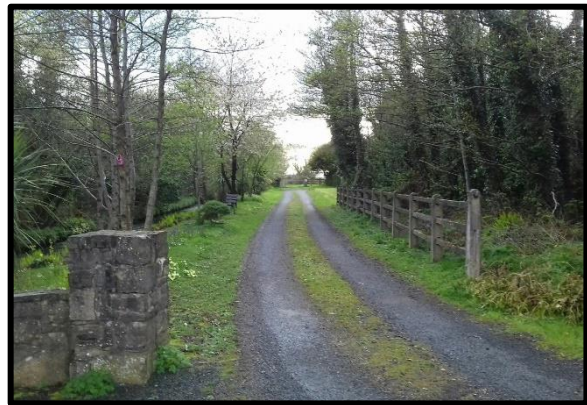


Local Biodiversity Action Plan

Carney

County Sligo



Funded by the Department of Rural and Community Development

Prepared by Woodrow Sustainable Solutions Ltd. in Summer 2022

in collaboration with

Carney Tidy Towns.

Acknowledgements

Carney Tidy Towns would also like to thank their volunteers and supporters for their help in the development of this plan and the implementation of its actions.

The funding for this work was provided by Sligo LEADER Partnership. The development of this plan was part of a wider biodiversity programme that included delivery of workshops, training and different biodiversity plans for communities across Co Sligo. This biodiversity programme was delivered by Woodrow who were appointed to deliver this work following their success in public tender process.

The workshops, and training materials and recordings of sessions are available to the public at <http://woodrow.ie/resources>

PHOTO CREDITS

All photographs are by Woodrow Sustainable Solutions Ltd. or open-source imagery unless otherwise stated.

Cover: top left – View of Carney village centre (Woodrow Sustainable Solutions Ltd.)

Cover: top right – Bug hotel at riverside walk amenity area (Woodrow Sustainable Solutions Ltd.)

Cover: lower left – Barnacle goose (Woodrow Sustainable Solutions Ltd.)

Cover: lower right – The riverside walk (Woodrow Sustainable Solutions Ltd.)

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Introduction and Local Context

The aim of this biodiversity plan is to raise awareness of biodiversity and to empower the local Carney community to undertake actions for the conservation and enhancement of biodiversity within their local area.

What is Biodiversity and Ecology?

'Biodiversity' literally means the diversity of life in the world around us. It includes all sorts of life, from the tallest trees to the tiniest microorganisms, birds, fish, mosses, reptiles... the list is endless and there are still species that have not yet been discovered! Biodiversity also includes genetic diversity within species, such as the things that make each person unique, and the differences in the genetic makeup of animals and plants that come from different places.

Ecology is the study of the way that living things interact both with each other and the places in which they live (known as their habitats).

		
<p>Male house sparrow: <i>Passer domesticus</i></p>	<p>Large white butterfly: <i>Pieris brassicae</i> on Blackthorn: <i>Prunus spinosa</i></p>	<p>Badger: <i>Meles brassica</i></p>
		
<p>Dandelions: <i>Taraxacum</i> sp</p>	<p>A hoverfly: <i>Sericomyia lappona</i> on Marsh- marigold: <i>Caltha palustris</i></p>	<p>Corvid nests</p>

Why are Biodiversity and Ecology Important?

All of the species in the world, no matter how small, have a specific part to play in the network of life that exists on Earth. Biodiversity has a key role in the formation of soils, availability of clean water, flood prevention, pollination of crops, natural pest control and many other vital functions. Biodiversity provides us directly with food, oxygen and medicines, and its economic value is infinite. Genetic diversity means that life on Earth is able to adapt to changes in climate, natural disasters and outbreaks of disease. Without the resources that biodiversity provides and maintains, we would not exist.

Biodiversity is not just about animals and plants - humans are an important part of biodiversity and our actions can influence other aspects of biodiversity, for better or for worse. Ecology deals with the inter-relations between organisms and the places in which they live. This includes how people interact with the species and habitats around them.

What is a Local Biodiversity Action Plan (LBAP)?

A Local Biodiversity Action Plan (LBAP for short) is a document which acts as a guide in the management of your local area in the conservation, enhancement and enjoyment of local biodiversity.

Conservation and enhancement of biodiversity in your local area has a wide-ranging number of benefits for local communities:

- Increased quality of life – pleasant places to walk or sit down and take a break and/or listen to beautiful birdsong.
- There is increasing evidence of the value for children of spending time in nature, and of the health benefits for all of us of spending more time enjoying the natural world.
- Pollination of flowers and crops by insects such as bees.
- Pest control e.g.: Bats eating biting midges; Ladybirds eating greenflies.
- An increased number of plants especially trees in an area will lead to cleaner air in the local environment.
- Insects, invertebrates, (e.g., worms, slugs and snails) and fungi help breakdown dead and decaying material e.g., make compost and improve soil condition and fertility.
- A healthy local environment increases the health and well-being of the local community.
- It is impossible to quantify the aesthetic value of a beautiful view across an area of natural beauty.

What does this Local BAP contain?

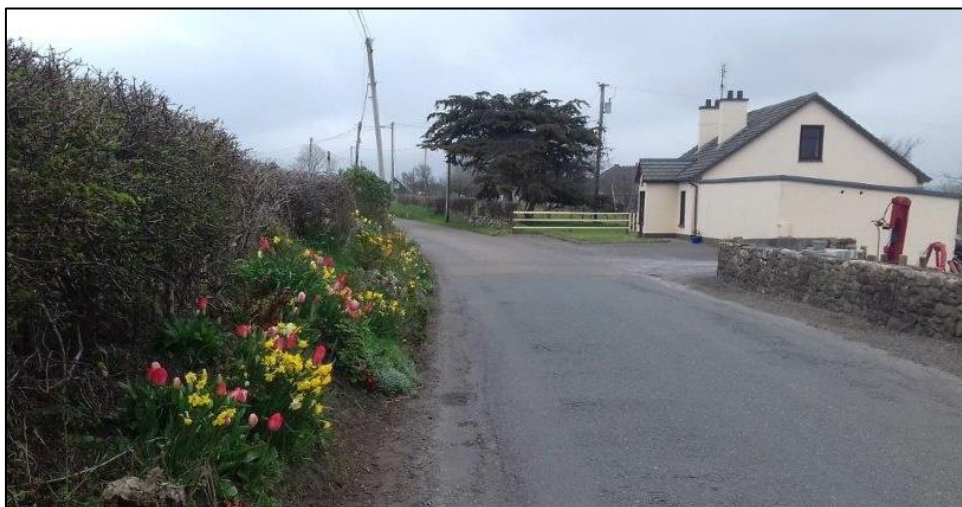
- The Local Biodiversity Action Plan contains a written report with maps, which documents the biodiversity highlights of the local area.
- The plan describes a number of actions that can reasonably be achieved by the community within a set timeframe (i.e., 5 years). This LBAP focuses on sustainable actions within Carney village prioritising the built-up and urban areas.

Location and Setting

Carney is a dispersed village community in north County Sligo with a population of approximately 400, situated approximately 1.5km west of the N15 Sligo-Donegal road. The village centre is located approximately 0.5km from the coast, which at this location coincides with the estuary of the Drumcliff River. Carney village is surrounded by good quality farmland on a limestone substrate, separated by a network of hedgerows. The Drumcliff River flows in a southwesterly direction through the centre of the village.

The centre of Carney village contains a small shop, restaurant and Chinese takeaway. There is no school in Carney; most local children attend the primary schools in either Rathcormac or Magherow. There is an active community centre at Oxfield, which is used by various sports clubs, community groups and a creche, and has extensive playing fields. There is also a soccer pitch belonging to Yeats United Football Club in the centre of the village. A new public footpath has recently been opened from the football club car park to the Oxfield playing fields. There is also a riverside walk and amenity area in the centre of the village.

Housing in Carney is mostly centred around the junction between the Cullagh Mór road and the Oxfield Road, where there are two private housing estates. Other than this, houses are scattered along the four approach roads to the village: 1. Coolbeg Road; 2. Oxfield / Cullagh Mór road; 3. Cooldrumman Upper Road and 4. Ballygilgan Road.



Spring planting along the Coolbeg approach road into Carney

Carney is close to Ballygilgan Nature Reserve, which is known to be one of the best sites in Ireland for observing barnacle geese in winter. Over 3000 barnacle geese overwinter in this area, grazing the “Goose Field” by day and roosting at night on the nearby island, Inishmurray. The geese return to Greenland in spring. Ballygilgan Reserve forms part of the larger Drumcliff Bay SPA, designated for its importance for waders and wildfowl, and the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC, designated for a range of habitats including estuary, mudflats and dunes, and its populations of harbour seal, sea and river lamprey, and narrow-mouthed whorl snail. Lissadell House and Gardens, famous as the birthplace of Countess Markievicz and its associations with the poet W.B Yeats, is located approximately 3.5km west of Carney. The coastline at Lissadell is widely used for bathing, camping and picnicking, and also supports a shellfish hatchery used for the production of Atlantic oysters and mussels.

The nature of the surrounding landscape is clearly visible in the aerial image of the village in **Figure 1** and offers us the opportunity to highlight main areas of interest to biodiversity as well as key landmark buildings.

Biodiversity in Carney

Carney is a large area that is principally agricultural in character but nonetheless contains a diverse range of wildlife habitats. Many of the fields around Carney are composed of good-quality improved grassland, often grazed by sheep and cattle, but there are also more specie-rich fields of wet grassland, fen and flush. Linear habitats such as hedgerows and treelines, as well as rivers and ditches, are an important feature of Carney’s biodiversity.

Much of the western part of Carney falls within the area designated as the Cummeen Strand and Drumcliff Bay Special Protection Area and proposed Natural Heritage Area, and Drumcliff Bay Special Area of Conservation, which are designated principally for coastal habitats and species, and important populations of wildfowl and waders. The portion of the designated area which falls within the BAP survey area is generally a mixture of improved grassland and woodland.

Many houses in Carney have gardens that are planted with flowers and shrubs, and there are a number of attractive flowerbeds and planters in the village, all of which contribute to the biodiversity of the local area. Pollen and nectar for pollinating insect species are provided by flowers, vegetables and fruit trees, while berry-bearing shrubs and bird feeders provide supplementary food for birds. Mature and semi-mature trees provide habitat for birds, bats and invertebrates. Green spaces such as those at Oxfield Community Centre and Yeats FC, the housing estates in the village, the riverside walk amenity area, and flowerbeds and planters within the village provide opportunities for further enhancing biodiversity in the Carney area.

Some biodiversity projects have already been initiated in the village, such as tree planting, provision of a composting area, and erection of bird and bat boxes and an impressive bug hotel at the Riverside Walk. This is where the Carney River flows through the centre of the village, crossed by the road via an attractive stone bridge, the walls either side of which represent a small but important biodiversity habitat. West of this point, the river meanders westwards across farmland until entering Drumcliff Bay at Finned Point. Carney River is important for both salmon and trout, and there is a linear strip of native woodland associated with its banks. It is frequented by riverine bird species such as dipper and grey wagtail.



Biodiversity friendly initiatives along the Riverside Walk amenity area – bug hotel (left) and composting area (right)

Enhancement of Biodiversity in Carney that has already been achieved

A number of biodiversity initiatives are already being successfully carried out in Carney, largely through the efforts of Tidy Towns Committee members and enthusiastic volunteers. Some of these are listed below:

- The riverside walk area has been planted with some ornamental trees. Bat and bird boxes have also been erected here.
- A composting facility and bug hotel have also been established at the margins of the riverside walk amenity area.
- Plants and flowers are grown in public areas in Carney annually, which benefits pollinating insects in the area
- Effort has been made to source plants for Tidy Towns planting from a local garden centre, who provided advice on selecting plants that have not been treated with pesticide.
- A new footpath and nature trail has been created between the Yeats and Oxfield playing fields. It is planned to develop the nature trail further as part of the Biodiversity Action Plan process
- Information signs have been erected at Coolbeg coast

- to raise awareness of the important bird species that use the Special Protection Area.
- There is a bird hide in Coillte woodland overlooking the Fanned goose field (Ballygilgan Nature Reserve) to enable people to learn more about the birds that use this area without causing disturbance.
- Children from the local creche recently made and planted “seed bombs” at Oxfield, in order to create wildflower areas and raise awareness of the importance of pollinators for biodiversity.
- Several beach clean-ups have been undertaken along the Coolbeg coast.
- NPWS has created a linnet plot at the east end of the goose field and erected signage at the shore.



Opportunities for further enhancement of biodiversity in Carney. Top: New nature trail and village centre. Bottom: Riverside walk and estate gardens.

Figure 1 – Aerial map of Carney



Carney Community Biodiversity Action Plan 2022-2027

Actions for Biodiversity:

This LBAP proposes a list of actions achievable through community effort in Carney village within a timeframe of five years (2022-2027) as outlined in **Table 1**.

The actions laid out in this plan aim to :

1. Enhance the overall biodiversity of Carney
2. Be achievable, sustainable and low maintenance
3. Compliment the vision for an attractive, safe and sustainable village

The locations for these actions are shown in the map in **Figure 2**.

Table 1: Actions for Biodiversity 2022-27

Carney Community Biodiversity Action Plan 2022-2027				
Action No.	Proposed Action	Proposed Location for Action	Suitable time of year	Locations on map in Figure 2
1	Plant biodiversity enhancing flowerbeds & pots	<ul style="list-style-type: none"> • Roundabouts • Carparks • In the Tidy Towns tended flowerbeds and pots in Carney – consider entering the Tidy Towns Pollinator Award. <p><i>Improving the appearance and biodiversity of the existing planters as well as considering planting new areas – a herb garden, a tiered planter, hanging baskets etc. Include winter-flowering plants for early pollinators</i></p>	Feb - May	A B D E
2	Change the grass-mowing regime, benefit wildflowers	<ul style="list-style-type: none"> • Roadside Grassland/Verges- <i>In the Tidy Towns managed grass verges within and leading into the village. Mow just half the width of the grass verge on the road-side, leaving wildflowers to bloom on the hedge side of the verge. This creates very attractive road verges into the village in spring and summer while enhancing biodiversity at the same time.</i> • Amenity Grassland: <i>Throughout the village as well as larger patches of improved grass with owners/management agreement Retain areas / strips of long grass within lawned areas to benefit pollinators; and/or mow strips in rotation so that there is always an area where grasses and flowering plants are blooming</i> • Sports clubs - Amenity Grassland: <i>GAA and football clubs can improve biodiversity following the Sports Club guidance laid out in the All-Ireland Pollinator Plan;</i> https://pollinators.ie/sports-clubs/ 	Jan-March – to delay cutting of these areas until April	D E Throughout area where suitable

3	Plant native trees and pollinator friendly shrubs- low mess, seaside species	<p><i>Throughout the village where the trees would not impair drivers' sight lines. Species selected should be low mess and suitable for the seaside climate. For example; in the Tidy Towns tended shrub beds at Yeats FC and Oxfield; along riverside walk or in grassed area at Lissadell Park estate. It's important to try and plant up gaps in existing hedgerows to help maintain habitat corridors for wildlife.</i></p> <ul style="list-style-type: none"> - <i>Include winter-flowering plants for early pollinators.</i> - <i>Gather local seed and sow locally.</i> 	Planting is optimal in Winter/early Spring	A B C D E
4	Develop the new looped nature trail in Carney. Erect biodiversity signage	<p><i>Create habitat for butterflies (e.g., nettle patch), invertebrates (bug hotels); plant wildflower area; plant native trees and hedges. Provide signs and information – e.g., reusable laminated leaflets in a box at the start of the trail. Biodiversity signage can showcase particular features of interest as well as highlighting areas that are being “managed for wildlife” to encourage awareness and public engagement.</i></p>	All year round - depending on resources and permissions	C
5	Erect bat and bird boxes	<p><i>In public spaces where there are trees – by the river; along the new nature trail; in Oxfield Park; in private gardens where the landowner is in agreement. Provide information board on the bat species occurring in Carney. Possibility to host a workshop on making and erecting bat and bird boxes or to carry out bat survey - involve local experts if possible.</i></p> <ul style="list-style-type: none"> - https://www.batconservationireland.org/wp-content/uploads/2015/05/BCIrelandGuidelines_BatBoxes.pdf - https://birdwatchireland.ie/irelands-birds-birdwatch-ireland/nestbox-designs-for-birds-and-wildlife/ 	Year round, but Spring is best	B C D E

6	Erect bird feeders	<i>With owner's agreement, on trees near benches and perhaps at parks and churches where birds can be watched from a distance e.g., at Oxfield Park; along river walk.</i>	All year round – Autumn/Winter is best	B D
7	Construct a bug/bee hotel or find a suitable south-facing earthen bank	Bug hotels - <i>A spot easily visible to the public e.g., a corner of a flowerbed or any location where the public can see them and learn of their importance e.g., the school or the community garden/playground.</i> https://pollinators.ie/the-secret-life-of-solitary-bees/	All year round – summer is best	A B C D E
8	Use natural methods of pest & weed control - Identify areas where weed control is not necessary.	Everywhere if at all possible! <ul style="list-style-type: none"> - <i>Replace slug pellets with wildlife-friendly pellets, or use natural repellents such as crushed eggshells, coffee grounds or copper tape.</i> - <i>Replace chemical weedkiller with 'green' alternatives (which can be homemade) or use a flame torch to spot treat.</i> - <i>Source plants and shrubs for planting that have not been sprayed with pesticides.</i> - 	All year round	Throughout area
9	Piles of leaves left in quiet corners to benefit hedgehog and invertebrates	<i>At the back of a flowerbed or at the base of a hedge where there won't be any disturbance over the winter.</i>	Autumn/Winter: especially important for hibernating species.	A B C D E
10	Biodiversity friendly hedgerow maintenance	<i>Everywhere, if at all possible, where this will not impede sight lines along roads. Where possible, use a 2 or 3 year rotation and ideally cut between November and January to minimise impacts on wildlife.</i>	Sept – Feb *outside breeding season	Throughout area

11	Monitor local area for invasive species & control where necessary	<i>Throughout Carney</i>	Year-round	Throughout Area
12	Green developments	<i>Example- Green bus stops: Select a bus stop coming into or within the village where biodiversity and colour could be enhanced – low maintenance.</i>	TBC	-
13	Biodiversity Data Gathering and a community biodiversity day	<ul style="list-style-type: none"> • <i>Along the nature trail; Oxfield park (involve community groups and creche); riverside walk; coastal areas. Submit records to www.biodiversityireland.ie.</i> • <i>Conduct guided walks along the riverside walk, the new nature trail and around the village of Carney, highlighting local biodiversity features (e.g., goose fields) and the actions being undertaken in the village to enhance biodiversity.</i> <p><i>Seek assistance and input from local experts for such events. Include events such as sustainable seed collecting.</i></p> <p><i>Example- Bioblitz day: Download the NBDC app and have a 24hour recording day – Woodrow could input ID help for a workshop prior to the day e.g.: basics of biodiversity – birds, bugs and botany!</i></p>	TBC – ideally during the summer holidays and possibly on weekend day. Biodiversity week in May?	B C D F G
14	A community garden/herb garden /sensory garden	<i>Is this a possibility? – An area with a raised bed, herbs, flowerbed etc where community events and training could take place; wildlife gardening / workshops.</i>	TBC	-

15	Raising biodiversity awareness and encourage others to take action for biodiversity for the benefit of the local community	<p><i>Hold various events / social media to raise awareness of local biodiversity including wildlife news on Facebook, a photography competition with a wildlife theme. A wildlife calendar could also be created. Linking with local poets, writers and artists.</i></p> <p><i>Liase with the Residents' Association at Lissadell Park in order to identify possible actions that would benefit biodiversity; tree/shrub and hedge planting with native species, changing grass mowing regimes, creating new habitats (wildflower meadows / community orchards), reducing pesticide and herbicide use etc.</i></p> <p><i>Introduce "Adopt a Planter" Scheme.</i></p> <p><i>Get creche, Scout group, sports groups and local schools involved with the LBAP.</i></p>	TBC	A B C D E
16	Provide and maintain a 'Biodiversity Noticeboard' in centre of village or alternatively online (e.g., Facebook page)	<p><i>Use this to raise awareness of local biodiversity features e.g., dune habitats; heronry; goose fields; and of issues such as decline of pollinators; marine waste etc.</i></p> <p><i>Habitat map could feature on this.</i></p> <p><i>Include information on topics such as maintaining bird feeders and wildlife friendly gardening.</i></p>	TBC	-
17	A sculpture or mural focal point for the village	<p><i>A biodiversity mural, sculpture or small mural trail – in collaboration with a local artist(s). Use this to engage all sectors of community with biodiversity – e.g., creche, schools, sports groups.</i></p>	TBC	-
18	Coolbeg coast cleanup	<p><i>Organise regular cleanups in collaboration with Rathcormac and Drumcliff Tidy Towns Group.</i></p> <p><i>Raise awareness of aquatic/marine habitats and biodiversity, and negative effects of waste in the marine environment.</i></p>		G
19	Develop walkway to goose fields at Finned		TBC	B F

*Figure 2 – Aerial view of Carney showing locations of biodiversity interest or potential



Figure 3 – Habitat Map of Carney – This LBAP prioritises actions within the built up and urban land use areas.

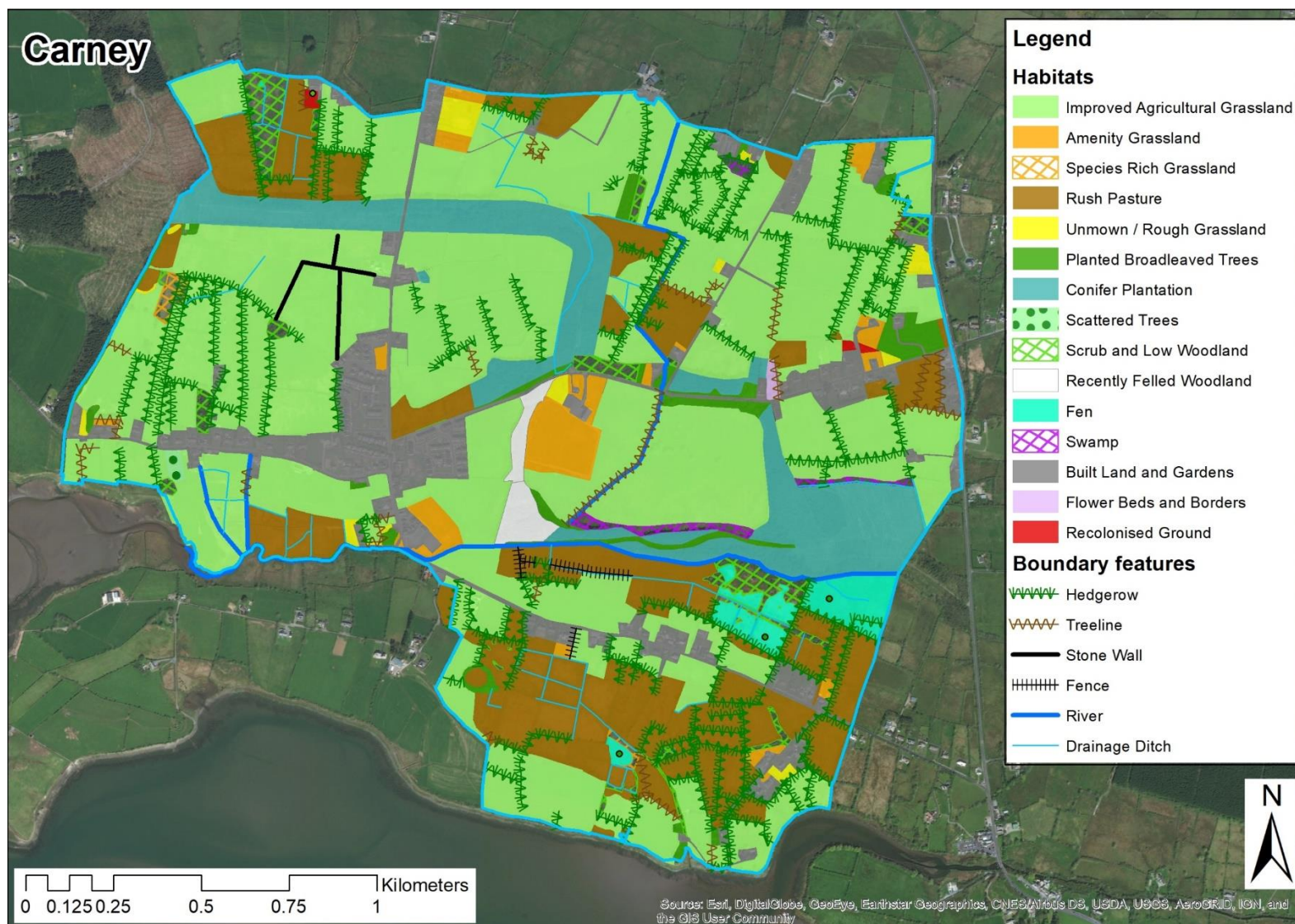


Table 2 – Habitats recorded in the Carney area.

Habitat Code and Description (Fossitt, 2000)	Corresponding Habitat in Figure 3	Biodiversity Value
BL1 Stone walls & other stonework	Stone wall	High
BL3 Buildings & artificial surfaces	Built land and gardens	Medium
BC4 Flower beds and borders	Flower beds and borders	Medium
ED3 Recolonising bare ground	Recolonised ground	Low to medium
GA1 Improved agricultural grassland	Improved agricultural grassland	Low
GA2 Amenity grassland	Amenity grassland	Low to Medium
GS1 Dry calcareous and neutral grassland	Species-rich grassland	High
GS2 Dry meadows and grassy verges	Unmown/rough grassland	Medium to High
GS4 Wet grassland	Rush pasture	High
PF2 Poor fen and flush	Fen	High
FS2 Tall herb swamps	Swamp	High
WL1 Hedgerows	Hedgerows	High
WL2 Treelines	Treeline	High
WS1 Scrub	Scrub and low woodland	High
WS5 Recently felled woodland	Recently felled woodland	Low
WD1 (Mixed) broadleaved woodland	Planted broadleaved trees	High
WD4 Conifer plantation	Conifer plantation	Medium
WD5 Scattered trees and parkland	Scattered trees	Medium
FW2 Depositing/lowland rivers	River	High
FW4 Drainage ditches	Drainage ditch	Medium

Notable Biodiversity Features in the Wider Area

Drumcliff estuary, south of Carney village, forms part of the Cummeen Strand / Drumcliff Bay (Sligo Bay) Special Area of Conservation (SAC), the Drumcliff Bay SPA and the Ballygilgan (Lissadell) National Nature Reserve. Cummeen Strand / Drumcliff Bay (Sligo Bay) Special Area of Conservation (SAC), which is designated under EU legislation because of its estuarine habitats, intertidal mudflats and dunes, and because it supports narrow-mouthed whorl snail, sea lamprey, river lamprey and harbour seal, all of which are protected species. The full site synopsis for this SAC is can be found at <https://www.npws.ie/protected-sites>.

Both Drumcliff Bay and Cummeen Strand are important for the many waterfowl which use them in autumn/winter, including Ringed Plover, Redshank, Lapwing, Knot, Bar-tailed Godwit, Oystercatcher, Curlew, Golden Plover, Dunlin, Turnstone, Brent Goose, Grey Heron, Teal, Wigeon, Mallard, Shelduck and Redbreasted Merganser. Because of this, Drumcliff Bay is also designated as a Special Protection Area for birds (SPA), designated for its importance for two Annex I bird species (Sanderling *Calidris alba* and Bar-tailed Godwit *Limosa lapponica*) and for wetland and waterbirds. The full site synopsis for this SPA is can be found at <https://www.npws.ie/protected-sites>.

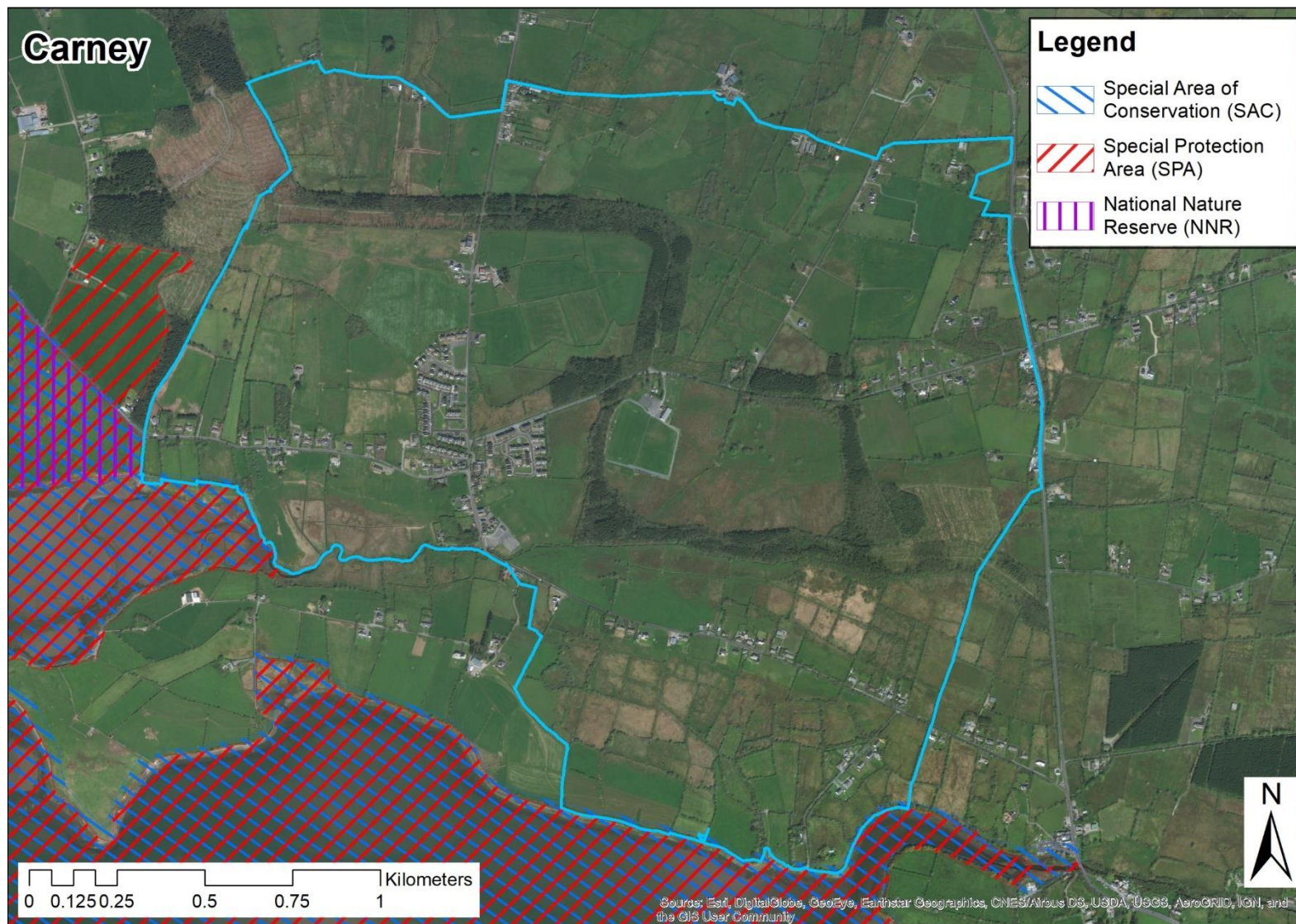
The field extending down from the public Carney-Lissadell road, to the shore of Drumcliff Bay, is a nationally important site for wintering barnacle geese, regularly supporting winter feeding flocks in excess of 3000 birds, and is designated as Ballygilgan (Lissadell) National Nature Reserve.

Figure 4 illustrates the protected Natural Heritage Areas around Carney.



Information board at the Coolbeg coast, south of Carney village, illustrating some of the bird species for which the Cummeen Strand / Drumcliff Bay (Sligo Bay) SPA is designated.

Figure 4 – Protected Natural Heritage Areas around Carney



APPENDIX 1: Details of the proposed actions for biodiversity

For each of the proposed actions, below we have provided more details where necessary.

Action 1: Plant biodiversity enhancing flowerbeds & pots

- **Enter the Tidy Towns Pollinator Award** – Tidy Towns groups are encouraged to create a buzz in their community and enter the Local Authority Pollinator Award in the national Tidy Towns competition. The award, with a €10,000 prize fund, encourages Tidy Towns groups to implement pollinator-friendly actions as part of the Tidy Towns competition. There was also a new ‘Best Newcomer Award’ in 2021, with a prize of €1,000!

<https://pollinators.ie/communities/tidytowns-pollinator-award/enter-the-2021-local-authority-pollinator-award/#:~:text=The%20award%2C%20with%20a%20%E2%82%AC,a%20prize%20of%20%E2%82%AC1%2C000.>

<https://www.pollinators.ie/wordpress/wp-content/uploads/2019/03/Tips-on-entering-Tidy-Towns-Pollinator-Award.pdf>

- **Roundabouts:** Create a colourful, welcoming and biodiverse focal point
- **Carparks:** Improving the appearance and biodiversity of any existing planters/flowerbeds and pots as well as considering planting new areas – a seaside herb garden, a tiered planter, hanging baskets etc. Important to keep things pollinator friendly, native, and low maintenance.
- **Enhance what is already there:** In the Tidy Towns tended flowerbeds and pots in Carney

Adding structural diversity – a trellis or a tiered planter – contacting a men’s shed or local carpenter to build. Sourcing desired plants/bulbs/cuttings (use the resources provided separately to help decide on what would be best suited e.g., heathers, lavender, perennial nasturtium, allium- low maintenance, native, biodiversity friendly and colourful species) – donations, funding, perhaps a local business/garage/garden centre would like to be involved.

Action 2: Change the grass-mowing regime, benefit wildflowers

- **Roadside Grassland/Verges-** In the Tidy Towns managed grass verges within and leading into the village. Mow just half the width of the grass verge on the road-side, leaving wildflowers to bloom on the hedge side of the verge. This creates very attractive road verges into the village in spring and summer while enhancing biodiversity at the same time.
- **Amenity Grassland:** Throughout the village as well as larger patches of improved grass with owners/management agreement Retain areas / strips of long grass within lawned areas to benefit pollinators; and/or mow strips in rotation so that there is always an area where grasses and flowering plants are blooming
- **Sports clubs - Amenity Grassland:** GAA and football clubs can improve biodiversity following the Sports Club guidance laid out in the All-Ireland Pollinator Plan; <https://pollinators.ie/sports-clubs/>

Reducing the frequency of mowing allows common pollen-rich wildflowers such as Dandelions, Clovers, Knapweed, and Bird's-foot-trefoil to naturally grow among long grass. This is the most cost-effective way to provide food for pollinators and other insects.



Tightly mown grass is like a barren desert for bees, devoid of food and nesting sites.

A new approach to grass-cutting encouraged by the local Tidy Towns group as an action to help pollinators, at Kilcullen, Co. Kildare.

If roads are used as walking routes, a 'layered' mowing approach can be of use. A one-metre strip along the roadside can be maintained as short turf for walkers, while the rest of the verge could be cut every 6 weeks or annually to allow wildflowers to grow.

Aim to reduce frequency of mowing at these locations and let vital pollinator species like clover and dandelion flower before the first cut (leave them until April). If you need to cut grass before April, consider leaving a margin of unmown grass to allow corridors of biodiversity. Stepped verges or a thin wildflower strip left along boundary edges – vision/road safety is a first priority. Cutting and removing clippings can increase biodiversity in these areas. Identify areas where changes in cutting regimes could increase biodiversity and where owners and management are open to changes in management regimes– e.g., verges, housing estates and small pockets of amenity grassland as well as local GAA clubs, faith buildings and schools. Designate an area to be managed for wildlife (signage is available through the all-Ireland pollinator plan: <https://pollinators.ie/resources/signs/>)

GENERAL ADVICE: Identify some green areas or lawns that have clover growing in them. Clover is easily identified at any time of year by the characteristic three leaflet structure of the leaves. If there are other species of wildflower such as dandelions, bird's foot trefoil or even self-heal growing in the lawns then that is even better.

Raise the blades on your lawn mower to the highest setting and cut the lawn less often. How often you cut will depend on the time of year and how fast the lawn is growing. The aim is to allow the dandelions, clovers and other wildflowers to grow and bloom but you can maintain a neat appearance by topping the grass when it grows taller than the flowers.

If you only have clover in your lawn and would like to try introducing more wildflowers then you could try scarifying the lawn and adding seeds of dandelion, selfheal or bird's foot trefoil to increase the diversity of wildflowers in your lawn. Only buy native Irish wildflower seeds or better still collect some from your local area (detailed tips on how to collect local seeds responsibly and sustainably are supplied separately in the resource documents provided) .

Action 3: Plant native trees and pollinator friendly shrubs- low mess, seaside species

The following leaflet outlines trees that are suitable for planting in towns and villages. https://www.heritagecouncil.ie/content/files/conserving_enhancing_wildlife_guide_2005_480kb.pdf

Another very useful document is this Heritage Council funded publication:

<https://www.clarecoco.ie/services/planning/publications/heritageconservation/tree-design-guide-for-towns-and-villages-in-co-clare-2017-28115.pdf>

And there is great information at the pollinator's website. For example:

https://pollinators.ie/wp-content/uploads/2021/08/Local-Communities_actions-to-help-pollinators-July-2021-WEB-JB.pdf

Action 4: Develop the new looped nature trail in Carney and erect biodiversity signage

Action 5: Erect bat and bird boxes

Participants can support local populations of small birds by putting up bird boxes (and bird feeders – Action 6). They could be placed in rear gardens, on the few mature trees in the green or on some of the maturing trees on rear gardens. Aim to have them up before the breeding season (maybe by March). They can also be left out all year, providing shelter and a place to roost in the winter.

They should be positioned out of direct sunlight – best facing north or south-east; and away from areas where cats can easily access them. We often see these placed too high, or poorly made with entrance holes too large for the target species. If bird feeders are placed near a nestbox, the nesting bird will spend a lot of energy defending its territory – so please don't.

There is a great information page with lots of FAQs about bird boxes:

<https://birdwatchireland.ie/irelands-birds-birdwatch-ireland/garden-birds/nestboxes/>

There is also an easy template on how to make your own bird box:

<https://birdwatchireland.ie/irelands-birds-birdwatch-ireland/nestbox-designs-for-birds-and-wildlife/>

A possible workshop could provide opportunity to show families how to assemble pre-cut parts to make a bird box.

Carney residents could also make bat boxes. These flying mammals are amazing animals. Like humans, they are warm blooded and suckle their young with milk. Some can eat up to 3000 midges a night. Bats are under threat through lost of habitats meaning they have less food and shelter; increased use of pesticides and increased lights at night.

Bat boxes can be installed in trees or on the outside of buildings providing habitat for bats to roost. In the Summer pregnant bats gather together to have their babies. The offspring and female bats stay together in 'maternity roosts' until late Summer. Insulated boxes are better for winter hibernation roosts.

Bat conservation Ireland has a great leaflet available to show how to make basic wooden bat boxes. The leaflet also shows where and how to put them up.

https://www.batconservationireland.org/wp-content/uploads/2013/09/Leaflet_3_batboxes.pdf

Action 6: Erect bird feeders

The RSPB (UK Wild bird conservation charity) recommends feeding birds throughout the year, not just in the winter. Feeders are a great way to get close-up views of birds. There are many different types of feeders– including ones that fit onto windows, that are perfect for excellent views.

You can also make your own bird tables, or indeed grow your own bird food in the form of sunflowers! Just place them quite high, away from cats, and not too exposed.

Expert guidance on feeding birds can be found at the following website:
<https://birdwatchireland.ie/irelands-birds-birdwatch-ireland/garden-birds/feeding-your-garden-birds/>

<https://www.rspb.org.uk/birds-and-wildlife/advice/how-you-can-help-birds/feeding-birds/when-to-feed-garden-birds/>

Many ask **what** should we feed birds: They should receive good quality food, for example, high-fat foods are beneficial in the winter. Do not feed birds:

- Salty foods; Loose peanuts, Cooked food or Bread.

<https://www.rspb.org.uk/get-involved/activities/nature-on-your-doorstep/garden-activities/open-a-bird-cafe/>

It is important to keep feeders clean and to prevent transfer of diseases. Move them if birds are not attracted to them. Sweep up any debris under feeders also. A lot of money is spent on buying bird food so try and ensure you know it comes from a good, environmentally responsible source.

Action 7: Construct a bug/bee hotel or find a suitable south-facing earthen bank

As mentioned - there is great information at the pollinator's website:

https://pollinators.ie/wp-content/uploads/2021/08/Local-Communities_actions-to-help-pollinators-July-2021-WEB-JB.pdf

Action 8: Use natural methods of pest & weed control - Identify areas where weed control is not necessary.

As mentioned - there is great information at the pollinator's website:

https://pollinators.ie/wp-content/uploads/2021/08/Local-Communities_actions-to-help-pollinators-July-2021-WEB-JB.pdf

Action 9: Piles of leaves left in quiet corners to benefit hedgehog and invertebrates

Action 10: Biodiversity friendly hedgerow maintenance

The following is a great resource:

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

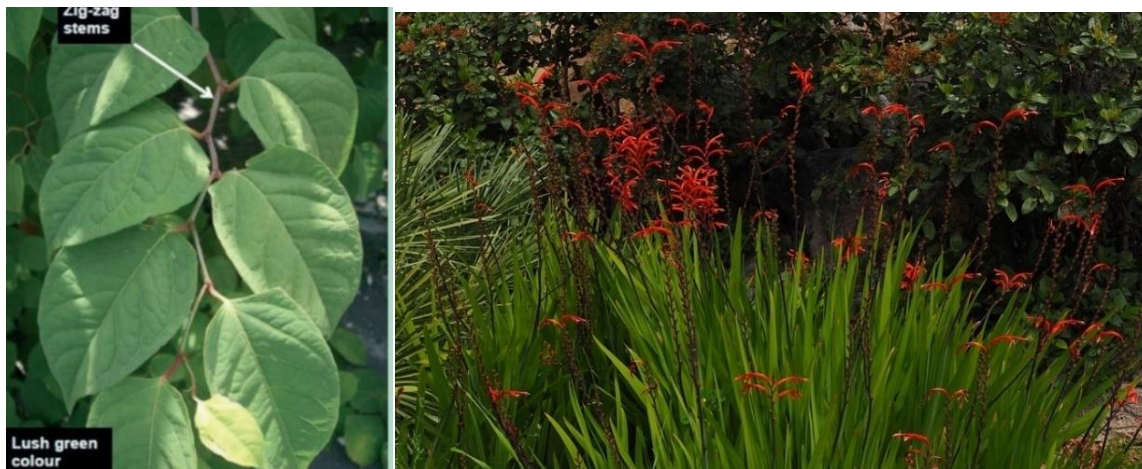
Action 11: Monitor local area for invasive species & control where necessary

Invasive species in Carney

Invasive species are generally defined as those that do not naturally occur in Ireland and which, as a result of their vigour, persistence and competitive advantage, have become established in Ireland to the detriment of our native species. Well known examples of invasive species in Ireland include the grey squirrel, which was introduced from North America and outcompetes our native red squirrel for food and territory. The New Zealand flatworm, which was accidentally brought into the country on imported plants, predated the common earthworm to the detriment of our gardens.

Irish legislation¹ makes it illegal to 'introduce, breed, release, or disperse' the most invasive species. Other, less noxious, species are not directly covered by this legislation, but it is still recommended that they are controlled where possible and are not allowed to spread.

During walkover surveys, several invasive plant species were noted in the wider area. Of most concern is **Japanese Knotweed** *Fallopia japonica*, the propagation and/or dispersal of which is illegal under Irish law. This species is extremely persistent, propagates vegetatively from minute fragments, and spreads very rapidly. It is notoriously difficult to eradicate, and fragments of rhizome may remain viable for over twenty years. Control is only achieved using systemic herbicide and should be undertaken only by trained operators with the permission of the landowner where relevant. Control must be repeated in successive years and care must be taken near watercourses, where herbicide should be injected into the stems rather than sprayed. Care should be taken not to cut or strim this plant because it propagates so readily from fragments.



¹ Statutory Instrument No. 477/2011 - European Communities (Birds and Natural Habitats) Regulations 2011, Articles 49 and 50.



Invasive species occurring in the Carney area. Top: Japanese knotweed (photo credit: Invasive Species Ireland), Montbretia. Bottom: Snowberry, Rhododendron

An invasive species that occurs occasionally on roadsides and in gardens in the wider area around Carney, is **three-cornered leek** *Allium triquetrum*. This is a member of the onion family that flowers in spring and early summer; it is not visible at other times of the year, remaining dormant as an underground bulb. The bulb produces many small bulblets, each of which may develop into a new plant when separated from the main bulb (e.g., through disturbance). The plant also produces seeds which are easily transported by water, machinery and soil movement.

Snowberry (*Symphoricarpos albus*) has often been planted in hedgerows in the past, and is relatively easy to eradicate. It was originally introduced into Ireland to provide food and cover for pheasants on large estates. Snowberry is not listed under Irish invasive species legislation but was Amber-listed following an invasive Species Risk Assessment undertaken by Invasive Species Ireland². It is advisable that it is not propagated or encouraged to spread, as it forms dense thickets that exclude our more desirable native species.

Montbretia, like snowberry, is listed on Invasive Species Ireland's Amber List of invasive species. It is an attractive hybrid plant bred in France from South African species, and is commonly grown in gardens, also appearing on waste ground and roadsides. It readily reproduces by means of corms and rhizomes (and occasionally by seed), spreading rapidly to form dense clumps that can completely dominate an area, eventually excluding existing native plants.

Another invasive plant species that is common amongst garden plants and is likely to occur around Carney, is the scheduled invasive alien species **Rhododendron** *Rhododendron ponticum*. This species often occurs within woodlands and old estates. Rhododendron, like Japanese Knotweed, is listed under Irish invasive species legislation and thus it is illegal to plant it or cause it to spread. This species grows rapidly in the Irish climate, can tolerate shading and waterlogging, produces vast

² <https://invasivespeciesireland.com/wp-content/upload-post-to-pdf-enhanced-cache/1/amber-list-recorded-species.pdf>

quantities of wind-dispersed seed, and effectively and rapidly regenerates from cut stems. Its foliage is toxic to mammals and unpalatable to most invertebrates. Its dense evergreen growth excludes light from the ground layer and excludes native species; dense rhododendron forms a monoculture where nothing else is able to thrive.

Cherry laurel *Prunus laurocerasus* is an invasive species which is commonly planted in gardens. It grows in a similar fashion to rhododendron, forming dense evergreen thickets that are also toxic to livestock (its leaves contain cyanolipids that are capable of releasing cyanide). It is widely planted as a hedging species and is readily available in garden centres but is detrimental to biodiversity as it excludes native plant species and provides poor habitat for birds and invertebrates. It is listed as a High Impact Invasive Species, scoring highly in the Invasive Species Risk Assessment undertaken by Invasive Species Ireland.

Further information and links to advice on control of these invasive plant species is available online.

The locations of the Invasive Alien Species (plants) that were noted in Carney during the 2018 surveys are provided in **Figure 5**.

Figure 5 - The locations of Invasive Alien Species (Plants) recorded in Carney during surveys



Action 12: Green Developments

Green bus stops: *Select a bus stop coming into or within the village where biodiversity and colour could be enhanced – low maintenance.*

These are examples of both homemade and more commercial green-roof bus stops. An even simpler structure made out of wood with space for a hanging basket or a climbing flower species such as nasturtium or clematis would also be lovely.



Action 13: Biodiversity Data Gathering and a community biodiversity day

Wildlife Walks:

- Along the nature trail; Oxfield park (involve community groups and creche); riverside walk; coastal areas. Submit records to www.biodiversityireland.ie.
- Conduct guided walks along the riverside walk, the new nature trail and around the village of Carney, highlighting local biodiversity features (e.g., goose fields) and the actions being undertaken in the village to enhance biodiversity.

Seek assistance and input from local experts for such events. Include events such as sustainable seed collecting.

Example- Bioblitz day: *Download the NBDC app and have a 24hour recording day – Woodrow could input ID help for a workshop prior to the day e.g., basics of biodiversity; birds, bugs and botany!* A BioBlitz is a dedicated period of biological surveying in an attempt to record all the living native or naturalised species within a particular area. Groups of scientists, naturalists and volunteers come together to conduct a field study over a set period of time, usually 24 hours, but can be shorter.

Apart from its value in data collection, a BioBlitz has many benefits particularly in the promotion of the wealth of biodiversity in the local environment. A BioBlitz provides an opportunity for the public to meet scientists and ask them questions. These events are very enjoyable as the short time frame creates a festival atmosphere and makes the searching more exciting.

Established by the National Biodiversity Data Centre in Waterford, a number of BioBlitz events have been run in Ireland including annual BioBlitz competitions held at a number of sites around the country, with each site competing for the greatest number of species recorded! – They can be as big or small of an event as suits and are a great way to get community groups and schools involved – might be a good idea for biodiversity week in May (15th – 23rd May).

Action 14: A community garden/herb garden/sensory garden

There is a great free flyer available listing suitable herbs.

<https://www.pollinators.ie/wordpress/wp-content/uploads/2019/03/AIPP-Herbs-A5-Flyer-PRINT.pdf>

Action 15: Raising biodiversity awareness and encourage others to take action for biodiversity for the benefit of the local community

Hold various events / social media to raise awareness of local biodiversity including wildlife news on Facebook, a photography competition with a wildlife theme. A wildlife calendar could also be created. Linking with local poets, writers and artists.

Liaise with the Residents' Association at Lissadell Park in order to identify possible actions that would benefit biodiversity; tree/shrub and hedge planting with native species, changing grass mowing regimes, creating new habitats (wildflower meadows / community orchards), reducing pesticide and herbicide use etc. Introduce "Adopt a Planter" Scheme. Get creche, Scout group, sports groups and local schools involved with the LBAP.

Action 16: Provide and maintain a 'Biodiversity Noticeboard' in centre of village or alternatively online (e.g., Facebook page)

Action 17: A sculpture or mural focal point for the village

Action 18: Coolbeg coast clean-up

Action 19: Develop walkway to goose fields at Finned