Dunshaughlin Biodiversity Action Plan 2021 – 2026

Actions for Biodiversity in Dunshaughlin

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Welcome to the Dunshaughlin Community Biodiversity Plan!

This plan is to be used to guide the work of Dunshaughlin Tidy Towns for the next 5 years. This was drawn up following consultation with members of the Tidy Towns group and a number of field trips undertaken in 2020.

The plan does not set out to include all of the excellent work already carried out by Dunshaughlin Tidy Towns but to provide direction for the group over the next few years.

The first section of the plan is an introduction to this plan and the project, that gave rise to it as well as some biodiversity basics. Next we outline some Key Biodiversity Projects – these will be projects that need significant resources for the Tidy Towns Group to complete. Finally, there are a schedule of projects that we suggest that the group would undertake over the next year, three years and five years.

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Dunshaughlin Tidy Towns would like to thank all of their tireless volunteers for their work over all our years of Tidy Towns involvement. We would also like to thank our many supporters, including the businesses and residents of Dunshaughlin.

This Community Biodiversity Action Plan was created by environmental consultants Billy Flynn and Ian Douglas for Dunshaughlin Tidy Towns. The authors would like to thank the volunteers of Dunshaughlin for their support completing this project and to commend the great work being done here year on year.

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DUNSHAUGHLIN TIDY TOWNS GROUP
Enhancing our Environment

1 Introduction: Local Biodiversity Action Plan

1.1 About this biodiversity project

Ecologists Billy Flynn and Ian Douglas were commissioned by Dunshaughlin Tidy Towns to investigate areas for biodiversity protection and opportunities for enhancement around the town, its estates and surroundings. The principle aim of this was to highlight projects for the Tidy Towns group to focus on over the next 5 years. This plan also aims to increase biodiversity potential of certain areas and help raise awareness of the importance of biodiversity in communities. Additionally, we hope this plan will help empower individuals and groups to make positive contributions for the benefit of both wildlife and people.

It is to the credit of the group that biodiversity has become such a part of what they do as a Tidy Towns group. This project will help the group to 'design' biodiversity matters into their present and future projects and maximise the benefits for wildlife. This statement of best practice for biodiversity will also be useful to groups seeking financial or material support for future projects.

This biodiversity plan was drawn up following a meeting and a series of site visits in early 2020 and again during the summer.

1.2 What is Biodiversity?

Biodiversity refers to the variety of life on Earth. It includes all living things (organisms) that make up the natural world (including humans). Biodiversity also refers to the places where animals and plants live (habitats) and the complex interactions between living things and their environment which we call ecosystems.

1.3 Why is Biodiversity Important?

Humans are a component of biodiversity and we are dependent on biodiversity to provide a range of ecosystem services. Human activities such as agriculture, forestry and fishing depend on services provided by biodiversity. We rely on biodiversity for the provision of clean air and water, food and medicines, natural landscapes, flood control, noise pollution control and much more. A healthy environment is important for human health and well-being. Biodiversity provides us with natural amenities to enjoy, parks and green spaces, wildlife and landscapes to admire and thus improves our quality of life. The

attractiveness of our country as a tourist destination, a place to live and do business depends to a large extent on the rich biodiversity of the county. Our country's natural heritage contributes to the attractiveness of landscapes, villages and urban centres.

1.4 What's the Local Biodiversity Action Plan For?

The purpose of a Local Biodiversity Action Plan (LBAP) is to set out appropriate locally based actions for the conservation, management and/or enhancement of habitats for the benefit of native species. This local biodiversity action plan:

- Makes recommendations for the conservation of biodiversity through appropriate actions for the protection, management or appreciation of an area of high ecological value.
- Identifies actions to improve or enhance local areas so as to increase their value as habitats for species.
- Encourages actions to raise awareness of the importance of biodiversity and its conservation.

2 Key Actions for Biodiversity

In this section, we set out some of the actions that will be common to all individuals or community groups interested in biodiversity. We also outline some of the guidelines that are accepted as best practice for biodiversity at local or wider levels.

2.1 Habitat Creation & Management

2.1.1 Habitat Creation

Habitat creation is one way to increase the diversity of habitats and enhance an area for biodiversity. Examples of small-scale habitat creation that may be appropriate and practical for community groups, schools and residents to undertake include managing an area as meadow grassland or wildflower lawn, planting hedgerows, treelines, groves of trees or creating a pond.

Habitat creation should only be attempted in an area that is currently of low biodiversity value such as amenity grassland. Introducing a habitat uncommon in an area, such as a pond, may be of more benefit than planting more trees in an area that already has good tree cover. Creating a small complex of habitats such as a small woodland or grove of trees along with some meadow grassland around the edges will create a collection of semi-natural habitats. This will be of more benefit to biodiversity as it will provide resources for a greater number of species.

2.1.2 Tree and Hedgerow Planting

Planting native hedgerows, trees and woodlands provide food, shelter and niche habitats for a range of plant and animal life and is one of the easiest ways of increasing the biodiversity value of an area. Native trees and shrubs are best for wildlife as species colonised Ireland naturally and are adapted to the environmental conditions here.

2.1.3 Meadow Grasslands, Wildflower Lawns and Grassy Verges

The traditional hay meadows once widespread in Ireland are now very scarce due to changes in farming practices. Meadows are a haven for wildlife in summer as they are rich in wildflowers and the insects, birds and bats that depend on them. Managing little-

used grassland areas as a meadow is one way to increase the resources available to wildlife. Not only does this allow the growth of wildflowers, which provide essential pollen for our pollinating insects, the long grass hosts a variety of other insects and invertebrates. Long grassed meadows also produces seed that is an food source for birds. Bat species will forage over a meadow grassland rich in insect life. Long grass also provides cover and nesting habitat for small mammals.

2.1.4 Making Meadows: Where and How to Encourage Wildflowers Naturally

Meadow grassland can be established in parkland areas or along grass verges. In general areas of meadow grassland or long grassy verges should be cut once a year in autumn and the cuttings removed. Removing the cuttings is important to prevent the build-up of nutrients in the soil. Wildflowers flourish in a nutrient poor soil where they can compete successfully with the more competitive grasses. Gradually over the years the number and diversity of wildflowers within the meadow will increase. It may take several years before you see an increase. Avoid using commercially available wildflower mixes to enhance your meadow. These mixes often contain species that are not native to Ireland and are really only suitable for gardening and not for creating natural habitats such as meadows. In addition, some species in these mixes are plants of disturbed ground or arable fields and are unlikely to thrive in a meadow grassland.

2.1.5 Pollinator Friendly Planting

Much is spoken about the importance of pollinators these days and rightly so. These are hugely important species for not only our wildflowers and trees but also for many of the plants on which we depend on for food. Any biodiversity plan should have a strong focus on plants for pollinators.

While native plants are best for wildlife and should only be planted in wild areas, there are a wide range of both native and non-native garden plants which provide food for pollinating insects. These species are suitable for use in gardens and formal planting settings. Planting a range of pollinator-friendly plants which flower at different times throughout the year will provide an important source of pollen and nectar for pollinating insects throughout the spring, summer and autumn.

2.1.6 Plants for Pollinators:

Naturally Native Here are some common (and sometimes overlooked) plants that are native to Ireland and Meath and are of great benefit to our insect pollinators:		
Dandelion	Ivy	Bramble
Daisy	Blackthorn	Primrose
Bluebell	Hawthorn	Foxglove
Bugle	Forget-me-not	Rowan
Red & White Clover	Heather	Spindle

Non-native but beautifully beneficial Here are some widely available plants that are good for pollinators and also look great in any planting scheme:		
Nepeta	Ribes (currants)	Dogwood
Rudbeckia	Buddleia	Hebe
Aubretia	Hydrangea	Cranesbills
Cotoneaster	Lavenders	Achillea
Berberis	Privet	Campanulas

2.1.7 Composting

Composting reduces the amount of waste going to landfill and provides a source of nutrient rich compost for gardening. This reduces the need to purchase garden compost, which is often sourced from peat bogs contributing to the loss of treasured habitats. Your compost heap also becomes a habitat! Worms, beetles, slugs and even hedgehogs will make themselves at home in a well-managed composting area.

Compost your garden and food waste in a designated composting area. Avoid tipping of garden waste into waysides or wild areas. Grass cuttings disposed of in waysides and other wild places smothers wildflowers. Beside watercourses, grass cuttings can pollute water and even kill fish. Garden plants which are disposed of outside garden areas can take root and spread. Some garden plants can become very invasive and spread to wild areas outcompeting our native plants and can lead to the damage of our natural habitats.

2.1.8 Bee Nesting Habitat

Honeybees live in hives and are looked after by bee keepers. Our wild bees do not enjoy such protection and must find a suitable place to nest. Bumblebee colonies make their nest on the ground often in long grass or other vegetation. Long grassy verges should be cut between September and March so as to avoid disturbing bumble bee nests.

Solitary mining bees make their nest in tiny burrows in south/east facing banks of bare soil, sand, or peat. Keep vegetation sparse on any earth banks or stony banks to provide nest sites for solitary bees. Scrape back to bare soil annually during October to February to create bare ground for solitary bees to burrow into.

Cavity nesting bees make their nests in south/east facing stonewalls, masonry, cavities in wood or dead plant stems. Visit such areas on a sunny evening from May -September. If bees are seen, protect these areas from disturbance and, in particular, ensure that there is no herbicides or pesticides used near these areas. Additional nest sites can be provided by drilling holes in fence posts (10 cm deep and 4-8mm in diameter).

2.1.9 Low Mow/Don't Mow, let it Grow

The Low Mow practise can be an excellent cost effective way to create areas of meadow grassland in parks, grassy verges and along the boundaries of other habitats. In principle this method allows grasses and flowers to grow, flower and set seed before being mowed. Ideally cutting should not take place before the end of August. If this window is missed it is no harm leaving it until the following spring. Where possible, approximately one third of the grassy area should be retained over winter to provide cover for overwintering wildlife and food for birds.

Mowing paths and small picnic areas within the meadows can also be an excellent way to encourage people into the meadows and to remove the 'don't walk on the grass' feel to the project.

2.1.10 Herbicides and Pesticides

We would recommend that you avoid the use of herbicides and pesticides as they cause harm to wildlife directly and indirectly. For example, using slug killer might result in fewer thrushes, hedgehogs and other slug-eating wildlife. Using herbicides to control 'weeds'

along grassy verges and around trees kills wildflowers upon which wildlife depend for food and seeds.

2.2 Protecting Biodiversity

Conserving and protecting biodiversity is sometimes as simple as getting the timing right. Scheduling management actions to avoid or minimise disturbance to wildlife is crucially important.

Without management hedgerows can become gappy reducing their value to wildlife and their stock-proofing function. Under the Wildlife Act 1976 (as amended), it is illegal to cut hedges between 1st March and 31st August in order to protect nesting birds unless there are clear traffic health and safety reasons to do so.

Hedgerows should be cut approximately every 3 years in rotation. This means that not all the hedgerows are cut in any one year and some are left uncut to provide resources for wildlife. Hedgerows can be cut between September and March but cutting hedgerows later in the autumn, in November or December is less disruptive to pollinating insects. Hedgerows should be cut to an 'A' shape which allows sunlight to reach the bottom of the hedge promoting a full and dense growth. The top of the hedge should be left uncut to leave some fruit and seeds through the autumn and winter months for birds to feed on.

Similarly delaying the annual garden clean-up normally carried out in autumn until early spring provides some additional shelter for wildlife. Dead plant stems and fallen leaves provide places for invertebrates and other small wildlife to shelter and hibernate during the winter months.

Groups and landowners could also be encouraged to use traditional hedge laying techniques that go back centuries. Hedge laying is carried out in the winter months. Firstly dead wood and weeds and any growth not needed for the final laying is removed. Wearing thick gloves and leather trousers use a heavy machete or a traditional bill hook to slash through half the stem of all trees that are intended to be laid. Each stem is then bent over to about 30 degrees from the ground. Off cuts can then be used to hold down the cut stems. Clean off any side growth then push the off cut into the ground and weave it into and around the cut stems.

Trainers in traditional hedge laying can be brought in to carry out training days which can be an excellent group activity during the less busy winter months.

2.3 Raising Awareness

Community groups such as Tidy Towns play a really important role here. Raising awareness of biodiversity and encouraging or facilitating people to engage with and appreciate wildlife is an important tool in biodiversity conservation. Providing opportunities for people to experience nature is useful to draw peoples' attention. Even more effective is increasing the amount of time people spend outdoors connecting with nature. Furthermore, the health benefit of spending time with nature is widely recognised with known benefits for both physical and mental wellbeing.

Raising awareness of biodiversity can be facilitated by organising wildlife-themed walks, bat walks, wildflower walks and bird watching or competitions, such as best wildlife-friendly estate, best garden for wildlife or a wildlife photography competition. Better still is providing opportunities for people to volunteer on a project, such as invasive plant species removal, tree planting or encouraging people to get involved in citizen science projects. It is often the social benefits of such events that will attract people to get involved.

When residents understand more about wildlife in their local area, this can instil respect, remind them of the value of nature and lead to more effective conservation. Where appropriate, interpretative signage highlighting the biodiversity present in an area or promoting a particular biodiversity projects such as Citizen Science.

2.3.1 Citizen Science: We can all be Environmental Scientists

Citizen Science engages the public to participate in recording wildlife. Keeping records of wildlife species and submitting these records to the National Biodiversity Data Centre (www.biodiversityireland.ie) or other dedicated recording schemes is a great way to get people involved in biodiversity conservation, improve skills in wildlife identification and foster a personal appreciation of nature. All records are valuable even that of common species seen every day. Such data is very important and is used in research, policy formation and contributes greatly to our knowledge of biodiversity and its conservation. The National Biodiversity Data Centre runs annual one-day wildlife identification training courses.

BirdWatchIreland
protecting birds and biodiversity

National Biodiversity Data Centre

Geological Survey
Suirbhéireacht Gheolaíochta
Ireland | Éireann

BAT CONSERVATION IRELAND

3 Key Projects for Biodiversity in Dunshaughlin

3.1 A little on the habitats of Dunshaughlin

Dunshaughlin town has rapidly transitioned from a small rural town to a large commuter town over the last 20 years or so. The town's boundary has continually expanded as new housing estates and commercial facilities have been developed on its fringes. An interesting feature of Dunshaughlin is the presence of a working farm on the town's main street. Recently the town has seen development within its centre with a Lidl being built on a greenfield site and an Aldi planned for another greenfield site close by. The town is generally surrounded by improved grassland and hedgerows with mature trees. However, an area of bog or marsh known as Redbog is also found to the north of the town. The town has managed to preserve much of its green space and thus contains a number of excellent greens, hedgerows and treelines.

There are no significant woodlands within or near the village with the exception of a small strip of wood on the Dublin Road. There are however a significant number of mature trees within the village streetscape and around the estates. The Readsland stream which is now mainly culverted runs westerly out of the village and forms part of the Skane river system. The Broadmeadows stream runs easterly from the town. This too is mainly culverted within the confines of the town. Historical features of the town include a workhouse on the outskirts along the old Dublin road (R147). This is an impressive cut stone building but unfortunately much of it has fallen into disrepair. These old abandoned buildings do however offer important habitat for bats along with the doubtless other roosts within private houses and buildings. An area of fallow grassland was found beside the workhouse that leads down to a famine graveyard. This grave yard contained some excellent mature yew and holly trees.

Projects and features for biodiversity enhancement

Projects have been separated into 3 groups based on an estimated amount of resources (time, people power and money) considered necessary to complete the projects.

0 - 1 year projects

1 – 3 year projects

3 – 5 year projects

3.2 Key Project 1: Grassland Management

Project Period: 2021 & Ongoing

Where: Grassland Management – Dunshaughlin Park, The Health Centre, The Green Areas at the rear of the Pastoral Centre, Verges and Estates

A portion of the park towards the northern end has begun to be converted to low-mow management. This project proposes that the grassland here is managed for the maximum benefit of pollinators and other wildlife. This should follow a set schedule of mowing agreed by the group. All-Ireland Pollinator Plan signage should be put in place. It is recommended that the National School are involved in the monitoring of plant diversity using quadrats. A suggestion here is to mow a looping path through this grassland area and even circles to encourage people to explore the area.

A portion of the grassland around the HSE health centre has also been managed for wildlife. To further add to the aesthetic, it could be suggested that areas are moved into a pattern instead of straight lines, providing softer lines for the eye. The banks on the R125 towards the old Navan Road are already being mown to promote biodiversity. These should be continued to be mown in the same manner.

To help continue the move towards flowers and away from aggressive grass species. The group should consider plug planting and planting yellow rattle in the autumn. Yellow rattle is naturally found in old wildflower meadows. This plant parasitises the roots of a wide range of meadow plants, particularly grasses. Yellow rattle can be added after a wildflower meadow has established, to help keep down grasses and encourage other wildflowers.

Establishing Yellow Rattle

Cut your grass as short as you can between July and September and remove the hay or clippings. Then remove the thatch (the layer of dead grass and moss that builds up on the soil surface) to expose some bare soil, using a rake or harrow. This ‘scarification’ is really important; the seed must to be able to reach the soil surface. Aim for at least 50% bare soil, preferably more.

Sow by hand straight away, scattering the seeds on the soil surface. This must be done by November as the seeds need about 4 months of temperatures dipping below 5°C in order to germinate in spring. Seed sown after Christmas germinates poorly. If you’re sowing an

entirely new meadow in an area of specially prepared bare soil, sow the yellow rattle along with all the other seeds in the autumn.

3.3 Key Project 2: Self-guided Biodiversity (Geocache) Tour

Project Period: 2021 & Ongoing

Where: All across the town and estates

Geocaching is a 'treasure hunt'-style activity that uses your phone's (GPS) receiver or other navigational techniques to hide and seek containers, called "geocaches" or "caches", at specific locations marked by coordinates all over the world.

A typical cache is a small waterproof container containing a logbook and sometimes a pen or pencil. The geocacher signs the log with their established code name and dates it, in order to prove that they found the cache. After signing the log, the cache must be placed back exactly where the person found it. Larger containers such as plastic storage containers (Tupperware or similar) can also contain items for trading things such as toys, trinkets, usually of more sentimental worth than financial.

This system could be used create an informative treasure hunt around the town. Caches could be hidden at or near specific points of interest or biodiversity. Information about the specific plant or habitat could be provided for in each cache. Each cache could also provide a piece of the puzzle towards a greater 'treasure' for kids like a free cake in a local café who sponsored setting up the caches. Having all the caches associated with one another and different habitats/species could help to highlight how all ecosystems and biodiversity is interconnected as part of a single web of life.

3.4 1 Year Projects

These are small projects in which individuals or small groups could manage without much financing and/or within a short time frame. These will usually focus on immediate results or results within one year.

Table 1: 1 Year Projects: Bulb Planting

Project Type	Areas	Equipment required	Milestones
Bulb Planting	The Meadows, Hanson Wood & other locations.	Small trowel and bulb stock	Bulbs in ground, first flowers.

Around the village great work has been done by groups and individuals to get out and plant bulbs for early nectar and pollen loving insects and pollinators. We have identified a couple of spots around the village where further work could be carried out to enhance the aesthetic and biodiversity value of the area.

Area at the entrance to The Meadows could benefit from additional spring flowering bulbs

Table 2: 1 Year Projects: Redbog Tour Days and Presentation

Project Type	Areas	Equipment required	Milestones
Redbog Tour Days and Presentation	Redbog	Instructor Good boots and suitable clothing!	-

An area of what looks to be former marsh or fen called The Redbog is located on the outskirts of the town. The Bog is approximately 19ha in size and located on the road towards Skryne.

This area is highly speices diverse within it ground flora. Meadow sweet dominates the landscape and orchids were found growing amoungst them. Sites like this are very uncommon in Meath and awareness should be brought to its significance.

The Redbog would be an excellent location for undertaking trips and tours for members of the group or anyone from Dunshaughlin who is interested in biodiversity.

Table 3: 1 Year Projects: Tree Planting

Project Type	Areas	Equipment required	Milestones
Tree Planting	GAA Grounds	Digging shovel Tree stock	Trees agreed, trees planted, successful establishment

The bank along the Drumree Road looks to be highly managed and also looks like it recieves a lot of footfall making it unsuitable for wild flowers or shrubs. Hornbeam or lime trees woud be more suitable for this area. These would provide rest and feeding opportunities for insects and birds and some more shelter for the GAA Grounds car park.

This bank has since been removed to facilitiate the construction of a public footpath and a rendred boundary wall is currently been erected alongside. Nevertheless we recommend that trees be planted inside the wall as indicated above.

Table 4: 1 Year Projects: Bird Box installation

Project Type	Areas	Equipment required	Milestones
Bird Box installation	Crannóg Estate, Hanson Wood and others	Bird Boxes Ladders Screw drivers and Screws	Aim to have 10 Bird boxes up within the year.

Large mature trees were common around some estates in the town. A small group of ash trees in the Crannóg Estate would be an ideal candidate for bird boxes. The trees are surrounded by the houses in the estate. Putting bird boxes where parents and children can clearly see them offers an excellent opportunity to allow people to engage with their local biodiversity. It might also be an idea to invest in a camera trap that could be temporarily installed to capture what's going on in some of the occupied boxes. This can then be put on the Tidy Towns social media.

Group of Mature Ash Trees in Crannóg Estate

Useful links and other reading material

http://www.askaboutireland.ie/enfo/sustainable-living/how-to/build-a-bird-box/building-a-bird-box/

https://www.rspb.org.uk/birds-and-wildlife/advice/how-you-can-help-birds/nestboxes/nestboxes-for-small-birds/making-and-placing-a-bird-box/

Table 5: 1 Year Projects: Mining Bees Habitat Promotion

Project Type	Areas	Equipment required	Milestones
Mining Bees Habitat Promotion	Behind the AstroTurf at the GAA Grounds and at the rear of the pastoral centre	Clippers Hoe Rake Wheel barrow	Establish/ maintain areas for mining bees. Record if they are being used in summer months If no evidence of use maybe rethink the use of space.

Clearing south facing banks can provide nesting habitat for many of our mining bee species. It is important to keep vegetation sparse on these banks to provide suitable nest sites for mining bees. Scrape back to bare soil annually during October to February to create bare ground for solitary bees to burrow into.

On sunny, warm spring days, look for bees returning to these nests with bright yellow pollen. If you see an active nest, try to protect it; avoid disturbing the area or spraying year-round.

Possible Mining Bees banks

Left Picture- Cleared south facing bank behind the small Astroturf pitch in the GAA Grounds.

Right Picture - Cleared bank at the back of the Pastoral Centre car park

Both offer an excellent opportunity for solitary bees. Although with the size of the area on the left planting flowering plants might be a better alternative for biodiversity overall.

Useful links and other reading material

https://www.biodiversityireland.ie/wordpress/wp-content/uploads/Pollinator-How-to-Guide-1-FINAL.pdf

https://pollinators.ie/record-pollinators/solitary-bees-for-beginners/

Table 6: 1 Year Projects: Insect Hotels

Project Type	Areas	Equipment required	Milestones
Insect Hotels	All around the town	Sticks, wood, small wooden boxes, moss	Create one bug hotel per year

Insect hotels provide safe areas for solitary insects to hibernate over winter. Big lawns and the lack of dead wood in our towns and villages leaves wild bees, spiders, and ladybugs without a place to live. Building accommodation for beneficial insects like ladybugs or flying pollinators can help benefit both your local environment and gardens.

Current insect hotel

Table 7: 1 Year Projects: Rubbish Blackspots

Project Type	Areas	Equipment required	Milestones
Rubbish Blackspots	Dunshaughlin Park Seachnall Place	Rubbish grabs Black plastic bags Gloves	Clear existing rubbish from areas of accumulation Check later in the year if it has begun to pile up again.

Two areas were identified where rubbish has accumulated over time or has been dumped. The first is at the edge of the park where wind is naturally accumulating leaf litter and therefore also rubbish.

In Seachnall Place in a ditch that backs onto the grounds of the church. Litter has either been dumped or accumulated here.

Table 8: 1 Year Projects: Signage about decomposers and fungi

Project Type	Areas	Equipment required	Milestones
Signage about decomposers and fungi	Seachnall Abbey Estate	Professionally produced sign	Have signs produced by the end of the summer Have sign erected by end of the year.

In a green at the front of the Seachnall Abbey estate stands the remainder of a large beech tree that is likely to be at least 250 years old.

The importance of standing dead wood and the decomposing work of fungi, bacteria and inverterbrates carried out is hugely important for biodiversity and all life on Earth. It is easy to appreciate the biodiversity in living things like flowers and birds but the role of organisms that breakdown and recycle nutrients is equally important. It has been estimated that 40% of woodland wildlife is directly dependent on the cycling of organic material in forest ecosystems.

Erecting some signage that explains about the role of deadwood, some of the inverterbrates that depend on them and a few of the fungal species (like brackets) would be a good way to help people appreciate the often forgotten or less 'pretty' side of nature.

Large dead stand tree at the enterance to the Seachnall Abbey Estate

3.5 1 - 3 Year Projects

Table 9: 1 – 3 Year Projects: Understory Planting

Project Type	Areas	Equipment required	Milestones
Understory Planting	Numerous locations	Trowels Clippers Hedge strimmer (maybe) Seeds and Bulbs	Identify a number of areas for planting Discuss with local residents about the plan Clear vegetation Conduct the planting

Shaded verge areas under leyland cypress treelines and decidious trees in the Ardlea Estate Green, Collage Park Green and in other locations around they town could be further enhanced with some selective planting. These areas often turn into green waste black spots and can become dominated by garden excapees and aggressive natives like nettles.

Woody verges can be rich in early spring flowering woodland species, such a primroses, bluebells, celandines, wood anemone, greater stitchwort, sweet woodruff and ransoms (wild garlic). Most seen in this survey had a thin growth of grass and won't need much cutting. Usually a late summer cut (this can be very helpful to keep woody plants like brambles, holly and sapling trees under control) is sufficent. Such verges should not be cut between the end of January and mid-July to allow early spring flowers to grow and set seed.

Volunteers should also monitor these areas in order to ensure that they are not already species-rich before any disturbance takes place to them. Woodland verge species are most likely to be successful.

Wild Garlic

Wild garlic thrives best in moist conditions and in slightly acidic soil. Its bulbs already wake up in late winter, so as to be ready to sprout in the end of March or in early April. Its leaves decay and make space for other forest vegetation. Wild garlic grows aggressively if given a chance but in areas where its growth can be limited by being surrounded by amenity grasslands, it could be suitable.

Wild garlic reproduces by seeds or bulbs. If you decide to grow it from a seed, the ideal time to plant it is between October and March. If you want to grow wild garlic from a bulb, plant it at the end of summer, in August or in September, when garlic has already gone out of bloom. These areas might also be suitable places to place dead logs and bows

of timber to encourage decomposers and provide a slow release nutrients that are extremely important for wooded environments.

Non Native Pollintator Friendly Planting

Another option where mature Leyland Cypress dominates is to plant non-native but pollinator-friendly species that are hardy and can cope with a wide range of light and soil conditions. An excellent example of what is possible can be seen in in the photo below taken in a park in Trim. Here the lower branches are removed to allow as much light as possible to reach the understory. Shrubs and ground cover plants can then be planted with the long term aim of filling this space and making it less likely that people will use it for dumping green wastes. Addationally planting pollinator friendly shrubs like Buddleja, Cotoneaster or members of the currant family will dramaticailly increase the food resources for birds and pollinators within the area.

Locations for understory planting around Dunshaughlin

An **excellent example of understory planting in Trim**

Table 10: 1 – 3 Year Projects: Redbog slideshow and presentation

Project Type	Areas	Equipment required	Milestones
Redbog Presentation (As part of National Heritage Week 2020)		Venue Projecting equipment	

Dunshaughlin Tidy Towns committee in conjunction with other groups and individuals came together to organise a project for National Heritage Week 2020 entitled 'Exploring the Biodiversity of Redbog' to highlight the biodiversity of Redbog and its ecological significance.

The event which consisted of a slideshow presentation including photographs and information about the site with video footage of the proceedings incorporating the song 'The Redbog Bouquet' which was posted on social media channels including Dunshaughlin Tidy Towns facebook page and a YouTube channel.

The results of those endeavours can be seen at:
https://www.heritageweek.ie/projects/exploring-the-biodiversity-of-redbog

We continue to raise awareness in relation to the biodiversity at Redbog. The prime mover of the initiave Tom Toner is currently finalising the details for the publication of a 120 page booklet entitled 'The Red Bog Bouquet.'

The Redbog

Table 11: 1 – 3 Year Projects: Grassy Verges

Project Type	Areas	Equipment required	Milestones
Grassy Verges	Dublin Road and most of the new estates around the town.	Wildflower Seed Mowers Trowel for planting Rakes and Shovels	Group to research verge management options Areas for management agreed Schedule of management agreed New verge management regime to begin April 2021

We have separated this category into projects of different sizes and priorities with some wildflower establishment projects considered the key projects for the group in the coming years.

Some of the smaller areas are listed here. The approach for most of these areas is broadly similar. In many of the new estates opportunities to establish species rich grasslands exist in areas that have been recently created and are ideally prepared for planting.

Some of the areas discussed here are likely to fall under the management of either landscape companies or building contractors and may not actually be available for planting.

A number of possible wildflower verge planting areas

Step by step guide to planting bare ground.

If ground has already been prepared as in the pictures above choose a mixture of flowers that are suitable for your soils (likely neutral in this instance). Buy seed of reputable seed suppliers that was collected in Ireland: EcoSeeds, Design by Nature and Irish Seed Savers are some examples.

Lightly rake over seeds to cover them and avoid losses to birds.

In later summer or early autumn in year one mow the area and remove all grass cuttings. Your seed supplier should be able to give you the best recommendations on management after sowing that is tailored to the area and the type of seed sown.

Table 12: 1 – 3 Year Projects: Composting and Garden Area

Project Type	Areas	Equipment required	Milestones
Composting and Garden Area	Seachnall Place Dunshaughlin Park	Wood and other materials for building composters. A closed composting drum or bin. Potentially a small compost bin for each household.	Discuss with the home owners in the estates about the idea. Find out about ownership of the patch and access to the areas in the park. Find out if people are already recycling/composting in the estates. Create a team to carry out the works.

Community Composting Schemes are an excellent way of managing organic waste, diverting green wastes from landfill and creating quality free compost for other projects. It also helps to manage green waste pollution which was evident in many of the parks around the town.

Effective composting requires a good deal of initial organisation, training and awareness raising. Research must be carried out to understand how to make a compost heaps work effectivity and what should and should not be added to it. A suitable location that is central should be chosen, materials for the construction of composting bays gathered, the bays constructed and a team of volunteers tasked with turning and feeding the heap.

Composting can be very rewarding particularly when you see how many worms you get within your heap!

Seachnall Place Estate

An area of what looks to have been a former shared space exists within the Seachnall Place Estate. This area could be renovated and turned into a small community composting area.

Additionally, if fenced off from dogs this could also be an excellent small community garden with a few raised beds or just some easy plants like rhubarb, raspberries and strawberries.

Dunshaughlin Park

It is evident that much of the greenwaste from mowing the parks and greens around Dunshaughlin is being dumped on the edges of the greens or under leyland cypress trees. This green waste could and should be composted where possible. The small enclosure at the end of the park could be turned into the towns composting facility or a new enclosure put beside it for the same purpose.

Possible composting and garden area in Seachnall place

Table 13: 1 – 3 Year Projects: Bank Planting

Project Type	Areas	Equipment required	Milestones
Bank Planting	Hanson Wood	Strimmer Seeds Plugs plants	Group to research verge management options Areas for management agreed Schedule of management agreed New verge management regime to be completed by winter 2021.

Mature trees and high banks. This little park would be an excellent place for planting shrubs, bulbs or wildflowers.

Depending on the chosen outcome what is required for ground preparation is likely to vary.

For shrubs the soil will likely be to dry and nutrient poor. A covering of compost, mulch or woodchip would help retain soil moisture and create some more organic matter for young plants.

Bulbs could be plugged into the ground during the winter with emergance the following spring. Plug planting could also be carried out here in the early spring.

For wildflowers scarify the ground to help germination, scatter and cover wildflower seeds in the same manner as discussed above. It would be worth sending a few pictures of these locations to your seed supplier and they will then be able to advise on the most appropriate seed mixture to sow.

Possible bank planting areas in Hanson Wood

Table 14: 1 – 3 Year Projects: Woodland Habitat Enhancement

Project Type	Areas	Equipment required	Milestones
Woodland Habitat Enhancement	Famine Graveyard	Tree Stock Shovels and Spades	Having 10- 20 Specimen trees planted within 2 years

This area contains some large mature trees including horse chestnut, sycamore and wych elm. Notable here are the large yew and a very tall holly. While the latter is substantially a standing dead tree, it is still alive and should be retained for its habitat value. It is suggested that further tree-planting could take place to 'enclose' the open area while retaining a path to the altar/statue. Holly and oak should be considered here.

Beautiful mature yew and holly in the Famine Graveyard

Table 15: 1 – 3 Year Projects: Grassland Habitat Management

Project Type	Areas	Equipment required	Milestones
Grassland Habitat Management	Norman Motte in the R.C. Graveyard at Main Street	Signage Herbicide	Replace signs and add All Ireland pollinator signs within one year. Remove sycamore within 2 years.

The remains of the Norman Motte (a national monument) is substantially a grassed mound with some woody species. The majority of these are non-natives including sycamore, Fuchsia and Buddleja. A large mature treeline to the east of this adds value for bird nesting habitat.

It is recommended that a low-mow regime is adopted here with grass cut only once (in late autumn). The woody species may mostly be retained for their pollinator and aesthetic value. The exception to this is the sycamore which should be removed (cut back hard and dabbed with herbicide).

Another enhancement could be a wildflower or low-mow strip that adjoins the rath and the southern boundary. It is recommended that the signs at the front of the rath be repaired or replaced and an All-Ireland Pollinator Plan sign (indicating that this area is managed for wildlife) placed here.

Area adjoining the Norman Motte that could be low mowed and have some selective plug planting

Table 16: 1 – 3 Year Projects: Habitat Enhancement

Project Type	Areas	Equipment required	Milestones
Habitat Enhancement	St. Seachnall's (COI) Churchyard	Works should be carried out by a licenced contactor	Oaks established within 3 years

This churchyard is substantially enclosed by large mature trees. While these are non-native sycamores, they are still of value as bird nesting habitat, shelter and commuting birds and bats. Other tree species here are elder, yew, oak, ash, hawthorn and another notably large holly. Some ground flora typical of woodland edge is developing here. It is recommended that the leyland cypress trees be removed from the boundary and replaced with some of the more valubale species (such as oak) that are already present. It is further recommended that cut grass is not deposited in the boundary areas as this can damage ground flora here.

Mature holly in the Church of Ireland graveyard

Table 17: 1 – 3 Year Projects: Grassland Management

Project Type	Areas	Equipment required	Milestones
Grassland Management	College Park	Tree Stock Shovels and Spades	Plant Trees within 3 Years Introduce Low Mow within one year.

It is recommended that a low-mow regime is adopted here to enhance the boundary habitat on the western boundary. Some understory planting of native broadleaved species such as holly or hazel along this boundary could also be carried out. Understory planting of leyland cypress as mentioned above could also be suitable here.

A number of flower pots alligned the edge of this area of grass. These should be relocated and replaced with a substantial flower bed in the ground.

Collage Park Green is suitable for understory planting of the Leyland cypress treeline, low mow and selective tree planting. All of the above could be enhanced with paths through the area.

Table 18: 1 – 3 Year Projects: Orchard Development

Project Type	Areas	Equipment required	Milestones
Orchard Development	Dunshaughlin Park	Tree Stock Digging Equipment	Area replanted in the next 2 years.

It is recommended that the Amelanchier trees that have not thrived be removed and some of the stronger ones retained. In their place native apple/pear and/or plum trees should be planted along the established lines.

The surrounding areas gravel areas could be allowed to remain or could be grass seeded and then regularly cut. It is recommended that this approach be discussed with the Meath County Council Parks Department.

Amelanchier trees in Dunshaughlin Park

Table 19: 1 – 3 Year Projects: Secret Garden

Project Type	Area	Equipment required	Milestones
Secret Garden	Cooksland Estate	Benches Information board/hidden geocache A formal flower beds or trees.	Plant additional trees within the area Install benches and tables for people to have lunch on.

Small, well-managed area of amenity grassland on the right as you go into the Cooksland estate. Almost impossible to see until you go through the small gap in the shrubs.

This area could be an excellent location on the geocache biodiveristy tour of the town with some information about some of the trees or plants found there. These currently include birch and beech.

Some biodiversity promotion through planting fruit trees like cherry would also add to the spaces overall value.

Potentially even a bench for locals and office workers in the area to us as a 'lunch time get away' on summer days.

Possible Secret Garden location at the entrance to the Cooksland estate

Table 20: 1 – 3 Year Projects: Grassy Verge

Project Type	Areas	Equipment required	Milestones
Grassy Verge	GAA Grounds	Strimmer Seeds Plugs plants	Group to research verge management options Areas for management agreed Schedule of management agreed New verge management regime to begin April 2022

Approx 140 meter long verges with a drain. Currently this area is dominated by aggressive species typical of nutrient rich grassy verges including Creeping Buttercup, Cock's-foot and others.

This area while likely already acting as a good corridor for wild life could be improved by adding additional herbaceous plant species. This bank also offers opportunity for connectivity between the potential mining bee bank discussed in the one year project section and the hedgrows in ajoining fields on the edge of the town.

Grass should be mowed back as low as possible early in late autumn or early spring. This might be easier achieved with a strimmer given the nature of the ground. Aggressive grass is likely to be an issue so taller growing flowers like Foxglove and Meadowsweet could be used to get by this. The group could also focus on adding yellow rattle (discussed above).

https://www.biodiversityireland.ie/wordpress/wp-content/uploads/Pollinator-How-to-Guide-1-FINAL.pdf

http://www.wildflowers.ie/growers-manual/p07_meadow_maintenance.htm

Grassy verge in beside GAA pitch

3.6 3 - 5 Year Projects

Table 21: 3 - 5 Year Projects: Dunshaughlin Sensory Garden

Project Type	Areas	Equipment required	Milestones
Dunshaughlin Sensory Garden	As yet undecided – to be completed	Area Planting Equipment Landscaping contractor Fencing Area plan	Subgroup (2-3 pers.) set up Outside professional consulted Plan drawn up for garden Garden completed and officially opened in time for May 2026 and Tidy Towns entry.

The group has expressed it long-term interest in developing a sensory garden for the local community. Sensory gardens strives to maximize the sensory impact that the garden has on its visitors. Sensory gardens are user friendly and encourage garden guests to touch, taste, admire, smell and listen. Creating a sensory garden is an exciting and worthwhile project that provides limitless opportunities to teach and exercise horticultural healing therapy techniques.

The Delta Centre in Carlow offers an example of a sensory garden and what can be achieved. It would be worthwhile for members of the Tidy Towns group to go and see. There is also sensory element to the excellent Bee Wise nature trail in Kilmessan.

Some possible Ideas for the sensory Garden

The Royal Horticultural Society offer some excellent guidance around design, plants for each sense and wild flowers.

https://www.rhs.org.uk/get-involved/community-gardening/resources/sensory-garden

http://deltasensorygardens.com/about/

Table 22: 3 - 5 Year Projects: Wall Space

Project Type	Areas	Equipment required	Milestones
Walls Space	All around the town	Trowel Clippers Hedge strimmer (maybe) Plants	Opinions of local residents consulted. Local residents' opinions reviewed and reported back Wall space management plan agreed upon in 2021 Implementation of wall space management plan by May 2022.

A number of walls around the town provide micro climates for creepers or other trained plants to exploit. On south facing walls a species like our native honeysuckle and ivy would be desirable as they produce an abundance of nectar-rich flowers and fruits later in the autumn.

Other attractive nectar producing non-natives that could be considered include star jasmine or trumpet vine. The group might also consider training some fruit trees like apple or pears along wires.

Walls like this also offer an excellent opportunity to introduce art into the local community. A street art competition could be organised where people submit designs to you based on a brief. An example might be 'Us and Nature Intertwined'. The winner could then be allowed draw a piece of street art on one of the walls. Waterford city has already embraced this idea and has become a destination for street art in Ireland https://waterfordwalls.ie/.

Possible walls for wall space projects around Dunshaughlin