



**Community Seagrass Initiative  
Key Stage 3- Programme of Study**

# Applications of Science in Conservation

<p><b>National Curriculum</b></p>	<p>During this session students will experience up to and including:</p> <p><b>Citizenship KS3</b></p> <ul style="list-style-type: none"> <li>Equipped with the skills to think critically and debate</li> <li>The different ways in which a citizen can contribute to the improvement of his or her community, to include the opportunity to participate actively in community volunteering, as well as other forms of responsible activity</li> </ul> <p><b>Geography KS3</b></p> <p><b>Location Knowledge</b></p> <ul style="list-style-type: none"> <li>Extend their locational knowledge and deepen their spatial awareness of environmental regions</li> </ul> <p><b>Human and Physical Geography</b></p> <ul style="list-style-type: none"> <li>Human geography relating to the use of natural resources</li> <li>Understand how human and physical processes interact to influence, and change landscapes, environments and the climate</li> <li>Physical geography relating to coasts</li> </ul> <p><b>Science KS3</b></p> <p><b>Working Scientifically</b></p> <ul style="list-style-type: none"> <li>Understand that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas, together with the importance of publishing results and peer review</li> </ul> <p><b>Experimental Skills and Investigations</b></p> <ul style="list-style-type: none"> <li>Make predictions using scientific knowledge and understanding</li> </ul> <p><b>Relationships in an ecosystem</b></p> <ul style="list-style-type: none"> <li>How organisms affect, and are affected by their environment</li> </ul> <p><b>Analysis and evaluation</b></p> <ul style="list-style-type: none"> <li>Apply mathematical concepts and calculate results</li> <li>Present observations and data using appropriate methods, including tables and graphs</li> <li>Use appropriate techniques, apparatus, and materials during fieldwork</li> <li>Interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions</li> </ul>
<p><b>Learning Outcomes/I can statements</b></p>	<ul style="list-style-type: none"> <li>Why would scientists want to collect information about habitats around the British Coast</li> <li>How scientist collect information about the real world.</li> <li>How scientist present information / numbers about the real world on computers.</li> <li>How the work done by scientist benefits coastal communities</li> </ul>
<p><b>Methods to Achieve Learning Outcomes</b></p>	<ul style="list-style-type: none"> <li>Talk through seagrass maps of seagrass beds around the South West</li> <li>How do we select the questions we want to ask in scientific data collection</li> <li>Different methods of data collection used for seagrass mapping on by CSI</li> <li>Mapping and seagrass area calculations activity</li> <li>Information types and selecting a display method</li> </ul>



## INFORMATION FOR TEACHERS

<b>Concepts covered</b>	<ul style="list-style-type: none"><li>• Seagrass:<ul style="list-style-type: none"><li>○ What is it</li><li>○ Where we find it</li><li>○ What questions would scientist want to ask about seagrass habitat?</li></ul></li><li>• How might scientists collect answers to these questions?</li><li>• What type of data might scientists want to collect while performing field work?</li><li>• How might scientists choose to present data collected about seagrass?</li><li>• What type of impact might presenting data about seagrass have?</li><li>• Computer Modelling</li></ul>
<b>Opportunities</b>	<ul style="list-style-type: none"><li>• Use of interactive web conferencing Skype in the classroom</li><li>• Interact with other schools through video conferencing</li><li>• Collaboration with active (citizen) scientist monitoring seagrass</li></ul>