

## PROVISIONAL PROGRAMME

### Aim

A comparison of biodiversity in a woodland and meadow pond Ecosystem.

### Introduction

- Background to Freshwater Ecosystems
- Discussion of invertebrate oxygen adaptations
- Risk assessment of fieldwork

### Field Site 1: Meadow Pond

- Random Sampling using Sweep sampling of 3 Micro-habitats
- Field identification of invertebrates using dichotomous keys
- Measuring abiotic factors

### Field Site 2: Woodland Pond

- Repeat of fieldwork techniques

### Follow up

- Calculation of Simpson's Diversity Index
- Example exam questions
- Summary, conclusion and limitations as group presentations.

## SPECIFICATION LINKS

### Topic 4: Biodiversity and natural resources

11. Explain the terms biodiversity and endemism and describe how biodiversity can be measured within a habitat.

12. Describe the concept of niche and discuss examples of adaptation of organisms to their environment (behavioural, physiological and anatomical).

### RECOMMENDED DAY LENGTH 9.30- 15.30

**SAFETY** All activities and sites are Risk Assessed. Recommended 1 adult per group.

**CLOTHING** Appropriate outdoor clothing. Indoor & outdoor footwear. Students may bring their own rubber gloves for fieldwork.

**VISITING TEACHER ROLE** Teachers to support FSC staff by circulating the students, keeping them on task. Teachers are responsible for behaviour.

### RESOURCES

All resources are provided.

**ICT** We have the option of using a digital camera to record techniques.



### ASSESSMENT

Progress assessed by open ended questioning, peer discussions, presentations and use of knowledge and skills in different situations.

### PRIOR LEARNING

Simple definitions and terms

### FUTURE LEARNING

Application of findings to other scenarios.

### HOW SCIENCE WORKS

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