What's wrong with the trees?

We depend on plants for our survival, so its important to keep them healthy, but sometimes plants can get sick, just like us.

The diversity of trees at Bedgebury is a really useful resource for studying plant health. We can use our collection to try to find more disease-resistant trees for the future.

Can you help us by trying to work out what's wrong with these 4 unhappy trees? Have a look at the 6 disease cards and see if you can find the cause of each tree's symptoms.

This young Corsican pine tree is losing its needles on the lower branches, leaving small tufts of needles at the end of each branch. The needles that are left have turned a yellow-red colour.

A

This Norway spruce tree is turning brown at the top.
There is lots of white resin dribbling down the trunk that seems to be leaking from small holes in the bark.

B

This fir tree looks very poorly. Its branches are dying and some have wounds (cankers) which are leaking resin.
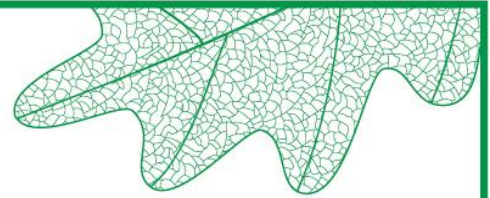There are clusters of small, red lumps on the bark.

C

This young spruce tree is struggling to grow. Its soft, new needles are missing, the top of the tree has gone and some of the bark has been stripped.

D

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NUISANCE NIBBLERS

Deer, rabbits and squirrels all like to munch on our trees. Deer love to eat new shoots, needles and bark. This can damage older trees and stop young saplings from growing.

DEADLY DESTROYERS

Phytophthora (say fi-tof-thera) is a fungus-like organism. Its name means 'plant destroyer'. Symptoms include dieback in the canopy and black tar-like patches on the branches.

LUMPS & BUMPS

Neonectria canker is a disease that affects fir trees. It is caused by a fungus. Symptoms include cankers (wounds) that leak resin. Sometimes the red fruiting part of the fungus can be seen.

BORING BEETLES

The great spruce bark beetle damages spruce trees by tunnelling Into the tree to lay its eggs under the bark. Infected trees start to turn brown at the top and burrowing holes cause 'resin bleeds'.

FOLLOW THE LEADER

Oak processionary moths build their nests on the trunks of oak trees. The moth caterpillars move around nose-to-tail along the tree. They cause leaf loss and their hairs are harmful to people.

SPORE SPREADERS

Red-band needle blight is caused by the Dothistroma fungus. Its spores spread easily in moist, windy conditions. The disease affects pine trees. Needles turn yellow-red before falling off, leaving just a few at the end of the branch.

What can you do to help?

- ## Keep it clean!
  Stamp your feet or Use a stick to remove mud from your boots and brush mud from bikes & buggies before you leave the forest.

- ## Report it!
  Search for 'Tree Alert' on the Forest Research website to report anything unusual that you see. *www.treealert.forestresearch.gov.uk*

Answers:
A – Red band needle blight
B – Great spruce bark beetles
C – Neonectria canker of fir
D – Deer grazing damage

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