



Abstract

In this classic psammosere study, students investigate how the distribution of colonising plant species is related to dune profile and substrate characteristics. Students will appreciate how the vegetation community changes over time and note a variety of xerophytic adaptations of plant species

Aim

- To investigate primary succession on a sand dune ecosystem

Learning Objectives:

(The Aims of the day are...)

- To grasp the long timescales required for succession to take place.
- To become familiar with the usage and meaning of the common terms: succession, pioneers, climax, plagioclimax, seral stage
- To understand the factors that control the rate of succession and the eventual climax community
- To experience the use of systematic sampling to record the percentage cover of plants

Learning Outcomes:

(Following a full day's fieldwork, students will be able...)

- To define the ecological terms used in a succession study
- To identify how the sand substrate influences the properties of soil
- To distinguish primary succession from secondary succession
- To predict how abiotic and biotic conditions change over time as a result of succession
- To evaluate the use of percentage cover as a measure of plant abundance
- To interpret the trends in primary data relating to the soil, microclimate, and plants, and relate these to hypotheses
- To understand why highest species richness is often not at the climax community
- Where appropriate, to explain unpredicted trends in the data
- To select and justify the use of an appropriate statistical test
- To evaluate the limitations in equipment and methods used in data collection