



Arterial worm



What is an arterial worm?

Elaeophora schneideri also known as the arterial or carotid worm is a nematode parasite native to North America.

Where is it found?

Endemic throughout the western United States including Wyoming, the definitive hosts include mule deer and black-tailed deer. The arterial worm is also found in several states in the southeast and Minnesota, which indicates that anthropogenic movements of deer may attribute the spread of this parasite. *Elaeophora schneideri* is normally nonpathogenic in mule deer and black-tailed deer and infections typically remain subclinical. In alternative hosts such as white-tailed deer, mild to moderate pathogenicity can be observed and in species such as elk, moose and sheep pathogenicity is widely varied and can be attributed to mortalities.

How is it spread?

The arterial worm is spread through bites from a horse fly. Microfilaria circulate within small blood vessels in the head of infected hosts, when bitten by a horse fly, microfilaria are transferred to the horse fly and go through several stages of development. When development completes in the horsefly the larvae move back to the mouthparts of the horse fly where they will be transferred to another host when bitten. Once back in an ungulate host the larvae circulate in the bloodstream until settling in large arteries such as the carotid where they fully mature. Fully mature worms reproduce and release microfilaria back into the bloodstream to repeat the process.

What are some clinical signs of disease?

Clinical signs can be widely varied and are attributed to obstruction of blood flow and/or damage to blood vessels. Some common signs observed can include malformed antlers, blindness, oral impaction and necrosis of tissue on the muzzle, ears or head. Some infections lead to abnormal behavior such as incoordination, depression and aimless wandering, loss of body condition; sudden death can also occur.

How does this disease affect me?

The arterial worm does not affect humans. Meat from game animals infected with the arterial worm is safe for consumption, although it is recommended to cook meat thoroughly before eating.

Information for outdoor recreationists:

Clinical symptoms related to the arterial worm are nonspecific and can indicate a number of diseases or conditions, it is best to contact your local biologist with concerns about sick or dead wildlife.

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