

Botfly



What is a Botfly?

Any species of fly that has a parasitic larval life stage.

Where is it found?

Botflies are found worldwide and can infect a variety of species. *Cephenemyia* spp. are also known as nasal bots and infect cervid species such as mule deer and white-tailed deer. *Cuterebra* species typically infect rodents and rabbits.

How is it spread?

Cephenemyia spp. - An adult fly lays immature larvae on a host nose or mouth. The larva then crawl into the nasal passages and the back of the throat where they mature into fully developed larvae. The mature larvae then leave the host and pupate on the ground to become sexually mature adults.

Cuterebra spp. – An adult fly lays eggs on natural substrates such as branches, twigs and similar vegetation in the habitat of their natural host. Eggs are stimulated to hatch by heat from coming in contact with a host. Once hatched larva migrate on the host to an orifice or wound and from there migrate under the host's skin. Once under the skin the larva create an opening in the skin to breathe and will mature into a fully developed larvae. Once fully mature, the parasite leaves the host where it will pupate on the ground to become a sexually mature adult.

What are some clinical signs of disease?

Cephenemyia spp. – Has little effect on host, irritation may cause host to sneeze or cough sporadically. You may observe mature yellow/tan grub like parasites exiting through the nares or mouth when field dressing an animal.

Cuterebra spp. – In rodents and rabbits you can observe nodules on the skin often with patches of bare skin. This parasite typically has little negative effects on hosts, large infestations can make movement difficult in small mammals and secondary infections can occur.

How does this disease affect me?

Botflies do not affect the meat of game species. Remove all larvae when field dressing and cook meat thoroughly. The infective stage of this parasite is right after hatching from an egg, once in a host it can no longer infect another host. Humans are not considered susceptible, however, cats and dogs can be accidental hosts.

Information for outdoor recreationists:

Botflies are a natural parasite and at this time do not pose management concerns.

For additional information on botflies or any other wildlife disease, please contact the WGFD Wildlife Health Laboratory at 307-745-5865.