**Transcript**

***Dr Susan Lawler – Crayfish ecology***

Well my research has focussed on Australian freshwater crayfish for the last 20 years. So, I’m interested in the evolution, conservation, ecology of those animals. And, most people don’t realise that the freshwater crayfish which they call yabbies or spiny crays are very, very diverse, very abundant in type so there’s about 140 different species and people tend to think there’s only the one in their dams in the back yard. So, I started working on that partly as a geneticist, an evolutionary geneticist. So what we were doing at the start was collecting crayfish, extracting their DNA and then comparing the sequences to look at evolutionary history in the group and we found some surprising things. We found that there were three different types of burrowing crays in Australia. Everyone thought they were related. They all evolved independently. They came off different branches. So, burrowing which is a terrestrial habitat seems to have evolved independently. Since building those trees and doing the DNA stuff I’ve become more interested in the conservation and ecology of the group. So, I’ve had students working on the decline in abundance of the Murray Cray here in Albury-Wodonga. I’ve got a student that’s just starting to, a project where we’re going to survey crayfish in a particular river in northeast Victoria from the top to the bottom and I know that at the top they’re very small and covered with symbiotic worms and at the bottom they’re very big and naked and we’ll look at the chemical parameters and compare those sort of things and see what kind of land uses are impacting on the crayfish population.

Some of my research has involved surveying fishermen and we’re very, we like working with fishermen. They’re passionate about the rivers. They want the fish and the crayfish to be there for their children and grandchildren but many of them are saying to me that we need to manage the fishery better. I’m interested in providing good solid data to DPI and other groups that manage the fisheries and make sure that we’re having the best possible policies and regulations to support the fauna and, you know, the fishermen that want to enjoy them.