



Devon
Wildlife Trust

Devon Ash Dieback
Resilience Forum



Saving Devon's Treescapes

Micro-nursery guidance for schools



Devon Wildlife Trust, Cricklepit Mill, Commercial Road, Exeter, EX2 4AB
Tel: (01392) 279244 Fax: (01392) 433221 E-mail: contactus@devonwildlifetrust.org
Web site: www.devonwildlifetrust.org Registered charity, no 213224

Protecting **Wildlife** for the Future



Introduction:

This guide is here to help you kick-start your micro tree nursery. It should have all the information you need to get you growing your first trees from seed.

Growing trees from seed is a fun and educational activity that can be done at any age. This guide starts with three of the easiest species to grow: oak, hazel and crab apple. You can use this guide to help you identify the right trees: <https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/british-trees/a-z-of-british-trees/>. All of these species can be collected in Autumn and you'll hopefully see the first signs of life the following Spring. The guidance allows you to choose whether you want to grow them in a raised bed (bare root) or in pots (cell grown) depending on your needs and what space you have available.

Before starting you should plan where the trees can be planted once they're grown. Here are a few ideas:

- Can they be planted on the school grounds?
- Is there a local landowner you can partner with who would like to plant the trees?
- Can pupils take them home to plant in their gardens?

When it comes to planting your trees, you can find more guidance in our planting and aftercare guide: <https://www.devonwildlifetrust.org/sites/default/files/2020-10/Saving%20Devon%27s%20Treescapes%20Planting%20%20Leaflet.pdf>

By growing and planting out trees you are helping Devon's treescapes thrive. Treescapes are stunning and provide crucial habitats so for much wildlife. Every local tree that is grown and planted is helping to create diverse and resilient treescapes for many years to come.

If you have any questions, or would like advice on how to grow other species, please contact Rosie Cotgreave at rcotgreave@devonwildlifetrust.org

The Saving Devon's Treescapes project is led by Devon Wildlife Trust on behalf of the Devon Ash Dieback Resilience Forum. It is a partnership project supported by National Lottery Heritage Fund, One Tree Planted and Tesco Bags of Help. More info can be found online on the project webpage: <https://www.devonwildlifetrust.org/what-we-doour-projects/saving-devons-treescapes>



Equipment list:

Every school has different needs and therefore what we can provide for you might be different. Here is a selection of equipment that is part of our micro-nursery starter kits:

- Raised beds
- Growing cells
- Peat-free compost
- Secure containers
- Tools and gloves
- Horticultural sharp sand
- Propagators
- Wire mesh protection

For extra resources it is worth contacting local businesses or your local garden centre who might be able to donate some more compost or tools.



Growing cells in action





Oak:

1. Collect acorns from the ground – but make sure you leave some for the animals too!
2. Check they are healthy by putting them in a bucket of water. If they float, they might not grow but if you have the space you can try and plant them anyway



3. Once collected you can store them for a week or two before planting them, but they must be kept cool and out of direct sunlight
4. Acorns are one of the easiest tree species to grow and don't need any pre-treatment. You can just put an acorn or two in a pot filled with compost and cover the acorn with around 2cm of compost. Or plant straight into soil in a raised bed to a depth of 5cm and firm it on top
5. Where possible, protect them from predation by using a wire mesh
6. When your tree is about 8 inches tall, it's ready to plant into its permanent home.





Hazel:

1. Pick Hazel nuts during September – but be quick because the squirrels will eat them. It's better to collect directly from the tree (rather than the floor) where possible but make sure you leave some on the ground for animals.
2. The ideal time to collect is when the nut easily comes away from the husk
3. The best and easiest way to extract the hazelnuts is removing the nuts from the husk by hand – although be warned, this can take a while
4. Like acorns, you can also put them in a bucket of water and those that sink are more likely to grow than those that float



5. Mix your hazelnuts with horticultural sand – one handful of seeds for one handful of sand
6. In a pot which you can seal, put some stones for drainage at the bottom, add the seed/sand mixture and then cover with a few centimeters of sand
7. Store the pot somewhere shady for winter, but make sure you protect it with wire mesh from mice
8. When the seeds show signs of germination (usually around the end of Feb although it can take 2 years) then they are ready to sow
9. You can either sow them in pots or in seedbeds. If using pots you might want to acclimatise them in propagators before pricking out into larger pots. If in pots place them 2-3 cm deep or if in seedbeds then you can broadcast the seed and cover with about 2cm on horticultural grit. Remember to keep them protected from mice
10. Hazel trees are generally ready to plant out when they are two or three years old





Crab apple:

Crab apples can be hard to identify so use this guide to check: <https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/british-trees/a-z-of-british-trees/crab-apple/>



1. You can collect crab apples directly from the tree from October
2. You can store the apples for a week or two in a cool, dry place before extracting the seed
3. There are several ways to extract the seeds from the apples:
 - You can either cut the apples – making sure not to damage the seeds and just remove the seeds
 - Or you can mash the fruit and sieve the small 'pips' from the pulp



4. Once you have the seeds extracted, mix with peat free compost and leaf mould or horticultural sand. For each handful of seeds, add two or three handfuls of mixture
5. Make sure the mixture is moist and place it into a plastic bag with a loose tie or sealable container with breathing holes
6. Put the bag into the fridge and leave it in there for around 14 weeks
7. After 10 weeks check for signs of growth, and in early Feb they will probably be ready to sow
8. Sow either in pots or a seedbed. If using pots you might want to acclimatise them in propagators before pricking out into larger pots. In a pot add two seeds to compost and cover in 5mm of compost or horticultural grit or in a seedbed, broadcast the seed and firm with a roller, pressing the seeds well into the soil. Cover with 5-10mm of grit
9. When your tree is about 8 inches tall, it's ready to plant into its permanent home.





Other key things to remember:

- When collecting seeds ensure you always have permission from the landowner first
- Ensure your seeds and saplings never dry out – they will need regularly checking and watering especially through the summer months.
- Ensure they don't get too hot or too cold. In summer they might need some shade, and when it is frosty they might need some fleece to keep them warm.
- Always keep them protected from animals such rabbits, mice and squirrels.
- Not all your seeds will become trees. It's normal to expect some loss so don't worry if some don't make it.
- When you plant the trees out, make sure you use tubes or spiral guards to protect them.

Heath and safety:

- When collecting seeds, make sure you are away from the road and other risks.
- Ensure children do not eat any berries when collecting seed.
- Make sure everyone washes their hands after directly handling nuts and berries.
- Sometimes eye protection is useful when looking for seeds.

More useful resources:

- TCV: Growing trees from seed - <https://treegrowing.tcv.org.uk/grow>
- Tree Council: Growing trees from seed - <https://treecouncil.org.uk/take-action/seasonal-campaigns/seed-gathering-season/growing-trees-from-seed/>
- A-Z of British tree guide: <https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/british-trees/a-z-of-british-trees/>
- Tree planting and aftercare guide - <https://www.devonwildlifetrust.org/sites/default/files/2020-10/Saving%20Devon%27s%20Treescapes%20Planting%20%20Leaflet.pdf>
- Educational resources for schools - <http://www.treetoolsforschools.org.uk/menu/>



Saving Devon's Treescapes

Micro-nursery guidance

Month by month seed guide												
	January	February	March	April	May	June	July	August	September	October	November	December
Alder		Store in cool dry place	Soak and dry	Sow seeds						Collect seeds	Collect seeds	Store in cool dry place
Downy and Silver birch		Store in fridge	Soak and dry	Sow seeds				Collect seeds		Store in a cool, dry place		Store in fridge
Blackthorn		Store in fridge or shady spot	Sow seeds	Sow seeds				Collect seeds		Collect seeds	4 weeks of warmth	Store in fridge or shady spot
Wild Cherry		Store in fridge or shady spot	Sow seeds	Sow seeds			Collect seeds		Store in fridge or shady spot			
Crab Apple		Store in fridge	Sow seeds							Collect seeds		Store in fridge
Elder		Store in fridge or shady spot	Sow seeds						Collect seeds	Collect seeds		Store in fridge or shady spot
Hawthorn		Store in fridge or shady spot	Sow seeds	Sow seeds					Collect seeds	Collect seeds		Store in fridge or shady spot
Hazel		Store in fridge or shady spot	Remove from fridge but store in a cool, dry place	Sow seeds				Collect seeds			Store in fridge or shady spot	Store in fridge or shady spot
Oak										Collect seeds	Collect seeds	Sow seeds
Rowan		Store in fridge or shady spot	Sow seeds					Collect seeds			Store in fridge or shady spot	Store in fridge or shady spot
Spindle		Store in fridge	Sow seeds	Sow seeds						Collect seeds	Collect seeds	Store in a cool, dry place