

Bot Flies

Gasterophilus species.

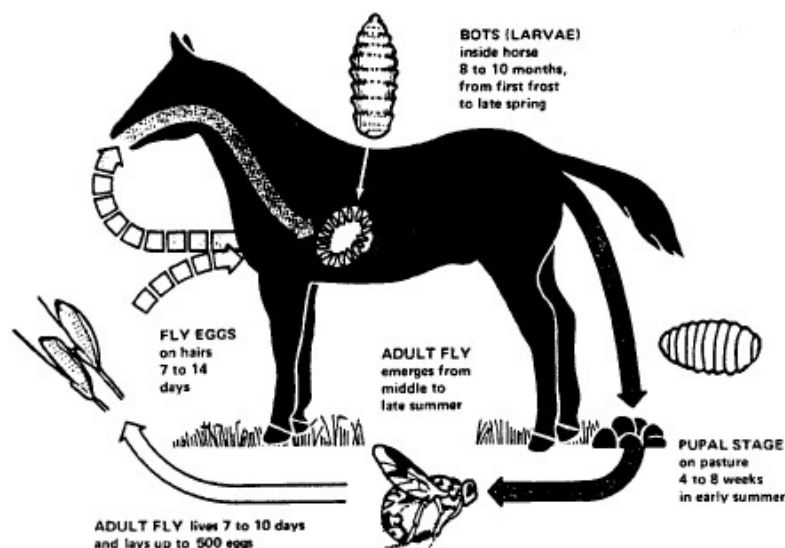
Lifecycle: Bot flies are seasonal parasites for most of southern Australia, with adult flies present during summer and autumn. Female bots recognize horses by sight, and will lay eggs on horses' legs, neck and body. Once ingested by the horse through grooming, the eggs will hatch into larvae and may burrow and migrate through the tissues in the mouth. Larvae will migrate to the stomach where they attach to the stomach lining. The larvae remain and develop for around 10 months, before passing out in the manure and pupating into adults. Adult flies do not feed and only live for a few days or weeks, to lay eggs and continue the lifecycle.

Clinical signs: Low level bot fly infections do not usually show any significant signs. Burrowing larvae in the mouth may cause pain and irritation in the mouth, while stomach-stage larvae can also result in inflammation and ulceration. Adult flies can cause significant irritation and avoidance behaviours in horses.

Diagnosis: As the bot larvae do not lay eggs within the horse, diagnosis cannot be achieved via a FEC. Occasionally, large burdens of stomach-stage larvae can be seen on gastroscopes.

Control and management: The best method of control is to prevent eggs being laid on horses, or to remove eggs before ingestion. As female bot flies use sight to recognise horses, chemical insect deterrents will not prevent egg-laying behaviour. Fly-rugs and boots may prevent bots from being able to deposit eggs and there is anecdotal evidence that paddock shelters will provide protection: it is theorised that the flies cannot recognize horses undercover of a shelter.

Chemical control can be achieved through washing off eggs with warm water and insecticide – the warmth stimulates the eggs to hatch, and the insecticide then kills the larvae. During autumn/winter once the bot flies have disappeared, a single treatment with a boticide anthelmintic (ivermectin, abamectin, moxidectin) will also remove any stomach/mouth stages and break the lifecycle. If all horses in an area are consistently treated each year, fly populations will reduce over time.



Lifecycle of bot flies. This lifecycle takes 12 months, therefore bots only need to be treated for once a year