detectives part 4 - super soggy extras

Homely Habitats Teacher's Notes

VELS Domain and (Level): Science (F-6), Humanities, Geography (F-6), The Arts (F-6), Civics and Citizenship (F-6)

Equipment: Homely Habitat survey diagram, Habitat Survey Results sheet and camera **Duration:** Two hours

Setting: On site

What is a habitat survey?

Your River Detectives now understand that the chemical tests completed provide a part of the picture of the river's health. This activity will acquaint you with the physical attributes of the waterway which also contribute to waterway health. This means assessing the surrounding land and catchment for its condition. An unhealthy waterway suggests that there is something wrong in the catchment. To gain a better understanding of the condition of our waterway we can conduct a habitat survey to work out the quality of the habitat for supporting aquatic and terrestrial life. If you do this early in your investigations it will also provide you with baseline data to determine if the habitat has changed since your initial investigations i.e. from one year to the next.

Why do a habitat survey?

Completing a habitat survey involves examining the vegetation along the waterway, the condition of the banks and features of the in-stream habitat. The condition of the vegetation in and around the waterway provides a good indication of the likely conditions of the aquatic environment. When the riparian vegetation is degraded, it provides less protection against land-use impacts and results in a decrease in water quality.

What will you do?

Your students will complete a habitat survey for the monitoring site, assessing the different zones of the riparian environment. They will calculate a score and use this score to give your site a rating for habitat health. They can then discuss actions that could improve the health of the habitat at your particular site.

- 1. Take an upstream and downstream photo of your site (include the vegetation on the banks in the picture)
- 2. Help your students understand the different zones of the river:

Bank vegetation

Bank vegetation (generally the sloping bit) protects waterways from erosion and provides shade, food and shelter for aquatic creatures by shedding leaves and branches. It includes trees, shrubs, rushes and grasses. <u>Verge vegetation</u>

The area either side and extending to 30 metres from the river. The roots of plants hold soil together and reduce the amount of sediment and nutrients being washed into the river. The verge forms a corridor for wildlife. In-stream cover

Logs, rocks and plants in the water provide habitat, hiding places and food for aquatic animals.

- 3. Ask students to assess the habitat for each zone using the Habitat Ratings Chart and calculate a score for your site using the Habitat Survey Results Sheet.
- 4. Ask students to draw a picture of your site and discuss some of the actions that could improve the habitat





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