| Report on | Mid Ulster Biodiversity Project |
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| Reporting Officer | Raymond Lowry |
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| Is this report restricted for confidential business? | Yes | |] |
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| If 'Yes', confirm below the exempt information category relied upon | No | Х | |

| 1.0 | Purpose of Report |
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| 1.1 | To inform and update Members of recent activities promoting community participation in conserving and enhancing the local biodiversity resource of Mid Ulster District. |
| 2.0 | Background |
| 2.1 | The activities of the Biodiversity Officer can be categorised into 6 broad areas of responsibility: Contribute to delivery on the Northern Ireland Biodiversity Strategy via the implementation of the Mid Ulster Biodiversity Action Plan. Provide guidance to MUDC in complying with various environmental legislation, including obligations under the Wildlife and Natural Environment Act (NI) 2011, ensuring Council fulfil their Biodiversity duty wherever possible. Provide advice and contribute to the development of Habitat Regulations Assessments (HRAs) to ensure Council projects do not contravene biodiversity related European legislation. Develop a range of partnerships to deliver biodiversity gain within Mid Ulster. To maintain and progress a database of species, habitats and sites of local wildlife value. To increase biodiversity awareness among local community and wider public and to provide training opportunities for the public to develop biodiversity related skills. |
| 3.0 | Main Report |
| 3.1 | The Biodiversity Officer continues to deliver actions identified in the Mid Ulster Biodiversity Action Plan. Many of these actions feed into and contribute towards the implementation of the Northern Ireland Biodiversity Strategy. Projects and events have been undertaken to raise awareness of and undertake actions for; woodland, grassland, urban habitats, wetlands, house sparrow, swift, bumblebees, Irish whitebeam, and bats. |
| 3.2 | A number of partnerships have been (and continue to be) developed to further the delivery of these actions towards biodiversity gain. This includes: The Woodland Trust; Ulster Wildlife; British Trust for Ornithology; The Conservation Volunteers; Cookstown Wildlife Trust; Ballinderry Rivers Trust; NI Swift Group; Lough Neagh Landscape Partnership; Bat Conservation Ireland; as well as a number of local individuals. |
| 3.3 | Examples of events and projects include: |

| | Pollinators in your Garden - public event looking at the benefits of and how to encourage a range of pollinators into your garden. Also three events/workshops on building homes for pollinators. Daubenton's Bat Survey - Coalisland Canal/Torrent River surveyed for 8th consecutive year, feeding into All Ireland Daubenton's Bat Survey Urban Biodiversity – Talks and walks given to 2 schools, guided walk at The Hill of The O'Neill, and walk through Castlecaulfield with Community Group. Growing Native Trees from Seed; Workshop held attended by people from throughout NI (Belfast, Ballymena, Portadown, Omagh) on growing native trees, with a focus on Irish whitebeam. This is the only known project in NI working on this endemic species. (Please see Appendix I for further details on this project.) Mid Ulster Bird Ringing Project. Twelve events held over the summer at Traad LNR, dates tying in with the British Trust for Ornithology (BTO) - Constant Effort Site (CES) windows. This site is now officially been registered as a CES with the BTO, which is only the second CES site in Northern Ireland. (Please see Appendix II for further details on this project). |
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| 3.4 | Many of these activities include a training element, providing opportunities for local people to learn about a wide range of biodiversity issues and providing the knowledge to enable people to undertake biodiversity related activities themselves. |
| 3.5 | The Biodiversity Officer has provided advice on a number of MUDC projects in relation to the Council's obligations under environmental legislation. |
| 3.6 | The Biodiversity Officer has also been consulted on biodiversity issues from both Council staff directly and on advice to members of the public on biodiversity issues. |
| 3.7 | The Biodiversity Officer continues to support and network with other Biodiversity Officers through the Northern Ireland Biodiversity Officers Forum, and has been re-elected as Chair of the Forum for a second year. |
| 3.8 | Mid Ulster Biodiversity Action Plan (BAP) - The current BAP was originally dated 2014- 2017. The publication of a Local Biodiversity Action Plan is the result of a number of international, national, and local processes: (Convention on Biological Diversity; UK Biodiversity Strategy; Northern Ireland Biodiversity Strategy). These strategies include national targets and actions for a range of important habitats and species. For these to be effective, action must be taken at a local level. Local Biodiversity Action Plans are seen as a means by which this can be achieved. Although many habitats and species are under threat in Northern Ireland, those deemed to be most in need of conservation action are listed in the Northern Ireland Priority Habitat and Northern Ireland Priority Species lists. These current lists were published in 2010, with new updated lists to be published in the first half of 2018. For a Local Biodiversity Action Plan to be most effective, and to make a real contribution at a national scale, it must focus resources on those habitats and species most in need of conservation action. Although a new/updated Mid Ulster BAP would be due to be produced in 2018, it would be prudent to delay the publication until after the new Northern Ireland Priorities are published. This would result in the MUBAP being relevant, up to date, and suitable for the entire timeframe of the BAP. |

| 4.0 | Other Considerations |
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| 4.1 | Financial & Human Resources Implications Financial: Activity within budget. However, to ensure the continuation of the Bird Ringing Project, additional budget will be required. Please see appendix for further information. Human: Officer time (Biodiversity Officer). |
| 4.2 | Equality and Good Relations Implications The project is open to residents, groups and individuals throughout the district. |
| 4.3 | Risk Management Implications |
| 5.0 | Recommendation(s) |
| 5.1 | Members are asked to note the content of this report. |
| 6.0 | Documents Attached & References |
| 6.1 | Appendix I - Report on the Irish Whitebeam Project Appendix II - Report on Mid Ulster Bird Ringing Project |

Appendix I

Irish Whitebeam Project

The Irish whitebeam (Sorbus hibernica) is one of the few plants endemic to Ireland. It is a small sized deciduous tree, with a smooth, grey, but sometimes ridged bark. The oval toothed leaves are silvery white on top with a dense covering of white downy hairs on the undersides. When leaves first open, the white undersides can make a distant tree appear white, but gradually becomes greener as upper leaf surfaces turn down and leaves lose their white covering of hairs. The white flowers are produced from May to June in flat-topped clusters. These are followed by the globular red fruits deepening to scarlet when ripe from September to October.



Irish whitebeam is scarce in Northern Ireland and difficult to find. It has been reported from about eight or nine sites, but the precise number is unknown because of confusion with common whitebeam (Sorbus aria). The number of trees at any one site is very small, most sites having 1 or 2 trees, so the total population within Northern Ireland is tiny and vulnerable.



In the first year of this project in 2010, a few berries were collected from a stand of Irish Whitebeam. At a 'Growing Trees from Seed' workshop several people committed to trying to propagate these seeds – with success! One volunteer from Coalisland now has 22 Irish whitebeam trees. As the total known population of Irish whitebeam in Northern Ireland is so small (estimated to be approximately 50 trees that are known about and recorded), this volunteer alone has made a significant percentage increase to the Irish whitebeam trees that we know about.

Following this success, the 'Growing Trees from Seed' workshop has become an annual event. Irish whitebeam berries are collected and given to volunteers to try to propagate. It is known that the germination of this species can be 'hit and miss', and although there has been some success in the following years, with another volunteer from Magherafelt area getting a couple to grow, it has been limited. However, things are moving in the right direction, and it does show that every tree successfully propagated through this project helps to ensure that Irish whitebeam remains part of our local biodiversity.

In October 2017, the workshop facilitated by The Conservation Volunteers was in the grounds of Tullylagan Manor House Hotel. This location was chosen as it provided an opportunity to collect seeds and berries from a range of tree species including the locally significant oak. The workshop attracted both local participants and a number from throughout Northern Ireland, with over 30 people registering a place. Seeds and berries were collected in the morning, before participants learnt how to extract and process the various seeds to try to maximise germination. This was put into practice



with everyone 'getting their hands dirty'. Irish whitebeam berries that had previously been collected from a known site were given out to participants to process and try to germinate.



Mid Ulster District Council are currently the only organisation in Northern Ireland that are known to be undertaking work on the Irish whitebeam. It is not known if there are any similar projects in the South. Due to the difficulties in germination, the Biodiversity Officer is investigating the possibility of developing a partnership project with The Conservation Volunteers that would involve grafting cuttings of Irish whitebeam onto related Sorbus rootstock. This is still at the very early stages, but something that may be developed over the next couple of years.

Appendix II

Mid Ulster Bird Ringing Project

Background to Bird Ringing

Bird ringing is essential to the development of both bird science and bird conservation. The rings carry a unique number turning anonymous birds into recognisable individuals, identifiable for the rest of their lives. In addition to being the mainstay of migration studies worldwide, ring-recoveries are used to estimate annual survival rates of birds. Moreover, the biometrics collected when birds are handled provide valuable insight into other aspects of bird biology, such as breeding and moult, body weights, age and sex ratios, and even the incidence of disease.

Ringing data have shown their value in recent decades, when many bird populations declined and some species have also changed their migration patterns. If we are to detect and understand these changes, and take effective conservation measures, we need appropriate data. The most recent British Trust for Ornithology (BTO) studies combine data from ringing, nest records and counting schemes to produce demographic models of bird populations that give unprecedented detail on large-scale population dynamics. Understanding what is happening to our bird species will help direct efforts in bird conservation.



Mid Ulster Bird Ringing Project

One of the objectives of the Mid Ulster Biodiversity Action Plan is to engage local people in action for our local biodiversity. One aspect of this is to encourage the observation and recording of our local species. Previous training projects have been well supported with local people now taking part and gathering vital information through a range of surveys for bats, butterflies, moths, etc.



Bird ringing provides vital information that cannot be obtained from bird observations alone. However, bird ringing is highly regulated and can only be carried out by skilled licensed ringers with the utmost consideration for the birds' welfare. Learning as an 'apprentice' under the close supervision of experienced ringers, progress is assessed by an independent ringer so the Ringing Scheme maintains very high standards of bird welfare and scientific data. A British Trust for Ornithology ringing permit is a legal requirement for anyone ringing birds. It has to be renewed annually.

Within Northern Ireland there are a few licensed bird ringers, however, few operate 'West of the Bann'. Consequently, there is a lack of data on bird species in the Mid Ulster area that could be obtained through ringing. This information would be particularly beneficial in shaping future conservation work both through and outside the Mid Ulster Biodiversity Action Plan.

To address this situation the "Mid Ulster Bird Ringing Project" is being developed in partnership with trained licensed bird ringers. The objective of the project is to bring together people interested in becoming a licensed ringer, and to provide training opportunities to enable them to do so. Through this, vital data will be obtained on a range of bird species frequenting the Mid Ulster area.

The outcome of the project will be to have a number of trained bird ringers operating in the Mid Ulster area, gathering vital information that will be of use at local, national and even international levels.

Traad – Constant Effort Site

During 2015 and 2016 a number of ringing training days were held throughout the Mid Ulster area. Following an assessment of this, it became apparent that one of the best ringing sites in the area (and on a par with any in Northern Ireland) is at Traad. It was decided to undertake a concerted effort during 2017, and to run the site as a trial Constant Effort Site (CES). The CES is a national standardized ringing program where ringers operate the same mist nets in the same locations within the same site over the same time period at each session over the breeding season. There are 12 sessions



undertaken, one within each of the 10 day windows specified by the BTO. There are currently over 140 CES sites throughout Britain and Ireland, but only 1 other CES site in Northern Ireland. Traad has now become registered as the second.

Between the beginning of May and the end of August 2017, all 12 sessions within the CES windows were completed at Traad. These sessions resulted in 357 new birds ringed and 75 retraps (birds already with a ring). Some of the highlights from this are that a sedge warbler originally ringed in France in 2015, which had been caught at Traad in 2016, was retrapped again in 2017. Sedge warblers migrate, spending the winter in western and southern Africa. This bird has been to Africa (twice), returning to Lough Neagh, and was caught in 2017 within 10 metres of where it had been caught in 2016. Another sedge warbler ringed in Spain in April

2017, turned up at Traad in May 2017. Several birds ringed at Traad have been caught in France and southern England.



While recoveries of birds in or from other countries creates excitement, the value of the information obtained from Traad's own birds is important in understanding local population dynamics. The numbers of sedge warblers and particularly reed warblers being ringed at the site is significant on a Northern Ireland scale. Ringing records for Northern Ireland for sedge warblers show: 32 ringed in 2014; 9 in 2015; 57 in 2016 (17 of which were from Traad), and 144 ringed at Traad in 2017. The importance of the site for information on reed warblers is even more significant with no reed warblers ringed in Northern Ireland in either 2014 or 2015, and only 17 ringed in 2016

(16 of which were from Traad). In 2017, 29 reed warblers were ringed at Traad. (Totals for NI for 2017 are not available yet).

Traad – The Future

In addition to the vital data on birds being obtained through the Mid Ulster Bird Ringing Project, the training opportunities being provided have been recognised. As well as local people becoming involved and starting the training process, trainees from over Northern Ireland (Belfast, Ballymena, Ballynahinch, Warrenpoint, Portadown, etc.) have attended ringing sessions to experience 'Traad'.

As bird ringing is highly regulated and can only be undertaken with trained licenced ringers present, the project has been relying on the good will of licenced ringers volunteering their time and effort to ensure each ringing session can be undertaken.



Due to the importance of the site for the data collected, the Biodiversity Officer will seek a Programmes budget allocation to ensure this significant project can be built upon, and continue without risk.