

Session Outline

KS3&4: Ecosystems & Interdependence (March - 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 | | |
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| Learning Objectives | Session outline | Evaluation of Learners progress |
| <ul style="list-style-type: none"> • Apply sampling techniques • The dependence of almost all life on Earth on ability of photosynthetic organisms • Levels of organisation within an ecosystem • Organisms are interdependent and are adapted to their environment • Importance of maintaining biodiversity • Positive and negative human interactions with ecosystems | <p>Introduction The class will have a brief welcome and introduction to the day. We will discuss ecosystems, think about how plants and animals are adapted to suit their environment and how all things are interdependent, and nothing exists in isolation.</p> <p>Activities Students will take part in pond dipping and bug hunting to explore a variety of different habitats and species adaptations. They will use equipment to carefully catch creatures and use keys to identify what they've found. Students will look at the different features of each animal and think about how it makes them suited to their environment. We will record species present and look at both abiotic and biotic factors within each ecosystem. Students will construct a food web to explore the relationships between species and how all things are interdependent. Sessions that take place at Linford Lakes will have the option of bird watching in place of one activity (pond dipping or bug hunting).</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/ and http://www.freshwaterhabitats.org.uk/ to find out more about the species and their habitats.</p> <p>Explore other food webs around the globe – what is the impact of humans introducing a non-indigenous species to an ecosystem? Look at the effect of cats in Australia and the current government policy: http://www.environment.gov.au/biodiversity/invasive-species/feral-animals-australia/feral-cats.</p> <p>Investigate other methods of surveying wildlife within the British Isles.</p> | <p>Pond dipping Bug hunting Guided walks</p> |