

Local Biodiversity Action Plan for Doorly Park Residents, Sligo Town



Collated in consultation with Doorly Park Residents Association.
by Woodrow Sustainable Solutions Ltd.

Part of the Parks Quarter Biodiversity Training Programme.

Client: Sligo Tidy Towns
September 2022



Funded by the Department of Rural and Community Development

Acknowledgements

This Local Biodiversity Action Plan was developed from input by members of Doorly Park Residents Association in collaboration with Woodrow Sustainable Solutions Ltd (Woodrow).

Woodrow would like to acknowledge and thank all the volunteers who gave up their time to meet and share their thoughts and ideas.

This was part of a wider programme of training and development programme for residential communities of south Sligo Town in the area known as 'The Parks Quarter'.

The funding for this project was provided by the EU LEADER fund, following an application from Sligo Tidy Towns. Sligo Tidy Towns part funded the project.

Front Page Image: The communal green area off Doorly Park Road, Sligo Town.

Source: All pictures used are property of Woodrow unless otherwise stated.

Table of Contents

Acknowledgements	1
Aims of participation in the Park's Quarter Biodiversity programme	3
How this programme and Local Biodiversity Action Plan was developed	3
Doorly Park Residential Area of Sligo	4
What is Biodiversity?	5
Biodiversity of Doorly Park Residential Area	5
Summary of Actions to enhance biodiversity in Doorly Park Residential Area	7
Proposed Training & Workshop Summary	9
Details of the proposed actions for biodiversity and resources.....	10
Action 1: Establish an Annual Wildlife Walk.....	11
Action 2: Reduce dumping of Grass Clippings by encouraging use of Brown Bins, and Mulching.	12
Action 3: Investigate the Feasibility of Establishing a Community Composting System	13
Action 4: Identify a Community Veteran Tree and Name it	14
Action 5: Plant an Edible Hedge & have social harvesting event.....	14
Action 6: Organise twice yearly litter picks with local user groups, in wider Doorly Park recreational area.	16
Action 7: Encourage 2-minute litter Clean-Up's by residents and volunteers	17
Action 8: Manage Communal Lawns for Biodiversity – tiered mowing and cut & lift regimes to Improve Species-Richness.....	18
Action 9: Plant Flowers for Pollinators in gardens, or newly created flower beds in residential areas.....	20
Action 10: Plant Flowers for Birds in Flower Beds	22
Action 12: Install Benches for Residents and Visitors with adjacent information on wildlife.	24
Action 13: Participate in Citizen Science Projects such as Clean Air Monitoring of Sligo County Council Climate Action Office.....	24
Action 14: Encourage use of New Electric Bikes	25
Action 15: Consider ways to advance Sustainable Energy Actions.	25

Aims of participation in the Park's Quarter Biodiversity programme

The aim of participation in this programme is to educate, enable and encourage residents to create more biodiverse areas in their gardens and communal areas.

How this programme and Local Biodiversity Action Plan was developed

Sligo Tidy Towns secured EU LEADER funding in 2022 to deliver a biodiversity training programme for communities across the Park's Quarter of Sligo Town. Woodrow Sustainable Solutions Ltd (Woodrow) won the tender to deliver this training for Sligo Tidy Towns.

Representatives of Doorly Park Residents Association were contacted to determine if the residents were interested in being involved. Having expressed an interest, the residents of Doorly Park joined this programme.

Resident volunteers from Doorly Park met with staff of Woodrow to discuss ideas and opportunities to enhance biodiversity. The residents of Doorly Park were assisted by staff from Woodrow to help them:

- Create a Biodiversity Action Plan for their estate; and to
- Identify any Biodiversity Training or workshops Woodrow could deliver to communities to raise their awareness and knowledge in this area.

From this collaboration, this action plan was collated specifically for this group. The proposed actions are relatively cheap and should be achievable by the community.

Doorly Park Residential Area of Sligo

The Doorly Park Residents Association is composed of volunteers who represent the local people living in the homes along Doorly Park Road and the adjacent road Martin Savage Terrace. There are approximately 50 homes on Doorly Park Road and a further 50 on Martin Savage Terrace. Most of these homes have substantial back gardens and smaller front gardens. They also share a communal green space (approximately 155m x 70m) and some linear strips of grass separating side roads from parking areas.

These homes are located beside the wonderful recreational area known as 'Doorly Park', which was formerly part of the Cleveragh Demesne. This Park is located along the southern bank of the Garvogue River as it exits Lough Gill. Doorly Park is a substantial size and borders the Special Area of Conservation which protects the natural habitats surrounding Lough Gill.



Figure 1: Doorly Park Road and Martin Savage Terrace and the surrounding estates and green spaces including Doorly Park Recreational Area.

What is Biodiversity?

Biodiversity can be defined as life in all its many manifestations – plants, animals, insects, fungi and microscopic organisms. The term also encompasses the different ways these organisms interact and the ecosystems which they collectively create. Climate scientists often describe biodiversity as the life-support system of the planet. Indeed, higher biodiversity is associated with more resilient ecosystems – meaning these natural habitats are more likely to rebound after extreme weather events associated with climate change. This is because living things regulate the environment through the provision of ecosystem services - by providing clean air, purified water and of course our food.

Biodiversity of Doorly Park Residential Area

Of the 100 homes there are opportunities to enhance and make changes for biodiversity in private gardens, along linear grass strips, in other communal green areas. This plan incorporates the suggestions and ideas from residents which could be implemented in these spaces. Indeed, in Figure 2 (and the picture on the front cover) you can see where the residents have reduced the mowing regime to benefit wildlife.

Due to its proximity, many locals consider the recreational park also called Doorly Park as their own and take pride in the biodiversity already found here. Sligo County Council's Parks team have already carried out a series of biodiversity actions in this recreational area at Doorly Park. For example, biodiversity enhancing measures which carried out in the recreational area of Doorly Park, include less intensive grassland management, pollinator-friendly planting, wildflower strips, planting an orchard, and planting native trees. Each one of these measures is making a positive contribution to local biodiversity. Many of these are discussed in further detail here as examples of good practice which can be replicated in other private and public spaces. These actions illustrate what is possible to achieve for biodiversity in urban environments.

Doorly Park recreational area encompasses part of the Lough Gill Special Area of Conservation (SAC), an EU site designated for its importance at a European level for wildlife and habitats. These native habitats which are valued for their high biodiversity, include sessile oak woodlands, alluvial alder forests, and semi-natural grasslands.

By integrating elements of these ecosystems into the urban environment we can support the existing biodiversity of these natural habitats. Examples of such actions include pollinator-friendly planting, protecting old trees, and increasing the species-richness of grasslands. These biodiversity actions will be discussed in detail and include providing resources for pollinators and birds.



The communal green space off Doorly Park Road with the grass mown closely at the margins and the wildflowers left to grow in the centre of the space.



Pollinator friendly planting at Doorly Park recreational area showing Salvia species, Aster species, and fennel.

Summary of Actions to enhance biodiversity in Doorly Park Residential Area

This is a summary of the proposed enhancement activities for the Doorly Park Residential Areas to create more biodiverse areas.

No.	Proposed Action	Further Details and Comments
1	Establish an Annual Wildlife Walk	Organise a wildlife walk/activity annually to raise awareness of local wildlife/habitats.
2	Reduce dumping of grass clippings.	To address issue of dumped grass cutting, encourage the use of Brown Bins through preparation of information leaflets for example. Those cutting grass should also be encouraged to mulch grass to reduce cuttings.
3	Investigate the Feasibility of Establishing a Community Composting System	Green waste can be turned into compost and re-used on flower beds as a source of balanced fertility. However, composting takes regular maintenance to prevent it going rank and physical strength to turn the pile.
4	Identify a Veteran Tree and Name it	Veteran (Mature, native trees) trees support local biodiversity by providing habitat for mammals, birds, insects, and fungi. A locally led initiative to identify a veteran tree/s in Doorly Park, and even name it, will help raise awareness of their importance.
5	Plant an Edible Hedge	An edible hedge is composed of native species which are edible for pollinators and birds. People can eat some of the fruits also, however care must be taken with children as the fruits such as sloes can contain large stones.
6	Organise twice yearly litter picks with local user groups, in wider Doorly Park recreational area.	In association with local clubs such as Sligo Rowing Club (who can access river-side litter safely), or Park Run a litter pick for the recreational park area and encourage participation by local residents. This could be part of National Spring Clean week activities.
7	Promote and support 2-minute Clean-Up's	Promote and support residents and visitors to take part in a two-minute litter pick when leaving the area. Providing communal litter-pickers with and a rubbish bin and signage to raise awareness would facilitate locally led clean-ups
8	Continue to Manage Communal Grass areas for biodiversity	Improving grassland management can increase biodiversity by better supporting the life cycle of native plants and insects. Current regimes should be promoted and encouraged – and 'tiered mowing' and 'cut & lift' to be adopted

Doorly Park Residents Association's Biodiversity Action Plan

9	Plant Flowers for pollinators in gardens and communal areas	Biodiversity doesn't have to mean uncultivated. Choose pollinator-friendly horticultural varieties to create an impressive herbaceous border.
10	Plant Flowers for Birds in gardens and flower Beds	Some flowers once pollinated yield fantastic nutrient-rich seed heads. Birds go wild for these in the Autumn months. Good examples include teasel, miscanthus, and sunflowers.
11	Plant more Native Trees	Trees have a much longer life cycle than herbaceous species, store carbon and create new habitat. They can be planted in the communal area or small fruit in back gardens for example.
12	Install benches for Residents and Visitors with adjacent information on wildlife.	Placing some rest areas in and around Doorly Park playground (with permission) especially would allow elderly residents or parents to enjoy and appreciate the biodiversity of the area. Enhancing these benches with signage displaying information on the various biodiversity actions taking place.
13	Encourage participation in citizen science projects.	There are many citizens science projects which the community could assist with. One idea would be to link with the County Council's Climate Action Team to raise awareness of air pollution and the impact it has on human health inspiring community action.
14	Encourage use of new electric bikes	With new electric bikes stationed at Doorly park, encourage community to use these.
15	Consider ways to advance Sustainable Energy Actions.	Through community action local people can make a significant contribution to climate change in their actions. As the Doorly Park Area is within the designated as decarbonisation zone of Sligo, look into actions and workshops to support this.

Proposed Training & Workshop Summary

This is a table of training the residents were interested in receiving. This will form part of a wider programme of workshops and training activities to be delivered for the wider South Sligo Parks Quarter.

Proposed Workshop/walk / Talk	
Deliver a seed-collection and cuttings Workshop.	This workshop will focus on how to save money by collecting seeds, and also how to grow plants from cuttings. The practical elements of gathering, storing and propagating seeds will also be covered.
Deliver a Low-maintenance pollinator-friendly planting workshop.	This workshop will discuss low-maintenance planting schemes.
Bees and Pollinators Workshop.	This workshop will discuss the difference between social and solitary bees, their life cycle, behavior, habitat preferences, and sources of food.
Activity workshop/s.	Create bird boxes or bat boxes or bird feeders.
Garden Bird Workshop.	This workshop could cover the basics of visual and aural bird identification for common garden visitors. It will also highlight their resource requirements.
Bat walk & workshop.	This workshop will cover the basics of bat ecology, including life cycle, bat behaviour, and habitat requirements. The workshop would include an educational sunset bat walk using handheld equipment for species identification.
Tree planting activity/workshop.	Most cost-effective for community groups is using bare-root trees.

Details of the proposed actions for biodiversity and resources

This Local Biodiversity Action Plan LBAP includes a lot of actions that would help the community connect with nature and help support local biodiversity directly. Increasing plant diversity is often the first step in this process as flowers provide food for pollinating insects and fruits provide food for our birds. Mature trees provide habitat for insects, birds, and bats. All these interrelated relationships create the wider ecosystem.

Ireland is now following the second All Ireland Pollinator Plan (AIPP) which runs from 2021-2025. There is great free information, posters, and resources at the website www.pollinators.ie. There are many simple actions outlined in the AIPP that communities can undertake to reverse declines in biodiversity. Many of the proposed actions detailed in this section link directly to those proposed in the AIPP. An excellent resource is this community action booklet: https://pollinators.ie/wp-content/uploads/2021/08/Local-Communities_actions-to-help-pollinators-July-2021-WEB-JB.pdf



Image shows section from 'Gardens: actions to help pollinators'

Source: https://www.biodiversityireland.ie/wordpress/wp-content/uploads/Gardens_actions-to-help-pollinators-July-2016.pdf

The competition handbook for Tidy Towns community is also packed with great advice for communities: <https://www.tidytowns.ie/competition/handbook/>

Action 1: Establish an Annual Wildlife Walk

It is important to raise awareness of local wildlife and habitats. Raising awareness is often the first step in generating stakeholder engagement and public support for change. Increasing public knowledge and promoting local action is an essential step in securing biodiversity in urban environments and climate resilient development. An easy way to do this would be by establishing an annual wildlife walk, hosted or promoted by Doorly Park Resident's Association. This could promote a continued interest in local biodiversity amongst members of the local community.

If you choose a guided event, guest speakers could be sourced from environmental groups or lecturers at ATU (Atlantic Technology University) or from the Local Authorities Water Programme. If the event is held over summer months, then it could introduce botanical identification providing basic training and information on select species and their role in the ecosystem. If the event is held in Autumn months the walk could focus on a foraging workshop with tips on collecting edible fruits (from apple trees, blackberry bushes, elderberry shrubs) and associated recipes (for juices, tarts, and preserves).

Even if free, tickets from the event could be allocated online through a website such as www.eventbrite.ie. This can help give quick updates to attendees (e.g. if had to cancel due to bad weather). Overtime this event may generate interest in the wider community and become a weekend long celebration of Doorly Park and environs. In 2022 two very popular guided biodiversity walks were organised in Doorly Park:



Families participating in a guided bat adventure in Doorly in October 2022.



Participants in the Pollinators Walk during Biodiversity week in May 2022 in Doorly Park.

Action 2: Reduce dumping of Grass Clippings by encouraging use of Brown Bins, and Mulching.

Doorly Park Residents have expressed concern over the dumping of grass clippings in the nearby native woodland. This can disrupt ecosystem functioning by introducing invasive species, contributing to nutrient enrichment and nutrient run-off. As such, regularly dumping grass clippings could negatively impact the biodiversity of Lough Gill SAC.

As such, residents should be encouraged to use their brown bin for the disposal of grass clippings. The distribution of simple information leaflets in the local area may help to raise awareness and alter behaviour.

Also where possible could residents be encouraged to mulch grass to reduce the amount of grass cuttings

Action 3: Investigate the Feasibility of Establishing a Community Composting System

Following on from Action 3, the residents of Doorly Park could investigate if there is local support for installing a community compost bin to help convert green grass clippings into compost. This would be another solution to the issue of grass clippings, but requires a lot of management as detailed below.

Composting requires green and brown materials to be layered in equal amounts. Green material includes grass clippings and vegetables. Brown material includes cardboard, sawdust, and farmyard manure. A considerable amount of this material would need to be added every time grass clippings are dumped. This might mean collecting and transporting used cardboard from a supermarket. If brown material is not added, then the compost pile becomes rank. This prevents proper break down of the material which can result in odour and flies. This facilitates turning of the compost heap. This is an essential process of making good compost as it aerates the organic material and prevents the build-up of anaerobic bacteria.

For this reason, the successful operation of a community compost bin would require a dedicated volunteer or set of volunteers.



A community created compost bin with information explaining responsible usage located along the Riverside Walk amenity area in Carney Co. Sligo.

Action 4: Identify a Community Veteran Tree and Name it

Veteran trees are often ancient trees (over 100 years old) but some can achieve this special status more quickly if they display specific biodiversity enhancing features, including; large rot holes with decaying wounds, water pockets in the trunk, large dead branches, hollowing in the trunk or major limbs, and fruiting bodies of fungi*. These features support biodiversity by providing habitat for mammals, birds, insects, and fungi. Indeed, it is in old ages that trees make their greatest contribution towards local biodiversity. For this reason, it is important to ensure our trees reach maturity.

The Resident's Association could organize a Veteran Tree Day. Community members can go on a forest walk and identify a locally distinctive native mature tree which displays some the features of a veteran tree. The participants can run a vote for a name for the tree – endowing a sense of ownership and commitment to manage and care for it.

Action 5: Plant an Edible Hedge & have social harvesting event

An edible hedge is composed of native species which are edible for pollinators, birds, and humans. However, care must be taken with children as some of the fruits can contain large stones (such as sloes) and some are not palatable when raw (such as hawthorn). Suitable native species for this hedge include hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), elderberry (*Sambucus nigra*), hazel (*Corylus avellana*), crab apple (*Malus sylvestris*), wild cherry (*Prunus avium*), and bird cherry (*Prunus padus*). Sometimes blackthorn is omitted from this list as it produces suckers which can be more difficult to manage.

The diversity of this hedge can be further increased by including some non-edible shrubs, such as; spindle (*Euonymus europaeus*), holly (*Ilex aquifolium*), rowan (*Sorbus aucuparia*) and guelder rose (*Viburnum opulus*). These are flowering shrubs which provide resources for pollinators and fruits for birds.



Image shows a useful information booklet discussing species rich hedgerows for pollinators.

Source: <https://pollinators.ie/wordpress/wp-content/uploads/2018/04/How-to-guide-Hedgerows-2018-WEB.pdf>

The herbaceous layer of a hedgerow is where wildflowers grow. As such, weeds and other wildflower species should be allowed to grow around the base of the hedge for two meters. These might include flowering species such as: foxglove (*Digitalis purpurea*), creeping buttercup (*Ranunculus repens*), meadowsweet (*Filipendula ulmaria*), ox-eye daisy (*Leucanthemum vulgare*), and purple loosestrife (*Lythrum salicaria*). Indeed, cutting around a 1m wide strip surrounding the base of the hedgerow should be minimized to once or twice a year preferably in the Autumn months.

Climbing plants provide structural diversity in woodlands and hedgerows alike. In Ireland our native climbing species are limited to ivy and honeysuckle (*Lonicera periclymenum*). Both perform essential ecosystem services. Ivy flowers out of season in Autumn when other sources of forage are scarce. Similarly, it fruits in the Spring before other species and provides food for birds and small mammals. Honeysuckle flowers release nectar resources in the evening time which provides important forage for nocturnal insects, such as moths. As such, these species should be encouraged when they seed themselves in the hedgerow. Other scrambling species such as brambles (*Rubus fruticosus*) and dog rose may also be found in hedgerows. These species also help create suitable habitat for wildlife.

A good location for this edible hedge is the north-west corner of Doorly Recreational Park (with Council Permission) where a small orchard is already in place. The edible hedge can be used to expand and enhance this existing habitat.

Action 6: Organise twice yearly litter picks with local user groups, in wider Doorly Park recreational area.

Residents have reported there is often rubbish scattered through the nearby woodlands of Doorly Park recreational area. This is unsightly and is a symptom of anti-social behaviours. One way to combat this is to encourage responsible disposal of litter. By working with other local community groups (eg. Sligo Rowing Club, Park Run), the association could organise and encourage local participation in an annual litter-pick of the area. This could be part of the An Taisce National Spring Clean <https://nationalspringclean.org/>. Links with Sligo TidyTowns would facilitate removal of locally collected rubbish. Using water-groups such as Sligo Rowing Club would facilitate river-side litter safely.

Not only could you get good PR for such events, new research from the University of Galway has shown participants who take part in locally led clean-ups have reported increases in well-being (Carlin 2022). These benefits include feeling happier, more engaged, more energized, and calmer. As such, this action promotes social and environmental well-being.



Some discarded litter found amongst the understory vegetation in the adjacent native woodland, with ivy and briar visible.

Carlin, C. (2022) Nature and Environment to Attain and Restore Health. Environment Ireland, 04.10.2022, Croke Park, Dublin.

Action 7: Encourage 2-minute litter Clean-Up's by residents and volunteers

As well as annual litter-picks for the wider area, the community could encourage residents and visitors to participate in a 2-minute litter pick before eg. they leave the playground. Signage at the recreational area could encourage a quick litter clean-up and sharing of actions on social media with captions such as #2minuteparkcleanup.

Clean Coasts has been a successful national campaign which is community-led and supported by government. It is run by An Taisce and provides communities with the necessary equipment and organizational support to host informal cleaning events. Clean Coasts provide a sandwich board with litter pickers and bags. Local people are then encouraged to spend two minutes picking litter using the freely available materials. Participants are encouraged to post their results on social media using a hashtag (#2minutebeachclean). This online component is believed to encourage wider participation and boost the 'feel good' component associated with volunteering.

This model could be adopted by the Doorly Park Residents Association. The development officers at Clean Coasts are always happy to engage with local citizens and will be a good source of information on how to get started – even if the project falls outside the scope of their remit. More information available at: www.cleancoasts.org.

A designated volunteer would have to be nominated to take care of these items, store them appropriately and put them out when needed. Or links with e.g. Sligo Rowing Club to assist in this could be considered.



A volunteer for Clean Coasts and a sandwich board with materials needed for a 2-minute beach clean. Source: www.cleancoasts.org

Action 8: Manage Communal Lawns for Biodiversity – tiered mowing and cut & lift regimes to Improve Species-Richness

Amenity grassland areas are typically species-poor and of little to no conservation value. The current cutting of the communal grass areas of the residential areas of Doorly Park Road is a good example of how this biodiversity enhancing action can be implemented in an urban space.

The grass has become less intensively cut in recent years as a “don't mow let it grow” policy has been implemented. The margins of the green are kept short, while the central area is allowed to grow longer. This can be seen well in the image below. The community is to encourage and promote understanding of this newly adopted mowing regime.



The communal green space off Doorly Park Road with the grass mown closely at the margins and the wildflowers left to grow in the centre of the space.

By cutting the grass at different heights, they can further enhance these areas for wildlife as indicated in the image from www.pollinators.ie



<https://pollinators.ie/wp-content/uploads/2022/05/Pollinator-friendly-grass-cutting-A5-Flyer-2022-PRINT.pdf>

Tiered Mowing

This difference in mowing regime creates two distinct 'sward heights' - which is the technical term for the height of the grass. Ideally a grassland has two sward heights: one less than 7cm and one more than 7cm. Both are necessary and provide essential habitat for insects to complete their life cycle. Indeed, this is one of the preliminary recommendations for achieving biodiversity-net-gain in development projects across the UK (Natural England 2021).

Cut & Lift

Cutting the longer grass, and **lifting** the cuttings, from the area, this will reduce the nutrient build-up of the area as necessary for the native seed stock in the soil to grow. As a result more wildflowers will grow.

Suggest the community discuss with grass cutters on this possibility also.

Action 9: Plant Flowers for Pollinators in gardens, or newly created flower beds in residential areas.



Pollinator friendly planting and wildflower lays arranged around a public space and seating area at Doorly Park Recreational Area.

Biodiversity of gardens, and communal areas, can be enhanced easily by planting shrubs and flowers of benefit to pollinators as they are rich in pollen and nectar. This has already been actioned in the recreational area and could be copied in small flower beds at the entrances to residential roads, or in front gardens.

Some such shrubs include viburnum, mahonia, and heather. Larger perennials include allium, hemp-agrimony, and verbenas. Smaller herbaceous plants sneezeweed, catmint and lamb's ear. Not all of these plants are native, but this is okay as the recommended species are non-invasive horticultural plants and the planting is to take place in an urban environment.

Choosing contrasting colours will make for a fun and playful display. Whereas choosing a limited colour scheme (such as mauve and pink) is more appropriate if a formal display is desired. You can keep things simple and formal by planting a bank of English lavender at the bus stop for the public to enjoy the smell also.

A good place to start is using the guide below. Select your favourite species from the list and search online for existing garden designs using these species. This will provide a good template for your own community planting.



Image shows a flyer depicting pollinator friendly plants which Doorly residents can plant in their gardens.

Source: <https://pollinators.ie/wp-content/uploads/2022/05/AIPP-A5-Flyer-Garden-2022-PRINT.pdf>

Action 10: Plant Flowers for Birds in Flower Beds

Many flowers, shrubs and plants look wonderful in gardens and are also a great source of food for birds. During the Autumn and Winter months birds will forage on nutrient-rich high-calorie seed heads. These stores of food help local bird population survive these harsh months. Many of these species also provide a spectacular display in the summer months providing resources for pollinators. As such, they are multifunctional.

Some examples of species which produce attractive seed-heads for birds include; teasel, (*Dipsacus fullonum*), Sea holly (*Eryngium spp.*), Globe thistle (*Echinops spp.*), Echinacea (*Echinacea purpurea*), Rudbeckia (*Rudbeckia spp.*), Turkish sage (*Phlomis russeliana*), Hyssop (*Agastache spp.*). Further information can be found at the Royal Society for the Preservation of Birds (RSPB) available at; <https://www.rspb.org.uk/get-involved/activities/nature-on-your-doorstep/garden-activities/leave-seedheads-standing/>

The seedheads of these species should not be cut back at the end of the growing season. Instead, they should be left to decay in-situ. This provides natural bird feeders all through the cooler winter months.

Action 11: Plant More Native Trees

Plant clusters of native trees as appropriate e.g. part of National tree week. Trees provide a myriad of ecosystem services. Some of these include carbon storage, provision of habitat, and structural diversity. Bringing more trees into the residential areas, and into Doorly recreational area (with council permission) will help integrate this grassland habitat into the wider natural landscape – in particular the nearby native woodland. This native woodland is a precious natural resource as so little is left in Ireland. Increasing the tree cover in Doorly Park will create these dynamic woodland-edge habitats which are so rich in biodiversity.

The Lough Gill Special Area of Conservation is protected for a number of qualifying factors, including the old sessile oak woodland and alluvial alder woodland. As such, the species selected for the parkland should complement this habitat. Suitable tree species include sessile oak (*Quercus petraea*), rowan, downy birch (*Betula pubescence*), alder (*Alnus glutinosa*) and holly. The birch and rowan will grow quicker while the oak is longer lived and will achieve a stately size and gesture if protected into the future.



The apple orchard planted at Doorly Park recreational Park and residents are encouraged to celebrate the harvest of this area with eg a workshop.

Action 12: Install Benches for Residents and Visitors with adjacent information on wildlife.

The community would like to have more rest areas/ seat for the public to enjoy in Doorly park. If permitted, these would be ideal places to provide information on local biodiversity actions we can engage the public and raise awareness. Laminated drawings by local residents of their favourite wildlife/ flowers of the areas could be included.

Action 13: Participate in Citizen Science Projects such as Clean Air Monitoring of Sligo County Council Climate Action Office

There are many various citizens science projects that are free for communities to participate in such as the hedgehog survey. Check out the ideas at www.biodiversity.ie Another idea could be to link up with the Climate Office of Sligo County Council to see how the designation of Doorly area as a decarbonisation zone could be supporting. For example, this office has free air monitoring equipment that could be installed for monitoring of air quality.

Since June 2022 the World Health Organization (WHO) has declared clean air to be a basic human right. Unfortunately, Ireland falls below the WHO standards for clean air in all 80+ monitoring stations located across the country (Kenny 2022). There are three major contributing factors to this, namely; road traffic (NO₂), home heating (PM_{2.5}), and low-pressure centres in winter months which prevent the dissipation of air pollutants (Kenny 2022).

These emissions are higher in the winter months and are known to have harmful impact on human health – particularly for the young and elderly who suffer from respiratory problems. A recent estimate suggests there are approximately 1,3000 premature deaths in Ireland every year as a result of poor air quality (EPA 2022).

Doorly residents could also consider how to link with The 'Clean Air Together' campaign is currently being rolled out across the country by the Environmental Protection Agency and the Environmental Education Unit of An Taisce. Thousands of individuals in Dublin and Cork have received test tubes to be used at home in order to monitor local air quality. This will provide important information used to inform government policy and mitigation measures. More information can be found at: www.cleanairtogether.ie.

Kenny, P. (2022) Air Quality in Ireland. Environment Ireland, 04.10.2022, Croke Park, Dublin.

Environmental Protection Agency (2022) Air. Available at: <https://www.epa.ie/environment-and-you/air/>
Accessed on: 06/10/2022.

Action 14: Encourage use of New Electric Bikes

Residents of Doorly Park are excellently located to avail of public transport initiatives. Recently the electric bikes (Bolt Bikes) have been introduced with parking stations in their areas. It is recommended that they promote and encourage their use to reduce carbon emissions in the locality. This could be accompanied with cycling proficiency lessons and even a session to show how to use the *Bolt* bike app.

Action 15: Consider ways to advance Sustainable Energy Actions.

Through community action, local people can make a significant contribution to climate change in their actions. As the Doorly Park Area is within the designated decarbonisation zone of Sligo, the community could look into actions and workshops to support this.