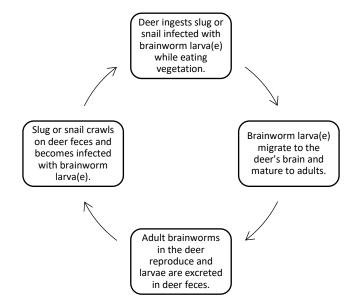
Brainworm (Parelaphostrongylus tenuis)

Brainworm, also called meningeal worm, can cause moose to die due to impairment of their central nervous system. Brainworm is suspected to cause long-term decline in moose populations that occur in areas with abundant white-tailed deer.

BrainwormLife Cycle





Moose displaying head tilt and glazed eye, both symptoms of brainworm. Photo copyright M. Ellingwood.

Deer and Brainworm

White-tailed deer are the primary host of brainworm. Adult worms occur along the outer edge of the brain and do not affect deer; approximately half of the deer in NH are infected.

Moose and Brainworm

Moose also accidentally ingest slugs or snails while consuming vegetation. When infected slugs and snails are consumed, larvae and adult worms can cause debilitating symptoms due to damage of the spinal cord and brain. These symptoms can lead to death.

Symptoms of Brainworm in Moose

- head tilt
- circling
- incoordination/weakness
- paralysis
- fearlessness
- glazed eyes

What can be done to minimize brainworm in moose?

The most direct approach is to keep deer abundance low in areas where it is desired to have moose. Regulated hunting is a potential tool for doing this. Also, creating moderate amounts of high quality moose habitat (mature conifer mixed with young forest) broadly on the landscape will help support moose over a greater area and minimize the effect of locally high deer populations.

Climate change may mean more deer in New Hampshire because a limiting factor for white-tailed deer in New Hampshire is harsh winter weather. More mild winters due to climate change could result in increasing deer densities which then will increase moose exposure to brainworm. Minimizing the impacts of climate change could reduce the impact of brainworm on moose in NH.

What should you do if you see a moose displaying brainworm?

If the moose is near a busy road or potentially affecting public safety, call NH Fish and Game immediately (Wildlife Division: 603-271-2461; Law Enforcement: 603-271-3361). Moose with severe symptoms of brainworm are not able to move away from people and are not known to recover.