



# HABITAT DIVERSITY AND FOOD WEBS

KS 3 Science

<b>Learning Objectives During this Day Course pupils should learn:</b>
<ul style="list-style-type: none"> <li>ü To carry out practical fieldwork tasks, gaining first hand experience of experimental procedures in an outdoor context.</li> <li>ü To use keys to identify plants and animals and to classify them into major taxonomic groups.</li> <li>ü To recognise variation between species of plants and animals in different habitats.</li> <li>ü To make predictions and carry out investigations to test them.</li> <li>ü To use a variety of equipment and data collection techniques.</li> <li>ü To use scientific and descriptive vocabulary relating to habitats.</li> </ul>

<b>Pupils will also:</b>
<ul style="list-style-type: none"> <li>ü Learn safely in a new environment;</li> <li>ü Gain an appreciation of the environment and understand their role in caring for it.</li> </ul>

<p><b>Adult : Pupil ratios</b> For this course CEES' recommended ratio for safety is <b>1 : 10</b> Additional adults may be needed with classes where individual pupils need 1 : 1 support</p>
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<p><b>Other information</b> Please see separate guidance notes on safe and effective day courses, including information on clothing and equipment.</p>
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<b>Day Course Programme</b>
Where 2 classes are attending the course the introductory session will be common to both. Classes will then separate and sessions A and B will be interchangeable am and pm.
<p><b>Introduction:</b> On arrival a member of CEES staff will welcome your group to the Centre and describe the day's programme and the learning objectives.</p>
<p><b>Session A:</b> This longer session will take place at Upware's unique South Pit nature reserve. Students will sample types and numbers of organisms present in 2 ponds, using keys to identify them, and record data suitable for creating food webs and pyramids of numbers. The distribution of invertebrates in grassland, leaf litter and on trees will be compared. An investigation comparing nettle growth at different light intensities will also be carried out.</p>
<p><b>Session B:</b> During this session students will be based in the Centre and its grounds where they will have an opportunity to use microscopes to look more closely at wetland and terrestrial invertebrates, and they will devise mini-investigations into the variety, behaviour or characteristics of a chosen species.</p>
<p><b>Plenary:</b> The group will reflect on their day and consider how well the learning objectives have been met.</p>
<p><b>Note:</b> The actual programme may vary depending on number and needs of pupils, length of visit and weather conditions.</p>

<b>Relevant extracts from CEES risk assessments</b>	
See also separate guidance notes on safe and effective day courses	
<b>Hazard</b>	<b>Control measures</b>
Extreme weather conditions	<ul style="list-style-type: none"> <li>• CEES staff are aware of daily weather forecast.</li> <li>• Alternative venues or activities are substituted if weather conditions are particularly unfavourable.</li> <li>• In extreme cases, where guidance notes on clothing have not been complied with pupils may be excluded from activities.</li> </ul>
Walking and working beside water	<ul style="list-style-type: none"> <li>• Pupils are given clear verbal instructions on safety beside water and the safe use of equipment.</li> <li>• Pond dipping is carried out from specially built platforms.</li> <li>• CEES staff carry a lifeline in addition to standard safety equipment.</li> <li>• Practical work is carried out only where there is no water pollution.</li> <li>• Pupils with cuts, abrasions or skin allergies are given protective gloves.</li> <li>• Pupils are instructed to wash hands thoroughly after the activity and before eating.</li> </ul>
Working with plants and animals	<ul style="list-style-type: none"> <li>• Pupils are warned about potential dangers</li> <li>• Pupils are instructed to wash hands thoroughly after the activity and before eating.</li> </ul>