
EXPLORE THE WONDERS OF WATER

Aquatic Exploration Fieldwork: GET READY TO GET WET

A lake, pond or standing puddle are good sites to consider for an aquatic BioBlitz. The basic methods are the same as a terrestrial BioBlitz. Here are some helpful hints.

1. Choose an easily accessed site such as small ponds, streams or standing water.
2. When making a key, include shoreline features and *in* the water features, such as logs and rocks, as well as storm drains or heavy run-off areas.
3. Divide the area into manageable sections just as you would on land. If the body of water is large, use a map to divide it into sections and choose a study plot.
4. Sampling your site can be as simple as observing what you see at the water's edge or, with proper safety precautions, wading into the water or sampling from a boat. Don't forget, just as trees go up, above the ground, the water goes down, below ground level. There's a lot going on below the surface!

Some helpful tools:

* **Clear plastic bags, bowls, cups or trays** – keeping your sample wet is important. Many animals will flatten or stick to leaves and can't breathe when removed from water. Observe your sample *in* water, where it lives normally, by scooping a sample into a bag or cup. After observation and identification it can be safely released.

* **Nets** – Nets can be small hand nets like those found in a pet store or large seine nets. Small nets are sufficient for sampling macroinvertebrates such as insects, worms or crayfish. Larger nets are needed for reptiles and amphibians. Seine nets, or even a rod and reel may be appropriate for discovering fish in the water.

* **Bottom Sampler** – Just as animals live in or on the soil, a community of animals live in or on the bottom of your aquatic site. A simple grab would be to scoop up some of the bottom with a cup, jar or net. Pour this sample into a clear or white pan and add more water. Many bottom animals cling to the dirt and rocks. Gently swirling the pan will help free the animals which can then be removed with a spoon or syringe for isolation and identification.

* **Flashlight** – Shining a light through sample helps highlight animals that look like leaves and sticks. It is also a welcome tool on a cloudy day!

5. Just as when sampling on land, to turn over rocks and logs the way you found them. Remember the creatures you take from the water need to be returned to the water, they cannot survive on land.
6. Sampling in water has a few challenges.
 - * Once you start netting, scooping and splashing the water will become cloudy. Make observations and identify as many plants and animals you can without disturbing the water first.
 - * Safety is the top priority when organizing an aquatic BioBlitz. Even a small body of water can be a hazard. Remember to consider things such as hypothermia and drowning when around water.