

Katie Collins – PhD student at the University of Canterbury NZFGW conference travel award write up

With travel scholarship funding from the NZFGW, I attended the Society for Freshwater Science Annual Meeting in Sacramento, California, in late May 2016.

The paper I presented was entitled “Testing and developing tools for weed macrophyte control in New Zealand agricultural waterways”, based on findings of my PhD thesis, which I am currently undertaking at the University of Canterbury.

Aquatic macrophytes are plants that grow in or near water such as watercress and oxygen weed. They can provide important services in freshwater ecosystems, however, these plants can grow excessively to the point where they choke waterways and cause a chain of negative ecological impacts. Such is the case in lowland Canterbury waterways.

Conveyance of excess water is the primary function of agricultural drains in lowland Canterbury. To be effective, waterways must drain water efficiently and quickly. When excessive weed growth occurs in summer, drainage is limited, causing flooding to adjacent farm land. Management typically involves mechanical clearance with a bank-side digger to excavate plants from channels which is costly and ecologically damaging to stream ecosystems.

Through my research, I am investigating the effectiveness of practical alternative management tools that can be used to control aquatic weeds.

There were nearly 1,000 participants at the conference, with a wide array of talks from North American and international attendees. The session I presented in included other speakers presenting on Conservation and Restoration. Attendance at the SFS annual meeting allowed me to present my research to an international audience, and meet other people with shared interests.

I am very grateful to the NZFGW for their support to attend.