

Biodiversity mat

Overview:

Ecology surveys are quick and easy methods of estimating the health of biodiversity in an area. By identifying the different species of plants, fungi and other living organisms and counting how many of them are in a set area, you can estimate just how many of them there are within that environment. Using the grassland mat, children and adults can conduct their very own ecology survey. Using our guides participants can see how many plants, insects and bugs they can find hiding in our ecology zone.



Equipment

- Secure the meadow image floor mat to the ground.
- Arrange the magnifying glasses and identification sheets near the mat (ideally on a table to reduce the trip hazard).
- Participants should collect an ID sheet and magnifying glass (1 set per family group or per 2-3 people. The equipment must be returned at the end of the activity).
- Using the ID sheet, try and identify as many of the plants and insects you find.
- After they have identified them, ask them to count how many of them they can find on the mat.
- Ask participants whether they think there are lots of different plants and insects in the meadow or whether there are mainly one or two. Do they think the area has high, medium or low biodiversity?

How does this relate to NERC science?

Environmental scientists use a range of methods to establish the level of biodiversity in an area,

but one of the key methods are quadrature surveys for terrestrial or marine habitats.

Key take home messages:

- You can do surveys easily at home to see how many different plant and insect species you can find.
- Scientists use a range of techniques.
- Having scientists in the field is highly valuable and even the latest high tech approaches still benefit from having scientists working on location.

Applications:

- Simple survey techniques
- ID skills
- Teamwork

Health and safety

Hazard | Precaution

Trip or slip – No food or drink is allowed on the mat. All edges to be stuck or weighed down by beanbags or cones.