UK Association for
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Newton's Apple Tree Care Guide

"Millions saw the apple fall, but Newton was the one who asked why"

- Bernard Baruch

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Congratulations!

You've grown your very own apple tree

Out of 28 Centres, only 12 germinated (that we know of!) and some are attempting a second germination this Spring. In this guide, you'll find instructions to help you with the next stage of tree care, pictures from other Centres and more information for those whose curiosity has been sparked by their Newton tree.

Caring for your Newton tree

With Spring around the corner, you'll need to start thinking about what to do next to make sure your tree stays healthy. Planting in the ground is the preferred home for your tree but if you don't have space, you can re-pot it instead. With expert guidance from the Royal Horticultural Society, below is a handy guide to help you.

Planting your tree in the ground

1. The best time to do this is between October and April, although planting can be done at any point in the year.
2. Your tree will need a well-drained sunny site that is sheltered from the wind and has reasonably fertile soil. Avoid waterlogged soil at all costs or its little roots will suffer. Waterlogged soil is easy to identify if water is sitting on the soil surface, pools in the bottom of the hole you dig, or if the ground is so frozen that you can't dig your spade in.
3. Prepare your tree's new home by loosening the soil in the area. This will help the roots grow and reach pockets of water.
4. If you have poor soil quality you can add organic matter to help i.e. manure, recycled coffee grounds from a coffee shop or Rootgrow if it's extremely bad.
5. Once you're ready to move your tree in, remove it from its pot and dig a hole to the depth of your tree's roots and three-times wider than the root's diameter. If your tree's home is on a lawn, make sure you prepare a mowing circle and keep it clear of weeds. This stops the grass from drinking all the water before the tree can quench its thirst.
6. Place your tree into the hole so that the point at which the roots flare is level with the top of the hole. If you plant your tree too deep, it can make your tree vulnerable to disease and prevents air flow to the roots.
7. Fill up your hole making sure the soil is between and around the roots with no air pockets.
8. Firm the top of the spoil gently (but make sure it's not too compact) and water your tree well.
9. If you have a small, inconspicuous tree, it might be worth putting something around it to make it more obvious, or protect it from hungry rabbits and voles.

Find out more on the Royal Horticultural website here:
https://www.rhs.org.uk/advice/profile?PID=237

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Re-potting your tree

1. Spring is the best time to repot your tree. Chose a new pot that is up to 50% bigger than the last. Don't be tempted to re-pot your small tree into a gigantic pot to save repotting in the future. At this point in your tree's life, it needs to gradually pot up until you reach the minimum final container size of about 45cm (18in).
2. Make sure your pot has good drainage by placing broken clay pots or stones into the bottom.
3. Using a good compost, make a hole the size of your tree's roots and follow the instructions for 'planting your tree in the ground' from instruction 5 to 8.
4. Use tomato feed from now until June.
5. Your tree will need re-potting once a year after leaf-fall to prevent it from becoming pot-bound.
6. Once your tree has made it into its final pot it will need root pruning every other year and a top up of compost when needed.

Find out more about choosing a pot here: https://www.rhs.org.uk/advice/profile?PID=274

Find out more about re-potting your plant on the Royal Horticultural Website here: https://www.rhs.org.uk/advice/profile?PID=350

To prune or not to prune?

However sorely tempted by wayward branches and dishevelled leaves, pruning should be avoided as much as possible. A well-pruned tree will keep it juvenile and therefore, less likely to flower.

When will flowers bloom and apples fall?

It can take some years for an apple tree raised from seed to flower and produce fruit. But when they do, it will be interesting to see what your apples are like. They will be genetically different from their parent tree but you never know, you may grow a delicious new apple, not grown anywhere else!

Woolsthorpe Manor, National Trust

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Pictures from other Centres

Images from International Science Centre and Science Museum Day, November 2017:

ASDC

Thinktank

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STFC

Wellcome Trust Sanger Institute

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Techniquest Glyndŵr

Winchester Science Centre and Planetarium

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Wellcome Genome Campus

W5

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Seedling images from March/April 2017:

The Observatory Science Centre

Jodrell Bank

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Techniquest Glyndŵr

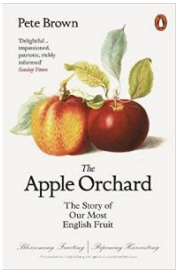
The Royal Society

UK Association for Science and Discovery Centres

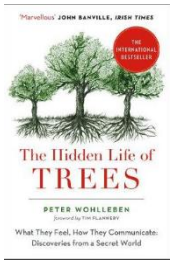
Royal Observatory, Edinburgh

A little something extra

Have you been inspired by your Newton tree? Here's something to get stuck into:



The Apple Orchard: The Story of Our Most English Fruit - from BBC Radio 4, Book of the Week: "Symbolically and nutritionally, the apple has played a significant role in human life for millennia. From its origins in Kazakhstan, its spread along the old spice roads and into mythology, it is now an all-year round supermarket staple. In this four-part abridgement of his new book, Pete Brown follows the cycle of an orchard's year to illuminate the hand-in-hand-history of humanity and our most familiar fruit. Along the way, he turns his hand to the three most labour-intensive jobs in the orchard: grafting, picking and pruning."



The Hidden Life of Trees by Peter Wollenben – this book is guaranteed to change your perception of trees. An easy read, eloquent and based on real research, Peter Wollenben reveals the secrets of these unusual organisms, showing us that life in the slow lane can be as dramatic as a soap opera requiring strategic decision-making, complex communication and often, community action.

Brian Cox investigates Isaac Newton and the Scientific Method - http://www.bbc.co.uk/programmes/p01jdfw4

BBC iwonder, Isaac Newton: The man who discovered gravity - http://www.bbc.co.uk/timelines/zwwgcdm

Isaac Newton inspired activities

1. Demonstrate gravity, motion, and other forces with The Egg Drop experiment - https://www.stevespanglerscience.com/lab/experiments/egg-drop-inertia-trick/

2. Investigate gravity and weightlessness with this Water Drop experiment - http://www.metrofamilymagazine.com/July-2014/Simple-Science-Experiments-Gravity-Water-Drop/

With special thanks to Guy Barter from the Royal Horticultural Society who expertly advised our Newton tree care guide.