Report for Galbally Tidy Towns Committee Galbally, Co. Limerick

> Of Proposed

Páirc Éiceolaíoch Ghallbhaile (Galbally Ecology Park)

Site Overview, Management and Planting Recommendations

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Introduction

The site in question was visited with Jim and Elke Cussen of the Galbally Tidy Towns Committee. The site is the proposed site of the Galbally Ecology Park and a 1916 tree planting commemoration. The potential of the site as a biodiversity refuge was examined and an overview of the existing habitats was briefly assessed.

The site is both spatially and ecologically a very interesting place and its location running along the bank of the River Aherlow to the village makes it a significant location from the biodiversity perspective.

Habitats and Analysis

The site is influenced by six adjacent habitats which connect to the wider countryside through a system of hedgerows to the ecologically important Galtee Mountains and the River Aherlow which connects to the River Suir, a special area of conservation.

For the purpose of this report and to allow for a further collection of botanical and ecological information in a manner that will involve members of the local community e.g. schools, local students etc., I have identified a group of six habitats, which simultaneously represent nearby habitat types around Galbally.

There is (1) the bank with a mixed hedgerow flora between the road and the meadow (2) damp marsh (3) damp/improved meadow (4) damp woodland (5) the River Aherlow (6) dry bank of ash and hazel.

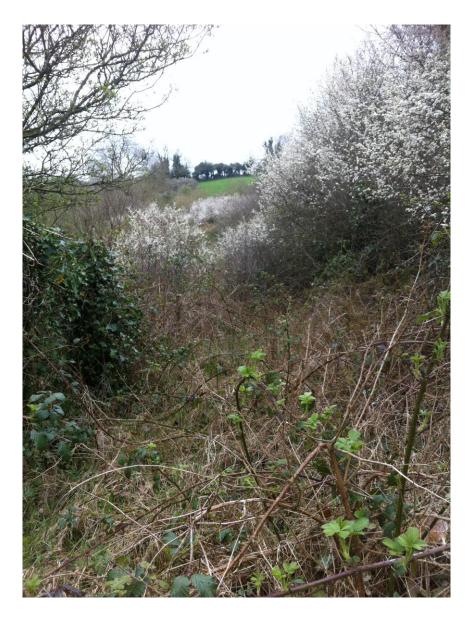
The site was visited on the 6/4/17. It is recommended the flora be examined frequently at different times of the year to assess what is interesting or in flower in that particular season. I also feel a fun community based activity could occur around the time of a 1916 tree planting ceremony which is rooted in a sense of the importance of biodiversity. This would tie quite nicely with the sense of this generation passing something important down for the next 100 years and more. It would also help to have all the extra hands involved in collecting ecological/botanical data and give every one involved a sense of having a stake in protecting and managing habitats for the community in general. It would help to contact the local NPWS officer, Biodiversity Ireland, the local authority heritage officer, local botanists, science teachers, schools and all who could help out with organising groups of volunteers to identify as many plants, animals, butterflies, invertebrates etc. as possible in the habitats on that afternoon using simple quadrants or tree counting.

It would help greatly to use Habitats of Ireland, Fossit, J. and the sample field data sheet from the Heritage Councils guide for habitat survey and mapping, so every one in collecting the information in the same way.

(1) Bank

The bank between the road and the meadow below is quite steep and has an interesting stand of hedgerow trees, understory plant layer, woodland floor and meadow edge flora. There are some coniferous trees in the mix near the road. On the occasion of my visit, I noted, Prunus spinosa, blackthorn, dominated the scene with a splendid early show of white flowers. This is accompanied by Fraxinus excelsior, Ash, Corylus avellana, hazel, Rubus fructicosus, bramble, Arum maculatum, lords and ladies, Harts tongue Asplenium scolopendrium, Betula sps. on a ridge between the river and the steep drop and Hedera helix, Ivy.

The bank is representative of hedgerow and woodland scrub. It is significant in that it is part of a linear habitat. It connects all the habitats in the hinterland to one another through the network of hedgerows.



It would be very beneficial to inspect this section and using methods of survey suited to linear habitats, collect data from what is found there at different times of the year. Advice from the local NPWS officer on bird life associated with the habitat would be excellent as well as guidance on protecting birds in the habitat during nesting.



I don't believe the blackthorn really ought to encroach any more into the meadow and needs to be maintained as it is. It is generating a flowing form to the meadow at present which is visually and spatially gentle adding an ephemeral air to the quality of the landscape. The landscape type is almost text book representative of the descent from a woodland to an understory to a shrub layer to a meadow with all the representative plants in between.



(2) Damp Marsh

Although the damp marsh is on the other side of the river, outside the site boundary, it never the less influences the habitats in the landscape ecology of the entire envelope. On the occasion of my visit the Iris pseudacorus were about to emerge in what would appear to be an attractive arrangement at the bend in the river.

(3) Damp Meadow

The damp meadow has a very attractive form. It is bordered by the river, the damp woodland type trees and the blackthorn. On the occasion of my visit, the scene was dominated by grass species peppered with Dandelion, Taraxacum sps., Cardamine pratense, a little Juncus and Ranunculus sps. It would be beneficial to examine what percentage of the grass was improved agricultural grassland species and what was of old damp meadow type species. You might expect to find Juncus sps appearing over the summer and when the grass goes to seed – Lolium sps Poa sps. Holcus sps. Plantago sps. Festuca sps. Agrostis sps. It would also to useful to record all flowering species over the summer as they appear to get a picture of the species rich quality of the meadow.

There may also be a little overlap between the damp marsh and the damp meadow with Mentha aquatica making an appearance in both places along with Filipendula ulmaria, Meadow sweet and other Juncus sps, rushes but I didn't notice any Iris pseudacorus in the damp meadow starting to emerge on the day of my visit.

The next step is to draw up a management / reseeding plan so as to have a meadow which can then be a repository of how a damp meadow ought to appear, with grass species and wild flowers of Irish provenance appropriate to this habitat type. The seed can be harvested each year, reseeded as required and provide a useful source of seed for other areas which are to be reseeded. Visually it will be very pleasing.

However, it must be stressed that any manual or set of advice notes is only a guide and you will hopefully find something interesting in the meadow and attention must be paid to any Annex II species if any should appear.



4. Damp woodland

Where there is a fluctuation in the river level, a small damp woodland has evolved. Species of willow Salix, sps. were noted on the occasion of my visit.

5. River Aherlow

The river has significant water volume at this point in its course. Like many rivers of its size, at the time of my visit, there was vegetative debris and plastic from agricultural wrapping, evident where the river level had dropped from its winter height. The River is a significant habitat for salmonids and it is a tributary of the Suir. It would be very interesting to have a mollusc expert examine this stretch to see if there were any interesting species to be found. This would also inform any future development in the area where care needs to be taken with respect to siltation of the watercourse. I believe the river is a great way of combining a survey of flora and fauna as it can be examined on the same day. Information from Inland Fisheries and utilising their community outreach programme would be a wonderful integration of all the habitat information. The river is important to Galbally as it is a linear habitat. Studying one small section will yield information important for its entire length. It would also be a good idea to have a local representative from Birdwatch Ireland and NPWS involved. Is there any aspect in the management of this stretch of river which is representative of the care that is required for habitats the entire length of its course, through the village? How for example are lamprey affected by river habitat management as it moves through the village. How best is plastic waste managed and removed from the river in spring. What birds nest adjacent to the river bank? Perhaps sightings could be recorded and dated.

(6) Dry Woodland

On the opposite bank of the river outside the site boundary a dry bank rises steeply from the river bank. It has a mature stand of Ash, Fraxinus excelsior and an under story layer of hazel, Corylus avellana. A comprehensive survey of the woodland may also indicate some Quercus sps. in the woodland. The habitat is included here as it falls within the ecological envelope of the site but outside its boundary. If it were possible with permission to complete a woodland survey of this area this could prove interesting.

Management

Focusing on managing the habitats will ultimately form the basis of the landscape management plan. The first step is to assess more comprehensively the list of plants in each habitat focusing firstly on the meadow. This will determine the level of reseeding and species required. Some grass species may be removed and some seed bulked so as to re seed in another section.

Prunus spinosa and Rubus are the species mostly encroaching onto the meadow. These will have to be cut back during the winter months, right back to ground level. It may be necessary to pull out Prunus spinosa by the remaining stump. Once the line between the meadow and the scrub layer is firmly established it needs to be maintained. A workshop on hedgerow management during the winter months could be organised with the hedge layers association. Again, given that hedgerows are probably the most important habitat in the environs of Galbally, having a workshop or demonstration on hedgerow laying methods and some attractive laying techniques would be of interest to the whole community, including landowners, home owners and local authority personnel.

Meadow management in this case will probably follow a regime of one or two cuts a year with significant seed being identified, harvested and stored in a cool dry place. Saving the seed and re

sowing annual seed and reseeding bare/ damaged patches will form part of the ongoing meadow management regime.

Access

Access into the site is restricted to one section. If on a ceremonial occasion it is found that access is required for a disabled person of a person with limited mobility assistance will be required from the existing gate and a mown pathway is to be provided to the tree planting site. A ceremony such as the tree planting ceremony, would need careful organisation with the numbers attending and walking to the access point or requiring transport, organised in advance. As the site develops and areas have been replanted and re seeded, it will be important to manage access to the site so for example the meadow isn't damaged before the correct mowing time.

Planting

In this plan, a planting scheme suited to a damp woodland is proposed. The planting pattern will follow the alignment of the stream. It is proposed that all the Salix and Alnus species are propagated from local mother stock of Irish provenance. Cuttings of Salix on site could be taken or this work could be contracted out to nurseries specialising in trees of Irish provenance. The health of the mother stock must be assessed for disease.

Small turf seating areas of selected grass species are proposed on a radius which culminates in a temporary/ permanent flagpole. The trees are on a different arc and the grass in this area and to the access point is mown. Seven planting beds of seed of Irish wild flowers of Irish provenance will add a splash of bright colour in the summer months and make an aesthetically pleasing backdrop to the trees. The colours will be concentrated to intensify the effect.

Please read the accompanying drawings in association with this outline report.

Propagation

A small propagation area can be set up on site purely for the purpose of propagating native plants of Irish provenance. It would need to be appropriately and simply set up and fenced to prevent damage from rodents, badgers etc. Again a workshop could be organised with local horticulturalists, or Irish Seed Savers or local nurseries specialising in propagation from trees of Irish provenance.

Conclusion

This is an exciting undertaking by members of Galbally Tidy Towns Committee. Not only have they identified a site to plant their 1916 commemoration trees, but have been very forward thinking in creating a small reserve which will remain as a snapshot in time of the habitats that surrounded the village. It will also serve to inform all the other habitat areas around the village of the likely species diversity that exists and the appropriate method for its management. It will also serve as a reserve for seed and tree cuttings into the future. Given the threat to the genetic diversity of our native tree stands and especially considering our native ash stand is currently vulnerable to the disease Chalera , we need as much of our own local genetic ash as possible. We may one day find, just the ash that is resistant to the disease. In any case, protecting the diversity of the local gene pool is a laudable undertaking demonstrating a foresight in this committee that is rare across the country.

References

Fossit, J et al, 2000 Habitats of Ireland Smith et al, 2011 Best Practice Guidance for Habitat Survey and Mapping Parnell et al 2012, 8th ed., Webbs An Irish Flora Devlin Z., 2014 The Wild Flowers of Ireland Fitzpatrick et al National Biodiversity Data Centre, 2014 Identification Guide to Ireland's Grasses Rose, F. Ed. O'Reilly 2006 The Wild Flower Key Hedgelaying Association of Ireland <u>www.hedgelaying.ie</u> Feehan, J. et al, 2012 The Grasses of Ireland, Teagasc and School of Agriculture and Food Science

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