Wetlands Food Web

Teacher Notes

Primary (F-4)

ACTIVITY DESCRIPTION

The Wetlands Food Web Activity engages students in the connections between living things. Students will develop an understanding of the important relationships that exist in a wetlands ecosystem between plants and animals. Students then explore the types of human activities that may harm this environment, and brainstorm possible solutions to assist in maintaining a healthy ecosystem.

INSTRUCTIONS

1. Read the Wetlands Story

As you read the story aloud, join the pictures of the plants and animals (see Figure 1) by drawing arrows to understand the food web of the wetlands. If there is time, re-read the story to check you've made all the connections between each plant/animal.

2. Discussion

- 1. What do each of the following animals like to eat?
 - a) Black swan
 - b) Pelican
- 2. Which animals (including other insects) like to eat the water boatman?
- 3. What would happen if we removed the water boatman from the food web?

SUGGESTIONS FOR ASSESSMENT

Formative

- 1. Participation in the Wetlands Food Web activity
- 2. Participation in the Discussion questions above
- 3. Students complete a short written summary of the activity

BACKGROUND NOTES

According to <u>Parks Victoria</u>, there are over 17,000 wetlands larger than 1ha in Victoria. These waters can be permanent or ephemeral, such as intermittently flooded wetlands and red gum floodplains. Wetlands support natural processes that purify water and cycle nutrients, as well as providing important habitat for a variety of animals. Some species such as fish and frogs require water throughout their life cycle, some may use aquatic areas for a specific stage of their life cycle (e.g. birds and amphibians), while others may require aquatic environments for resources such as food or as a corridor for movement. The right conditions can result in large breeding colonies and a thriving ecosystem.

Wetlands are also of significant value to people as places for recreation, tourism and cultural enrichment.

ACCESS THIS ACTIVITY

Visit the CERES School of Nature and Climate website to download the activity - https://sustainability.ceres.org.au/education-resources/curriculum-activities/



Curriculum and RSS Links

KEY CONCEPTS

Biodiversity, Food Webs, Ecosystems, Food Chain

KEY LEARNING INTENTIONS

- 1. Students will be able to use comprehension strategies to interpret and analyse meaning from the text, and to support their growing knowledge of ecosystems
- 2. Students will be able to describe the interactions and relationships between plants and animals within a food web
- 3. Students will be able to discuss how certain human activities may harm an environment and brainstorm possible solutions

VICTORIAN CURRICULUM

Science

F - 2

Living things have a variety of external features and live in different places where their basic needs, including food, water and shelter, are met (VCSSU042) 3 - 4

Different living things have different life cycles and depend on each other and the environment to survive (VCSSU058)

English

F

Use comprehension strategies to understand and discuss texts listened to, viewed or read independently (VCELY153)

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Use comprehension strategies to build literal and inferred meaning about key events, ideas and information in texts they listen to, view and read by drawing on growing knowledge of context, text structures and language features (VCELY186)

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Use comprehension strategies to build literal and inferred meaning and begin to analyse texts by drawing on growing knowledge of context, language and visual features and print and multimodal text structures (VCELY222)

3 - 4

Use comprehension strategies to build literal and inferred meaning and begin to evaluate texts by drawing on a growing knowledge of context, text structures and language features (VCELY257)

Use comprehension strategies to build literal and inferred meaning to expand content knowledge, integrating and linking ideas and analysing and evaluating texts (VCELY288)



SUGGESTED RESOURCESMART SCHOOLS MODULE LINKS



Undertaking the activity as described above link to the *ResourceSmart Biodiversity Module* - actions B1.1, B1.3, C1.4, B1.1, B1.2, B1.3, and B1.4

Below is a list of extension activities that link to additional actions of the Biodiversity module:

- 1. Extend the activity to include the following categories and classifications (*ResourceSmart Schools Biodiversity Module action B1.1*)
 - Students categorise each element of the food web according to whether they are producers or consumers
 - Students categorise each element of the food web according to whether they are plants, reptiles, amphibians, insects, birds or fish
 - Students categorise the elements of the food web according to whether they live on land or in the water
- 2. Write a story about the activity and include it in your school newsletter or on the school website. Provide tips on how to promote and protect biodiversity in your community (ResourceSmart Schools Biodiversity Module actions C1.1, C1.3, C3.5)
- 3. Conduct a field trip to a local wetland environment or CERES Environment Park (ResourceSmart Schools Biodiversity Module actions B1.1, B1.3, A1.1, C3.3)

Make observations and record:

- the species and organisms that are present
- the relationships between the different elements of the wetlands ecosystem
- the negative impacts that are occurring as a result of human activities

Propose strategies and/or develop a project for the management of these negative impacts.

4. Conduct a Biodiversity Audit of the school grounds, using CERES or Cool Australia audit. Identify ways the school can improve its biodiversity (*ResourceSmart Schools Biodiversity Module - actions A1.1, A2.1*)

Speak to your CERES ResourceSmart Schools Facilitator about further links to the Biodiversity Module.

