Biodiversity in the Monkstown area, Dublin

Report prepared for Monkstown Village Tidy District

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1. INTRODUCTION

The purpose of this report is to give a first impression of the biodiversity of accessible parts of the Monkstown area with the aim of stimulating the collection of further information and suggesting actions that could increase the variety and density of wildlife, including plants. Because the survey was carried out in autumn it is necessarily restricted to plants, though reference is made to other organisms where possible.

English names are used as much as possible in the report though at first mention the Latin name Is included. A location map for the area is shown at the end where there is also a summary of suggested actions (p.22).

In the time available, it was not possible to cover every area in and around the village. The obvious omission is Dalguise, a large house with grounds off Monkstown Road, which is likely to be developed in the near future. The extensive grounds, which appear to have been largely unchanged for a long period, may well have features of significant interest which may be easy to preserve if identified.

We would like to thank the owners of the more private of the sites for allowing access to them.

2. BIODIVERSITY

Biodiversity is a measure of species-richness, the number of types of organisms that occur in any particular area. Normally it refers to native species, animals and plants that have reached Ireland without human intervention and have generally been here for many years. Sometimes there have been natural changes, newcomers to the bird or insect fauna, but human activities have contributed the most to our current wildlife. Weeds – generally plants that grow on disturbed habitats – have arrived with cargo or vehicles and spread outwards from their point of introduction while garden plants (or insects associated with them) have been brought intentionally and sometimes escaped from cultivation.

Thus, the flora of any area is made up of a complex mix of natural and introduced plants and it is on these that the fauna must survive and into which newly introduced animals must integrate. In a suburban situation butterflies and bees are often more noticeable on garden plants than on wild ones but there are many less obvious organisms that depend on the native flora. They may be small or hidden, either living underground or having a completely different juvenile phase.

The assessment and management of biodiversity has to take a pragmatic approach in this maze of comings and goings, accepting that some introductions are here to stay but also that some tend to dominate local plants and reduce their appearance and variety. In this report the intention is to divide the various sites into those that retain enough natural habitat to support a level of 'natural' biodiversity and those that have been modified to such an extent that they have lost all species except those that have been later planted. The management of each will be quite different.

3. THE SITES

These are described in the following pages, together with suggestions for management.

A) WEST END LONGFORD GARDENS



This is the narrow strip of land between the coast road and the railway. It slopes northeast and receives morning sun. The vegetation is a mix of natural grassland and scrub and an upper section (A1) of planted 'wildflower' seeds. The western end (A2) is sealed by a thicket of elms *Ulmus procera* with some butterfly bush *Buddleja davidii* and ragwort *Senecio jacobaea*. To the east the slope to the road (A3) is of rough grassland consisting of false oat *Arrhenatherum elatius*, creeping bent *Agrostis stolonifera* and field horsetail *Equisetum arvense* with some ground elder

Aegopodium podagraria and winter heliotrope Petasites fragrans as well as bramble Rubus fruticosus and large bindweed Calystegia silvatica. Two tall purple toadflax Linaria purpurea grow at the base of the slope in the grassland, along with clovers Trifolium pratense and T.repens, The tall fescue grass Schedonorus arundinacea, hoary ragwort Senecio erucifolius, figwort Scrophularia nodosa and traveller's joy Clematis vitalba are noticeable there too.



Late-flowering purple toadflax

The section is terminated by a built wall below Seapoint Avenue. Occasional plants of Japanese knotweed *Fallopia japonica* are found here (A4) with tall herbs including bastard cabbage *Rapistrum rugosum* and sow-thistles *Sonchus oleraceus* and *S.asper*. The grassland near the path consists of characteristic species – ryegrass *Lolium perenne*, false oat, creeping buttercup *Ranunculus repens*, autumn hawkbit *Scorzoneroides autumnalis* and dandelion *Taraxacum* agg.

The northern end (A5) of the sown section has a considerable amount of large bindweed both on the slope and the railway fenceline, where there is also some Fuchsia. The sown plot itself still supports a few flowers but was dominated by fruiting spikes of wildflowers. Obvious species are

Corn marigold Prickly lettuce Nipplewort Cornflower Corn cockle Ox-eye daisy Black medick Glebionis segetum Lactuca serriola Lapsana communis Centaurea cyanus Agrostemma githago Leucanthemum vulgare Medicago lupulina Hard grass Squirrel-tail fescue Yellow rattle Wild carrot Teasel Bastard cabbage Catapodium rigidum Vulpia bromoides Rhinanthus minor Daucus carota Dipsacus fullonum Rapistrum rugosum



Looking into the northern end, Fuchsia on right



Wildflower' planting on slope below road (October)

Evaluation & management

This is an interesting site because of its exposure and general wildness. The presence of hoary ragwort (A6) is of interest as it is a species particularly associated with County Dublin and is very rare outside it. There is enough soil exposed (A7) for a variety of bees, both bumble and solitary to nest; the common carder bee was the main one seen in autumn. The 'wildflower' mix adds a useful element to these populations. It would be important to increase the flowering period as much as possible by having early species as well the main crop. The importance of late flowering plants like the toadflax and Fuchsia was clear to see in the number of insect visitors.



National distribution of hoary ragwort. Small squares are 2x2km, large ones 10x10km

Negative features of this area are the Japanese knotweed, traveller's joy and large bindweed. All these need some measure of control to prevent them dominating the area to the exclusion of much other biodiversity. Measures to control and eliminate the knotweed are well known and will probably be done by the Local Authority in the future. The other two are both introduced and tend to smother adjacent plants whether wild or planted. Traveller's joy has a few woody stems that can simply be cut off at the base and painted with herbicide. The bindweed is more intractable but efforts should be made to reduce its extent, dig out or spray.

Sown wildflowers are a considerable asset in summer but should be strimmed in September when they become messy and dominated by weed species.

Where	What & map location	When	2020 priority	Who
Longford Gardens (DART Park)	Draw attention to hoary ragwort	Any time	C	Botanist
	Survey solitary bee tunnels on exposed soil	May	В	Interested person
	Add early flowering species to wildflower planted areas	September	A	In conjunction with DLRCC
	Add late flowering species (eg toadflax) to periphery of area. They are mostly perennial plants	May/June	A	In conjunction with DLRCC
	Control (a) Japanese knotweed, (b), traveller's joy, and (c) large bindweed.	a) September b) May/August c) During growing season	A	Gardener
	Strim sown wildflowers in September	Sept	В	DLRCC

SUGGESTED ACTIONS – LONGFORD GARDENS

B) STRADBROOK STREAM



At Dalguise. The channel (B1) is overhung by shade trees, sycamore, Leyland cypress, Griselinia, snowberry and ivy and has limited interest. The channel itself could be diversified by riffles (small dams and shallows) if access can be arranged. These have the dual purpose of oxygenating the water and introducing a different habitat for invertebrates. They also add to the sound effect of a stream and bring it to notice.

The wonderful trees (B2) on **Drayton Close** comprise horse chestnut, beech, lime, deodar cedar and a very large Macrocarpa which houses the herons. (6 seen on my visit). The stream supplies little if any food for these birds which are likely to fly to the coast to feed in Blackrock Park or Booterstown. Smaller trees here are wild cherry, Bay, cherry laurel, Griselinia, Laurestinus, holly, yew, arbutus and myrtle *Luma apiculata*. Below the trees are many plants of hedge mustard *Sisymbrium officinale*, with some wood dock *Rumex sanguineus*, fool's parsley *Aethusa cynapium*, wood sedge *Carex sylvatica* and alkanet *Pentaglottis sempervirens*.

Suggestion: In biodiversity terms this treeline would benefit from logs on the ground – a normal feature on the floor of a forest which are used by many invertebrates for breeding and living. Tidying up fallen timber (what goes on in public parks) is inimical to a whole range of species of beetle, moth and snail which are consequently rare in built-up areas. To look in keeping, cross-cut sections of branch or trunk could be placed on the ground and left without further attention. These should be too heavy to be easily turned over.

At Richmond Green/Cheshire Home. The channel is overshadowed again by planted trees, especially dogwood *Cornus alba*, sycamore and elder though it does support pendulous sedge *Carex pendula*. Large bindweed is again an unwelcome presence as without it there would be some space on the south bank (B3) for planting shrubs – ornamental species of hawthorn, rowan etc. This could be built into any new development.

At Alma Place. This is the most open section of channel which is considerably silted. Around the bridge there is some fool's watercress *Apium nodiflorum* and either this or watercress *Nasturtium officinale* would be a suitable plant to encourage. Sow-thistle *Sonchus oleraceus* also grows low down in the channel, along with broad-leaved dock *Rumex obtusifolius* and nettle *Urtica dioica*, all

showing the high nutrient content of the water. With the present drainage situation there is little that can be done to improve the water; the banks however currently only have spear thistle *Cirsium vulgare*, sycamore, Buddleja, petty spurge *Euphorbia peplus*, charlock *Sinapis arvensis*, American willowherb *Epilobium ciliatum* and scentless mayweed *Tripleurospermum inodorum*.

Suggestion: Space on the northern side (B4) could be planted with garden species to encourage insects. The small comfrey *Symphytum* 'Hidcote Blue' would be a suitably tough plant here. It forms good ground cover that would inhibit weeds as well as having spring flowers valuable to bumble bees. At the upper end of this section (B5) there is an accumulation of garden rubbish under trees

on the south bank. This in deep shade and may have a function in providing habitat for overwintering hedgehogs etc. It can be left *in situ*.

The silt in the channel (B6) is a natural feature and it is deposited as water speed drops in this section. Even if cleared it will recur as high flows will bring down material from upstream in the future. Unless it is a flood hazard (which seems unlikely), it may be left to get colonised by plants in the natural way. Increasing the flow rate by releasing a block downstream would also reduce its extent.



Alma Place showing silt in bed and fool's watercress at edges

At St Patrick's Church (RC). A visible section of the stream in the back garden of the priest's house (B7). It supports curled pondweed *Potamogeton crispus* and water crowfoot *Ranunculus aquatilis*, two waterplants that are unlikely to occur anywhere else in the Monkstown area. Fool's watercress and pendulous sedge also occur as they do upstream. A bank has been created for flood control on the southern side of the stream and is colonised by small weeds.



Suggestion: A mixture of primroses and bluebells could be planted here that would add interest in springtime and would not interfere with the rest of the garden.

Garden and bank to right of stream

General comment

The stream is a definite asset to biodiversity in this built-up area as it brings in a whole segment of insect life that would otherwise be absent. Since it is located at the bottom end of residential sites it is most often overgrown and shaded and difficult to manage without extensive felling and other work. A few suggestions are included above on a section by section basis.

Where	What & map location	When	2020 priority	Who
Stradbook Stream	Generally, look into ways of improving water quality	Spring	В	Aquatic specialist
At Dalguise	Introduce riffles	July	В	Anyone
	Continue efforts to get access to main Dalguise site	Now	В	MVTD leaders
At Drayton Close	Place crosscut logs on the ground (under main trees)	When available	В	In conjunction with DLRCC
At Richmond Green	Check actions/reports from planning appn. for Cheshire Home	When available	A	Group
	Replace bindweed on S bank by ornamental hawthorn, rowan if possible	a) Depends on above	В	Submission to Planning Authority if needed
At Alma Place	Encourage watercress/fool's watercress around bridge	Do nothing		Will occur naturally
	Plant garden species e.g. comfrey Hidcote Blue on N side of stream	March	A	Gardener
	Leave large pile of garden rubbish on S side	Do nothing	С	-
	Release any block downstream	Anytime	В	Active youth
At St Patrick's Church	Plant mixture of primroses and bluebells on bank in garden	November	A	Gardener
	Survey area at end of garden of 3 Richmond Hill on S side of stream	March	В	Biologist

SUGGESTED ACTIONS – STRADBROOK STREAM

C) CARRICKBRENNAN LAWN TREE BELT

The trees are varied but consist of several native species (which support a larger invertebrate fauna than non-native trees) and some introduced ones. There is oak, ash, Italian alder *Alnus cordata*, beech, poplar,

pines, horse chestnut and yew with specimen Macrocarpa, Wellingtonia and pine growing in the grassy area at the northern end (C1).

The belt has something approaching a woodland flora with wood avens *Geum urbanum*, great brome grass *Bromopsis ramosa*, wood sedge and wood meadow-grass *Poa nemoralis* well as the ubiquitous ivy broomrape *Orobanche hederae*, a parasite on the ivy itself. The flora is augmented by winter heliotrope and wall barley *Hordeum murinum* but there are harmful amounts of dumped lawn mowings (C2) which enrich habitat and encourage a rank growth of nettles, scutch grass bindweed. These inhibit the natural diversity of a woodland margin.

Evaluation

The five woodland species mentioned above are fairly frequent in south Dublin and occur in several other sites in Monkstown. The ivy broomrape has a different nutrition than green plant, being a parasite on ivy without any chlorophyll. Its known distribution around Dublin is seen below and shows a concentration in the Liffey valley and southeast county.



Dead flowers on ivy broomrape





Distribution of ivy broomrape in Dublin.

Suggestions. Organise that grass clippings are brought to green waste – which the Local Authority does with its areas. Create an edge of shrubs (C3) such as blackthorn *Prunus spinosa* which gives early flowers, valuable to insects. Since adjacent ground is mown it will not spread excessively but will give a new habitat for fauna.

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SUGGESTED ACTIONS – CARRICKBRENNAN LAWN TREE BELT

Where	What & map location	When	2020 priority	Who
Carrickbrennan Lawn tree belt	Find alternative to dumping grass clippings	March	В	In conjunction with DLRCC
	Create edge of shrubs eg blackthorn	March	В	Gardener

D) MONKSTOWN CASTLE



A gardened site with very limited biodiversity. A few ferns and other plants grow on the old stone walls – wall pellitory *Parietaria judaica*, wall-rye *Asplenium ruta-muraria* and ivy-leaved toadflax *Cymbalaria muralis* but the lawns are monotonous and uniformly amenity grass. A few weeds grow in the gravel paths, for example Bilbao fleabane *Conyza floribunda*, wall barley and soft cranesbill *Geranium molle*.

Suggestions. This is a space calling out for a big bank of garden plants at the base of the low wall shown

above (D1), on one or both sides. Catmint would be ideal especially if someone would undertake to cut it back midway in the season so it would repeat flower into the autumn. It is of huge value to bumble and other wild bees. The prairie speedwell *Veronicastrum* would also be a good autumn plant.

A single or few-species stand of plants is more valuable to insects than a mixture as they find it more easily and also learn to come back to the same places for several weeks. The end result is greater usage and value to the bee populations. The site could be used as a bee monitoring plot – a scheme organised by the National Biodiversity Data Centre in Waterford.



Monkstown Castle from eastern lawn

SUGGESTED ACTIONS – MONKSTOWN CASTLE

Where	What & map location	When	2020	Who
			priority	
Monkstown Castle	Create big bank of garden plants	March	А	Gardener (DLRCC?)
	(eg catmint) at base of low walls		_	
	Set this up as bee monitoring plot (NBDC scheme)	April	В	Interested person. Needs to go on course
				probably

E) VESEY PARK



An extensive park with very well grown trees. It includes a basin in the eastern half (E1) that is unfortunately rich in alexanders *Smyrnium olusatrum*. This is a wintergreen plant and a very large one so it dominates and eliminates any other spring flora. Specimen trees cover the bottom part – oak, ash, turkey oak, horse chestnut, lime and sycamore while wilder ones have established themselves on the slopes (E2) – sycamore, hornbeam, elm, holly, Griselinia, bay, laurels and elder.



Grass in basin and view of SE edge, dominated by alexanders. Autumn 2019

There is little diversity in the ground flora which contains a lot of winter heliotrope, alexanders and hedge mustard. In addition there is

Garlic mustard Winter heliotrope Nettle Ox-eye daisy Wild carrot Wood avens nightshade parsley Wood dock Self-heal Alliaria petiolata Petasites fragrans Urtica dioica Leucanthemum vulgare Daucus carota Geum urbanum Enchanter's CIrcaea lutetiana Fool's Aethusa cynapium Rumex sanguineus Prunella vulgaris

The lawn at the base of the site is uniformly dull with ryegrass, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, white clover *Trifolium repens* and daisy *Bellis perennis* – a complete contrast to that in De Vesci Gardens (see below).

The western, level section is again specimen trees in lawn surroundings. Ash is noticeable here as well as strawberry tree *Arbutus*. Some wall lettuce *Mycelis muralis* grows in the road outside and a little at tree

bases where the sweet violet Viola odorata would be a useful addition.



Western section of park

Evaluation & Management

Although a large and semi-wild (on the slopes) habitat, this site is low in biodiversity value and does not have any notable flora. It is however visited at times by badgers and feeding signs were seen on the bottom lawn. The lack of diversity is primarily caused by alexanders and efforts should be made to limit its extent and vigour. The plant is favoured by warm winters and is likely to continue spreading. It flowers early in the spring and has a little value for flies. Some herbicide seems to have been applied to the SE corner (E3) but changing the habitat to shade rather than sun seems to be the better option. This will be a long-term project but is based on shading out the plant by promoting low branches on trees and increasing the density of sycamore and beech, beneath which it will not grow. In the meantime it would be worth collecting all seeds before they are ripe (May/ June) so that no new plants are established. It is a non-poisonous plant and normally biennial (grows in its first year, flowers in its second). Once reduced, one can envisage spring flowers such as primrose and violets surviving and these could be introduced in time.

New planting is called for in the upper part of the site (E4), both of new specimen trees but also flowering shrubs such as hawthorn, rowan, wild rose, (not Cotoneaster). A hedge of hawthorn could well be planted along the southern margin on Vesey Place (E5) and clipped in autumn.

Where	What & map location	When	2020	Who
			priority	
Vesey Park	Reduce alexanders in SE corner by collecting seeds before they are ripe	May/June	A	Everyone
	Also introduce more sycamore & beech to increase shade,	November	А	In conjunction with DLRCC
	Later, plant primrose & violets	March	С	Gardener
	In main flat parts of the park plant new specimen trees and flowering shrubs	November to March	С	In conjunction with DLRCC
	Plant hedge of hawthorn along S margin & clip in autumn	November	В	In conjunction with DLRCC

SUGGESTED ACTIONS – VESEY PARK

F) CARRICKBRENNAN CEMETERY

A well laid out site with planted trees including dawn redwood Metasequoia, red cedar *Thuja*, cedar and Macrocarpa, Norway maple, crab and sycamore surrounded by old walls rather of growth. They do have snap dragon *Antirrhinum majus*, wall valerian *Centranthus* and ivy-leaved toadflax but no small ferns.

Showing all the signs of long-continued Roundup use, the open ground bears superabundant willowherbs (which are resistant to it) along with other 'weeds'

> Dandelion Herb robert Toadflax Petty spurge Ragwort Butterfly bush Bush vetch Nipplewort Meadow vetchling Prickly sow-thistle Smooth sow-thistle

Taraxacum agg Geranium robertianum Linaria purpurea Euphorbia peplus Senecio jacobaea Buddleja davidii Vicia sepium Lapsana communis Lathyrus pratensis Sonchus asper S.oleraceus



Eastern end of graveyard looking into overgrown corner

The shady southern side (F1) supports mind-your-own-business *Solerolia solerolii* on the ground, along with figwort *Scrophularia nodosa*, pearlwort *Sagina procumbens*, self-heal *Prunella vulgaris*, thyme-leaved speedwell *Veronica serpyllifolia* and thale cress *Arabidopsis thaliana*; there are also some cowslips *Primula veris* spreading from planted individuals. The western wall (F2) bears prickly lettuce, hedge woundwort *Stachys sylvatica*, pellitory and groundsel *Senecio vulgaris*.



yew, Atlas apple free

ruber



Building inside graveyard

The building within the grounds (F3) has perhaps the greatest interest with birdsfoot trefoil *Lotus corniculatus* and autumn hawkbit *Scorzoneroides autumnalis* in the grass nearby and wall rocket *Diplotaxis muralis*, fool's parsley, woodland meadow-grass on and at the base of the wall.

Suggestions: The SE corner of the area (F4) is becoming overgrown by large bindweed, great willowherb *Epilobium hirsutum*, rose-bay *Chamerion angustifolium*, butterfly bush and spear thistle. Attention could be given to this, replacing this unconfined growth with something that could be managed easily, shrubs like *Rosa glauca*, *Hydrangea paniculata*, *Berberis darwinii* or *Leptospermum scoparium*. These are all good bee plants.

SUGGESTED ACTIONS – CARRICKBRENNAN CEMETERY

Where	What & map location	When	2020	Who
			priority	
Carrickbrennan	In SE corner, take out large	Anytime	А	Anyone
Cemetery	bindweed, great willowherb etc			
	Replace with shrubs eg Rosa	Early spring	В	In conjunction with
	glauca, Hydrangea paniculata,			DLRCC?
	Berberis, Leptospermum			

G) G) CBC MONKSTOWN

The school has extensive grounds with the buildings and playing pitches ringed by woodland. This is all based on planted trees but beneath them some more natural ecological processes are taking place. They are described in a clockwise direction.

North of the rugby pitch (G1) the slope is covered by sycamore, beech, ash, horse chestnut and a few lime growing above yew, *Ligustrum vulgare*, snowberry *Symphoricarpos* holly *Ilex aquifolium*, laurel *Prunus laurocerasus* laurestinus *Viburnum tinus*. The ground flora is towards ivy with winter heliotrope rather common and alexanders at the edges where is more available light. Nettle is also prominent edge, encouraged by the piles of grass clippings. A good stand of wood false-brome *Brachypodium sylvaticum* covers an exposed corner, followed by some large Monterey pine *radiata* and beech with garlic mustard and bay *nobilis*.

The NW wall is the only boundary that is not shielded from the surroundings. It supports a of sycamore with individual oak and ash fronted by large bindweed, winter heliotrope, nettles, goosegrass *Galium aparine* and traveller's joy and again augmented by mowings.



The former vegetable-growing garden (G2) at the northern point retains a fig tree, some lemon verbena and fennel but is quite weedy otherwise with wild turnip *Brassica rapa*, creeping thistle *Cirsium* arvense, hedge bindweed *Calystegia sepium* and Bilbao fleabane. Nearby at the gate to the outside world (G3) is the garden *Stipa arundinacea*, rose-bay and traveller's joy.

The woodland thickens along the north end of the east wall where sycamore and some lime are generally dominant. Woodland herbs occur, especially broad-leaved willowherb *Epilobium montanum*, herb robert, wall lettuce *Mycelis muralis*, nipplewort, wood avens and hedge mustard but the trees are fronted by a mess of brambles and nettles (G4), the result of previous disposal of grass clippings.

Rank growth of plants caused by disposal of grass clippings at edge of woodland

After the tarmac path appears (G5), sycamore, lime and various oak species form the woodland and there is more variety below with large plants of pendulous sedge, garlic mustard, wood avens, tutsan *Hypericum androsaemum*, wood dock, wood false-brome, pheasant berry *Leycesteria formosa* and Buddleja. Ivy is dominant on the ground surface but it gives way to more open soil near the container (G6). Here hard grass *Catapodium rigidum*, fleabane and knapweed *Centaurea nigra* appear and the vegetation gradually transforms into limestone grassland above and between the long jump and other tracks.



Species consist of

Perforate St John's wort	Hypericum perforatum
Birdsfoot trefoil	Lotus corniculatus
Red fescue	Festuca rubra
Catsear	Hypochaeris radicata
Self-heal	Prunella vulgaris
Red clover	Trifolium pratense
Glaucous sedge	Carex flacca
Fairy flax	Linum catharticum
Small hawkbit	Leontodon saxatilis
Centaury	Centaurium erythraea
Cinquefoil	Potentilla reptans
Black medick	Medicago lupulina
Common bent	Agrostis capillaris
Mouse-ear	Cerastium fontanum
Autumn hawkbit	Schenodorus arundinacea

Disturbed soils of bank with diverse flora and many annuals, container in distance

The south-eastern section of woodland (G7) is the densest and most difficult of access. The large trees are mostly sycamore, ash and horse chestnut but beneath these there is much yew, bay, snowberry, and uniquely for this site, hazel *Corylus avellana* and blackthorn. Many garden species are also present, among them a large comfrey *Symphytum* sp., St John's wort, laurel and butcher's broom. The main feature of the area is a thicket of brambles and wild Clematis in the centre. This hides a large badger sett with three main entrances. The most active of these is beside the wall on Mounttown Road where there is new digging. Alexanders is common at the wood edges where there is light.



Evaluation & management: The bank on the eastern side of the playing pitches is the most species- rich site for native plants in the school and one of the best seen in the Monkstown area. It depends on regular disturbance to prevent colonisation by woody plants. Current use is all right but to fence a section off each year would be a useful educational exercise which could be monitored.

The woodland is the remains of estate planting carried out for the original house and done at a time when game cover was included below the main trees. It has few features of natural woodland but could gradually be modified. One of the most useful things would be to create more shade in the badger wood (G8) so as to limit the growth of brambles and alexanders. Planting of 2m beech is considered the best option since these



trees, although introduced, create enough shade to limit the other species. They also encourage a good fungus flora.

The badgers provide an opportunity for monitoring by CCTV as there are many suitable 'trail cameras' on offer, some with night vision. As well as being useful

for project work this could be put on-line.

One of three active entrances of badger sett

SUGGESTED ACTIONS – CBC MONKSTOWN

Where	What & map location	When	2020	Who

			priority	
CBC Monkstown	Fence off areas for monitoring as educational exercise until Sports Day	March	В	Biology teacher/group
	Plan for retaining 'garden' in CBC for use as educational tool	March	С	Biology teacher/group
	Plant 2m high beech in badger wood area	Nov - March	А	Gardener
	Put CCTV cameras on badger sett	Start in February	С	Publicity value/student project

H) DE VESCI GARDENS

The park is traditionally managed with beds trees and shrubs set in a lawn that is regularly mown. It is located on the old shoreline of Dublin Bay so the curving northwest side (H1) is in fact the coastal slope, now covered by trees. On the northern edge the trees include turkey oak, sycamore, Norway maple, elm, poplar and lime and they are in good condition. Around corner into Pakenham Road (H2) however, there is more openness with a dying Macrocarpa and some tall beeches and Austrian pine and many cut branches. Below tree canopy there is yew, Portuguese and cherry laurels, laurestinus, hawthorn, privet, butcher's-broom Ruscus aculeatus and abundant ivy. The few herbaceous species consist of wood avens, lords-and-ladies Arum



maculatum, garlic mustard and ivy broomrape, probably at its most abundant anywhere in Monkstown.

The lawns (H3) are uniformly rich in species. Apart from such grasses as crested dogstail *Cynosurus cristatus*, creeping bent *Agrostis stolonifera*, cocksfoot *Dactylis glomerata*, meadowgrass *Poa pratensis* and red fescue *Festuca rubra*, which grow in moss *Rhytidiadelphus squarrosus* there is

Bulbous buttercup Daisy Ribwort plantain Yarrow Lady's bedstraw Sorrel Self heal Birdsfoot trefoil Knapweed hawkweed Cowslip Field woodrush Small hawkbit Red clover Autumn hawkbit autumnalis Slender speedwell Salad burnet **Rest harrow** Erect brome

Ranunculus bulbosus Bellis perennis Plantago lanceolata Achillea millefolium Galium verum Rumex acetosa Prunella vulgaris Lotus corniculatus Centaurea nigra Mouse-eared Pilosella officinarum Catsear Hypochaeris radicata Primula veris Luzula campestris Leontodon saxatilis Trifolium pratense Scorzoneroides

> Veronica filiformis Sanguisorba minor Ononis repens Bromopsis erecta



Section of lawn dominated by mouse-eared hawkweed

Other beds of shrubs and trees on the level ground consist of such species as elms, sycamore, lilac, yew, *Cotoneaster, Laburnum,* holly, evergreen spindle *Euonymus japonicus,* snowberry and mock orange *Philadelphus* sp. One bed in the southeast section (H4) is becoming overgrown with cherry plum *Prunus cerasifera,* probably the rootstock of a previous ornamental plum. Herbaceous plants are few with winter

heliotrope the most frequent. Additional species are ground elder, herb robert *Geranium robertianum*, nipplewort *Lapsana communis*, catsear, goosegrass *Galium aparine*, gladdon *Iris foetidissima*. Some alexanders occurs around gates on the eastern side (H5) while there are occasional plants of sow-bread *Cyclamen hederifolium*.

Evaluation and management

Long-continued mowing of a lawn without the use of fertilisers or herbicides often leads to very high biodiversity and De Vesci Gardens offers an excellent example of this. All the lawns here are herb- rich, perhaps least above the tennis courts (H6), and all will be transformed if left unmown for sufficient time to let the plants flower – when they will be of great benefit to all bees, both domestic and wild. Many of the species

are locally abundant in the lawns and the swathes of colour of the mouse-eared hawkweed, cowslips or knapweed can only be imagined at this stage. This could be one of the most important sites in south Dublin for this flora though it is probably mirrored in a few other private gardens. The erect brome and salad burnet are the rarest plants and have not been seen in the Monkstown area since before 1970. The brome is described as 'locally frequent near Dublin, rare elsewhere' in Webb's An Irish Flora whereas the salad burnet is 'locally frequent in the southern half of the country'.



Small area of grass at granite seat, home to at least 25 separate plant species

The diversity of fungal species is also notable because of the absence of fertiliser use – eleven species were noted fruiting.



Coral fungus Clavulina sp. in shrub bed



Horse mushroom Agaricus arvensis on lawn



Puff-ball fungus Lycoperdon sp in lawn

The area around the granite seat (H7) is an obvious one to start with but corners of other lawns could also be included on a pilot basis, especially the cowslip corner in the SE part (H8).



Lawn near SE entrance with cowslip leaves in foreground

A follow-up survey should be done during the first year of growth to see what additional species appear. Potential ones are spring sedge *Carex caryophyllea*, burnet saxifrage *Pimpinella saxifraga* and summer lady's tresses *Spiranthes spiralis*. Usually unmown patches would be cut in August/September but it would depend on the species involved and their flowering and fruiting times.

Where	What & map location	When	2020 priori ty	Who
De Vesci Gardens	Alert De Vesci Gardens owners to their special situation to preserve rich biodiversity.	Winter	A	MVTD leaders with land owners
	Encourage plan for choosing areas to be unmown and mark in March	Winter	A	MVTD leaders with land owners

SUGGESTED ACTIONS – DE VESCI GARDENS

4 OTHER SUGGESTIONS

Where	What & map location	When	2020	Who
			priority	
Other suggestions	Document species change in various areas over time	June	В	Botanist
	Carry out comparative survey between grass areas in Vesey Park & De Vesci Gardens	June	С	Botanist
	Plan further surveys to build on this survey. New surveys for birds, insects (bumblebees, butterflies, etc), mammals, e.g. moths in De Vesci Gardens	Birds (May) Insects (April/July)	A	Birdwatcher