

Heather Moorland Questions

1. *What are abiotic conditions like in moorlands?*

- Upland heathlands
- Above 250 metres (Britian)
- Occur mainly on resistant impervious rock which are acidic
- Acidic rock supplies few nutrients to the soil, combined with climatic conditions restrict plant growth
- High altitude, strong winds, lower temperature,
 - Environmental lapse rate of 1 degree per 100 metres,
 - Increased relief rainfall of over 12500mm per annum,
 - Greater cloud cover, restricts sunshine
- Low primary productivity and low diversity
- Cold wet conditions are not favorable to decomposition, partially decomposed materials accumulate as peat.

2. Which species dominate the moorland ecosystem and why

1. Heather is the dominant plant in many moorland ecosystems due to its ability to tolerate the harsh environmental conditions found in these areas. Heather has small, needle-like leaves that reduce water loss and help it retain moisture in dry conditions. Additionally, heather is well adapted to the acidic soil conditions found in many moorlands and can grow in nutrient-poor soils.

3. *Reasons to conserve moorland, human and physical*

One reason to conserve moorlands is because of the economic loss if not maintained, in Somerset England moorlands are heavily used for recreational activities and are also a big tourist destination which bring revenue and employment opportunities to the local area.

A physical reason to conserve moorlands, is because the ash from regular burning adds to soil fertility, new growth provides sheep with a more nutritious diet. Moreover, burning maintains the plagioclimax.

4.

They believe in nature's recovery, restoration of it and to rewild 5% of Britain, this expansion is seen as reversing biodiversity loss and enabling nature to bounce back.

5.

Pressures on heather moorlands

Agricultural threats – soils can be limed, fertilised and improved to form arable farming land

Nutrient enrichment by spray drift from agricultural fertilisers

Afforestation

Development for urban expansion

Excessive recreational uses, motorbike scrambling

Rising population pressures, desirability of heathlands (dry, flat, relatively, easy to clear) Britain contains 40 percent of Europe's remaining lowland heaths.

Leads to fragmentation, diminishes value and makes them more vulnerable to invasion by rival species,

Supports rich assemblage, of animals, Dartford warbler rare