About Us

Activities are carried out on our 7 acre Nature Reserve consisting of wetlands, meadows and woods. A classroom is available in bad weather, however our class shelters allow work to continue even when it gets wet.
All activities are lead by our friendly, knowledgeable education team, and are aimed to give the children a 'hands-on' learning experience. The Nature Reserve is situated next to the BT Communications Centre providing a unique backdrop of 32m diameter satellite dishes. The Nature reserve also has great historical interest, including being part of a former WW2 Airfield.

How to book

Select the activities you would like to do (each topic takes half a day) and book your visit by either phoning our Education Officer, Louise Murphy on 01981 251616 or email contact@mesc.org.uk
NB Activities within topics are flexible, so call to discuss a programme to suit your needs.

Staff Ratios

Staff ratios should be no less than 1:12. Usually the more staff that are present, the greater the value of the trip to the pupils.

Visits to MESC
Full day—£140 / class (upto 35 children)
Half day—£80 / class (upto 35 children)

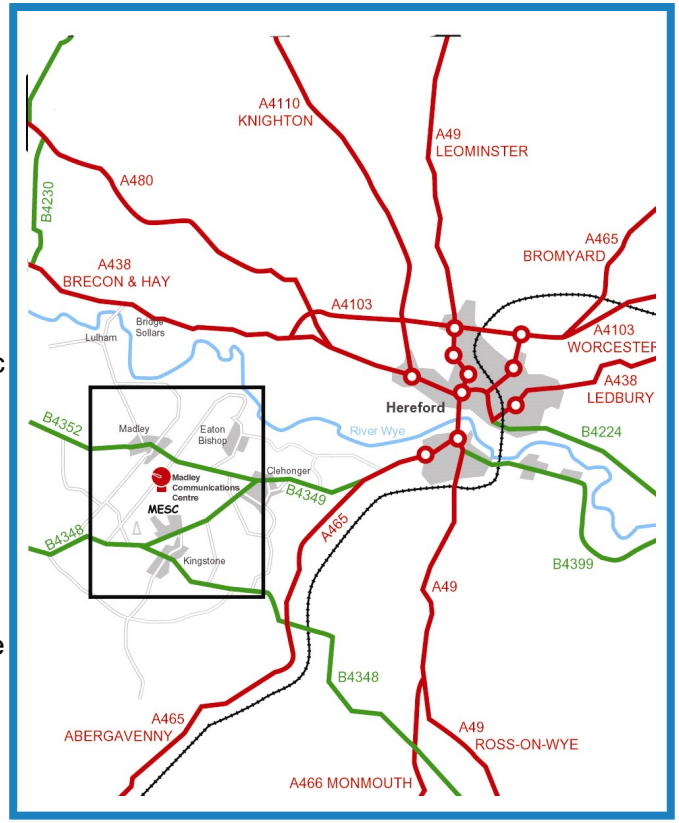
A full day is up to 5.5hrs between 9am and 3pm. A half day is up to 2.5hrs in either the morning (between 9 and 12am) or the afternoon (between 12 and 3pm).

Eco-days at School
Full day—£150 + travel for up to 4 class sessions
Half day—£85 + travel for up to 2 class sessions

Eco-days can include an assembly if requested. Adult ratios do not apply, although extra bodies are useful.

How To Find Us

MESC is less than 7 miles South West of Hereford, near the village of Madley.



Directions from Hereford

Follow the A465 Hereford to Abergavenny road, turn right towards Madley shortly after the sign for the Belmont Golf Course. Follow the road through Clehonger until you reach the cross- roads at the Comet Inn, turn left in to Stoney Street and follow the road for about half a mile.
Then take the 2nd turning on the left after the BT Communications Centre, onto the old airfield (before the Brightwells gate). Follow the old runway down to the parking area and walk to the double gates of the Nature Reserve along the stone pathway.

MADLEY ENVIRONMENTAL STUDY CENTRE (MESC)
where nature meets technology

Wildlife Discovery

For Key Stages 3 & 4

At Madley Environmental Study Centre

Enjoy curriculum based activities for a great day out in amazing surroundings.

BT

Adaptations and Habitats

Using invertebrates and plants collected by pupils from the stream and the pond, we look at the features that enable them to survive in water, and how these differ from terrestrial plants and animals.

Population Dynamics

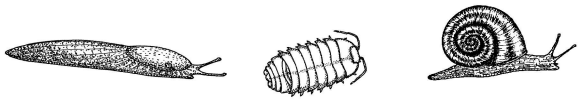
Invertebrates collected by pupils from the pond are identified and numbers of individuals recorded. The animals are then studied to find evidence of being carnivores herbivores or omnivores. Reasons for the variation of numbers of individual species are discussed, followed by explanations of energy flow and the formation of population pyramids. The session can finish with games to reinforce the principles of food chains, webs and energy flow.

Comparing Aquatic Habitats

Samples of pond water are collected to be tested. Experiments are carried out to find the pH, temperature and turbidity of the water. Light intensity and surface tension are also measured. This is followed by pond dipping and identifying the plants and animals that live there. The activities are then repeated for the stream habitat, followed by discussions as to why differences occur between the 2 habitats.

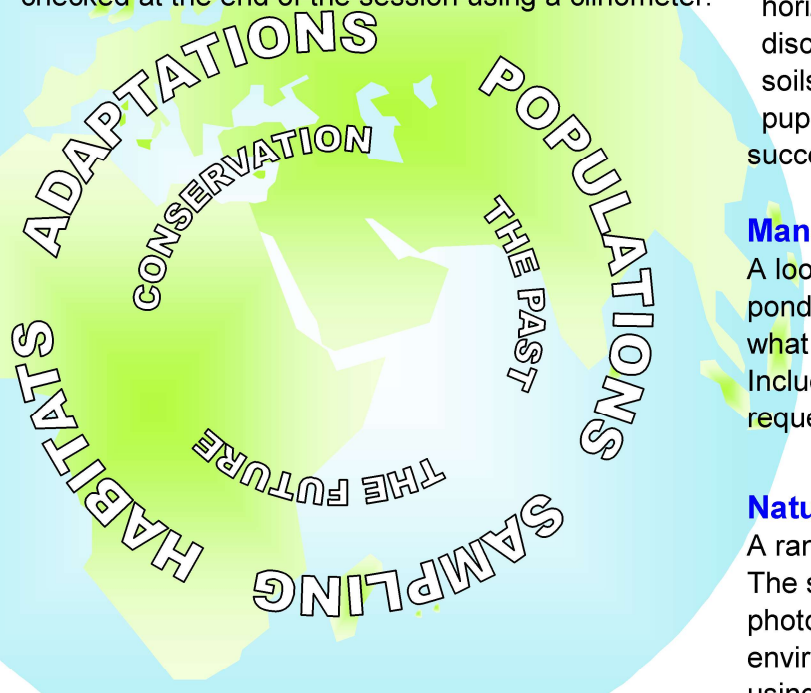
.Discovery Trail

A look at various habitats and the creatures that live there. By pond dipping and using pitfall traps, sweep nets, shaking of trees and other surveying techniques we can reveal the variety of unseen life in meadows, woods, rivers and streams. The day can be treated as a chance to explore or various topics such as biodiversity, human effects and habitat loss.



Trees of Life

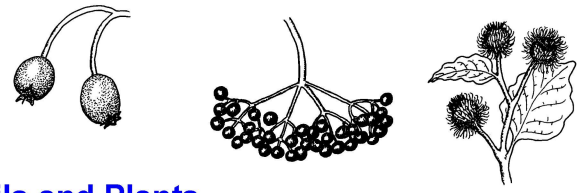
The session starts with an overview of the uses of trees. This is followed by identification of tree species (by examining their leaves) using a branching key. Invertebrates can then be collected from different tree species and comparisons of these can be made. Mathematical estimates are then made about the heights and ages of individual trees, with estimates checked at the end of the session using a clinometer.



Wild Flower Sampling and Identification

Using quadrats along a transect of wild flower meadow to determine occurrence and abundance of plant species. The transects can incorporate a path, which highlights issues of trampling. Alternatively, comparisons of long and short grass swards can be made by sampling with quadrats and identifying the plants found.

Different site specific branching keys can be used to identify wildflowers in the spring and summer.



Soils and Plants

A day investigating the formation of soils, including looking at how soils can differ within small distances. Soil profiles are taken, studying soil horizons, texture and pH. Nutrient cycling can be discussed, as can the roles of animals in forming soils. Depending on the stage of the curriculum pupils have reached, the basic theory of succession can also be explored.

Management for Conservation

A look at various habitats including farmland, rivers, ponds and woodland to see what features help and what hinders the survival of wildlife in the long term. Includes a role-play deciding the future of the site if requested.

Natures Art

A range of activities to explore nature through art. The session includes creating sculptures and photographing them, inspired by the work of environmental artist, Andy Goldsworthy. Collages using natural materials can be made, and also shadow pictures and observational drawings.

Sustainable Living

Investigating the issues of sustainability surrounding waste, water, energy and global warming with games and activities. (This topic is usually delivered at school).