



guinea worm

Dracunculus insignis

Kingdom: Animalia
Division/Phylum: Nematoda
Class:
Order:
Family:

FEATURES

The guinea worm is a parasitic roundworm. It has a long, unsegmented, cylindrical body with tapered ends. The adult male is about one and one-half inches in length while the adult female may be up to 48 inches long. The definitive host species for this parasite include mink, raccoon, fox, skunk, muskrat, weasel, opossum and otter. The intermediate hosts are copepods of the genus *Cyclops*. The definitive host may indicate the presence of the worm by being inactive or rubbing its skin over the area where the worms are present.

BEHAVIORS

The guinea worm may be found statewide in Illinois wherever its hosts live. It has a complex life cycle. Ten to 14 months after infecting a definitive host, the female guinea worm burrows through the host's skin to release larvae. She does this at the end of one of the host's legs. The larvae are released when the host's legs are in contact with water. The larvae then must infect copepods of the genus *Cyclops*. After three to six weeks of development, the larvae inside the copepods are capable of infecting a host. When the host swallows the infected copepods, normally by drinking the water that they are living in, the host may be infected.

Copepods containing larvae may also be ingested by frogs, crayfish and fishes. These animals can store the larvae and pass them on to the definitive host if they are eaten by one. Once inside the definitive host, the larvae migrate to the connective tissues of the abdomen and thorax. Here, the larvae mature and mate. The females with developing eggs then move to areas under the skin of the host's legs, and the cycle continues. The guinea worm may cause swelling and inflammation under the skin and in the muscle tissues of its host, mainly on the lower limbs. The skin of the host may have ulcers where the females burrow out to expel larvae.

HABITATS

- bottomland forests
- coniferous forest
- southern Illinois lowlands
- upland deciduous forest

ILLINOIS STATUS

- common
- endangered
- threatened
- native
- exotic

ILLINOIS RANGE

Permanent resident: statewide
Summer resident:
Migrant:
Winter resident:

BIBLIOGRAPHY

Illinois Department of Natural Resources. 1999.
Biodiversity of Illinois, Volume 2: Woodland Habitats CD-ROM.