

Session Outline

KS3&4: Ecological Techniques (April - October)

This outline is a general guide for what to expect during your session with us. Activities and session structure may vary depending on weather conditions and other circumstances.

National Curriculum links: KS3&4 programmes of study – Science: working scientifically, biology; Maths; English.		
Learning Objectives	Session outline	Evaluation of Learners progress
<ul style="list-style-type: none"> • Applying knowledge of a range of techniques, apparatus, and materials to select those appropriate for fieldwork • Making a recording observations and measurements using a range of apparatus and methods • Methods of identifying and measuring distribution, frequency and abundance of species within a habitat • Levels of organization within an ecosystem • Some abiotic and biotic factors which affect communities & the importance of interactions between organisms in a community • The importance of biodiversity 	<p>Introduction The class will have a brief welcome and introduction to the day. We will discuss different sampling techniques used in the field and how they are useful in finding out more about the biodiversity of an area.</p> <p>Activities Students will take part in a practical population study using capture-mark-release-and-recapture methods and learn about how the Lincoln Index can be used to calculate population size. They will use a variety of equipment to sample invertebrates and will record species present. They will survey a hedgerow and decide its ecological value by investigating both the flora and fauna present, using a national standard survey.</p>	<p>To include: Discussion with students before, during and after the visit</p>
Pre Visit activities	Post Visit activities	Relevant activity risk assessments
<p>Visit http://www.theparkstrust.com/parks/map and find out more about the site you will be visiting. Discuss the different habitats within the site and the species you would expect to find there.</p>	<p>Explore further the creatures you sampled during the visit. Visit https://www.buglife.org.uk/ to find out more about the species. Compare the results from the capture-mark-release-and-recapture activity – are the results as you expected? Were there any problems with the methodology? Investigate other methods of surveying wildlife within the British Isles. Visit http://www.britishecologicalsociety.org/ to find out more about working in the sector. Visit http://www.hedgelink.org.uk/index.php to find out more about hedgerows in the UK</p>	<p>Bug hunting Guided walks</p>

