



Pond Studies

Session Guidelines

Through the collection, examination and release of critters from our creek, students learn about water catchments, quality, and habitats and how we affect this ecosystem.

Equipment and resources needed for the activity (located at the shed near the activity base):

- 1x trolley to carry equipment
- Nets - 1 per 2 participants
- 5x sets of animal identification cards
- 6 white containers/buckets for collecting & sorting
- Introduction kit/information
- Sandwich bags
- Environmental resources

Lesson Outline:

- 10mins - Walk to the activity site
- 10mins - Explain what a catchment is
- 15- 20mins - River Story
- 35mins - Fishing for invertebrates with a net and exploring / identification of animals
- 10mins - Review activity
- 10mins - Walk back to accommodation/ kitchen

Introduction Brief:

1. Use the catchment resource to explain what a catchment is and for guests to understand that we all live in one.
2. Prepare a sandwich bag of clear water from the nearest tap. Proceed to tell the story of Moogurrappaum creek (laminated resource). As you come across each bold italic word, place the corresponding environmental example into the clear water until the end of the story. This will show how the water is polluted.
3. Discuss the two major factors that affect health of the ecosystems within a catchment.
 - A) Water quality – (sediments, nutrients, salinity, temperature, and pH)
 - B) Habitat – Riparian zone (filter zone, bank stability, and temperature control)
4. Discuss ways to keep our waterways healthy. You can use the following questions to help lead this discussion;
 - How do you think the pollution affects the wildlife that lives in rivers?
 - How do you think pollution affects us?
 - How can we help reduce the amount of pollution in our areas?
5. Lead into the water bug survey. Use the nets and identification keys to explore what is in the creek.

Safety Brief:

- Establish boundaries: one edge of the river from activity area to the bridge.
- No collecting from the bridge or walking to the other side of the creek.
- Participants must be fully supervised when they are collecting at the water's edge.
- All participants must stay on the bank of the creek.
- Walk, don't run on the creek bank.

Review:

- What macro-invertebrates did you find? Where did you find the most invertebrates?
- From the variety of animals you found, do you think the water quality is good? Why?
- Explain what a water catchment is and some ways in which humans can impact it?