



Myxobolus cerebralis

Salmonid whirling disease, myxosporean parasite

General

1. Parasitic microorganism causing salmonid whirling disease

Geography and Habitat

1. Native: Common European parasite of brown trout (*Salmo trutta*), which is generally asymptomatic to infection
2. Habitat:
 - Occurs in environments inhabited by host salmonid species
 - *T. tubifex* (an oligochaete) is the obligate host
 - Severity of infection may be correlated to water temperature and conductivity: 5°C—27°C are best for spore production; >20°C is inhibitive to growth
 - Greatest infection rates occur in hatcheries
 - *Salvelinus namaycush* (lake trout) appears to be immune to infection; *Oncorhynchus mykiss* appears to be most susceptible



DEADLY PARASITE: Myxobolus cerebralis causes whirling disease, a trout-killing infection that is devastating in some wild trout populations.

Photo: Bunk 2002

<http://nas.er.usgs.gov/queries/FactSheet.aspx?SpeciesID=2364>

Invasion Pathways

1. Likely introduced with nonindigenous salmonids stocked in the Great Lakes drainage system

Sources

1. <http://nas.er.usgs.gov/queries/FactSheet.aspx?SpeciesID=2364>
2. <http://www.issg.org/database/species/ecology.asp?si=437&fr=1&sts=sss&lang=EN>