

Equine Veterinary Services

The use of Worm Egg Counts in the Responsible Management of Equine Parasites

Introduction

When considering your best plan of attack to control parasitic burdens in your horses it is important to remember that horses evolved along side intestinal parasites and it is normal for them to have a minimal infestation of worms. Only overwhelming worm burdens are detrimental to your horse's well being and performance.

A base line worm infestation will stimulate an innate natural resistance to worms, while 'Sterile' or 'Clean' horses become more at risk of overwhelming infections. Also repeated across the board dosing of all horses as recommended by some manufacturers is leading to an increased resistance of the parasites to many groups of drugs. For this



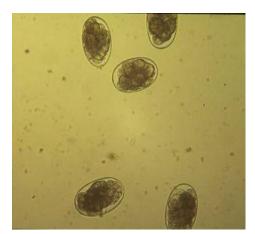
reason current veterinary research suggests that frequent, blanket, broad-spectrum dosing of all horses is contraindicated.

For about the same cost as worming a horse, Equine Veterinary Services can perform a simple Worm Egg Count (WEG) on a fresh sample of manure to help you distinguish between horses carrying a safe level of worms and horses with heavy worm burdens. This then allows for the strategic worming of only those horses that actually require treatment, usually less than 25% of all horses.

Worm Egg Counts

In order to perform a Worm Egg Count we need approximately 10g of fresh manure (roughly golf ball in size) packaged in a sealed container that excludes excess air (a zip locked bag is ideal), which is then stored in a cool place (fridge) until delivered to the surgery with in 12-24 hours of being produced. Each sample should be clearly labelled and dated. Results will be obtained daily and then appropriate treatment protocols advised.

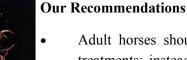
Only horses shedding more than 200 Eggs Per Gram should be treated. The underlying cause of any heavy infestation should then be identified. Consideration will be given to a lack of immunity possibly associated with concurrent disease, heavy infection rates from a 'contaminated / overcrowded paddock' or as a result of parasite resistance to the treatments previously used.



Strongyle worm eggs in stool sample

When heavy shedders are identified it is advisable that their manure be rechecked two to three weeks after treatment to help identify cases of primary resistance. This is of importance because any worm eggs found at the subsequent test will indicate resistance of the worms to the treatment given and these eggs will continue to be dispersed into the environment, further contaminating your paddocks with resistant worms that can spread to all your horses in time.

Ascaris Worms



- Adult horses should not be given repeated, blanket, broad-spectrum worm treatments; instead fresh stool samples should be collected twice a year and submitted for a Worm Egg Count.
- Only horses with a proven heavy worm infestation should be treated.
- Heavily infected horses should receive a follow up Worm Egg Count two to three weeks later to rule out the presence of resistant worms.
- The underlying cause of any heavy infections should be identified and management protocols put in place to prevent a recurrence. These may include improved 'pick up' of manure from the paddocks to prevent recontamination, changing the selected wormer, and treating any underlying disease.
- Depending on your Worm Egg Count results you should be able to implement strategies that will allow you to both reduce your worming costs and your effective worm burdens.



Bots



Parascaris Equorum Egg



Mature worms lay eggs

The horse eats the eggs

Larvae mature into adult worms

The eggs hatch in the gut

EQUINE VETERINARY SERVICES 07 4630 9983

31 Luck Road, Hodgsonvale, QLD, 4352

Further considerations

When formulating a parasite control programme it is important to remember that horses less than two years old will fall outside our general recommendations. This is because they have not had sufficient time to develop their own innate immunity and can be susceptible to heavy worm burdens from contaminated pastures.

For this reason we recommend that all young horses are wormed every six weeks with a broad spectrum wormer until they are two years of age. However we still recommend that you submit a stool sample twice a year for a worm egg count to ensure that your treatment protocol is adequate and no resistance has developed. Changing the class of drug used (not just the brand) annually will further reduce the chance of resistance developing.

Finally because of the presence of so many young horses, we recommend that all Stud Farms should consult with their veterinarian to formulate the best worming strategy as this will vary from premises to premises.