Bringing back Headington's Limestone Wildflowers

A Friends of Lye Valley, Oxford City, Project

[See group's website at http://www.friendsoflyevalley.org.uk]

Introduction and Aims

The Headington area Jurassic Corallian limestone rocks have been the source of much building stone in the past resulting in an area with numerous relic examples of the quarrying. Before urban development and abandonment, the area was full of attractive flowers specific to the alkaline, limy soils.

Flowers of the Headington area are detailed in the 'Flora of Oxfordshire' in 1927 by local botanist G C Druce. Most of the special limestone flowers of the area have now been apparently lost, with the exception of the small range of valuable wildflower species which still exist in Rock Edge LNR (the old 'Crossroads Quarry' adjacent to the junction of Windmill Road and Old Road – see photos in Rock Edge section of FoLV website). The special wildflowers do exist in other areas like the Oxford Golf Course, but these are not publicly accessible for enjoyment.

The FoLV have been increasing the populations of limestone wildflowers at Rock Edge for two years already and now the mowing management has been changed to achieve better flowering and seeding of the species present.

This project aims to bring back the special flowers of the area by introduction to publicly accessible green spaces from the nearest local flowery sources. Rock Edge is a key source site in this project, but other important areas are the Oxford Golf course adjacent to Hollow Way and Fairview Allotments marginal areas.

An important point about this project is that it aims to bring back wildflowers from <u>local genetic stock of Headington/Oxford limestone species</u>, not using bought-in seed from sources far away or even from a different country, or agricultural varieties. This supports our native flora, which is adapted to the local soil and climate.

The benefits to the local community will be:

- Greater enjoyment of walks in Headington's green accessible public areas because there will be attractive flowers to view rather than monotonous green mown grass.
- Greater flower diversity will bring greater diversity of insects such as butterflies and bees, which may then be appreciable by the public.
- By involving local primary school children in collecting wildflower seed and sowing it in their local green areas we contribute to education of young people about wildlife, and the flower heritage of their own area plus the link between flower pollen and nectar sources and pollinators.

Benefits to Wildlife will be:

- Support for local pollinator populations of bees, butterflies, flies and beetles that all depend on nectar and pollen. Ties in with the City Council Pollinator Initiative
- Support for local populations of rare fen insects such as the large soldierflies that live in the Lye Valley SSSI and LWS wetlands. These need access to nectar and pollen sources to complete their life cycles. There is a lack of such resource within the Lye Valley itself.
- Support for the populations of limestone wildflowers that are so seriously declining that they are on the new Vascular Plants Red list for England.
- Support for local wildflower populations where they are threatened by future development e.g. the Churchill hospital site verges.

The flowers to be targeted for bringing back (photographs of some of these are to be found on the FoLV website). These are all documented by Druce as being present in the Headington area 100 years ago:

Wild marjoram Origanum vulgare. A key plant as nectar source for butterflies and bees, currently at Fairview allotments.

Salad burnet Sanguisorba minor. Currently on the Oxford Golf course.

Sainfoin Onobrychis viciifolia. Key flower for bees, currently on the Oxford Golf Course

Bird's foot trefoil Lotus corniculatus. Key flower for bees to feed on plus foot plant for butterfly and moth caterpillars. Currently at Rock Edge

Fairy Flax Linum catharticum. Currently on the Oxford Golf course.

Horseshoe vetch Hippocrepis comosa. Key flower for bees to feed on plus butterfly food plant. Nearest local population was Barton, not there now.

Common Rockrose Helianthemum nummularium. Not so common, declined so much that now on the England Red list of vascular plants as Near Threatened. Nearest local source Chilswell valley.

Small scabious Scabiosa columbaria. Important butterfly and bee food source. Currently at Rock Edge

Hare's foot clover Trifolium arvense. Bee food source. Currently still on the Churchill hospital site verges. Druce 1927 'cornfields near the Asylum'; Roadside verge Barton SP560090 in 1983, most likely gone now

Musk Mallow Malva moschata. Bee and butterfly food source. Currently on the Churchill hospital site verges.

Mouse ear Hawkweed Pilosella officinarum. Butterfly bee and fly food source. Currently on the Churchill hospital site verges.

Stemless thistle Cirsium acaule. Butterfly and bee food source. Currently on the Oxford Golf course

Field Scabious Knautia arvensis. Important butterfly and bee food source. Currently at Rock Edge. Declined so much that now on the England Red list of vascular plants as Near Threatened.

Common knapweed Centaurea nigra. Important butterfly and bee food source. Currently at Rock Edge.

Greater knapweed Centaurea scabiosa. . Important butterfly and bee food source. Currently at Rock Edge.

Clustered bell flower Campanula glomerata. Bee food source. Currently at Rock Edge

Burnet saxifrage Pimpinella saxifraga. Butterfly bee and fly food source. Currently out near Islip on verge.

Wild carrot Daucus carota. Very important butterfly bee and fly food source. Currently at Rock Edge.

Common Restharrow Ononis repens. Important bee food source. Currently at Rock Edge and Oxford Golf Course.

Wild Thyme Thymus polytrichus. Very important butterfly and bee food source. Currently at Sydlings Copse SSSI or Chilswell Valley.

Tufted vetch Vicia cracca. Good bee food source. Currently at Rock Edge

Hairy violet Viola hirta. Important for spring bees and butterfly food plant. Currently at Oxford Golf Course off Hollow Way

Wild basil Clinopodium vulgare. Very important bee food source. Currently at Chilswell valley.

Hoary plantain Plantago media. Hoverfly food source. Currently at Rock Edge and Oxford Golf Course.

Wild candytuft Iberis amara. Nectar source for butterflies. No local source yet found. Nearest source Chiltern chalk grasslands. Previous records - Harcourt hill, Randolph, Headington abundant, 1868 Mrs Davenport, Used to be abundant in the quarries 'cornfields between the Asylum and Bullingdon Green, Baxter 1823, Boswell 1857, Headington and Cheney lane Beesley, Iberis amara var hortensis Headington Gambier-perry practically confined to the chalk, Druce 1927' <u>Headington green sites on limestone thus suitable for introduction of these</u> wildflowers to small areas from Rock Edge populations initially:

1. Lye Valley access area off The Slade on dry limestone soil and valley bank to Peat Moors road and recreation field above the fen

2. Magdalen Quarry (already started this with pupils of local Windmill Primary School)

Drafted by Judith A Webb, Chair FoLV, 2016