



BECOMING A FORCE FOR NATURE

Seed Gathering – Collect

Before gathering seeds, it is important to:

- Have the permission from the landowner before collecting seeds
- Know where you intend to plant your young trees so that you can collect the right seed, to grow the right trees for the right place
- Have permission to plant the trees on the land

Introduction

Growing trees from local seeds is a fantastic way to green your local area and ensure that the trees will thrive as they are already adapted to your local environment. It is a relatively easy process and a great way to inspire children, teach them about the full life cycle of a tree and let them experience the magic of seeing the seeds turn into trees.

Why are trees important?

Trees are magnificent – they are homes and a food source for thousands of creatures, they provide oxygen we need to survive, have positive effects on our wellbeing and help to combat climate change by capturing carbon from the air.

We all know about the incredible carbon-busting, habitat-protecting and wellbeing-boosting powers of trees and that they are key to a healthy and happy future for us and our planet. By gathering seeds (and planting them later in the year) you and your students can continue to be a #ForceForNature and help make sure that our trees, and planet, continue to thrive in the future.





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Why gather seeds?

Pests and disease are threats to trees and by keeping things local, you can help to reduce the spread and effects of pests and disease. Collecting seeds in your local area will most likely mean that the tree is adapted to the local environment and will more likely flourish and thrive. It's important to collect seeds from a healthy tree in your area as that suggests it is well suited to the local conditions. Not every seed you plant will become a magnificent tree but, with care, many can. It's a great discussion and learning point to think about *Why the seed might not survive?*

Resources

- Gloves (if the tree is sharp or prickly)
- A hessian, jute or paper bag (not plastic as this can make the seeds too moist and reduce their chance of germination)
- Labels for each bag
- Appropriate clothing (long trousers if needed)
- Sketchbooks (optional)

Activity

1. Work through the slides in the classroom so that the students understand the process and reasons for seed gathering. See the notes on each slide for extra information and ideas.
2. When you have found a tree, ID it. How do you know what tree it is? Does it look like a healthy, thriving tree? How do you know? [A guide to some common trees can be found here](#) and [a guide to spotting tree seeds can be found here](#)
3. In a sketchbook, get your students to:
 - Sketch a leaf
 - Draw the shape of the tree
 - Estimate the height of the tree





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- Describe where the tree is growing
 - Why did you choose this tree?
 - Think about what would happen to the seed if you did not gather it. Would it be a food source? Would it travel far away (carried by the wind or an animal) or would it fall nearby?
 - How would you group or sort the seeds?
 - Sketch the seed
4. Carefully collect the seeds and place them in the bag.
 5. Label the bag with the type of tree. These can be kept in the fridge until you are ready for the next stage.
 6. For health and safety reasons, it's really important to wash hands after touching the trees, fruits and seeds.
 7. When you return, discuss what you found. If you didn't find many seeds, why do you think this was? (See slides) Did anything about the seeds surprise you?
If you can, use your senses to explore the seeds you have found. How would you describe the seeds? What are the similarities and differences?

Health & safety – recognising toxic berries

It is important that you and the children understand the potential risk posed by certain berries and that everyone knows never to eat one. A number of berries can be toxic if ingested and so it's a good idea to learn how to recognise them before you head out. The main ones you may come across include yew, spindle, holly, ivy, black bryony and woody nightshade.

Find out more here <https://www.jackravenbushcraft.co.uk/fruits-and-berries/>





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Top tips:

Don't collect the first seeds that fall from the tree, later the seeds will probably be of better quality.

Don't collect seeds from near busy roads or old industrial sites.

For your safety, only collect seeds that you can reach from the ground.

Don't pick more than you need – leave these seeds as they are an important food source for wildlife.

Avoid collecting in wet weather when the seeds are wet as they will not store well.





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Curriculum links - England

- Y1, Plants: They should become familiar with plant structures (including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem).
- Y1, Plants: identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- Y2, Living Things: identify and name a variety of plants and animals in their habitats, including microhabitats
- Y2, Living Things: explore and compare the differences between things that are living, dead, and things that have never been alive
- Y2, Plants: observe and describe how seeds and bulbs grow into mature plants
- Y3, Plants: explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal
- Y5, Living things and their habitats: describe the life process of reproduction in some plants - They might try to grow new plants from different parts of the parent plant, for example, seeds.
- Y5, forces: Pupils should explore falling objects and raise questions about the effects of air resistance. They should explore the effects of air resistance by observing how different objects such as parachutes and sycamore seeds fall.
- KS3: reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms.

Curriculum links - Scotland:

- SCN 1-01a
- SCN 0-03a
- SCN 1-03a
- SCN 2-14a
- Develop the skills of scientific inquiry and investigation using practical techniques
- SCN 4-02a
- SCN 2-02b
- SCN 2-14a





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Useful videos and online resources:

- [The Tree Council's Seed Identification booklet](#)
- [The Tree Council's Guide to Growing Trees from Seed](#)
- [The Tree Council's Guide to Spotting Tree Seeds](#)
- [Collecting seeds with Laura and Kai](#)
- A plant's lifecycle: <https://www.youtube.com/watch?v=AcSgaUBwln4>
- [Seek By iNaturalist](#) - a free app to help identify trees and nature in your school grounds
- [Treezilla](#) – a free app to help you identify trees and work out their value and CO₂ storage capacity
- [Match the fruit and seed to the tree](#) (Woodland Trust) – online activity matching the fruit or seed to the tree name
- [Can you ID the tree from the leaf?](#) (Woodland Trust) – online activity to match the leaf to the tree name
- [ID That Tree Quiz](#) – Online quiz to ID common British Trees (multiple choice)
- Information about Mast Years: <https://www.treesforcities.org/stories/the-mystery-of-the-mast-year>
- How does a seed become a plant? <https://www.youtube.com/watch?v=tkFPyue5X3Q> (best watched at a slower playback speed).
- Seed germination: <https://www.science.org.au/curious/earth-environment/plant-germination>

Other activities:

- Instruction writing - how to gather and grow seeds
- Story writing around seed gathering
- Art – use the leaves, twigs and seed to make sculptures, sketches...the list is endless
- Create a fact file or poster: Tree ID fact files or poster (include seed, leaf, bark etc)
- Tree/plant life cycle (stop motion animation)





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- Plant reproduction
- Use your microscope to look at the leaves and seeds in more detail
- Seed dispersal lessons (one example from [Learning Through Landscapes](#))
- http://hellotrees.co.uk/wp-content/uploads/Autumn_Tree-seeds-with-wings.pdf
- http://hellotrees.co.uk/wp-content/uploads/Lesson-Plan-3_November_birch_windborne-seed.pdf
- http://hellotrees.co.uk/wp-content/uploads/2016/05/Wind-pollination_spring.pdf
- Research trees - <https://www.wildlifetrusts.org/wildlife-explorer/trees-and-shrubs>

