

Teacher Notes

1. Lesson Outline

During their voyages in the oceans around Antarctica both Dame Ellen MacArthur and the crew of *HMS Endurance* frequently encounter albatrosses. These magnificent birds are masters of gliding on the air currents above the oceans and can remain aloft for months on end without having to land.

Of the 22 known albatross species, 19 are now threatened with extinction.

In this lesson pupils are asked to research some of the behaviour and life cycle of the albatross, in particular its dance. Pupils will then design and perform their own albatross dances.

This lesson can be taught on a stand alone basis or would make a good follow up to *Lesson 12 - Albatross Diary*.

2. Learning Objectives

By the end of the lesson, pupils should be able to:

- Work effectively within a small group/team.
- Discuss within a group/team.
- Communicate effectively with others.
- Understand how human activities in the environment can put pressure on animals and other organisms.
- Appreciate that the life cycle of an albatross has certain similarities and differences to the human life cycle.

3. Age Group

Years 4, 5 and 6.

4. Timing

This lesson should take approximately two hours to complete.

5. Curriculum Links

England (National Curriculum)

Key Stage 2 Science

- Sc2: 1b, 5a,b

England (QCA Schemes of Work)

- Unit 4B: Habitats
- Unit 5B: Life cycles
- Unit 6A: Interdependence and adaptation

Scotland (5-14 National Guidelines)

Environmental Studies: Science

- The processes of life: Level A,B,C
- Interaction of living things with their environment: Level A,B,C

Wales

Key Stage 2 Science

- Life Processes and Living Things: 1.1; 4.1, 4.2

Northern Ireland

Key Stage 2 Science and Technology

- Living Things: Animals and Plants a - d, f

6. Keywords

The following is a list of keywords that will be used in this lesson:

- *colony* - in this sense, a large group of birds of the same species living together in one particular place.
- *crustacean* - creatures with shells. They are usually sea creatures such as crabs and shellfish.
- *digest* - to convert swallowed food into a form that can be absorbed into the body.
- *fledgling* - a bird which has just fledged.
- *fledging* - a bird has fledged when it has grown its feathers and first leaves the nest.
- *forage* - to look for food.
- *unique* - one of a kind, no others like it.

7. Equipment & Materials

Teacher Resources

- A large globe and/or world map.
- Pictures of Dame Ellen MacArthur *HMS Endurance* from the Resource Gallery either printed out or displaying on the class whiteboard.
- Albatross pictures from the Resource Gallery either printed out or for displaying on the class whiteboard.

Very little in the way of resources are required for this lesson. Pupils will create their own albatross masks and then use them in an albatross dance.

To make the mask pupils will need:

- A copy of *Resource Sheet 13.1 - Make your own albatross mask*. This will need to be printed or photocopied onto card.
- Scissors, glue sticks and colouring pens/pencils.
- Each mask will require about 30 cm of thin elastic from which to make the head strap.

To create their dances they will need:

- A copy of *Resource Sheet 13.2 - How to dance like an albatross*

8. Lesson Structure

Introduction

- I. Explain the role of *HMS Endurance*. You may want to use some of the images included in the Resource Gallery on this website to help illustrate this part of the lesson. You may also want to use a globe or map to show pupils where Antarctica is in relation to the UK. Explain also who Dame Ellen MacArthur is and that she has spent a lot of time sailing the oceans around Antarctica during her racing. Explain that her racing yachts are very different in design and purpose to *HMS Endurance*.
- II. Ask pupils to spend one minute in pairs writing down as many different animals as possible that they think that Dame Ellen MacArthur and the crew of *HMS Endurance* might see during a trip to the Antarctic.
- III. Show pupils an image of an albatross from the Resource Gallery and ask them if they know what it is.
 - Explain that albatrosses are among the world's largest flying birds. An adult wandering albatross can have a wingspan of over 3 metres and live for more than 60 years. You could ask pupils to measure out a length of 3 metres on the floor so that pupils can then compare this to their own height. You may also wish to show pupils pictures of other birds and animals to compare.
 - Explain that albatrosses are being endangered by human activities; such as long line fishing and scientists estimate that over 100 000 birds are being killed each year. Because albatrosses are very long lived it takes them a long time to reproduce and they simply cannot breed fast enough to replace these losses.

As a result 19 out of 22 albatross species are endangered and unless urgent action is taken several may have completely disappeared in the next few decades.

Main Activities

- I. Show pupils a clip of an albatross dance. Some good quality clips can be found at www.arkive.org/. Just type 'albatross' into the movie search box and select from the numerous clips available. A specific example is given in the find out more section at the end of this lesson plan.
- II. Ask pupils why they think albatrosses dance.

Once an albatross has grown its feathers (fledged) it will fly out to sea, where it might stay wandering for up to five years. It will then return to a colony where it will learn to dance. This period of learning may take several years.

At first the albatross will dance with lots of different birds but as time goes on, the number of different dance partners drops until only one partner remains. This pair will bond for life and will go on to produce particular dance moves that are unique to them.

III. Ask pupils to make their albatross masks. These should be coloured in before they are cut out.

IV. Pupils should now work in pairs and use *Resource Sheet 13.2 - How to dance like an albatross* to help them create their own albatross dances. This part of the lesson should take place in the school hall or another suitably large space where pupils will not be too cramped.

- The best pairs can then be asked to perform their dances in front of the rest of the class.

Conclusion

Summarise key points ie;

- The albatross has a complex life cycle, which has certain similarities to the human life cycle.
- For albatrosses, dancing is a form of communication which they use to select a mate.
- Albatrosses are very long lived so reproduction is a slow process.

9. Differentiation

- Adapt discussion sessions to suit ability and age group.
- Provide extra support during group activities for those pupils who require it.

10. Extension Work

- Pupils could continue their research by investigating how 'dancing' is used by other living creatures, such as bees, for communication.

11. Risk assessment

Some safety advice is included in this lesson plan, however, it is the responsibility of the supervising teacher to carry out all risk assessments with regard to this activity and to make sure that any such risk assessment complies with the requirements of the particular institution in which it is being conducted.

12. Find Out More

Teachers

www.visitandlearn.co.uk and www.royalnavy.mod.uk

Lots of information about HMS Endurance and its work in Antarctica.

www.ellenmacarthur.com/

Find out what Dame Ellen MacArthur has been up to recently.

www.antarctica.ac.uk/about_antarctica/wildlife/birds/albatross.php

An outline of the problems facing the albatross.

www.savethealbatross.net/

Lots of information about albatrosses and the problems that human activities are causing them.

<http://en.wikipedia.org/wiki/Albatross>

Detailed information about the albatross lifecycle and taxonomy.

www.rspb.org.uk/supporting/campaigns/albatross/support.asp

Details of how to support the RSPB *Save the Albatross* campaign

www.youtube.com/watch?v=MBm3oqMnWyo&NR=1

Just one of many dancing albatross clips on You Tube.

www.arkive.org/species/GES/birds/Phoebastria_albatrus/Phoebastria_albatrus_09.html?movietype=rpMed

A good quality clip of an albatross dance.

Pupils

www.ellenmacarthur.com/

Find out what Dame Ellen MacArthur has been up to recently.

www.antarctica.ac.uk/about_antarctica/wildlife/birds/albatross.php

An outline of the problems facing the albatross.

www.savethealbatross.net/

Lots of information about albatrosses and the problems that human activities are causing them.

www.kcc.org.nz/birds/albatross.asp

Interesting albatross factsheet on a childrens' conservation website.

So you want to dance like an albatross?

Just have a read through this sheet to get some information that will help you perfect your moves.

Why do albatrosses dance?

Albatrosses dance to find a mate.

When does an albatross learn to dance?

Once an albatross has grown its feathers (fledged) it will fly out to sea, where it might stay wandering for up to five years. It will then return to a colony where it will learn to dance. This period of learning may take several years.

How does an albatross use dancing to find a mate?

At first the albatross will dance with lots of different birds but as time goes on, the number of different dance partners drops until only one partner remains. This pair will bond for life and will go on to produce particular dance moves that are unique to them.

What kind of moves are there in an albatross dance?

There are a number of typical moves in an albatross dance here are a few of them:

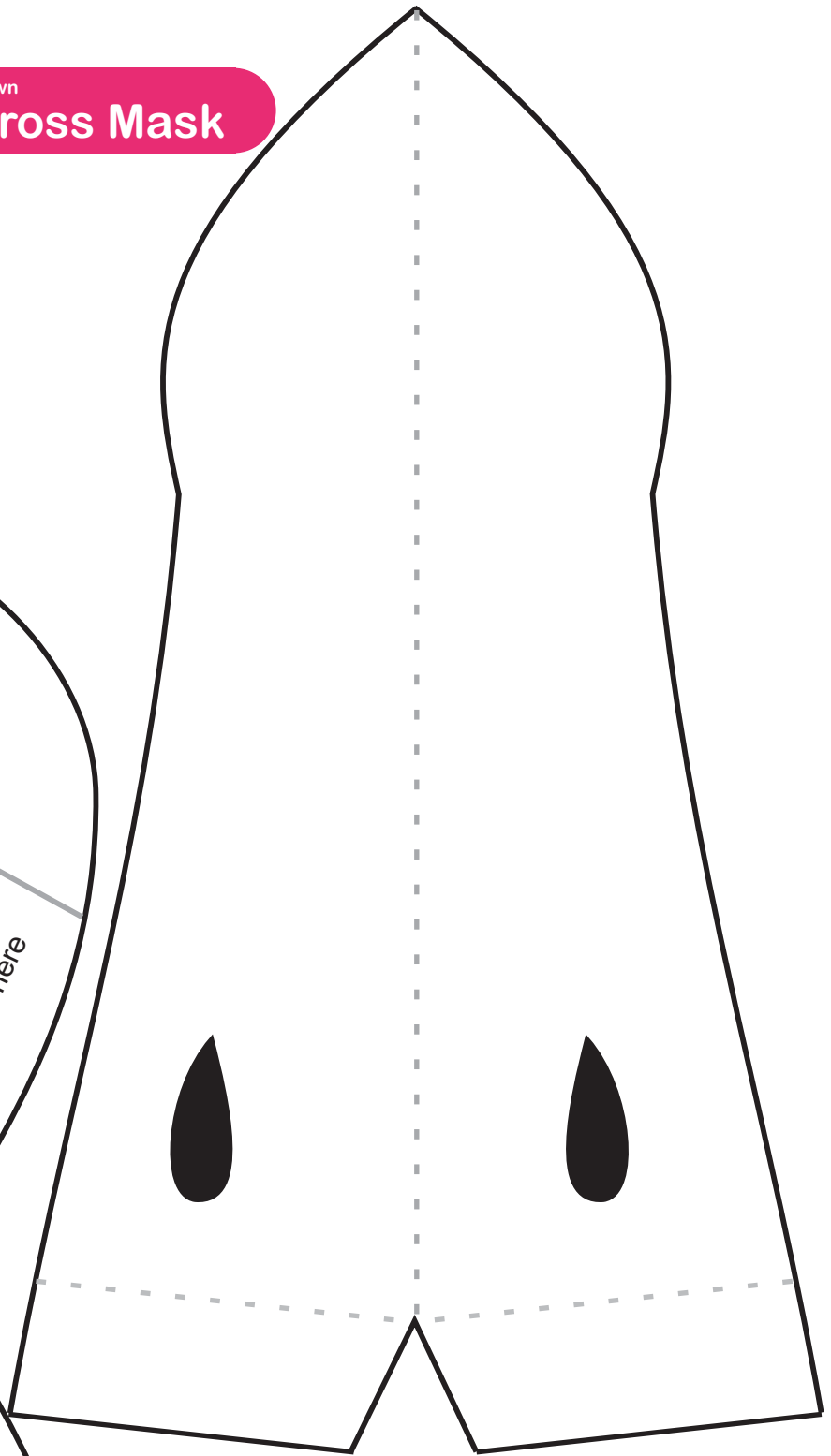
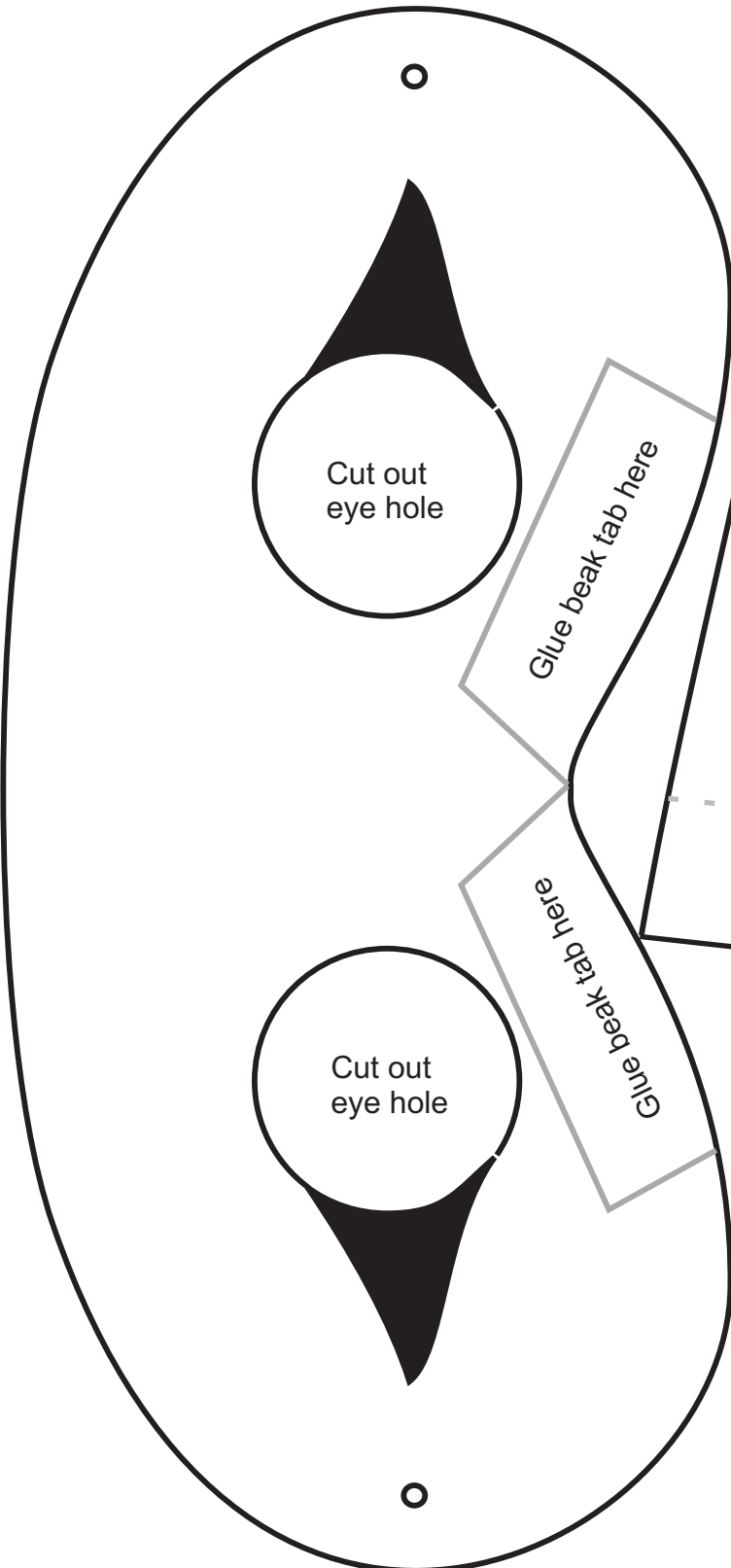
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|-------------------|---|
| <i>Skycall</i> | the bird stands with its wings open and swings its head up giving a single loud snap with its bill on the way up. When its head is pointing upwards it holds it very still and makes loud whistling noises. |
| <i>Leg action</i> | the bird lunges forward and snaps its bill loudly. It then swings its head down to one side and rests it on the feathers at the top of its leg. |
| <i>Bowing</i> | while standing, the bird lowers its neck and head towards its feet. It may take its head back between its legs. This move is often performed by pairs facing each other. |

Some of these moves might be a bit difficult for you to copy - can you rest your head on the top of your leg?



A pair of black-browed albatrosses

Cut out this template and stick it together to make your own albatross mask. Your teacher will give you a piece of elastic for a head strap.



Creating your own albatross dance

Your teacher may have shown you some clips of albatrosses dancing. Use these to give you ideas about how albatrosses dance.

One of the main things to notice about albatross dancing is that both birds in a pair do the same moves at the same time it's a bit like looking in a mirror.

Try to include a *skycall*, *leg action* and some *bowing* into your dance.

Think about what sounds you will need to make as you perform your dance. Remember that albatrosses mainly snap their bills, making a 'clack clack clack' sound and whistle.

Mind that you don't bang heads with your partner if you are going to use some *bowing* moves.