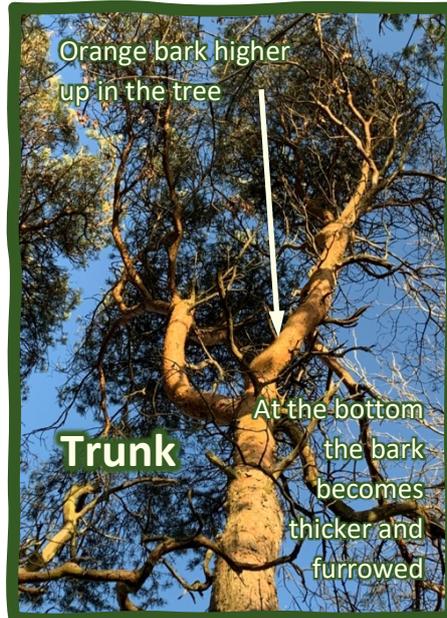
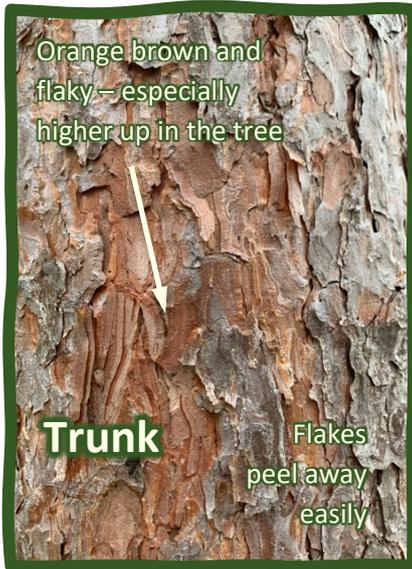
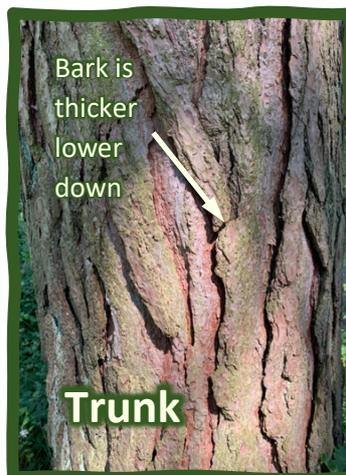


PLANT ID: Scots pine

Pinus sylvestris L.



Conifers are a group of plants classed as a Gymnosperm.



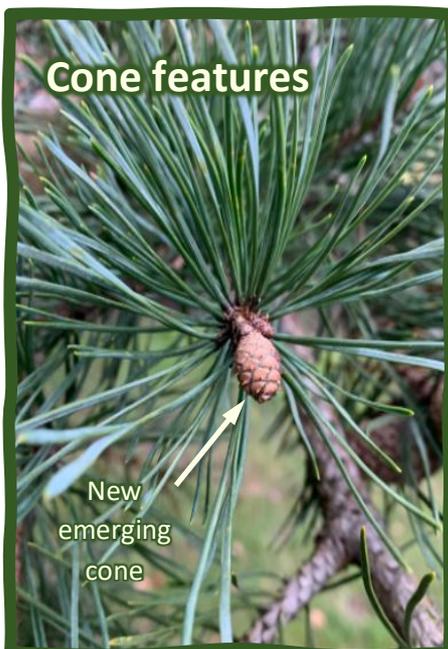
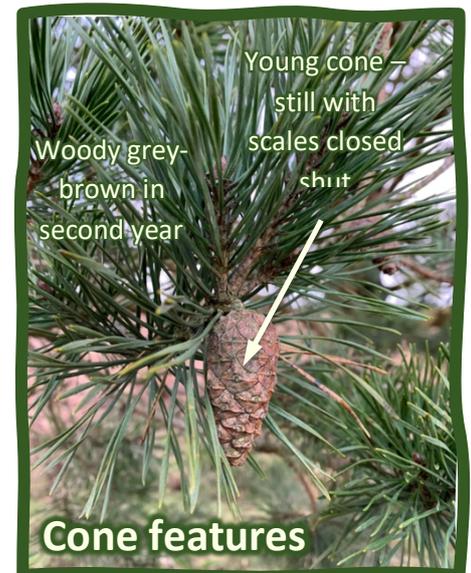
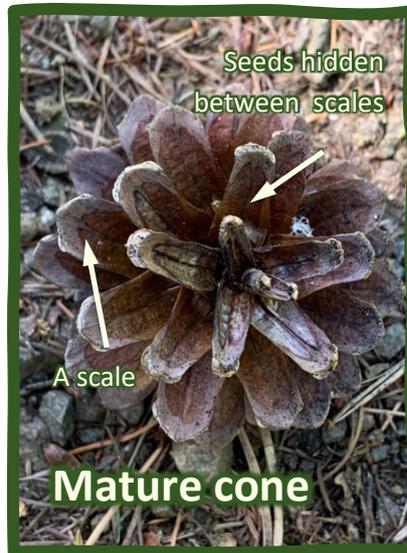
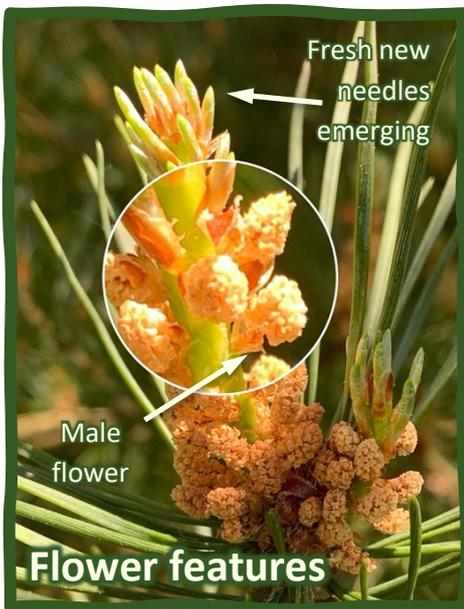
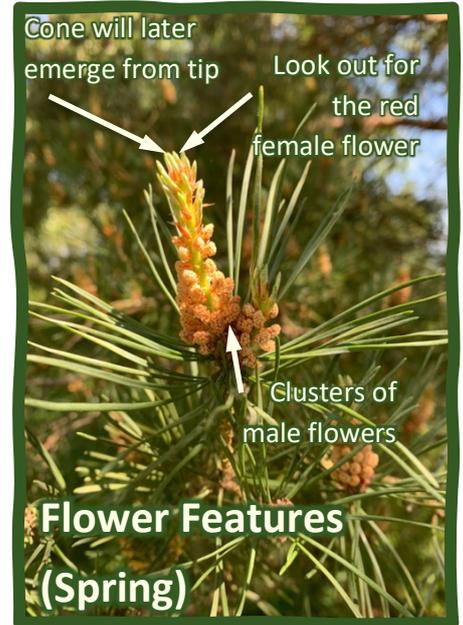
PLANT ID: Scots pine *Pinus sylvestris* L.

Magic

Before Christianity was established in northern Europe, pagans believed that the evergreen nature of conifer trees - like scots pine, represented immortality in the wake of the autumn leaf drop from broad-leaved trees.

Superstitions around felling scots pine for shipbuilding during a waning moon, was thought to affect the woods resin content because of the tidal influence of the moon. Today, we now know that sap-flow in plants is to a partial extent affected by the moon.

!
Scots pine is not a toxic poisonous plant.



Special Feature

Pine needles are adapted to cope with frosts and drought. They have embedded stomata and a waxy layer to protect from water loss, hence they can grow in areas of both low rainfall and low temperature.

Helpful ID tips

Pine trees are easily recognizable by their bundles of leaves, called needles in either 2s, 3s or 5s.

The shape of their cones also reflects the bunches of needles:

- cones of two needled pines are small with scales opening widely.
- cones of three needled pines are huge; both are oval and conic in shape and stay on the tree for many years.
- cones of five needled pines have thin-pliable scales and fall off the tree quickly.

Reproduction strategies

Pollination: pollinated by insects.

Seed dispersal: spread by wind, birds and mammals.

PLANT ID: Scots pine

Pinus sylvestris L.

Fact File:

CURRENT STATUS: Least Concern of becoming extinct
LOCATION: Exists across Europe into east Russia.

Plant Description (aka Taxonomy)

Pinaceae is the largest and most widespread family within the Conifers (*Coniferophyta*). It contains the genus – *Pinus*, to which scots pine belongs. An evergreen tree. A mature scots pine is an elegantly poised tree that supports a mushroom topped canopy of spreading gnarly boughs with evergreen needles.

ALIASES

In the past has been known as: scotch fir, scots fir, Baltic pine, Riga pine, Norway pine and European redwood.



Flowers from May - June.

Flower Structure

In spring, male flowers are a dazzling yellow (occasionally crimson) existing in dense clusters, while on the tips of shoots the female flowers are pink becoming purple.



Fruits

Oval to conic cones – up to 7.5cm long, green in first year becoming woody grey-brown in second year, then remaining on the tree with their scales open wide thereafter. Cones require alternating years of wet and dry weather to open and then shed their winged seeds.



Leaf

Stiff needles in two's, bluish green with fine white fibres when broken, less than 8cm long (in mature trees) and up to 14cm (in saplings) and often distinctly twisted. Leaf buds resinous, pointed and dark red brown – some with white resin.



Habitat

Though a naturally occurring native tree to Scotland and Europe, it does occur in the wider countryside as either a commercially planted tree within vast forests or as planted specimens in urban parks, gardens and along highways. Scots pine is a pioneer species of nutrient poor disturbed ground and can exist at sea-level or as high as 2,600 metres.

What to look for



It is recognised from afar by its fiery red-orange trunk and its dark green-blue needle leaves that occur in clusters of two on a very short shoot. Needles are less than 8cm long in mature trees, but longer in juvenile saplings. Needle colouration and length often varies between sapling and mature trees

It has a semi-circular needle profile.

Best time to see it and use it

- The scent of a pine tree on a warm day will never fail to uplift your spirits, as does the murmuring swish of the needles as the wind passes on by. Always a good place to picnic or camp - is in amongst the pines!

Stem and trunk

Furrowed grey-brown lower down, while high up in the canopy, the trunk becomes more obviously orange brown in colour and flaky in nature.

FOOD WEB

Nectar gathered by insects. Winged seeds eaten by birds, and mammals.

IMPERSONATORS:

There are two other common pines that you may encounter in the countryside.

Also, with needles in two's - Austrian pine (*P. nigra ssp. nigra*) is very similar; but it lacks the orange-red trunk colour and has **very dark green long needles** (not green-blue) that are **longer than 8cm**.

The Eurasian stone pine (*P. cembra* L.) which exists up in the Alps and the Carpathian Mountains has similar length needles, but these are in **clusters of five**, not two as in scots pine.



PLANT ID: Scots pine *Pinus sylvestris* L.

What's in a name? – Scots Pine's Latin name - *sylvestris*, is taken from Greek to indicate that it grows wild in woods and forests.

Botany glossary (part 1)

Bark thick outer protective layer of the tree trunk.

Cone woody and conical in shape containing the female reproductive parts – seeds.

Filament the stalk that supports the anther at its tip.

Furrowed grooves or channels on the tree trunk.

Stomata a pore found on plant leaves and stems that helps control the rate of gas exchange.

Gymnosperm plants that have seeds which are unprotected by an ovary or fruit.

Botany glossary (part 2)

Needles leaves of conifers that have evolved to retain more water by reducing their surface area to reduce evapotranspiration.

Ovule an unfertilized egg.

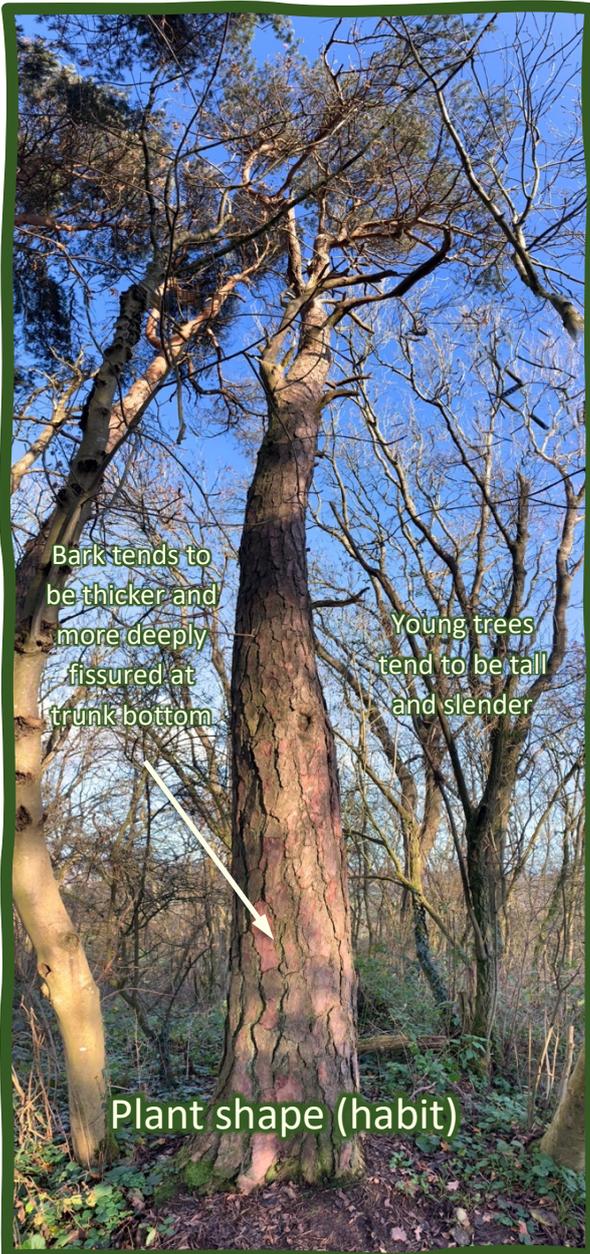
Pollen fine powdery like grains found on the anthers of male stamen.

Scale a feature in which the ovule attaches itself at the bottom.

Stamen male part of the flower, each comprising a filament and anther.

Seed a fertilized ovule that contains the plant embryo.

Get up close to the Scots pine by taking a virtual tour using the Pappus film library.



Psithurism – the study of arboriculture symphonic acoustics. Pines have a special uplifting restorative and calming sound to them

“Among plants and trees, those with large leaves have a muffled sound; those with dry leaves have a sorrowful sound; those with frail leaves have a weak and unmelodic sound. For this reason, nothing is better suited to wind than the pine.”

Liu Chi (14th C. - China).

Oldest – Largest – Tallest

The oldest scots pine on record is a 589-year-old tree in Pchelarovo, Bulgaria.

The tallest known tree stands at 46.6 metres and is from Estonia

The tree with the thickest trunk-girth is found in Scotland and has a girth of 5.97 metres.

Global distribution

Scots Pine occupies a range from Spain in the west to the far east of Russia, while its latitude extends northwards into Scandinavia (70 degrees) and south to the mountains of the Spanish Sierra Nevada (37 degrees).

Global species risk of extinction (IUCN – Red Data List)

