Park Canal Wildflower Proposal

Limerick City Biodiversity Network

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1 Introduction

This document outlines a proposal by Limerick City Biodiversity Network (LCBN) to enhance the biodiversity corridor along the upper stretch of the Park Canal and towards the University of Limerick. This is an area in which Limerick City Council has recently carried out works to develop the first sections of a walking and cycling track between the city and the university.

1.1 Limerick City Biodiversity Network

Limerick City Biodiversity Network was founded in 2011 and is a group of individuals who seek to enhance the biodiversity of the city by developing proposals and working with the local authority and other agencies to see these proposals through to implementation. More information about the group can be found at the Limerick City Biodiversity Network website – http://limerickbiodiversity.weebly.com/– and Facebook page – http://www.facebook.com/LimerickCityBiodiversityNetwork .

1.2 Progress and Objectives of LCBN

To date, in conjunction with Limerick City Council, LCBN has developed a pilot biodiversity project in the city, and the intention is to build on this experience and expand the initiative to other areas of urban Limerick. The pilot project (a wildflower garden) was planted on Clancy Strand in the spring of 2011. The bed has flourished, become popular among local residents and tourists, attracted the attention of the media, and have become a valued resource for the community.

Figure 1 – Pilot Biodiversity Bed on Clancy Strand

2 Park Canal Proposal

Following the guidelines of the Limerick City Council Draft Biodiversity Plan (2011) and the success of the pilot bed in Clancy Strand, Limerick City Biodiversity Network proposes to sow wildflowers along the path by the Park Canal, from Richmond RFC to the junction with the River Shannon and up to the lane to Angler's Walk.

As with the successful pilot project on Clancy Strand, it is proposed that Limerick City Council support this project through funding the purchase of sufficient native wildflower seeds and the provision of technical assistance through the Parks Department.

2.1 Area Description

The canal bank and towpath are used as a route between UL and the city by students, faculty and staff on foot and bicycle; by local residents for recreation; as a running route by athletes in training. The path forms part of the Slí na Sláinte walk from Limerick to Killaloe, with old milestones as historical interest along the way.

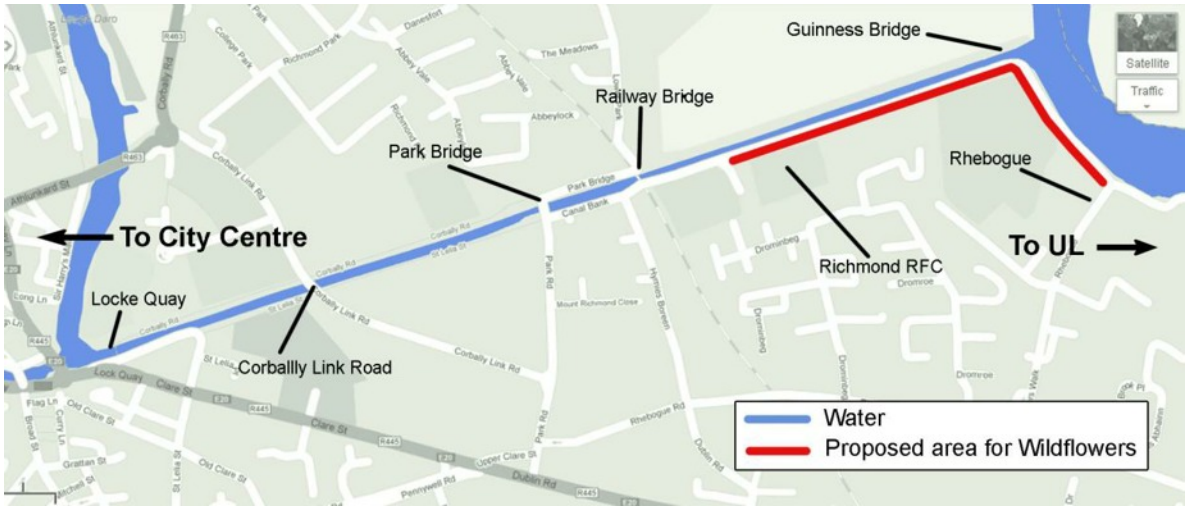

Figure 2 – Map of proposed wildflower planting area

Figure 3 – Photographs of proposed wildflower planting Area (February 2012)

2.2 Limerick City Council Upgrade Work

Limerick City Council has recently carried out extensive upgrade work on this stretch of the pathway as part of its plan to develop a cycling and walking route between the city and the university. The work involved digging up and tilling much of the soft ground on either side of the pathway, and this has presented an ideal opportunity for the sowing of wildflower seeds.

2.3 Ongoing Community Initiatives

A number of groups are active within this area. This area was recently cleared of rubbish, both old build-up in the ditch and recent rubbish that had washed downstream, by a large group of volunteers, led by Gabriela Avram and Miriam Lohan of the Interaction Design Centre at University of Limerick. Volunteers included local residents, students and faculty, and other interested groups such as Green Campus, Wildroutes, birdwatchers, fishing and angling groups. Limerick City Biodiversity Network have been actively involved in this ongoing clean-up initiative from the beginning. These groups and volunteers support our proposal and have pledged to assist in its implementation and maintenance.

Figure 4 – Photographs taken during recent canal and river bank clean-up

2.4 Proposal Detail

Limerick City Biodiversity Network would like to enhance this wildlife corridor by sowing native, self-seeding wildflower species which will bolster the ecosystem of insects and birds. This will also enhance the visual amenity such that the pathway will be attractive to increased numbers of people. The planting scheme will see flowers bloom throughout the late spring and summer months, and into the autumn. This colourful mixture is designed to provide seed in autumn and winter to attract over 20 of the more common bird and 16 of the 32 Irish native butterfly species (see wildflower species list below).

2.4.1 Wildflower Information

It is proposed to sow a particular mix of native Irish wildflower seeds, which is available for purchase through this website: http://www.wildflowers.ie.

Product Name: GF03 Butterflies, Bees and Bird Attracting Wildflowers

Product Code: GF03

Number of Species: 44

Description: This is a colourful mixture and is ideal for farms, estates, parks, gardens and schools. GF03 is a designed seed mixtures for those who seek to have a range of colourful flowers and attract wildlife. This seed mixture will grow in wet or dry soils, sunny or slightly shaded. It is ideal for large sunny sheltered areas especially mounds, 'hillocks' and south-facing ground where the warm microclimate helps pollination.This mixture is designed to provide seed in autumn

and winter to attract over 20 of the more common bird species and 16 butterfly species as well as provide seed feed for winter migrant birds, such as the Goldfinch. In summer the area will be alive with edible insects for migrant summer visitors such as Warblers. Some of these insects will over winter in the seed heads, further providing protein for winter birds.

2.4.2 Cost

The following sets out an approximate costing for the amount of wildflower seed required.

1kg of GF03 mix = €160.00

Normal sowing rate: 1.5 grams per m / 6.6 kilos per acre / 15 kilos per Ha. (a teaspoon per meter squared)

Approximate area of embankment = 1600 m2

Amount of seed needed= 1.5g x 1600 =2400g (2.4kg)

Cost= 2.4kg x €160 = €384

Appendix A – Species list

Birdsfoot Trefoil, *Lotus corniculatus*
Burdock, Genus *Arctium - A. lappa,*
Burnet Saxifrage, *Pimpinella saxifraga*
Common Vetch, *Vicia sativa*
Corn Chamomile, *Anthemis arvensis*
Corn Marigold, *Glebionis segetum* Corn Poppy, *Papaver rhoeas* Corncockle, *Agrostemma githago* Cornflower, *Centaurea cyanus* Cowslip, *Primula veris*
Dames Violet, *Hesperis matronalis*
Devil's Bit Scabious, *Succisa pratensis*
Dog Violet, Genus Viola - V. canina
Feverfew, *Chrysanthemum parthenium*
Field Scabious, *Knautia arvensis*
Fleabane, Genus *Erigeron Inula salicina*

Foxglove *Digitalis purpurea*
Greater Knapweed, *Centaurea scabiosa*
Greater Trefoil, *Lotus pedunculatus* Hedge
Garlic Mustard, *Alliaria petiolata* Hemp
Agrimony, *Eupatorium cannabinum* Hoary
Plantain, *Plantago media*
Kidney Vetch, *Anthyllis vulneraria*
Lady's Bedstraw, *Galium verum*
Lady's Smock. *Cardamine pratensis*
Lesser Knapweed, *Centaurea nigra*
Marjoram, *Origanum majorana*
Scented Mayweed, *Matricaria chamomilla*
Meadow Vetchling, *Lathyrus pratensis*
Meadowsweet**,** *Filipendula ulmaria*
Ox-eye Daisy, *Leucanthemum vulgare*
Purple Loosestrife, *Lythrum salicaria*
Ragged Robin, *Lychnis flos-cuculi*
Red Campion, *Silene dioica*
Red Clover, *Trifolium pratense*
Rough Hawksbit, *Leontodon hispidus*
Ribwort Plantain, *Plantago lanceolata*
Shepherds Purse, *Capsella bursa-pastoris*
St John's Wort, *Hypericum perforatum*
Sorrel, *Rumex acetosa*
Teasel, Genus *Dipsacus* – D. ferox Water
Avens, *Geum rivale*
Wild Angelica, *Angelica sylvestris*
Wild Carrot, *Daucus carota*
Wood Sage, *Teucrium scorodonia* Yarrow,
Achillea millefolium

Appendix B – Maintenance

Mixture Specifications:

GF03 should not be cut at the end of summer; the seed heads should be left on so that the birds, especially finches, can search for seeds and provide hours of fascinating entertainment. Cut in Spring, or cut the most showy lower half at the end of summer, and leave the taller seed heads for the birds all winter

Origin: Native Irish Origin, Wildflower Seed Mixture.

pH range: Suits all soils.

Aspect: Sunny to light or semi shade, but not too shaded

Life Cycle: Contains Annuals, Biennials and Perennials.

Height Range: 30cm - 240cm
Flowering Period: May to September.
Fertility Range: Will grow on any soil, the less fertile the soil, the less cutting will be required.
Wintergreen: Moderate
Total number of seeds per gram: 980
http://www.wildflowers.ie/mixes/gf/gf03.htm

Seedling Establishment

When the seeds are first sown, seedlings will keep on germinating each spring and autumn until about the second or third year. Correct timing when cutting the meadow is crucial to the survival of seedlings. If the original cultivation methods did not produce a clean weed-free seedbed, this is the last opportunity to get rid of stones and weeds that have been missed. During this stage it is vital that the growth of grasses & flowers is cut each autumn. Cutting the growth away allows the sun to warm the soil and for fresh air to circulate over the tiny seedlings. If the grass is left uncut, mould will grow and kill off the tiny seedlings. The dead layer of thatch at the base of the grasses should be removed and rolled with a Cambridge roller if the soil is crusted.

In the first year for meadows sown 'with grass' always cut by the end of July if not sooner. All flora sown with grass and no annuals must be regularly cut and the grass removed when growth passes a height of 15-25cm in the first year. Cut down to 1"-3". The grass must not 'lodge' (fall over).

Any meadow can be cut every 30-60 days to keep tidy as a lawn. On infertile sites cutting may not be necessary, except once in the autumn. On fertile sites from 4 - 8 cuts per year may be required to reduce fertility during the seedling establishment phase.

The seedling establishment stage must be maintained during the first year and may need to continue into the 2nd and 3rd year on fertile sites. Use a strimmer with blade attachment or a finger / sickle bar mower (lawn mower type).