# Lesson Plan
A Level Biology Investigating Populations, Environment and Ecosystems, (Terrestrial field work)

## National Curriculum links:
AQA (A2) Unit 4 – Populations and Environment (3.4.1, 3.4.5, 3.4.6. and 3.4.7.)
AQA (A2) Unit 6 - Investigative and practical skills in A2 biology (3.6.1. and 3.6.4.)

## Learning objectives
By the end of the session pupils will be able to:
- Develop fieldwork skills involved in undertaking an investigation
- Formulate hypotheses and collect relevant data using biological techniques
- Use specialist equipment to accurately collect data

## Session structure
<table>
<thead>
<tr>
<th>Introduction</th>
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<tbody>
<tr>
<td>Students have an introduction to the site including an outline of the day and activities. Outline and discussion of key concepts, sampling techniques and fieldwork methods.</td>
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**Session Activities**
- **Grazed and ungrazed comparison fieldwork**
  Investigation on plant diversity of grazed and ungrazed ecosystems. This will relate to our grazing management scheme – are the RSPB doing it right?
- **Random sampling**, quadrats % cover, soil moisture, temp, and ph, and plant height. Relate findings to management of site. Evaluate techniques used, limitations and improvements
- **Line transect** set up encompassing two different areas. Vegetation quadrats % cover / frequency, soil moisture, temp, and ph, and plant height. Relate findings to management of site. Evaluate techniques used, limitations and improvements

**Plenary options**
Group sharing of fieldwork data collected, analysis and interpretation

## Assessment for learning
We will re-visit the learning objectives and students will be encouraged to reflect on their learning and enjoyment of the day and be given the opportunity to give feedback in a variety of ways

## Before your visit
Students could revise the theory of succession and sampling techniques

## After your visit
Analyse the data collected by constructing graphs and using appropriate statistical techniques

## Key vocabulary
Succession, hypothesis, biotic, abiotic