

## Millennium Seed Bank

### Introduction

In this activity students watch a film about the Millennium seed bank and discuss its work.

### The activity

1) Students watch the 20 minute film *Banking on Life*.

<http://www.advancedbiology.org/resources/millennium-seed-bank-film,1459,NA.html>

2) When they have watched the film once they discuss the following questions in groups:

1. In what ways do humans benefit from the science and technology used in seed banks?
2. How do the interests of human societies in different countries dictate the way the work of the Millennium Seed Bank is directed?
3. How is classification important to the work of the Millennium Seed Bank?
4. What different areas of scientific expertise are necessary to run the MSB project?

10 minutes

In a second viewing, students should indicate – e.g. by raising their hand, when the film provides answers to the questions. Stop the film at these points, clarify the point being made and give students time to make a note of the example identified.

Answers to questions on student sheet

1. *Over 80% of our plant – derived food comes from just 12 species. Many other plant species are used for food and remedies. The restoration of habitats through reintroduction of plant species is also economically important for many communities.*
2. *A particular country's land use preferences dictate the focus for the MSB's work in many cases. MSB need cooperation in order to find, collect and store seeds locally. Local priorities for e.g. preservation of important species are taken into account. Important species include those used for food, habitat restoration and remedies.*
3. *You have to be able to identify species to recognise those which are useful to humans, and those which are threatened.*
4. *Microscopy, field collection, identification, administration, working specialist machinery, taking and interpreting digital x-ray photography, managing low-temperature storage systems, plant maintenance, microropagation, cataloguing and referencing, producing field guides etc.*

30 minutes

June 2009

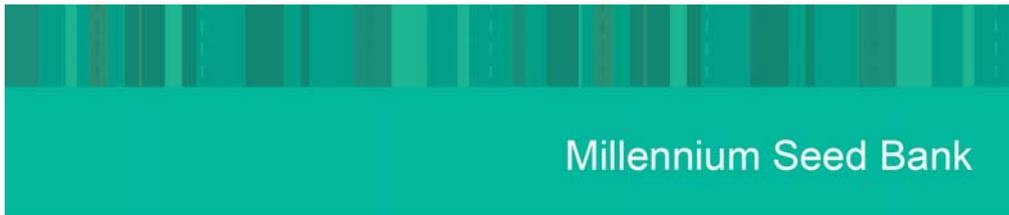
#### How Science Works

**Fa** The interests and concerns of society influence the directions of scientific research and technological development, and the extent of funding for work in different areas.

#### Science explanations

**Pb** Classifying living things helps to identify relationships between and within species, and to decide how best to protect the individual species that are part of the world's biodiversity.

**Pm** Unlike the five previous episodes of extinction, this one is being caused by the activity of a single species.



## Introduction

In this activity you watch a film about the Millennium Seed Bank, and discuss its work. During a second viewing you make notes about specific aspects of the seed bank's work.

Watch the 20 minute film *Banking on Life*.

When you have watched the film once, discuss in a group the following questions:

- 1) Who benefits from the science and technology used in seed banks?
- 2) How do the interests of the societies in different countries dictate the way the work of the Millennium Seed Bank is directed?
- 3) How important is classification to the work of the Millennium Seed Bank?
- 4) What different areas of scientific expertise are necessary to run the MSB project?

Now watch the film again, and indicate, by raising your hand the sections of the film that specifically provide answers to these questions.

You should make notes of the examples from the film under the four questions as headings.