

Castleknock Biodiversity Place Mapping

Report produced by: William O'Halloran, October 2020

For: Castleknock Tidy Towns



Wildwork

HELPING PEOPLE **HELP NATURE** HELP PEOPLE

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Introduction

At the request of Castleknock Tidy Towns, Castleknock was visited by Wild Work's William O'Halloran in June 2020. The purpose of the visit was to identify biodiversity features of interest that stood out from walking around the community.

William was shown around Castleknock by Tidy Town's volunteers. The tour included: a walk around the grounds of St. Brigid's National School; being shown a number of areas of biodiversity interest around Castleknock; and examples of biodiversity themed work being undertaken by the Tidy Towns around the village.

The trip revealed many interesting places that included woodland, old buildings and meadows managed for wildlife. After being shown around Castleknock, William then travelled back around the places he was shown and documented everything by capturing video footage. The footage was then compiled into a video which can be seen by anyone interested in biodiversity in Castleknock

Based on Wild Work's visit, this report outlines what was interesting things were discovered about biodiversity in Castleknock. It is hoped that this project will help raise awareness about biodiversity around Castleknock and encourage people to get involved with efforts to enhance biodiversity in the local community.

A documentary video has also been produced to accompany this report. It can be found on www.castleknocktidytowns.com or by contacting castleknocktidytowns@gmail.com

About biodiversity in Castleknock

Situated close to the M50, Castleknock lies west of the city of Dublin and north of the river Liffey; just next to the Phoenix park – Europe’s largest enclosed urban park and home to 50% of Ireland’s mammal species; more than 40% of the bird species; and many, many insects. (OPW, 2020).

In Castleknock itself, locals have this year reported sightings of a family of foxes in the village - often seen crossing through the graveyard at night. A number of hedgehogs in village gardens; a great increase in small birds during Covid 19 lockdown - Starlings, Bullfinches and Sparrows; and butterfly species, such as Peacock, Cabbage White and Common Blue (Tidy Towns, Pers. Comm., 2020).



Figure 1 - Peacock Butterfly

Courtesy of Evelyn Pender

Prior to developing into a vibrant urban area, Castleknock was a country village. Though it’s built up nowadays, when one walks around the village remnants of Castleknock’s rural past can still be seen.

In terms of the landscape and biodiversity, Castleknock has a large number of green spaces, many of which were developed as parks for housing estates that have been built over the last half century. Most of these parks contain a mix of amenity grassland and woodland habitats; and many of the trees within these woodlands appear to be close to forty years old.

The land in Castleknock was once mostly divided into large estates owned by a small number of wealthy families. Luttrellstown Estate to the west has woodlands that are classified as ancient and long established (OSI, 2020), Farmleigh estate is today managed by the Office of Public Works as accommodation for important guests of the Irish nation, for government meetings, and for public enjoyment (OPW, 2020). The Guinness family have a strong association with the area and still manage a farm at Knockmaroon which was the only dairy farm inside the M50 up until 2019 (Fox, 2019). Visitor’s to Castleknock will be pleased to see that lots of roadside green spaces are managed as meadows for wildlife, creating a historical link with Castleknock’s farming heritage and its hay meadows of long ago.

Perhaps not as easy to notice, is that Castleknock is a place that is cared for in a very natural way. That is that most public amenity areas and roadsides are managed without the use of chemical weed killers and other pesticides and there has been a very deliberate move towards a ‘managing for wildlife approach’ by the local Tidy Towns group. According to local sources (Tidy Towns, Pers. Comm., 2020), Fingal County Council’s ‘Greener Communities’ initiative which encourages the

development of habitats to support wildlife (Fingal County Council, 2020) has made a very positive impact in that regard.



Figure 2 - Collage of Castleknock Biodiversity, courtesy of Evelyn Pender

Item location maps

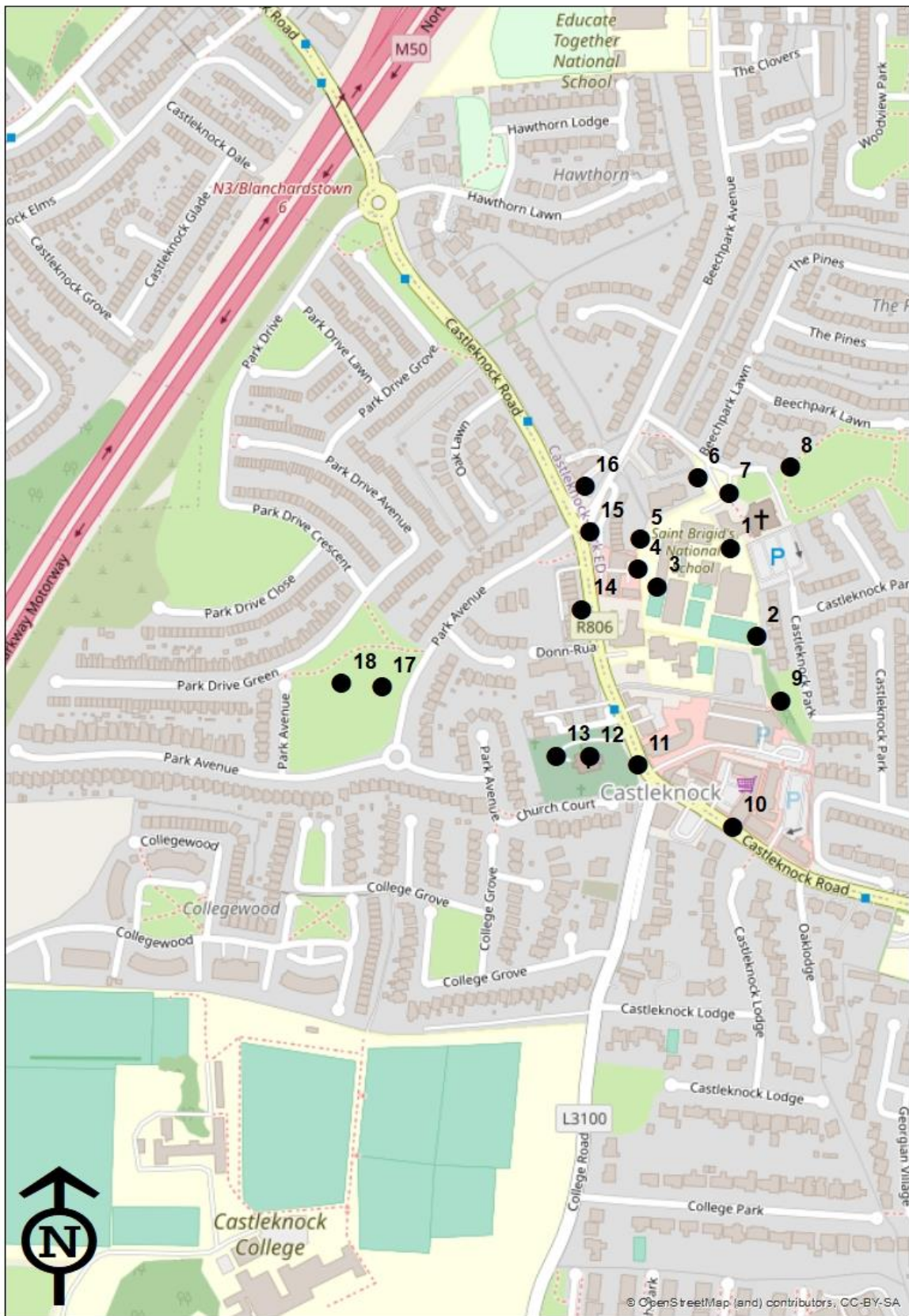


Figure 3 – Location of items 1 to 18



Figure 4 – Location of items 19 to 25

What was found

Explanation of items 1 to 25

1. Wildlife-friendly school garden with a freshwater pond

This school garden was awash with pollinating insects and is being managed without chemicals. There is a pond with fish also.

2. Sowing of native wildflower seeds

The school have dedicated an area of their grounds to the sowing of wildflower seeds. This is to act as a resource for wildlife and for teaching school children about nature.

3. Swift sighting near a building with eaves suited to Swift nesting

Swifts (*Apus apus*) are a beautiful swallow-like bird whose populations have been in decline. They have a very characteristic screaming sound which many people associate with summer. One of the school buildings is very well suited to erecting Swift nesting boxes (Swift Conservation Ireland, 2020) .

4. Pollinator-friendly lawn management

Lawns in the school grounds are being managed in a pollinator-friendly way, meaning that there are many flowers blooming within the lawn which provides food for pollinators such as bumblebees, solitary bees and hoverflies.

5. Contained Winter Heliotrope infestation

Winter Heliotrope (*Petasites fragrans*) is an invasive plant which can be easily spread (NRA, 2010). Efforts should be made to raise awareness of this plant so that further spread around the community can be prevented. There is an isolated patch of it in the corner of the school grounds.



Figure 5 - Winter Heliotrope

6. Tall well-established hedge of native species

A good example of a native-tree hedge including Hawthorn (*Crataegus monogyna*), Bramble (*Rubus fruticosus*) and Ivy (*Hedera Helix ssp.*)

7. Pollinator-friendly perennials planting scheme

Formal garden plants that are suited to pollinators have been introduced in this location.



Figure 6 – Lavender in Castleknock, a pollinator-friendly perennial

8. Woodland edge managed in a wild way

The borders of this park have been deliberately let go wild to see what develops. It is intended for some management to be undertaken to help improve its appearance but in so doing to facilitate the wild habitat to continue their development also (Tidy Towns, Pers. Comm., 2020).

9. Small secluded green with mature naturally managed woodland

Another example of a mature parkland green space with lawn and woodland both managed in a way which appears sensitive to wildlife. Trees appear to have been planted approx. 40 years ago. There is a healthy understory and evidence of some deadwood, which is a good thing from a biodiversity perspective.

10. Well-managed ivy

Ivy is an important food source for bees and other wildlife (Woodland Trust, 2020). It is also a key ecological component in many Irish woodland and hedgerows. Unfortunately, some people have a negative attitude towards it and so it can sometimes be cut away for unwarranted reason. Concerns people have about ivy are to do with it potentially damaging built structures and being a factor in trees falling. In most circumstances the ivy is not an issue and can be easily managed. The wall to the south east of Myo's along the Castleknock road has ivy growing along the top of it, in a way that appears well-managed. This is providing a resource for wildlife, looks well and the wall itself does not appear to be threatened in any way by the ivy. An excellent example.

11. Old Buildings with potential for bat roosts

In the vicinity of St. Brigid's Church of Ireland, including the church itself, Castleknock cottages and some other structures, there are a number of suitable places for bats to roost and indeed places that are also potentially suitable for other wildlife species that depend on such structures.

12. Old church grounds with Yew trees

As mentioned above, St. Brigid's Church may be important for bats and other wildlife and as mentioned below, Swifts were observed flying overhead. Perhaps the most notable feature of the church grounds is its Yew trees (*Taxus baccata*). This tree has a really interesting history in terms of Death, religion, war and the Irish Landscape (Delahunty, 2002).

There's about 15-20 well-manicured specimens which appear quite old and one lone Yew in the graveyard which is growing in a natural form. There's also a very elegant Birch tree (*Betula* sp.) in the north-eastern corner of the graveyard.



Figure 7 - Shaped Yew trees at St. Brigid's, courtesy of Evelyn Pender



Figure 8 - Yew in its natural form

13. Swift sighting

Swifts were also seen and heard in the vicinity of St. Brigid's Church of Ireland

14. Cottage-style gardens

Some lovely examples of traditional Castleknock cottages, some of which have been gardened in a cottage garden style across family generations. There's a nice example of a traditional Hawthorn hedge alongside the footpath here too.

15. Pollinator-friendly perennials planting scheme

Formal garden plants that are suited to pollinators have been introduced in this location

16. Woodland with potential Laurel invasion

A nice small deciduous woodland with an informal woodland path going through it. There is a Cherry Laurel (*Prunus Laurocerasus*) hedge on its inside boundary which acts as important screening for private property, but also which is a potential threat to the woodland in terms of its invasiveness. This Laurel will likely need management if the woodlands ground flora is to be preserved.

17. Green space with potential for meadow management

A quiet secluded green. May be wet underfoot at times of year, meaning it might be possible to develop some of it as a wet grassland habitat. There's ample space both to maintain enough amenity grassland (that is used for playing ball and other games) and to have long grassy wildlife meadow too.

18. Woodland with old coppiced Ash trees

Within the same green mentioned above, there's a grove of woodland with a number of trees, mainly Sycamore (*Acer pseudoplatanus*) that have been planted around 40 years ago. This wood also contains older species of Ash (*Fraxinus excelsior*) which have been coppiced many years ago, meaning they were felled, and new stumps grew back again into multi-stemmed mature trees. OSI mapping records from 1837 to 1913 do not indicate the presence of woodland in this area (OSI, 2020). However, these Ash trees do appear to be close to 100 years old. It would be good to learn of their origin, perhaps from elderly Castleknock residents who may be more aware of their history.



Figure 9 - Coppiced Ash

19. Solitary bee nesting potential

An area along the side of the road near the St Brigid's GAA club shows evidence of solitary bee nesting and due to its southerly aspect and substrate, has good potential to be enhanced for these important pollinating insects (Fitzpatrick, 2020) .

20. Dry meadow grassland with emerging Blackthorn scrub

In the same area that Solitary Bees appear to be nesting, there is some dry grassland habitat and scrub composed mainly of Blackthorn (*Prunus spinosa*) that is naturally emerging from the woodland that is planted along the roadside.

21. Mixed broadleaved woodland with native trees

A nice section of broadleaved woodland has been planted along the R147

22. Roadside amenity lawns managed as meadows

On entering Auburn Avenue off the R147, one is immediately struck by the long grassy areas that are being managed for wildlife along the roadside green spaces. This makes a great first impression on someone visiting Castleknock to explore what's happening there in terms of biodiversity.

23. Treelined avenue with zero pesticide management

Beside areas that are managed as meadows, Auburn Avenue is a well-manicured tree-lined avenue with amenity lawn underneath the trees. Impressively and unlike many other places in Ireland, the use of pesticides had been eliminated here. The footpath verges and tree bases are instead managed through manual effort, mostly by community volunteers.



Figure 10 - Tree-lined Auburn Avenue

24. Roadside amenity lawns managed as meadows

Here is a continuation of the same type of habitat management that is seen on the northern end of Auburn Avenue. These long stretches of hay-style meadow are creating a very beneficial ecological linkage with similar types of habitats in the Phoenix park.



Figure 11 – Roadside meadows between Castleknock Village and Phoenix Park

25. Phoenix Park

A beautiful place to conclude a visit to Castleknock and somewhere with a wonderful array of interesting biodiversity features. Not to be missed.

Summary of what was found

Although there were lots of buildings and concrete and traffic noise, there were many areas too that were more natural, with secluded tranquil green spaces being a very nice feature within many of the housing estates. Areas being maintained with pesticide were very difficult to find, and the survey uncovered lots of features of interest for wildlife. The discovery of Swifts at the school was perhaps the highlight. It was very impressive to see all of the areas of amenity lawns that have been allowed to grow into meadows and also to have found some lovely old trees in Park Avenue, as well as the old Yew trees in St. Brigid's Church of Ireland; especially the one in the middle of the graveyard which has been allowed to grow in a natural form.

What we didn't get to see

Though a really nice selection of Castleknock's biodiversity was explored as part of the field survey for this report, there are a number of places where, according to locals and from some online research, sound to be potential havens for biodiversity. Some of these places include: Luttrellstown Estate woodlands; Farmleigh House and Estate, Knockmaroon farm and other farmland in Castleknock; St. Vincent's Castleknock College grounds; Laurel Lodge; and Park Drive Green.

Only a small section of the Phoenix Park was visited and there's certainly lots more there which could be discovered.

Among other things that were missed was getting to see areas where native Foxgloves (*Digitalis purpurea*) have been encouraged as part of a Foxglove planting scheme and the getting to see the blooming of the native wildflowers that were sown at St. Brigid's School, though we were afterwards sent a picture of those.



Figure 12 - Wildflowers in bloom at St. Brigid's School, courtesy of Margaret Condon

Things to consider...

Though the purpose of this piece of work was not to identify biodiversity themed actions that could be undertaken in Castleknock, a number of obvious things did stand out and are listed here in this section.

Expand upon this project

This project was about discovering what biodiversity potential exists in Castleknock and to raise people's awareness of what's around them. Essentially, Wild Work's visit to Castleknock was just to get things started. It would be wonderful if people in Castleknock could continue with this work and help Castleknock Tidy Towns to identify many more biodiversity features of interest around the community. That then can lead to further action and activity.

Develop a Castleknock biodiversity action plan

A biodiversity action plan acts as a framework for everything to do with enhancing biodiversity in a community. It tells the story of the habitats and the wildlife present, and details actions based on what's learned from the research, fieldwork and through consultation and engagement with local people and other key community stakeholders. Many of the items listed below could be incorporated as part of such a biodiversity plan.

Areas of action could include: Citizen science monitoring; Swift conservation; invasive species management; survey of old trees; pollinator friendly planting schemes; nature education programmes; dedicated well-being spaces; etc.

Such a plan could form an important connection with other biodiversity action plan work that's happening in Fingal County Council (Fingal County Council, 2015) and around Dublin, such as with the Dublin City Biodiversity Plan (Dublin City Council, 2018).

Habitat mapping report

Castleknock could benefit in having its habitats mapped in further detail. Habitat mapping provides a strong foundation on which to base decision making with regard to enhancing biodiversity. Different habitat types be they within woodlands, grasslands, or wetlands, etc., will support different forms of life. This could eventually feed into a biodiversity action plan (or be included as part of that process). A habitat mapping report should classify all habitats to Fossitt Level 3, a level required for most aspects of wildlife management work in Ireland.

As well as classifying the habitats, the mapping would also produce a baseline list of flora and fauna species.

Managing for pollinators

Lots of potential exists to further enhance Castleknock for pollinators.

This may include: hedgerow management to increase flowering of trees; adapting lawn cutting regimes; introducing pollinator friendly planting schemes in flower beds; and creating insect nesting areas...

This type of work is already being undertaken in a number of areas around Castleknock and where it is, it should certainly be continued if possible.

Continue to avoid pesticide usage where possible

Not only are pesticides a direct threat to wildlife, they also affect the food chain by reducing the amount of food available. Very few places were observed during the Castleknock visit where pesticide was being used. This is something which Castleknock should be proud of and it would be good to see this continue.

Swift survey

Swifts were observed at St. Brigid's National School and also separately at the St. Brigid's Church of Ireland cemetery. As they are a bird of conservation concern, further investigation should be undertaken on Castleknock's Swift population; and on what could be done to help them.

Wetland features

During the community survey work, very few ponds, rivers, wet grasslands or other types of wetland habitats were encountered.

In this regard, the introduction of new wetland habitat features could be very beneficial to local wildlife. In some way, this might also provide a beneficial wetland linkage for species of wildlife associated with the Grand Canal and the Liffey.

Conclusion

So, in terms of what's presented in this report and its accompanying video, what can we all do to help biodiversity?

Here are some simple tips:

- Reduce or eliminate the use pesticides - natural habitats have natural predators who keep the pests in check. For example, if you use slug pellets, you can kill birds or hedgehogs as they will accumulate poisons in their bodies when they eat the slugs.
- Plant native hedges and sow native Irish wild flowers. As rule of thumb, native species of flora will support a much more diverse community of wildlife.
- Think differently about things like Ivy, which we sometimes may see as negative. Ivy's important in providing berries for birds, shelter for nesting, and homes for many other types of insects.
- Let areas grow a bit wilder - but maybe try to have a neat verge so things look cared for.
- Cut your grass less often to provide more flowers to feed pollinators and other wildlife.
- Rather than planting annuals, plant pollinator-friendly perennials, like lavender, which will come back every year.

These are just a few suggestions. To discover more, you can get in touch with us at Wild Work any time you like and there's also lots more information available online.

If we were to recommend just one thing that you could do, then it would be to take a closer look at what's around you - tune into nature in the place where you live - and if you're from Castleknock, then why not get in touch with Castleknock Tidy Towns and get involved with their efforts of helping nature in the community.

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Appendix

Images from Castleknock gardens courtesy of Margaret Condon



About Wild Work

Wild Work is a unique initiative with biodiversity at its heart. We support everyone committed to helping nature; and our particular focus is to connect business, biodiversity and local communities. We also support the work of both local and national organisations involved in the conservation and protection of our natural environment. With our practical expertise, we help people create and care for meadows, woodlands, beaches, rivers and other natural habitats, both in urban and rural settings. We strive to work in line with best practice, with nature and not against nature and we value research as a key component of our work. Our aim is to understand the bigger picture, so we can help people do the right thing.

We work with:

- Local community groups and individuals
- Businesses big and small
- Schools and colleges
- Farmers
- Local authorities and other state bodies
- Conservation organisations and charities

Wild Work's Social Ethos

To benefit society and nature, we want to foster people's good will to ensure that our local flora, fauna and habitats are protected, valued and enhanced. We also want people who connect with the Wild Work movement to benefit positively in terms of improved health and well-being.

To educate and raise awareness, we follow a place-based approach, working with nature and the environment in a positive way to have a real and practical impact on environmental issues; because increasing people's awareness, respect and understanding, helps them care more effectively for our natural world.

To support employment activation, we provide quality work experience opportunities for people and aim to contribute to the creation of fulfilling jobs, particularly in the biodiversity sector.

For further information please visit www.wildwork.ie