

“I’ve been doing FECs for my horses and getting no/low egg counts. Then I wormed my horses in early winter and found their droppings contained lots of dead worms. What’s going on?”

A client contacted me this week about this very issue, so I thought I’d share the response I gave to her with all of you who follow EBW on Facebook.



We discussed the factors that might have influenced the nil/low readings followed by appearance of dead strongyles following treatment. First, we discussed her sampling technique to make sure it was correct –

- the flotation solution – was it in the correct proportions to make sure the eggs were floating?
- the slides – were they clean? Was she magnifying 100x with her microscope?
- where was she taking the sample from? We (EBW) advise siphoning up solution from just beneath the surface to collect the eggs in suspension. My client mentioned her veterinarian – who used a different procedure – suggested she siphon from the very surface. While this sounds logical (eggs will float to the surface), you can also pick up a lot of air bubbles this way which might compromise the accuracy of the count. The technique used by EBW is one adopted from the NSW Department of Primary Industry’s **PROfarm** course (for farmers) which recommends siphoning the eggs from just beneath the surface.

All of my client’s procedures were spot on so next we considered some of the worm factors which seems to allow them to ‘hide’ inside the horse –

- at any one time there could be thousands of strongyles that are encysted within the mucosa of the horse’s intestine. Being non-patent (non-egg producing) this will give a nil/low FEC result but, short of a necropsy, we can never know

the burden of encysted worms (or any worms for that matter) inside a horse, so we could discount this factor on this occasion.

- drugs, feeds, competition for host nutrients may alter the vigour of parasites and lead to a temporary cessation of egg production. My client hadn’t treated the horses for several months, they were all receiving good nutrition and were in good health.
- female strongyles have periods of high and low egg production and, at any given time, a population of strongyles will comprise both patent and non-patent worms. This can be seasonal with the worms increasing egg production when external environmental conditions are likely to be most conducive to the survival of their offspring.

This seems the most probable explanation - the worms were in a period of low patency, ie, they were living within the caecum and large colon, but producing minimal eggs. As we are now in early winter, egg production typically levels off until conditions are more favourable for the offspring to survive when conditions warm up in spring.

It is important to remember that the objective of evidence-based worming is to **delay the onset of resistance to all of our currently available anthelmintics**. We can only do this by *not* eradicating all small strongyles, but by limiting the numbers of eggs they shed onto the pasture where infective larvae can be picked up by other horses. Only a small percentage of all horses are likely to be ‘high egg-shedders’ (shedding in excess of 500 eggs per gram of manure) and, ideally, these are the horses we target for treatment. By doing this we are able to use anthelmintics more judiciously which will ensure we still have the use of them into the future.

Remember: the clue is in the poo! Always monitor your horses’ egg-shedding status with FECs.

