


Session title	The Migration Challenge	
Key Question	What challenges do migratory birds face and what can we do to help them?	
Session Description	A chance for learners to work as conservation scientists identifying migratory birds and analysing the threats they face, from weather and poaching, to changes in land use. Teams will monitor habitats and species at WWT Llanelli. What can their observations tell us about the human impact on migratory birds?	
Key Stage suitability	KS3	
Duration	1 or 2 hours	

Curriculum links	<p><b>Curriculum for Wales</b></p> <p><b>Science and Technology</b></p> <p>Being curious and searching for answers is essential to understanding and predicting phenomena</p> <ul style="list-style-type: none"> <li>▪ Progression step 4 <ul style="list-style-type: none"> <li>○ I can explain how the impact of our actions contribute to the changes in the environment and biodiversity.</li> </ul> </li> <li>▪ Progression step 5 <ul style="list-style-type: none"> <li>○ I can evaluate contemporary issues that affect the planet and biodiversity.</li> </ul> </li> </ul> <p>The world around us is full of living things which depend on each other for survival</p> <ul style="list-style-type: none"> <li>▪ Progression step 4 <ul style="list-style-type: none"> <li>○ I can describe the interdependence of organisms in ecosystems and explain how this affects their chances of survival.</li> <li>○ I can explain the threats to the development and health of organisms and describe how the effects of these are reduced by natural defences, preventions and treatments.</li> </ul> </li> <li>▪ Progression step 5 <ul style="list-style-type: none"> <li>○ I can explain how variation of organisms within a changing environment leads to natural selection which drives evolution.</li> <li>○ I can evaluate the factors that affect the development and health of organisms.</li> <li>○ I can explain how prevention and treatment can support natural defence systems and enhance the health of organisms.</li> </ul> </li> </ul> <p><b>Humanities</b></p> <p>Our natural world is diverse and dynamic, influenced by processes and human actions</p> <ul style="list-style-type: none"> <li>▪ Progression step 4 <ul style="list-style-type: none"> <li>○ I can understand and explain how human actions affect the physical processes that shape places, spaces, environments and landforms over time.</li> <li>○ I can describe and explain the distinctive features of places, spaces and landscapes at a variety of scales, in my locality and in Wales, as well as in the wider world, along with the processes at work in them.</li> <li>○ I can describe and explain why spatial patterns of places, environments and landforms may change over time in my locality and in Wales, as well as in the wider world.</li> <li>○ I can describe and explain how places, spaces, environments and landforms have changed over time and outline the processes that cause these changes in the natural world.</li> </ul> </li> <li>▪ Progression step 5 <ul style="list-style-type: none"> <li>○ I can explain and analyse the wide range of interrelationships and interdependencies between the human actions and physical processes that shape places, spaces, environments and landforms over time.</li> <li>○ I can give comprehensive explanations for the distinctive features of places, spaces and landscapes at a variety of scales in my locality and in Wales, as well as in the wider world, along with the processes at work in them.</li> <li>○ I can give comprehensive explanations for the spatial patterns of places, environments and landforms at a range of scales and predict how patterns and</li> </ul> </li> </ul>
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	<p>trends may continue or change in the future in my locality and in Wales, as well as in the wider world.</p> <ul style="list-style-type: none"> <li>○ I can give comprehensive explanations and analysis of how and why places, spaces, environments and landforms have changed over time.</li> </ul> <p><b>Informed, self-aware citizens engage with the challenges and opportunities that face humanity, and are able to take considered and ethical action</b></p> <ul style="list-style-type: none"> <li>▪ Progression step 4 <ul style="list-style-type: none"> <li>○ I can analyse and explain the impact of decisions made by individuals, local, national or global governance, and non-governmental organisations on people, their rights and the environment.</li> </ul> </li> <li>▪ Progression step 5 <ul style="list-style-type: none"> <li>○ I can explain the importance of the role played by groups, governments, businesses and non-governmental organisations in the creation of a sustainable future, and how they impact on people and their rights and on the environment.</li> </ul> </li> </ul>		
Learning outcomes	<b>All learners</b>		<b>More able learners</b>
	<p><u>All learners</u> will identify five migratory species.</p> <p><u>All learners</u> will Identify two areas of impact that humans can have on the environment (that can, in turn, affect migratory birds).</p> <p><u>All learners</u> will give three examples of what they can do to help migratory birds.</p>		<p><u>A few learners</u> will understand how changes in the environment can leave migratory species less well adapted and can affect their survival.</p>
Key vocabulary	<p>Migration</p> <p>Threatened</p> <p>Predated</p> <p>Food</p>	<p>Breeding</p> <p>Shooting</p> <p>Water</p> <p>Shelter</p>	<p>Wingspan</p> <p>Weight</p> <p>Satellite tagging</p> <p>Habitat</p>

Session Outline	Time
Introduction	5 mins
Learners are introduced to the centre, staff and volunteers running the session and the key question, explaining what we will be focusing on today.	
Section 1: Where in the world?	10 mins
Learners will discover the meaning of migration and then using a large floor map will map out the migratory routes of three geese.	
Section 2: What challenges do migratory birds face and what can we do to help them?	15 mins
Learners will measure, weigh and tag weighted geese and begin to understand what challenges these species face.	
Section 3: Collection walk	15 mins
Learners meet and feed several geese and swan species and learn about the challenges that they face and the work that WWT is doing to help these species.	This section can be extended during a 2hr session
Section / Activity 4: Visiting a hide	10 mins

Learners will visit at least one hide and observe the habitat and how the birds are using it e.g. to feed, rest etc.	This section can be extended during a 2hr session
Plenary	5 mins
Learners will review what they have learnt and ask any further questions.	