WATER BUG DETECTIVE GUI

Using water bugs to measure water quality

stream is usually a home for many different types, of animals These include insects, crustareans, molluses and worms. They are commonly referred to as water bugs. Scientists have found that the number and variety of water bugs found in a stream. can give an indication of the relative levels of water pollution. In other words, by sampling the water bugs in your local stream, you can get an idea about the quality of the water!

This Water Bug Detective Field Guide is designed to provide you with information on how to collect water bugs, make some basic, identifications, and, based on what you've found, work out a Stream Pollution Index for the stream sampled. The higher the Index, the lower the level of pollution, and the healthter the stream.

Collecting Water Bugs

ater bugs live in many different parts of the stream. Some live on the water's curtary, some or the water (ivel), others on or in the bottom of the river or creek, in the surrounding regetation, or amongst the rocks. The idea is to sample as many of these different 'microhabitats' as possible.

Before setting off on a sampling expedition, assemble as much of the following equipment as possible:

ice cube

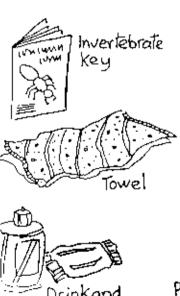
7White plastic Ducketor tray toplace bugs in eg ice cream containers tray for sorting bugs, σ lids

Cover bugs with water

Once you've gathered your equipment, head down to the local stream and try to sample as many of the different sugainenvironments as possible.

Using your net, strain the water at different depths, including the water surface. Run your net over the surface of the bottom, through the plants growing on the water's edge. Wash larger rocks and stones into the net to remove attached animals. Stir the hottom to a depth of two confineeres for two minutes and run your net through the disturbed sediments Closely examine rocks and plant for bugs and use your tweesers and brush so transfer them to a collecting container. Examine the banks for yabbies and other life. Even look for their homes - yabby holes or caddisfly cases.

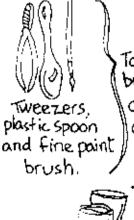
disturb creek as little as possible and return all water bugs Sweepnetacross surface to catch Look in bank striders and beetles uabbies Pick up rocks/stones/ decoring wood/ through water, leaves and brush mud and amongs or pick off the animals plants



nibblek

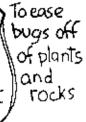
Your favourite

hat





Notebook and pen in a plastic



gloves



Atlached to broom handle to reach deeperwater.

Teast one friend to

ioin in.

Plastic kitchen sieve -make the meshfiner by using stocking or tights and a rubber band