Plastic Clever Guides and Scouts

1st Thatcham Guides – a case study

In 2017, Hannah Marsh contacted Kids Against Plastic about their Plastic Clever campaign. As you'll see below, Hannah was a Guide leader and keen to get her young people engaged with the issue of plastic pollution:

Hi Amy & Ella

I saw you both talk (and sing!) and Yestival and thought you were very inspiring. I have made a conscious move to be more Plastic Clever since. I am a Girl Guide leader, and when asking my girls (aged 10-15) about what kind of things they would like to do next term, one thing that came up was helping animals - I'm therefore planning to use Blue Planet II (which I know a lot of them have seen) as a lead into the subject and take this opportunity to introduce them to Kids Against Plastic and encourage a few more Plastic Clever campaigners.

I'm planning a number of activities next term, including some education about the harm single use plastics can do, a trip to the beach to do a litter pick, speaking to local coffee shops to encourage them to become plastic clever - essentially taking all your wonderful resources and sculpting them into a programme that the girls can work towards. I would really like to finish by giving the girls who have completed all the elements some sort of certificate to say they are a plastic clever supporter - I have seen the certificates you have for cafes and schools, do you have anything similar for individuals?

If you have any advice or resources (other than those on your website, which are a great start!) to help in our quest it would be much appreciated. I'll keep you updated with how we're getting on!

Next steps

A few emails and a couple of months later, Hannah contacted me to share the great work her and her Guides had completed.

Suffice to say, they were awarded with the Plastic Clever Guides certificate and window sticker, and they even designed some Kids Against Plastic sew on badges to add to their badge collection.

The 1st Thatcham Guides in action

A team photo after a beach clean in Bournmouth.

The girls having completed their Plastic Clever Café survey.

Investigating which types of plastic might float or sink.

The amazing Plastic Clever display the girls put together.

How to become a Plastic Clever Guide or Scout Group

Thanks to Hannah and the 1st Thatcham Guides', below is a guide (with resources) that any Guide or Scout group can follow to become a Plastic Clever Group.

Activity ideas and suggested flow

1. Learn about the impact that plastic has on our planet.
    - Find out 3 facts about plastic pollution and share them with your group. Which facts surprised you most?
    - Watch some videos posted on the Kids Against Plastic website about the impact of plastic pollution. For example (please check for age suitability, may contain distressing images):
        i. The Future Of The Oceans | Blue Planet II (4:19)
        ii. Albatrosses are ingesting plastic - Blue Planet II: Episode 7 Preview - BBC One (201)
        iii. Mother pilot whale grieves her dead calf - The Blue Planet II: Episode 4 preview - BBC One (2:21)
        iv. The Life of a Plastic Bottle Pt 1 (2:22)
        v. The Life of a Plastic Bottle Pt 2 (3:55)
        vi. The Life of a Plastic Bottle Pt 3 (3:15)

2. Find out what the 4 biggest single use plastics are in the UK, and identify environmentally friendly alternatives.

3. Bring in a collection of plastics from your recycling bin (please don't buy plastic especially for this activity!). Look at the bottom of your plastics and find the recycling number of each object. Which plastics are recycled in your area?

   Using the Density Table (see attached), estimate which objects will sink and which ones will float. Get a bucket of water and test your theory.

   Different animals feed in different feeding zones in the ocean – some on the sea floor, some in open water, and some on the surface of the water. Think about which of your plastics will impact which types of feeders.

The Montery Bay Aquarium has and excellent “Plastics in the Water Column” to support this activity on their website: http://www.montereybayaquarium.org/education/classroom-resources/curriculum/grade#6-8

4. Design a comic strip, poster or leaflet showing the impact the plastic has on our planet, or demonstrating how someone can be more Plastic Clever

5. Write a list of 20 items that would be on your weekly shopping list – make sure to include some fruit and vegetables and a couple of treats! Visit a local supermarket and consider the following questions. Please make sure to inform the supermarket in advance of your visit if you are a large group.

    - What packing does each of your items come in, does it use plastic?
    - If there is plastic packaging, is there a non-plastic alternative?
    - Do you think the plastic is necessary?
    - What could the supermarket use instead?

6. Carry out a survey of your local coffee shops to see how plastic clever they are. Share the ‘Plastic Clever Café’ guide from Kids Against Plastic (http://kidsagainstplastic.co.uk/wp-content/uploads/2018/08/PC-Cafe-Guide.zip) and encourage them to meet the criteria and sign up to be a Plastic Clever café (example survey attached).

7. Have a go at the Plastic Pollution Quiz (attached) – how many questions did you get right?

8. Carry out a litter pick at your local beach or in your local town. Send a photo of yourselves with the plastic you have collected to hello@kidsagainstplastic.co.uk

9. Commit to being plastic clever – see the Plastic Clever Guide/Scout criteria

Plastic Experiment: Density Table

SPI Code	Name	Density (g/mL)	Uses
	Plastics		
1	**PETE** Polyethylene terephthalate	1.38-1.39	Soft drink and water bottles, peanut butter containers, salad dressing and vegetable oil containers
2	**HDPE** High-density polyethylene	0.95-0.96	Milk jugs, detergents, household cleaners, motor oil containers, some garbage bags, butter and yogurt tubs
3	**PVC** Polyvinyl chloride	1.16-1.45	Clear food packaging, medical equipment, siding, piping, windows, shampoo bottles
4	**LDPE** Low-density polyethylene	0.92-0.94	Squeezable bottles, various bags (for bread, frozen food, shopping and dry cleaning), clothing, furniture
5	**PP** Polypropylene	0.90-0.91	Syrup bottles, ketchup bottles, caps, straws, medicine bottles
6	**PS** Polystyrene (two kinds)	0.020-1.07	CD cases, meat trays, egg cartons, disposable plates and cups
7	**Other** Many kinds	Varies	DVD cases, iPod packaging, signs and displays, nylons
	Other Substances		
	Fresh Water	1.00	
	Sea Water	1.03	

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Plastic Clever Café Survey

We are from [xxx] Guides/Scouts. We have been learning about the impact of plastic pollution on our environment and what we can do to make a difference.

Would you mind if we asked you some questions about your business and tell you about how you can be plastic clever?

1. Do you serve take away hot drinks? If yes:
    a. Do you let customers use their own reusable mug instead of your standard take away cups?

    b. Do you offer customers a discount for using their own mugs? How much?

    c. Do you automatically give out a plastic lid when you give out a disposable take away cup?

    d. What proportion of customers do you think use reusable mugs versus disposable ones?

    e. Have you seen a change in this proportion over the last year?

2. Do you refill customers water bottles for free from the tap if asked? If yes:
    a. Do you remind customers of this when they buy bottled water?

3. Do you give out straws when a customer orders a drink? If yes:
    a. Do you do this automatically, or only when a customer asks for a straw?

4. Do you use plastic stirrers or an alternative such as wooden stirrers or metal spoons?

5. Do you sell food to take way? If yes:

    a. Do you provide a plastic bag, and if yes is this done automatically or only when asked?
    b. Do you provide plastic cutlery? If yes, only when asked or automatically with each order?

We'd like to leave you some information on how you can become a Plastic Clever café. If you'd like to sign up you can do so on the website and will be sent a certificate and a window sticker to display. Thank you for your time!

Plastic Pollution Quiz

1. What are the four most common single use plastics?
   Plastic bottles, plastic bags, plastic straws and disposable coffee cups

2. What happens to plastic waste?
   a) It is a biodegradable material so it eventually disintegrates
   b) It never fully goes away, it just breaks into little pieces
   c) There is no such thing as plastic waste, all plastic is recycled
   d) It is dumped in the ocean for fish to eat

3. Why is plastic dangerous for marine life?
   a) They mistake it for food and cannot digest it
   b) They can get tangled in it which hinders their ability to swim
   c) Both a and b
   d) It's not dangerous because they use plastic waste for habitats

4. Where does the majority of plastic waste end up?
   a) Oceans
   b) Burned for energy
   c) Landfills
   d) Recycled

5. How many million tons of plastic are dumped in our oceans every year?
   a) 1 million tons
   b) 8 million tons
   c) 20 million tons
   d) 50 million tons

According to the Ellen MacArthur Foundation, at least 8 million tons of plastic is dumped into our oceans each year. That's the equivalent of dumping one garbage truck full of plastic into the ocean every minute. If nothing is done, this will increase to two garbage trucks a minute by 2030 and four per minute by 2050!

6. True or False: There are many alternatives to single use plastic products.
   a) True
   b) False

7. What percent of plastic packaging is recycled in the UK?
    a) 9%
    b) 35%
    c) 45%
    d) 75%

In terms of plastic packaging, 45% (1,015,000 tonnes) of all plastic packaging used in the UK was recycled in 2016. This is an improvement of 15% from 2015.

8. True or False There are 51 trillion microplastic particles in the ocean today—500 times more than the number of stars in our galaxy.
    a) True
    b) False

9. Approximately, how many plastic drinking straws does the UK throw away each year?
    a) 500m
    b) 1bn
    c) 6bn
    d) 8.5bn

The UK is easily the biggest user of plastic straws in Europe, with an estimated 8.5 billion thrown away each year, according to a study by Eunomia Research & Consulting. This compares with 4.8 billion in Germany, 3.2 billion in France, 2 billion in Italy and 1.1 billion in Denmark

10. How much oil is needed to make a single-use plastic bottle of water (% capacity of the bottle)?
    a) 1%
    b) 20%
    c) 35%
    d) It doesn't account for any part because plastic is not made using oil

For every single-use plastic bottle of water, the equivalent of around 1/5th of its capacity of oil – a finite resource – is used.

11. How many single-use coffee cups are used in the UK each day?
    a) 1 million
    b) 5 million
    c) 7 million

d) 10 million

Aka 250 million per year. Less than 1% of these are recycled.

12. By what year do scientists predict plastic will outweigh fish in the ocean, pound for pound?
    a) 2020
    b) 2050
    c) 2250
    d) 3000

A report done by the Ellen MacArthur Foundation found that there are over 150 million tons of plastic in the oceans today. That is about 1 ton of plastic for every 3 tons of fish. Keeping up a business-as-usual trend will have plastic outweighing fish in the ocean by 2050.

13. On average, how long is a plastic bag used by a person before being thrown away?
    a) 12 minutes
    b) 1 hour
    c) 1 day
    d) 1 week

According to the 5 Gyres Institute, 12 minutes is the average “working life” of a plastic bag before it is thrown away. Globally, one million plastic bags are used per minute and only 1% of them are recycled. Most of them make their way to the ocean where they can take up to 20 years to decompose.

14. How much water does it take to produce one bottle of water?
    a) No water is used to produce plastic
    b) 1 bottle of water
    c) 3 bottles of water
    d) 6 bottles of water

According to the Pacific Institute, producing a water bottle (including the plastic container and the filtered water inside) requires three times the amount of water in the actual bottle. In other words, every litre of bottled water sold represents 3 litres of water used. And this doesn’t say anything about the energy required to transport it.

15. What is the most effective way to reduce plastic pollution?

Prevention! Reducing resource use in manufacture, ensuring products last for a long time and using less hazardous material