



## **Apple a day: for wetlands**

### **AIM OF THE ACTIVITY:**

- To show how little of the earth is made up of wetlands
- To highlight the vital role wetlands play in our environment
- To emphasise how we must look after the scarce and vital wetlands, (like Reedy Swamp) that are still left.
- Use of our natural resources to produce food and fibre is essential. Careful management of the environment through improved knowledge and technologies is necessary to ensure we will always have those natural resources to use without causing environmental damage, such as loss of biodiversity, declining health of rivers, erosion, salinity and loss of wetlands.

### **ACTIVITY OUTLINE:**

- 1.** Slice an apple into quarters. Set aside three of the quarters, as they represent water on the Earth's surface. (the oceans and the seas)
- 2.** Cut the remaining quarter in half. Set aside one of the halves as uninhabited deserts, the Arctic and Antarctic areas, mountains.
- 3.** Divide the remaining piece into quarters. Set aside two of the pieces for land that is forests, and land for cities and food production. Set aside another piece which was wetlands but now is not, due to drying up and draining due to human settlement and agriculture.
- 4.** The remaining piece is 1/32nd (approx 3%) of the original apple. Peel this section. The peel represents the thin layer of the earth's surface covered by wetland.

## **Why teach your class about wetlands?**



Wetlands are everywhere in Australia, from the man-made ponds of your suburb, and the rivers that criss-cross the continent, to vast floodplains in central Australia that only see water every few years. We often pass them unnoticed and without a thought to the important jobs they perform each day.

The term 'wetlands' encompasses a vast range of water based areas including swamps, marshes, billabongs, lakes, salt marshes, mudflats, mangroves, coral reefs, fens and peatlands.

Wetlands are an important part of the Australian landscape. They act as filters for our waterways, breeding sites for hundreds of Australian animals and recreational centres for many communities. They protect our shores from wave action, reduce the impacts of floods, absorb pollutants and improve water quality. They provide habitat for animals and plants and many contain a wide diversity of life, supporting plants and animals that are found nowhere else in the world.

Wetlands are vital habitats for international migration by birds, demonstrating how habitats around the world are connected.

Because of their unique ability to trap sediments and filter nutrients, wetlands have been likened to a cleansing 'kidney' within the river systems. They are essential for sustaining healthy rivers, on which communities throughout Australia depend.

All Australians rely on water and the quality of our waterways to sustain life. Whether it's water for our households, industries or ecosystems, wetlands play a central role and their conservation should be a priority for all Australians.

This unit is one way your students can be involved in thinking about the role of wetlands, their importance and why we should all hold some responsibility in their conservation.

**This is the original LandLearn version for a slightly different context.**

## ***An Apple a Day: for feeding the world.***



A Practical Demonstration of how precious our planet is.

### **AIM OF THE ACTIVITY:**

Use of our natural resources to produce food and fibre is essential. Careful management of the environment through improved knowledge and technologies in agriculture is necessary to ensure we will always have those natural resources to use without causing environmental damage, such as loss of biodiversity, declining health of rivers, erosion, salinity and loss of wetlands. Just how much of the Earth's surface is needed for growing food for a world of people?

### **ACTIVITY OUTLINE:**

1. Step by step, read the instructions to the students for them to follow. It is more effective if they do not have the instructions in front of them. The activity can be done in pairs, or it can be demonstrated by the teacher and one or two students, depending on circumstances and age. [Provide the students with a copy of the activity to take home to do with their families.]
2. Slice an apple into quarters. Set aside three of the quarters, as they represent water on the Earth's surface.
3. Cut the remaining quarter in half. Set aside one of the halves as uninhabited deserts, swamps and the Arctic and Antarctic areas.
4. Divide the remaining piece into quarters. Set aside three of the pieces for land that is too rocky, wet, hot or poor for crop production.
5. The remaining piece is 1/32nd of the original apple. Peel this section. The peel represents the thin layer of soil that is available for producing all of the world's food crops.

**EQUIPMENT:**

apples (or substitute, e.g. potatoes)  
chopping boards or plates  
knives

**HELPER DUTIES:**

Risk Alert: Use of knives, especially with younger students.

**Discussion:**

1. Discussion points will be directed by the purpose of using the activity and year level of students. Experience and feedback from teachers suggest it is more effective to save the discussion to the end of the activity.
2. What is the key message underlying the activity?
3. What actions can students take to care for their patch of this precious Earth: ...as individuals, as a class and school, with their families, in their community?
4. Compare apples and Earth to introduce the concepts of sustainability, without using the word (which is so difficult to define). Produce concept maps based on discussion.
5. Introduce topics or themes around natural resource management, agriculture, farming and food production in Victoria / specific region, feeding the world, landcare and environmental management.
6. Use as a prompt or example for students to produce a game or puzzle or poster or other means of delivering a similar message.

**SOURCE:**

LandLearn

This version can be viewed as an animation at

<http://www.farmland.org/images/flash/apple.swf>

