



Fermanagh & Omagh  
District Council  
Comhairle Ceantair  
Fhear Manach agus na hÓmaí

# Fermanagh and Omagh Local Biodiversity Action Plan

- Helping to conserve and enhance local habitats and species
- Raising awareness and knowledge of local biodiversity
- Involving local people and developing partnerships to help deliver action for biodiversity



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## Foreword

### FERMANAGH AND OMAGH LOCAL BIODIVERSITY ACTION PLAN



As Chairman of Fermanagh and Omagh District Council I am delighted to introduce the inaugural Local Biodiversity Action Plan developed by the new Fermanagh and Omagh District Council. This plan will build on the foundations laid down in the Local Biodiversity Action Plans developed in former years by the legacy Councils and will guide the conservation and enhancement of biodiversity in the Fermanagh and Omagh area into the future.

Biodiversity and people are inextricably linked. We all have an important role to play in the delicate balance of the circle of life and while it is important to recognise the rich tapestry of habitats and species which exist in our district, it is of critical importance that we recognise the key role we have to play in the preservation of this unique natural resource. There is also a less altruistic reason for preserving our natural heritage as it plays a key role in two of our district's principal industries: tourism and agriculture. Consequently, any imbalance which would affect the natural habitats will negatively impact on both industries and consequently undermine the economic benefit to the area.

The Action Plan has been developed with the aim of conserving local habitats and species and to raise awareness of biodiversity. The biology of biodiversity is covered in much greater detail in the body of the Action Plan. Since the implementation of the Local Biodiversity Action Plans by the legacy Councils, legislation has been introduced placing the onus on every public body in exercising any functions to further the conservation of biodiversity so far as is consistent with the exercise of those functions. Our commitment to the preservation of the environment is enshrined in the Council's Corporate Plan under the themes of Quality of Life and Protecting and Creating Quality Spaces.

The Fermanagh and Omagh District is home to 1 Area of Outstanding Natural Beauty, 12 National Nature Reserves, 2 Local Nature Reserves, 8 RAMSAR areas, 20 Special Areas of Conservation, 3 Special Protected Areas and 133 Areas of Special Scientific Interest. These statistics spell out just how important our district is in terms of natural heritage and it is incumbent on all of us to ensure that we play our part in enhancing the biodiverse nature of our district. I believe that this document will provide the blue print as to how this can be achieved and I encourage everyone in the Fermanagh and Omagh district to embrace this wonderful opportunity.

I am delighted to commend this document to you and I look forward to working with you to secure a district rich in biodiversity.

Councillor Thomas O'Reilly  
Chairman  
Fermanagh and Omagh District Council

## Introduction

### Biodiversity: What is it?

Biodiversity is simply the variety of life on earth, from small micro-organisms to plants, animals and the ecosystems they depend on. It is found all around us in gardens, parks, roadside verges, fields, mountains, rivers and underground in our caves.

### The Importance of Biodiversity

Biodiversity is important for a wide range of reasons and we all have a role in looking after native plants and animals, protecting ecosystems, and raising awareness of the value of our natural environment. There have been many reports and studies of how biodiversity contributes to our economy, our health and well-being and the stability of our natural systems.

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***“Ecosystem services are the benefits provided by ecosystems that contribute to making human life both possible and worth living”  
UK National Ecosystem Assessment<sup>1</sup>***

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These services are normally separated into goods or services and fall into four categories. **Diagram 1. Ecosystem Services – What Nature provides for free**, shows some of the most common goods and services provided by healthy ecosystems and very often things we take for granted every day. These include products such as food, fibre and fresh water, processes such as pollination and control of climate and water, cultural heritage, recreation and tourism and vitally the support of all other natural systems such as soil formation, nutrient and water cycling, all contributing to our ability to farm, eat and live. The value of pollination, as highlighted below, is just one of many services we could not survive without.

#### **Value of Pollination**

- The market value of insect pollination of agricultural and horticultural crops in Northern Ireland is estimated at £7.1 million.
- In 2005, the total economic value of pollination worldwide amounted to €153 billion, representing 9.5% of the value of the world agricultural food production.
- Insect pollination is believed to benefit the yields of 30% of globally important crop species and is responsible for an estimated 35% of world crop production.

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<sup>1</sup> <http://uknea.unep-wcmc.org/>

**Diagram 1. Ecosystem Services – What nature provides for free**



Source: <http://www.metrovancouver.org/services/regional-planning/conserving-connecting/about-ecological-health/ecological-services/>

### **Biodiversity: It's Our Duty**

In 2011, the Wildlife and Natural Environment Act (Northern-Ireland) 2011 (WANE)<sup>2</sup> came into force, replacing the Wildlife Order (NI) 1985. This legislation is the primary tool for the conservation and protection of Northern Ireland's threatened or endangered wildlife. Whilst the WANE Act has introduced new species to protected lists, tightened controls on invasive species and increased penalties for wildlife crime, a significant change for Councils was the introduction of a new Biodiversity Duty for all public bodies.

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***"It is the duty of every public body, in exercising any functions, to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions."*** Wildlife and Natural Environment Act (Northern-Ireland) 2011

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<sup>2</sup> <http://www.legislation.gov.uk/nia/2011/15/contents>

## Why is the Duty required?

There are European, National and Regional targets set to halt the loss of biodiversity. The EU vision is for better protection of biodiversity in the EU by 2050. In Northern Ireland the NI Biodiversity Strategy<sup>3</sup> has set a target to significantly reduce overall biodiversity loss. The biodiversity duty is considered a key measure to contribute to these targets and at a Council level, adopting Biodiversity Implementation Plans that focus on internal Council actions and coordinating Local Biodiversity Action Plans, is agreed as an appropriate way to help meet this duty.

## What's involved?

In essence, the aim of the duty is to raise the profile and visibility of biodiversity and to make it an integral part of policy and decision making. Public bodies when undertaking their functions, have to take into account the following five areas:

- The protection of biodiversity
- The maintenance of biodiversity
- Enhancing biodiversity
- Restoring biodiversity
- Promoting the understanding of biodiversity both within and outside the organisation

## Valuing Nature - A Biodiversity Strategy for Northern Ireland to 2020

The Strategy sets out how Northern Ireland plans to meet its international obligations and identifies local targets to protect biodiversity, ensuring that the environment can continue to support our people and economy into the future. It builds upon the first Biodiversity Strategy published in 2002 but adopts the modern and internationally agreed approach that emphasises the management of biological systems to deliver the materials and services upon which people depend – the ecosystem services approach.

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***“By 2050, our life support system, nature, is protected and restored for its own sake, its essential contribution to our well-being and prosperity, and to avert catastrophic changes likely to arise from its loss”*** Valuing Nature – A Biodiversity Strategy for Northern Ireland to 2020

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<sup>3</sup> <http://www.doeni.gov.uk/natural-policy-biodiversity-strategy-to-2020-2015.pdf>

## **Sustainable Development through community planning and planning powers**

New council powers that will be important mechanisms for delivering protection and enhancement of our local biodiversity are the development of a Community Plan and Local Development Plan.

Public services will work together with communities to deliver real improvements for local people, including improving environmental wellbeing and contributing to sustainable development. The Community Plan will be the long-term strategic plan for the future and will provide a simple and clear framework for a wide range of plans and strategies which Council and community planning partners will take forward at both a district and a local level.

Community planning is linked to other new powers, including planning and urban regeneration. Councils must take account of their current Community Plan when preparing a Local Development Plan (LDP) which will provide a spatial expression to the community plan. There will also be a requirement to subject LDPs to a sustainability appraisal which will assist in ensuring that the environment is managed in a sustainable manner. It is recognised in the Strategic Planning Policy Statement for Northern Ireland 'Planning for Sustainable Development' (SPPS) that there is a commitment to preserve and improve the built and natural environment and halt the loss of biodiversity. This will require an integrated approach to the management of the natural and cultural aspects of the landscape.

## **Threats to Local Biodiversity**

Despite the celebration of our rich natural heritage in the Fermanagh and Omagh area, as with most areas in Northern Ireland, many habitats and species are still in decline. Some of these declines can be attributed to global causes while others have more local origins. Legislation and policy guidance is attempting to close the gap on these but of course, implementation, monitoring and enforcement are key.

### **Habitat loss and fragmentation**

Habitat loss is the greatest threat to biodiversity worldwide either from damage, drainage, development, inappropriate management or fragmentation. For example over 90% of species rich grasslands or meadows were lost over a 50 year period in the UK as farming intensified post war and hay production changed to silage. This has resulted in the decline of many species dependant on meadows such as the Irish hare, specialised butterflies and moths and the complete loss of the corncrake. However Fermanagh still hosts pockets of high quality nationally and internationally important meadows.

### **Non-native invasive species, pests and diseases**

Non-native invasive species are the second biggest threat to biodiversity after habitat loss. Human activities are the main cause of the introduction and spread of invasive species through accidental and deliberate releases, stowaways in imported goods or escapees from gardens and large estates. Key invasive species already affecting our area include Japanese knotweed, Himalayan balsam, giant hogweed, zebra mussel, pondweeds and grey squirrel with potentially many more on the horizon. Ash dieback and *Phytophthora ramorum* are current threats with Crayfish plague on the horizon.

### **Pollution**

Pollution is the introduction of contaminants to the environment whether it is chemicals into water, litter, or sewage into our seas. It still remains a serious problem for our environment and for biodiversity as it can kill species directly (fish kills in rivers and lakes, wildflowers and hedges sprayed with weed killer) and destroy habitat over time.

### **Climate change**

Climate change will have significant impacts on both the distribution of species and habitats in our area and their ability to function as ecosystems. For example, species that exist only within certain ranges or temperatures, could be pushed northwards and to higher altitudes, restricting their natural range and compromising their future. Healthy ecosystems will become more important to maintain and protect, as we rely on them for essential services such as water regulation, flood prevention and soil formation.

## Fermanagh and Omagh Local Biodiversity Action Plan

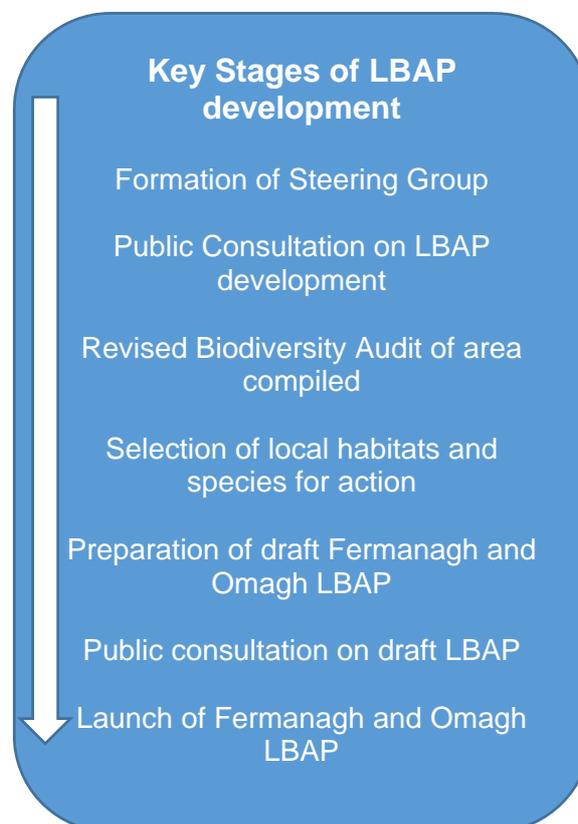
Local Biodiversity Action Plans (LBAP's) have been in place in many Council areas across Northern Ireland since 2002, after the first NI Biodiversity Strategy set a framework for local delivery of Biodiversity Action Planning. Both Fermanagh and Omagh legacy Councils employed Biodiversity Officers and began developing LBAP's in 2005 and 2006 respectively, in partnership with the Ulster Wildlife Trust. These legacy plans now provide the basis on which this new LBAP for the Fermanagh and Omagh District Council area has been produced.

Strengthened legislation through the Biodiversity Duty for public bodies and the continued recognition in the NI Biodiversity Strategy that LBAP delivery is important, has ensured that protecting our environment has remained high on our Council's agenda. The Corporate Plan for Fermanagh and Omagh District Council 2015 - 2019 clearly reflects this in its Mission, **“Leading and serving our community, working with others to promote quality of life, quality places and quality services for all.”** This is transferred through in the Corporate Themes;

- People and Community – Quality of Life
- Place and Environment – Protecting and creating quality places

To this end, a new Biodiversity Steering Group for the Fermanagh and Omagh area was set up in 2014 to begin the process of developing the next phase of LBAP for our new Council area. The steering group currently has a membership of representatives from Council, local experts, statutory and non-statutory organisations. As the delivery phase progresses, more will be invited to participate;

- FODC Councillors and Officers
- Botanical Society of Britain and Ireland (BSBI)
- Countryside Management Branch, (DARD)
- Forest Service Northern Ireland
- Inland Fisheries (DCAL)
- Local experts
- Loughs Agency
- Marble Arch Caves Global Geopark
- National Trust
- Northern Ireland Environment Agency (NIEA)
- Rivers Agency (DARD)
- The Conservation Volunteers
- Transport NI
- Waterways Ireland



Following a detailed revision of the existing biodiversity audits, public consultation and steering group consideration, a selection of local habitats and species were picked for action in this first phase of the LBAP.

Information from the audit<sup>4</sup> enabled the steering group to select these local priorities, as listed below, on the merits of national and regional priority, conservation status, extent, rarity and importance to local people. Key species for action also include those that are iconic or will help to inspire people to take action.

Fermanagh and Omagh LBAP outlines a plan of action to:

- **Help conserve and enhance local habitats and species**
- **Raise awareness and knowledge of local biodiversity**
- **Involve local people and develop partnerships in the delivery of the Fermanagh and Omagh Local Biodiversity Action Plan**

#### **Broad Habitats for action**

- Wetlands
- Calcareous habitats
- Bogs and heath
- Grasslands
- Woodland and hedgerows
- Urban

#### **Local Species for Action**

- Atlantic Salmon
- Bats
- Breeding waders
- Bumblebees
- Devil's bit scabious and marsh fritillary
- Dragonflies and damselflies
- European eel
- Fresh Water Pearl Mussel
- Frogs and newts
- Orchids
- Red squirrel
- Swift
- Wild thyme
- White-clawed crayfish

Specific habitat and species actions are highlighted in the next section of this document but overarching actions that will help deliver for a wider range of species can be found in Appendix 1.

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<sup>4</sup> FODC LBAP Audit available online at [www.fermanaghomagh.com/residential-services/biodiversity](http://www.fermanaghomagh.com/residential-services/biodiversity)

## Local Habitats for Action

### Wetlands

**Wetlands are a widespread and important feature within the Fermanagh and Omagh landscape.** The Fermanagh Lakelands are deservedly-known for their biodiverse, scenic and recreational value. The lakelands are central to the character of the area and form much of the landscape. The diversity of the habitats and species found in the Council area owe much to the presence of the lakelands; 11 NI priority habitats are associated with wetlands.

The reedbeds, muddy banks and their associated flood plains and wet meadows provide a host of invaluable transition zone opportunities for wildlife including plants, insect life and wildfowl. Wet woodlands frequently fringe their shores offering a different set of opportunities to other groups of wildlife such as mammals. Wetlands are perhaps the most under threat due to their sensitivities to drainage, water pollution and infilling.

### Lakes and Ponds

Lakes and ponds are essential for many species, from native fish, wildfowl and otters, to invertebrates and plants such as dragonflies and rare gems like globeflower. There are many wonderful examples of loughs in our Council region with the infamous Upper and Lower Lough Erne, unique Lough Melvin, the Seven Sister cluster at The Murrins and the many smaller loughs dotted around Fermanagh and Omagh such as Local Nature Reserves, Killyfole and Loughmacrory. Lough Erne is particularly important for wildfowl including species such as tufted duck, great crested grebe and mute swan. In winter, populations of whooper swan and goldeneye arrive to avoid the harsher climes of latitudes further north. Breeding waders and a unique Sandwich tern colony also thrive on some islands within Lower Lough Erne, with 40 of the Erne's islands managed by the RSPB for their benefit.

The pollan, Northern Ireland's only native species of whitefish, is found in Lower Lough Erne which is one of only a few locations on the island of Ireland. Lough Melvin is particularly noteworthy as there are three races of brown trout present, namely sonaghan, gillaroo and ferox. Arctic charr is also found in these waters, representing Northern Ireland's only location for this species.

### Rivers and Streams

From mammals to birds, insects to plants, rivers and streams are a vital source of life for all wildlife. The smallest stream will have huge importance for localised biodiversity and a cumulative importance for the catchment as each stream feeds into rivers downstream. Fermanagh and Omagh's rivers are important for many species including the European protected otter, freshwater pearl mussel, Atlantic salmon, native brown trout and white-clawed crayfish. Notable rivers that occur in the area include the Cladagh River, Erne River, Sillees River, Colebrooke River, the River Strule, Owenreagh River and Owenkillew River. Scrub and strips of woodland often follow river corridors as do belts of wildflower meadows along their banks, further enhancing their value.

### **Reedbeds**

Reedbeds are the transitional phase between open water and land, and contain mostly reeds and other tall vegetation. They are typically species poor, however, some rare species can be found here such as the otter, reed bunting and the reed-beetle *Donacia aquatica*. Reedbeds often exist as a patchwork alongside other wetland habitats such as fens and wet woodland which increases the species diversity. Given the abundance of wetlands in the Fermanagh and Omagh area, reedbeds are a widespread feature and are clearly visible from the majority of the walks/cycle paths or lay-by's on the Lough or river shore margins.

### **Key Threats**

- Nutrient enrichment of water through direct pollution incidents and indirect diffuse pollution such as agricultural run-off
- Drainage and changes in water levels
- Shoreline and riverbank erosion and change
- Non-native Invasive species e.g. zebra mussel, potential crayfish plague, and riparian invasive species Japanese knotweed and Himalayan balsam

### **Local Action**

- Raise awareness of the importance of wetlands for biodiversity through specific guided walks, activities at larger joint events, talks and press releases
- Develop initiatives at suitable wetland sites to help enhance their value for wildlife
- Develop partnerships to assist in the delivery of River Basin Management Plans
- Promote and increase the recording of key wetland species

### **Key sites to visit**

- Castle Basin and Broad meadows, Enniskillen
- Castle Archdale Country Park
- Killyfole Local Nature Reserve
- Loughmacrory
- Gortin Lakes
- Strule Riverside Walk, Omagh

### **Other notable species**

- Banded demoiselle
- Native brown trout
- Freshwater pearl mussel
- Kingfisher
- Greenland white-fronted geese
- Whooper swan
- Redshank

## **Calcareous Habitats**

The FODC area hosts a significant quantity of NI calcareous habitat. The underlying carboniferous limestone of the Fermanagh area gives rise to several interesting and notable habitat types, which in many cases are confined only to Fermanagh in Northern Ireland. The rarity of these calcareous habitats, along with their significant contribution to biodiversity means they are afforded protection through statutory designation. The Marble Arch Caves Global Geopark is an excellent network of wildlife sites across the Council area and beyond that showcases not just calcareous habitats like caves and limestone pavements, but bogs, forests, lakes and more. Log on to <http://www.marblearchcavesgeopark.com/> to explore further.

### **Calcareous Grassland**

This type of grassland is found on soils rich in calcium or other basic minerals such as chalk. The resource is principally found in the Knockmore scarpland, Cuilcagh and Marlbank areas. A range of different plant species has developed including Irish eyebright and blue moor grass as well as wild thyme, harebell and bird's foot trefoil. These sites are home to a large range of breeding butterflies and moths including the marsh fritillary butterfly and the narrow-bordered bee hawk-moth. Other typical associated priority species are the Irish hare and skylark.

### **Limestone pavement**

Limestone pavement is a relict feature of the last Ice Age, thousands of years ago. During this time large areas of bare limestone were exposed by the scouring action of ice sheets as they moved along the landscape. As glaciation came to an end, huge amounts of debris were left on top of this limestone, in which woodlands established. Naturally acidic conditions developed, which caused the limestone below to dissolve and form the characteristic features of limestone pavement we see today; the clints (blocks of limestone), and grykes (deep vertical fissures between the clints).

Wild thyme, blue-moor grass and sheep's fescue are the most commonly recorded plant species that occur on the clints of limestone pavement. The grykes provide a special micro-climate and shelter from grazing animals, with the most frequent species including herb-robert and wood sorrel. In Northern Ireland, limestone pavement only occurs in Fermanagh, making it a crucially important part of the landscape and biodiversity of the Fermanagh and Omagh area. Killykeegan and Crossmurrin Nature Reserve and the lower reaches of Cuilcagh Mountain Park are excellent locations to discover these unique habitats.

### **Underground caves**

The limestone hills of Fermanagh contain a large number of caves which have been carved by weakly acidic water flowing through the limestone over thousands of years. There are numerous caves within the Marble Arch Global Geopark, the most famous being the Marble Arch Caves which are normally open for guided tours from March to September. Cave entrances in the Geopark that are safe to view but not to enter include Whitefathers Cave just outside Blacklion and Pollnagollum Cave in Belmore Forest at Boho. Important cave species include bats, freshwater shrimps, moths and spiders.

### **Marl lakes**

Marl lakes are base rich (calcareous) and nutrient poor and are characterised by clear water, deposits of calcium phosphate (marl) and charophytes (calcareous algae). A specialised range of plants known as stoneworts are specially adapted to this environment. Two types of stonewort, the pointed stonewort and lesser-bearded stonewort, both of which are extremely rare, occur in the marl lakes of Fermanagh. On the B143 between Rosslea and Clones, marl lakes can be seen amongst patches of willow scrub.

### **Turloughs**

Turloughs are seasonal lakes that occur in areas where there is low-lying limestone that is flooded in winter due to the increased level of the water table. Turloughs are quite unique as collectively they are only found at four sites in the UK and three of these occur in Fermanagh. Turloughs exhibit distinctive types of plant groupings, with white water-lily, bog bean, and pond water-crowfoot being the most common species. The nationally rare fen violet has also been recorded in turloughs.

### **Key Threats**

- Habitat loss
- Scrub encroachment
- Water abstraction
- Eutrophication
- Quarrying
- Stocking with fish

### **Local Action**

- Raise awareness of the importance of calcareous habitats for biodiversity through specific guided walks, activities at MACGG events, talks and press releases
- Advise landowners when possible on appropriate management
- Develop initiatives at suitable sites to help enhance the value for wildlife
- Promote and increase the recording of key calcareous grassland species.

### **Key sites to visit**

- Killykeegan and Crossmurrin Nature Reserve
- Cuilcagh Mountain Park at MACGG

### **Other notable species**

- Dingy skipper
- Marsh fritillary
- Narrow-bordered bee hawk-moth
- Birdsfoot trefoil

## **Bogs and Heath**

Bogs and heath continue to be one of the most characteristic features of the FODC area. There are three distinctive types of peatland ecosystems namely: lowland raised bog, blanket bog and fens and two heathland types in our area; upland heathland and montane heath. They were historically viewed as vast desolate places that were used for afforestation, sheep grazing and peat cutting, but in recent years the importance of bogs and heath for biodiversity, as valuable carbon sinks and as key features in flood alleviation systems, has been widely recognised.

Bogs are also an intrinsic part of our cultural heritage and have harboured some of our most significant archaeological finds over the decades from treasure hoards and bog bodies to ancient track ways and ritual monuments.

### **Lowland raised bog**

Lowland raised bogs occur in low-lying areas, usually in river valleys, old lake basins or between drumlins and are largely fed by rainfall. The acidic, waterlogged, oxygen-deficient conditions found on bogs, mean only a specialised range of plants and animals can live here. Key plant species typically found are *Sphagnum* mosses, sundews, butterworts, cranberry, lichens and cotton grasses. Lowland raised bogs also support a distinctive range of animals including breeding waders such as curlew, skylark and a variety of invertebrates. Rare and localised invertebrates such as the Large Heath Butterfly are found on some lowland raised bog sites. From Black Bog Special Area of Conservation (SAC), Fairywater Bogs SAC, Tonnagh Beg Bog and Deroran Bog in the Omagh area to Tattynamona and Moninea in Fermanagh, there is a significant resource of protected sites.

### **Blanket bog**

Blanket bogs are found on higher ground as a layer of peat and vegetation covering the hillsides like a blanket. Within Fermanagh and Omagh, wide expanses of blanket bog are found: to the north at Bessy Bell and to the south the Sperrins; to the west around Lough Bradan, Pigeon Top, Pettigo Plateau; and in the south Cuilcagh Mountain. Again, blanket bog often occurs as a mosaic with other habitats such as heathland and on lower slopes with purple moorgrass and rush pasture, and fens. Important species found on blanket bogs include *Sphagnum* mosses, sundew, hare's tail cotton grass, tall bog-sedge, green hairstreak butterfly, golden plover, skylark and Irish hare.

### **Upland heathland**

Upland heathland often forms a mosaic with other habitats such as blanket bog and acid grasslands, and can therefore be very rich in species diversity. Typical species include bell heather, ling heather, many macro moths, Irish hare, hen harrier, red grouse and skylark, among many others. In the Fermanagh and Omagh area there are notable populations of hen harrier, red grouse and lower plants such as mosses and liverworts. The rare argent and sable moth and sword grass moth have also been recorded here. The main areas of upland heath are restricted to the upper slopes of Mullaghcarn, Bessy Bell, Glenlark, Brougher Mountain, Slieve Beagh, Cuilcagh, and Correl Glen NNR within Lough Navar.

### **Montane heath**

This type of heathland is very rare as it is found only in the uppermost reaches of Northern Ireland's mountains, in areas over 600m in altitude. There are only three

known locations of montane heath in Northern Ireland; the Mourne Mountains, Sawel Mountain and Cuilcagh Mountain. Conditions on these mountain tops are hostile, with high rainfall, strong winds and shallow soils. Consequently, only a limited range of plant species can survive. Typical plant species include shrubs such as heather, crowberry, and the rare juniper. Wind-pruned willow scrub has also been recorded on the montane heath of Cuilcagh Mountain. Rare species include alpine clubmoss and stag's horn clubmoss. Other species present are similar to those found in upland heathland and blanket bog, and include meadow pipit and wheatear.

### **Key Threats**

- Habitat loss and fragmentation
- Drainage
- Extensive peat extraction
- Over grazing and under grazing
- Trampling and disturbance
- Scrub encroachment
- Non-native invasive species such as Rhododendron
- Inappropriate development such as wind farms

### **Local Action**

- Raise awareness of the importance and value of bogs and heaths for biodiversity through specific guided walks, activities, talks and press releases
- Identify and advise landowners where possible on appropriate management
- Develop initiatives at suitable sites to help enhance the value for wildlife
- Promote and increase the recording of key bog and heath species
- Promote peat free compost at wildlife gardening talks and workshops

### **Key sites to visit**

- Cuilcagh Mountain Park at MACGG
- Creggan Bog, An Creagan Visitor Centre
- Boorin National Nature Reserve
- Lough Navar
- Topped Mountain
- Slieve Beagh

### **Other notable species**

- Large heath butterfly
- Green hairstreak butterfly
- Wheatear
- Meadow pipit
- Golden plover

## **Grassland and Roadside Verges**

Grasslands are naturally diverse habitats and many different types can be found in the District; lowland meadows, calcareous grassland, coastal and floodplain grazing marsh, lowland dry acid grassland, purple moor-grass and rush pasture and road side verges. While the majority of our biodiverse grasslands have been lost to modern farming practices, development etc., a significant proportion of what remains occurs in West Fermanagh and South Tyrone (currently being highlighted by an Ulster Wildlife project 'Saving our Magnificent Meadows'). Outside these meadows, roadside verges have inadvertently become a refuge for grassland habitats. Low nutrient levels, minimum disturbance and/or limestone substrates have contributed to their development.

### **Lowland meadow**

Lowland meadows, or hay meadows have all but disappeared in Northern Ireland with remnant fields still found in Fermanagh and a few south of Omagh. They are important habitats for many wildflowers, such as meadow vetchling, yellow rattle and the rare blue-eyed grass, and a wide diversity of grasses which in turn support butterflies and bees. This seed source and long grass habitat was once home to the corncrake and other ground nesting birds, but the decline in the habitat has contributed to their disappearance. It continues to be important for breeding waders.

### **Purple moor-grass and rush pasture**

This is a complex wet grassland, composed of many grasses such as quaking grass, sedges and rushes like carnation sedge as well as flowering plants like wild angelica. Purple moor-grass is always present in the mix. Often purple moor-grass and rush pasture occurs as a patchwork with other habitat types such as fens, floodplain grazing marsh and lowland raised bog, increasing its value for biodiversity. You will see this habitat throughout Fermanagh, typically in field corners, wet hollows, and as parts of other habitats. The best quality pastures are protected and include Moneendogue ASSI. The marsh fritillary butterfly is reliant on good pastures where devil's bit scabious is present, as this is the only food plant of the butterfly. Our district is vitally important for this European protected species.

### **Floodplain grazing marsh**

This habitat occurs on flat, low lying land that is periodically flooded. Drainage ditches are an integral part of grazing marsh and are biodiversity hotspots. Rushes and sedges are commonplace. Within this habitat type there are many factors that dictate species diversity, such as how the water levels are managed, how the area is managed and the levels of nutrients present in the water. Upper Lough Erne has significant areas of floodplain grazing marsh with important breeding wader populations and there are numerous access points and lay-bys, enabling the habitat to be viewed and appreciated.

### **Farmland**

The main land use in Fermanagh and Omagh is farmland. The district is predominately rural with Enniskillen and Omagh being the two major towns. Much of the land, especially in south Fermanagh, is designated as Areas of Special Scientific Interest or Special Areas of Conservation. This means that the landowner has to manage it sensitively for the habitat or species present. Outside of this, lowland farmland is mainly characterised by rye-grass green fields with simple hedgerow boundaries,

whereas upland farmland is more likely to be open with degraded heathland and cut-over blanket bog.

Farmland has vital importance for some wildlife, and has great potential for biodiversity if managed more sensitively. Through agri-environmental schemes, farmers can be remunerated for managing their land for the benefit of biodiversity. Many options have been available in the past for example leaving winter stubble for birds or managing buffer zones around lakes and rivers which have had great biodiversity benefits. A great example of excellent partnership working has been the gains for breeding waders achieved between a pool of approximately 150 farmers, the agri-environment schemes and hands-on RSPB advisory support.

### **Roadside verges**

Road side verges extend the value of hedgerows and adjacent farmland by acting as wildlife corridors between fields. When they are rich with grasses such as sweet vernal grass, and wildflowers such as bird's foot trefoil and ox – eye daisies, they add to the overall biodiversity value of the countryside, providing seed heads for birds, nectar plants for butterflies and bees, and cover for many insects, mammals and birds. Rural roadside verges in Fermanagh are of particular interest as the rare blue-eyed grass and dingy skipper butterfly, both Northern Ireland Priority Species, have been recorded here.

### **Key threats**

- Scrub encroachment
- Inappropriate management/grazing
- Changes in agricultural practice
- Abandonment

### **Local Actions**

- Raise awareness of the importance and value of grasslands for biodiversity through specific guided walks, activities, talks and press releases
- Work with landowners of species rich grasslands in order to raise awareness of their importance and ultimately maintain and improve that land for biodiversity
- Through partnerships, manage key road side verge sites for biodiversity
- Pilot wildflower meadows on publically accessible land to improve areas for pollinators and act as best practice examples
- Promote and increase the recording of key grassland species

### **Key sites to visit**

- Castle Archdale County Park
- Castle Coole
- Crom Estates
- Killykeagan and Crossmurrin - Marlbank National Nature Reserve
- Key verges from Enniskillen to Derrygonnelly and Belleek.

### **Other notable species**

- Skylark
- Meadow pipit
- Irish hare
- Blue-eyed grass
- Dingy skipper
- Fragrant orchid

## **Woodlands and Hedges**

Woodland is the climax vegetation for our area, meaning that if most habitats were left to progress with no interference from humans, some form of woodland would develop. However, as humans have settled over the years, many of our woodlands have been cleared for harvesting and to create farmland. Today, Northern Ireland is one of the least wooded areas in Europe, with only 1% of land under native tree cover.

### **Coniferous forests**

There are an estimated 37,500 hectares of woodlands in the FODC area. Coniferous forests representing 60% of the total are normally found in the upland areas and consist largely of non-native species such as Sitka spruce, Norway spruce, Lodgepole pine and larch. They play a significant role in the conservation of a number of priority species such as the red squirrel and hen harrier. Key examples of coniferous woods include Lough Navar, Ely Lodge Forest, Castle Caldwell Forest, Gortin Glen Forest Park and An Creagan Forest.

### **Oak woodland**

Oak woodlands are mainly dominated by oak trees, but they also contain a diverse mix of native tree species such as downy birch, hazel, holly and rowan. Their understorey and ground flora is normally quite diverse, with typical plants including bluebells, wood anemone, bramble, ferns, lichens, mosses and liverworts, and not forgetting the important fungi.

Most of Fermanagh and Omagh's important oakwoods, such as Drumlea and Mullan Woods, Owenkillew and Glenelly Woods, Largalunny and Florencecourt are all protected as ASSI's. However, many other pockets of important woodland exist throughout the district and are often associated with river corridors. Upper Lough Erne – Crom ASSI is a mecca for wildlife and showcases a wide range of habitats including oak woodland. It is the perfect place to visit in the hope of catching a glimpse of the wonderful purple hairstreak butterfly, a cheeky red squirrel, any one of the eight species of bat that occur in NI or even the more common, but rarely sighted, pine marten or otter.

### **Wet woodland**

Wet woodland is normally around lake shores, along streams, or on wet flushes where the soils are poorly drained or waterlogged. Typically, wet woodlands are dominated by willow, alder or downy birch and the high humidity in wet woodlands also favours the growth of a variety of mosses and liverworts. Wet woodland in the Fermanagh area is important for the rare alder buckthorn, which in turn supports the regionally rare dark umber and brown scallop moths. Good examples of wet woodland are present in Castle Caldwell Forest, Castle Archdale Country Park and on the shores of Lower Lough Erne.

### **Parkland**

Parklands are important types of woodland characterised by veteran or mature trees, both native and non-native, as well as deciduous and coniferous, surrounded by grassland pasture. They are normally associated with grand old houses or demesnes such as Ecclesville Demesne in Fintona, and the National Trust's Castle Coole, Crom Estates and Florence Court. Parklands support a wide variety of species including rare lichen species, many beetles, bugs and insects, and numerous birds such as song thrush and bullfinch. Other NI priority species that can be found in our parklands include red squirrel, many of the bat species and the spotted flycatcher.

### **Ashwoods**

This habitat is distinguished by the dominance of ash in the woodland canopy, although other species such as oak and downy birch are also sometimes present. Mixed ashwood is renowned for the diverse range of plants present at ground level, including bluebell, primrose and wood anemone. As ashwoods usually occur on base-rich soils, they are concentrated in the west of Fermanagh. Key woods include hanging rock and Rossaa NNR, Marble Arch Nature Reserve and Cladagh Glen.

### **Hedgerows**

Hedgerows are defined as linear boundaries, comprised of planted shrubs and are vital wildlife corridors within our fragmented landscape. A species-rich hedgerow should contain six or more woody species on average in a 30 metre length. If the hedge has less than this but has a rich ground flora of grasses and wildflowers such as primrose, common dog-violet etc., then it can still be classified as species-rich. Hedgerows resemble woodlands in their basic structure of trees and an understorey and are therefore very important for the movement of birds and animals from one pocket of woodland to another, providing much needed refuge throughout the countryside. They are vital habitats for wildlife, including plants such as primrose and herb robert, birds such as the dunnock and yellowhammer, mammals such as bats, and many types of insects such as butterflies and bumblebees.

### **Key threats**

- Habitat loss and/or fragmentation
- Non-native invasive species such as grey squirrel, Japanese knotweed and Rhododendron
- Inappropriate management
- Ash Dieback and other tree diseases

### **Local Actions**

- Raise awareness of the importance of woodlands and hedges through specific guided walks, activities, talks and press releases
- Work with landowners where possible to raise awareness of the importance of hedges for biodiversity and through training and funding, help replant and restore.
- Increase the woodland cover in our district through promotion of funded schemes e.g. agri-environment and Woodland Trust schemes that are available for woodland restoration, restocking or creation.
- Through partnerships, manage key road side hedges for biodiversity
- Pilot new woodland, hedge planting and woodland management schemes on publically accessible land to act as best practice examples
- Promote and increase the recording of key woodland and hedge species

### **Key sites to visit**

- Castle Caldwell Forest
- Crom Estates
- Florence Court
- Gortin Glen Forest Park
- Lough Navar Forest
- Seskinore Forest
- Sloughan Glen

### **Other notable species**

- Great spotted woodpecker
- Sparrow hawk
- Purple hairstreak
- Pine marten
- Dark umber and brown scallop moths
- Primrose

## **Urban**

Urban habitats are vitally important for a wide range of wildlife and serve to introduce people to biodiversity. Most people first encounter wildlife in their back yard, at the local park or on local golf courses! From ladybirds to hedgehogs, blue tits to song thrushes, and even bats, our urban habitats are a refuge and a much needed feeding ground for many native species.

## **Gardens**

Gardens are where most people first experience wildlife. Whether it is a ladybird, a bumblebee or a robin, gardens are essential feeding points and homes for lots of wildlife. Both urban and rural gardens have equal importance in improving the biodiversity value of their surroundings. A row of town gardens with small trees, nectar rich flowers and bird feeders will support many insects and garden birds in an otherwise sterile environment. Likewise in the countryside, a larger garden with a wildlife pond, mature trees and many flowering plants will supplement adjacent farmland habitat and provide extra food and shelter in the winter months.

## **Public parks and open space**

Public parks, government land and open spaces provide an opportunity for biodiversity to flourish in urban areas that otherwise would not support wildlife. Typical species are similar to gardens, however very often different management regimes and larger spaces have led to new and improved habitats to be created including mini-woodlands, meadows and ponds. Urban habitats have a special importance for biodiversity, as it is where people and wildlife co-exist and where people are encouraged to relax and enjoy nature.

## **School grounds**

School grounds have the potential to be a biodiversity hotspot and valuable educational resource. Outdoor classrooms are perfect places for children to explore and learn from nature. Easy wildlife projects include planting hedges and native trees, creating a butterfly garden, making insect hotels, bird boxes and bug boxes as well as surveying what wildlife already makes the school grounds their home.

## **Business and development sites**

Many industrial sites, business and new developments have areas that are of benefit to wildlife or have the opportunities to provide new homes for wildlife. Neglected corners provide a refuge for a range of plants and animals, old derelict buildings are often vital nesting spots for birds such as swifts, house martins and swallows and can be seasonal shelters for bats. New developments have the opportunities to incorporate bee friendly planting, native trees, nesting bricks or boxes and, where the space allows, extended open space for residents or workers to benefit from. The South West Area Hospital is an excellent example where a large meadow with walks and seating was created, affording staff, patients and visitors the opportunity to experience nature easily, benefiting their health and well-being on a daily basis.

### **Key threats**

- Inappropriate development and missed opportunities
- Non-native invasive species such as grey squirrel, Japanese knotweed and Himalayan balsam
- Unsympathetic management including excessive chemical use, excessive grass cutting, hedge cutting out of season
- Ash Dieback or other tree diseases

### **Local Actions**

- Raise awareness of the importance of urban habitats for wildlife through guided walks, wildlife gardening workshops, talks and press releases
- Promote and increase the recording of key urban species, utilising the range of citizen science schemes available such as RSPB Big Garden Bird Watch, Butterfly Conservation Big Butterfly Count, BTO Garden Birdwatch, Bumblebee Monitoring scheme etc.
- Engage with local businesses to reduce their impact on biodiversity and help explore their options to help local wildlife
- Support government departments where possible, through advice and signposting, on how to manage their estate for wildlife
- Provide interpretation at key public parks to explain their biodiversity value

### **Key sites to visit**

- Bellanaleck Moorings Walk
- Cottage Lawn, Belcoo
- Ecclesville Demesne, Fintona
- Forthill Park, Enniskillen
- Grange Park, Omagh
- McCauley Park, Omagh
- Racecourse Lough walk, Enniskillen
- Riverside Walk, Enniskillen
- Riverside Walk, Omagh
- Round 'O' Park, Enniskillen

### **Other notable species**

- Swift
- House sparrow
- Song thrush
- Bats
- Hedgehog
- Garden tiger moth
- Small tortoiseshell

## **Local Species for Action**

The biodiversity audit highlighted the variety of species and habitats found in the Fermanagh and Omagh area. At least 216 of the 481 NI Priority Species have been recorded locally in the area. 12 species have been selected by the Fermanagh and Omagh LBAP Steering Group as priority species for conservation action. Other species not selected for specific action will still benefit from the overarching action plan and local habitat and species action plans.

Species	Description	Local sites	Local Actions
<b>Atlantic Salmon</b>	<p>The Atlantic Salmon is an anadromous species (i.e. the adults migrate from the sea to breed in freshwater). After spawning in shallow, gravelly areas of clean streams and rivers, the young live for a period of 1-6 years before migrating downstream to the sea as smolts. After 1-3 years at sea, a homing instinct drives them back to the river they were spawned in. This leads to genetically distinct stock between rivers.</p> <p>Key threats to this species are pollution, physical barriers to migration, exploitation from netting and angling, physical degradation of spawning and nursery habitats.</p>	<p>Melvin, Erne and Foyle Catchments</p>	<ul style="list-style-type: none"> <li>-Work in partnership to promote conservation of salmon through regulation</li> <li>-Use salmon as a key species to promote responsible use of waterways and clean-up operations</li> <li>- Highlight the threats to salmon through media, guided walks and talks</li> <li>-Working in with relevant stakeholders to instigate practical habitat enhancement projects where possible</li> </ul>
<b>European Eel</b>	<p>The European eel is a fascinating snake-like fish and is the only eel found in fresh water. It is still of commercial importance to Northern Ireland despite major international decline. Unlike other migratory fish, it begins its lifecycle in the ocean, namely the Sargasso Sea and over a period of nearly a year, migrates across the Atlantic towards Europe, where it enters freshwater systems. Here it grows and remains for up to 20 years, before returning to the Sargasso Sea to spawn.</p> <p>Key causes for its historic decline include overfishing, habitat loss, barriers to migration, pollution and changes in the ocean circulation.</p>	<p>The European eel is found in most lowland rivers and lakes in Northern Ireland.</p> <p>You can see the trap and transport process of silver eels at Lady Craigavon Bridge, Portora Gates, Ferney Gap and Roscor Bridge within the Erne catchment.</p>	<ul style="list-style-type: none"> <li>-Using the European Eel as a flagship species, raise awareness of the importance of wetlands for biodiversity through talks, guided walks and media releases</li> <li>- Encourage riparian and waterway owners to be aware of where eels are present and ensure free passage</li> <li>-Eel management plans have been drawn up under the EU eel regulation and have been incorporated into Northern Ireland law with the enactment of the Eel Fishing Regulations (Northern Ireland) 2010.</li> <li>-Promote the current regulations to all water users and anglers</li> </ul>

<p><b>Freshwater Pearl Mussel</b></p>	<p>The Freshwater Pearl Mussel is a filter-feeding mussel that lives in fast-flowing unpolluted rivers for up to 100 years. A key stage of the mussel's life cycle involves a symbiotic relationship with Atlantic Salmon. For a period of time, the mussel's larvae will snap shut on a gill filament of a salmon or trout and grow parasitically. The salmon are thought to benefit from cleaner water through this relationship.</p> <p>Main threats are water pollution, poaching of riverbank and sedimentation, in stream destruction and low numbers of salmon.</p>	<ul style="list-style-type: none"> <li>-Tempo River</li> <li>- Claddagh River</li> <li>- Owenkillew River</li> <li>- Owenreagh River</li> </ul>	<ul style="list-style-type: none"> <li>-Seek projects to help reduce water pollution, poaching and sedimentation of rivers</li> <li>-Raise awareness of freshwater pearl mussel, its habitat and key threats through talks and media releases</li> </ul>
<p><b>White-clawed crayfish</b></p>	<p>White-clawed crayfish is widely distributed throughout lakes and rivers in the Fermanagh area as it needs calcium rich water that is clear and oxygen rich in order to build its limy shell. The main threats are non-native crayfish introductions, crayfish plague and water pollution</p>	<ul style="list-style-type: none"> <li>-Lower Lough Erne feeder streams</li> <li>- Lough Navar lakes</li> <li>- Colebrook River</li> </ul>	<ul style="list-style-type: none"> <li>-Promote the correct procedures of where to report sightings of crayfish plague and non-native crayfish introductions</li> <li>-Disseminate information on existing biosecurity measures in place regularly</li> <li>-Undertake recording schemes to establish exact locations of white-clawed crayfish</li> </ul>
<p><b>Wild thyme</b></p>	<p>A native wildflower found on sand dunes or rocky outcrops. It is an aromatic, creeping perennial with small leaves and dense flowering heads. This eye catching herb is a food plant for many moths and butterflies and provides important nectar for bees. The main threats are habitat loss, scrub encroachment and trampling.</p>	<p>Restricted to the limestone areas in Co. Fermanagh such as Killykeegan and Crossmurrin <i>NNR</i></p>	<ul style="list-style-type: none"> <li>-Use wild thyme as a flagship species to raise awareness of the importance of species rich grassland for biodiversity through talks, walks and media releases</li> <li>- Provide wildflower identification training to encourage more people to record wildlife</li> </ul>
<p><b>Orchids</b></p>	<p>Wild orchids are elegant plants, with very impressive delicate sculptured flowers. They are one of the world's</p>	<p>Key sites across the area include;</p>	<ul style="list-style-type: none"> <li>-Provide wildflower identification training to encourage more people to</li> </ul>

	<p>most highly evolved flowering plants. There are 37 different types of orchid and many hybrid species on the island of Ireland. Orchids are found in different types of habitat (woodland, wet or dry grassland, sand dunes, etc) and this can help with their identification. Each orchid has its own flowering season, which can be from April to as late as September. They are a good indicator species of specie rich grassland, in which an assemblage of other wildflowers may occur.</p> <p>Key threats include inappropriate management, grazing pressure. scrub encroachment and nutrient enrichment</p>	<p>Common spotted orchid → widespread including Devenish Nature Reserve Early Purple Orchid → Castle Coole</p> <p>Greater butterfly orchid → Castle Coole</p> <p>Lesser butterfly orchid →Castle Archdale Country Park, Killykeeghan and Crossmurrin NNR</p> <p>Heath-spotted orchid → Killykeeghan and Crossmurrin NNR</p> <p>White mountain orchid → Killykeeghan and Crossmurrin NNR</p> <p>Bee orchid → verges near Brookeborough and Castlecaldwell.</p>	<p>record orchids in the wider countryside</p> <ul style="list-style-type: none"> <li>- In partnership, coordinate the correct management of key roadside verges to improve them for orchids</li> <li>- Manage and promote public sites sensitively where orchids occur</li> </ul>
<p><b>Dragonflies and Damselflies</b></p>	<p>Dragonflies and damselflies are insects that are attractive and entice their observers to watch more closely. From lake fringes, slow moving rivers, bog pools and garden ponds to a wet ditch, these insects can be found in a wide range of places and therefore are a great species to win the hearts of the public.</p> <p>The adult and larvae stages of dragonflies and damselflies are predators, meaning they feed on</p>	<p>Fringes of Lough Erne and satellite lakes, Castle Archdale Country Park, Crom Estate, An Creagan Bog, Black Bog, Gortin Lakes, Killyfoyle LNR, Loughmacrory and some rivers including River Strule, Camowen River, Garvary River and Sillies River.</p>	<ul style="list-style-type: none"> <li>-Provide dragonfly and damselfly identification training to encourage more people to record in the wider countryside</li> <li>- Survey key sites under public management and manage better for the species present</li> <li>- Encourage the retention of wetlands, wet features in gardens and parks, to provide vital habitat for dragonflies and damselflies</li> </ul>

	<p>smaller invertebrates. In turn, they are important in freshwater food chains as they are a significant food source for fish, birds, spiders and other invertebrates.</p> <p>Key threats are habitat loss, nutrient enrichment/pollution, invasive species, lack of knowledge</p>		
<p><b>Breeding waders</b></p>	<p>Breeding waders live and breed in wetland habitats, wet grassland, hay meadows, unimproved pasture and in some upland areas, where there is a good supply of invertebrates. These include lapwing, redshank, curlew and snipe.</p> <p>Threats are wide ranging but include drainage, agricultural improvement, predation on small, fragmented populations, dereliction through abandonment and disturbance relating to development and dogs.</p>	<p>Fermanagh is the stronghold for waders in NI with concentrations on the islands in Lower Lough Erne and Upper Lough Erne. Fairy Water Bogs and Black Bog SAC are also a significant stronghold.</p> <p>Approx 60% of NI redshank in Lough Erne</p>	<p>-- Work with landowners where waders occur to encourage sensitive management</p> <ul style="list-style-type: none"> <li>- Highlight the threats to waders through media and guided walks and talks</li> <li>- Encourage responsible rambling in sensitive areas during breeding season</li> <li>- Promote the recording of waders across the district</li> </ul>
<p><b>Devil's bit scabious and Marsh fritillary</b></p>	<p>Devil's bit scabious is a herbaceous plant that produces a small blue/purple flower in summer/early autumn and is known locally as the 'blue button'. It is the sole food plant of the European protected marsh fritillary butterfly caterpillar and the Narrow-bordered bee Hawk moth caterpillar.</p>	<p>Lough Navar forest, Garrison meadows, West Fermanagh scarplands, Glenlark townland, Gortin and Drumquin hinterland</p>	<ul style="list-style-type: none"> <li>-Provide wildflower identification training to encourage more people to record wildflowers including devil's bit scabious and other wetland species</li> <li>-Help map key sites to guide marsh fritillary butterfly web surveys</li> <li>- Work with landowners of species rich grasslands in order to raise awareness of their importance and ultimately maintain and improve that land for biodiversity</li> </ul>

<p><b>Red squirrel</b></p>	<p>Red Squirrels have found a refuge in coniferous forests but can still be found in deciduous woodland. Their varied diet includes nuts, seeds, berries and fungi. They are an endangered species due to the threats that the grey squirrel poses, including disease and out-competition</p>	<p>Found throughout Co. Fermanagh in gardens, woods and forests. Remnant populations found in Gortin Glen Forest and around the Drumquin area. More single records of reds are being submitted closer to Omagh town, Tempo and other villages throughout.</p>	<ul style="list-style-type: none"> <li>- Support the work of local red squirrel groups including the Fermanagh Red Squirrel Group and West Tyrone Red Squirrel Group</li> <li>- Encourage red squirrel records to be submitted to CEDaR</li> <li>- Celebrate Red Squirrel week each October</li> <li>- Work in partnership with NGO's and public landowners to seek viable solutions to the grey squirrel threat</li> <li>- Highlight the importance of wildlife corridors to allow squirrels to move safely across the landscape.</li> <li>- Educate on the importance of grey squirrel control</li> <li>- Educate on best practice in supplementary feeding of reds</li> </ul>
<p><b>Bats</b></p>	<p>Bats are one of the smallest mammals in NI, commonly found in buildings, trees, caves and bridges. Despite their widespread occurrence, they are afforded European protection due to their sensitivity to habitat change and vulnerability to persecution. Key threats include loss of roost sites such as buildings, trees, bridges, foraging areas, wildlife corridors and poisoning.</p>	<p>All eight species of bat can be found at Crom Estate. Bat records are sensitive and not readily available to the public but bats can be seen in many habitats; along rivers and lakes, in woodlands, in your garden or along a hedgerow in the late evening.</p>	<ul style="list-style-type: none"> <li>-Run bat walks and talks across the district to raise awareness</li> <li>- Provide advice to members of the public on bat conservation</li> <li>- Guide Council and other organisations on their legislative duties with regards bats and development</li> <li>- Signpost public in aid of help if grounded or injured bats are found</li> <li>- Survey public spaces each year to identify roost sites and key foraging areas</li> </ul>
<p><b>Bumblebees</b></p>	<p>There are 20 species of bumblebee on the island of Ireland of which one third are threatened with extinction and an additional 3 species are near threatened. They are normally associated with flower rich grasslands, vibrant gardens and species rich hedgerows. With the decline of grasslands and</p>	<p>Records show most people will see 6 bumblebee species in their gardens and this makes up 95% of the bumblebees present in NI. These include red-tailed bumblebee, white-tailed</p>	<ul style="list-style-type: none"> <li>- Raise awareness of the plight of the bumblebee, the threats they face and how to help</li> <li>-In partnership, manage key road-side verges to create better wildlife corridors</li> <li>- Trial pollinator friendly plants in public parks and gardens, showcasing best practice examples</li> </ul>

	<p>hay meadows, there is little natural food for them in the wider countryside, meaning parks and gardens are increasingly becoming their refuge.</p>	<p>bumblebee, buff-tailed bumblebee, garden bumblebee, early bumblebee and common carder bee.</p>	<ul style="list-style-type: none"> <li>- Encourage the public to make their gardens more bee friendly</li> <li>- Promote the recording of bumblebees by providing bumblebee recording training</li> <li>- Support the Pollinator Plan 2015-2020</li> </ul>
<p><b>Frogs and Newts</b></p>	<p>Both the common frog and smooth newt are the only amphibians resident in NI. Both will use a wide range of wetland habitats and are commonly found in garden ponds, wet ditches and lakes throughout the district.</p> <p>Whilst newts have a diet of invertebrates both on land and in the water, frogs only eat invertebrates on land such as slugs, insects, worms and spiders.</p> <p>Key threats are direct loss of habitat such as infilling of breeding sites, fragmentation, exposure to pesticides and herbicides and unsympathetic habitat management.</p>	<p>Common throughout the district from Ecclesville Demesne pond, An Creagan ponds, Loughmacrory, Killyfole LNR,</p>	<ul style="list-style-type: none"> <li>-Provide identification training to encourage more people to record frogs and newts</li> <li>- Raise awareness of frogs and newts, the threats they face and how to help</li> <li>-Run wildlife gardening workshops, talks and walks to encourage gardening for frogs and newts</li> <li>- Provide advice and signposting to projects that will affect frogs and newts</li> <li>- Survey key sites under public management and manage better for frogs and newts</li> <li>- Encourage the retention of wetlands, wet features in gardens and parks, to provide vital habitat for frogs and newts</li> </ul>
<p><b>Swift</b></p>	<p>Swifts are fascinating birds that are here for just 3-4 months a year from May – August. They have a unique ability to drink, eat, bathe and even sleep on the wing, only landing intentionally to breed and nest. Significant declines are partially due to the loss of nest sites as buildings are lost or renovated.</p>	<p>Swifts can be seen every summer in flocks as they take part in screaming parties over rooftops in Enniskillen and Omagh towns, Derrygonnelly and Lisnaskea.</p>	<ul style="list-style-type: none"> <li>-Raise awareness and encourage the public to take part in swift recording each summer</li> <li>- Monitor important nesting sites</li> <li>- Identify new nest sites</li> <li>- Encourage businesses and public organisations to erect swift boxes or swift bricks into new or existing buildings</li> <li>- Trial the use of swift sound systems to attract swifts to new sites</li> <li>- Provide advice and signposting to projects that need swift mitigation during renovation works</li> </ul>

<p><b>Non – native Invasive Species</b></p> <p><b>A threat to all species...</b></p>	<p>Non-native invasive species are the second biggest threat to biodiversity after habitat loss. Human activities are the main cause of the introduction and spread of invasive species through deliberate releases, stowaways in imported goods or escapees from gardens and large estates. Key invasive species affecting our area include Japanese knotweed, Himalayan balsam and giant hogweed, zebra mussel, pondweeds, grey squirrel, American mink and potentially many more on the horizon.</p>	<p>Grey squirrels – Widespread but including Grange Park, McCauley Park</p> <p>Japanese Knotweed – Riverside walk, Omagh, many roadside verges, many riverside banks</p> <p>Himalayan Balsam – most riverside banks</p> <p>Giant Hogweed – River Strule, Clanabogan</p> <p>Zebra mussels – Lough Erne system including satellite lakes and Lower Lough MacNea</p> <p>Pondweeds such as Nuttall’s pondweed in Lough Erne</p> <p>American mink - widespread</p>	<p>-Raise awareness and provide advice through guided walks, talks, media and websites</p> <p>- Provide training to relevant staff from Council and other organisations who manage land to identify and ,where possible, manage invasive species</p> <p>- Seek funding through partnerships to tackle riparian invasive species on a catchment wide scale</p> <p>- Support the work of the Lough Erne Invasive Species Group.</p>
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## **Do your bit for biodiversity**

In order for the Fermanagh and Omagh LBAP to be successful, it is important to have the support and involvement of local people and local organisations. There are a number of ways in which you, as an individual or organisation, can get involved and play a vital part in enhancing and maintaining Fermanagh and Omagh Districts biodiversity.

### **Farmers and land owners**

- If eligible, sign up to an agri-environmental scheme to add further benefit to wildlife
- Follow the codes of good agricultural practice
- Leave field margins uncut later in the season for birds, insects and mammals
- Restrict any cutting of hedgerows to every other year, allowing some stretches to flower and fruit each autumn
- Cut hedgerows as late as possible in the season, ideally February, so seeds, nuts and berries are available to wildlife

### **Businesses**

- Sponsor a local biodiversity project and help make it happen
- Create your own wildlife garden in your company grounds. You could build an insect hotel or even sow a small wildflower meadow
- Volunteer your staff to lend a hand with local conservation projects which will give your team new skills and help local biodiversity

### **Community Groups**

- Create a community wildlife garden and increase your local sense of pride and stewardship for the environment
- Help plant a woodland or preserve a local bog for the future
- Help implement your LBAP by starting a community project –contact the Fermanagh and Omagh Biodiversity Officer to find out how
- Work in conjunction with a local school to develop biodiversity projects

### **Individuals**

- Help build a better picture of local biodiversity and become a wildlife recorder! Record any sightings of important wildlife and report these to the Biodiversity Officer or directly to the Ulster Museum's recording centre, CEDaR ([www.nmni.com/CEDaR](http://www.nmni.com/CEDaR)). The Fermanagh and Omagh Biodiversity Audit revealed that there are some gaps in habitat and species records, so your help is vital.
- Have a go at wildlife gardening and enjoy the small wonders in your own patch. Or why not create a street garden and encourage your neighbours to do one thing for biodiversity in their gardens too!
- Create your own compost heap, reducing your waste and reducing the need for peat compost

- Report wildlife crime. Incidents such as dumping and water pollution should not be ignored as these have an impact on local biodiversity. Local people are ideally placed to report such activities and this can go a long way towards preventing further decline of our habitats and species. See our signposting page for contact details of where to report wildlife crime
- Volunteer! There are always local projects that need the help of volunteers and give people a chance to learn about helping their local wildlife. These could be tree planting days, bird box making, scrub clearance or even hay making. In addition, The Conservation Volunteers, RSPB, Lough Erne Wildfowlers Council, National Trust and Ulster Wildlife have ongoing conservation projects taking place throughout the Fermanagh and Omagh area that people can get involved in.

To find out more about the Fermanagh and Omagh LBAP or how you can DO YOUR BIT for biodiversity, please contact:

Fermanagh and Omagh Biodiversity Officer  
Fermanagh and Omagh District Council  
Lisnamallard House  
Old Mountfield Road  
Omagh  
Co. Tyrone BT79 7EG  
Tel: 03003031777  
Email: [Julie.corry@fermanaghomagh.com](mailto:Julie.corry@fermanaghomagh.com)  
Website: [www.fermanaghomagh.com](http://www.fermanaghomagh.com)

## Finding out more about Biodiversity

If you would like to find out more about biodiversity, please visit the websites listed below or contact the organisation. As of 1<sup>st</sup> April 2016, NIEA and DOE are now part of a larger department, Department of Agriculture, Environment and Rural Affairs (DAERA). Websites should redirect you, but in the instance they don't please contact the new department for details.

- An Creagan Visitor Centre - [www.an-creagan.com/biodiversity.aspx](http://www.an-creagan.com/biodiversity.aspx)
  - Get in touch with our dedicated Biodiversity team to discover how you can get involved in the latest biodiversity projects and events:  
[biodiversity@ancreagan.com](mailto:biodiversity@ancreagan.com)
- Biodiversity in Northern Ireland - [www.biodiversityni.com](http://www.biodiversityni.com)
- Botanical Survey for British Isles – [www.bsbi.org.uk](http://www.bsbi.org.uk)
- British Trust for Ornithology - [www.bto.org](http://www.bto.org)
- Butterfly Conservation - [www.butterfly-conservation.org](http://www.butterfly-conservation.org)
- Centre for Environmental Data and Recording (CEDaR) – [www.nmni.com/cedar](http://www.nmni.com/cedar)
- Derrygonnelly Field Studies Council - [www.field-studies-council.org/centres/northern-ireland/derrygonnelly.aspx](http://www.field-studies-council.org/centres/northern-ireland/derrygonnelly.aspx)
- Ecoschools - <http://www.eco-schoolsni.org/>
- Fermanagh Red Squirrel Group – [www.fermanaghredsquirrelgroup.com](http://www.fermanaghredsquirrelgroup.com)
  - The FRSG is a local volunteer-led charity. We provide advice and support to a range of people and organisations who wish to further the conservation of the red squirrel.
- Forest Service - [www.dardni.gov.uk/forestry](http://www.dardni.gov.uk/forestry)
  - The Forest Service has produced a range of worksheets and activity sheets that, when combined with a visit to a forest and the services of a forest guide, can assist teachers in providing challenging and exciting activities that can play an integral part in the delivery of the Northern Ireland National Curriculum in a variety of subjects.
- Habitas - [www.habitas.org.uk](http://www.habitas.org.uk)
- Lough's Agency - [www.loughs-agency.org](http://www.loughs-agency.org)
- Lough Erne Landscape Partnership – find on facebook and twitter
- Lough Erne Wildfowlers Council – [lewc.org.uk](http://lewc.org.uk)
- National Biodiversity Data Centre - <http://www.biodiversityireland.ie/>
- National Trust - [www.nationaltrust.org.uk](http://www.nationaltrust.org.uk)
- Marble Arch Caves Global Geopark - [www.marblearchcavesgeopark.com](http://www.marblearchcavesgeopark.com)
- National Trust - [www.nationaltrust.org.uk/](http://www.nationaltrust.org.uk/)
- Northern Ireland Bat Group - [www.bats-ni.org.uk](http://www.bats-ni.org.uk)
  - With support of Creggan Country Park, NIBG deliver free bat awareness education workshops with communities and schools, conduct rescue and rehabilitation of bats in the North West and are keen to train new volunteers contact  
[Karen.healy@creggancountrypark.com](mailto:Karen.healy@creggancountrypark.com)
- Northern Ireland Environment Agency - [www.doeni.gov.uk/niea](http://www.doeni.gov.uk/niea)
- Northern Ireland Environment Link - [www.nienvironmentlink.org](http://www.nienvironmentlink.org)
- Northern Ireland Fungus Group - [www.nifg.org.uk/](http://www.nifg.org.uk/)
- Royal Society for the Protection of Birds - [www.rspb.org.uk](http://www.rspb.org.uk)
- Saving Our Magnificent Meadows - <http://www.magnificentmeadows.org.uk/>
- The Conservation Volunteers - [www.tcv.org.uk](http://www.tcv.org.uk)
- Ulster Wildlife - [www.ulsterwildlife.org](http://www.ulsterwildlife.org)

- Walk NI – [www.walkni.com](http://www.walkni.com)
- Waterways Ireland - <http://www.waterwaysireland.org/>
- Water Management Unit - [www.doeni.gov.uk/niea/water](http://www.doeni.gov.uk/niea/water)
- Woodland Trust - [www.woodlandtrust.org.uk](http://www.woodlandtrust.org.uk)

## **Where to report wildlife crime and pollution**

### **Police Service NI**

Wildlife crime includes offences like poaching, killing or disturbing protected species or damaging their breeding and resting places. Where you suspect that an incident is a wildlife crime then you should report it to the local PSNI either at the nearest police station or by telephoning **101** (only available for landlines). Make sure you state that you believe a 'wildlife crime' has taken place and always ask for a crime reference number to allow you to follow up any action.

### **Water Pollution Hotline**

There is a hotline for urgent water pollution incidents. Members of the public are asked to call the following telephone number if they become aware of such an incident **Tel: 0800 80 70 60**. This service must be used to report all **urgent** water pollution incidents.

### **Grounded or injured bats in your building**

Call CEDaR (Centre for Environmental Data and Recording) in the first instance to report the case. Email: [cedar.info@nmni.com](mailto:cedar.info@nmni.com), or telephone: 028 9039 5264. Outside of hours, contact the Northern Ireland Bat Group or see their website for guidance [www.bats-ni.org.uk/wp-content/uploads/2013/05/nibg-north-west-bat-project.pdf](http://www.bats-ni.org.uk/wp-content/uploads/2013/05/nibg-north-west-bat-project.pdf)

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Finally, many thanks to all the members of the public who have supported the project so far; we look forward to continuing to work with you to ensure a district rich in wildlife.

## Appendix 1. Fermanagh and Omagh Local Biodiversity Action Plan – 2016 ~ 2020

This table outlines the overarching objectives and key actions of the Fermanagh and Omagh LBAP:

- **Help conserve and enhance local habitats and species**
- **Raise awareness and knowledge of local biodiversity**
- **Involve local people and develop partnerships in the delivery of the Fermanagh and Omagh Local Biodiversity Action Plan**

<b>Strategic Objective</b>	<b>Key actions</b>	<b>Lead Partner</b>	<b>Key Milestones</b>
1.To help conserve and enhance local habitats and species	1.1 Coordinate the delivery of Habitat and Species local actions across the F&O region.	FODC and Biodiversity Steering Group	Regular steering group meetings to review progress
	1.2 Develop a Local Non-Native Invasive Species Strategy	FODC, Biodiversity Steering Group, Lough Erne Invasive Species Group	Strategy written and agreed by partners by September 2016
	1.3 Encourage and facilitate the creation of Local Nature Reserves at suitable sites in the district	FODC	2 LNRs declared by 2020
	1.4 Ensure FODC deliver on the statutory Biodiversity Duty through coordination of the F&O LBAP, internal Biodiversity Implementation Plan delivery, continued training of staff and input into relevant projects and programmes.	FODC	-F&O LBAP launched by April 2016 - FODC BIPs development ongoing - All relevant staff trained appropriately by April 2017 and annually as required
	1.5 Participate in and encourage landscape-scale biodiversity conservation projects in the project area	All	-2 projects ongoing by 2020

<b>Strategic Objective</b>	<b>Key actions</b>	<b>Lead Partner</b>	<b>Key Milestones</b>
2.To raise awareness and knowledge of local biodiversity	2.1 Host and promote a programme of biodiversity themed events, talks and workshops	FODC, MACGG, Ulster Wildlife, National Trust, The Conservation Volunteers, RSPB, An Creagan Visitor Centre	-MACGG Annual programme of events published by March - FODC Biodiversity events updated quarterly on FODC Website - Other biodiversity events fed through biodiversity officer for publicising on FODC and Biodiversity NI website
	2.2 To publicise information about biodiversity through FODC, MACGG, BiodiversityNI and other partner websites, the media by press releases and any other opportunities	FODC, MACGG	As required
	2.3 Encourage national and regional wildlife recording schemes and the submission of all wildlife records to CEDaR and National Biodiversity Data Centre	All	Seasonal recording schemes promoted
	2.4 Produce local biodiversity interpretation through relevant publications and signs at sites of wildlife interest	All	One production per year

<b>Strategic Objective</b>	<b>Key actions</b>	<b>Lead Partner</b>	<b>Key Milestones</b>
3.To involve local people and develop partnerships in the delivery of the F&O Local Biodiversity Action Plan	3.1 Help and signpost local communities in developing wildlife projects such as creating wildflower meadows, planting mini-woodlands or organising wildlife themed events.	FODC, TCV, Ulster Wildlife (SoMM), An Creagan Visitor Centre	5 projects or events annually
	3.2 Provide encouragement and support to key stakeholders, local environmental organisations and communities	All	As required
	3.3 Engage with partnership project bids for biodiversity funding	All	2 projects per year
	3.4 Highlight opportunities for people to get involved in nature conservation and outdoors activities which in turn lead to better mental and physical health	All	Regular email circulars and press releases on local opportunities