life-cycle of the parasites, such as spreading manure on pastures. We can also identify those animals that carry high parasite loads on a regular basis, contaminating your premise, and possibly indicating that that animal may have some immunological deficiency predisposing to high worm loads. We are excited about the new recommendations and happy as always to answer any questions our clients may have about the change. Please see the summary below:

- Spring: Worm all animals on the premise and follow-up with a fecal egg count during the time period suggested for the class of wormer selected. Identify persistently infected animals and de-worm again according to the results

- Mid- summer: worm all horses or livestock showing or travelling

- Fall: worm with ivermectin/tape worm meds combo and follow-up two weeks later with a fecal egg count to identify persistent shedders of parasite eggs.
- Year-round: pick pastures clean every 2 to 3 days; sunlight and hot dry conditions are your friend – get pastures to dry out; rotate pastures every 4 to 6 weeks if possible to break parasite cycle; cross- species grazing if possible. Winter and the frozen ground allows our pastures to recover if the piles of manure are covered by snow and ice, but we should all be diligent about clearing them of accumulated manure before things thaw too much in the spring.
- Worm and quarantine all new arrivals – fecal egg count negative before turning out on pastures. Realize that a negative fecal may not guarantee your horse does not have worms, it only means there are no eggs being shed at that time. Your horse may have sexually immature parasites or unisex populations of parasites so some minimal de-worming needs to be done. Additionally, young horses (those less than 2 years of age need to be wormed more aggressively than adult horses who have likely developed some natural resistance to intestinal parasites.