



Heritage & Habitat in Your Community

An educational project of
Donegal County Council, Donegal Education Centre & The Heritage Council



Fieldtrip to a Deciduous Woodland

Basic Details

Names of Students on Team :			
Date of Fieldtrip:			
Time Fieldtrip Started:		Time Fieldtrip Finished:	
Name of Study Site:			
Location of Study Site:			
Weather:			

Exercise 1: The Layers of the Deciduous Woodland

Deciduous woodland has 4 layers - the tallest trees form the **canopy** layer, the smaller woody plants form the **shrub** layer, the non-woody plants make up the **field** layer and the fallen leaves and other plant debris make up the **leaf-litter** layer. Describe these briefly in the box below. If possible, identify species in the layers.

Layer	Description
Canopy	
Shrub	
Field	
Leaf-Litter	

Exercise 2: Plants of Shady & Open Areas

Find an area you think is shady and an area that is open. The class now splits into 2 groups. We will use the quadrat to measure abundance of plants and compare the results between the two areas. If you have a light meter, this will be used to measure light intensity in each area.

Throw the quadrat as directed by your teacher. Identify the plants found inside the square. Using the initial letters, indicate whether the plants are **D**ominant, **A**bundant, **F**requent, **O**ccasional or **R**are. Record the light intensity at each quadrat position. Repeat this 2 more times.

Circle area of grassland being surveyed: shady / open

Quadrat Number

Plant Species	1	2	3
Light Intensity			

The DAFOR Scale

This is a quick way to assess plant abundance measuring ground cover. Use the table below to decide which best matches your findings:

D	Dominant	More than 75%
A	Abundant	75- 51%
F	Frequent	50- 26%
O	Occasional	25-11%
R	Rare	10-1%

Exercise 3: Woodland Vegetation

Here we use a transect - a straight line between two points across a certain area - to find out about the way vegetation might change across habitat types. We are going to investigate how the shade of a tree might impact on vegetation in the field layer. Place the transect into the ground as near as possible to a large mature tree and extend it fully. Now record the plants found at each 50cm interval. Where you do your measuring is called a station. Record your results in the table attached. If a species such as lesser celandine is found, write its name in the left-hand column and then put a tick (✓) in the appropriate column.

Exercise 4: Animals of the Woodland

Woodlands are very rich in animal life of many kinds. We will now look for evidence that this is so. Record your findings in the boxes below. Don't forget to add any findings to your map.

Woodland Birds

Woodlands are hugely important to many of our animal species. The amount of shelter and food that they provide for birds makes them the best places in Ireland to hear birdsong. You should spend about ten minutes just listening for birdsong. You may not be able to identify the birds you hear but try and determine how many types of birdsong you can hear. By standing still quietly for a few minutes, you should be able to see a number of birds. These could be blue and great tits, robins, blackbirds and thrushes. All of our crow species including jackdaws and rooks use woodlands.

Birds we saw or heard (describe if you can't identify them)	
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Mammals

The woodland is also a great place to look for mammal activity. Evidence of mammal use might be burrows, droppings, tracks or runs (mammal paths). Look out for hazelnut shells that may have been stashed by squirrels. There may also be evidence of deer such as worn tree bark at around chest height where they rub their antlers or distinctive hoof prints. Have a walk around your study area and see what you can find.

Mammal tracks or signs found	
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Invertebrates of the Woodland

By far the most numerous of the woodland animals are the invertebrates (animals with no backbone such as insects and spiders). There are many ways of looking for woodland creatures.

An easy way to sample the reachable part of the canopy is to open your umbrella below a branch and then shake the branch vigorously.

Another easy way to see bugs of the lowest layer is to lift some handfuls of leaves into plastic containers, leave for a few minutes and see what emerges.

Record as many invertebrates as you can. Do you notice any differences between the creepy-crawlies of the canopy when compared with those found in the leaf-litter? Why do you think this might be?

Invertebrates found	Canopy
	Leaf-Litter

