



Throw away | Motivating



## Life on the ocean waves



25  
mins

Brownies  
& Guides

### Aim

To build girls' knowledge about two different types of marine wildlife.

### Equipment

Copies of the *Albatross* and *Marine turtle* fact sheets - sufficient for each group to have one fact sheet.

### What to do

1) Show your unit a picture of an albatross or a marine turtle. As a group, share what you already know about these animals. For younger girls you could read the story of the albatross in *The Stolen Egg* by Tim and Sue Vyner, Gollancz Children's Paperbacks, 1992, Published in association with WWF-UK.

2) Invite the unit to split into groups. Each group must choose one of the animals and develop a way of presenting information about it to the rest of the unit in a creative way - this might be through a play, song, poem, masks, shadow puppets, etc. In putting together their presentation, they can have access to the *Albatross* or *Marine turtle* fact sheets, which give more information.

#### They should consider:

- Where the animal lives
- What it eats
- What else it needs to survive
- What threats it faces



Throw away   
**The albatross**  
Fact sheet



## Description

Albatrosses are among the largest flying birds, weighing up to 25 lbs. The largest species, the wandering albatross, has a wingspan of 3.35m, and can live for 50 years or more.

These amazing ocean wanderers feed on fish and squid, which they find in the open ocean and can fly thousands of miles without pause. They only touch land to nest and raise young. Albatrosses are unusual in that they lay only one egg. This can take 70 days to incubate, and another 10 months for the young bird to fledge. During this time, each parent in turn makes frequent trips of up to 5,000 miles, for days on end, to bring food back for the hungry chick. Not surprisingly, a pair of wandering albatrosses can only produce, at best, one chick every two years.

## Where they live

Southern oceans.

## Threats

Marine pollution is a major issue for the albatross. A chick's normal diet would include fish and fish eggs, squid, and octopus. However, the plastics pollution of our oceans means that young albatross chicks are also likely to be fed on a variety of indigestible, synthetic products including toothbrushes, make up, fishing products, bottle tops and plastic bags - all of which will kill a chick.

Parent birds face many perils while foraging for food, including power lines, planes, sharks or other predators, and industrial scale, longline fishing. This involves thousands of baited hooks attached to lines up to 129km long towed behind fishing vessels. The aim is to catch vast numbers of large fish like southern bluefin tuna and Patagonian toothfish. But sadly these lines also snare many seabirds, which are dragged underwater and drowned. With so many thousands of birds being killed, the species cannot reproduce fast enough to make up the numbers lost.



Throw away   
**The sea turtle**  
Fact sheet



## Description

Unlike tortoises and freshwater turtles, sea turtles have flippers instead of legs, are clawless and cannot withdraw their heads into their shells. There are seven known species of marine turtle: the flatback, green, leatherback, loggerhead, hawksbill, Kemp's Ridley and olive Ridley. Scientists disagree as to whether the black turtle is a further species or merely a subspecies of green turtle.

## Where they live

The Pacific coast plays host to Olive Ridley, green and leatherback turtles. The Caribbean shore hosts green, hawksbill, leatherbacks and loggerheads. The leatherback is capable of travelling huge distances. Most marine turtles live in warm tropical and sub tropical seas, but the leatherback also visits cooler waters. If global warming continues, we may see more of the leatherback and other species which make occasional appearances off the British coast.

## Threats

Turtles spend most of their lives at sea, but lay their eggs on land. When the hatchlings are born, they rely on reflected moonlight to guide them to the sea and safety. But as tourist development has encroached onto nesting beaches, the babies have become confused and have frequently headed towards the bright lights of discos, beach bars and cafes instead - only to collapse exhausted and be attacked by predators. However, tourism can also offer a solution, and when fishing communities and poachers realise that more money can be made from taking tourists to see turtles, and that a simple change of fishing hooks and practices can save the species, the solutions benefit all concerned. The diet of the turtle varies according to the species. Green turtles are fond of sea grasses, while leatherbacks favour jellyfish. Leatherbacks often mistake floating plastic bags for their favorite prey, with fatal consequences.

The leatherback turtle has declined by more than 95% in the last 20 years. Part of the cause is the often unintentional killing of marine turtles on hooks and nets set by fishermen. This is compounded by harvesting turtles and their eggs for food by coastal communities. The Kemp's Ridley is now critically endangered because its population has declined due to human exploitation and because it gets trapped in shrimp nets. The species is particularly vulnerable because it nests on just one stretch of beach in Mexico.



Throw away | Motivating



## Packaging on the line



15  
mins

Brownies,  
Guides &  
Senior section

### Aim

To explore some of the hidden issues around packaging.

### Equipment

Cards marked 0, 50 and 100. Position the cards at three points on an imaginary line across the room.

### What to do

Read the questions below in turn and ask the girls to show their estimate by standing in what they think is the correct place on the imaginary line.

**Discuss their estimates before telling them the answer:**

#### Question (Cards represent £0, £50 and £100)

Out of every £100 we spend on food, how much pays for the packaging? **Answer £16**

#### Question (Cards represent 0kg, 50kg and 100kg)

How many kilograms of packaging waste do we produce every six months? **Answer 88kg**

#### Question (Cards represent 0, 50 and 100 joules. A joule is a unit of energy; it takes about 1 joule to lift an apple 1 metre)

How much energy does it take to make: 1 gram of paper? a plastic bottle? a baked bean tin? a coke can? **Answers paper - 48j, plastic bottle - 43j, baked bean tin - 35j, coke can - 229j**

#### Question (Cards represent 0, 50 and 100 years)

How many years does it take for these items to rot away in a landfill site? Coke can? plastic bottle? baked bean tin? crisp packet? paper? **Answers 100 years, 1,000 years, 50 years, 8 years, 3 years**



Throw away | Making the links



# Unwrapped



ONE PLANET  
CHALLENGE

10  
mins

www.girlguiding.org.uk

Brownies,  
Guides &  
Senior section

## Aim

To help girls think about the purpose and the problems associated with packaging.

## Equipment

Packets of individually wrapped sweets. You might like to download or show photos of litter and pollution from the following website:  
[www.unep.org/regionalseas/marinelitter/publications/gallery/default.asp](http://www.unep.org/regionalseas/marinelitter/publications/gallery/default.asp)

## What to do

1) Girls take turns to unwrap a sweet as quickly as possible using just one hand - the rest of the group time each effort by counting in seconds. **Ask:**

- Can you unwrap it twice as fast if you work as a pair?

2) Look at the pile of discarded packaging. **Ask:**

- Did making that packaging harm the environment?

Think about raw materials, the energy used in manufacture and transport, the water used in manufacture.

- What's going to happen to the packaging now?
- Will that harm the environment?

Think about litter, landfill sites, water pollution from landfill sites, emissions from incinerators.

- What can we do to help? - reduce, reuse and recycle.

3) Ask girls to look at packaged items at home and in the shops. They should compile a list of *The top 10 over-packaged and pointlessly packaged products*, or bring in examples from home.



Throw away | Going deeper



## Plastic bag facts hide and seek



ONE PLANET  
CHALLENGE

20  
mins

www.girlguiding.org.uk

Brownies,  
Guides &  
Senior section

### Aim

To understand some of the environmental problems caused by plastic bags.

### Equipment

Copies of the *Plastic bag facts hide and seek* resource sheet - one per group and one for the leader; scissors and pencils.

### What to do

- 1) Before the session, walk around the building with a copy of the *Plastic bag facts hide and seek* resource sheet. Cut out one of the answers from the 'Hide' column and hide it. Write down a clue that will help the girls find this location in the 'Clue' column. Repeat for each 'Hide/Seek' pairing.
- 2) Cut off the 'Hide' column from copies of the resource sheet. Give the rest of the sheet to the girls. Explain that you've hidden the answers to the 'Seek' questions in various places around the building. Read out or display the clues. Ask the girls to find the hidden answers.
- 3) **Discuss:**
  - Could you cope without plastic bags?
  - How?
  - Are plastic bags a problem?
  - Why?
  - What can we do about these problems?



Throw away   
**Plastic bag facts  
 hide and seek**

**Resource  
 sheet**

**ONE PLANET  
 CHALLENGE**

**Seek**

**Location clue**

**Hide**

|  |  |                       |
|--|--|-----------------------|
| Number of plastic bags used in the world?  |  | 1 million per minute  |
| Number of plastic bags used by average person in UK?   |  | 290 - 300 per year    |
| Number of plastic bags recycled in UK?   |  | About 1 in every 200  |
| Number of turtles, dolphins, whales, seals and other marine mammals killed by plastic bags and plastic waste per year? |  | Approximately 100,000 |
| Number of free plastic bags handed out by UK supermarkets per year?  |  | About 17 billion      |
| Working life of average plastic bag?   |  | About 12 minutes      |
| Time it takes for a plastic bag to decay?  |  | About 100 years       |

✂ Cut out the 'hide' section along the dotted lines before handing out.



Throw away | Going deeper



## Plastic mosaic



45  
mins

www.girlguiding.org.uk

Brownies,  
Guides &  
Senior section

### Aim

To help girls understand that the waste we produce damages the environment.

### Equipment


Copies of the photo on the *Plastic mosaic* resource sheet for groups of girls. Visit the following webpage [www.plasticbagfree.com/iframe\\_facts.php](http://www.plasticbagfree.com/iframe_facts.php) and scroll down to find the image. Move the cursor to the top left hand corner of the image to access 'print' and 'save' functions. **NB** There are some disturbing images on this web page, so we would advise against you asking the girls to access the mosaic from home. You will also need paper, scissors, glue. Copies of the *Action woman!* resource sheet.

Also ask the group to bring in items of plastic waste from home.

### What to do

- 1) Explore the photo. Ask - What do you think it is? What can you see?
- 2) Explain that these are plastic items taken from the stomach of one dead albatross chick. Look for - toothbrush, lighters and Lego.
- 3) Use items of plastic to create a plastic mosaic. Add a caption explaining the significance of your picture. You could theme your mosaic around an animal under threat.
- 4) The photo was taken by Rebecca Hosking. Read her story on the *Action woman!* resource sheet to find out what she's done to reduce plastic waste.



Throw away   
**Plastic mosaic**

# Resource sheet

**ONE PLANET  
CHALLENGE**


## Did you know?

- 5% of all the plastic ever made has ended up in the ocean.
- 80% of this waste came from our homes, schools, shops, factories and streets. 20% came from ships and boats.
- It's getting worse: 100 million tonnes of plastic waste reach the oceans every year.
- This plastic waste causes the death of birds, dolphins, turtles, whales and other wildlife when they try to eat it or become tangled up in it. Toxic chemicals are also released into the water as the plastic starts to break down into smaller pieces.



© Rebecca Hosking. Visit [www.plasticbagfree.com](http://www.plasticbagfree.com)



Throw away   
**Action woman!**

**Resource  
sheet**

**ONE PLANET  
CHALLENGE**

## Getting to know you

**Rebecca Hosking** is a wildlife camerawoman who went to the Pacific in 2006 to film marine life for the BBC and was horrified by the plastic bag pollution - dolphins trailing plastic, albatrosses dying in plastic, and seals with their noses trapped in parcel tape roll.

She said “the sea is now like a trash can and the plastic is there for ever. It doesn’t go away for hundreds of years and all this damage is simply caused by our throwaway society”.

In the UK alone some 13 million plastic bags are given away, of which eight billion end up in landfill and others get blown away and end up in the sea. On her return from filming she went diving to find the UK seas also full of plastic and as a result she launched a very successful campaign in her home town of Modbury in Devon to outlaw the plastic bag.

The campaign hit off by the simple ploy of hiring the Modbury art gallery, inviting all the traders and showing them her film *Hawaii: message in the waves*, broadcast on BBC2.



[www.messageinthewaves.com](http://www.messageinthewaves.com)



Throw away | Taking action



## One Planet Challenges



30+ mins

Rainbows, Brownies, Guides & Seniors

In this part of the session, girls chose a number of practical activities they can do - individually or as a unit - either to share what they have learned with others, or to take practical action to address the issue of excess packaging and damaging plastic waste.

### Personal pledge

Make a pledge to consider the packaging of what you buy. Challenge yourself to stop using plastic bags altogether. Recycle and reuse when ever possible. Add your pledge to the *One Planet Challenge* site at [www.wwf.org.uk/oneplanetchallenge](http://www.wwf.org.uk/oneplanetchallenge)

### Spread the word

Make posters for your own age group to recycle items you wouldn't normally think of - such as make-up containers and toys that come free with other purchases.

### Get creative

Design a bag for life. Enter our competition on the WWF *One Planet Challenge* website. **Download *Design a Bag for Life* competition here** ►  
Hold a competition to find the best new use for a waste household object.

### Recycling centre

Become a 'recycling unit' and as far as possible buy recycled products for your meeting's needs. Challenge yourselves to reuse and recycle as much as possible. Add this target to your unit charter. Hold a recycling event for family, friends or the wider community.

### Swap-it!

Organise a 'Swap-it!' event. Bring along some cool things you have grown out of, have two of, or no longer need, and take away some cool things that someone else has brought. Invite family, friends, another patrol or a younger guiding group. Anything that remains unclaimed could be taken to a local charity shop.



Throw away | Taking action



## One Planet Challenges cont.



30+ mins

Rainbows, Brownies, Guides & Seniors

### Make things happen

Write to your local Chamber of Commerce (visit <http://www.britishchambers.org.uk/6798219246374351083/contact-the-bcc.html> for contact details) or speak to local retailers about becoming a bag free town or village.

Visit [www.plasticbagfree.com](http://www.plasticbagfree.com) for some information that will help you explain how they can achieve this - and why they should.

Find out about Rebecca Hosking; how did she change the world? [Download Action Woman! here](#) ►

### Support conservation work to save dolphins

Adopt a dolphin through WWF. Visit [wwf.org.uk/adoption/index.asp](http://wwf.org.uk/adoption/index.asp)

### Celebrate success!

Don't forget to celebrate success! There are downloadable certificates from the *One Planet Challenge* website to help you recognise effort and achievement. But why not design an albatross or marine turtle sticker that can be given to girls who do something to raise awareness of plastics based marine pollution.