

Activity R5: Investigating plant and animal life along a stream bank and within the stream

As with all field-based activities, safety considerations are of prime importance. *Group Safety at Water Margins* published by the Department for Children, Schools and Families is a comprehensive guide to all aspects of safety in this type of activity and is available at:

<http://national-library.info/download.asp?fileid=423>

Working by deep, fast flowing rivers has many hazards and is not recommended. It is far safer and easier to find a suitable stream of a depth that will allow pupils to wade safely in wellington boots. The aim of the activity is to allow pupils to observe and record the plant and animal life along river bank and within the river.

Equipment:

Camera

Binoculars

Notebooks

Pencils

Quadrats (square frames approximately 25x25cm in size)

Nets (with one straight side are best)

Buckets or deep trays

Magnifiers

Wellington boots

Method:

1. Recording smaller fauna and flora on the stream bank

Observe smaller fauna and waterside flora by using a quadrat to focus attention on a fixed area that it can be studied in detail. Ask pupils to make a count of the different plants and creatures within their quadrat and identify as many as possible.

2. Recording creatures in the stream

If the stream has a gravel bed many small creatures will be concealed in the gravel. Ask half of the pupils to stand in the stream, forming a line across the stream and facing downstream. Ask the other pupils to stand in the stream about 2 metres downstream of the first group and form a line across the stream and face upstream. Ask the students in the second line to shuffle forward slowly to move the gravel upstream. Any creatures in the gravel will escape by trying to swim upstream. This will slow the creatures down enough for a partner in the first group facing downstream to catch them in a net. Transfer creatures immediately to a tray or bucket to observe them.

Final notes:

- It is a good idea to photograph the plants and animals and to return them quickly to the place they were caught. (If the small creatures are kept too long you will find that those that are higher in the food chain will eat the others!)
- The range of plants, mammals, amphibians, reptiles, insects and fish that may be observed is huge. An example of a useful website with a list of the more common flora and fauna found in streams and on stream banks is:

<http://www.wildlifetrusts.org/>