

Estate Manager activity 2 Wonderful willow

Age
range:
7-11

Duration:
Several short sessions
through the school year

Aim

For pupils to learn about growing plants and creating a wildlife area.

Learning objectives

Pupils should learn:

- How willow can grow from cuttings
- About how estate managers run conservation projects
- What willow branches can be used for



Curriculum links

England

- National Curriculum Science: Sc2 3a, 3b, 3c
- Geography: 5a, 5b
- Citizenship: 1e

Wales

- Science: Skills 'Communication' – 1, 2, 3, 'Planning' 1, 2, 3, 'Developing' 1; Range 'Interdependence of organisms' 4, 5, 6, 7, 'The sustainable earth' 4, 5

Materials and equipment

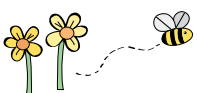
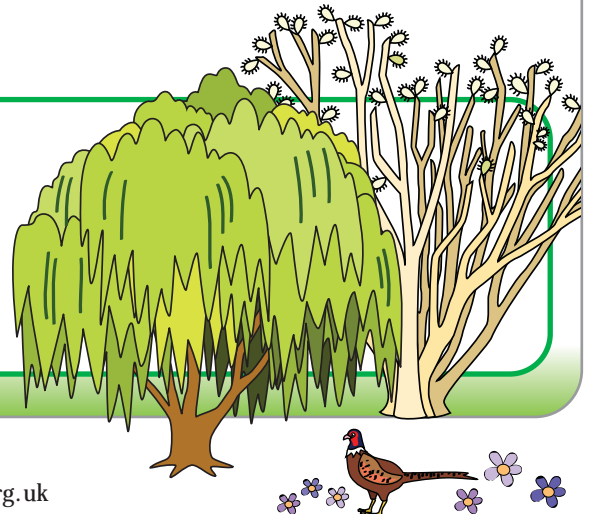
- Secateurs
- Copies of Worksheet Es2 (one per pupil if required – see below)

Preparation

You will need a supply of willow cuttings. These can be thin branches about 30cm long, cut from any willow tree without harming it. Keep the cuttings in water. You will also need an area for the pupils to plant the cuttings, such as a wildlife area, a vegetable plot or corner of a flower bed. Ideally, to protect the cuttings from weeds, the ground should be covered with a mulch or plastic matting (slots can be cut in this for the cuttings). The cuttings may not take if planted in grassy ground.

Key vocabulary

estate manager, estate, wildlife, conservation, willow, cuttings, roots, leaves, shoots, crafts



Running the activity

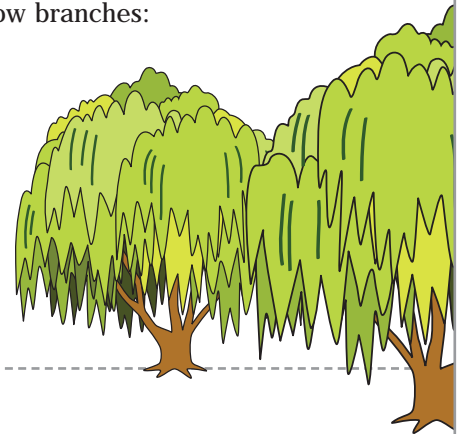
a) Introduction:

Go to Country estate > Estate manager and show the video to introduce pupils to the role. Explain to the pupils that estate managers need to look after the countryside on the estate and encourage wildlife through conservation work. One of the ways that this is done is by planting trees. Willow trees are often planted near water because they stop river banks being eroded and they grow quickly.

b) Discussion:

Discuss how trees are normally grown from seeds to produce saplings, which are then planted to grow on site. Explain that willow trees can be grown from cuttings because the branches produce roots when they are placed in soil. Show the class the cuttings and explain that they are going to plant them to grow some willow trees from which branches can be cut to make things. If possible, show the class some photos of willow trees (these can easily be found using Google Images) and also some pictures that show the uses of willow branches:

- Charcoal
- Baskets
- Wicker furniture
- Brooms
- Fences
- Living willow structures such as wigwams and arches
- Plant supports



c) Planting:

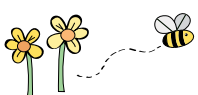
Plant the cuttings in the prepared area by simply pushing them into the soil, at least half way in, about 30cm apart. The ground is best dug over lightly first. Explain that the cuttings must be protected from weeds. The cuttings can be planted in autumn or spring. Growth will be quite rapid and if left a full year, the cuttings will produce enough branches for the pupils to cut and make into something such as a broom or simple sculpture. There are numerous websites that show how to make willow crafts and give more information about growing and harvesting willow.

Extension activities

- 1 Worksheet Es2 will help pupils to learn more about willow in general.
- 2 Willow is now grown and harvested commercially as biofuel. It is cut, dried and burned as a low-carbon renewable energy source. Pupils can find out about this and learn what benefits there are to willow fuel compared with fossil fuels like oil, coal and gas.
- 3 If the pupils are successful at growing willow from cuttings, they can try creating a living willow structure such as a tunnel, den or wigwam for the school grounds. This is obviously a long term project but will provide a rewarding experience. Again, there is plenty of information about how to make these structures on the Internet.

Background information for teachers

Go to Teachers > Useful links to find out more about estate managers and their work.





Illustrate each box of information and carry out some research to add one more fact to each box.

Types of willow

There are more than 400 types of willow tree!

Here are a few:

- Weeping willow
- Pussy willow
- Crack willow
- White willow

Growing willow

Willow can be grown from cuttings as follows:

1. Cut some thin branches from a willow tree.
2. Dig an area of soil and remove the weeds.
3. Push the cuttings into the ground.

Uses of willow

Willow grows very quickly and the thin bendy branches are very useful. Here are some things it is made into:

- Baskets
- Furniture
- Cricket bats
- Living willow structures

Facts about willow

- Willow is often planted near rivers
- Willow is now grown for fuel (biofuel) in some areas because it is renewable, which means it will never run out
- Willow can grow up to two metres a year

On the back

Make a careful drawing of a willow leaf and write why trees have leaves.

