

What are we trying to control? Some common species of worms that affect horses include:



Roundworm: There are many species of roundworm that affect horses. For example Ascarids - *Parascaris Equorum* - can grow up to 50cm in length, and are dangerous to foals and young horses. Older horses are more immune. The larvae migrate through the gut wall to the liver and then to the lungs. The larvae are coughed up and swallowed where they mature to egg laying adults within the gut. They can cause respiratory signs (such as a cough or nasal discharge) as the larvae journey through the lungs. Other signs include weight loss, pot-bellied appearance and diarrhoea. Awareness of roundworm is required all year round and will show up in a Faecal Egg Count Test (FEC).



Large Redworms (strongyles) and Small Redworms (cyathostomins): These are the most common and harmful worms found in horses, with the encysted larval stages giving the greatest cause for concern (1). The larvae hibernate as cysts within the gut wall during winter and emerge in large numbers in spring, causing liver damage to the intestines during the process. Control needs to be focused on all stages of the parasites' life cycle, with specific attention paid to the encysted larvae, which can cause life threatening disease at any age of the horse.

(1) Love et al. (1999) *Veterinary Parasitology* 85, 113-122



Tapeworm (*Anoplocephala perfoliata*): Horses pick up tapeworm by ingesting the forage mite (the intermediate host). Tapeworms can infect horses during any season of the year, (2) but exposure is greater during periods of prolonged grazing. Tapeworm infections can result in diarrhoea, spasmodic and ileal impaction and colic.

(2) Baib et a (1977) *NZVJ* 25: 27-28



Bots (*Gastrophilus*): Bot flies are one of the most common irritants to horses during the summer grazing season. They lay sticky yellow eggs on horses' coats, these are then ingested as a horse grooms itself by licking. On entering the mouth' the eggs hatch out into larvae and migrate to the stomach. The larvae can reside in a horse's stomach for 10 to 12 months before maturing and emerging via dung. Treatment against bots is recommended in the winter after adult flies have died and before the bots mature. Removal of eggs from a horse's legs using a bot knife also helps to control bots

Fact - a female adult ascarid can lay up to 200,000 eggs per day!

Different species of worms - anatomical location of main internal parasites in horses



There are many types of parasites.

The effective control of intestinal worms requires knowledge of the type of parasite, the seasonal climatic variations of your area, the housing and feed sources being used, the management practices of the stable or farm, and the age of your horse.

Like any endeavor, good parasite control requires effective tools, good timing and sufficient knowledge of the problem at hand. It is very important that horses are treated with the right wormer at the right time of the year. This can be achieved with a targeted worming programme.

Parasite control measures encompass two broad objectives:

- Minimise your horses' exposure to parasites
- Reduce parasites inside your horse

You can accomplish this through practical farm management practices and a strategic drenching programme. Eggs produced by an adult worm will be shed in horse' faeces, therefore increasing any existing worm burden on the pasture. The cycle continues as contaminated pasture has the potential to infect grazing horses. Eggs ingested from infected pasture can develop inside a horse's gut or lungs where they have the potential to cause disease.