

## Hippo dilemma

Why are we losing Biodiversity?

### "Finding out & Action"

Learners investigate the threats to biodiversity and biodiversity loss

Grading: Y

Time: 20:20

Place: Inside/Outside

Group size: Five groups

#### Activity Outcomes:

Learners are able to:

- identify five important threats to biodiversity and sustainability
- use scientific knowledge and principles to illustrate actions about biodiversity loss

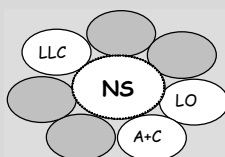
#### Assessment:

- Evaluate group discussions and presentations using a rubric for group communication

#### Skills:

- Investigating and analysing the problems
- Selecting cause of action
- Managing the environment effectively for sustainability

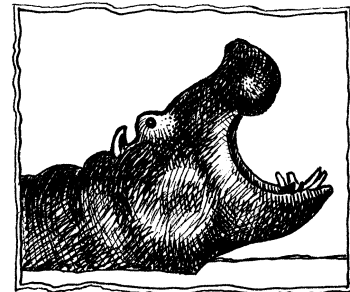
#### Learning Area links



### Background:

Biodiversity is reduced when changes in the environment exceed the ability of populations of plants, animals and other living things to adapt. This leads to the extinction of species - either locally or globally. In order to understand the role people play in biodiversity loss, it helps to think of something called the **HIPPO dilemma**. This term does not refer to the endangered hippopotamus but rather to an acronym for the threats to biodiversity:

- ↳ **H**abitat loss
- ↳ **I**ntroduced species
- ↳ **P**opulation growth
- ↳ **P**ollution and
- ↳ **O**ver-consumption



These problems have one thing in common - they are all caused by people.

### Activity Guidelines:

**Needed:** WOW poster, paper, camera, film, colour markers, glue, contact paper.

- ✂ Divide learners into groups of five and give a short explanation of the WOW poster.
- ✂ Name each group after one of the letters of the HIPPO dilemma.
- ✂ Assign groups to take photographs of their specific research topic. For instance, the "H-group" will take photographs of the influence of humans on habitat change, the "I-group" will research the most common alien plants and/or animals in their biome.



Instead of photographs, learners can also use pictures from magazines and newspapers. They can also print out pictures from the Internet.

- ✂ These photographs can then be displayed on posters created by the learners themselves or they can make use of the WOW poster. Link the 5 posters created by the learners to the specific area on the WOW poster (use arrows or coloured

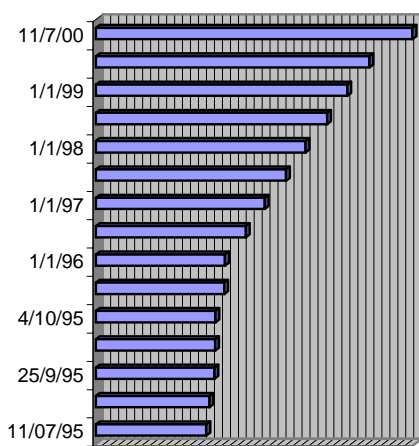
ribbons). The posters could be displayed in the school library or lobby.



See Teacher Guide 2 p 8-11

- After completing the research, the learners describe the problem, explain what is causing it and then discuss how individuals or local organisations could address the problem and find possible solutions.

SA Population



### Variation:

#### For your portfolio - The issue of population growth

*"South Africa's population is approaching 40 million, with an average annual growth rate of 2.5 percent, which means that 2100 people are born every day."*

Write a short report discussing some of the problems that over-population could have on the utilisation of natural resources in our country.

#### Debate - Wildlife Trading (another threat to Biodiversity)

Divide your class into two groups, one representing the conservationist and the other a manager of a wildlife trading company.

The debate could include some of the following issues:

- Sustainable use of wildlife
- Is trade good or bad for wildlife diversity - remember some of the trading is legal.
- Illegal trade should be eradicated
- Benefits of trading should be channelled to right people
- Sustainable market for wildlife products should be provided
- Revenue for the country
- Employment possibilities.
- Contributions of CITES and TRAFFIC.
- Poaching and hunting.

#### CITES and TRAFFIC:

**TRAFFIC** (Trade Records Analysis of Flora and Fauna in Commerce) officially opened an office in SA in 1992.

TRAFFIC is concerned with enforcement of the **CITES** Treaty (Convention on International Trade in Endangered Species of Wild Flora and Fauna)

#### Personal audit

Make a list of items, in your family, which contribute to pollution, study them and try to reduce pollution in your home. Remember that ANY change you make will make a difference.

