

PARENT NOTES

Geography

Coasts - Conservation



At A Glance:

- ✓ Geography
- ✓ Key Stage 4
- ✓ National Curriculum 2014
- ✓ Promotes understanding of threats to the natural coastal environment
- ✓ Pre-visit, on-board, and follow-up activities

About this activity

Before their visit to the Isle of Wight, students will be investigating the physical characteristics of Southampton Water; specifically the mudflats and saltmarshes. These once lined the shores but, due to extensive reclamation for port, industrial, residential and recreational developments, much of this natural ecosystem has been lost. Students will learn how these ecosystems develop, what their key characteristics are, and why they are important; both in terms of their conservation, but also as their 'worth' to humans. This

Teaching resources by Education Destination Ltd.

Curriculum relevant materials supporting school trips to the Isle of Wight. Book today with Education Destination and get full access to **this and hundreds more** quality resources

www.edudest.uk

Students will examine the natural ecosystems and learn how they develop and what they are like. They will consider how human activities may pose a threat to the natural landscape and ecosystems, and they will conduct fieldwork to assess the quality of the environment and the likely threats to it. They will use an online Geographical Information Systems (GIS) mapping tool to find out how the area is being protected.



An EQA is a commonly used tool in geography fieldwork which enables the observer to make judgements about different criteria related to the 'quality' of the environment, for example; air quality, accessibility, safety, open space... More able students will take this further by graphing and analysing their results, and also evaluating the relative strengths and limitations of the technique in making judgements about the environment.

Once back at school, students will learn about the many designations that are in place to protect the environments of Southampton Water, and they will conduct independent research to find out what these designations aim to do and how exactly they are helping to conserve the natural ecosystems and wildlife that inhabit them.

Questions & Answers

What is the task?

- ▶ Students will learn about the physical geography of the area, specifically, the mudflat and saltmarsh ecosystems that are found there.
- ▶ The activities on the worksheet guide students through learning what these ecosystems are and their key features, making first-hand observations of them, looking at the ways in which humans can impact upon them, and what is being done to protect them.
- ▶ The post-visit activity uses an online GIS mapping tool which enables students to 'build up' layers of information on a base map of Southampton Water to investigate the various designations in place to conserve the environment there.

"Conservation is a state of harmony between men and land."

- Aldo Leopold

How does this link to my child's learning?

Below are the relevant links to the current GCSE Geography specifications, showing where this resource fits into your child's studies:

AQA Geography A: *The Coastal Zone*

AQA Geography B: *The Coastal Environment*

Pearson Education Ltd (Edexcel) Geography A, Unit 2, section A, Topic 1: Coastal landscapes

Pearson Education Ltd (Edexcel) Geography B, Unit 1, section B, Topic 5: Coastal change and conflict

OCR Geography B: Theme 1: Rivers and coasts

WJEC Geography A: Unit 2; Our changing coasts

WJEC Geography B: Theme 2; Coastal processes and coastal management.

What will they learn?

- ▶ What mudflats and salt marshes are; how mudflats and salt marshes develop over time (an example of succession); why they are important as an environmental, and a human, resource.
- ▶ How to make observations of saltmarshes and mudflats (depending on the tide) in the field and record these on a field sketch and photographs.
- ▶ What an EQA is, and how to carry one out and use the data gathered and interpret the results.

Teaching resources by Education Destination Ltd.

Curriculum relevant materials supporting school trips to the Isle of Wight

Book today with Education Destination and get full access to **this and hundreds more** quality resources

- ▶ Nothing beats first-hand experience of www.edudest.uk being saltmarshes (and hopefully mudflats, although this is tide-dependent!) with their own eyes will help them to consolidate what they have learnt about them in school. Good fieldwork literally brings to life the learning that takes place in the classroom.
- ▶ This activity involves a lot of fundamental skills in geography, photo interpretations, making observations in the field and conducting primary fieldwork such as field sketching, and conducting an EQA. The opportunity to use GIS is both stimulating and interesting, and also a key part of modern GCSE syllabuses as technology enables its use more and more in our modern lives.
- ▶ Also, good fieldwork is fun! Students have the opportunity to fully engage with the subject and immerse themselves in it, something which will hopefully enthuse them and instill in them a curiosity about the world around them

What do they need to have done in preparation?

- ▶ Students can use the internet and/or books to research and ensure that they understand what mudflats and saltmarshes are, their key features and why they are important ecosystems. An animation showing how tides affect saltmarshes can be found here:

http://en.wikipedia.org/wiki/Salt_marsh#/media/File:Salt_pannes_and_pools_high_and_low_tide.gif

- ▶ Students could start to think about why conservation is difficult. Why is it not straightforward? Why might balancing the needs of a lot of different people pose problems?

What skills do they need to demonstrate?

- ✓ Photo interpretation – the ability to interpret/gather information about a place from images.
- ✓ Producing a simple, labelled field sketch.
- ✓ Conducting an EQA.
- ✓ Observational skills; the ability to observe and interpret features of human and physical geography that they can see, and record them accurately.
- ✓ Using GIS mapping to find out information about a location.
- ✓ Working with others.

