BS111 Group Photos of Site

2. Provide Photos of site & some of the species found and apply standards required for Figures (See guidance in Undergraduate Handbook, section on Minimum Standards of Presentation Diagram/Figures (Ideal number of Figures: (12 - 20)

[10% of overall mark Pract 2 & 3]



Figure 1 : Marsh Thistle (Cirsium palustre)

These plants grow to about a medium height (1-2 m) and contain stems that are spiny-winged and sometimes branched at the top. They usually do not have many branches, but rather have small spines on the leaves and shoot. There are also covered with small sticky hairs along the entire plant. These plants are usually linear oblong in shape, and have prominent woody veins.

It is a biennial plant whose flowers are purple and borne on short peduncles that only reach a few centimeters in height.



Figure 2 : Greater Plantain (Plantago major)

The Greater Plantain (*Plantago major*) commonly known as rat tails, is identified as a monocotyledon from it's distinct fibrous root and parallel veins. It is a perennial plant that is pollinated by wind distribution of seeds and can produce as many as 1,500 seeds per individual. The dark green leaves lie close to the ground and form a rosette at the base. There are few veins present on the leaves, and the flowers are borne on a long narrow spike that gives the plant its nickname (rat tail). The leaves and spikes themselves are very resistant to trampling by feet, and can sometimes even harm the thing that trampled on it, giving a small bruise or cut. Consequently, this plant can also be used to treat ulcers and sores, as it has been used in Britain. It is very widespread in the area and has even been used to create bread (way-bread).

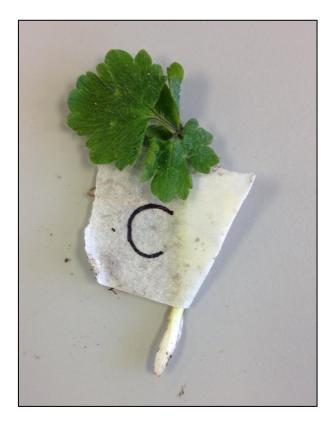


Figure 3 : Creeping Buttercup (Ranunculus repens)

Author Comment - please note, plant not correctly identified.

Creeping Buttercup (Ranunculus repens) is identified as a dicotyledonous plant. Dicots have two seed leaves inside the seed coat and when they germinate they produce two seed leaves. It is a perennial weed that can be considered in some areas as a "weed of concern" due to the fact that it grows quickly and in large quantities in areas where soil is moist and poorly drained. They are generally low lying plants, with yellow flowers that cannot be seen in mowed grass (such as where this sample came from). It can be easily identified by its creeping stolons that root at the nodes, by the three toothed leaflets that are dark green. Observation of the basal leaves is also a good indicator of the identification, these generally have longer stalks than the leaves higher up on the plant. Finally, a clear indicator that the plant is a creeping buttercup is the presence of pale patches on the leaves, and small hairy projections from the leaves and the stems.



Figure 4 : Chickweed (Stellaria media)

Chickweed are dicotyledonous plants and are very common weeds that can be found in all types of habitats. They are the most common weed found in lawns, and can also grow in abundance in fields and pastures. The presence of this plant decreases insect damage to other plants around it.

Chickweed can be easily identified by either its leaves or flowers. It grows in a unique intertwining manner, and has small white shaped flowers (hence the latin name *Stellaria media*). The stems of these plants have a thin white line of hair that grows in weave-like patterns. Its leaves are oval shaped and are slightly pointed, the leaves are also slightly hairy or can also be smooth. The flowers of the plant are produced at the tips of the stems, or in angles between branches. They can grow to be from 5 to 50 centimeters in height. These plants can also be eaten, most people take the leaves and put them in salad, but they can also be boiled entirely and eaten that way.



Figure 5 : Broad Leaf Dock (*Rumex obtusifolius*)

Commonly known as bitter dock or celery seed, this plant species can reach up to five feet in height and is a rosette forming perennial with relatively large broad leaves. The stems of the plant are long and erect and sparsely branched. They are generally smooth but can sometimes be rigid, and turn a reddish brown color with age. The leaves are broad and generally twice as long as wide, with veins covered with small white hairs on the underside. The upper leaves of the plant are lance shaped and have pointed tips.



Figure 6 : Agrimonia (*Eupatoria*)
Author Comment - please note,
plant not correctly identified.

This is the common agrimonia that is a deciduous, perennial herbaceous plant that can reach up to 100 centimeters in height. The plant is green with a number of soft hairs. These soft hairs aid the plant in the sticking of their seed pods to any animal or person that is passing by and comes into contact with the plant. The flowers of the plant have been used for medical reasons, mainly for assisting in digestive issues and mixed into a tea to be drunk. It can also be used externally as a sort of ointment, for skin problems and wounds.



Figure 7 : Ragwort (Jacobaea vulgaris)

Jacobaea vulgaris, earlier known as Senecio jacobaea and commonly known as Ragwort, is a species of poisonous weeds that are generally abundant in waste lands, waysides and grazing pastures. The species is native to the United Kingdom and grow well in open dry places.

Ragwort is a dicotyledonous plant that is typically considered to be biennial but has shown characteristic perennial tendencies when under certain conditions, such as when there is repeated grazing or mowing occurring. The stems of the ragwort are erect, have little to no hairs, and can reach heights up to two meters. The leaves are pinnately lobed with the end lobe being blunt. The leaves also have a very unpleasant foul smell, giving the ragwort many nicknames that include "stink". The flowers of the plant are borne in dense, flat topped clusters with the florets being bright yellow and hermaphroditic. Finally, pollination generally occurs by way of bees, flies, moths and butterflies.



Figure 8 : Grass A

This is a very common monocot species of grass which was widely distributed and abundant in the Bluebell Wood. Grass is a herbaceous plant and has narrow leaves growing from it's base. The most common characteristics of monocotyledonous grass species are the blade, collar, sheath, ligule, and auricles. The blade is the flattened portion of the leaf; at the junction between the blade and the sheath is the collar. The sheath itself is the portion of the leaf that surrounds the stem. Also surrounding the stem are things called auricles, which are claw-like appendages that attach to the collar to surround the stem. Another distinct characteristic of the collar is the ligule, which is a membrane-like structure attached to the collar located on the inside of the leaf.



Figure 9 : Grass B (Species I)

This is the second monocot grass that was identified at the site. It was widely distributed and abundant throughout the area and is a herbaceous plant with one main stem with a number of growing leaves.

The grass is also quite dry, indicated by it's lack of green colour suggesting that the soil moisture content where the this species was found was low.





Figure 10: Yarrow (Achillea millefolium) (Species J)

Yarrow (Achillea millefolium) is a common dicotyledonous flowering plant and is most abundant in temperate areas of the Northern Hemisphere in Asia, Europe and North America.

Yarrow can grow up to 50cm high and can produce one to two stems with evenly distributed finely divided and feathery leaves of 5cm-20cm in length.

Flowering of the plant occurs from June to late autumn producing flowers that are flat topped and clumped together. They consist of a white flower head which is made up of yellow disc florets and pink ray florets.



Figure 11: Unidentified species L

This is the unidentified species L. It is a monocot and has small leaves distributed down it's stem. The species was found predominantly in small clusters at the edge of the tree line to the wood.



Figure 12 : Unidentified species M

This is the unidentified species labelled M. It is a dicot and has a singular hairy leaf at the top of it's stem. This species was found mainly to the edge of the wood in small clusters.



Figure 13: The Edge of the Bluebell Wood

The Bluebell Wood is located at the shelter belt alongside the main road from the lake to the middle lodge. It is the woodland along Clinghoe Hill Road.



Figure 14: An open field between the two treelines that grow parallel to each other



Figure 15: The grass was cut short with small patches of vegetation is scattered around the area being sampled



Figure 16: The trees provide moderate amount of shade for the plants that grow beneath them





Figure 17: Patches of vegetation growing above the cut line of the grass

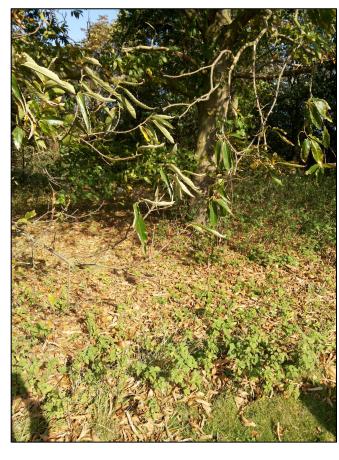


Figure 18: Leaves scattered around the roots of the trees



Figure 19: The sampling equipments