

10. How large will the trees grow?

Size matters. Make sure you check how large the tree species you are thinking of planting will grow to at maturity. The available space above and below the ground will dictate what species of tree should be planted to ensure that they reach their full size, without risk of having to be removed, providing all the benefits they offer to people for the long term.

Other site-specific factors will dictate how large a tree will ultimately grow, including site location, soil type, hydrology and exposure to light, wind and flooding or planned changes to surrounding infrastructure.

11. Plant native or non-native?

Planting native species of trees of local provenance is preferred wherever possible to protect and enhance local biodiversity and improve successful establishment of new trees and hedgerows.

In built-up places like towns, villages, commercial/industrial parks etc., the local climate, pollution and limited space available above and below ground for trees to thrive may mean native species are not the most appropriate trees to plant. There is a host of tree cultivars and non-native tree and shrub species that can succeed in more challenging places. Select species that will support as many of the County Council Development Plan Habitat and Climate Change Objectives as possible.

Be aware of invasive species. These are plants that are not native and are known to disrupt the balance of nature in the local environment.

Mix it up. Whether your planting project includes native or non-native species, select a range of species to plant. This is important for:

- biodiversity by supporting a wider range of wildlife,
- resilience by reducing risk of loss of tree/hedgerow species in future as a result of climate change or disease,
- landscape/townscape by reflecting the distinctive character of the area to reinforce the identity of place.

In woodland and hedgerow projects it is essential to plant mixes of native species appropriate to the locality and site conditions.

Orchards: Consider the opportunity to plant a mixed fruit orchard as part of your project. As well as providing local healthy food for people, orchards are recognised as highly valuable habitat for wildlife, particularly pollinators.

12. How to plant your tree or hedge?

Preparation of the site is essential to the successful establishment of your trees or hedge. **Ensure:**

- the area around where the tree will be planted is clear of grass and weeds,
- you do not plant in wet or frozen conditions – soil should be crumbly,
- to plant the tree at or just above the level it has been grown in the nursery. Do not cover the root flare,
- to backfill soil and firm gently – do not compact the soil, and
- to add a layer of mulch around the tree to feed it and keep weeds down.

The typical time of year for planting trees/hedgerows is between mid-November to mid-March when the plants are dormant. Times vary slightly from year to year, depending on the start of winter and the following spring. This is when there is the greatest range and quantity of plants available.

For woodland or hedgerow planting, you are more likely to order your trees as whips or transplants. These are usually single stem trees at between 40cm - 120cm tall, depending on the species. These whips give better value for money and have a higher success rate.

For maintaining your new hedgerow, consider traditional management methods including hedge laying. This will support:

- biodiversity through less frequent cutting and establishment of habitat,
- traditional skills development and knowledge in communities and
- social connection, as it is a way that people can come together and practise and learn.

In towns and other built-up areas, consider the risk of damage to new trees. You may need to plant trees at a larger size to be robust. Larger trees are older and more expensive to buy and plant.

Be aware that larger trees in new sites are at greater risk of dying if they are not tended to properly and regularly. Make sure you are aware of what is required to ensure the commitment of time and resources will be given to your trees from the start of your project.

13. How to make sure you look after your trees and hedgerows?

Make an Aftercare Plan: Looking after your trees/hedgerows, especially new planting, is essential to make sure it is successful and provides the benefits to biodiversity and your community for generations.

The Aftercare Plan should set out a programme for:

- Regular watering in the seasons after planting to ensure establishment. Note specific additional watering will be required in extensive dry periods.
- Regular inspection of trees and hedgerows to check for damage to trees and any tree-planting supports, guards or fencing.
- Regular weeding of areas over the tree planting pit and topping up of mulch annually.

The Aftercare Plan should include details of the materials used in the planting of the trees with contact details of suppliers to ensure any replacements for damaged items can be readily obtained.

For more information visit:

<https://biodiversity.galwaycommunityheritage.org/>

Introduction

Trees and hedgerows characterise the Irish landscape we love. They add beauty to the countryside and our towns and villages. They are the green lungs of our communities, support wildlife, enhance the environment and mitigate impacts from climate change, such as flooding. By planting trees, we can add to the aesthetic allure of where we live, whilst supporting biodiversity and taking a step to tackle climate change. The purpose of this guide is to provide a step-by-step guide to planting trees and hedgerows and guide you to resources. By following these steps, it will ensure greater success of the trees planted, allowing the benefits to be enjoyed for years to come.

Benefits for County Galway in numbers

Based on digital mapping and analysis of the existing tree canopy cover across County Galway, the total value of carbon stored in trees is over €2.3 billion with an annual value of over €94 million in carbon drawn out of the environment. The total value of the benefits in mitigating air pollution is over €63 million across the county and the value of avoided surface water runoff is approximately €46.7 million. These sums highlight only the monetary part of the value of our existing trees and hedgerows while they mean so much more to us as well.

Your Tree & Hedgerow Project

Things to think about before you plant trees/hedgerows to ensure success.

Aim to plant the **right tree, in the right place, for the right purpose**

- **Where you want to plant**
- **Who and what you need to make your project happen**
- **What type of trees will thrive in your space**

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Step 1: Should you, or can you plant?

Do some initial checks and get advice to make sure your tree/hedge planting project is viable.

1. Who owns the site?

If you do not own the site, you will need to identify who the owner is and get their permission to plant trees or hedgerows.

2. Will tree or hedge planting affect neighbours?

Speak to neighbours before you plan your project further. Check that their amenity will not be negatively affected by new planting. This includes making sure:

- you know the fully-grown size of the tree(s) you want to plant;
- new planting will not block views or affect the security or access to their property;
- new planting will not be too close to roads or obstruct paths or visibility.

3. What is the site used for or is it protected in any way?

Find out the history of your site. Current or past land use affects what tree or hedge species to plant, how it is done or if it should be done. For example, some sites may have an industrial past with underground contamination that could be hazardous to public health if disturbed and kill new trees.

It is essential to check that there are no protected habitats or standing or buried archaeological heritage features on your site, that may be affected by your plans or impact on your plans.

Step 3: What to Plant and How to do it

How to select your tree and hedgerow species, how to plant and look after them?

9. What is already successful?

County Galway has a range of landscapes, from the exposed coast with salty air and mountains with shallow soils to more sheltered inland areas with fertile land, parkland estates, villages and towns. These conditions will influence the success of the trees you plant.

Look around you. The trees and hedgerows that are growing successfully in the locality and with similar conditions to your site are the best guide to what species you should choose.

Step 2: Making it Happen

When you have a viable project, how do you make it happen?

Make a plan for your project to cover the key things you need, including partners, costing, funding and long-term management and maintenance.

6. Do you need wider support?

Tree and hedgerow planting projects by communities can be of any scale, from a space in a neighbourhood, at a school or along a street, to a woodland or a forest park. All these projects are valuable to your community.

Look for community support and engagement from the outset.

Across Co. Galway, there is a wide range of existing groups that have similar aims to yours. Can you team up, share ideas and improve what your project site can offer? The more benefits your project can provide to your community, the greater the opportunities for funding to make it happen.

7. How will new trees or hedgerows be managed and maintained?

Know from the start who will be responsible for the managing and maintaining of your trees/hedgerow.

This will help you:

- Make sure the scale of your project is matched to the standard of maintenance required to provide long-term benefits to the community.
- Identify the costs to execute and maintain your tree/hedgerow project from the start to prepare a funding plan.

8. How will you fund your project?

Prepare a funding plan.

Different potential funding sources may be available, depending on the type of tree/hedge planting project you are planning.

The funding plan should include the cost for:

- Any site surveys and specialist or professional advice.
- Ground preparation, supply of plants and at least 12 months of maintenance of your new planting.

Make sure to include the cost of any accessories like tree tubes, stakes, ties, fencing or tree grilles/surrounds and irrigation.

Use your funding plan to get financial support from the local community, including businesses. The more benefits to your environment and community your project can show, the greater the chances of getting funding support from a wide range of people and organisations.

Team up with other projects in your locality to apply for other funding streams such as Climate, Biodiversity, Arts, Culture, Community Enterprise and Development, Social Inclusion and Skills Development.

Step 1: Should you, or can you plant?

Do some initial checks and get advice to make sure your tree/hedge planting project is viable.

4. Is the site already helping nature to thrive?

Check your site thoroughly over a period of time, especially in spring and summer, to see how many different species of wildlife are there. The site may be doing a great job already, supporting nature and only needing light-touch management to keep it working and improving naturally.

Your survey may identify individual existing characteristics that are special to your community. This includes anything from physical features such as existing trees to views of buildings or wider landscape.

5. Are there any public amenity services above or below the ground on the site?

Overhead services like powerlines and telephone cables or underground services like water, drainage, gas, electric power, telecommunication cables or foul drainage, restrict what tree or hedgerow species can be planted and how close they can be to any such service. The site must be checked before planning your tree or hedgerow project.

Tree Management Guidelines for Communities

in the County of Galway



Tree Management Guidelines for Communities in the County of Galway

Comhairle Chontae na Gaillimhe
Galway County Council

An Chomhairle Oidhreachta
The Heritage Council

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Technical advice & text: Brady Shipman Martin

Project Coordinator: Rosina Joyce

Proofreading: Marianne ten Cate

Illustration: Damien Goodfellow

Translation: Europos

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Why are trees & hedgerows important?

County Galway is predominantly rural with the many of our trees growing in the existing hedgerow network across our county. These trees perform vital functions and provide multiple benefits including:

Producing Oxygen and absorbing carbon from the atmosphere, storing the carbon in their trunks, roots and branches.

Supporting nature and biodiversity. Did you know that a mature oak tree can support up to 284 different insect species, 324 lichens and can survive for 1,000 years.

Protecting against flooding by slowing down the speed at which rainwater reaches the ground and storing water in their roots. Did you know that tree cover reduces surface water runoff by 80% more than an asphalt surface?

Connecting habitats through mixed native hedgerows as a distinctive part of the Irish landscape. Our hedgerows are vital green corridors that support a wide variety of wildlife and connect patches of habitat to create a living network. Did you know that there is some 689,000kms of hedgerows in Ireland, but we are losing between 2,000km to 6,000km of hedgerows per year?

Supporting human physical and mental health by creating more attractive environments that encourage us to get outdoors, exercise, connect with nature and each other. Did you know a recent study has found that trees in built up areas reduce depression in people?

Slowing vehicle speeds by planting street trees as part of traffic calming measures. Did you know that studies have found that the presence of street trees make drivers slow down and increases their awareness of other street users.

Providing food by planting fruit trees and community orchards. Did you know that there are 68 Irish varieties of apple? Traditionally planted and managed orchards are also incredibly valuable hotspots for biodiversity.

Making places more distinctive. Did you know that property values in streets with appropriate and well-maintained street trees are typically higher than the same streets without street trees?

Native Tree Selection Guide for County Galway

Common Name	Latin Name	Soil Preference	Max Height (meters)	Growth Rate	Biodiversity Value	Attractive Features
Alder, Common	<i>Alnus glutinosa</i>	Grows in a wide variety of conditions, including wet soils	20	Fast	Birds, insects, squirrels, lichens	Cones
Apple, Crab	<i>Malus sylvestris</i>	Thrives in most fertile soils (not acid or wet)	16	Slow	Birds, insects	Flowers, fruit
Aspen	<i>Populus tremula</i>	Prefers damp, neutral soils (not acid)	24	Fast	Insects	Autumn colour
Birch, Downy	<i>Betula pubescens</i>	Grows in a wide variety of soils (prefers acid to neutral)	24	Medium/Fast	Insects, lichens	Catkins, bark, foliage, autumn colour
Birch, Silver	<i>Betula pendula</i>	Prefers dry soils, acid to neutral	18	Medium/Fast	Birds, insects, squirrels, lichens, fungi, deadwood	Catkins, bark, foliage, autumn colour
Blackthorn, Sloe*	<i>Prunus spinosa</i>	Grows in a wide variety of soils	4	Medium	Birds, insects	Flowers, berries
Buckthorn	<i>Rhamnus cathartica</i>	Prefers damp, lime-rich soils	5	Medium	Birds, insects	Berries
Cherry, Bird	<i>Prunus padus</i>	Prefers damp soils (acid to neutral)	6	Medium	Birds, insects	Flowers, berries, autumn colour

* Tolerates exposure

Common Name	Latin Name	Soil Preference	Max Height (meters)	Growth Rate	Biodiversity Value	Attractive Features
Elder	<i>Sambucus nigra</i>	Grows in a wide variety of soils (not acid)	6	Fast	Birds, insects	Flowers, berries
Elm, Wych	<i>Ulmus glabra</i>	Prefers fertile free-draining soils	30	Medium	Insects, squirrels, lichens, deadwood	Autumn colour
Guelder Rose	<i>Viburnum opulus</i>	Prefers damp lime-rich soils	4	Medium	Birds, insects	Flowers, berries, autumn colour
Hawthorn*	<i>Crataegus monogyna</i>	Grows in a wide variety of soils (not acid)	8	Medium/Fast	Birds, insects	Flowers, berries
Hazel	<i>Corylus avellana</i>	Grows in a wide variety of soils (not acid)	6	Medium/Fast	Birds, bats, insects, squirrels, lichens	Catkins, nuts
Holly*	<i>Ilex aquifolium</i>	Grows in a wide variety of soils	15	Slow/Medium	Birds, insects, lichens	Evergreen, flowers, berries
Oak, Pedunculate	<i>Quercus robur</i>	Prefers well aerated, deep fertile soils. Thrives on heavier soils	30	Medium	Birds, bats, insects, fungi, deadwood	Foliage; autumn colour

* Tolerates exposure

Common Name	Latin Name	Soil Preference	Max Height (meters)	Growth Rate	Biodiversity Value	Attractive Features
Oak, Sessile	<i>Quercus petraea</i>	Prefers well-drained, acidic to neutral soils. Tolerates less rich and lighter soils than Q. robur	30	Medium	Birds, bats, insects, fungi, deadwood	Foliage; autumn colour
Rowan*	<i>Sorbus aucuparia</i>	Grows in a wide variety of soils	10	Fast	Birds, insects, squirrels, lichens	Flowers, berries
Scots Pine*	<i>Pinus sylvestris</i>	Prefers dry, light soils	24	Medium	Birds, insects, lichens	Cones, evergreen
Spindle	<i>Euonymus europaeus</i>	Prefers damp, lime-rich soils	7	Medium	Insects	Autumn colour, berries
Whitebeam, Irish*	<i>Sorbus aria</i>	Prefers neutral to lime-rich soils	15	Medium	Birds, insects	Flowers, berries
Willows*	<i>Salix spp.</i>	Generally prefer damp soils with heavy to medium texture	8	Fast	Birds, insects, lichens, fungi, deadwood	Catkins, autumn colour
Yew	<i>Taxus baccata</i>	Prefers dry, lime-rich soils	15	Slow	Birds	Berries, evergreen

* Tolerates exposure

SUSTAINABLE DEVELOPMENT GOALS

A well-planned tree planting project plays an important role in working towards the UN Sustainable Development Goals