

2019BeardOlivia-abstract

Abstract

Toxoplasma gondii is a parasite for which felids are the definitive hosts and the oocysts are shed in the felid's feces. Oocysts that are prevalent in the soil where ring-tailed lemurs (*Lemur catta*) live can be ingested by them and infect them with toxoplasmosis, which can lead to reproductive problems, anorexia, cellular necrosis, depression, and even death. Soil samples were taken from the inside and outside of the ring-tailed lemur exhibit at a zoo in the Midwest to determine the prevalence of *Toxoplasma gondii* oocysts there. Samples were taken through two separate treatments to isolate the oocysts from the soil. Both treatments of both inside samples and outside samples did not return any isolated oocysts. Even though *Toxoplasma gondii* oocysts were not found in the soil samples that were taken for this study, the ring-tailed lemurs at this zoo have still gotten toxoplasmosis, so more research is necessary to determine how this is happening. Recommendations for lowering the risk to the lemurs at this zoo include reevaluating the construction of their exhibit and taking other preventative measures to avoid this disease.

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