

## **Deciding on support for conservation programs**

When insufficient money and resources are allocated toward environmental issues such as the preservation of endangered species, a choice may have to be made about which species is supported in a conservation program.

In this activity you will look at economic, scientific and ethical issues that must be considered before deciding which species it is most important to conserve. You will decide which issues you think are the most important influences on decisions about conservation of particular plants or animals.

### **What to do (part 1):**

The list below contains a number of issues that need to be considered before time and money are spent on developing a conservation program for a particular animal or plant.

#### **Economic issues**

- Does the species earn money from tourism?
- Is it an unusual species?
- Is it important to our identity as Australians?
- Will its conservation be inexpensive?
- Is a conservation program likely to succeed?
- Do you like this species?

#### **Scientific issues**

- Is it an endangered species?
- Will it become extinct if nothing is done?
- Is any species ecologically unimportant?
- Is gene technology more dangerous to species protection than not, on balance?

---

## **Biotechnology Online School Resource**

*Increasing the public's general awareness of biotechnology and its uses, through the provision of balanced and factual information explaining the technology, its applications, and regulations to safeguard people and the environment.*

For further information contact the Gene Technology Information Service on freecall **1800 631 276**.

[www.biotechnology.gov.au](http://www.biotechnology.gov.au) | © Biotechnology Australia 2001

### **Ethical issues**

- If the endangered species were a human would we be asking such questions?
- Are animals that star in TV cartoon series more valuable than others?
- Should we spend more on the military than the environment?
- Will we be less careful to protect species if we think we can bring them back with gene technology?

Work in a small group to:

- Add at least one more issue to each of the lists.
- Decide whether there are other types of issues that you think should be considered when trying to decide whether money should be spent on the conservation of a particular species.

To do this your group should do one or both of the tasks below.

### **Task 1 – cumulative impacts**

Cumulative impacts refer to the total result of a number of smaller environmental changes over time. For example:

- a small amount of pollution from a factory may be absorbed by the environment, but over many years the total effect might be so great that the environment cannot cope with the pollution;
- the effect of one chemical may be amplified or increased by the combination of different chemicals in the environment from different factories; or
- the removal of one species in an ecosystem will affect the whole area and food chain.

So what happens if we allow one of these small changes to occur every few years, and habitats and species are gradually reduced? Illustrate what happens by doing this exercise.

---

### **Biotechnology Online School Resource**

*Increasing the public's general awareness of biotechnology and its uses, through the provision of balanced and factual information explaining the technology, its applications, and regulations to safeguard people and the environment.*

For further information contact the Gene Technology Information Service on freecall **1800 631 276**.

[www.biotechnology.gov.au](http://www.biotechnology.gov.au) | © Biotechnology Australia 2001

- a Draw a circle with a line down the middle, cutting it in half.
- b Colour one side in and call that 'development'; call the other side the 'natural environment' or 'habitat'.
- c Now imagine that every few years we need to decide if we should allocate more of the natural environment to development. This is usually called 'striking a balance' between nature and development. Each time you imagine that you have had to 'strike a balance' draw a line from the centre through the natural environment and colour one of the quarter circles in. Keep striking a balance between nature and development.

Where is the final balance?

### **Task 2 – role play**

Select someone as Chair, and conduct a hearing on which types of people to preserve - blue-eyed or brown-eyed people, old people or teenagers, drivers or pedestrians, people of different races, religions or sexes. How do you decide which have priority?

### **What to do (part 2):**

Choose a group spokesperson to present your group's conclusions about:

- adding issues to each of the lists;
- whether there are other types of issues that you think should be considered when trying to decide whether money should be spent on the conservation of a particular species.

---

## **Biotechnology Online School Resource**

*Increasing the public's general awareness of biotechnology and its uses, through the provision of balanced and factual information explaining the technology, its applications, and regulations to safeguard people and the environment.*

For further information contact the Gene Technology Information Service on freecall **1800 631 276**.

[www.biotechnology.gov.au](http://www.biotechnology.gov.au) | © Biotechnology Australia 2001