



[www.whitebaitconnection.co.nz](http://www.whitebaitconnection.co.nz)

**Our field trip...**

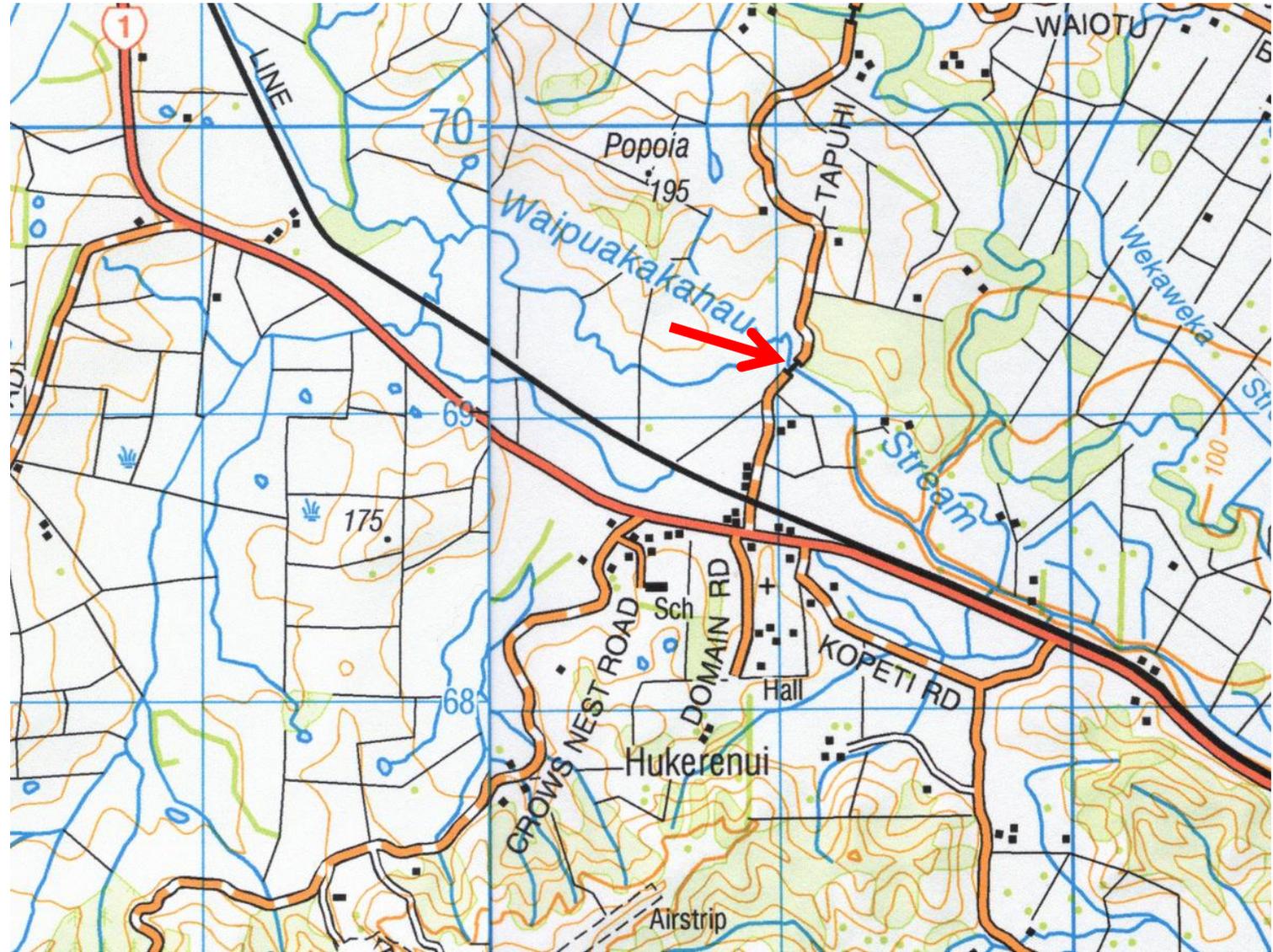
**Hukerenui School**

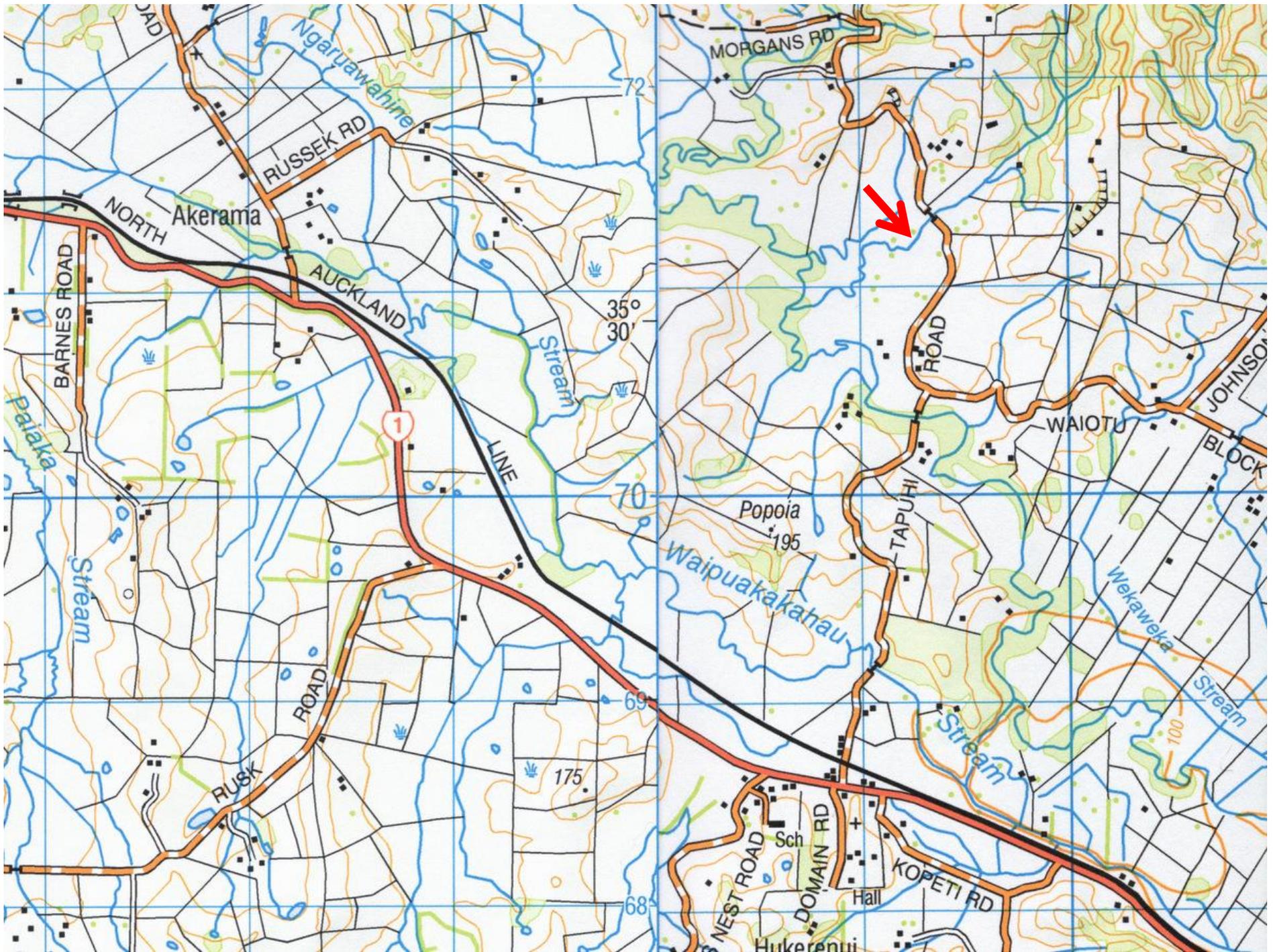
**Stream**

**Investigation**

**Finding the treasure!**

Where is the first waterway where we set two traps?





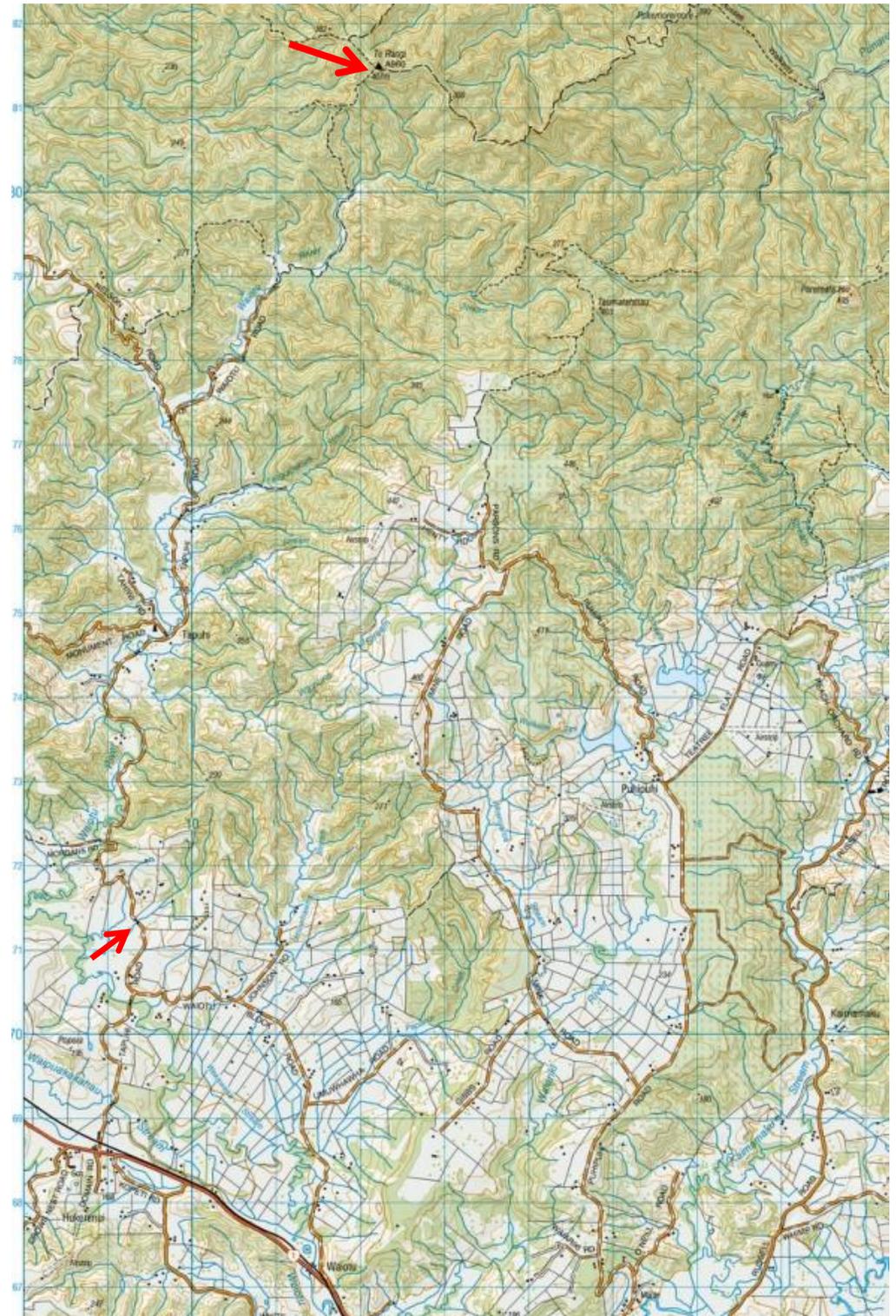
And the second site where we did the main investigation?

The Waiotu Catchment is one small part of a much bigger catchment encompassing all the streams and rivers that join to form one wide river that flows into the Kaipara Harbour at Dargaville.

The headwaters for the Waiotu Stream lie in the Russell Forest, flowing south from the 407m peak, Te Rangi.

Tributaries – like the small stream where we did our main investigation – join the Waiotu as it flows down through Tapuhi.

Do you know the names of the other rivers that link the Waiotu River to the Kaipara Harbour?





The first site we looked at was by the first bridge along Tapuhi Road.

2 waterways meet here and the water is quite deep (up to 1.5 m?) but hardly moving.

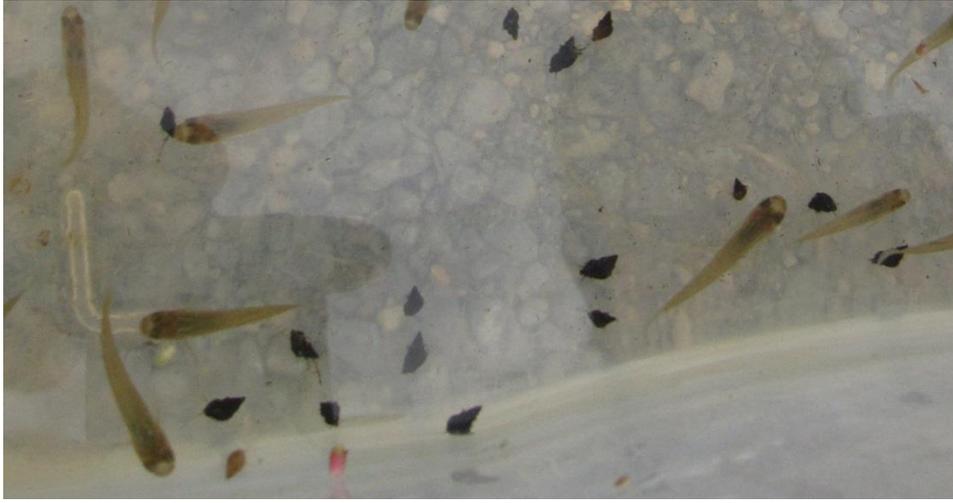
The heads and offal from two slaughtered cattle could be seen floating in the water and it didn't smell good.



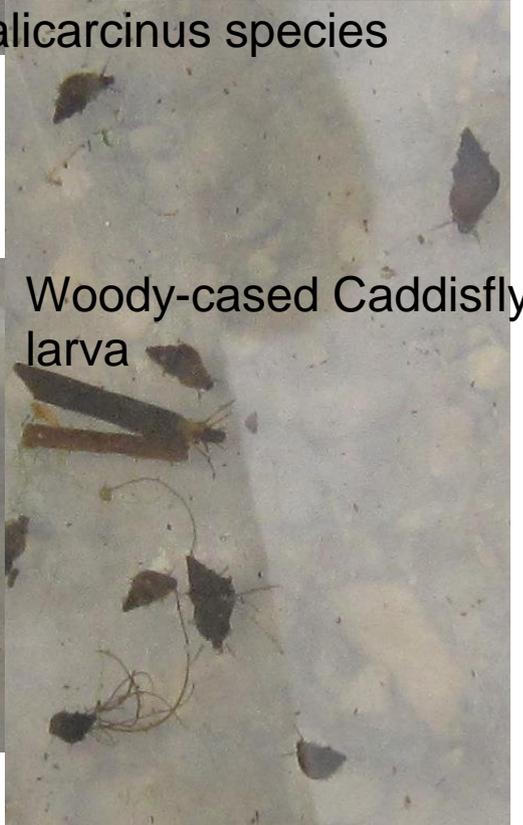
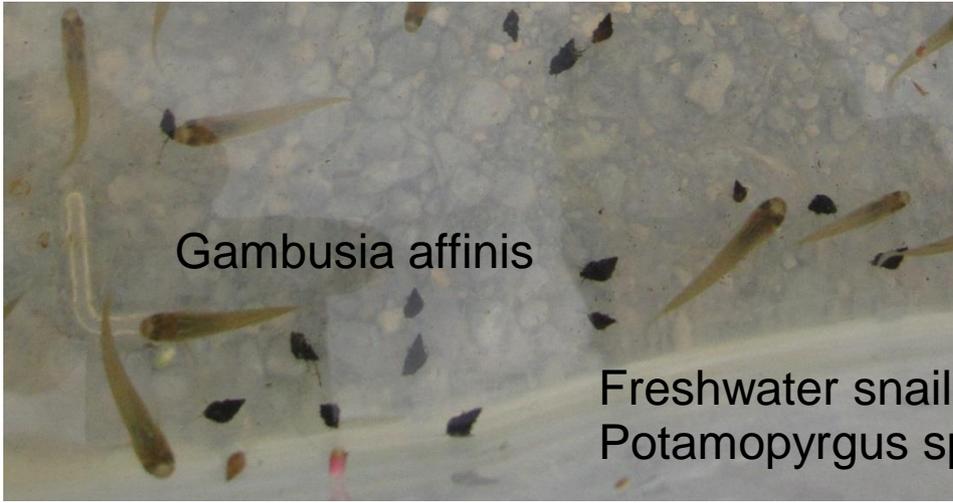
Soozee carefully retrieved the traps and put the critters into a basin.



Soozee carefully retrieved the traps and put the critters into a basin.



The only fish species was *Gambusia* .  
How many species of invertebrates can you see?





**Site 2** was our main investigation site, so we broke into groups and went to work with the stream gear.



The stream is mostly hidden by pasture weeds and introduced wetland weeds but under all that the water is flowing very clear, about 30cm deep in a bed that is about 1 metre wide. The streambed is shingly, muddy, and – in places – rocky.

Again, the main species of fish that we found were gambusia, but there were also some small bullies, and lots of invertebrates.



Can you name the invertebrate species and give their sensitivity score?



Bully fish



Water Beetle - 6





Woody-cased Caddisfly larvae - 5



Damselfly nymphs - 5



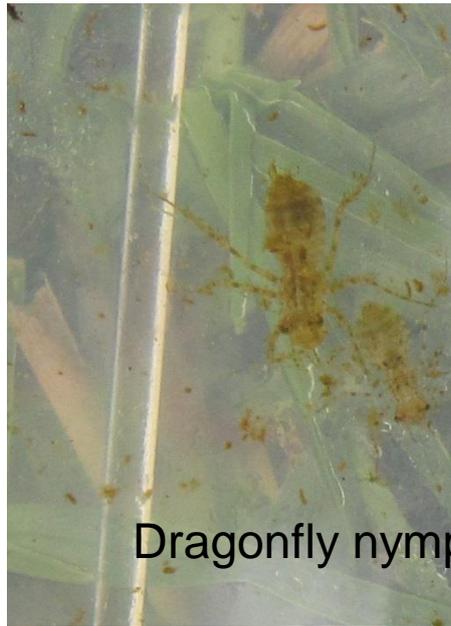
Water Boatman - 5







Freshwater snails - 3



Dragonfly nymphs - 6



Horsehair worms - 6

We also measured the temperature and pH of the water and checked its clarity.

It was a cool 12 degrees Celsius.

The pH was between 5.5 and 6 and our measurements with the clarity tube indicated from about 60cm to 80cm. 70cm is considered a good clear stream so the clarity was fine.



What do these measurements tell us about the health of the stream and its environment?







This part of the stream is shaded by trees and the stream bed is quite rocky. This is where a special critter lives...



Koura, Crayfish - 5



Back to school.

It took a while for the water to run clear again after 40 people had walked around in it!



But we went back to school with lots of information that we gathered from our stream investigation...



...and Soozee, our Whitebait Connection co-ordinator, went home to check, clean and dry the stream gear so that no unwanted pest plants or critters are transferred between waterways!