

Pest Profile



Photo credit: Sturgis McKeever, Georgia Southern University, Bugwood.org (1st photo-squirrel bot fly); Pest and Diseases Image Library, Bugwood.org (2nd photo, horse bot fly larva)

Common Name: Bot Fly

Scientific Name: *Cuterebra spp.*, *Gasterophilus spp.*

Order and Family: Diptera, Oestridae

Size and Appearance:

	Length (mm)	Appearance
Egg	1.27-1.5mm Variable depending on species	Grayish-yellow to off white. Looks like grains of rice.
Larva/Nymph	Variable per species but ranges from 5-19mm	Generally, a creamy white to yellowish color with some species darkening to brown with age.
Adult	Ranges from 12-22mm	Horse bot fly resembles a bee with black and yellow hairs. Tree squirrel bot fly also has black and yellow hairs but has smokey-black wings.
Pupa (if applicable)		Pupae are typically dark brown to reddish in color with flower-like anterior spiracles for breathing.

Type of feeder (Chewing, sucking, etc.): Adults do not feed. Larval stage has mouth hooks for consuming vertebrate tissues.

Hosts: The larval stages are obligate parasites that feed on the living tissues of their mammalian hosts. Horse bot flies tend to target horses but will also invade other equine species such as donkeys and mules. Tree squirrel bot flies feed on eastern gray squirrels, fox squirrels, and chipmunks.

Description of Damage (larvae and adults): Tree squirrel bots are generally of no consequence other than the possibility of accidental myiasis in a cat or dog.

Horse bot flies can cause irritation and stress in horses they infect. When the larvae invade the gastrointestinal tract, severe complications can arise such as colic, blockages, and other ulcers or ruptures. Human horse handlers can occasionally develop ocular myiasis (invasion in the eye) or cutaneous myiasis (invasion of the skin).

Human bot flies are not native in the United States, but occasionally infest visitors to Central and South America. Infection usually causes a raised lesion where the larva has invaded the skin.

References:

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