



# A Learning Resource to support visits to Evanton Wood



*Enjoy and learn about the past, present  
and future of our Community Woodland*



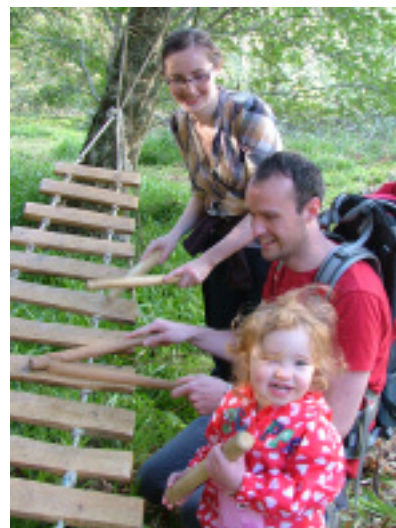
# Introduction

This resource has been developed as part of the Evanton Wood Community Company (EWCC) Five-Year Activity Plan agreed by the Heritage Lottery Fund.

It aims to provide teachers and others involved in outdoor learning with information and activities that will support their visit to the woodland.

The resource contains:

- A brief summary of Evanton Wood
- Six activities with information on:
  - *Storytelling and the woodlands*
  - *How we viewed and used woodlands in the past*
  - *Wildlife and landforms in the woodlands*
  - *Measurement, survey and money*
  - *Renewable resources and energy*
  - *Our community woodland*
- Curriculum for Excellence links to these activities
- Links to other sources of information and help
- 'Stop & Look' identification sheets.



Evanton Wood also has a resource box of woodland activity packs and practical items such as bug viewers, tree measuring resources and other outdoor learning support resources.

This resource is available in pdf form on the Evanton Wood website [www.evantonwood.com](http://www.evantonwood.com)

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## Planning a safe visit to the woods

Outdoor Learning is a great way to deliver Curriculum for Excellence and to provide for children's diverse learning needs.

Assessing the risks of a trip can also be a learning opportunity for students to think about risk, their personal safety and to learn to do their own assessments of risk. This also highlights the benefits of suitable risk and the transferable skills this helps develop.

For leaders there are guidelines on the Highland Council website:

<http://www.highland.gov.uk/learninghere/communitylearning/outdoorlearning/offsiteexcursions/riskassessments.htm>

There are also guidelines on the Education Scotland website:

<http://www.educationscotland.gov.uk/learningteachingandassessment/approaches/outdoorlearning/healthandsafety/index.asp>

# Links to Curriculum for Excellence



**Outdoor learning** has been recognised as an important way of delivering **Curriculum for Excellence**, offering a wide a range of activities, for many different types of learners and allowing progression from Early Level through to Senior Level.

## Successful learners

A wide range of students appear to become engaged and motivated in an outdoor learning environment, with physical and practical experiences reinforcing this learning.

## Confident individuals

Outdoor activities encourage independence and promote confidence and self-esteem. The physical aspects of outdoor visits are also positive for wellbeing and physical fitness.

## Responsible citizens

The experience of carrying out work in a woodland owned and run by a local community helps pupils to see how their (and others) involvement makes a difference to wider society. It also provides an opportunity to study their local environment and understand its relationship in a wider world context.

## Effective contributors

Outdoor activities usually involve teamwork and co-operation, helping to develop students' interpersonal and communications skills. Problem solving as a group, for example, in making a den, are commonplace in outdoor learning.

**Curricular links** for each of the activities in this resource are given in the table below. Details of Experiences and Outcomes can be found on the Evanton Wood website [www.evantonwood.com](http://www.evantonwood.com)

	Languages – Literacy & English	Numeracy & Mathematics	Expressive Arts	Sciences	Social Studies	Technologies	Health & Wellbeing	Gaelic learners
1. Stories in the wood	●	●	●		●	●	●	
2. Links to our woodland past	●	●	●	●	●	●	●	●
3a. What's natural in the woods? - Living things	●		●	●			●	
3b. What's natural in the woods? - Landforms	●		●		●		●	
4. Measuring, survey & money!	●	●			●		●	
5a. Renewable energy and resources - Uses of wood	●			●	●	●	●	
5b. Renewable energy and resources - Renewable energy	●			●	●	●	●	
6. Our woodland	●		●	●	●	●	●	

**Education Scotland** has identified some of the key benefits of learning outdoors, in their document, *Outdoor Learning: practical guidance, ideas and support for teachers and practitioners in Scotland*. <http://www.educationscotland.gov.uk/resources/o/outdoorlearningpracticalguidanceideasandsupportforteachersandpractitionersinscotland.asp?>

Some of the general benefits of taking learning outside include:

- *Connections are made with the real world. The complexities of the real world can help pupils to develop critical thinking skills*
- *Outdoor environments and surroundings act as a rich stimulus for creative thinking and learning*
- *Children and young people can sometimes behave differently outdoors. Quiet pupils may speak more, others become calmer and more focused when outside*
- *The multi-sensory experience outdoors helps children and young people to retain knowledge*

## Finding out about Evanton Wood

Evanton Wood has:

- a history that includes cultural links, local stories and historical figures
- many unique features of natural and geological importance and
- a potential future that is being built on ideas of sustainability, healthy lifestyles, community ownership and participation.



### General Background

Evanton Wood is 64 hectares of planned woodland dating from the late 19th century situated beside the village of Evanton in Ross-shire. It is mainly a coniferous wood, (including Douglas fir, Sitka spruce, larch and Scots pine) with deciduous beech trees and is capable of producing timber, but also has a wide range of plants and animals. The wildlife includes red squirrel, pine marten and creeping ladies tresses, along with a range of insects and other minibeasts, ferns, mosses, fungi and lichens.

The woodland has had a history of public access and it continues to be an important place for informal use and recreation. Visitors also come to view Black Rock Gorge, a narrow ravine through which the River Glass (also known as Allt Graad) flows.

An eminent German-born forester, Sir William Schlich, prepared the first written plan for the woodland and the resulting design has created the basis for the present day structure and management.

Cultural features in the woodland include the Balconie well and Clach a' Cholumain, a stone that may have pre-Christian associations; and there are many well-known stories associated with this area.



The woodland management plan has identified some key outcomes for the wood:

- 🍃 Evanton Wood will remain a **special place** for people and wildlife.
- 🍃 The woodland will be **more than just trees** as biodiversity flourishes and increases.
- 🍃 **Room to enjoy** as the woodland offers more low key informal recreation to all.
- 🍃 **Improving knowledge** within the Community in a woodland learning environment.
- 🍃 **Looking after our woodland heritage** with many management operations being carried out by volunteers.
- 🍃 The woodland will be **part of a network** of habitats and village paths linking woodland places in Ross-shire..



## Education

Woodlands are unique 3D spaces that can absorb large numbers of people. They offer an enormous educational resource for a wide range of groups, and can be experienced in many different ways throughout the seasons.

People have a strong attachment to trees and woodland. They offer shelter, shade, timber, food, inspiration for art and stories, leisure spaces and create a sense of well-being.

They are also high in biodiversity value with many



species, from a variety of groups, connected in many complex ways.

Evanton Wood offers diverse and easily accessible woodland as a place for learning. Curriculum for Excellence; the move towards more outdoor learning mean that Evanton Wood can be a valuable resource for schools, colleges and other organisations and initiatives involved in learning.





# Stories in the woods

There are many traditional stories linked to woodlands and Evanton Wood is a great place to explore some of these stories and it also has some stories of its own. A visit to the woodlands can provide excellent material for pupils to develop their own stories.

## In the classroom



- Get pupils to close their eyes and think of a favourite outdoor place – what does it look like, can you hear anything? Can you smell anything? Put your hands out what can you feel? Either draw or describe these places. Are there common elements to all of them? Often there is water and often there are trees.
- Discuss traditional tales associated with woodland like “Hansel and Gretel”, “Goldilocks and the three bears” and “Little Red Riding Hood”. What kinds of stories are they?
- Do the students know other stories about woodlands? Try writing one.

## In the woodland



- Use the Forest Education Initiative Woods for Learning Postcard Series – Journeysticks. ([http://www.foresteducation.org/search/site/search&channel=learning\\_resources&keywords=postcards&submit\\_x=18&submit\\_y=7/](http://www.foresteducation.org/search/site/search&channel=learning_resources&keywords=postcards&submit_x=18&submit_y=7/))  
*FEI Postcard on woodland products – Journey Sticks*  
This involves finding a stick, giving each student a piece of string which they tie to the stick and then they collect objects as they walk through the wood – that appeal to them – and tie them into their stick.
- Walk to a seating area in the woodland. Once there allow the pupils to discuss their Journeysticks and their favourite object on the stick and their favourite part of the walk to the seating.
- Tell the story of the **Lady of Balconie**, or another local story.
- Get the students to make up their own woodland story – one sentence at a time – each student adding the next sentence. (Somebody, maybe a teacher or group leader, should write down or record the story.)
- Spread out and take 5 minutes just to sit and listen to the woodland.
- Use sensory activities on the return journey – look for shapes (maybe leaves) colours (can use a pallet to match – see how many different colours you can find) – use magic scent catching fluid (coloured water) on the end of your nose to smell objects, and collect different types of textures – like prickly, hard, soft, fluffy, rough and so on.





### CURRICULAR LINKS

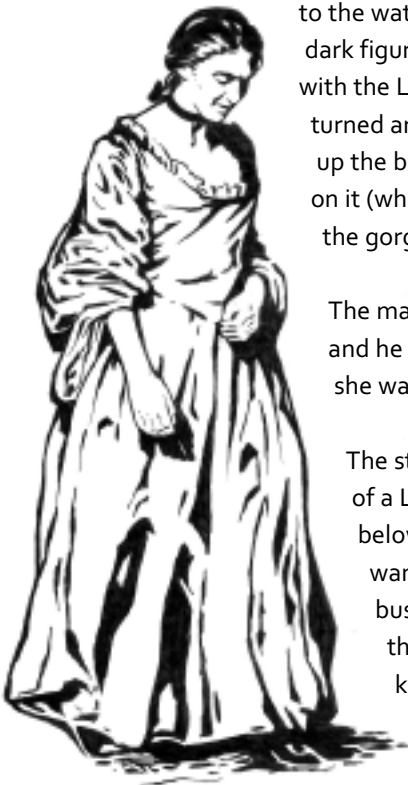
Languages – Literacy & English	listening & talking; reading; writing
Numeracy & Mathematics	number, money & measure; shape, position & movement; information handling
Expressive Arts	participating in performance; art & design
Social Sciences	people, past events & societies; people, place & environment
Technologies	craft, design, engineering and graphics context for developing technological skills and knowledge
Health & Wellbeing	mental, emotional & physical wellbeing; planning for choices and changes; physical education, physical activity and sport



### The Lady of Balconie

About four hundred years ago, there was a woman who lived at the house of Balconie. The 'Lady of Balconie' was quiet, hadn't many friends and spent a lot of time walking, on her own, by the banks of the Auldgrande that runs through Black Rock Gorge. She spent large amounts of time with one of her maids, but even this girl found the Lady a little strange, silent and sad.

One evening, the maid went with the Lady, to the banks of the Auldgrande. The sun was setting, as they reached the gorge and the Lady said "Let us approach nearer the edge." However, the maid was frightened and said "No", complaining that there were stories of strange things being seen at night in the gorge. The Lady said she wanted to show her a path that went



to the water's edge, but the girl argued and tried to get away. Just then, a dark figure appeared behind them - a man in green - and offered to go with the Lady of Balconie. As she got close to the edge of the gorge, she turned around and untied the household keys from her belt and threw them up the bank towards the girl. The keys hit a large boulder and left an imprint on it (which is still said to be visible). Then she disappeared with the man into the gorge.

The maid told the Lady of Balconie's husband about what had happened and he rushed down to the gorge with the other men of his household, but she was never found.

The story continues, that about ten years later, a Highlander, the servant of a Lady who lived near the Auldgrande, was fishing in the river, just below where it comes out of the gorge. He caught quite a few fish and wanted to keep some for his elderly mother. So he hid some under a bush and took the rest to his employer. The lady of the house asked if this was all the fish he had caught, he said yes, but she seemed to know he had more, so when she wasn't looking he went back to the bush to get the others. But they had disappeared and there was a faint track heading towards the gorge.





The track went into the gorge, on a path that the fisherman hadn't seen before.

The narrow gorge made it difficult to see and he almost gave up when the path stopped at a large cave. As he went in he saw two huge dogs. Then he saw a chair and table of iron, with his fish on it, and the Lady of Balconie, sitting in the chair.

He explained he had come for the fish and asked if she wanted to leave with him. But she said she could not. And he then saw that an iron chain was tied around one of her ankles preventing her from leaving. She told him that the fish were now owned by her "jailor" and that he may not be able to escape because of the dogs. The dogs had got up and were looking threatening. The Lady then threw some uncooked bread that was on the table, to the dogs and the fisherman made his escape. He came out of the gorge as it began to get dark and no-one has ever seen the Lady of Balconie since.

Adapted from Hugh Millar – Scenes and legends, from:  
[http://gerald-massey.org.uk/miller/c\\_scenes\\_o4.htm](http://gerald-massey.org.uk/miller/c_scenes_o4.htm)

The Black Rock Gorge also features in 'The Testament of Gideon Mack' by James Robertson. Here it is referred to as Black Jaws but is associated with a different river. Hear an audio recording of the author:  
[http://www.ambaile.org.uk/en/item/item\\_audio.jsp?item\\_id=72952](http://www.ambaile.org.uk/en/item/item_audio.jsp?item_id=72952)

## Extra activities



- Use the Journesticks as decoration or discuss where students found things to make a map of the woodland.
- Discuss the sights, smells, textures and sounds heard in the woodland.
- Write up the class story and maybe add some of the sensory information. Draw pictures to go with the story and display it.
- Talk to parents to find out if they have stories of the woodlands.
- Make stick picture frames to create a 3D picture to represent a woodland story or scene, use only natural materials found in the wood.



**Did you know?**  
 Balconie well can be seen in the woods and provided water by pipe to Balconie Castle.



# Links to our woodland past

Woodlands have been used by people in the past in many ways, for shelter, a place to forage and hunt for food and as a source of timber that can provide heat and a building material. This close relationship with the woods, our natural world and the landscape, is often reflected in language.

## In the classroom



- Get pupils to research the way people have used woodlands in the past. Have they been used for shelter? tools and goods for everyday life? (like bowls and brushes) food? (and if so, what kinds of food and drink? clothing? (Talk about natural dyes)
- Discuss Gaelic place names. Look at a map of Evanton Wood and the Gaelic place names in the woodland. What do they mean? Do the students know other Gaelic place names in their area? Could they make up names for places they know, based on the features or uses, like the "green hill" or the "buzzard's cliff"
- Look up the Gaelic tree alphabet. You can find out about it at:
  - The Sunart Oakwoods website <http://www.sunartoakwoods.org.uk/heritage/gaelicalphabet.htm>
  - Woodland Trust Scotland – Outdoor Learning Pack  
<http://www.woodlandtrust.org.uk/en/about-us/projects/bowl/Documents/learning-pack.pdf> - has a section on Gaelic and modern language tree names

Look at the Gaelic names of trees in Evanton Wood. Try drawing an ornate letter for a tree of your choice and illustrate it with the leaf of the tree.

- Look at the Sustainable Management of Evanton Woodland and read about Sir W. Schlich – find out about another famous historical person.



### Did you know?

Evanton is translated in Gaelic as Baile Eòghainn which means Evan's town. The town was created in the early 1800s by Alexander Fraser of Balconie who named it after his son Evan.





## In the woodland



- Use the Forest Education Initiative (FEI), Woodland Learning Activity Postcard - Hideaways and Dens. [http://www.foresteducation.org/search/site/search&channel=learning\\_resources&keywords=postcards&submit\\_x=18&submit\\_y=7/](http://www.foresteducation.org/search/site/search&channel=learning_resources&keywords=postcards&submit_x=18&submit_y=7/)  
This activity gives instructions for a simple wigwam style den. Draw a circle, in the soil or dust, with a stick, and find some fallen branches that are quite long. Push them into the ground and tie the tops together. Weave flexible small branches, like willow to create the walls of the den and leave a gap for the doorway. To finish use small leafed branches on top and overlap them, to help shed water. Use a waterproof sheet for the floor.
- This activity can be combined with the Woodland Learning Activity Postcard - Tied in Knots. [http://www.foresteducation.org/search/site/search&channel=learning\\_resources&keywords=postcards&submit\\_x=18&submit\\_y=7/](http://www.foresteducation.org/search/site/search&channel=learning_resources&keywords=postcards&submit_x=18&submit_y=7/)  
This can be used to discuss shelter and the other things woodlands has provided for us in the past
- Find the trees that occur in the Gaelic tree alphabet and do a bark rubbing of your tree, to add to your ornate letter.
- Find as many different tree types as you can and guess how old they are. You can work this out roughly by measuring the girth of the tree. Look at FEI Scotland Resource – Tree Measuring 1,2,3 [http://www.foresteducation.org/search/site/search&keywords=measuring&channel=learning\\_resources+regional\\_downloads/](http://www.foresteducation.org/search/site/search&keywords=measuring&channel=learning_resources+regional_downloads/) – Sheet 2 – for information on this..
- In the woodland is an area known in recent times as Mag's Wood (Mag was the widow of the woodsman). There was a forester's cottage here, showing us the links with jobs in the woodland in the past.
- Check [www.evantonwood.com](http://www.evantonwood.com) to find out more about the woodland's past management.





### CURRICULAR LINKS

<b>Languages – Literacy &amp; English</b>	listening & talking; reading
<b>Numeracy &amp; Mathematics</b>	number, money & measure; shape, position & movement; information handling
<b>Expressive Arts</b>	participating in performance; art & design
<b>Sciences</b>	planet earth; materials
<b>Social Sciences</b>	people, past events & societies; people, place & environment
<b>Technologies</b>	craft, design, engineering and graphics context for developing technological skills and knowledge
<b>Health &amp; Wellbeing</b>	mental, emotional & physical wellbeing; planning for choices and changes; physical education, physical activity and sport
<b>Languages – Gaelic (learners)</b>	listening & talking; reading; writing



### Extra activities



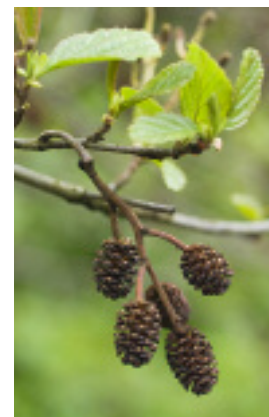
- Having discussed how people used woods for shelter in the past, think about how we use wood in our present day houses.
- Look up the Ordnance Survey list of Gaelic Place Names <http://www.ordnancesurvey.co.uk/resources/historical-map-resources/gaelic-placenames.html> Think about the names of places you know and their Gaelic origin. People often used the names of natural features to describe a place. On the Ordnance Survey website - there are also links to Scandinavian and Scots place names. Dingwall has 3 names - Dingwall, Inbhir Pheofharain and Baile Chàil - do you know what they mean and the language they are from? (Dingwall - Scandinavian - Ting wall "the field of the assembly/court"; Inbhir Pheofharain - Gaelic - "the mouth of the Peffery", Baile Chàil - Gaelic - "cabbage town".)
- Check Am Baile <http://www.ambaile.org.uk/> for old photos of the Black Rock gorge
- Find out about ways other countries manage their woodlands, in the past and now. Look at places like Canada, Norway and South America. What do you think is the best way to look after our woodlands.
- Find out about other community woodlands in Scotland <http://www.communitywoods.org>



## Gaelic language and the wood

There are a number of place names in and around Evanton Woodland that are Gaelic in origin such as:

- **Allt Graad** - means the ugly river (and is also known as the River Glass)
- **Allt cùl na greine** - means the stream at the back of the sun
- **Clach a' Cholumain** - means the pigeon (or dove) stone and some people believe the name may be pre-Christian. (NH 5945 6681)
- **Cnoc ruadh** (the name of the ridge) - means red knoll or hillock



There are 18 letters in the Gaelic alphabet and they have been traditionally linked to tree names. This reflects the importance of the natural world to the Celtic peoples.

Letter	Ancient Gaelic	Modern Gaelic	English
A	Ailm	leamhan	elm
B	Beith	beithe	birch
C	Coll	calltainn	hazel
D	Dair	darach	oak
E	Eabha	critheann	aspen
F	Feàrn	feàrna	alder
G	Gort	eidheann	ivy
H	Uath	sgitheach	hawthorn
I	Iogh	iubhar	yew
L	Luis	caorann	rowan
M	Muin	fionan	vine
N	Nuin	uinnseann	ash
O	Onn	conasg	gorse
P	Peith bhog	beithe	birch
R	Ruis	droman	elder
S	Suil	seileach	willow
T	Teine	conasg	gorse
U	Ur	iubhar	yew

The trees in **brown** are those found in Evanton Wood

Find out more about the Gaelic Tree Alphabet look at:

- The Sunart Oakwoods website  
<http://www.sunartoakwoods.org.uk/heritage/gaelicalphabet.htm>
- Gaelic Place-Names of Scotland  
<http://www.gaelicplacenames.org>
- Woodland Trust Scotland - Outdoor Learning Pack  
<http://www.woodlandtrust.org.uk/en/about-us/projects/bowl/Documents/learning-pack.pdf> - has a section on Gaelic and modern language tree names
- Evanton Oral History Project  
<http://www.spanglefish.com/evantonoralhistoryproject/>

### Did you know?

There are about 100 species of trees in the UK but only 32 species are native - these include ash, oak and scots pine, all of which can be found in Evanton Wood.





# What's natural in the woods?

## PART A - LIVING THINGS

There is a rich variety of plants and animals in Evanton Wood that can be observed and studied. There are different shapes, forms and colours; different types of living species, flowering plants (including the spectacular trees!), mosses, lichens, ferns, fungi, invertebrates, birds, amphibians and mammals; and many signs and impacts of these species on the wood. All these plants and animals are connected intimately to one another and the wood.



### In the classroom



- Discuss the plants and animals likely to be present in the woodlands
- Get each child to choose one plant or animal and find out as much as they can about it.
- Look at the connections between woodland species - use food chain and web activities. The book *Sharing Nature with Children* by Joseph Cornell and the website 'I'm a teacher, get me OUTSIDE here!' <http://creativestartlearning.co.uk/t/biodiversity/>, have selections of games and activities.
- Do the food pyramid game (This can also be an activity for the woodland.)
  - give 8 pupils labels saying "leaves" and get them to crouch down on the floor,
  - give out another 4 labels to 4 pupils saying caterpillars and get them to kneel behind the leaves and lean against them.
  - Next give 2 pupils labels saying "blue tit" and get them to stand behind the caterpillars and lean against them.
  - Finally give one pupil a label saying "sparrowhawk" and get them to stand behind the other birds and place a hand on a shoulder of each of them and lean, slightly. This shows the dependence of each layer in the food chain.
  - Herbicides or pesticides can be "fed" to the leaves (bits of paper saying "poison" are given to them) and these in turn can be eaten by the caterpillars and so on up the chain. How many "pieces" of poison does the sparrowhawk have at the top of the chain?
  - If you remove 1/2 of the woodland - 1/2/ the leaves are removed (get the leaves to slowly and carefully - to avoid accidents - move forward) - what happens to the rest of the wildlife? This activity can be finished by asking 'Where are we in this pyramid?'





## In the woodland



- Use “nature slides” activity - give each child a “slide”( a folded piece of rectangular paper that forms a square when folded, and then has a square hole cut in it - to create a frame) and ask them to collect some items to put in their slide. A piece of sticky tape may be needed to keep the collected items in place. When a clearing is reached get the children to form a circle and all stand facing the same way - looking into the back of the next person. Then hold their slide up to the light to look at it. The circle becomes a giant slide projector and every time you go “click” the child has to pass the slide onto the person in front. Do this until each child gets back their original slide.
- Dip in the burn or pond - using nets and trays. Try to draw or take photos of the species you find. How are they adapted to life in moving or still water? Look at the feelers, the legs, the body and so on.
- Find some leaves with bites in them - who has eaten them? - and who eats the animal that has eaten the leaves?
- Talk about trees - what do they do for us - give shade, create oxygen, hold onto water - prevent floods. They are used to make products, like furniture and provide homes for plants and animals that we like to watch.
- Take a moment of silence to listen to the woods. What do you hear?



### Did you know?

Lichens are a fungus and plant “team” – the fungus provides a “home” for the simple plant (alga) to live and the alga makes food and shares it with the fungus.

### Did you know?

Red squirrels run down trees head first and hide on the other side of the tree trunk if they spot a threat.



## CURRICULAR LINKS

Languages – Literacy & English	listening & talking
Expressive Arts	art & design
Sciences	planet earth; materials; topical science
Health & Wellbeing	mental, emotional & physical wellbeing; planning for choices and changes; physical education, physical activity and sport



### Extra activities

- Make a display of the “slides” on a window in the classroom
- Talk about adaptation to water - make up imagined beasts designed for life in water
- Make up an Evanton Wood food web (don't forget the sun - for energy)
- Draw a poster to explain to others why trees are important.



## Biodiversity

Parts of the woodland are considered to be of local conservation importance.

The wooded gorge that forms the northern boundary of the wood was present on General Roy's military maps of 1750 (this map is available on the Evanton Wood website [www.evantonwood.com](http://www.evantonwood.com)). The main body of the woodland is listed as long-established woodland of plantation origin (category 2b) which means that it has existed since at least 1860.



Wood sorrel



Roe deer

Animals that have been recorded in Evanton Wood and the River Glass include roe deer, pine marten, otters, badgers and red squirrels, toads, salmon, trout, eels and speckled wood butterflies. The birds include; blackcap, blue tit, coal tit, long-tailed tit, crossbill, great spotted woodpecker, siskin, song thrush, spotted flycatcher, tawny owl, treecreeper, willow warbler, wood pigeon, and wren.

Plants of local interest include creeping lady's tresses, sanicle, sweet woodruff and hard shield-fern. The gorge is also rich in mosses and liverworts, some of which are rare in northern Scotland.

Surveys have been carried out in the woods and the information collected is available on the Evanton Wood web-site <http://www.evantonwood.com/index.asp?pageid=296073>

Non-native trees have been added to the woodland such as Douglas fir, Sitka spruce, and beech and these, together with larch and the native Scots pine have created the diverse woodland structure that now supports the wide range of plants and animals seen in the wood. Over the next 5 years five thousand native trees are being planted and this will further increase the biodiversity of the wood.

There are also plans to improve the ponds on the Allt cùl na greine to create better living spaces and sources of food for amphibians, like frogs, toads and newts. Schools are helping with this work.

While individual species are all important it is the complex 'web' of nature that allows plants and animals to survive.

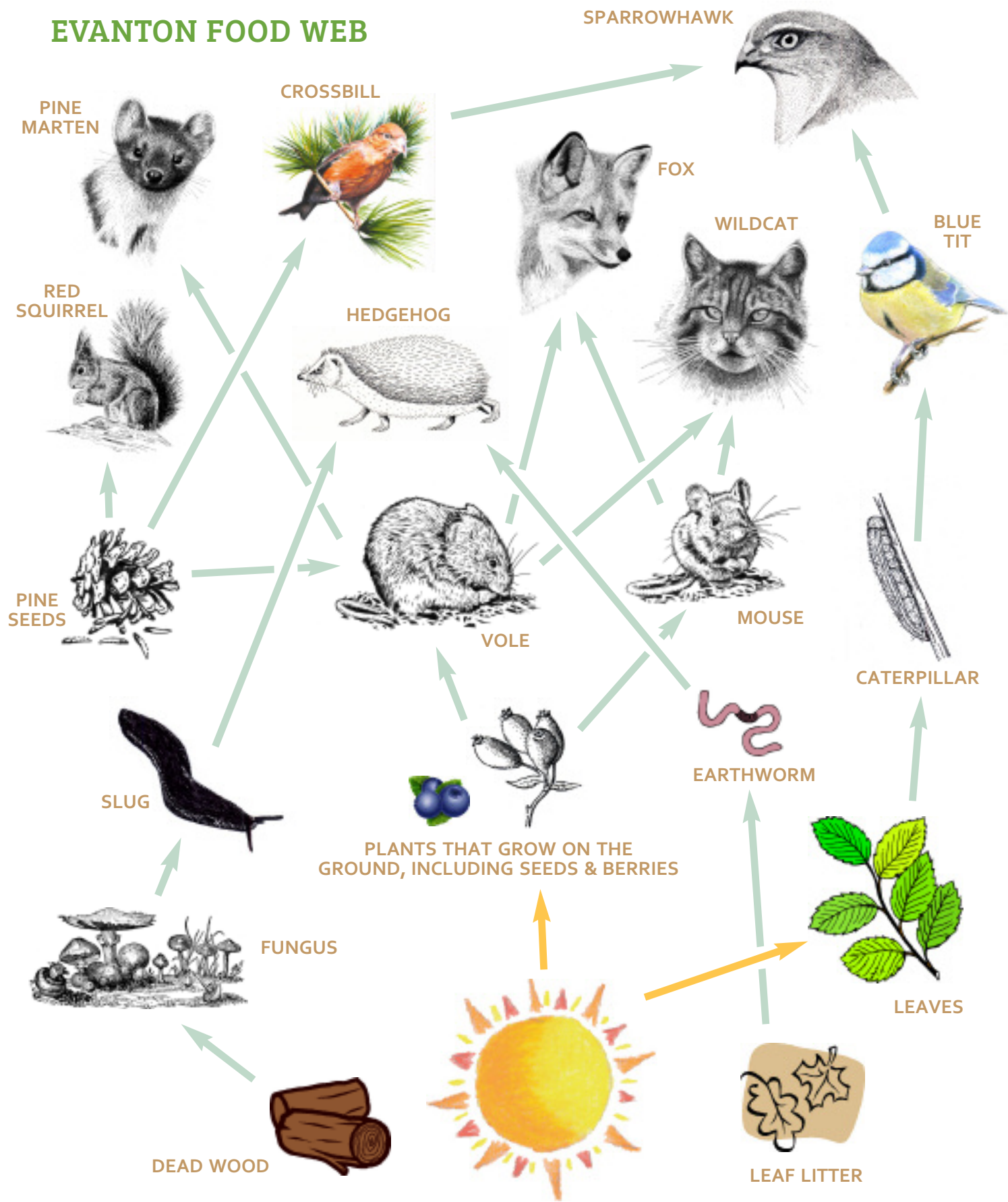


Salmon





# EVANTON FOOD WEB





# What's natural in the woods?

## PART B - LANDFORMS

As well as the wide variety of plants and animals there are also interesting natural landforms in Evanton Wood. The eskers and Black Rock Gorge illustrate the impact of erosion on our landscape and are real life examples that could be used as case studies for geography.

### In the classroom



- Research how eskers are formed.
- Look at the source of the river that runs through Black Rock Gorge and see where it joins the Firth. How does it change along the route.
- Research the ways rivers carve their routes and the different factors that give rivers and their banks distinctive forms.

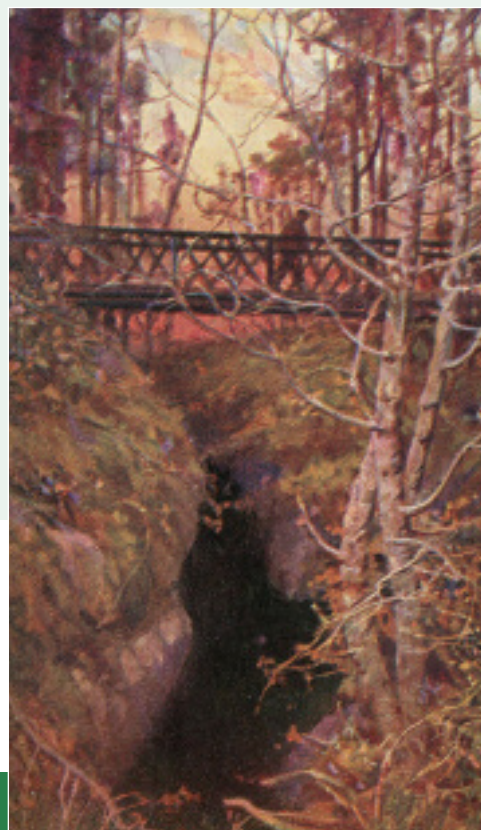
### In the woodland



- Study the shape and form of the eskers Take photographs and/or sketch them.
- Discuss how they eskers were formed and what use they have been put to in the woodland.
- Look at the river and discuss the different forms it takes in the wood.
- Take photographs to compare this section of river with others parts of a river (source to sea) or compare with other rivers, back in the classroom.
- Views to the Firth also allow discussion to take place of the river's final destination - the sea. And also can be used to discuss the water cycle.

#### CURRICULAR LINKS

Languages – Literacy & English	listening & talking; reading
Expressive Arts	art & design
Social sciences	people, place and environment
Health & Wellbeing	mental, emotional & physical wellbeing; planning for choices and changes; physical education, physical activity and sport







## Black Rock Gorge and Eskers

There are two striking landform features in Evanton Wood: Black Rock Gorge and eskers - the high ridges that run round much of the woodland.

### Black Rock Gorge

This gorge, which features in the story of the Lady of Balconie, is a deep and narrow gorge that is both unexpected and awe inspiring.

While it is only a few hundred metres in length, it reaches 36 metres (120 feet) in height with the Allt Graad (or 'River Glass') flowing through it.

It was formed when the Old Red Sandstone was cut through by fast flowing water containing sediment in the post-glacial rebound. The gorge starts where the Braemore mudstone layer moves below the Cnoc Fyris Conglomerate and ends at the contact with the Raddery Sandstone.

The gorge has long attracted visitors to the area and in April 2004 it was a location for the filming of the movie "Harry Potter and the Goblet of Fire". It is featured as part of the dragon chase scene.



### Eskers

These ridges run through the woodland and many of the paths are situated on top of them.

An esker is a long winding ridge of sand and gravel, usually formed during glaciation by streams that flowed under the glaciers and deposited these sediments.

Eskers are often several kilometres long and, because of their peculiar uniform shape, are a bit like railway embankments.

The name Esker is derived from the Irish word eiscir (Old Irish: escir), which means: "a ridge or elevation, especially one separating two plains or depressed surfaces".

### Did you know?

There are other eskers in the Highlands. Maybe you could visit one of them at:

#### Littlemills

<http://www.forestry.gov.uk/website/ourwoods.nsf/LUWebDocsByKey/ScotlandHighlandNoForestLittlemillLittlemillRedTrail>

#### Muir of Dinnet

<http://www.nnr-scotland.org.uk/muir-of-dinnet/nature-and-culture/the-power-of-ice/>



# Measurement, Survey and Money!

Managing the woodland and using wood for timber involves measuring the trees, carrying out surveys and working out the costs and possible money making finances to do with the wood.

## CURRICULAR LINKS

Languages – Literacy & English	listening & talking; reading
Numeracy & Mathematics	Number, money & measure; shape, position & movement; information handling
Social sciences	people in society; economy & business
Health & Wellbeing	mental, emotional & physical wellbeing; planning for choices and changes; physical education, physical activity and sport



## PART A - MEASUREMENT

### In the classroom

- **Early years** - Look at colours in the natural world using pictures. This can be developed to look at camouflage by drawing a “grass” background on a large sheet of paper, and seeing if different colours and shapes stand out more or less, or creating a woodland scene and decorating egg shapes to see if the pupils can make them blend in.
- **Upper Primary** - Use **Tree Measuring 123 sheet 2** (weblink below), to make your own clinometer to measure tree height. Order pupils in height order, or shoe size and discuss tallest and smallest (largest and biggest).
- **Secondary** - Research and discuss what foresters need to know to be able to work out the amount of timber a woodland can produce in a given time. Talk about the types of measurements that may need to be taken.
- **Tree Measuring 123 sheets 1, 2, & 3** are available to download on the Forest Education Initiative Website: [http://www.foresteducation.org/search/site/search&keywords=measuring&channel=learning\\_resources+regional\\_downloads/](http://www.foresteducation.org/search/site/search&keywords=measuring&channel=learning_resources+regional_downloads/)





## In the woodland



- **Early years** - sort leaves by shape, match colours of natural items from a palette (can use paint chart colours stuck on a card). Measure a tree by hugging it – can you get your arms all the way round or do you need two children? Use **Tree Measuring 123 sheet 1**.
- **Upper Primary** - measure the tree height and girth using **Tree Measuring 123 sheet 2**. An easy way to measure tree height involves two pupils working. One pupil stands beside the tree and the other walks away from the tree. This pupil looks back at the tree, holding a pencil at arm's length vertically and lines it up with the tree. When the bottom of the tree is level with the bottom of the pencil, and the top of the tree is level with the top of the pencil, this pupil stops. They then move the pencil to a horizontal position, with the end of the pencil at the bottom of the tree. The child standing beside the tree now walks (at a right angles to the tree) until they reach the "point" of the pencil. The pencil holder then shouts "stop" to their partner and marks this spot. The distance between this mark and the base of the tree is the height of the tree. Which types of trees are the tallest and the smallest. Are trees with the biggest girth, the tallest? As a very rough guide, tree girth divided by 2.5 will give you an estimate of the age of the tree.
- **Secondary** - Use **Tree Measuring 123 sheet 3** to measure tree girth, height and canopy. This sheet will show you how to make your own clinometer to measure tree height. A measuring tape can be used to measure girth – this should be taken at a height of 1.3m. This is a circumference (C) and will need to be converted to a diameter (d), by using

$$C = \pi d \quad (\pi \approx 3.14)$$

The diameter (d) is divided by 2 to give the radius (r). Then use maths to calculate the rough volume of timber in one tree. For the purposes of this exercise the tree is treated like a cylinder (although it tapers to some extent) - so we use the formula

$$V (\text{volume}) = h (\text{height}) \times \pi r^2 (\text{radius})^2$$

### Did you know?

The tallest tree in the UK is a Douglas Fir, in Argyll which is 63.79 metres tall. These trees are usually 20-55 metres tall, but there are a few very tall individual trees, including Dughall Mor (62.02m) in Reelig Glen Wood.

How tall do you think the ones in Evanton Wood are?







### Measuring Trees

To calculate the amount of timber a woodland can produce the trees need to be measured. The height, girth and canopy of the tree can be combined with an estimate of the number of trees in a woodland to allow the forester to calculate the potential value of the woodland.

Some of the trees in Evanton Wood are very tall and can be measured in a variety of ways. A Clinometer is a device designed to measure trees by foresters, but it is easy to make your own one with a paper plate, some string and a pencil. Measuring girth can be done using a measuring tape and this can be used to estimate the age of a tree too. Information sheets on how to make your own clinometer and how to measure trees in variety of ways can be found on the [Forest Education Initiative website](#).

### Extra activities



- **Early years** - Draw leaf shapes for an imaginary tree, discuss the leaf size (big or small), describe it (colour, 5 parts, pointed, curved and so on). Make an artistic display with leaves and other items collected.
- **Upper Primary** - Which types of trees were the tallest? Find out about some of the special trees in Scotland. Look at the Forestry Commission's Heritage Trees of Scotland - to see some of the widest, tallest and oldest trees in Scotland. <http://www.forestry.gov.uk/heritagetreesscotland>
- **Secondary** - Consider managing your own woodland for timber and for people to enjoy. The Forestry Commission produce a Facts and Figures document every year. This can be interpreted graphs, tables and charts, linked to forestry. <http://www.forestry.gov.uk/forestry/infd-7aqf6j>



# Measurement, Survey and Money!



## PART B - SURVEYING

The community are carrying out a number of surveys in Evanton Wood. It may be possible to carry out your own survey work. It can be repeated a number of times a year or each year to develop your own data and look for changes in the wood.

### In the classroom



- There are many on-line surveys that can be joined. The Woodland Trust have an on-line website that looks at the dates animals and plants are first recorded - Nature's Calendar <http://www.naturescalendar.org.uk/>
- The BBC has some articles about surveys for everyone. <http://www.bbc.co.uk/nature/uk/indepth/surveys.shtml>  
[http://www.bbc.co.uk/breathingplaces/wildlife\\_survey/](http://www.bbc.co.uk/breathingplaces/wildlife_survey/)
- And the Natural History Museum also runs surveys for everyone: <http://www.opalexplorenature.org/?q=surveys>
- Older students can research survey and monitoring techniques to develop their own projects.

### In the woodland



- A simple photograph taken at the same spot, pointing in the same direction, can show seasonal or year on year change.
- Measuring out a quadrat - a 1m x 1m square - and looking at the plants you find - estimating % cover - is a traditional method of survey. It is interesting to compare an area with full coniferous canopy to an area with mixed or deciduous canopy.
- Take part in a survey run by the Evanton Wood Community Company.
- Collect information to add to one of the on-line surveys, researched in class.





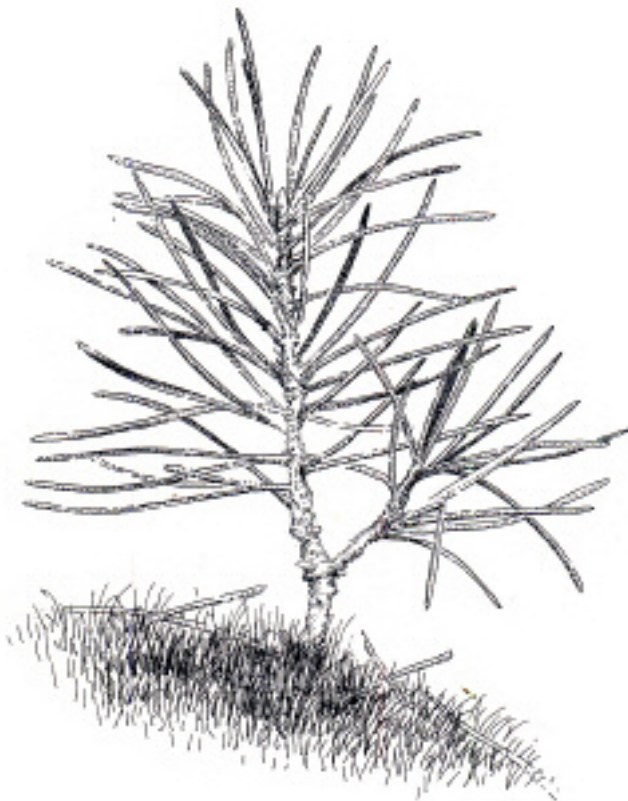


### Surveying

There have been a number of surveys carried out in Evanton Wood, including bird, amphibian, invertebrate and plant surveys. There are plans for more surveys, including one to look at aquatic life in the burns and ponds and to survey the many different types of moss and lichen. There are links to these surveys: <http://www.evantonwood.com/index.asp?pageid=296073>

This work helps the people managing the woodland to make decisions about what it is best to do to make the woodland a place that supports and encourages a wide variety of plants and wildlife.

Survey work, like all science, requires time to plan the work and decide what it is you want to find out. Then it is important to consider the methods of survey. For example to survey plants "quadrats" - a 1 meter by 1 meter square - is used and the plants in this square are identified and the amount of each plant estimated as a percentage. Birds however might be surveyed by walking through the wood following a set line and listening for bird calls and identifying the birds this way and again estimating bird types and numbers from this work.





## PART C - MONEY MATTERS!

Evanton Wood Community Company has had to look at ways of raising money to buy and look after the woodland.



As part of an **enterprise** or a **citizenship project** consider ways of raising money for a project that supports woodlands. It could be your local woodland, a Scottish or UK woodland or a woodland or forest in other parts of the world.

**Talk Money, Talk Solutions** is a collection of problem solving activities for primary schools. They help develop an understanding of money and financial matters.

[http://www.educationscotland.gov.uk/resources/t/genericresource\\_tcm4495165.asp?strReferringChannel=learningteachingandassessment&strReferringPageID=tcm:4-628465-64&class=l5+d139796](http://www.educationscotland.gov.uk/resources/t/genericresource_tcm4495165.asp?strReferringChannel=learningteachingandassessment&strReferringPageID=tcm:4-628465-64&class=l5+d139796)

Financial Education is an important part of numeracy. Education Scotland has many resources on this topic on their website.

<http://www.educationscotland.gov.uk/learningteachingandassessment/learningacrossthecurriculum/responsibilityofall/numeracy/financialeducation/index.asp>



## Economics

### The financial aspects of running a community woodland

This community project has been involved in raising money to fund this project and is also looking at ways that the community can benefit from the woodland as a resource.

The Evanton Wood Community Company is a registered charity has used a membership scheme to encourage people to get involved in the work of the community woodland.

<http://www.evantonwood.com/index.asp?pageid=205304>

The money raised for this project is also given on the community woodland website

<http://www.evantonwood.com/index.asp?pageid=327912>





# Renewable Resources and Energy

## PART A - USES OF WOOD

### In the classroom



- Consider the uses of wood, traditional and modern. Younger children can think of things they come across in their homes, whereas older students can research sources of energy, construction and medicines that come from trees.
- Have stickers with tree products on them (like a cork, chewing gum, olive oil, chocolate, marmalade, squash ball, toilet roll, maple syrup, vanilla essence, soap, charcoal, eraser, notebook, aspirin, quinine, elderflower champagne, varnish etc.) and then have a large picture of a tree on the classroom wall, with the different parts of the tree marked, like wood, resin, bark, leaves and so on. Students have to guess which product comes from which part of the tree, and stick them onto the correct parts of the tree.
- Use different types of tree to extend this - e.g., aspirin is made of a chemical (salicylic acid) that comes from the bark of willow.
- There are many resources on the topic of wood and its uses, generally they can be found at: [http://www.foresteducation.org/search/learning\\_results/](http://www.foresteducation.org/search/learning_results/)  
These are a few specific resources from this site:
  - "I spy" products made of wood in the classroom:  
[http://www.foresteducation.org/images/uploads/ispys\\_woodeng.pdf](http://www.foresteducation.org/images/uploads/ispys_woodeng.pdf)
  - Different types of wood and how to make paper:  
<http://www.foresteducation.org/images/uploads/woodproductssci.pdf>
  - How different types of wood are used to make different items:  
[http://www.foresteducation.org/images/uploads/wood\\_typesci.pdf](http://www.foresteducation.org/images/uploads/wood_typesci.pdf)
  - A teaching plan for upper primary on wood products:  
[http://www.foresteducation.org/images/uploads/investig\\_woodlandgeo.pdf](http://www.foresteducation.org/images/uploads/investig_woodlandgeo.pdf)
  - The Wonder of Wood - a series of activity sheets and lesson plans  
<http://www.heritagewoodsonline.co.uk/schools/Wonderofwood.htm>







## In the woodland



- Use the FEI Woodland Learning Activity Postcards - Woodland Products – What's in the trees? [http://www.foresteducation.org/search/site/search&channel=learning\\_resources&keywords=postcards&submit\\_x=18&submit\\_y=7/](http://www.foresteducation.org/search/site/search&channel=learning_resources&keywords=postcards&submit_x=18&submit_y=7/) Make labels showing things that are made from trees and hang these on trees in the woodland. Include non-tree products. Discuss whether the products are made from trees or not? What part of the tree do they come from? Here are some examples: Wood provides timber for houses, and furniture; Cellulose is a substance obtained from pulped wood and is used to make paper and cardboard that can be used in books, magazines, and packaging. It is also an ingredient in fabrics like rayon, synthetic sponges, imitation leather, and shatterproof glass; Tree gum is used to make rubber products and chewing gum; Tree resin is used to make soap and varnish; Trees produce many fruits and nuts and these are used to make other products like marmalade; Tree bark is used for cork bulletin boards, bottle corks and medicines, like aspirin and quinine; Tree leaves, like bay leaves are used as food flavourings.
- Ask an expert to lead a guided walk around Evanton Wood to discuss the way the trees in this wood have been used and continue to be used.

## CURRICULAR LINKS

Languages – Literacy & English	listening & talking; reading
Sciences	planet earth; materials
Social sciences	people, past events & societies; people, place & environment; people in society; economy & business
Technologies	technological developments in society; craft, design, engineering & graphics context for developing technological skills & knowledge
Health & Wellbeing	mental, emotional & physical wellbeing; planning for choices and changes; physical education, physical activity and sport





### Sustainable management of Evanton Wood

Sustainability is a word we associate with the last 20 years or so and at its broadest can be defined as the ability to “endure”. However, it is used more specifically to mean the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs.

Woodland has generally been seen as a “sustainable resource” - a resource that can be renewed and will not run out if it is managed well. Wood also has many different uses including; the fruits and seeds it produces, for food; the wood, for wood products such as bowls and other implements and tools; bark and other products for medicines and of course timber for building shelters and homes and for fuel.

Woodland can be managed as a crop - planting, thinning, clear felling - but this is quite a disruptive method of management for the many of the plants and animals living in the wood. A more “sustainable” approach, particularly for the woodland wildlife is ‘continuous cover’ management (now called Low Impact Silvicultural System). This involves thinning the trees and selectively removing trees to encourage natural regeneration. The taller trees are gradually removed and by creating gaps in the canopy, this allows young trees to grow.

Evanton Wood is an outstanding example of continuous cover forestry and the management over the last century has resulted in a structure and diversity that is not typical of conventional coniferous woodland in Scotland and the UK.

Two factors have been particularly influential:

- Evanton Wood is one of only a few examples where continuous cover forestry techniques have been used over a long period.
- The forest design principles implemented by Sir William Schlich who prepared the first written plan for the woodlands on Novar Estate for Viscount Novar in 1899.



An important German Forester, Schlich was one of the first professors of forestry in Great Britain in 1885 founder of the School of Forestry at Oxford in 1905 He believed in systematic forest management with written management plans and had a major impact on British forestry around the turn of the 20th century. Schlich wrote a Manual of Forestry, that became a standard textbook for generations of forestry students and he is considered a ‘father’ figure in modern British forestry. A statue at the School of Forestry in Oxford celebrates his role.

It was in the late 1890’s, that Schlich first visited Novar Wood, of which Evanton Wood was a part. At that time many of the woodlands in the northeast of Scotland, including Novar, had been severely damaged by storms and this meant that woodlands had to be cleared and the trees replanted. Schlich’s approach to this replanting is a significant factor in the woodland that exists in Evanton today.

#### Did you know?

- Soap and varnish are made from tree resin.
- Medicines like aspirin and quinine come from bark.





The style of management, (continuous cover forestry), used by Mr A.B.L. Munro Ferguson, an Aberdeen forestry graduate, and a nephew of Viscount Novar, when he became laird of Novar in 1951, has also been important in the development of Evanton Wood. This approach to management has been continued to the present day and the structure of the woodland reflects this with natural regeneration and a mixed woodland (coniferous and broadleaved trees) with many types of trees and many ages of trees.



This approach to woodland management was recognised in 2003 when Evanton Wood won the Management of Small Woodlands category in the Scottish Finest Woodlands awards.

The wood is regularly visited by present day forestry students and interested parties seeking to find out more about forest heritage in the UK and to learn about alternative types of woodland management and their wide ranging benefits.

A number of non-native species such as Douglas fir, Sitka spruce, and beech were introduced alongside the larch and native Scots pine and this was also important in creating the diverse woodland environment that exists today.

The Douglas fir, mentioned above, is of particular note in the woodland. It is an evergreen conifer species native to western North America. It is named after David Douglas (1798-1834), a Scottish botanist who first recorded it in the Pacific Northwest, in 1825. The common name is misleading as it is not a true fir, but actually a type of pine. The trees grow very tall and one of the tallest trees in the United Kingdom is a Douglas fir that grows not far away, in Reelig Glen near Inverness. It is called Dughall Mor and stands at 64 m. There are also some very tall specimens in Evanton Wood. If you look across the river (below the main intersection) you will see a fine collection of tall conifers, which are part of a 'pinetum' planted over a century ago. Some are nearly as tall as Dughall Mor. In the centre is a western hemlock (*tsuga heterophylla*), with its graceful flowing branch formation; this was a favourite of Queen Victoria..



With its continuity of management and strong historical links to Professor Schlich and his legacy of forest management planning and training in the UK, Evanton Wood is a valuable woodland heritage resource. Today Evanton wood is aiming to provide both a sustainable supply of quality timber, and an environment with a wide range of habitats attractive to a range of species including important listed and protected species.



# Renewable Resources and Energy

## PART B - RENEWABLE ENERGY

Renewable energy is energy that comes from natural sources such as:

- Solar - the Sun's energy is changed into electricity and heat.
- Wind - wind-turbines change the wind's energy into electricity
- Hydroelectric - flowing water is used to create energy.
- Biomass - Materials, like wood, are burnt or turned into gas to produce energy.



### In the classroom



- Education Scotland has a site explaining about renewable energy <http://www.educationscotland.gov.uk/weatherandclimatechange/energy/renewable/introduction.asp> Information about "wood" as a renewable resource, is under the "biomass" section.
- The Energy Saving Trust also has information about wood as a fuel on their website. <http://www.energysavingtrust.org.uk/scotland/Generating-energy/Choosing-a-renewable-technology/Wood-fuelled-heating>
- BBC Bitesize Geography looks at some of the issues to do with renewable and non-renewable energy use: [http://www.bbc.co.uk/schools/gcsebitesize/geography/energy\\_resources/energy\\_rev1.shtml](http://www.bbc.co.uk/schools/gcsebitesize/geography/energy_resources/energy_rev1.shtml)
- More information on renewable energy can be found on the Scottish Government website: <http://www.scotland.gov.uk/Topics/Business-Industry/Energy> <http://www.scotland.gov.uk/Topics/Built-Environment/planning/National-Planning-Policy/themes/renewables>
- Hi- Energy has information on renewables and specifically hydro-electricity: <http://www.hi-energy.org.uk/Renewables/Hydro-Energy.htm>
- Find out all about saving and generating energy at: The Energy Saving Trust <http://www.energysavingtrust.org.uk/Scotland>

### In the woodland



- View the small hydro-electric scheme on the Allt Graad. Take photographs and discuss the advantages and disadvantages of hydro-electric schemes. Also compare large scale to small scale developments.
- Discuss wood as a sustainable source of energy and methods of harvesting the wood for this purpose and methods of burning wood, such as pellets burners (often used for business), wood boilers and log fires.
- Look for a view of the oil rigs on the Firth and discuss fossil fuels. What are the advantages and disadvantages of this form of energy





## Renewable energy

Wood is traditional form of renewable energy that has been used from ancient times, but has now been developed through technology to a modern green fuel, that has been adapted to be used in the new wood pellet burners.

The new turbine house is the visible sign of the small scale hydro-electric development that is using water from the Allt Graad to generate electricity. This opened in 2013 and provides the electricity needs for around 2000 households.

While in the past water has been used to power mills and other machinery, these days it is providing Scotland with 12% of its electricity. It is an example of and provides a chance to talk about the advantages and disadvantages of small scale and large scale renewable developments.

From the meeting point in the wood there is a view of the rigs in the Cromarty Firth and in the dry dock at Invergordon; this provides an opportunity to discuss the issues around non-renewables and renewables.

Evanton Wood Community Company plans to look at the use of the woodland to sustainably harvest timber on a small scale, working with local people to harness this renewable resource.



### Did you know?

The amount of electricity generated from renewable energy sources in the UK reached 15.5% of total electricity generation in 2013 according to the Department of Energy and Climate Change.

This is a jump of 5.8% compared with the same period in 2012, when it was 9.7%.

### CURRICULAR LINKS

Languages – Literacy & English	listening & talking; reading
Sciences	planet earth; materials
Social sciences	people, past events & societies; people, place & environment; people in society; economy & business
Technologies	technological developments in society
Health & Wellbeing	mental, emotional & physical wellbeing; planning for choices and changes; physical education, physical activity and sport



# Our Woodland



What would you like to see happening in Evanton wood (or another local wood)? How can you get involved? Are there ways you can tell others about the value of your local wood?

## What would you like to see in your local wood?

Many people already use the woods for walking, to relax, and to get fit. It helps us stay physically healthy and research has now shown it also makes us feel good too!



It's a good idea to visit your local woodland, take photographs and/ or write down the things you like about the wood and think about possible changes. Think about who already uses the woods and maybe find out what they like about the wood and what changes they might like (or not like!).

Here are some ideas of things you could think about for your local woodland:

- Discuss well-being impacts of woodlands.
- Discuss practical ways trees make us feel better in wet weather and hot weather.
- Think about whether walkers and cyclists might want the same things in a woodland and if not how you could manage that - so that both can enjoy the woods.
- Design an active or fitness trail, cycling trails or walking trails. Think about the routes and lengths of the trails.
- Research the benefits of walking on physical fitness and the impact on well-being. Ask other students whether walking in woodlands changes their mood?



Plans, maps and/ or models can be drawn to illustrate the ideas the class comes up with. These can be displayed in the school or another local venue.

Maybe the class can get involved in practical work in their local woodland like helping to clean up areas, build paths or do survey work.

## Our Woodlands Project

- Visit your local woodland with a Countryside Ranger or other leader who knows about the woodland and can explain about its interesting features including the wildlife.
- Take still and moving images of the woodland to capture some of the aspects of the woodland that appeal to individual students.
- With support of an art teacher and computer teacher - develop digital photo art work - moving and still. A soundtrack can be added.
- This can be developed into web based material that reflects the woodland.
- Present the material on the school or a local community web-site.





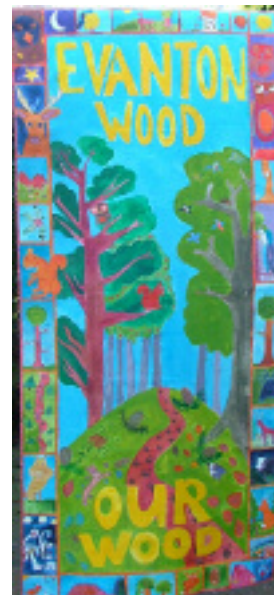
## Evanton Wood - a woodland for the community

Evanton Wood has a history of public access and is a key informal recreation area for the village.

Evanton Wood Community Company (EWCC) was formed in 2007, when Novar Estate decided to sell the Evanton Wood. Various plans, including a Management Plan and a 5- year Activity Plan were developed by EWCC and these were used to guide the community ownership and management of the woodland.

The aim is to manage the woodland for the benefit of the community, in a way that keeps and improves the rich and varied woodland environment and also to develop its use for education, leisure and timber.

It is expected that community ownership will provide local people with a long-lasting resource that provides, a sustainable fuel source, learning and employment opportunities, and an enjoyable space for people and wildlife.



Currently there are good walking trails used by families, dog-walkers and others, also by cyclists and horse riders. The paths are being improved and new ones being added - including a shorter adventure circuit for younger people. It is planned that the wood will be increasingly used by cyclists, those wanting to use the wood to get fitter and certain specialist users like orienteering groups, bird-watchers and, of course, educational groups.



Volunteers are actively involved in the management of the wood, including in path improvement, tree planting and cutting back the western hemlock (which is very shade tolerant and has recently tended to smother other tree species). There are regular volunteer sessions (normally on the last Saturday of the month). Volunteers also assist with events in the wood.

### CURRICULAR LINKS

<b>Languages – Literacy &amp; English</b>	listening & talking; reading; writing
<b>Expressive Arts</b>	participation in performance; art & design
<b>Sciences</b>	planet earth; materials
<b>Social sciences</b>	people, past events & societies; people, place & environment; people in society; economy & business
<b>Technologies</b>	technological developments in society; ICT to enhance learning; computer science contexts for developing technological skills & knowledge; craft, design, engineering & graphics context for developing technological skills & knowledge
<b>Health &amp; Wellbeing</b>	mental, emotional & physical wellbeing; planning for choices and changes; physical education, physical activity and sport

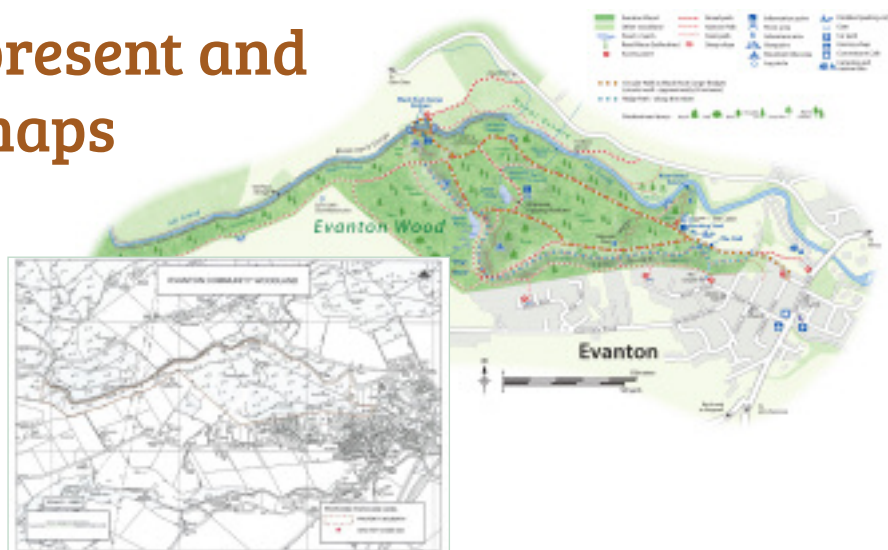
### Did you know?

There are now over 200 community woodland groups in Scotland, managing thousands of hectares of woodland and countryside.

# Linking past, present and future, using maps

Maps can capture many of the features of the woodland described here and can show changes over time.

Use the maps on the Evanton Wood website to explore these aspects and changes.



<http://www.evantonwood.com/index.asp?pageid=399883>

## Evanton Wood Web Links

### Evanton Wood

<http://www.evantonwood.com/>

### Evanton Wood - culture and history

More information about the culture and history of Evanton Woodland can be found on the Evanton Wood Community Company website

### General Outdoor Learning Support

**Education Scotland - Outdoor Learning** pages - information on links to Curriculum for Excellence, activities, places to go and health and safety information

**Grounds for learning** - a charity supporting school in outdoor learning and play with a very useful website which includes a YouTube video on woodland play

**Creative Star** - Juliette Robinson's blog with outdoor learning ideas and activities

A powerpoint showing a nursery class project visiting Evanton Wood

<http://calachildhoodpractice.com/2013/10/24/evanton-nursery-go-up-to-the-woods/>

### General Woodland Resources

**Woodland Trust** - Nature Detectives - lots of free activities

**Woodland Trust Scotland** - Outdoor Learning Pack

**Scottish Natural Heritage** - Teaching Space - woodland activities



**Forest Educations Initiative** - woodland learning

**BBC Education** - on-line woodland resource for early and middle primary

## Specific Resources

**Forest Education Initiative - Language** - if you are studying “**Wolf Brother**” by Michelle Paver, there is a woodland learning resource that has specifically been developed for this.

### **Scottish Natural Heritage - factsheets on wildlife**

These include facts and activities on red squirrels, bumblebees and fungi.

**Birds** - RSPB Bird identifier

### **Tree Measuring**

Forest Education Initiative Tree Measuring 1,2,3 - Three tree measuring information and activity sheets.

### **Journeysticks**

FEI Postcard on woodland products - Journey Sticks

SNH Biodiversity Pack - Nature on your doorstep - Journey Stick Stories

### **Building Dens and Knot work**

FEI Postcard on woodland products - Woodland hideaway and Tied in knots

#### **Dens**

Woodland Trust - video on den building

Forestry Commission, England Rope swings, dens treehouses and fires, A risk based approach for managers facilitating self-built play structures and activities in woodland settings

#### **Knots**

Scouting Resources - A-Z of knots

Animated Knots

### **Seeds and seed dispersal**

FEI Postcard on woodland products - Carried away

Birmingham Grid for Learning - resource on Seed Dispersal

Biotechnology and Biological Sciences Research Council - information and worksheets of seed dispersal

Woodland Trust - Seed Hunt

### **Scavenger hunts**

FEI Postcard on woodland products - Scavenging about

### **Evanton Wood - culture and history**

More information about the *culture and history of Evanton Woodland* can be found on the Evanton Wood Community Company website

<http://www.evantonwood.com>

### **Other**

BBC Summer of Nature website

# Spot a bird!

Crossbill ☐



Great spotted woodpecker ☐



Treecreeper ☐



Wren ☐



Blue tit ☐



Woodpigeon ☐



See if you can spot any of these feathered friends!

# Who's been here!



Front

Hind

Hedgehog ☐



Front

Hind

Red squirrel ☐



Front

Hind

Pine marten ☐



Front

Hind

Fox ☐



Front

Hind

Rabbit ☐



Roe deer ☐

See if you can spot the tracks of any of these furry friends!



# Sort the leaves!



Rowan ☐



Sycamore ☐



Birch ☐



Oak ☐



Goat willow ☐



Beech ☐

See if you can find any of these leaves!

# What's that cone!



Douglas fir ☐



Larch ☐

Alder ☐



Scots pine ☐



Sitka spruce ☐



See if you can find any of these cones on the ground!

# Find that flower!



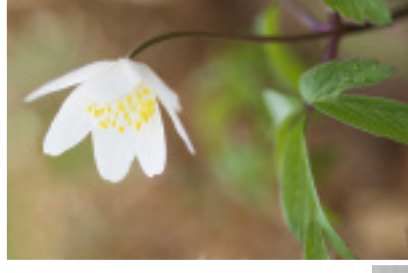
Bugle ☐



Primrose ☐



Wood  
sorrel ☐



Wood  
anemone ☐



Marsh  
marigold ☐



Ramsons ☐

See if you can find any of these flowers growing in the wood!



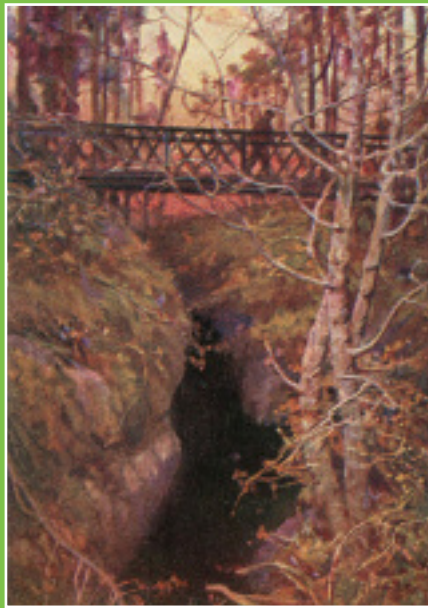
# Notes

# Notes



# Evanton Wood

COMMUNITY WOODLAND



This pack has been produced by Evanton Wood Community Company. Created with support from Adrian Clark, Simon Harry and local teachers and educators. Written by Iona Finlayson, designed by Iain Sarjeant, illustrations and photographs by John Tasker, Iain Sarjeant and Evanton Wood Community Company.

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