LESSON 2.3

Bat houses

Overview

Students will learn about the impacts humans have had on micro-bat habitat and the importance of looking after entire ecosystems. Conservation efforts used to help micro-bats include the building of artificial roosts, or bat boxes. Students will research and design a diorama of a bat box before inviting a parent or member of a woodworking group (e.g. Fraser Coast Micro-bats, Men's Shed), to construct their own bat houses for installation on the school grounds.

Background information

Micro-bats need: forests, old trees, hollows, abundant food and roosting sites where they wont be disturbed.

Habitat destruction is a major factor in causing a species population to decrease, eventually leading to its being endangered, or even to its extinction. Large scale land clearing usually results in the removal of native vegetation and habitat destruction. Bushfires and poor fire management, pest and weed invasion, cyclone and storm damage can also destroy habitat.

One of the roles of national parks, nature reserves and other protected areas is to provide adequate refuge to animals by preserving habitat.

However, there are many hectares of land in the region that are not protected and it is important that we keep native bushland for our local wildlife. Without education and awareness of the importance of remnant bushland, these areas could be developed for urbanisation or farming, and we could see the loss of more bats and other bushland species.

Resources

PowerPoint presentations:

- All About Micro-bats
- Micro-bat Habitat

The Nestbox Book - $19.95 (+ postage) from the Gould Group Bookshop www.gould.org.au

Graph paper

Plasticine, clay

Cardboard, paper (tissue, coloured)

Shoe boxes

Pipe cleaners, paddle pop sticks, straws

Glue, sticky tape, scissors

Activity descriptions

Activity 1: Human impacts and conservation

Discuss the benefits of micro-bats to the environment. You may want to go through the All About Micro-bats PowerPoint presentation.

Discuss the habitat requirements of micro-bats by going through the Micro-bat Habitat PowerPoint presentation with your students.

Brainstorm the different impact that humans could have on micro-bat habitat, such as habitat destruction (see *Background information*).

Students answer the worksheet questions before choosing one of three investigation activities that can be used to apply their awareness of habitat conservation. These are socially responsible actions that can be used to raise community awareness about micro-bats.

Time requirement: 30 mins (approx) + investigation project

ACTIVITY SHEET 2.3A

Human impacts and conservation

1. What are the benefits of micro-bats to the environment and to humans?

2. List the habitat features that micro-bats need for survival.

3. List some of the threats to micro-bats and their habitat.
   Identify which threats are caused by humans and which are natural.

4. What can people do to help conserve micro-bat habitat?

5. Choose a micro-bat species from the website allaboutbats.org.au and find out as much as you can about the species. Complete ONE the following investigation tasks:

   A. Create a poster or other display about the species and how people can do their part to look after them and their habitat.

   B. Identify a local park or patch of bushland in your neighbourhood. Create a plan of action to look after this area for the conservation of micro-bats.

   C. Write a letter to the Principal outlining the actions the school can do to make it micro-bat friendly.

ACTIVITY SHEET 2.3B

Micro-bat house design

PART 1: Using the Internet, find out as much information as you can about where micro-bats roost during the day and the types of micro-bat house designs that can be used.

Use the following questions as a guide.

1. What types of places do micro-bats like to roost in?

2. When making a micro-bat house, what types of materials should be used?

3. Where would you place your micro-bat house once it is finished?

4. How would you attract micro-bats to your micro-bat house?

PART 2: Knowing what makes a good micro-bat house, you need to design the ultimate roost for your micro-bats. Draw your design on a separate piece of paper, making notes of what materials you will use, how the micro-bats will use it and where it will be located once it has been built.

PART 3: Using craft materials, see if you can build a diorama of your ultimate micro-bat house design.