

Bringing the Seashore to the Classroom

Shoreham Beach Local Nature Reserve Outreach Programme



Sussex Marine Education Programme based at Shoreham and delivered across Sussex © S. Savage 2014

The Seashore – An Exciting and Dynamic Habitat

The seashore is an exciting and dynamic habitat but it is not always possible for schools to visit the coast. This might be due to the age of the pupils, distance from the coast, cost of transport or other reason. Teachers at educational events have increasingly mentioned these issues.

To help support teachers with marine topics we have expanded our outreach programme which focuses on bringing the seashore into the classroom. This document explains the main sessions we have developed for 2014



Bringing the Seashore into the Classroom

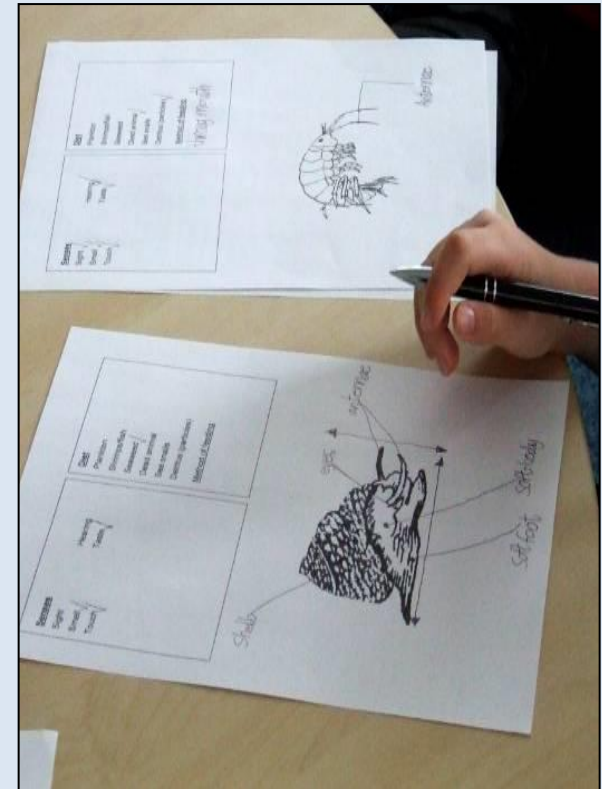


We have developed a special outreach visit displaying live marine life using a digital microscope and projected for the whole class to see using a media projector.

The session looks at various topics including habitats, adaptation, locomotion, life processes, food chains and more.



The session is supported by a coastal PowerPoint and activity sheets



The main aim of the session is to provide the opportunity for pupils to observe and investigate a variety of live seashore animals. They will be encouraged to speculate on adaptation, locomotion and the life processes of each animal.

Sample jpeg images from a school session



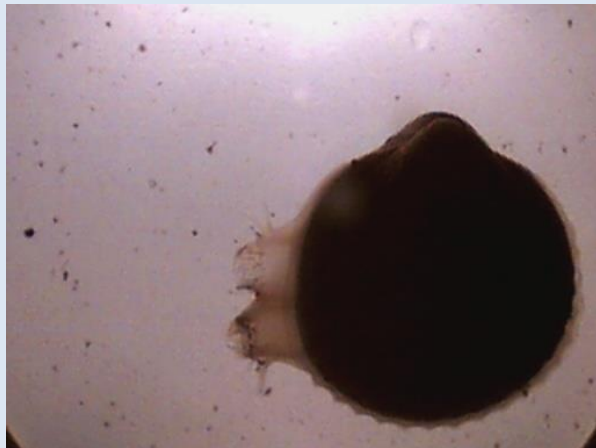
Shore crab



Sea anemone



amphipods



Cockle

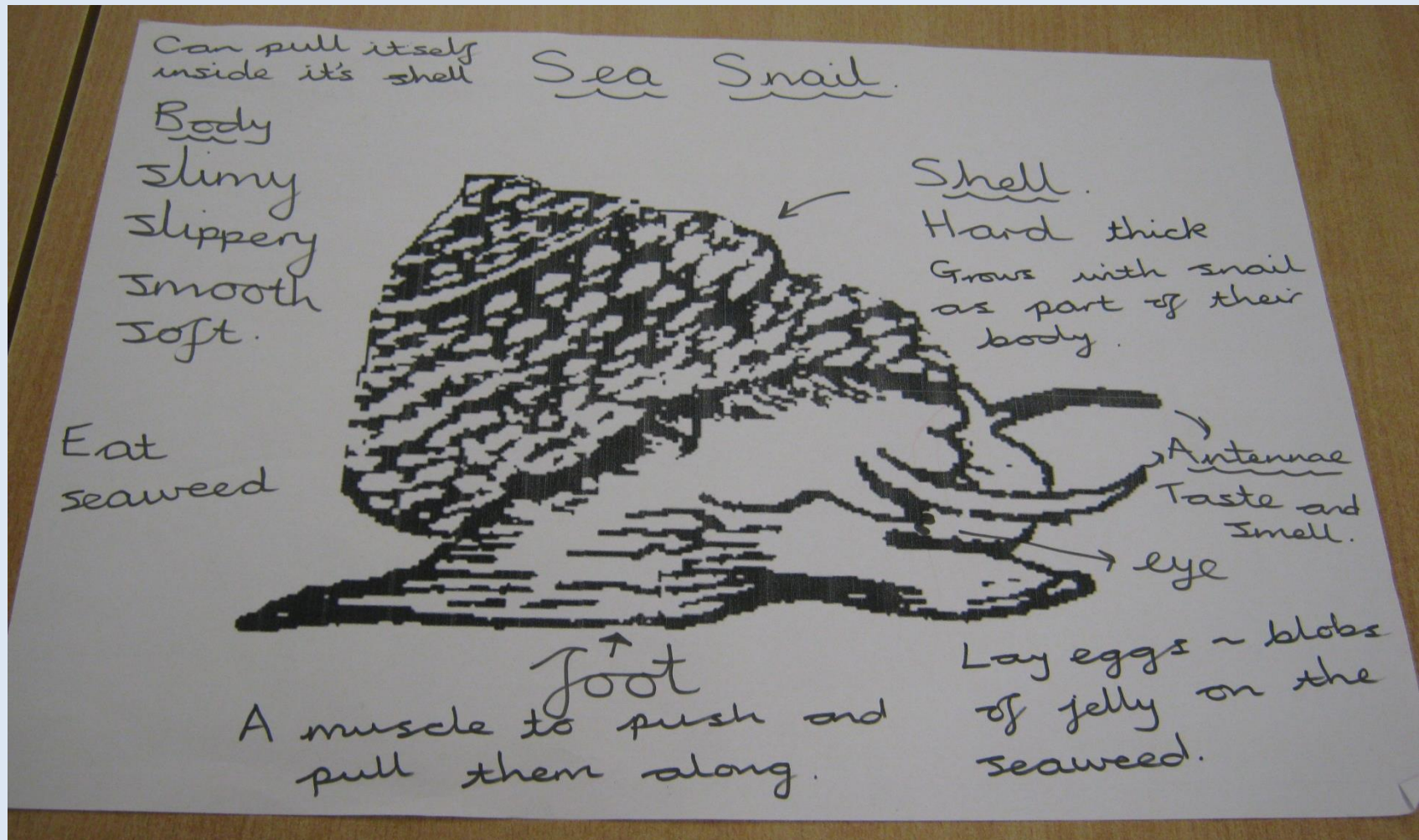


Blenny fish



Barnacle

The children usually work in 2 or 3 groups depending on the size of the year group. During the session they will be guided to observe the animals and their features.



6 very different animals will be examined in more detail and the pupil's observations and thoughts are recorded on a class sheet (example above). This information can also be used by the school in follow up work to compare how they are similar, different and can also be used to work on classification.

ADDITIONAL TOPICS

Secretes of the seashore. This session is based around the fascinating objects that you can find washed up on the beach at low tide. The pupils will be able to investigate and identify a selection of objects and learn more about the natural history of the animals that the objects come from.



Dogfish egg case



whelk eggs



Ray egg case



Dogfish egg



Adult whelk



Ray



This includes the use of photographs of marine animals and how they relate to the objects, fascinating facts and also myths and folklore surrounding seashore objects. We also discuss how the strandline is a habitat in its own right.

Marine debris. This session focuses on plastic pollution and other man-made objects that pollute the sea. This can be investigated as a local and global issue including various examples of the harm that it causes in the marine environment.

Pupils can investigate why plastic is such a problem and also the sources of beach litter, including the results of a local beach litter clean/survey that took place in Sept 2013



This session can be included as part of the Secrets of the Seashore session and can also include an activity looking at things that once lived and never lived.

Marine conservation

If the main focus of the topic is plastic pollution, or marine conservation, you might be interested in the following project <http://seawatch17.wix.com/one-world-one-ocean>

This project focuses on both the local and global aspects of the marine environment – looking at how our local coastline is linked to the global ocean and also how global issues such as marine debris, climate change, sea level rise may affect our coastline. We will also focus on local and global marine life. This is a project that links pupils with scientists and their work.

Marvellous Molluscs. This session looks at the fascinating world of molluscs from your garden/ school grounds, ponds and marine habitats

Molluscs are a fascinating animal group that have adapted to live in a wide range of environments. (Octopus are molluscs too!). Molluscs provide opportunities for pupils to undertake first hand scientific investigation on the needs and requirements, adaptations and senses of snails and slugs. This project is also suitable for urban schools with small grounds.

In this session we bring to the school some examples of marine molluscs for children to investigate. If you do not have a school pond we can usually bring some freshwater snails as well. We also bring along some large tropical shells for the pupils to examine.

Pupils can examine and record the molluscs we bring as part of the wider study including mollusc in the school grounds focusing on similarities and differences. We discuss facts such as why slugs/snails are slimy and how shells grow.

Our session can be used as a start point for or can be used mid-way to introduce marine molluscs to the pupils terrestrial mollusc investigations. (We can provide ideas and activities for studying terrestrial molluscs)



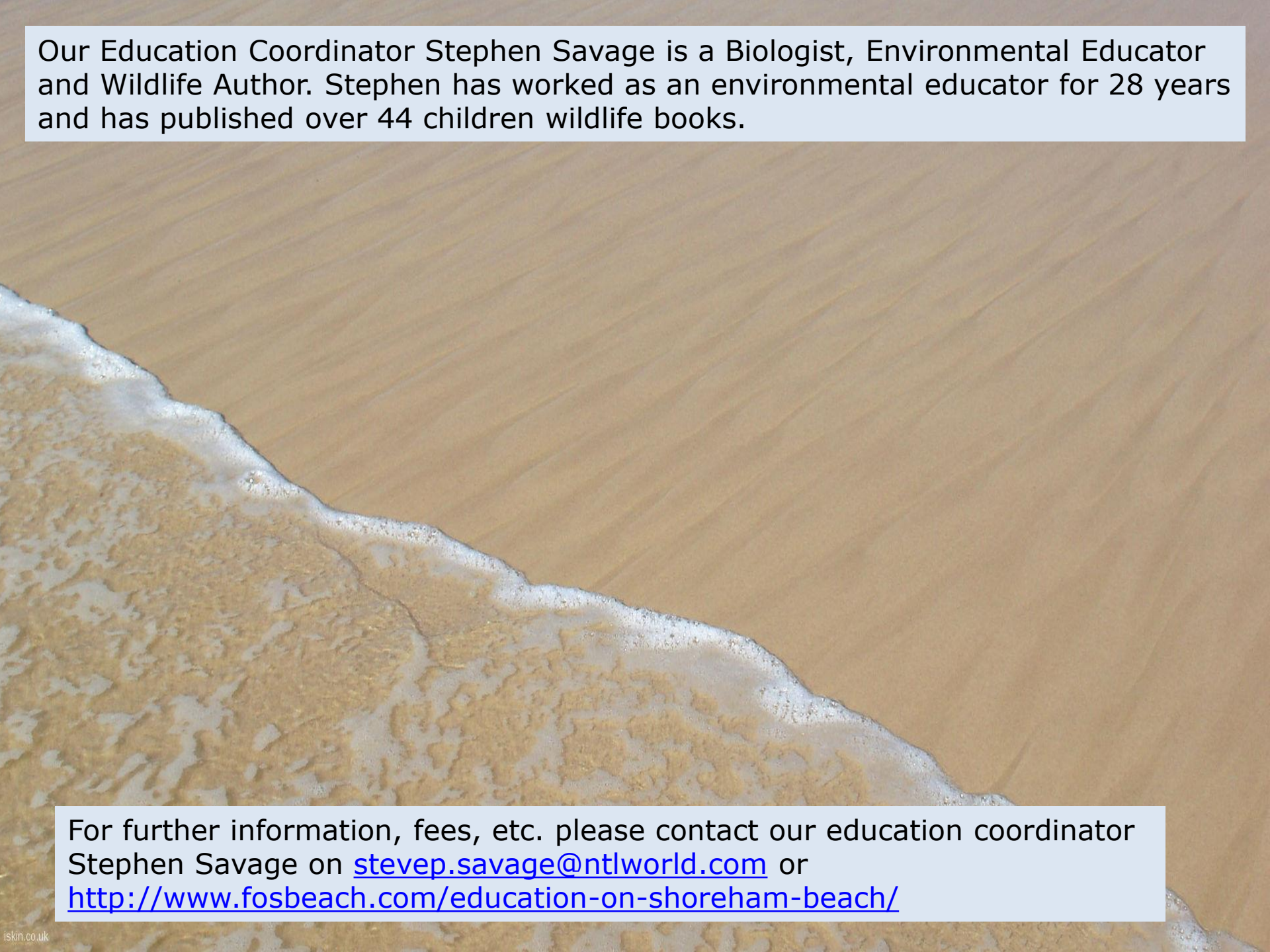
Comparing water habitats. This session can be used to compare a rock pool and a pond. This project has been particularly designed for schools that have a pond in their grounds. We can bring some live marine animals for the pupils to study.



We will encourage the pupils to think about the physical differences between a rock pool and a pond and the wildlife associated with each habitat.

While we will discuss both the rock pool and pond habitat we will focus on providing an opportunity for the pupils to investigate some live rock pool animals as previously mentioned in this document.

Pupils can start to explore their school pond prior to our visit and continue this investigation afterwards or you can use the project as a start point.



Our Education Coordinator Stephen Savage is a Biologist, Environmental Educator and Wildlife Author. Stephen has worked as an environmental educator for 28 years and has published over 44 children wildlife books.

For further information, fees, etc. please contact our education coordinator Stephen Savage on stevep.savage@ntlworld.com or <http://www.fosbeach.com/education-on-shoreham-beach/>