

Flatworms in the Food Chain

The turbellarian flatworms living in freshwater are free-living and most are carnivores. Some species are efficient predators that feed on tiny invertebrates and small crustaceans. Others feed on detritus and dead animals. Flatworms may regulate population dynamics of zooplankton in ponds. Tiny turbellarians that live in spaces between sediment feed on particles too small for other organisms to eat.

The marine flatworms (polycladids) are the largest of the free-living flatworms. Some, like the Persian carpet flatworm, eat a variety of food. They feed on tunicates, small crustaceans, worms, and molluscs. These flatworms feed like sea stars, extruding their pharynx, which secretes enzymes to digest their prey.

Parasitic flatworms play a role in keeping the populations of some animals low. Flukes (trematodes) are internal parasites of molluscs and vertebrates, like fish. Flukes include 18,000 to 24,000 species divided into two subclasses. The smaller Aspidogastrea, about 100 species, are obligate parasite of molluscs and may also infect turtles and fish. The other group, Digenea, comprise the majority of trematodes; they are obligate parasites of molluscs and vertebrates.

Most trematodes have a complex life cycle with at least two hosts. The primary host, where the flukes sexually reproduce, is a vertebrate. The intermediate host, in which asexual reproduction occurs, is usually a mollusc.