

Parascaris equorum

Horse roundworm

Description: The horse roundworm, an ascarid, is a rigid, heavy-bodied worm up to 50 centimeters long.

Predilection site: Small intestine.

Geographic distribution: Very common throughout the US.

Life cycle: *Parascaris* has a direct life cycle typical of other large roundworm species. Within the egg, the second-stage (L₂) larvae develop to infectivity on pasture in 10 days to 6 weeks. The swallowed ova hatch in the intestine, and the larvae penetrate the wall of the intestine, and are carried to the liver and lungs. They then follow a pattern of tracheal migration. Larvae that have been coughed up and swallowed mature in the small intestine. The eggs can remain viable in the environment for long periods of time.

Significance: *Parascaris* infections are highly significant, mostly in foals up to 6 months old. In these animals, untreated parascariasis causes severe debilitation, poor growth, and even death. In the past, some veterinarians and horse owners believed that ivermectin was not effective in controlling ascarid infections. However, clinical data have since proved this perception to be incorrect.

Clinical effects on host: In heavy infections, adult worms can cause obstruction of the intestines; occasionally, a blocked intestine may perforate. Damage is more widespread in foals, which have low resistance and may quickly accumulate massive worm burdens. Large numbers of larvae breaking into the lungs cause hemorrhage (bleeding). Acute parascariasis is also accompanied by severe enteritis, which is characterized by alternating constipation and foul-smelling diarrhea. Infected foals become debilitated and lethargic and lose weight. Lung damage in foals causes "summer colds," with coughing, fever, anorexia, and pneumonia from secondary infections. Mature horses rarely show clinical signs, as previous infections confer good resistance.

Diagnosis: Identification of round, pitted, thick-walled eggs in feces is diagnostic.