

Term 1, Lesson 7

Wetland Observations

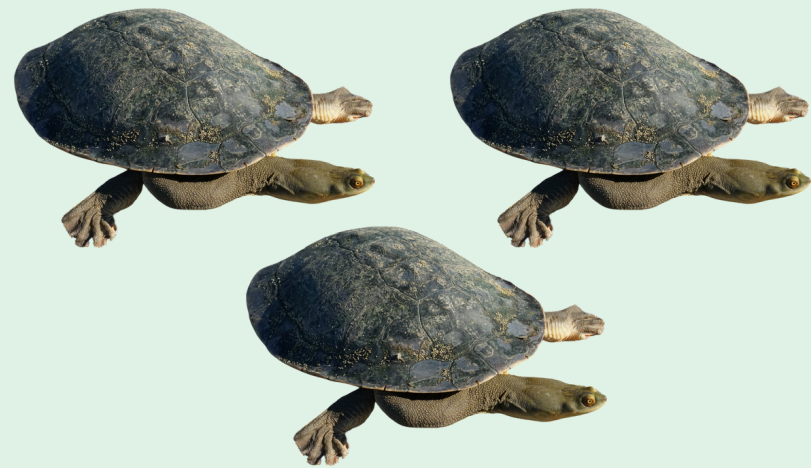
Learning Objectives:

1. Identify habitats used by freshwater turtles;
2. Collect data on the distribution and abundance of flora at the local wetland;
3. Assess the health of the wetland based on observations.



Abundance, Distribution and Diversity

Abundance - refers to the number of individuals per species present.



Distribution - refers to the geographical range of a species.

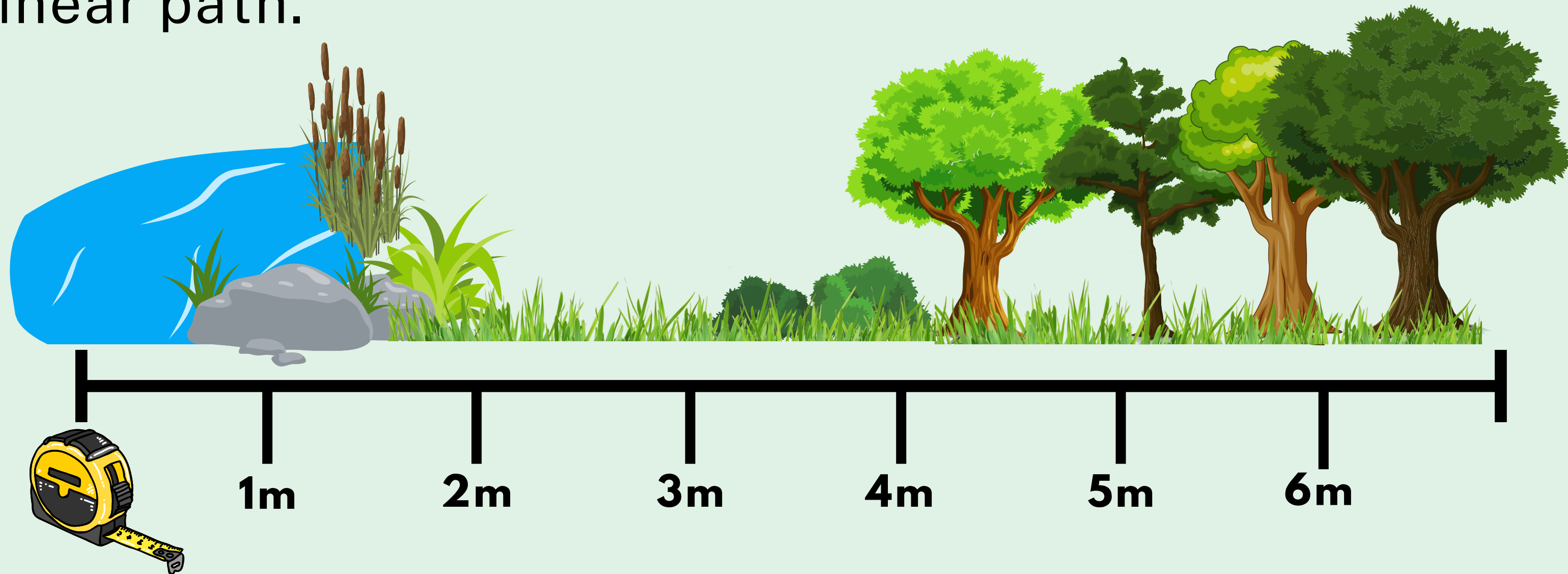


Diversity - refers to the variety of species in a particular area or ecosystem.



What is a transect?

Transect: a linear sampling method used to study changes in plants and animals by recording observations along the linear path.



How is a Transect done?

- **Choosing a Line:** First, scientists pick a straight line that goes across the area they want to study.
- **Placing Markers:** Along this line, scientists place markers at regular intervals, for instance every metre.
- **Recording Organisms:** Then, starting from one end of the line, scientists carefully look at the organisms that are right next to the line. They write down what kinds of organisms they see and how many of each kind there are.

Why do Ecologists use Transects?

- **Mapping Distribution:** Scientists can make maps that show how different plants and animals are distributed in an area.
- **Studying Habitats:** Transects help scientists see how plants and animals change from one habitat to another along the transect line.
- **Monitoring Changes:** Scientists can use transects to keep an eye on how plant and animal populations change over time.



Classroom Activity

Activity 1 -

Game: "Transect Explorers"

See your workbook for the instructions for the game.



Wetland Activities

Activity 2 -

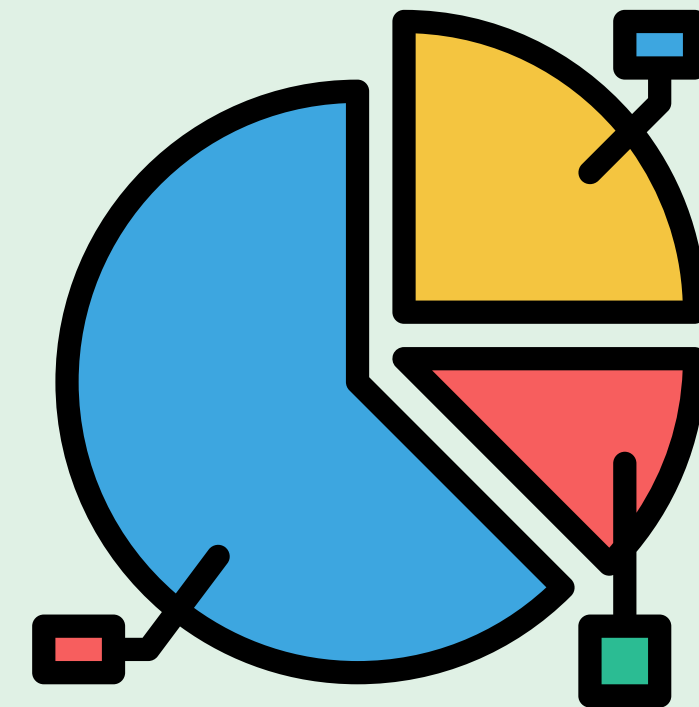
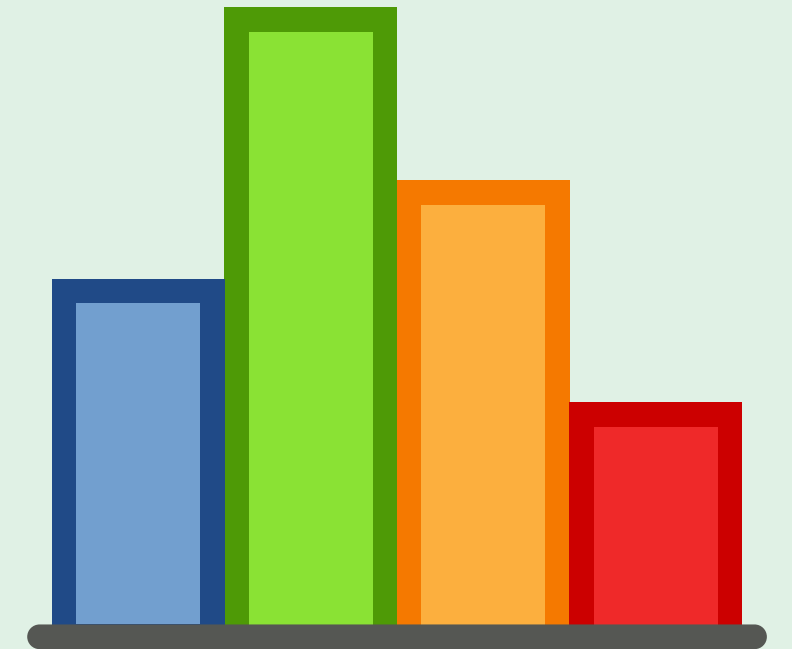
- Walk around the wetland and observe the riparian and aquatic habitat.
- Take note of abiotic and biotic factors and freshwater turtle habitats.
- Conduct a transect study and record the abundance and distribution of flora at the wetland.



Classroom Activities

Activity 3 -

- Create a visual representation of your distribution and abundance data from the wetland.
- You may choose to use a bar graph or pie chart.



Classroom Activities

Activity 3 -

- Reflect on your visit to the wetland and write about what you observed.
- Propose one action you can take to contribute to wetland conservation.

