



URBAN WORLD ACTIVITY
BREAKING THE
BAG HABIT



Jane Goodall's
roots&shoots

REUSE AND RECYCLE: BREAKING THE BAG HABIT

Single-use plastic bags are really useful when you are packing your shopping, but where do they end up after you are finished with them? This activity looks at the effects discarded single-use plastic bags can have on the environment around us and the animals that live there.

IN THIS ACTIVITY YOU AND YOUR STUDENTS WILL:

- ▶ Learn about the environmental impact of single-use plastic bags.
- ▶ Make a reusable bag and decorate it with your own design.
- ▶ *Optional:* run a 'best bag' competition.
- ▶ *Optional:* make and sell reusable bags with your favourite designs.

OBJECTIVES

Carrying out this activity will help students see how many plastic bags are used every day in Abu Dhabi and the problems that these can cause for wildlife and the environment when they are discarded. It will also help your students stretch their creative talents as they design reusable bags to use whenever they and their families go shopping. But we do not just want talk, we want action! Why not show off your creations by running a 'best bag' competition at school, then make bags using the best designs to sell to other students and the local community to help raise awareness of the problems of plastic bag use in Abu Dhabi!

WHAT DO I NEED TO MAKE IT WORK?

For this activity you will need pens and paper for the students to create their bag designs and access to materials to create each student's bag. Try to source unwanted, strong fabrics (like linen) to create your reusable bag so that it lasts as long as possible (though you can also use recycled plastic, tarpaulin or strong paper). Designs can be applied to the bags using fabric paints or markers, iron-on stencils – anything that will permanently colour your chosen fabric. Alternatively, you could contact a local T-shirt printer and arrange to have designs printed professionally (great if you want to produce larger numbers of bags and sell them).

WHAT THINGS WILL MY STUDENTS (CREATE?)

- ▶ *Optional:* a wall frieze for the classroom showing the environmental problems caused by single use plastic bags.
- ▶ A reusable bag to take home and use, incorporating a design or slogan supporting reuse.
- ▶ *Optional:* reusable bags to sell to other students and the local community.

THE PROBLEM WITH PLASTIC BAGS...

First we will look at why this is important. Here is some useful background information that you can present to help your students can develop their ideas on this subject. This will also help inspire their designs in the next steps.

Ask your students to consider the following facts:

- ▶ At the beginning of 2013 the Ministry of Environment and Water revealed that residents of the UAE used 11 billion single-use plastic bags each year (goo.gl/cGso0g). Ask your students to try and imagine just how many that is. How many are used every second? Almost 350! How far would they stretch if you tied them all together into a long string? (We reckon about 4 million kilometres – that’s almost 100 times round the equator).
- ▶ Discarded plastic bags are believed to be the cause of up to 50% of the camel deaths in the UAE each year (goo.gl/01X5SU). The camels eat the bags, possibly because they smell of food. This can cause the camel to choke straight away, but a bigger problem is that swallowed bags start to form plastic ‘rocks’ in their stomachs. As they eat more and more bags, the rocks grow and eventually kill them.
- ▶ Check out goo.gl/SSDCJw – one artist’s attempt to raise awareness of the plastic bag problem in UAE.
- ▶ Large islands of plastic waste, including plastic bags, form in the oceans. Many sea creatures and birds can get caught in these or swallow their contents. (goo.gl/c2MUIH).
- ▶ Some disturbing pictures of the effect of plastic bags on marine wildlife can be found here: <http://goo.gl/k6tmUn>
- ▶ This is not just a problem in the UAE – countries across the world use far too many single-use plastic bags. The US uses around 380 billion plastic bags a year, and the world as a whole may use up to an amazing 1 trillion (<http://goo.gl/3cgRwi> – tied together that makes around 350 million kilometres, which is more than twice the distance between the Earth and the Sun).



“Camels” by M1st91 - Own work. Licensed under Creative Commons Attribution-Share Alike 3.0 via Wikimedia Commons



“Sea with Garbage Dump” by Adam Jones, Ph.D. - Own work. Licensed under Creative Commons Attribution-Share Alike 3.0 via Wikimedia Commons

Optional: Why not do a combined survey/litter pick in a local park or on a local beach? See how much discarded plastic waste you can spot!

Optional: Why not include some of the facts that your students have discovered about plastic bags into a wall frieze for your school explaining all about your reusable bag project?

MAKE A REUSABLE BAG

Now the class has thought through the problems with throwing plastic bags away, it's time to start thinking about ways to help. One good way to help is to start using reusable bags when they go shopping, so let's make some!

You can decide how you want your students to make their bags, or (with older students) you might want to discuss what is needed for a great reusable bag and let them come up with their own design and choice of material (with help from the internet).

Here are some key points that you should bear in mind when choosing how to make your reusable bag, plus some suggested designs and 'how to' guides.

- ▶ It needs to be made of strong material so that it can be used over and over again.
- ▶ It should be relatively cheap to make (especially important if you are going to be selling your bags).
- ▶ If you are going to be using the bag to carry food, you might want it to be washable.
- ▶ Can you make the bags from recycled material? Where will you get the material from? Will you buy it, or can your students collect old clothes etc. to use?
- ▶ Could the bag you make be recycled again once it wears out?
- ▶ What pattern are you going to use to make the bag? Certain patterns work better with different fabrics.
- ▶ Here is a great suggestion from the website 'instructables' on how to make your bags from material off-cuts or old clothing: goo.gl/krFOHy, complete with step-by-step instructions.
- ▶ This pattern helps you make reusable plastic bags from old single-use bags <http://goo.gl/yUV2Vg> (with video).
- ▶ There are loads more patterns and ideas here, including knitting your own bag: <http://goo.gl/f1qiBO>

If you would prefer to keep things simple, you could skip this section, buy plain reusable fabric bags and just decorate them – whatever works best for your students.

(CREATE A DESIGN FOR YOUR BAG

The next part of this activity is to create a design to put on the side of your finished bag, perhaps incorporating a slogan encouraging people to abandon single-use plastic bags and move over to reusable ones instead.

One of the best ways to do this is to first cut out pieces of paper that are the same size and shape as the sides of your new bag. That way you know that your design is going to fit, and you can have a few tries to make it perfect before you put it on the bag itself. If you are going to have your designs printed check with the printer for any restrictions on size and colours before you start.

As well as helping the environment by reusing bags ourselves, we want to encourage other people to use reusable bags too. With this in mind, you might want to incorporate a slogan into the design on the side of your bag that tells people why you are using it, or you could simply make your design so beautiful that everyone wants one just like yours!

Once you have practiced your design on paper and got it perfect, it's time to transfer it to the side of your bag. Exactly how you do this will depend on what material your bag is made of, but you might want to use fabric paints, fabric markers, dyes (carefully!) or fabric transfers or even get your design printed onto the bag by a local printer.

Optional: If you're making a wall frieze to record the project, don't forget to add lots of pictures of the finished designs!

(RE)USE YOUR BAG!

After all that effort, you need to make sure that people see you using your bag out and about! Take it wherever you go, and when shops offer you a plastic bag, always say "No thanks, I brought my own!"

OPTIONAL: HAVE A REUSABLE BAG COMPETITION AND START A BUSINESS!

As a great way to show off your bag creations, why not run a school competition to see who can create the most attractive bag with the most effective design? The winner of the competition could have copies of their bag printed at a local printer to either give out or sell with a view to encouraging more people to embrace reusable bags. You could even run your bag competition as part of a larger Trashion Show (check out goo.gl/zjC15f). Why not try to organise a sponsorship/partnership deal with some local shops to sell your exclusive designs!

SOME INSPIRATION...



Just in case you can't imagine why anyone would want to buy a bag made from old rubbish, check out Freitag, a Swiss company that started out in 1993 making bags out of old truck tarpaulins – now they have 160 employees and shops around the world, and everything they make is recycled! www.freitag.ch

KEEP US UP TO DATE

We'd love to know how this activity went and see your finished bags. Who won your competition? How many bags have you sold? Just send us an email with details (and some pictures) to MrH@rootsnshoots.ae and let us know what you have been up to, and we'll feature it on the website!

WANT TO HELP IMPROVE THIS ACTIVITY?

This activity is a living document! Please help us by editing this activity to make it as good as possible. You can edit it by using this short link (just type it into your web browser's address bar): goo.gl/ndiXQZ – full instructions are provided. Any edits that can make this resource easier to use in the classroom or more applicable to life in Abu Dhabi are very welcome, so please follow the link and make your contribution!

APPENDIX – LINKS TO OTHER PROGRAMMES

LINKS TO ABU DHABI EDUCATION COUNCIL (ADEC) CURRICULUM STRANDS:

Physical World – this activity is about reducing plastic by making use of reusable bags wherever possible. Fewer plastic bags means less use of the Earth's natural resources and less landfill.

Living World – reducing plastic waste is a great boon to wildlife, especially camels and marine life which can get caught in or ingest the waste leading to illness and death.

LINKS TO ENVIRONMENT AGENCY – ABU DHABI (EAD) PROGRAMMES:

KEY AREAS

Direct link to **Waste** – this activity encourages people to reduce waste by reusing bags and hence creating less trash.

Indirect link to **Air** – Indirectly, reusing bags means fewer plastic bags produced and hence less energy used, so fewer emissions and better air quality.

Indirect link to **Climate Change** – reusing bags means fewer plastic bags produced and hence less energy used, so fewer emissions and less impact on the climate.

(CURRENT ENVIRONMENT (HABITATS):

Direct link to **Desert** – waste plastic bags are one of the biggest killers of camels in UAE. By reducing plastic waste, we make the desert better.

Direct link to **Marine** – waste plastic bags collect in the marine environment and cause problems for wildlife that becomes entangled in them or ingests them.

Indirect link to **Ground Water** – reusing means fewer new plastic bags produced and hence less water used in their production.