



Training to develop a biodiversity enhancement plan for an outdoor recreational space in your community, running May to October 2021

Site: Clarecastle People's Park

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1 Introduction

Thank you for an enjoyable time exploring Clarecastle People's Park with you. It is a very beneficial project for the area and the hard landscaping you have completed to date is visually attractive. We liked the quality and location of the footpaths. It's an exciting project because it's a blank canvas in many ways and this is the best opportunity to develop a biodiversity plan that can be sustained at the park well into the future.

Thank you for providing us with a copy of the Clarecastle and Ballyea Biodiversity Plan which has given us useful background and it's great to read the initial biodiversity plan which has much merit.



Image 1 Fran showing the Clarecastle group the difference between positive and negative indicator plant species

2 Site description



Image 2 Aerial view of Clarecastle People's park showing the attractive layout of the footpaths

The Park is primarily laid to grass. The east and north boundaries are lined with mostly native trees and hedgerow species. The hedgerow was looking lovely on the day of the visit. To the west, the park boundary lies adjacent to the sports grounds in front of which is a slope where a line of trees has been felled. To the right of the entrance is an attractive stone wall and an enclosed green space which has been designated as an orchard. Close to this area are mature ash, all of which are diseased with ash dieback caused by the invasive alien fungus *Hymenoscyphus fraxineus*. Sadly, these fine mature trees will die within 2 or 3 years, and it will be prudent to include actions in the biodiversity plan to protect the public from falling branches.

2.1 Grassy areas

Throughout the park many areas are designated as wildflower meadows. The management strategy for these will depend on the species found in the different areas. We found many positive indicator species in the gravel area in front of the slope at the edge of the sports ground, on the grassy slope, and elsewhere, including yellow clover (*Trifolium dubium*), dandelion, red clover, scarlet pimpernel, cut-leaved geranium, meadow buttercup, ox-eye daisy, Lady's smock, germander speedwell, common sorrel, common figwort, bird's foot trefoil, bush vetch, and common vetch. These are all to be encouraged and over time they will form carpets of spring colour amongst the grasses.

When the book, *The Key to Indicator Plants* arrives from the printers, you can use it to see how many positive indicator species you can identify and we suggest you do this using a 1 m² quadrat (Webinar 5). You can also download an excellent guide from www.biodiversityireland.ie, called the Irish Plant Monitoring Scheme 2016 Pilot, which gives details on how to use a quadrat.

Coltsfoot is becoming established on parts of the slope and the gravel area. This is a native species but it can become troublesome. Keep an eye on it.

In some parts of the grassy slope, we found an abundance of negative indicator species, including docks, spear thistle, ragwort, and nettles. This is not surprising because there has been extensive disturbance to the soil in previous years caused by the tree felling. However, you don't want these and we suggest you take the following actions:

- Retain the trees where possible. We noticed some nice willow which won't grow tall and provide a home to over 600 insect and lichen species.
- Strim the entire slope quite regularly this year (every 2-3 weeks). Please don't strim when docks and thistles are in flower because the seed could become widely dispersed. Always keep the cutting height at 10 cm or more.
- It is best to cut off the flowering heads of docks and thistles by hand before they set seed and rot in a barrel of water. When well-rotted, the liquid can be added to a compost heap. Follow these simple actions and the negative indicator species will begin to disappear.
- After strimming, immediately remove the cut clippings and compost them appropriately. This will help to lower the high nutrient levels in the soil which encourage the negative indicators and discourage the positive indicators.

If you take these simple actions this year, you will notice a difference next year and subsequent years. The aim is to turn the slope into an attractive grassy slope with abundant wild flowers.

Review the cutting regime in spring 2022. As the negative species lose their vigour, you can start to strim less often, perhaps once every 4-5 weeks between late April and late September.



Image 3 The grassy slope in the park



Image 4 Coltsfoot, showing the furry white under surface to the leaves (left hand picture)

2.2 Orchard area

Apple trees have been planted here and more will be planted over time. We noticed that the stakes on the apple trees are too tight and it is important to loosen the ties and cut the stakes lower so that the trees do not become wounded when hitting the stakes in wind. The following links provide excellent information on planting and protecting fruit trees, particularly in urban environments.

[Planting your orchard - The Orchard Project](#)

[Planning and designing an orchard - The Orchard Project](#)

Guards round young trees can help protect them as they become established.



Image 5 left picture shows good quality tree guards, the right-hand picture shows the orchard area. Photo: from the Orchard Project showing the tree guards in place, more information on their website

2.3 Pollinator friendly planting bed, incorporating seating

We selected a potential site for a pollinator friendly planting bed which could be designed to incorporate seating and thereby include people who have mobility issues. An area 15 m long tapering from 3 m wide down to 0.5 m wide was selected. We suggest you create a raised bed, 45cm in height (seating height) and import good quality, screened top soil to fill the bed. Concrete or timber can be used to construct the bed and we advise getting professional advice on the construction as it will be a permanent feature. Some images are included below for guidance – please ignore the planting as much of it is not pollinator friendly.

A pollinator friendly planting scheme can be designed for the bed – perhaps under the guidance of Betty. Webinar 12 will include details on designing these schemes but in brief it will involve the selection of perennial, pollinating flowers: two flowering in spring time, three flowering over the summer and two flowering in autumn. These will be repeat planted through the bed with perhaps some ornamental grasses for year-round structure. It is essential that the bed is totally weed free before it is planted, this will make future maintenance much easier.



Image 6 Left picture shows location of pollinator friendly bed, the right-hand pictures are samples of raised beds which incorporate seating.

2.4 Managing the native hedge that borders the site

An attractive native hedge borders one side of the site with hawthorn, hazel, guelder rose, ash, and willow. Dogwood (*Cornus* sp.) has been planted along the front of the hedge and elsewhere. This non-native species has started to encroach the grassy areas and, over time, it will become increasingly difficult to control. We suggest that you seek professional advice for its control because when it is cut back it can sprout more vigorously. Fran can advise further.

Maintenance of the hedge: A hedge needs to be maintained, otherwise it will turn into a tree line. Hedges are trimmed to keep them under control, to thicken them. Constant trimming at the same height places a hedge under stress and can damage it but sympathetic trimming can thicken a hedge by creating new points from which growth can fill out. In the recent past hedges were managed by laying or coppicing.

Key points:

- Please adhere to the ban on hedge cutting between February and October to allow birds to nest safely. (Section 46 Wildlife Act 2000).
- The key to hedgerow management is learning to read your particular hedge. See <https://hedgeline.org.uk/hedgerows/hedgerow-management-advice> for excellent guidance. “Incremental **height increase is the key to the hedge management cycle**, sympathetically allowing a hedgerow to progress slowly through its natural growth cycle without putting it under damaging stress. It also promotes a dense healthy hedgerow and extends the period between rejuvenation. Using this approach, a hedgerow may take many tens of years to complete a full cycle of growth, and at all times during this remain dense, healthy and functional. **For example, by increasing the cutting height by 10cm every three years, it will take over 30 years for the hedgerow to gain only a metre in height**”.

2.5 Silver birch copse

A lovely silver birch copse stands towards the back of the park. The grass has been allowed to grow long here and this has the potential to become a biodiversity-rich area, supporting the wildlife associated with the trees and the grassy areas.

Currently, the grass species beneath the birch are vigorous, tufting species such as Yorkshire fog. This forms a dense layer of dead material on the surface of the soil which prevents more interesting species from becoming established. We suggest you return to fairly regular cutting -every 4 to 5 weeks for the rest of this year. Cut high at more than 10 cm to allow ground dwelling species to survive.

The key to changing this grassy area to greater biodiversity is to remove all the grass clippings as soon as they are cut. This will help to create more space on the soil surface for wild flowers to establish and it will reduce the nutrient levels in the soil which, in turn, will help to reduce the vigour of the undesirable grasses.

It may be beneficial to erect some signage to explain why you are taking these actions as some members of the public may fear you are removing this ‘wild area’. Over time, it will be possible to revert to fewer cuts a year as more interesting species establish.

Bulbs have been planted here. We are delighted that you have used *Narcissus pseudonarcissus*, Wordsworth’s daffodil. This is not strictly native to Ireland, although it is found in the Northern Ireland and its abundance is famous in the Lake District in the UK. It’s a lovely daffodil and capable of withstanding County Clare’s worst weather. It will spread over the years so plan ahead and we suggest you don’t crowd them with too many other bulb types.

When planting bulbs, always choose native species – a good list is provided in your initial biodiversity plan. Plant them in groups and avoid straight lines which Nature never makes.

3 General points

3.1 Vegetation clearance

Bramble clearance and other vegetation clearance is best done in the winter months (Oct to Jan) to prevent disturbance during the spring and summer when wildlife will be nesting. Brambles are best cleared by hand, with a pair of secateurs. If they are strimmed, the stems tend to grow back vigorously and viciously prickly. In winter months, brambles can also be pulled or dug out by hand quite easily.

3.2 Green waste

Please consider how to dispose of green waste in your biodiversity plan and refer to handouts from webinar two in relation to composting and creating dead hedges. There is a green waste facility in Inagh.

We noticed that the grass has been cut recently and the clippings left on the ground which is visually unattractive and will encourage undesirable species. Please consider implementing a general rule in your biodiversity plan that all cut grass areas must be raked after cutting to remove the clippings or a mower with collecting box is used.

3.3 Invasive species

The site is completely clear of invasive species which is hugely beneficial and a wonderful thing to see. Please keep it this way by making sure that contractors and volunteers properly clean their equipment before coming onto the site to make sure they do not bring in fragments of Japanese knotweed, winter heliotrope and other invasives that are very difficult to remove once they start to colonise.

Include actions in your biodiversity plan to control dogwood throughout the park.

3.4 Monitoring your actions and citizen science

Your biodiversity plan will become more interesting and motivating if you measure and monitor your biodiversity actions. This is citizen science, using simple scientific methods to measure how your actions are benefitting (or harming) biodiversity. We encourage you to watch a webinar on biodiversity and citizen science given by Fran in May. It can be accessed at the link:

<https://www.ouririshheritage.org/content/resources/ican-members-section/ican-biodiversity-talks-may-2021/biodiversity-for-citizen-scientists>

The webinar explains citizen science and describes some of the national initiatives the public can participate in.

For your site, we suggest you use a 1 square meter quadrat. This can be made from rope or strips of timber. Lay the quadrat on the ground in a grassy area and try to identify all the plants that you find within the quadrat. The Key to Indicator Plants will soon be available to help you. If you repeat this once a year you will be able to measure how the community of species in the quadrat changes over time. Your aim is to increase the number and diversity of native flowers which grow in grassy areas.

Children in the school can become involved in this and it will give them the opportunity to develop their skills in observation, documenting information, and patience.

Also, we suggest you measure the amount of carbon that is stored by the trees on your site. We will teach the method for this at the next webinar and you will receive a handout.

Children and adults may like to participate in one of the national initiatives, such as the garden bird count and the bumblebee monitoring programme. These citizen science initiatives can be very

enjoyable and they will contribute valuable information about your site which you can use to modify and refine your biodiversity actions over the years.

4 Suggestions for biodiversity plan

- Manage the grassy slope and other grassy areas as suggested in Section 2.1.
- Protect the solitary bee nests in the grassy bank beside the outdoor classroom (taken from existing biodiversity plan).
- Allow naturally regenerating trees to grow unless they are in a very difficult position.
- Continue to consider where you wish to plant the specimen tree. It will require plenty of space. We suggest you don't plant it near the orchard (to replace the dying ash trees) as it will create too much shade.
- Manage the hedgerow as suggested in Section 2.4
- Include in the biodiversity plan, an action to monitor the dying ash trees and to ensure they do not become a public health hazard.
- Protect all the native trees on the site by using guards if necessary to prevent ringbarking from strimming too close to their trunks and from anti-social behaviour.
- Include a pollinator friendly planting scheme in the park and restrict all non-native planting to this bed.
- Develop some citizen science initiatives to monitor changes to biodiversity over time.
- Develop educational initiatives and signage. Consider the creation of an ecological corridor which can be planned by children.
- Keep the park invasive species-free by insisting that all equipment is thoroughly cleaned and checked before being brought into the site.



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