

A Cat-Borne Threat to Monk Seals

Mauka to Makai: How *Toxoplasma gondii* Makes Its Way from Mountains to Ocean

A Microscopic Parasite

Toxoplasma gondii is a parasite that causes the disease toxoplasmosis.



T. gondii



Develops in the Guts of Cats

T. gondii can infect any warm-blooded animal (including humans, birds, and seals), but it only reproduces in the digestive system of a cat.

Spreads Via Cat Feces

Millions of *T. gondii* eggs can be spread into the environment—surviving for many months—via the feces of just one cat. These eggs are the source of *T. gondii* infection in monk seals. It only takes one egg to cause an infection.



Contaminates Natural Resources

T. gondii eggs contaminate water and soil, along with the plants that grow in it. Wildlife and livestock can consume the eggs and become infected. Even people can get infected by accidentally ingesting cat litter/fecal particles or consuming under-cooked meat or unwashed produce.

Travels Through Waterways

Rainwater and runoff transport the eggs to the ocean through streams and gutters.



Exacerbated by Human Behavior

People unintentionally contribute to the spread of *T. gondii* by allowing pet cats to roam outdoors, abandoning unwanted cats, and not controlling feral cat populations.

Impacts Marine Environment

Hawaiian monk seals become infected with *T. gondii* by consuming contaminated water or prey.



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