

Trematode infections are a persistent problem in the livestock trade leading to serious economic and welfare issues. Anthelmintics are the main method of parasite control used for livestock. Liver fluke (*Fasciola hepatica*) is becoming more prevalent, however, partly due to an increase in suitable habitats for the parasites' intermediate snail hosts, but also due to the development of anthelmintic resistant genotypes. Additional or alternative strategies to chemotherapeutics are needed for continued fluke control.

Biocontrol is a possible alternative to anthelmintic control. Under experimental conditions, fish, crustaceans, bivalves and insects have been shown to consume trematode free-living stages, but little is known about the predatory microinvertebrates that inhabit the water bodies in which liver fluke is transmitted. One study has shown that daphnia consume the miracidia (free-living stage hatching from eggs) of *F. hepatica*. Daphnia, however, are suspension feeders and miracidia are fast prey. There are a range of other microinvertebrates present within these water bodies that are active predators and may be more appropriate fluke biocontrol agents. Microinvertebrates also may offer a better solution for biocontrol than other organisms due to the ease at which high numbers can be cultured in a short amount of time.

In simple two species experiments, we have previously shown that ostracoda and cyclopoida can consume the miracidia of *F. hepatica*. In real world systems, however, access to alternate food sources may interfere with the miracidial consumption rate. To further understand the potential of ostracoda and cyclopoida as a biocontrol agent, we need to assess these relationships. Here, we investigate the importance of alternate prey on the removal of *F. hepatica* miracidia. Looking at how communities affect *F. hepatica* consumption provides evidence of potential biocontrol alternatives for liver fluke under more natural conditions.