

## Doug Allan: Ocean Plastics - Live Lesson

### Primary School Classroom Resource



#### Background

Dunfermline-born Doug Allan is a natural history cameraman and presenter on programmes such as Blue Planet. Having seen first-hand the impact that marine litter has had on wildlife, he is passionate about raising awareness of this global problem. In our live lessons on ocean plastics, Doug Allan talks about his career as a wildlife cameraman and his first-hand experience of marine litter.

This resource is designed to support the live lessons with signposts to relevant resources, suggested activities to extend learning, ideas for action and suggestions of ways in which you can share your thoughts and findings. The lesson also connects well with several of the [Sustainable Development Goals](#) including: Life Below Water, Life on Land and Responsible Production and Consumption.

#### Suggested Activities and Resources

##### Discuss and reflect

- After watching the lesson, encourage pupils to reflect and record their thoughts to share with the rest of the class (see activities one and two for examples).
- Make a note of any idea's pupils have for action projects focused on [Litter](#) and [Waste Minimisation](#). Discuss which actions could be achievable to start with and who could help turn the projects into reality?

##### Investigate the problem

- Support pupils to investigate the source to sea pathway of marine litter in your local area. This could be in the form of a drawing, map, creative story, poem, [photo board](#) or research report.
- [Zack's journey](#) is an excellent story for Early Years about the journey of a plastic bag from supermarket to ocean. This could be acted out as a drama or simply a diagram to show movement of litter to drains or streams.

- Investigate litter levels in your school neighbourhood by taking part in a [litter audit](#). We would particularly encourage you to look beyond the school gate and into the surrounding areas. You may wish to use a litter survey, photographs or come up with your own method of measuring litter.
- Investigate the impact of litter pollution on wildlife, the ocean and human health. This visual [case study](#) from Photographer Chris Jordan records the impact of marine plastics on Albatross chicks nesting on Midway Atoll, in the Pacific. How might the litter you find in your own survey impact the environment?
- Key topics discussed in the lesson that could be explored further in class:
  - Have you noticed litter when on holiday? How are other cities or countries affected by and tackling litter?
  - Investigate the abundance of plastic accumulation throughout the oceans. The [North Pacific](#) and [North Atlantic](#) Garbage Patch's could be used as case studies.
  - Doug mentions that plastic bags and bottles are one of the most common forms of litter. What kind of litter do you see most/least? Why do you think that is and what could be done about it?

## Discover solutions

- As a class, pledge one action to carry out as individuals, as a school, and at home to help tackle the problem of marine litter.
- Organise a [clean-up](#) as a great way to get the whole school involved in making a difference in your community. A set of supporting [resources](#) for schools or youth groups has been developed to support schools to conduct a litter survey.
- The circular economy aims to minimise waste and make the most of resources, re-using or recycling wherever possible to close the loop of single use, disposable products. Encourage pupils to identify ways they can help support a circular economy. There are lots of educational resources on this topic at the [Ellen MacArthur Foundation](#). The pupil led video '[Source local, Buy local](#)' from Mackies could also be used as a case study.
- Organise a One Planet Picnic at school to celebrate food that is good for you and good for the planet. Explore ways in which you could reduce food waste and packaging - there are lots of ideas and inspiration [here](#) to help you get started.
- Explore technologies, jobs and skills required to tackle the source to sea litter problem. This learning opportunity can be extended by providing opportunities for pupils to interview relevant people within the local community (see local [case study](#) from Stirling City Council for inspiration).

## Share your thoughts and findings

- A clean up is a great opportunity for [Measuring](#) progress over time. Record your findings after each litter pick and share your results with others.
- Issues to discuss as a school community could include the types of litter found, the likely sources and possible solutions. You could also display the proportion of litter which could be recycled.
- Create a 3D histogram or pictogram from collected litter, showing the count of each litter item found.
- As a class, create a piece of art which helps to explain the problem of marine litter and/or explains what you will do to help solve it. Try to upcycle or reuse as many items as possible as part of the design.
- Organise a film night or art exhibition to share your ideas and creations with the wider school community. You can find more inspiration on our website from previous litter campaigns such as the [Sip Don't Tip exhibit](#) at the Gallery of Modern Art, our [Marine Pathways art competition](#) with Blair Drummond Safari Park in 2018 and the [Upstream Battle Marine Litter art competition 2019](#).
- Produce a map showing the path of marine litter from source to sea.
- Write a poem or song to perform to the rest of the school in a marine litter assembly.
- Investigate the power of media to raise awareness of environmental issues. Identify campaigns or messages within public media which have highlighted the issue of source to sea litter. Encourage pupils to critically analyse if they were successful in creating change and if so, why? For example, 'The Blue Planet' effect.
- Support pupils to engage in our [Young Reporters Scotland](#) programme by investigating and reporting on an environmental or sustainability issue that matters to them. For example, local causes of source to sea litter, the impact of litter on marine wildlife or new innovations to reduce the amount of waste generated.
- Host a 'clean-up conversation' at school to share how your school is tackling litter and discuss what more could be done as a community. You could invite partners such as local businesses, charities and community members to encourage networking and shared solutions.
- Write a letter about marine litter to your local MP, highlighting concerns and ideas for action.

## Take Learning Further

- How could you STEM the Flow of plastic into the oceans? Encourage pupils to utilise STEM skills by designing a model to either stop plastic getting into waterways or remove it once it's entered.
- For teachers within the West Partnership (Glasgow City, North Lanarkshire, South Lanarkshire, East Dunbartonshire, Renfrewshire, Inverclyde, West Dunbartonshire and East Renfrewshire), sign up to our free professional learning course to build confidence and STEM capital through the context of source to sea litter. Apply to take part here: <https://www.keepsotlandbeautiful.org/source2sea>
- Investigate and link your learning to **Sustainable Development Goal 14 (Life Below Water)**. The world's largest lesson has some fantastic resources which explore the threats and possible solutions of plastic in our oceans:  
<http://worldslargestlesson.globalgoals.org/global-goals/life-below-water/>
- Further resources exploring plastic pollution can also be found here:  
<https://canalrivertrust.org.uk/refresh/media/library/40262.pdf>

## Activity One: Classroom conversations

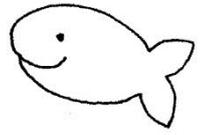
**What did you think after watching the Doug Allan Live Lesson on Ocean Plastics? The following questions could be used as conversation starters within the class or to prompt discussion and action in pairs/small groups.**

- Doug likes going to places where its cold like the Antarctic to film fur seals. Which country would you like to go to and what animal would you like to see there?
- It can be scary and even funny filming wildlife programmes, especially when polar bears, fur seals or walruses come to visit! Which animal would you like to film and why? How could it be affected by litter?
- The biggest animal Doug has ever seen is a whale shark. What's the smallest or biggest animal you've ever seen? Where does it live and what does it eat? How could it be affected by litter?
- Doug feels sad when he sees litter in the water as it traps animals and they can confuse it for food. How does litter make you feel?
- Doug has visited countries where there has been litter all over the beaches. What does your closest beach look like? Have you ever noticed any litter? What type of litter have you seen? How do you think it gets there?
- One of the best ways to stop litter from getting into the sea is not to drop it in the first place and pick up any litter that you see. Have you seen any litter around the school or where you live? What could you do individually, at home and as a school or community to make a difference?

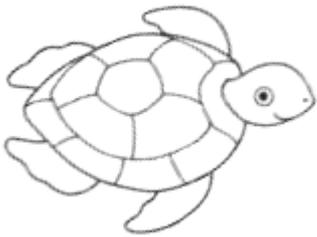
## Activity Two: Reflection

Write down your thoughts and ideas to share with the class.

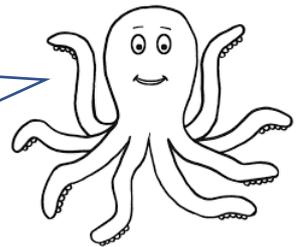
The thing I enjoyed most about the video was...



I learned that...



I think we can stop the litter problem in our oceans by...



I would like to learn more about...

