

## Intrinsic characteristics; trees

### **Long lived:**

50 to 200 year sometimes longer

### **Adapted to different conditions:**

Scots pine and juniper native to Scotland, birch common to northern climes

Sweet chestnut more suited to southern UK

Alder suited to waterlogged ground

Shade tolerant such as hazel

### **Succession:**

Open ground moves from herbaceous to bush, small pioneer trees through to high forest

### **Recycles:**

Leaves and twigs decompose and become nutrients for beneficial fungi

### **Carbon capture:**

Takes in carbon from the air and combines with water from roots to form starches and sugars

1 hectare of forest absorbs 2 tonnes of carbon per year (1 tonne birch, 4 tonne poplar coppice)

### **Filter air:**

Needles and twigs of conifers absorb 20kg of sulphur and 20kg of nitrogen per year

### **Roots:**

Anchor tree to the ground

Absorb water

Take up mineral nutrients

### **Shoots:**

New growth

Take in nutrients and store them

Seal off from leaf to allow it to drop but retain nutrients

### **Leaves:**

Contain chlorophyll for photosynthesis

Air enters the leaf via pores (stomata) and also allows water vapour out

Tree transpires through leaves (water vapour and carbon reduced oxygen)

a large oak can transpire 80-120 gallons (364-545 litres) of water per day

Drops leaves in winter

Evergreens drop every 2 to 6 years

### **Woody growth:**

Secondary thickening

Heart wood

Sap wood

Bark

**Tasks:****Tree observation**

Look at woods during different seasons, draw them, measure them and observe the life that lives on and around trees.

**Make a bug shelter**

Gather leaves and twigs, bind together and leave around trees. Make specific shelters for specific species.

**Coppice a tree**

During the dormant season (end of November through to beginning of March) find a small tree on the edge of a wood with an open access and cut it to 4 inches (10 cm) above the ground. Use the cut wood or scatter it throughout the wood, making sure it does not become a hazard to those who may use the wood. Keep revisiting the coppice stool through spring summer and back into the winter recording the changes.

Seek the permission of the owner of the woodland before cutting.

**Plant a tree**

Observe the site you intend to plant in, what tree would benefit this area and are there other factors present to support it. Pay close attention to soil, aspect, wind, proximity to other plants and buildings and time.