

Lesson Plan – Ponds – Exploring aquatic ecosystems and who lives there

<u>Learning Objective – Key Stage 3 & 4</u>	<u>Session Structure</u>	<u>Assessment for learning</u>
<p>By the end of the session pupils will be able to:</p> <ul style="list-style-type: none"> • Identify different pond creatures by their characteristics • Know the difference between carnivores, herbivores and omnivores • Identify predators and their prey • Understand different adaptations • Understand the impact of disease or pollution on an ecosystem • Establish the pH of the water • Learn about and complete a Biotic Index to establish the water quality • Work as a team 	<p>An introduction is given to the class and the session is explained. General discussion about plants, animals and their habitats to gain understanding of the group's knowledge. Discuss working around water safely.</p> <p>Activity</p> <ul style="list-style-type: none"> • Children will use equipment to investigate the pond, discovering different pond creatures and how they are adapted to live in an aquatic habitat • Children will carefully take turns to collect creatures and work as a team to identify them. • They will find out who eats whom and explore a food chain or food web • Establish the pH of the water and what this means • Discover how a Biotic Index indicates the health of an ecosystem 	<p>During the session we will use questions and answers to encourage children to reflect on their learning from the session.</p> <p>We will end the session with a plenary discussion to gauge their knowledge on the habitat they have been exploring.</p> <p>We will discuss how this pond habitat provides food and shelter for the creatures. What would happen if the area became polluted? Discuss the balance of the ecosystem.</p> <p>Key words</p> <ul style="list-style-type: none"> • Carnivores, herbivores, omnivores • Predator and prey • Invertebrates and vertebrates • Invasive species and non-native species • Ecosystem • Interdependence