

Learning & Discovery in the National Park

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PEAK
DISTRICT
NATIONAL
PARK

Ecology of Limestone Grassland – A level practical activity requirement

Thank you for your booking. Please check all details both on the programme and on your booking confirmation form and your risk benefit analysis.

Programme aims

An investigation into the effect of a named environmental factor on the distribution of a given species using different sampling techniques, using limestone grassland as an example. The named environmental factor is aspect/light level and the named species can be selected from a number of species present.

Learning Outcomes

Broad Objectives

For students to have a safe, fun and enjoyable experience in the Peak District National Park and understand that:

- The Peak District National Park exists because of its special, valued characteristics.
- Sustainable management is needed to conserve and enhance these special characteristics.
- That everyone has an opportunity to enjoy and contribute to the sustainable management of the National Park and wider environment.

Specific Objectives

By the end of the visit students will understand:

- How biotic and abiotic factors are interrelated in an ecosystem.
- How organisms are adapted to their environments.
- The physical and chemical factors affecting the distribution of organisms.
- The concept of energy flow through an ecosystem
- That ecosystems are affected by human activity and are Carefully monitored and managed.

An experience of:

- Different data collecting techniques, using quadrats, line transects, ID keys , using various meters and pH tests.
- Collecting data for statistical analysis, limitations and evaluation of techniques

Differentiation:

- Within the day there is ample opportunity for differentiation and student choice within the investigation, both in techniques used and levels of understanding reached.

We are holders of the **Learning Outside the Classroom Quality Badge**. Certificate number: R2QB103464

Quality Badge awarded by



Safety All our activities and sites are risk assessed. Risk assessments and health and safety information can be downloaded at the above website.

Our staff to student ratios vary depending on age, and ability of the group and activities booked. All our leaders are first aid qualified.

Clothing Please ensure that children are wearing warm outdoor clothing. Waterproof jacket, stout shoes with adequate grip are advised for all visits but this one in particular.

Behaviour Teachers are responsible for good behaviour, discipline & lunch time supervision.

Medical Information Please let us know about any allergies, medical conditions or special needs.

Accessibility We strive to make our visits accessible to all. Many of our sites are accessible to people with limited mobility, but do discuss your particular needs with us before booking. **Note: The**

Curriculum Links

- AQA - A level Biology practical activity requirements – investigation of a named environmental factor on the distribution of a given species
- OCR - A level Biology practical activity requirements – Use of sampling techniques in fieldwork
- Edexcel – A level Biology practical activity requirements – Investigate the effect of one abiotic factor on the distribution and morphology of one species

Thinking Skills – All activities promote independent enquiry, creative thinking, team working and effective participation.

Location and Coach instructions

Start time and meeting place: Please refer to your booking form. Meeting place is [Castleton Car Park](#) (SK149830) where coach parking is available.

Programme

- Meeting and Greeting. Where have they come to?
- Introduction to National Park and walk to site.
- Objectives and outcomes of the day
- Staying safe

Activities

- Walking up to 3 miles up Cavedale
- Using various data collection techniques for practical fieldwork, transects, quadrats, Pin Quadrats, ID keys etc
- Using meters and Apps to measure abiotic parameters
- Sampling methods, random, systematic or stratified
- Using clinometer to measure slope angle
- Assessing abundance and diversity of plant species
- Soil pH testing and soil depth measurement
- Using maps to navigate to site

Lunch will be taken enroute at a suitable location. There are no toilets in Cavedale but the day starts and finishes in Castleton where there are toilets and shops.

Cavedale site is only accessible on foot!

Payment Please note the terms and conditions on your booking form.

Cancellation Please let us know as soon as possible if you have to cancel or if your numbers change significantly.

Weather We continue activities in all but the very worst weather so please make sure everyone comes prepared to be outside in the prevailing conditions! See [what to wear](#).

Insurance Our education service is covered by £10 million Public Liability Insurance Policy. Please ensure that your school or LEA has appropriate insurance cover.

Prior Learning activities

It is helpful if students are familiar with the concept of National Parks and have some understanding of what makes them special. A knowledge of basic ecological ideas, including succession adaptation, abiotic parameters.

Follow-up activities

You may also want to look at our [secondary education resources page](#), and in particular the “state of the Park report” which offers a “mine” of useful facts and figures about the Park and for more follow up ideas and information.

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