

Educational activities in partnership with the Forestry Commission, Kielder Castle

Who we are

Northern Education for Sustainability CIC (NEST), is a 'not for profit' social enterprise working with local and regional partners to raise awareness of environmental issues and to encourage personal positive action that will allow local communities to thrive in a healthy global environment.

Since our formation in 2001 we have forged links with fifteen partner organisations and worked with over 50 schools and groups to deliver earth education activities both residentially and within the community. In addition we have provided training and development for over 300 people.

The Earth Education Approach

Much of our work is done using the tried and tested earth education approach with clear, focused outcomes:

Conceptual encounters: these teach the key ecological concepts that support life on Earth such as energy flow and food chains, the air cycle, water cycle and soil cycle.

Immersing activities: to help participants explore the natural world through activities which encourage plenty of rich, direct contact with nature, breaking down barriers and developing personal feelings for the natural world.

Personal action: to encourage personal, positive action to live sustainably through life style choices. All conceptual encounters and programmes have a strong personal message about human impacts on the environment.

The underlying principle is that if someone understands (conceptual encounters) how things work and how we impact upon the natural world, cares for and appreciates the natural world around them (immersing activities) then they will readily take positive personal action to live sustainably.

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Immersers

These provide rich direct contact with the natural world in a wonderfully engaging fresh way giving new perspectives and initiating a new relationship with the richness and diversity of life all around us which often goes unnoticed.

Earthwalk (1 to 1.5 hrs) Y1 - Y6

A series of fun sensory experiences which explore the natural world from completely different perspectives using a variety of the senses.

Seasonal Tale (1 hr) Y3 - Y6

The children collect special effects from the natural world around them to participate in a seasonal story. The fun lies in the telling of the tale which involves blindfolds, trust and plenty of excitement.



Magic Spots (10 to 30 mins) Y3 - Y6

This is probably one of the children's favourite activities; it involves listening and silence! The children find themselves a comfortable spot far enough apart to feel they have their own space in the natural world. As they sit nature starts to settle down around them and things start to happen that they wouldn't normally notice.

Micro Parks (1 hr) Y3 - Y6

This activity explores the miniature world at our feet. Each child lays out a nature trail in their own nature park but it is only 30cm in diameter. Once they've created their nature trail they take visitors on guided tours.

Map Sticks (1 to 1.5 hrs) Y3 - Y6

The native peoples of North America didn't use maps they used a stick and attached things to it that people would find along the journey to help guide them. The children take a walk creating a map stick as they go. They swap map sticks and see if they can find the things on their new sticks on the return journey.



Poe-tree (1hr) Y3 - Y6

At different positions and angles round a tree the children come up with words to describe it. They then create a poem using the words. Some wonderful poetry has come out of this activity.

All the immersers can be run with just one activity leader per class.

Conceptual Encounters for KS2

These adventures in learning ecological principles are active, fully inclusive, participatory and very engaging experiences with discovery and exploration of ideas a key part of the learning process.

The Great Spec-tackle (1.5hrs)

Ecological Concept: The cycles of air, water and soil

The children find out about the building blocks of life and how they are used over and over again in cycles. They follow the crazy journeys of a water speck (molecule), a soil speck and an air speck to find out what's going on. During the adventure they even get to pinch a speck from a real dinosaur between their fingers. (Run back to back with another Conceptual Encounter. Class split in half.)



Munch Line Monitors (1.5hrs)

Ecological Concept: Energy Flow

The concept of energy flow comes to life at Mother Nature's Munch Room as the children undertake training to become Munch Line Monitors. They discover what a munchline (food chain) is and how it works. They also discover that some munchlines are in trouble. Their job once qualified is to look out for munchlines in trouble and see if they can help put them right. (Can be run with full class)

Connection Inspection (1.5hrs)

Ecological Concept: Interrelationships

Every plant and every animal is linked in a web of life through energy flow and the cycles of air, water and soil. The children build the web of life becoming part of it; they then discover that when one part of the web is damaged it has an effect on all the other parts. (Run back to back with another Conceptual Encounter. Class split in half)



Home Sweet Home (1.5hrs)

Ecological Concept: Community

All things live in a natural community with other living things. Each plant or animal has a job to do as well as a home there. They can only live where they can find all the things they need for life. Each child adopts the role of a member of a natural community perhaps becoming a web footed bug bagger; they get its job description and its special needs. There are three communities: forest, field and marsh. Once they've worked out which one



they live in a problem is discovered; the marsh has turned into a field. What will happen to the marsh dwellers? In a life or death court room drama they examine the evidence presented and decide the fate of each according to its needs. (Can be run with full class)

Time Capsules (1.5hrs)

Ecological Concept: Change

The children take out a "treasure" map to find nine "buried" time capsules. They open them to discover ammonites, dinosaurs, woolly mammoths and much more going back to the dawn of life. The contents of each box form a layer in the Earth's past; the children work out and place the contents of their capsules in the correct level on the time capsule shelves which finally reveals how life and the Earth has changed and is continuing to change. (Can be run with full class)



Earth Education Programmes

An earth education programme is a carefully structured, focused, sequential and cumulative learning experience with specific outcomes. A programme develops understandings, feelings and initiates positive action. There are three major components in all programmes:

understandings, feelings and processing. An earth education programme motivates and pulls learners with experiences that promise discovery and adventure and weaves activities together with a clear, easily remembered organising pattern. It transfers learning to school and home with specific tasks that focus on developing good environmental habits.



Teddy Bears' Picnic (KS1)

Everyone brings their teddy bear. While the bears do their training course to find the things they need for life the children go off and explore the wilds and play some games to help them find out more about the needs of life. When they return the teddy bears have gone off for a picnic; tracking them down they learn how teddy bears can get their food, water, air and shelter in the woods. The teddy bears are having a picnic and everyone joins in. Later the children help their teddies to create desert islands containing all the things they need to stay alive. (Requires two leaders for half a day)



Earth Magic (KS2)

The children are challenged to find the lost meaning of the magic word WASSAP; this is the magic word that makes life on earth work properly (Earth Magic). Unfortunately because we've forgotten its meaning the magic isn't working so well any more. As they complete the programme they will themselves become Earth Magicians and can start to help Earth Magic to work properly again.

The programme starts with a surprise delivery to the classroom of a bin with a riddle to solve; inside the bin are endangered animals and plants plus something very unexpected buried under a pile of different types of rubbish. The contents of the bin form the focus of the follow up investigations and actions that the children will undertake after their day out on site.

The programme covers a full term with one day in the woods and the rest of the work being undertaken in school and at home.

Creative Learning Activities (Reception, KS1 & KS2)

Two hour sessions that are aimed at personal development and experiential, child led learning through exploration, play and discovery. A structure that allows flexibility is catered for within activities that focus on working with tools, found materials and ideas to generate expression in a creative way.

Sessions can contain many potential activities and are structured around the following themes.

- Arts and Craft: using the natural space and/or found materials in creative activities including sounds, textures, colours for example.
- Home and Shelter: exploring the area through these themes and using materials to create homes.
- Food and Warmth: fire safety, fire and simple food to make and eat.

Forest Schools (Reception & KS1)

Forest Schools comprises a set of six half day sessions and offers a cumulative and in-depth educational experience. They are aimed at personal development and experiential, child led learning through exploration, play and discovery. Forest Schools activities are suitable for a wide range of primary ages, particularly early years, and can be tailored to suit the needs of the group/class.



Example sessions could be:

Getting to know the site: boundaries, finding each other, collecting/exploring.

Seeing our place in a new way: sensory activities to explore the area.

Art and crafts: Creative expression and reflections on the natural setting.

Home: shelter, warmth food. Looking at what the animals and plants need to survive and prosper here, shelter building, using tools.

Manual skills: using more advanced tools for whittling/creating, making things for our area.

Celebration: food, fire and activities to draw together the week. Can include inviting parents/carers to join to see and share the experience with the children.

Bush School (Y5 and Y6) (I'm not a celebrity get me out of here!)

Your light airplane has crash landed in dense forest hundreds of miles from civilisation. You have no food, medicine, shelter or matches to light a fire. How will you survive? Working as part of a team you will solve the problems and hopefully get to live!

Ideal as a follow up after, or independent of, Forest Schools, Bush School can be run over two half day visits or as a more intensive full day with 6 hours of survival action. An adult is needed with each of the four or five teams. (Requires one leader)

Heal and eat

1) Which doctor? (1.5 hours)

You have problems. Someone was injured in the crash and has a gaping wound, several other people are ill with diarrhoea, someone has a bad mouth infection, one has a bad cold, someone else has stomach pains and you've got a head ache with all the worry! Collect the plants you need and prepare the medicines to treat the problems you face.

2) Bush tucker (1.5 to 2 hrs)

Bush walkabout - check out the tucker on offer
Plant tucker – make a salad
Bug tucker – a bug hunt with a difference!



Stay dry, keep warm

3) Stay dry (1.5 hrs)

The plane blew up and burnt to bits just after you all got out of it and it is raining. You need a dry place to sleep. Your task is to build a water and weather proof survival shelter using only the natural materials you can find in the forest.

4) Keep warm (1.5 hrs)

You haven't any matches but you find a box with some bits and pieces in that may help. Can you work out how to make fire using the contents?

Themed study activities (KS1 to KS5)

Plants, animals, forest ecology, forest management; if you don't see what you want ring us to tailor an activity to your needs.

Mini Beasts (KS1 & KS2)

This is a practical, hands on, exploration of the fascinating world of invertebrates. Using simple identification guides and a range of different collection techniques, the pupils will explore three major layers of the forest habitat: the litter layer, the trees, the tall vegetation of clearings. In addition to some simple classification and discovering the diversity of form and body structure related to feeding, movement, camouflage and defence they will discover food chains and the important roles played by some of the animals they find.

(Requires one leader for half a day)



Pond/River dipping (KS1 & KS2)



Ponds are great places to look at a whole new world of minibeasts adapted to a very different way of life. Using nets and simple identification guides the pupils will discover the diversity of life in a pond using some simple classification. They will create a food chain by finding out what the animals eat and they will discover how they are adapted to live where they do for example how they breathe, move around and avoid being eaten. They will also find out about some of the life cycles in a pond. KS1 are restricted to the pond but KS2 have the option of exploring the river to compare its inhabitants with the pond life found.

(Requires one leader for half a day)

Nature Detectives (KS1 & KS2)

This is an exploration of the forest looking for the tracks, trails and signs of the animals that live there from minibeasts through to birds and mammals like roe deer. They'll discover feeding signs, footprints, homes and sometimes even fur and feathers. If they find suitable prints they'll take a plaster cast of them to take back to school. As well as discovering the unseen diversity of forest wildlife they'll discover food chains, interrelationships, adaptations, habitats and homes.

This half day activity is best done with smaller groups of up to 15 per leader but if budget constrains this we can run it with one leader.



Growing timber trees - looking after the forest (KS2 - KS5)

Kielder Forest is managed by the Forestry Commission with a key aim to produce a tree crop whilst balancing this with nature conservation and providing for thousands of visitors a year. This half day activity looks at forest management from planting to felling, managing for wildlife and for recreation. It can also include a minibus visit to see forestry operations in progress, by arrangement, making a full day visit - price on request. The level of presentation, content and detail will be adjusted to suit the group from KS2 to KS5.

(Requires one leader for half a day unless forestry operations are included)

An introduction to forest ecology (KS3 - KS5)

The aim of this half/full day visit is to introduce students to practical examples of some of the key ecological principles they have covered in theory and to extend their knowledge by looking at a forest ecosystem. We will explore:

- Energy flow within the ecosystem - producers and consumers
- The role of detritivores and decomposers in nutrient cycles
- Succession and the development of woodland since the last glaciation
- Habitats within the forest system
- Niches
- The importance of mycorrhizal associations in forest systems

(Requires one leader for half/full day)

The trees and other plants of Kielder Forest (KS2 -KS5)

In addition to the above themed activities if you would like to focus your visit more on plants we can run an activity exploring the trees and other plants of the forest looking at classification, identification, adaptations and uses.

Choosing your activities for the day

You will normally be able to book two or more activities for your visit. They can be combined in different ways to suit your classes needs e.g. Munchline Monitors plus an earthwalk for a half day booking that will involve one of our leaders and so cost £100. Please contact us to discuss your aims for the visit and we can advise you.

Rates

Half a day with one activity leader	£100
Half a day two activity leaders	£200
Full day one activity leader	£150
Full day two activity leaders	£300

Prices include the benefits of the Forestry Commission's facilities for a full day.

Price for the Earth Magic programme, Forest Schools and forestry operations visit available on request.

High quality standards and working practices

Our professional, qualified staff have been involved with the delivery of environmental education and earth education for many years. We number teachers, ecologists and community and site based rangers amongst our team. Our delivery staff are fully trained to deliver the programmes and our policies and practices cover CRB checks and child and vulnerable adult protection policies. We are first aid qualified and fully risk assess our projects each time. We are fully insured for public liability.

Contact information

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