

Local Biodiversity Action Plan 2017-2022





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Cover Images:
Main image – Dundrum Bay @ Tourism NI
Red squirrel @ DAERA
Red kite @ Ben Hall

Contents Page Image:
Marsh fritillary butterfly @ Stephen Craig



Irish hare @ Ronald Surgenor

Foreword

Réamhrá an Chathaoirligh,

Mar Chathaoirleach Chomhairle Ceantair an Lúir, Mhúrn agus an Dúin, is mór an pléisiúr domh Plean Gníomhaíochta Chomhairle Ceantair an Lúir, Mhúrn agus an Dúin um Bithéagsúlacht Áitiúil a chur faoi bhur mbráid (PGBA). Tógfaidh an Plean seo ar an bhunobair a bhí curtha le chéile i bPleananna Gníomhaíochta Áitiúla an dá Chomhairlí a bhí ann roimhe. Tabharfaidh an Plean seo treoir do chaomhnú agus d'fheabhsúchán na bithéagsúlachta fud fad an Cheantair.

Is réigiún ardscéimhe i dtuaisceart na hÉireann é, Ceantar an Lúir, Mhúrn agus an Dúin, a bhfuil clú agus cáil air as a shléibhte maorga, a thránna gainmheacha, a pháirceanna foraoise, agus a lochanna farraige a bhfuil tábhacht eiceolaíoch ag baint leo, a leithéid de, Loch Cairlinn agus Loch Cuan. Is áiteanna tábhachtacha iad ó thaobh turasóireachta de cé go bhfuil an chuid is mó den talamh ina dtailte feirme, atá rithábhachtach chun slite beatha áitiúla a chothú. Tá an dúiche seo fiorthábhachtach ó thaobh bithéagsúlachta. Gach uile bhliain feictear radharcanna áille dena cadhain bolgfhiann ar féarach, ar chladaigh na lochanna. Chomh maith leis sin bíonn fiadhúlra eile le feiceáil, ina measc, cúir rua ag faoileaoireacht go hard os ár gcionn, bumbóga i mbun phailniú na mbláthanna, agus na h-ioraí rua ag crúbadach sna crainn ar an Tulaigh Mhór agus ar Shliabh gCuillinn gan ach roinnt bheag a lua.

Tá Comhairle Ceantair an Lúir, Mhúrn agus an Dúin tiomanta don timpeallacht nádúrtha a chosaint agus an fiadhúlra atá ag brath uirthi. Le bheith rathúil áfach, tá muid ag brath ar thacaíocht leanúnach an phobail áitiúil sa dóigh is go mbeidh orainn comhoibriú le chéile chun ár n-oidhreacht saibhir, nádúrtha a chaomhnú do na glúnta atá le teacht. Mar sin de, iarraim ort, a dhaoine uaisle Cheantair an Lúir, Mhúrn agus an Dúin tacú leis an Plean Gníomhaíochta um Bithéagsúlacht Áitiúil an Lúir, Mhúrn agus an Dúin agus a bheith páirteach gníomhach i gcosaint na bithéagsúlachta iontach atá ar leac an dorais s'againne.

An Comhairleoir Marcas Ó Murnáin
Cathaoirleach
Comhairle Ceantair an Lúir, Mhúrn agus an Dúin

As Chairman of Newry, Mourne and Down District Council, I have great pleasure in introducing the Newry, Mourne and Down Local Biodiversity Action Plan (LBAP). 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 across the district.

Newry, Mourne and Down district is a beautiful, scenic region of Northern Ireland, well known for its stunning mountains, sandy beaches, forest parks and the ecologically important sea loughs of Carlingford and Strangford. These areas are important for tourism and, with a large proportion of the land being farmland, are vitally important for sustaining local livelihoods. Our district is also extremely important in terms of its biodiversity. Every year we are treated to the wonderful sight of internationally important populations of light-bellied Brent geese grazing on the shores of our loughs. Other wildlife highlights include red kites soaring overhead, bumblebees busily pollinating plants, and red squirrels clambering up trees at Tollymore and Slieve Gullion, to name a few.

Newry, Mourne and Down District Council is committed to protecting our natural environment and the wildlife that depends on it. To be successful, however, we need the continual support of local people so that we can work together to conserve our rich natural heritage for future generations. Therefore, I ask you, the people of Newry, Mourne and Down district, to support your Local Biodiversity Action Plan and become actively involved in protecting the amazing biodiversity that we are so fortunate to have.

Councillor Mark Murnin
Chairman
Newry, Mourne and Down District Council



Introduction

What is Biodiversity?

Biodiversity is the short term used for 'biological diversity', which is 'the total variety of all living plants and animals, and the habitats in which they live'.

The biodiversity we see today is the result of millions of years of evolution, shaped by natural processes and, increasingly, by the influence of humans. It is found all around us, in our fields, gardens, lakes, mountains, parks, rivers and woodlands. Biodiversity adds character and distinctiveness to an area.

The Newry, Mourne and Down area has a rich and distinctive variety of habitats from the Mountains of Mourne and Murlough Beach, to the fens of Lecale and the Ring of Gullion. Indeed, this natural beauty has helped to shape our culture and inspire our artists, writers and composers.

Why is it Important?

Biodiversity is a key measure of the health of our planet and therefore vital for our survival. It provides us with the essential ingredients without which we could not live, such as the oxygen we breathe, water we drink, and food that we eat, as well as adding beauty and variety to our surroundings.

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Threats to Biodiversity

Many habitats and species across Northern Ireland are 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 United Kingdom (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, native butterflies and moths and the complete loss of the corncrake from many areas.

Non-native Invasive Species, Pests and Diseases

Non-native invasive species are the second biggest threat to biodiversity after habitat loss. Human activity is 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.

As invasive species tend to be highly adaptable and strong competitors, they can out-compete native species for food and space. Key invasive species already affecting our area include Japanese knotweed, Himalayan balsam, giant hogweed and grey squirrel, with potentially many more on the horizon.

Pollution

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

Climate Change

Climate change is having 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. It is important to protect and maintain healthy ecosystems as we rely on efficient water regulating by bog lands and woodlands in our river catchments to reduce flooding.

Biodiversity: It's our Duty

In 2011, the Wildlife and Natural Environment Act (Northern Ireland) 2011 (WANE)¹ 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. While 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.

Why is the Duty Required?

To halt the loss of biodiversity; European, national and regional targets have been set. The European Union (EU) vision is for better protection of biodiversity by 2050. The target set by Northern Ireland, in the NI Biodiversity Strategy, is to significantly reduce overall biodiversity loss. The Biodiversity Duty is considered a key measure to contribute to these targets. Council action on adopting Biodiversity Implementation Plans (BIPs) that focus on internal Council actions and coordinating Local Biodiversity Action Plans, is agreed as an appropriate way to help meet this duty.

What is 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. When undertaking their functions, public bodies have to take into account the following five areas:

- Enhancing biodiversity
- Promoting the understanding of biodiversity both within and outside the organisation
- Restoring biodiversity
- Maintaining biodiversity
- Protecting biodiversity.

"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



Girl exploring @ Strangford Lough and Lecale Partnership

Light-bellied Brent Goose @ Breffni Martin



Newry, Mourne and Down District Council's Local Biodiversity Action Plan

The publication of a Local Biodiversity Action Plan (LBAP) is the result of a number of international, national and local processes. It all began in 1992, which saw the gathering of world leaders from over 150 countries at the Rio de Janeiro Earth Summit. This agreement led to the UK committing to produce an action plan to sustain and conserve biodiversity. In 1995, the UK Biodiversity Strategy was developed, followed by the Northern Ireland (NI) Biodiversity Strategy in 2002.

The NI Biodiversity Strategy has since been reviewed in 2015. 'Valuing Nature - A Biodiversity Strategy for Northern Ireland to 2020' sets out plans on how international obligations will be met and identifies local targets to protect biodiversity, ensuring that the environment can continue to support people and economy into the future.

To achieve the recommendations of these strategies, local biodiversity action must be taken. Local Biodiversity Action Plans do just that, developing local action for

local wildlife. They also link in with, and help deliver, other plans within an area such as Council Corporate Plans, Tourism Area Plans and AONB (Area of Outstanding Natural Beauty) Management and Action Plans. The Local Biodiversity Action Plan, or LBAP process as it has become known, is a fantastic way to promote biodiversity throughout NI.

The LBAP for Newry, Mourne and Down district has been developed using the plans from both the former Newry and

Mourne District Council and Down District Council areas. Protecting the environment has remained high on the new Council agenda and this is reflected in it's mission in the Corporate Plan 2015-2019. The Plan states, "Our mission as a Council is to lead and serve a district that is prosperous, healthy and sustainable". This will be achieved through the Council's strategic objectives, which include protecting our natural and built environment.

Mill Bay @ Conor McGuinness

¹ <http://www.legislation.gov.uk/nia/2011/15/contents>



Newry, Mourne and Down District Council Area

Newry, Mourne and Down District Council is located in the south east of Northern Ireland, covering parts of County Down and Armagh. It is the third largest Council area within Northern Ireland comprising approximately 11% of the total land area and over 100 miles of coastline. The area is renowned for its scenic beauty, bounded on the east by Strangford Lough and Carlingford Lough and on the west by Slieve Gullion and Slieve Croob, with the picturesque Mountains of Mourne in the centre.

Of the eight Areas of Outstanding Natural Beauty (AONB) designated within Northern Ireland, three of them lie within the district: Mourne AONB, Ring of Gullion AONB, and Strangford and Lecale AONB. The district's varied landscape combines to provide an important and unique biodiversity resource. A large number of sites in the district have been designated through

legislation to protect key areas or habitats for nature conservation.

The district has:

- 187 Sites of Local Nature Conservation Importance (SLNCI).
- 62 Areas of Special Scientific Interest (ASSI)
- 11 Special Areas of Conservation (SAC)
- 7 Nature Reserves (NR)
- 3 Special Protection Areas (SPA); and
- 4 Ramsar Sites (RS)

This reflects the importance of the area for biodiversity. The large number of protected sites, in the wider countryside, land is managed for agriculture, some of which will be under agri-environment scheme agreements. These are designed to encourage the adoption of environmentally friendly management practices which can have great benefits for our biodiversity.

The LBAP for the district outlines a plan of action to:

- Conserve and enhance the

rich biodiversity of the District for both current and future generations

- Educate and raise awareness of the importance and variety of biodiversity found within the Newry, Mourne and Down district; and
- Encourage local ownership of Newry, Mourne and Down district's biodiversity.

The project strives to ensure that the biodiversity of Newry, Mourne and Down district is maintained and enhanced through the preparation and implementation of individual action plans, covering a range of habitats and species, which reflect local, European and national priorities. It is based largely on the targets set out in the NI Biodiversity Strategy, translating regional strategy into local action.

Everyone who lives in the district has an important part to play; it is only through this support, can our valuable flora and fauna be protected.

Priority Habitats and Species in Newry, Mourne and Down District

The following habitats and species have been selected for priority action 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. This list is not exhaustive and will be updated throughout the course of the LBAP.

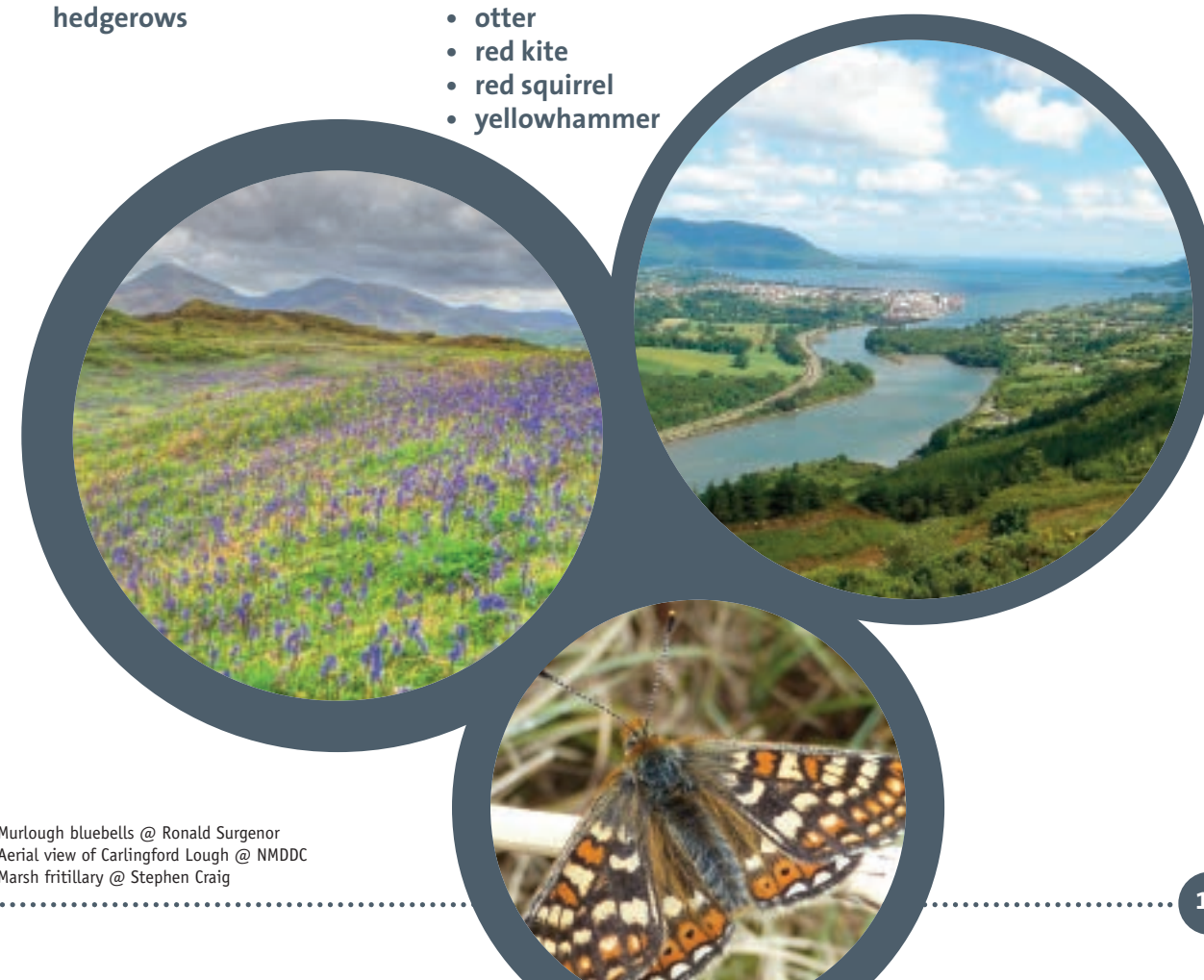
Broad habitats selected for priority action in Newry, Mourne and Down area are:

- **coastal and marine habitats**
- **grassland/arable field margins**
- **peatlands**
- **urban habitats/gardens**
- **wetlands**
- **woodlands and hedgerows**

Species selected for priority action in Newry, Mourne and Down are:

- **bats**
- **breeding waders**
- **bumblebees**
- **fish species**
- **house sparrow**
- **juniper**
- **marine mammals**
- **marsh fritillary**
- **otter**
- **red kite**
- **red squirrel**
- **yellowhammer**

The Newry, Mourne and Down area is home to many diverse habitats and species. The following sections outline the different habitats, priority areas within them, their key species, and examples of the objectives and actions required to conserve them.



Habitats across Newry, Mourne and Down

Coastal

The distinctive coastline of the Newry, Mourne and Down area extends from Killyleagh to Newcastle, through Bloody Bridge to Carlingford Lough. It supports an array of valuable coastal habitats as well as many important species. There are maritime cliffs and slopes, coastal vegetated shingle and coastal saltmarsh habitats as well as extensive sand dune systems.

Key Threats

- Coastal squeeze
- Erosion
- Inappropriate management
- Invasive species
- Pollution
- Reclamation
- Unregulated shore based shellfish collection

Local Actions

- Implement existing bye-laws for local biodiversity preservation, and encourage the development and enforcement of new bye-laws to manage the coast for the benefit of people and wildlife
- Encourage the monitoring of the coastal environment by local community groups
- Help deliver current and new management plans for coastal and marine protected areas for example Strangford Lough SAC
- Raise awareness of coastal biodiversity through talks, events and media

Maritime Cliffs and Slopes

These include hard and soft cliffs, which extend from the splash zone (above the high water mark) at the base of the cliff to the land at the cliff top which is influenced by salt spray. Maritime cliffs are often significant for their populations of breeding seabirds, which can reach numbers of international importance. They provide nesting sites for breeding birds such as the guillemot, kittiwake, peregrine falcon, razorbill and raven. Examples include the cliffs at Killard Point, which formed from debris deposited as the ice melted during the last Ice Age, and the cliffs at Maggie's Leap, Newcastle, which support a large population of kittiwakes.

Coastal Vegetated Shingle

Coastal Vegetated Shingle is defined as sediment with particle sizes larger in diameter than sand (>2mm) but smaller than boulders (<200mm). Vegetated shingle banks occur at the upper end of the shore where conditions are favourable, usually in high energy environments. They occupy long strips but typically have a small surface area and support specialised plant and invertebrate communities. In Northern Ireland, coastal vegetated shingle is found mainly along the low, rocky parts of the County Down coastline. Extensive areas include Glassdrumman, Gransha Point, Minervastown and Strangford Lough. Rare plants such as sea kale, oysterplant and yellow horned-poppy are found in these areas. Coastal vegetated shingle also supports breeding birds such as ringed plover and oystercatcher.

Coastal Saltmarsh

Saltmarshes are a highly productive habitat dominated by species that are tolerant of flooding by seawater. They occur mostly in the upper vegetated areas of mudflats, in sheltered areas of low wave energy. Saltmarsh is a very important habitat as the vegetation consists of a limited number of salt tolerant species adapted to regular covering by the tide. As well as this it is also very important for wading birds and wildfowl such as curlew, golden plover, lapwing, oystercatcher and redshank.

Saltmarsh is now a rare habitat in Northern Ireland as the majority of the original habitat has been reclaimed and improved for agriculture. Strangford Lough and Mill Bay in Carlingford Lough (ASSI) support the most extensive areas of saltmarsh in Northern Ireland. The Sheepland Coast (ASSI) also has saltmarsh areas in sheltered bays and inlets along the coast.

Coastal Sand Dunes

Sand dunes develop when wind-blown sand is trapped by specialised dune building grasses, such as marram (*Ammophila arenaria*), above the high water mark. Sand dunes are diverse habitats that support a range of common and rare plants, mosses, insects, birds and mammals. They support a large proportion of our butterfly, moth, ant, bee and wasp species. Sand dunes also provide nesting habitat for breeding birds such as the skylark and meadow pipit.

Two of the largest sand dune systems in Northern Ireland are found within Newry, Mourne and Down district: Dundrum Bay and Killard National Nature Reserve (NNR). The Dundrum Bay dunes include Murlough National Nature Reserve, which is a fragile 6,000 year old dune system, owned and managed by the National Trust. Murlough Beach supports the largest population of the marsh fritillary butterfly in Northern Ireland. Also, the secretive common lizard may also be found. Dundrum Bay dunes support rare plants such as

Shepherd's Cress, one of only three sites that this species has been seen in the past 30 years. Tyrella Beach (ASSI) is a small enclosed dune complex within Dundrum Bay. The 2 kilometer long flat, sandy beach is backed by 25 hectares of mature dunes in a conservation area. Killard Point (ASSI) sand dune system remains largely unmodified and is of vital importance for a number of rare plants and animals. It is one of the best sites in Northern Ireland for grassland and heath invertebrates.



Key Coastal Species

Yellow Horned-poppy

The yellow horned-poppy is a rare plant found on bare shingle along the County Down coast. Each individual plant produces one to several rosettes with a single flower stalk emerging from each. The waxy leaves are greyish-green and covered with fine short hairs which protect the leaf surface from the salty conditions in which it lives.



Light-bellied Brent Goose

The light-bellied Brent goose is a small, dark goose with a pale belly. Carlingford Lough and Strangford Lough are the most important sites for the species in the UK and Ireland, where they can be seen from September to April. These geese have one of the longest migrations, travelling from their wintering grounds in Ireland via Iceland and Greenland to their summer breeding grounds in arctic Canada. Killough Bay (ASSI) is the last staging post in Ireland before their lengthy journey to Canada. Their main food plants are eel grass (*Zostera species*), green algae and saltmarsh grasses.

Curlew @ Tom Marshall
Yellow horned-poppy @ Debbie Gillies

Curlew

The curlew is a large wading bird, well known for its very long, decurved bill. Its haunting two-note call and bubbling song was once a familiar sound of the open countryside. However, over the last twenty years, it has declined as a breeding species in Northern Ireland and elsewhere in northern Europe. Outside the breeding season, birds arrive from the north and east to winter mainly around the coast. Strangford Lough is one of the most important wintering sites in Northern Ireland for the curlew.

Common Seal

Strangford Lough is a stronghold for this charming mammal. It can be recognised by its fine spotted grey or brown fur and V-shaped nostrils. They normally feed at sea, but can be seen on several of the many islands within the Lough. Since the 1980s, their population has declined sharply due to pollution and disease.

Grassland

Grassland is a major habitat type within Newry, Mourne and Down district, which includes lowland meadows and calcareous grasslands and purple moor grass and rush pastures. These grasslands differ depending on the soil type and vegetation cover. Agriculture is a major industry within the area and, if managed appropriately, farmland can provide food and shelter for many native plants and animals.

Changes to agricultural practices have, in recent times, produced areas of less value to wildlife. However, agri-environment schemes developed by the Department of Agriculture, Environment and Rural Affairs (DAERA) have encouraged farmers and landowners to adopt environmentally friendly management practices which benefit biodiversity.

Key Threats

- Abandonment
- Changes in agricultural practice for example a shift from hay to silage as well as the overuse of fertiliser
- Inappropriate management/ grazing
- Scrub encroachment

Local Actions

- Creation of Council greenspace management strategy
- Liaise with Transport NI and other governmental organisations to enhance the biodiversity value of roadside verges through appropriate management
- Pilot wildflower meadows on publicly accessible land to improve areas for pollinators and act as best practice examples
- Raise awareness of the importance and value of grasslands for biodiversity through events, talks and media

Photo above: Scabious @ Niall Magee

Arable Field Margins

Arable field margins are strips of land between cereal crops and the boundary of the field. They are deliberately managed under agri-environment agreements to benefit farmland wildlife. Arable field margins provide nesting and feeding sites for many birds such as skylark and linnet, not to mention the huge variety of insects including butterflies, grasshoppers and plant bugs. Many species of priority wildflowers can be found in these margins.

Lowland Meadows

A lowland meadow is defined as unimproved neutral grassland found on enclosed land, normally on a well-drained mineral soil with a sward rich in wildflowers. Such meadows are found in former hay meadows or in non-agricultural sites such as churchyards or roadside verges. In Newry, Mourne and Down district several examples of lowland pastures can be found in the Crossmaglen drumlins and Newcastle valleys.

Traditional management practices in Tullyard (ASSI) for example, have brought about a great diversity in species composition, both of grasses and herbs. Levallymore (ASSI) and Tullyratty (ASSI) are also excellent examples of species rich meadows.

Lowland Dry Acid Grassland

Lowland dry acid grassland occurs in nutrient-poor, well-drained acid soils. There are no large areas of lowland dry acid grassland in Northern Ireland. Instead, it is most likely to be found in very small patches in a matrix of other grassland types. This habitat may also occur in old gardens, churchyards and other amenity areas. In Newry, Mourne and Down district it can be found on the lowland slopes of the Mourne Mountains and in South Armagh. Lowland dry acid grassland contains plant species such as common bent, sheep's sorrel and tormentil and supports species such as the Irish hare and skylark.

Purple Moor Grass and Rush Pasture

This habitat occurs on poorly drained, acidic soils in lowland areas often as fragments within farmland in wet hollows or field corners. Purple moor grass is always present in the mix, with many other species of grasses, sedges, rushes and wildflowers such as orchids, wild angelica, meadow thistle, devil's bit scabious and self-heal. This habitat, in association with others, provides ideal sites for a number of Northern Ireland's priority bird species such as the skylark, curlew, reed bunting and snipe. The Irish lady's tresses orchid and marsh fritillary butterfly may also be found in this habitat. In the Newry, Mourne and Down district this habitat occurs within the Quoile Valley lowlands, Killough Bay and Strand Lough (ASSI).



Key Grassland Species

Yellowhammer

The yellowhammer is a member of the bunting family and a characteristic resident species of lowland arable and mixed farmland. In the summer they can be found in highly productive areas of farmland whereas in winter they form flocks and feed in mixed farmland on stubble fields. The yellowhammer was once a familiar farmland bird but its numbers have declined in recent years.

Skylark

The skylark is a small brown farmland bird which is renowned for its display flight. It flies vertically up in the air and then hovers whilst in song. The skylark likes open countryside, from lowland farmland to upland heath. It can be found in the uplands in the Newry and Mourne area, however its numbers have been declining recently.

Pink Meadow Waxcap

The pink meadow waxcap is a fungi with a pinkish-lilac conical cap and a slightly greasy appearance. Fungi acquire nutrients from living or dead plants, animals or other fungi. This species is found all over Northern Ireland in mossy lawns and semi-natural grasslands. Silent Valley in the Mourne Mountains is a good site for the pink meadow waxcap.



Skylark @ Chris Gomersall
Species rich grassland @ DAERA

Yellowhammer @ Tom Marshall
Pink meadow waxcap @ Roy Anderson

Marine

The marine environment supports over half of our biodiversity. A number of very important marine habitats occur within the Newry, Mourne and Down District Council area.



Strangford Lough

Strangford Lough was designated as Northern Ireland's first Marine Conservation Zone (MCZ) in 2013, under the introduction of the Marine Act (Northern Ireland). The designation of MCZs safeguards vulnerable or unique marine species and habitats of national importance in the Northern Ireland inshore region based on an ecosystem approach.



The Lough encompasses many marine species and habitats of significant importance to the area and therefore is protected by numerous designations. Most significantly it was appointed an ASSI in 1988 and a Special Area of Conservation (SAC) in 2005. It boasts many rich habitats for wildlife including, but not limited to: tidal mudflats, salt marsh, reed beds, *Modiolus* reefs.

The Lough contains 365 islands that are utilised by local farmers and are considered havens for insects, migratory and residential birds, as well as the local seal population.

Carlingford Lough

Carlingford Lough is a narrow and shallow sea lough that lies on the east coast of Ireland, located at the border of Northern Ireland and the Republic of Ireland. It has an extensive intertidal area of sand and mudflats that provide key feeding grounds for breeding and overwintering birds, including the arctic tern, sandwich tern and light-bellied Brent goose. It also contains several significant habitats, such as salt marshes and mudflats.

Carlingford Lough was designated an ASSI in 1996, a RAMSAR site in 1997 and a Special Protection Area (SPA) in 1998. It was subsequently designated as a Marine Conservation Zone (MCZ) in 2016 due to the many habitats and species it supports.

Horse Mussel Beds

The horse mussel, (*Modiolus modiolus*), is a long-lived, slow reproducing marine mollusc that can occur in isolated clumps or together in large beds. These beds form a vital habitat for the attachment of many marine animals (approximately 272 species) that would not otherwise be found in the area. These include Brittlestars, the Rugose Squat Lobster and the commercially important Queen Scallop. Some of the mussels within beds can be 25 years old or more. The beds occur in four areas in Northern Ireland, the largest of which is found in Strangford Lough. Due to deterioration of the Strangford Lough beds a permanent ban was placed on mobile fishing gear. The restoration plan recommends 'total protection' in areas of the Lough where fishing activities prevent the recovery of the beds.

Maerl Beds

Maerl is the term used to describe several species of calcified marine algae. Although it is slow growing, over long periods its dead calcareous skeleton can accumulate into deep deposits. With an additional thin layer of living Maerl, beds are formed. Maerl beds are typically found in sheltered conditions with some tidal flow, including the narrows and rapids of sea loughs. These habitats can support communities of sea pens and sea cucumbers. Maerl beds are found in Strangford Lough at Zara Shoal off Castleward Bay, Jane's Rock in the centre of the Lough and Rainey Island near Whiterock.

Mudflats

Mudflats are intertidal habitats created by sedimentary deposition in low energy coastal environments, particularly in estuaries and other sheltered areas such as sea loughs. They are highly productive areas, which, together with other intertidal habitats, are of great importance to large numbers of birds and fish. They provide resting areas for internationally important populations of migratory, over wintering and breeding waterfowl. Mudflats can be found at the western end of Carlingford Lough and throughout Strangford Lough. Intertidal mudflats are also found within Inner Dundrum Bay and Killough Bay (ASSI).

Local Actions

- Collaborate with the Council's Tourism and Education programmes to promote the biodiversity, educational and tourism importance of the marine environment through talks and events
- Help deliver current and new management plans for marine protected areas such as Strangford Lough (SAC)
- Promote marine recording schemes such as Coastwatch and Shore-thing
- Promote recording of key marine species such as cetaceans
- Work in partnership with local environmental organisations to hold 'shore clean-ups'

Key Threats

- Water pollution
- Invasive species
- Marine litter
- Over exploitation of marine resources
- Physical disturbance for example dredging/trawling
- Climate change and sea level rise



Mud Habitats in Deep Water

Mud habitats in deep water typically occur below 20-30m in many areas of the UK's marine environment. As a fairly stable habitat, communities of burrowing animals often become established, such as the Dublin Bay prawn and Sea pens. Several Northern Ireland priority species use these habitats, including the rugose squat lobster. Beds of Dublin Bay prawns have been recorded off Newcastle and are found in the centre of Strangford Lough on extensive areas of mud plains. Mud habitats in deep water can also be found in Carlingford Lough.

Sabellaria alveolata Reefs

Sabellaria alveolata reefs consist of tightly packed honeycomb-like masses of tubes constructed by a small worm called the Polychaete. The reefs can be up to 50 centimetres thick, forming sheets, hummocks or massive formations. Compared to young formations, older reefs seem to support a higher level of biodiversity due to their increased number of crevices. Recent surveys have located these reefs at three sites within the district: Glassdrumman where there is a high quality reef, Minerstown and Coney Island.

Harbour porpoise @ Dave Wall
Common seal @ Ronald Surgenor
Warrenpoint @ Conor McGuinness
Harbour porpoise @ Ronald Surgenor

Saline Lagoons

Saline lagoons are water bodies with a restricted connection to the sea due to natural or artificial barriers. As a result, the salinity of the water is neither marine nor fresh but may vary from brackish to fully saline. Organisms found in saline lagoons range from marine and freshwater species to lagoon specialists. Saline lagoons are also important habitats for large numbers of wildfowl and waders. In the Newry, Mourne and Down district, saline lagoons are found at Killough Bay and Strand Lough (ASSI). Strand Lough is a brackish lake but many of the surrounding fields contain plants characteristic of saline conditions. It is the last remaining site in Ireland that supports the Northern Ireland Priority Species, the crawling water beetle, *Haliphus apicalis*.

Seagrass Beds

Seagrasses are marine flowering plants which often grow in dense, extensive beds in shallow, coastal areas on sheltered sandy or muddy substrata. This creates a highly productive habitat that provides food and shelter for other plant and animal species. Seagrass beds also provide nursery and foraging areas for commercially important fish, improve water

quality by removing dissolved nutrients, stabilise sediments and are a valuable food resource for wildfowl such as the light-bellied Brent goose. Seagrass beds can be found in Carlingford Lough, Dundrum Bay, Killough Harbour and Strangford Lough.



Key Marine Species

Harbour Porpoise

The harbour porpoise is the smallest and most common cetacean (whale/dolphin) found in the coastal waters of Northern Ireland. It is dark grey with a pale belly and white extending up the sides. It has no forehead or distinct beak and can often be detected by the sound of its short, sharp blows. The population is believed to have decreased over the last 50 years, which may be due in part to thousands of porpoises getting caught and drowning in commercial fishing nets every year around the UK coast. The best places to see harbour porpoises are headlands and bays when the sea is calm.

Sea pen

The slender Sea pen, (*Virgularia mirabilis*), is a marine invertebrate in the same group as corals and anemones. True to its name, the sea pen looks like an old fashioned quill that can retract into the mud when disturbed. In the Down district communities of this sea pen can be found in sandy and muddy habitats in Dundrum Bay, part of the Quoile River and Strangford Lough.

Common Seal

The common seal is the smaller of the two seals found along the County Down coastline. It can be recognised by its short muzzle and V-shaped nostrils, compared to the longer, doglike muzzle of the grey seal. The common seal can be seen hauled out on rocky shores and sandbanks from July to September. Strangford Lough is home to a significant population of these marine mammals in Northern Ireland. However, recent research has found that this population is currently in decline.

Peatlands

Peatlands are a characteristic part of the Irish landscape due to the island's cold, wet climate. Northern Ireland contains a significant proportion of the remaining bog resource in Europe and therefore the importance of these bogs cannot be over-emphasised.

Key Threats

- Commercial forestry
- Drainage
- Extensive peat extraction
- Habitat loss and fragmentation
- Inappropriate development for example wind farms
- Inappropriate grazing
- Liming and burning
- Non-native invasive species such as rhododendron
- Scrub encroachment
- Trampling and disturbance

Local Actions

- Develop initiatives at suitable sites to help enhance their value for wildlife
- Promote the new Environmental Farming Scheme
- Promote the use of peat free compost within the Council and at wildlife gardening events and talks for the public
- Raise awareness of the importance of bogs and heath for biodiversity through events, talks and media

Lowland Raised Bog

Lowland raised bogs are peatland ecosystems that are found in lowland areas generally below 150 meters. In Northern Ireland they are typically found in wide river valleys or between glacial hilly drumlins. Due to their harsh conditions, only a limited number of specialised plants can live in these habitats, including cotton grasses, cross-leaved heath and bog asphodel. The main building block of peat is sphagnum mosses. These mosses hold water like a sponge contributing to the waterlogged, acidic conditions. In Newry, Mourne and Down district, small patches of lowland raised bog have been found in the Strangford drumlins and islands and also the Mourne Mountains. Unfortunately, many have been cut-over in the past and some have subsequently been reclaimed into grassland while others developed into diverse sites with fen, carr woodland, and remnant patches of bog.

Blanket Bog

Blanket bog generally occurs in upland areas and is a layer of peat and associated vegetation covering the land like a 'blanket'. Similar to lowland raised bogs, sphagnum mosses are the main component of a blanket bog. Other dominant plant species include heather and cross-leaved heather, cottongrass, deergrass and sundews. Within Newry, Mourne and Down district, blanket bog is found mainly on the higher slopes of the Carrigatuke Hills, Mourne Mountains and Slieve Roosley. Kilbroney red bog above Rostrevor is one example occurring in the Mournes Mountains. However very little of the blanket bog in the Mourne Mountains and Carrigatuke remains intact, most has eroded and is thin and other areas of deeper peat have been cut-over or indeed cut-away.

Green hairstreak butterfly @ Mourne Heritage Trust
Murlough @ Ronald Surgenor
Sundew @ Ronald Surgenor



Lowland Heathland

Lowland heath occurs on mineral soils and thin peat generally below 300 meters and supports a range of flora and fauna not found on upland heath. It is characterised by the presence of dwarf shrubs such as heather and bell heather. The majority of the Northern Ireland resource can be found in Newry, Mourne and Down district on the lower slopes of the Mourne Mountains and the Ring of Gullion. Lowland heath in the Mourne Mountain area is important for a number of UK and NI priority species such as the keeled skimmer dragonfly, and green hairstreak and marsh fritillary butterflies.

Upland Heathland

Upland heathland occurs on acidic soil and thin peat in upland areas on the higher slopes, generally above heights of around 300m. Upland heath often forms part of a mosaic with other habitats such as acid grassland, bog and fen which enhances its value for wildlife. The Mourne Mountains support some of the most extensive and important tracts of upland heath in NI, which are also of European importance. The upland heathland on Slieve Gullion (ASSI) is one of the largest expanses in NI of this rare habitat. It is dominated by heather and, where there is no intervening forestry, there is a transition downslope to lowland heaths, acid grassland and fens. Cowberry can also be found here. Other important species found in upland heath in the district include the Irish hare, juniper and peregrine falcon.

Montane Heathland

Montane heathland is found in areas that lie above the natural level of tree development, generally above 600m. Northern Ireland is towards the southern edge of the natural range for this habitat. It consists of a range of short dwarf shrubs such as heather, grasses, sedges and specialised mosses and lichens. Montane heathland occurs on several summits in the Mourne Mountains, most notably Slieve Binnian. Species present are similar to those found in blanket bog and upland heathland, such as meadow pipit.

Key Peatland Species

Irish Hare

The Irish hare is a unique hare species only found in Ireland. It has a russet brown coat, long ears with black tips and eyes set high in the head. The species occurs in Newry, Mourne and Down district in upland sites but also on lowland sites such as bogs, coastal grassland and farmland.

Green Hairstreak Butterfly

The green hairstreak is an unmistakable small green butterfly that is found in bogs and heaths with plenty of scrub. The green hairstreak always rests with its wings closed showing its striking metallic green undersides that have a faint line of white spots. This is a clever form of camouflage as it resembles a newly opened leaf. Food plants include bird's-foot-trefoil, gorse, bilberry, cross leaved heath and bramble. Green hairstreak has been recorded at various sites across the district including Silent Valley and Tollymore Forest Park.

Juniper

Juniper is one of only three conifers native to Ireland. It is a slow growing prickly shrub which can be found growing either low to the ground or upright. It is mainly found in montane habitats and around limestone pavement or calcareous rocky outcrops and cliffs. Juniper was one of the first plants to recolonise the landscape of Northern Ireland post-glaciation. It is thought to have declined by up to 60% throughout the British Isles since the 1960s, possibly due to increased agriculture and overgrazing by cattle, sheep and goats. Juniper found in the Mourne Mountains is genetically unique.



Top left: Juniper @ Mourne Heritage Trust
Above: Juniper @ Mourne Heritage Trust
Irish Hare @ Ronald Surgenor

Urban Habitats and Gardens

Often overlooked, urban habitats and gardens are very important for a wide range of species. These urban greenspaces have special significance for biodiversity as they are where wildlife and people can interact. Habitats include abandoned and brownfield sites, cemeteries, gardens, golf courses, industrial sites, urban parks and walks.



Key Threats

- Landfill and dumping, including fly-tipping
- Non-native invasive species
- Unsympathetic management including excessive chemical use and grass cutting which results in a rye grass dominated monoculture
- Urban development

Local Actions

- Collaborate with the Council's grounds maintenance section to improve the biodiversity value and interpretation of local parks
- Create and manage a network of Local Nature Reserves (LNRs) in Council owned sites
- Raise awareness of wildlife friendly gardening through public events and the media

White-tailed bumblebee @ Niall Magee
Beautiful garden @ Liam Blair



Urban Greenspace

Small pockets of green space in urban settings can provide ideal habitats for a wide range of plants and animals. Sites such as cemeteries, golf courses, roundabouts and small parks provide safe havens for wildlife in busy towns and cities. In the Newry, Mourne and Down district there are many examples of green spaces and small parks which are of benefit to people and wildlife alike.

Parks are generally larger and more mature than gardens, and therefore tend to have a more diverse range of wildlife associated with them. Parks are typically managed for formal and informal recreation but many could be developed to enhance their biodiversity value. Good examples of public parks in the district include Castlewellan Forest Park, Kilbroney Park, Tollymore Forest Park and Slieve Gullion Forest Park.

Gardens

Gardens link urban greenspace with the wider countryside, forming a mosaic of wildlife habitats. Every garden, big or small, has the potential to be a mini nature reserve. Many gardens already support some level of biodiversity, but with a little more planning for wildlife in mind, we could be making a much more valuable contribution to protecting our native plant and animal species.

Industrial and Business Sites

Many industrial sites have areas within their premises that are of benefit to wildlife. Neglected corners provide a refuge for a range of plants and animals. Old derelict buildings can provide shelter for bats and nesting places for birds such as the house martin, starling and swallow. New industrial sites can also be valuable for wildlife if landscaped using native flowers, shrubs and trees.





Key Species

House Sparrow

The house sparrow lives happily alongside humans nesting under roof tiles and sometimes in existing swallows nests. It has suffered decline recently due to a lack of insect food in the summer and winter seed and is consequently a Northern Ireland priority species.

Bumblebees and pollinators

There are six common bumblebee species that can be found in gardens, including the white-tailed and red-tailed bumblebees. During the summer bumblebees are 'busy', collecting nectar and in turn, pollinating native plants and agricultural crops. Sadly, bumblebees are declining as there is not enough natural habitat left for them to live. Although species-rich grassland is the preferred habitat for most bees, urban gardens are providing an important haven for this declining group.

Hedgehog

The western European hedgehog was selected as a UK priority species in 2007 due to a decline in numbers. They are common in farmland, gardens and parks, and throughout the British Isles, and prefer woodland edges, hedgerows and suburban habitats where there is plenty of food such as caterpillars, beetles, slugs and worms.

Wetland Habitats

Wetlands are extremely important habitats as they support a variety of plants and animals such as amphibians, birds, fish, invertebrates and mammals. Newry, Mourne and Down district has many good quality examples of wetland habitat including fens, lakes, reedbeds, rivers and streams.

Key Threats

- Changes in water levels through drainage and inappropriate management
- Non-native invasive species for example Japanese knotweed, giant hogweed and Himalayan balsam
- Nutrient enrichment of water through pollution, such as agricultural run-off
- Salmon farms which can negatively impact wild salmonoid populations through, for example, sea lice

Local Actions

- Develop initiatives at suitable wetland sites to help enhance their value for wildlife
- Promote and increase the recording of key wetland species
- Raise awareness of the importance of wetlands for biodiversity through specific guided walks, talks and media

Quoile @ Hayley McKeown
Opposite page:
House sparrow @ Ray Kennedy
Hedgehog @ Ben Hall

Lakes and Ponds

Standing open water, including lakes and ponds, are quite an extensive habitat across Newry, Mourne and Down district and Northern Ireland as a whole. Lakes can be classified by the levels of nutrients that occur naturally in the water. Eutrophic waters have high nutrient levels and, in their natural state, associated high levels of biodiversity. Examples in the district include Derryleckagh Lough, Great Dam and Mill Pond. Mesotrophic lakes have moderate nutrient levels and in the district include Altnadua Lough, Aughnadarragh Lough (ASSI) and Camlough Lough. Marl lakes have high alkalinity and low nutrient levels (oligotrophic). The Lecale region includes an area of marl lakes and fen peat pools of high biodiversity importance at Loughkeelan, east of Downpatrick. The Loughkeelan (ASSI) supports large numbers of rare stoneworts and the UK priority species, marsh stitchwort, occurs in adjacent fen areas.

Ponds are found within interdrumlin areas across East Down, ranging from large pools surrounded by fringes of fen or woodland to small ponds with more extensive fens. Lakes and ponds support invertebrates such as beetles, dragonflies, mayflies and pondskaters. They also support many species of breeding and wintering waterfowl and plants such as duckweeds and yellow water-lily.

Rivers and Streams

Rivers and streams are of great value to wildlife and because of this are recognised as an important habitat locally. No two rivers are alike and neither are their assemblages of plants and animals. They support many priority and important species such as Atlantic salmon, brown trout, otter and bat species.

Newry River

Newry River flows through Newry City, acting as a border between counties Down and Armagh, eventually emptying into Carlingford Lough. This provides a valuable wildlife corridor for species movement along with the canal and other rivers present in the district.

Shimna River

This river, designated as an ASSI in 2007, runs from the Mourne Mountains through Tollymore Forest Park before draining into the Irish Sea at Newcastle. It is in a highly natural state and provides an excellent habitat for populations of Atlantic salmon, brown trout and sea trout.

Quoile River

The Quoile River is a major river system in the Council area. It flows from Annacloy down through Downpatrick to the barrage where it flows into Strangford Lough. In 1957 a tidal barrier was constructed to prevent flooding in the Downpatrick area. This caused the formation of a sheltered pond at the end of the river. On either side of the Quoile River is the Quoile Pondage National Nature Reserve. The Reserve has a diversity of habitat and wildlife, including insects, willow, eels and various wading birds, including herons.

Fens

A fen is a wetland with a permanently high water level at or just below the surface. They often form on peaty soils in river valleys or hollows and receive the majority of their water and nutrients from ground water, soil and rock. Fens support a rich variety of sedges, grasses and mosses, as well as invertebrates such as the irish damselfly and the whirligig beetle. Breeding waders also depend on fen wetlands habitats. In Newry, Mourne and Down district, rich fen occurs at the Fens of Lecale (SAC), Ballybannan (ASSI), Ballycam (ASSI) and Carrowcarlin (ASSI). The latter site supports invertebrates including rare water beetles, spiders and pond skaters.

Reedbeds

The term reedbed describes a wetland habitat dominated by common reed in areas where the water table is at or above ground level for most of the year. This habitat is widely distributed on the margins of water bodies, along lowland and upland streams, estuaries, reservoirs, clay pits, sewage treatment works, industrial lagoons and as successional habitat on fens and bogs. In Newry, Mourne and Down district reedbeds can be found in Ballykilbeg (SAC, ASSI), Killough Bay and Strand Lough (ASSI) and Turmennan (SAC, ASSI). Ballykilbeg supports a number of scarce plants and a well-established colony of the marsh fritillary butterfly. Reedbeds also provide excellent cover for birds such as the reed bunting.

Key Wetland Species

Otter

Otters live on the banks of rivers, lakes and the coast feeding on fish, shellfish, smaller mammals and birds. They have a long streamlined body and tail and can be found sleeping in holes in the riverbank called holts. They are quite widespread within Newry, Mourne and Down district, especially along Newry Canal and the Quoile (ASSI).

Irish Damselfly

The Irish damselfly is a delicate blue damselfly found in Ireland around small lakes and is concentrated in Armagh, Down, Fermanagh and Tyrone. Within Newry, Mourne and Down district, it has been recorded at Black Lough (ASSI) and Drumlougher Lough (ASSI) outside Crossmaglen. The Irish damselfly is a NI priority species and only occurs in areas where there is good water quality, as it is very sensitive to pollution.

Atlantic Salmon

The Atlantic salmon is known as the 'king of fish' due to its vast migrations across the North Atlantic. In autumn, adults make their way upstream to spawn in riverbeds, often leaping over obstacles such as waterfalls to do so. One year after moving to the sea, young salmon use their homing instinct to return to the river of their birth to spawn themselves. Major threats include over fishing, introduction of non-native salmon stocks, physical barriers to migration and increased mortality at sea. These fish can be found in rivers in the Mourne Mountains. The Footstick Bridge in Tollymore Forest Park is a 'hot spot' for leaping salmon.



Otter @ DAERA
Irish Damselfly @ Brian Nelson
Atlantic salmon @ Laurie Campbell

Woodland

There was a time when Northern Ireland was almost completely covered in woodland. However, as a result of agriculture and development, it is now We now have only six percent woodland cover, one percent of which is native broad-leaved woodland.

Key Threats

- Habitat loss and/or fragmentation
- Inappropriate management
- Non-native invasive species such as grey squirrel, Japanese knotweed and rhododendron
- Tree diseases such as ash dieback

Local Actions

- Increase the woodland cover of our district through promotion of funded schemes e.g. agri-environment schemes and the Woodland Trust schemes for restoration, restocking or creation
- Pilot new woodland planting schemes on appropriate publically accessible land
- Promote and increase the recording of key woodland species
- Raise awareness of the importance of woodlands and hedges through guided walks, talks and media



Mixed Ashwoods

Mixed ashwoods are woodlands where ash is the dominant species in association with other broadleaf native species such as oak, downy birch and hazel. Other trees such as rowan and the non-native species sycamore and beech may also be common. Mixed ashwoods support a rich and colourful ground flora of spring-flowering herbs such as, bluebells, primrose and wild garlic and wood-anemone

In Newry, Mourne and Down district, mixed ashwoods are found on Fathom Mountain and in the Newcastle Valleys. Small unidentified pockets of mixed ashwoods can also be found across the district that may have importance locally for wildlife.

Oakwoods

Oakwoods are dominated by the two native oak species in Northern Ireland; sessile oak and pedunculate oak in association with other species such as downy birch, hazel, holly and rowan. The ground layer is often rich in ferns, woodland wildflowers including bluebells, great wood-rush, wild garlic and shrubs such as bilberry and bramble. These woods can also contain many rare species of fungi and lichen.

Rostrevor oakwood overlooking Carlingford Lough is the most established oakwood in the district. It is designated an ASSI as well as a National Nature Reserve (NNR) and is open to the public. Another oakwood in the District is Bohill Forest Nature Reserve. This small deciduous woodland contains native trees that have naturally regenerated since the site was clear felled in the past. The reserve was established and is now managed to protect the holly blue butterfly. This woodland also supports red deer and woodland birds such as the jay, goldcrest and tit species.

Wet Woodland

Wet woodlands are a range of woods that occur on poorly drained or waterlogged soils such as around lake shores, along streams, on hill-side flushes and on fens and cutover bogs. Typically wet woodlands are dominated by willow, alder or downy birch and can often occur as habitat mosaics with other woodland types.

Examples of wet woodland in the district can be found at Cappagh Lough and St. Peter's Lough which are predominately alder and willow carr. Wet woodland has also developed undisturbed in Hollymount Forest (NNR) since 1745 and, under the dense canopy of alder and willow trees, yellow flag iris and other wetland plants dominate the ground.

Red squirrel @ DAERA
Hawthorn Hill @ Danielle Begley
Yellow flag iris @ Belfast Hills Partnership

Parkland

Parkland is a special type of woodland that is uncommon in Northern Ireland. They are designed landscapes associated with significant houses or demesnes. There is generally a mosaic of habitats including open grown veteran trees set in pasture or heathland, specimen trees, boundary features, woodland blocks, streams, rivers and natural or constructed lakes. Parklands are important for a wide variety of species from grasses, lower plants and invertebrates to birds, bats and mammals.

Examples of parkland in Newry, Mourne and Down district include: Castleward, Castlewellan Forest Park, Creggan Poet's Glen, Delamont Country Park, Derrymore House, Mourne Park and Seaforde House.

Species-rich Hedgerows

Hedges are defined as linear boundaries, comprised of planted shrubs. Species-rich hedgerows are those which contain five or more native woody species on average in a 30 metre length or those with a rich flora of herbaceous plants such as bluebell, herb-robert, lords and ladies, primrose and wood anemone at their base. Hedges are an integral part of Ireland's landscape and a valuable habitat for local biodiversity.

Hedgerows act as very important wildlife corridors for many species, providing connectivity between habitats allowing dispersal and movement. They support many species of birds, insects and mammals. Hedgerows are found throughout the district, typically adjacent to semi-natural habitats and low intensity farmland.



Key Species

Red Squirrel

Catching a glimpse of a native red squirrel is a moment to be treasured. As a shy creature, the red squirrel spends most of its time in the tree tops of mainly coniferous woods. The biggest threat comes from the grey squirrel, which was introduced from North America. The grey squirrel is bigger, bolder and has a less specialised diet compared to the red squirrel. It also transmits the deadly pox virus to the red squirrel. As the grey squirrel expands its range, it is replacing the red squirrel, especially in deciduous woodland. The Cooley, Ring of Gullion and Tollymore red squirrel groups are actively involved in conserving the red squirrel population through recording and providing supplementary food.

Song Thrush

The song thrush is a familiar and popular songbird whose numbers are declining seriously. It is a brown bird with a white (or yellow-white) chest densely sprinkled with arrow head spots. It occurs on farmland, in gardens and in woodland edges and feeds on insects, snails and worms.




Pipistrelle Bats


There are three species of pipistrelle bat in Northern Ireland: common, soprano and the newly recorded, nathusius' pipistrelle. These flying mammals forage along edges such as tree lines, large hedgerows and water edges. Using echolocation (use of echoes), a single individual can eat up to 3,000 insects in one night. Hibernation occurs from November to April after which females give birth to a single pup that they can recognise individually by smell and sound. For further information on local bat species visit the Northern Ireland Bat Group's website: www.bats-ni.org.uk

Local Action for Species




Of the wide variety of species found in the Newry, Mourne and Down district, 12 (individual species and groups of species) have been selected for priority action (see the tables on pages 37-40). Other species not selected for specific action will still benefit from the Habitat Action Plans (HAPs).

Small tortoiseshell butterfly @ Linda Thompson
Nathusius pipistrelle @ Mark Smyth
Breeding waders @ Ronald Surgenor
Common carder bumblebee @ Niall Magee

SPECIES	DESCRIPTION	THREATS	LOCAL ACTIONS
<div>Bats</div> <div></div>	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.	<ul style="list-style-type: none">• Loss of foraging areas and wildlife corridors• Loss of roost sites, such as buildings, trees and bridges• Poisoning e.g. water pollution and chemicals used in timber treatment	<ul style="list-style-type: none">• Guide Council and other organisations on their legislative duties with regards to bats and development• Provide advice to members of the public on bat conservation• Raise awareness of bats through bat walks and talks in the area in partnership with the NI Bat Group
<div>Breeding Waders</div> <div></div>	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. They include lapwing, redshank, curlew and snipe.	<ul style="list-style-type: none">• Agricultural improvement• Disturbance relating to development and dogs• Drainage• Encroachment of scrub on breeding wader sites• Predation on small fragmented populations	<ul style="list-style-type: none">• Encourage responsible rambling in sensitive areas• Highlight the threats to waders through media and guided walks and talks• Promote the recording of waders across the district• Work with landowners where waders occur to encourage sensitive management
<div>Bumblebees and Pollinators</div> <div></div>	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. Most people will see six bumblebee species in their gardens and this makes up 95% of the bumblebees present in NI. They are normally associated with flower rich grasslands, vibrant gardens and species rich hedgerows.	<ul style="list-style-type: none">• Fragmentation and loss of suitable habitat due to development and the intensification of agriculture• Pesticides; use of pesticides in farming• Over-management of greenspace	<ul style="list-style-type: none">• Manage key Council owned sites to improve for pollinators and act as best practice examples• Raise awareness of the plight of the bumblebee, the threats they face and how to help through press releases and events• Work in partnership to improve road side verges and other greenspace across the district

SPECIES	DESCRIPTION	THREATS	LOCAL ACTIONS
Fish Species 	Fish play an important part in freshwater habitats in NI and contribute greatly to our economy.	<ul style="list-style-type: none"> Physical barriers to migration Physical degradation of spawning and nursery habitats Pollution Exploitation from netting and angling Salmon farms which threaten wild salmon populations 	<ul style="list-style-type: none"> Work to develop fish population studies for a number of important rivers and tributaries in the district Work with Rivers Agency to improve the habitat where appropriate
House Sparrow 	A common bird in many gardens. Numbers have dropped in certain areas due to a lack of insect food in summer and winter seed.	<ul style="list-style-type: none"> Lack of food and winter stubble Predation by cats and sparrowhawks Reduction in nest sites due to modern building methods 	<ul style="list-style-type: none"> Raise awareness of the house sparrow through media and events Promote wildlife friendly gardening and recording of the house sparrow
Juniper 	A prickly shrub which tends to be found in exposed areas such as rocky outcrops. It is one of only three conifers native to Ireland.	<ul style="list-style-type: none"> Burning Grazing Scrub clearance Vegetational succession 	<ul style="list-style-type: none"> Raise awareness of the species through education and events Promote further recording through talks with public and landowners Work with partners such as MHT to help create more self-sustaining populations of Juniper
Marine Mammals 	The Council area is host to two species of seals, common and grey. Twenty four species of cetacean (whales, dolphins and porpoises) have been recorded in Irish waters, with eight species regular visitors or residents to our shores.	<ul style="list-style-type: none"> Open net fishing Pollution – agricultural run-off, litter, oil spills and acoustic pollution Ship/boat strikes 	<ul style="list-style-type: none"> Assist/support local groups with coastal clean-ups Organise one event per year to promote recording in the district Promote schemes such as WiSe through talks with local boat owners

Atlantic salmon @ Laurie Campbell
House sparrow @ Ray Kennedy
Juniper @ MHT

SPECIES	DESCRIPTION	THREATS	LOCAL ACTIONS
Marsh Fritillary 	The marsh fritillary is a medium-sized colourful butterfly. The bright orange, yellow and white chequers on the wings are in contrast with the dark brown background. Both sexes look similar but the female is the larger. In June and early July the marsh fritillary is on the wing.	<ul style="list-style-type: none"> Loss and reduced quality of breeding habitat as a result of agricultural improvement along with fragmentation of habitat Parasitic wasps and other predators such as spiders, bugs and ground beetles can also cause fluctuations in populations 	<ul style="list-style-type: none"> Assist with monitoring of populations where possible Raise awareness of the marsh fritillary and promote recording through press releases and events such as the Big Butterfly Count Work with partners to improve habitat for marsh fritillary across the district
Otter 	Otters live in a variety of habitats including freshwater rivers, lakes and coasts. Signs of otters have been recorded throughout the district.	<ul style="list-style-type: none"> Pollution such as farm waste, pesticides and oil spills Habitat loss through drainage and removal of bankside vegetation Accidental death such as road traffic accidents and drowning in fishing equipment 	<ul style="list-style-type: none"> Raise awareness of the importance of otters through the media and events/talks Promote recording and surveying otters Construct an artificial otter holt by way of demonstration to the public Work with public bodies, including Rivers Agency and DAERA
Red Kite 	This magnificently graceful bird of prey is unmistakable with its reddish-brown body, angled wings and deeply forked tail. It was saved from national extinction by one of the world's longest running protection programmes, and was successfully re-introduced to Northern Ireland in 2008.	<ul style="list-style-type: none"> Poisoning - Illegal poison baits set for foxes or crows are indiscriminate and kill protected birds and other animals 	<ul style="list-style-type: none"> Continue to support the 'RKites' project and assist with raising awareness of the red kite Help to promote responsible rodenticide use Work with RSPB and other partners to hold one public event/talk per year focusing on the red kite

Marsh fritillary @ Stephen Craig
Otter @ DAERA
Red kite @ Ben Hall

SPECIES

	DESCRIPTION	THREATS	LOCAL ACTIONS
	Our native squirrel is a shy creature of a reddish colour, with a bushy tail and ear tufts. They spend most of their time high in the tree canopy mainly in coniferous woodland. The spread of the non-native grey squirrel threatens the native red squirrel.	<ul style="list-style-type: none">• Disease - The parapox virus which is carried and spread by the grey squirrels• Grey squirrels outcompete the red for habitat and food	<ul style="list-style-type: none">• Hold events to raise awareness of the red squirrel e.g. Red Squirrel Week• Promote recording of the red squirrel by members of the public and local groups• Support local efforts to re-establish or increase red squirrel populations• Work with the local red squirrel groups to raise awareness
	These buntings occur in arable and mixed farming areas in the district. The male yellowhammer is unmistakable with his bright yellow head and chest. During the winter they feed on grain and seeds whereas throughout the summer breeding season they feed on insects.	<ul style="list-style-type: none">• Changes in land management from mixed farming to livestock production• Changes in spring sown cereals to autumn sown cereals• Inappropriate management of hedgerows• Use of pesticides	<ul style="list-style-type: none">• Increase awareness and recording through at least one engagement with the media and event per year• Pilot suitable sites for giant bird tables on council owned land• Support the RSPB and other partners in their work with yellowhammers• Work with DAERA to promote entry and commitment to arable options in agri-environment schemes

Please note, this list is not exhaustive. Key species will continue to be monitored by the relevant organisations.

Red squirrel @ Ronald Surgenor
Yellowhammer @ Tom Marshall

Do Your Bit for Biodiversity

In order for the Newry, Mourne and Down 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 the area's biodiversity.

Girl exploring @ Strangford Lough and Lecale Partnership

Farmers and Land Owners

You can greatly contribute to this LBAP through managing your land or sections of it in a way that will benefit local wildlife, particularly farmland birds. For example:

- Cut hedgerows as late as possible in the season, ideally February, so seeds, nuts and berries are available 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 to allow some stretches to flower and fruit each autumn
- Sign up to an agri-environment scheme if eligible, to add further benefit to wildlife

You can find out more about agri-environment schemes by contacting your local DAERA office.

Community Groups

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

Businesses

- Create your own Wildlife Garden in your company grounds. You could build an insect hotel or even sow a small wildflower meadow
- Sponsor a local biodiversity project and help make it happen
- Take part in team building days by allowing staff to volunteer on local conservation projects which will give them new skills and help local biodiversity.

Individuals

- Have a go at wildlife gardening and enjoy the small wonders in your own patch: why not create a street garden and encourage your neighbours to do one thing for biodiversity in their gardens too!
- 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).
- Report wildlife crime. Incidents such as dumping and water pollution should not be ignored as these have an impact on local biodiversity. See our signposting page for contact details of where to report wildlife crime.
- Use natural resources more sensitively, for example create your own compost heap, reduce your waste and the need for peat compost, or use a water butt to reduce water usage.
- 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 or scrub clearance for example. Not only will you learn about conservation techniques but you will also be getting fit in the process!

To find out more about the Newry, Mourne and Down LBAP project please contact:

Newry, Mourne and Down Biodiversity Officer
Newry, Mourne and Down District Council Offices
O'Hagan House,
Monaghan Row
Newry
BT35 8DJ

Telephone: 0300 013 2233

Email: health@nmandd.org

Web: www.newrymournedown.org



Butterfly survey @ Lecale conservation
Exploring the seashore @ Strangford Lough and Lecale Partnership

Finding Out More about Biodiversity

If you would like to find out more about biodiversity, please visit the websites listed below or contact the organisations.

- Biodiversity in Northern Ireland** - www.biodiversityni.com
- Biodiversity Ireland** - www.biodiversityireland.ie
- British Trust for Ornithology** - www.bto.org
- Butterfly Conservation** - www.butterfly-conservation.org
- Centre for Environmental Data and Recording (CEDaR)** - www.nmni.com/cedar
- Department of Agriculture, Environment and Rural Affairs** - www.daera-ni.gov.uk
- Ecoschools** - <http://www.eco-schoolsni.org/>
- Farm Wildlife** - <https://farmwildlife.info/>
- Forest Service** - www.dardni.gov.uk/forestry
- Habitas** - www.habitas.org.uk
- Loughs Agency** - www.loughs-agency.org
- Mourne Heritage Trust** - www.mournelive.com
- National Biodiversity Data Centre** - <http://www.biodiversityireland.ie/>
- National Trust** - www.nationaltrust.org.uk
- Northern Ireland Bat Group** - www.bats-ni.org.uk
- Northern Ireland Environment Link** - www.nienvironmentlink.org
- Northern Ireland Fungi Group** - www.nifg.org.uk/
- Ring of Gullion AONB** - www.ringofgullion.org
- Royal Society for the Protection of Birds** - www.rspb.org.uk
- Strangford Lough and Lecale Partnership** – www.strangfordlough.org
- The Conservation Volunteers** - www.tcv.org.uk
- Ulster Wildlife** - www.ulsterwildlife.org
- Walk NI** - www.walkni.com
- Waterways Ireland** - <http://www.waterwaysireland.org/>
- Water Management Unit** - www.doeni.gov.uk/niea/water
- Woodland Trust** - www.woodlandtrust.org.uk

Where to Report Wildlife Crime and Pollution

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, or telephone: 028 9039 5264. Outside of hours, contact the Northern Ireland Bat Group or see their website for guidance <https://www.bats-ni.org.uk/what-to-do-if-you-find-a-bat/>

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, you should report it to the local PSNI either at the nearest police station or by telephoning 101. 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.

Newry, Mourne and Down Local Biodiversity Action Plan 2017 – 2022

This table outlines the overarching objectives and key actions of Newry, Mourne and Down districts' LBAP:

- Conserve and enhance the rich biodiversity of the district for both current and future generations;
- Educate and raise awareness of the importance and variety of biodiversity found within Newry, Mourne and Down district, and;
- Encourage local ownership of Newry, Mourne and Down district's biodiversity.

STRATEGIC OBJECTIVE	KEY ACTIONS	LEAD PARTNER	KEY MILESTONES
1. Conserve and enhance the rich biodiversity of the district for both current and future generations	1.1 Ensure NMDDC deliver on the statutory biodiversity duty through implementation of the NMD LBAP, delivery of internal Biodiversity Implementation Plans(BIPs) and input into relevant projects and programmes	NMDDC	• LBAP actions and BIPs reviewed annually
	1.2 Develop a Local Non-native Invasive Species Strategy	NMDDC, RoG, MHT, NIHE, SLLP	• Non-native Invasive Species Strategy drafted by April 2019 • Local problem areas identified and control options/funding investigated by September 2019
	1.3 Participate in and encourage landscape-scale biodiversity conservation projects across the district	All relevant partners	• Two projects ongoing by 2020
2. Educate and raise awareness of the importance and variety of biodiversity found within the Newry, Mourne and Down District	2.1 Host and promote a programme of biodiversity themed events, talks and workshops	NMDDC, RSPB, UW, SLLP, NT and RoG	• Biodiversity events included in weekly 'what's on guides' from the visitors information centre and updated quarterly on Council and Biodiversity NI websites and Facebook pages • Other events to be fed through Biodiversity Officer for publicising on NMDDC website and social media pages and Biodiversity NI pages

STRATEGIC OBJECTIVE	KEY ACTIONS	LEAD PARTNER	KEY MILESTONES
	2.2 Publicise information about biodiversity through the media using press releases and other media opportunities	NMDDC, SLLP, MHT, RoG and others	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 relevant partners	Seasonal recording schemes promoted every year such as the Big Garden Birdwatch, Big Butterfly Count
	2.4 Produce local biodiversity interpretation and signs at sites of wildlife interest across the district	All relevant partners	Minimum of one produced per year
	2.5 Assist local schools with relevant eco-schools targets e.g. biodiversity and school grounds objectives	NMDDC, RoG, RSPB	As required
	3.1 Help and signpost local communities in developing wildlife projects such as planting mini woodland, creating patches of wildflower meadow or organising wildlife themed events	NMDDC, RoG, SLLP, MHT	• Minimum of three projects or events annually
3. Encourage local ownership of Newry, Mourne and Down district's biodiversity	3.2 Provide practical advice, encouragement and support to key stakeholders, local environmental organisations and communities	All relevant partners	As requested

STRATEGIC OBJECTIVE	KEY ACTIONS	LEAD PARTNER	KEY MILESTONES
	3.3 Highlight opportunities for people to get involved in nature conservation and outdoor activities which in turn leads to better mental and physical health	All relevant partners	Regular email circulars and press releases on local opportunities and success stories
4. Protect and conserve designated sites	Fully implement AONB Management Action Plans	RoG, SLLP, MHT, NMDDC, DAERA and others	The full success of the implementation programme will be determined by external funders

Partner Abbreviations

- NMDDC
Newry, Mourne and Down District Council
- RoG
Ring of Gullion AONB and Landscape Partnership
- MHT
Mourne Heritage Trust
- NIHE
Northern Ireland Housing Executive
- SLLP
Strangford Lough and Lecale Partnership
- RSPB
The Royal Society for the Protection of Birds
- UW
Ulster Wildlife
- NT
The National Trust
- DAERA
Department of Agriculture, Environment and Rural Affairs

Murlough bluebells @ Ronald Surgenor

