

# STRAIDE

## BIODIVERSITY ACTION PLAN

### 2021-2026



October 2021

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An Chomhairle Oidhreachta  
The Heritage Council



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## **Acknowledgements**

We would like to thank Straide Community Development Group for the support in completing this plan. Special thanks to Keith McGreal, Kate O'Hara, Celia Graebner, SS Peter and Paul National School, Rural Social Scheme, Michael Davitt Museum, and St Peter and Paul Church, for their valuable input.

This project has been funded by The Heritage Council.

*The content of this publication is solely the responsibility of the authors and does not necessarily represent the official views of The Heritage Council.*

## **Executive summary**

Straide Biodiversity Acton Plan was funded by the Heritage Council. Straide is a small village located in the heart of Mayo between Foxford and Castlebar. Straide takes its name from 'tsráid', meaning street. There is a small village green (fairgreen) in front of the Michael Davitt Museum. The Straide River flows through the village. There is a Community Hall, church, two public houses, and numerous private dwellings. Much of the surrounding landscape is agricultural, with cattle and sheep being the main farming activity.

Communities like Straide have the potential to make changes in the management of its managed green spaces and natural habitats which could potentially make many positive changes for local biodiversity.

The following habitats were recorded in Straide and its surroundings: improved agriculture, lakes, hedgerows, buildings and artificial surfaces, stone walls and other stonework, amenity grassland, scrub and depositing/lowland rivers.

Several habitats and species that make Straide's biodiversity particularly special have been highlighted in the report. Habitats include river, lakes and stone walls. Areas of interest include Straide Abbey and grounds and ringforts. Species of interest include dipper and kingfisher and the Large carder bee.

The community questionnaire showed that the natural environment was important to everyone who responded and that they would support a Straide Biodiversity Action Plan.

A biodiversity action plan was developed with 21 actions.

# 1.0 Introduction

This Biodiversity Action Plan has been funded by the Heritage Council. Giorria Environmental Services were commissioned by Straide Community Development Group to develop an action plan in consultation with the local community and stakeholders including the local primary school, Michael Davitt Museum, Rural Social Scheme and the Church.

Straide is a small village located in the heart of Mayo between Foxford and Castlebar. Straide takes its name from 'tsráid', meaning street.

Michael Davitt, the founder of the Irish Land League was born (1846) and buried (1906) in Straide. The Michael Davitt Museum was established to commemorate his life. Neighbouring the Museum is the church of Saints Peter and Paul located at the top of the hill marking the centre of the village. A well-preserved 13th Century Dominican Abbey stands close to the church. Around the church is the local graveyard.

There is a small village green (fairgreen) in front of the Michael Davitt Museum. The Straide River flows along the edge of this green. To the rear of the museum is Straide Davitt Community Hall.

There are two public houses, and numerous private dwellings. In a small green space close to the Copper Beech public house, backing onto the river, a new polytunnel has been erected by the Museum. There are several mature trees around the church and close to the river. Many are non-native species such as sycamore and Sitka spruce.

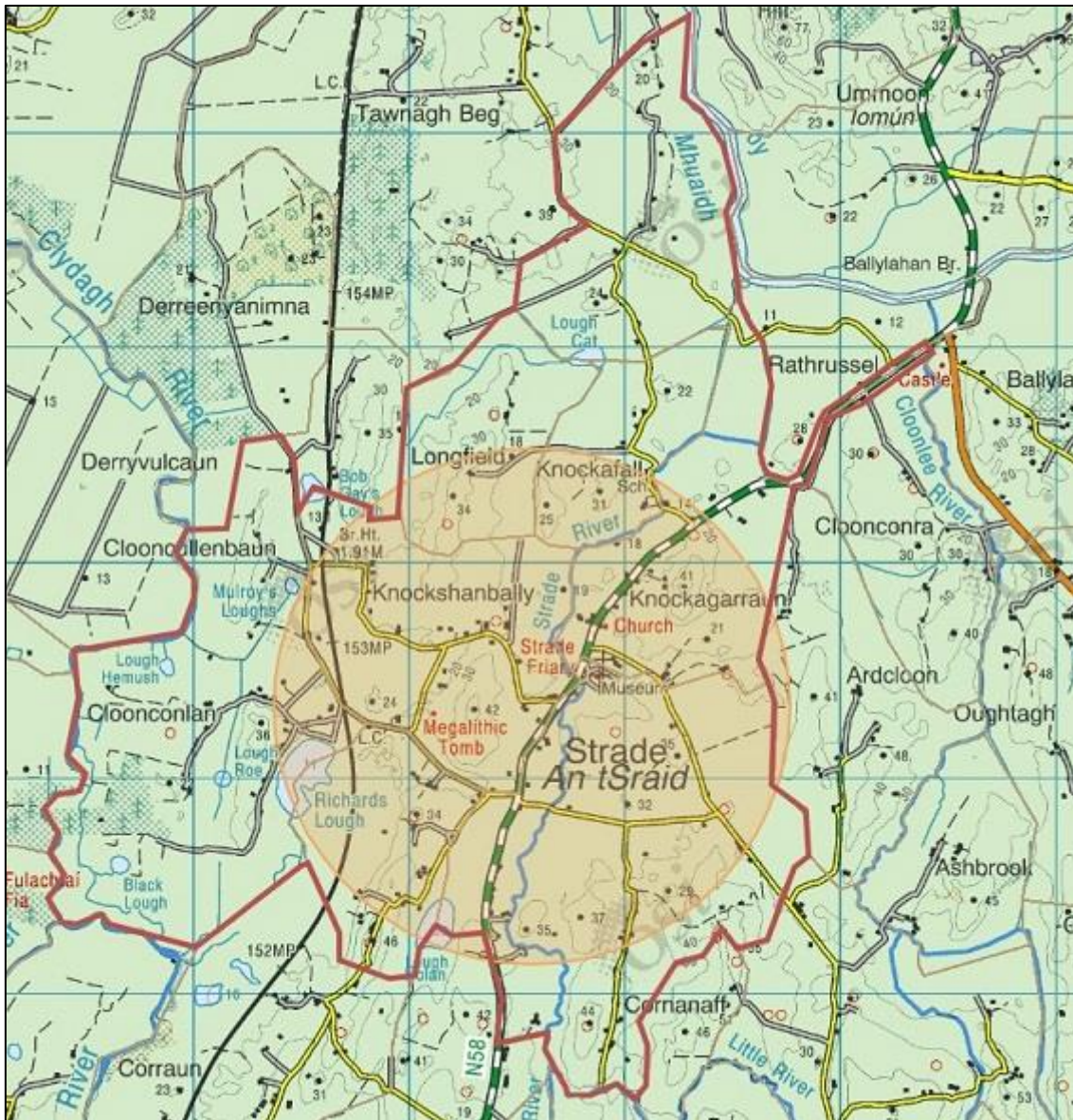
Much of the surrounding landscape is agricultural, with cattle and sheep being the main farming activity.



*Photograph 1 – Jackdaw using walls of Abbey*

## 1.1 Survey Area

The main survey area for the project is shown in Map 1 below. The village is quite long with the centre being the church area. The main area of focus is the area highlighted by the orange circle.



Map 1 – Area of interest around Straide

## 1.2 What is Biodiversity?



Biodiversity refers to all living things.

Biodiversity is important because without it we would not survive. It is basically our ecological life-support, providing us with many ecosystem services. Without biodiversity there would be no oxygen, clean air and water. Biodiversity provides food, pollination of plants and natural pest control. Biodiversity is defined as: "*the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.*"

In 2019, the Inter-governmental Panel on Biodiversity and Ecosystem Service (IPBES) published its global assessment on the state of the world's biodiversity and ecosystem services. The report highlights how biodiversity is declining globally and how the rate of species extinctions is accelerating. The impact of these declines on humans cannot be overestimated.

The impact of the loss of biodiversity can also be seen here in Ireland. Of the species that have been assessed here, one in every five is threatened with extinction. For example, there are ninety-nine different types of bees in Ireland (twenty-one bumblebee species, seventy-seven solitary bees and one honeybee). Of these, one-third are threatened with extinction. Pollinators are declining for many reasons but two of the main threats are the lack of food and shelter. The Irish Butterfly Red List (2010) has found that, of the 35 resident and regular migrant species of Irish butterfly, one species is now extinct, and six species are threatened with extinction. Nearly one fifth of our butterfly species are now under threat. Thirty-seven species of bird are of high conservation concern. The corn bunting has become extinct since around 2000 and the once widespread corncrake is just lingering on in the western extremities of counties Donegal and Mayo.

It is up to all of us to do our bit for local biodiversity.

### Why have a Biodiversity Action Plan?

Communities like Straide have the potential to make changes in the management of their managed green spaces and natural habitats which could potentially make many positive changes for local biodiversity. Changes in grassland management could lead to an increase in flora, which in turn would support many invertebrate species including pollinators and this in turn would also support birds and small

mammals. The inclusion of wildlife homes such as bird and bat boxes can also help increase biodiversity.

The National Biodiversity Action Plan 2017-2020 sets objectives, targets and actions for the country. The vision of the national plan is *“That biodiversity and ecosystems in Ireland are conserved and restored, delivering benefits essential for all sectors of society and that Ireland contributes to efforts to halt the loss of biodiversity and the degradation of ecosystems in the EU and globally.”*

One of the objectives of the National Plan is for an “Enhanced appreciation of the value of biodiversity and ecosystem services amongst policy makers, businesses, stakeholders, local communities, and the general public (Target 3.1).”

Local communities are seen as being key partners in the national plan. A local Community Biodiversity Action Plan looks at how communities can contribute to the conservation of biodiversity at a local level. It can be used as a plan to maintain and enhance biodiversity within your local area.

In order to thrive, biodiversity needs a diversity of habitats. Animals and plants need places that provide shelter and cover. This can be in the form of wooded areas, areas of undisturbed tall vegetation, walls and soil banks are also important. These areas provide shelter and nesting sites for birds, small mammals and invertebrates. By limiting or eliminating the use of herbicides and pesticides a safe environment for species can also be provided.

Plants and flowers will provide food for pollinators. Native wildflowers have declined in Ireland with the loss of hay meadows and other flower-rich habitats. It has also been shown that flower-rich meadows and pastures can store 500% more carbon than fields of pure grass. By providing native flowers in our factory sites, industrial estates and towns and villages we can replace this valuable resource and help climate change.

Ireland is one of the least wooded countries in Europe. Trees provide nesting sites and food for birds. They can also help store carbon. Straide, like many areas has small areas of scattered scrub (good for biodiversity) and some conifer plantations (generally poor for biodiversity) but native broadleaf woodland that would include oak, birch, alder and holly would support many more flora and fauna.

Over recent decades we have suffered a huge loss in biodiversity, from loss of hay meadows and the insect life they support, loss of wetland habitats as we have drained bogs and agricultural fields, loss of hedgerows and woodland. In the latest review of the Birds of Conservation Concern in Ireland published in April 2021, further declines in Irish birds have been highlighted. The report highlights that there has been a 46% increase in the number of Red-listed bird species. More than half of Ireland’s bee species have undergone substantial declines since 1980, with the distribution of 42 species declining by more than half. Humans are an integral part of biodiversity, and our actions can affect it in both a positive and negative way.

However, there is much we can do to improve this. When managing land, it is often not a case of doing nothing, nature needs a helping hand. A field left un-grazed or uncut would quickly become dominated by rank vegetation and brambles. Therefore, it is important for communities to plan actions. When planning actions, it is important to know what is there. It is important to know how we can best maintain what is there, but also to know how we can enhance what is there.

This plan will set out actions for the community to protect and enhance the biodiversity they have in Straide.

## 2.0 Straide's Biodiversity

In order to set a baseline for any future management to improve biodiversity of an area it is important to know what habitats and species are already present in the area and their current status in terms of conservation.

### 2.1 Ecological Surveys

The following surveys were completed during 2021.

- Ecology surveys
- Hedgerow surveys

Details of species recorded are given in Appendix 1. The habitats around the village centre were mapped (see Map 1). Table 1 provides a summary of the area of habitats.

Several hedgerows near the village were also surveyed.

#### 2.1.1 Limitations of surveys

Surveys were limited to the months of July through to September. Time, seasonal and access restraints meant that not all habitats outside the immediate surrounding of the village were surveyed in any detail (e.g., ringfort, lakes).



*Photograph 2 – Agricultural grassland and mature trees*



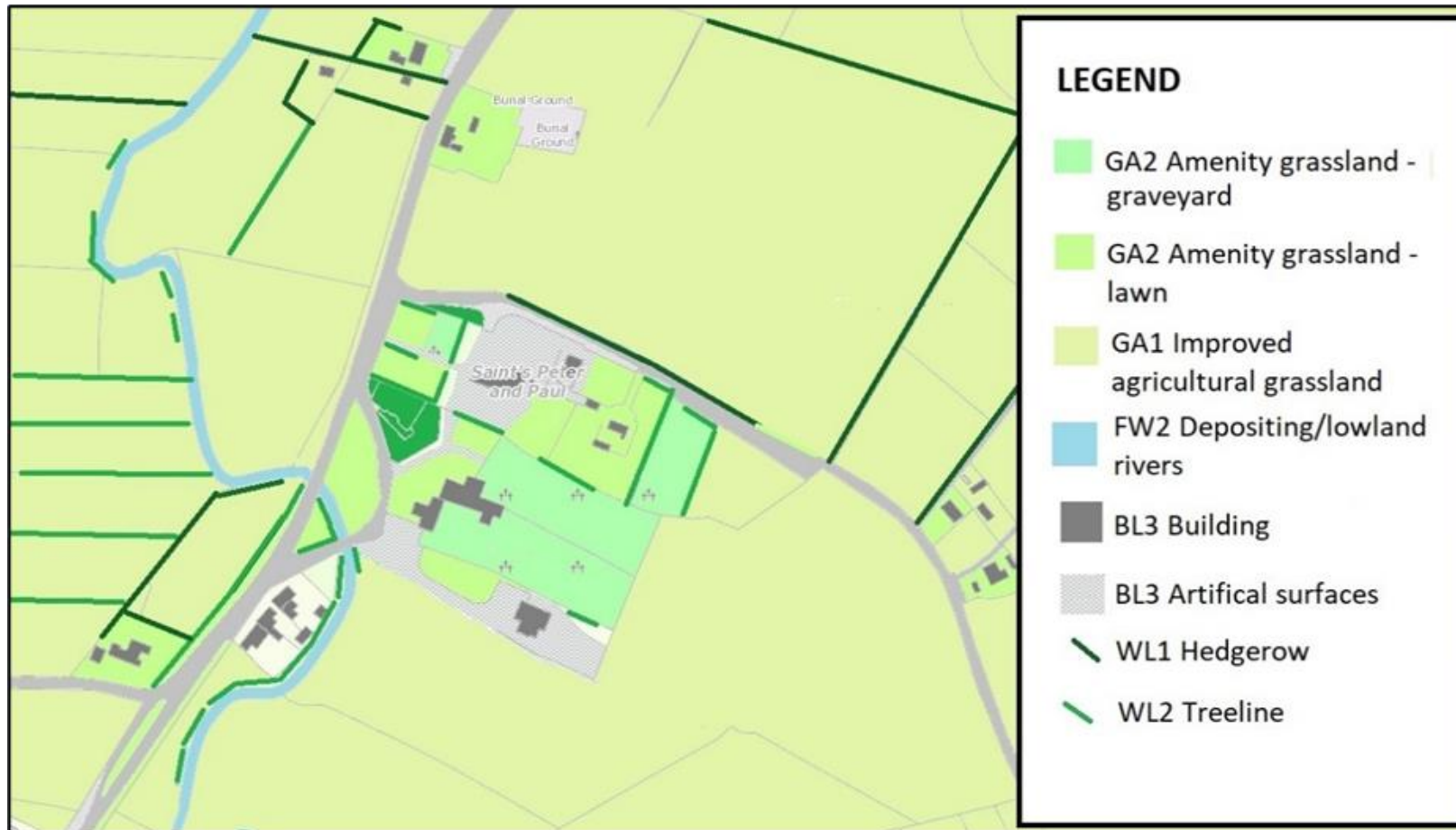
## 2.2 Habitats recorded in Straide and surrounding areas

Habitat Type	Habitat code*	Habitats	Biodiversity value
Improved agriculture	GA1	Agricultural grassland	Low
Hedgerows	WL1	Hedgerows	High
Buildings and artificial surfaces	BL3	Built land and gardens	Medium
Stone walls and other stonework	BL1	Built land, garden, agricultural stonewall boundaries	Medium
Amenity grassland	GA2	Cemetery Village Green	Low-medium
Scrub	WS1	Scrub / woodland	Medium-high
Depositing/lowland rivers	FW2	Straide River	High
Lakes and ponds	FL	Lough Holan, Richard's Lough and Lough Cat.	Medium-high

\*Fossett Habitat Classification



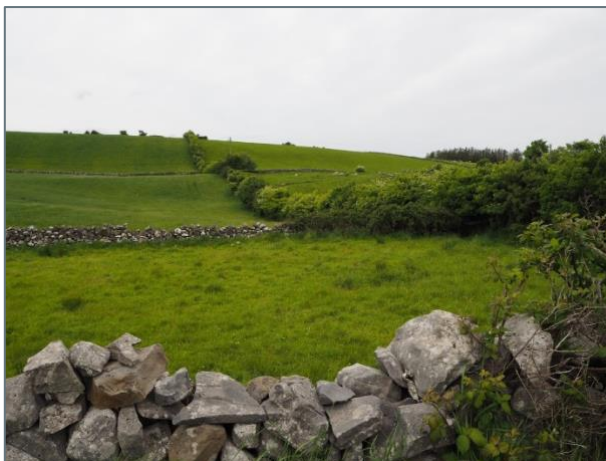
*Photograph 3 – Wildflower verge along main road at Season Master*



Map 2 – Habitat map of centre of village

## Agricultural grassland (GA1 Improved agricultural grassland)

Much of the habitat in the immediate surrounding of Straide village is composed of grassland and on the whole, these are improved agricultural grassland. The fields are generally separated by hedgerows. Agricultural grassland can have a low biodiversity value where it is managed intensively. However, some pastures are wetter and more rushy in nature, and pastures close to the river have potential to have richer banks.



*Photograph 4 –Agricultural fields surrounded by stone walls*

## Stone walls and other stonework (BL1)

Stone walls feature frequently as field and field / road boundaries in the surrounding landscape of the village. Some stone walls have become vegetated (see also Hedgerows below). Stonewalls support lichens but also ferns, such as wall rue and spleenwort. Brambles are also found scrambling over stonewalls.

Stone walls are also important for small mammals such as stoats and mice, providing cover and possible foraging area for insects. Many insects will hibernate at the base of these walls. Stonewalls were generally found to be in good repair.



*Photograph 5 – Wall rue (a type of fern) growing in stone wall*

## Hedgerows (WL1) and Treelines (WL2)

Hedgerows are frequent field boundaries. Many of the hedgerows are dominated by hawthorn. Blackthorn was also present. Larger trees included ash and sycamore. Ivy and bramble were the most frequent climbers, though dog rose was occasionally present.

Pressures seen on some roadside and field hedgerows was intensive management, with hedgerows being cut to low square shapes,



*Photograph 6 –Intensively managed roadside hedgerows*

removing all fruiting and flowering aspects of the hedgerow. Some roadside hedgerows were also being cut by flails which left hedgerow trees damaged. Damaged branches can lead to the trees being susceptible to disease.

There was evidence of ash dieback on many of the ash recorded in the hedgerows and village.

## River (FW2 - Depositing/lowland rivers)

Straide river flows through the village. Sections of the river fall within the River Moy SAC, the river being a tributary of the River Moy.

The STRADE\_010 waterbody (EPA code: IE\_WE\_34M020650) has Water Framework Directive (WFD) River Status of "Poor" and a WFD River Water Bodies Risk status of "Under review" based on EPA data: 2013-2018 reporting cycle.

Pressures in the river seen during field work includes cattle drinking areas where cattle have access directly to the river for drinking. This causes pollution not just from livestock defecating directly into the water but also from cattle poaching and destabilising the riverbank. Such pressures can easily be overcome by installation of nose pumps. Nose pumps operated by cattle, pumps water up to 70 m length or from a depth of 7 meters. As the animals' drink from the bowl, they push against a lever which pumps water from the water source. Livestock learn quickly how to operate the pump and each one is suitable for 10 to 15 animals (for example see [www.odonovaneng.ie/2015/05/27/aquamat-pasture-pump/](http://www.odonovaneng.ie/2015/05/27/aquamat-pasture-pump/)).

Other pressures included evidence of herbicide use close to riverbanks. This could potentially lead to run-off of chemicals into the water.



*Photograph 7 – River Straide*

## Lake (FL – Lakes and ponds)

There are several small lakes in the wider hinterland of the village. The closest of these is Lough Holan which is approximately 6.3 hectares in size. Other lakes include Richard's Lough and Lough Cat. Lough Holan currently has an "unassigned" status in the EPA water quality status of lake waterbodies (2013-2018) but it did have a "good" status in 2007-2009. These habitats are important for aquatic insects, amphibians and wildfowl.



*Photograph 8 – Lough Holan*

## Blanket Bog (PB3 - Lowland blanket bog) and Wet Heath (HH3 - Wet heath)

There are bog habitats within 2 km of the village. Some of these bogs are listed on Annex I habitat (protected habitats under EU habitats directive legislation). Bogs support a wide range of flora and fauna and can be biodiverse. However, many of the bogs in the vicinity of Straide have been harvested for peat for generations and are generally in poor condition.

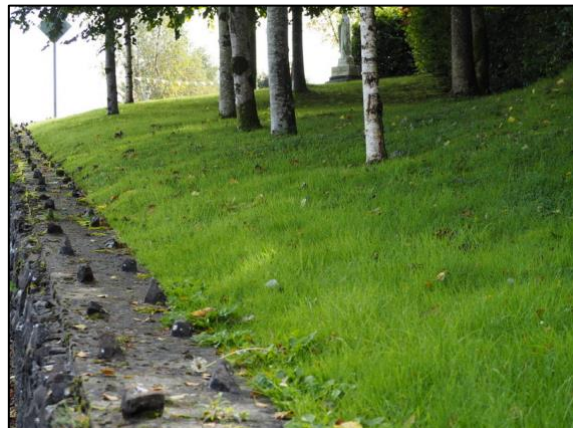


*Photograph 9 – Ling heather growing in bog at Muckanagh*

The main pressures on bog habitat here is peat extraction, though mechanical peat extraction can be particularly damaging. By blocking drains and raising the water level there is potential for the bog to be restored. Restored bogs are vital for storing carbon into the future with the increased threat of climate change.

## Amenity Grassland (GA2)

This type of grassland is improved, or species-poor and includes amenity, recreational or landscaped grasslands, but excludes farmland. These areas are regularly mown to maintain very short swards. Amenity grassland is found in the village green and in the newer sections of the graveyard and in the green areas around the church. The old graveyard appears to be cut regularly too but has potential to be more species rich.



*Photograph 10 – Amenity grassland near church*

## 3.0 Local Biodiversity Areas

### Straide Abbey and Grounds

Straide Abbey was founded around 1240 by Jordan de Exeter. At first it was a Franciscan Friary but by 1252 it was handed over to the Dominicans. Part of the surviving structure dates back to the 13<sup>th</sup> Century but most of the building existing today date to a 15<sup>th</sup> Century restoration. The friary was dissolved in 1578 but friars continued to serve in the area until the 19<sup>th</sup> Century.

The building itself is used by members of the corvid family. Jackdaws and rooks were recorded during site visits. The crows also use the surrounding tall trees. The stones of the Abbey are covered in numerous species of lichen and ivy-leaved toadflax (introduced / garden escapee) also ferns such as polypody. As the building is not roofed it is unlikely to have any bat roosts, though bats may temporarily use the crevices and gaps in the stone walls.

The grass areas and graveyard area of the grounds are relatively intensively managed through mowing and strimming. There are many mature trees in the ground of the Abbey which provide important habitats for insects and birds.

Despite the intensive mowing, the graveyard supported many plants including field scabious and dandelions which were being used by pollinators (hoverflies) on the days of the survey.

Ash trees planted in the newer part of the graveyard have been affected by ash dieback. The newly planted beech hedge will provide shelter for small birds and insects.



*Photograph 11 - Straide Abbey*

## Domestic and School Gardens

There are numerous domestic gardens within the village of Straide and in the surrounding townlands. Gardens can be important habitats particularly for pollinators and wild birds if the gardens also contain trees and shrubs.

The school has a garden and vegetables, and flowers are grown. The school grounds had a good diversity of ground flora during the summer. Encouraging the school to continue to manage grounds in a way that increases flora diversity is recommended.



*Photograph 12 – Red clover flowering in school garden during summer 2021*

## Straide River

The river is an important feature of the village and links directly to the River Moy Special Area of Conservation. Different areas of the river have different flow rates, from slow moving water to areas of faster moving water over gravel. This diversity in riverbed supports different types of aquatic animals. These fast-flowing areas are also favoured by Dippers (see page 18 below) which have been recorded in the river. Duck, such as mallard will use any part of the river for foraging and also nesting in secluded bankside vegetation.



*Photograph 13 – Open banks and relatively fast flowing section of Straide river near school*

Some of the banksides are lined with trees, mainly willow, ash and alder, creating a riparian habitat. These areas would be used by otters for daytime lie up sites. There is potential for otter holts (dens) to occur along the river, and they have been recorded near Ballylahan bridge on the main River Moy. Otters have also been seen near the Disabled Angler Facility along the River Moy. These riparian habitats are also important for nesting birds.

Some areas of the bank are more open. These areas support a diversity of flowers which benefit insects such as pollinators but also provide resting spots for dragonflies and damselflies. In most cases these areas open straight out onto farmland.

Tall banks allow for nesting sites for kingfisher which have been recorded along the river.

The river is known to support a brown trout population.

As mentioned in previous section on page 12, cattle drinking areas are a potential pressure on water quality of the river. In addition, riparian habitats are being impacted where ash trees are being affected with ash dieback. Only minor amounts of littering were observed.



*Photograph 14 – Well wooded banks of the river with willow tree in the foreground.*

## Bog habitats

Much of the bog habitat is old cutaway bog but there are some areas with abundant heather and areas of wet bog pools. The bog pools also contain bog plants including Bog Pondweed and are important for aquatic insects and amphibians. Bogland flora including devils bit scabious, various sedges, ling heather, and cross-leaved heath were all observed. Irish hare droppings were found in a couple of areas of the bog and good hare numbers were reported around the bog habitat at Tawnagh Beg.



*Photograph 15 – Stacked turf*

## Ringforts

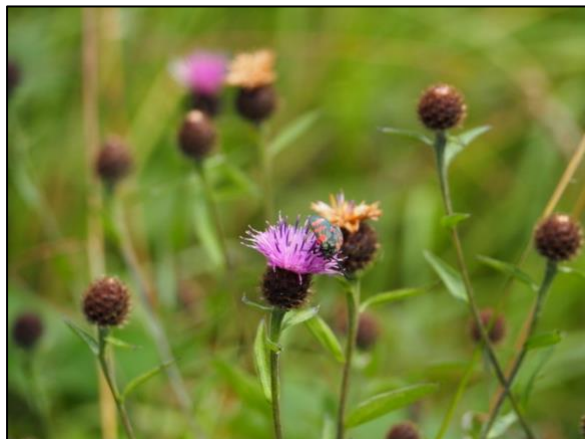
The ringforts are generally ringed with hawthorn trees and there are quite a number within a kilometre radius of the village. Some of the ringforts have become little islands of scrub. These habitats can be valuable nesting habitats for birds especially where forts are directly linked to hedgerows which birds and other animals will use as corridors.



## Wildflower Rich areas

An area of flora rich habitat was observed in townlands of Tawnagh Beg and Knockafall and other areas are known. One hay meadow recorded by C. F. Graebner recorded 21 different flowering plants. Flower rich meadows such as these are very important for insects, particularly pollinators.

*Examples of flora rich areas with species such as knapweed, meadowsweet, lady's bedstraw, ragwort, and field scabious.*



## 4.0 Local Biodiversity – Species of note

### Large Carder bee

The large carder bee is a striking blond bee with a ginger thorax and no black hairs on its abdomen. These bees are generally found on flower-rich habitats, and it is therefore largely absent from lowland agricultural landscapes. Unlike other familiar bumblebees, which nest underground, carder bees' nest above ground, covering their nests with moss and dry grass. The large carder bee is listed as "Near Threatened" in the Regional Red List of Irish Bees (Fitzpatrick et al, 2006). The main threat to the species is habitat loss, particularly the loss of flora rich grassland. There have been at least five records of these bees in the Straide area this year (2021) (C. F. Graebner, personal communication.)



*Photograph 16 – Large carder bee*

### Dipper

Dippers are the only true aquatic passerine. They are able to dive and swim underwater in search of small aquatic insects such as caddisfly, stonefly and other insect larvae. While they generally prefer faster flowing water, they will visit more varied flow rates. They need rocks along the banks and mid channel. Dipper nest under old bridges but many newer bridges have smooth sides and no holes. Dipper will use nest boxes placed under bridges. Placed above the flood level.

### Kingfisher

A study carried out in 2010 (Kingfisher Survey 2010) documented kingfishers in very close proximity to the village green. Kingfishers use waterways that are slow flowing, which have perches available for fishing. Perches are generally overhanging branches suitable for observing the water below and launching dives from. For breeding, kingfishers need suitable nesting banks. These are generally tall vertical banks with soft material into which they can dig their burrows.

Threats to water quality can impact kingfishers as they only feed on fish from the river and if pollution impacts prey availability the kingfishers will not thrive. When looking at creating a river walk the potential disturbance of kingfisher using the river should be taken into account.

# 5.0 Community Outreach

## Community Questionnaire

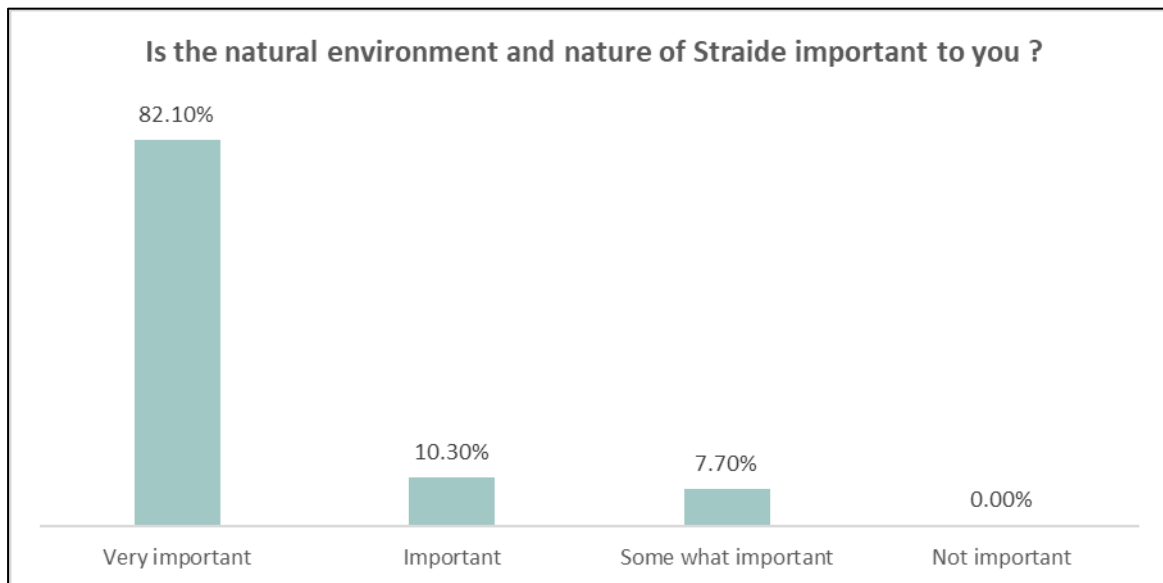
An online community consultation resulted in 41 responses. Those consulted were asked about local biodiversity and what they felt was most valuable in terms of biodiversity in their local area.

In general, those surveyed felt that they were aware what biodiversity meant, with only two felling they were not sure. Most of those surveyed (82%) felt that the natural environment was very important to them, while the remainder still felt it was important. A slightly higher percentage (85%) felt that more should be done to protect and improve the nature and natural surroundings around Straide. Of those who completed the survey 92% felt that they would support a biodiversity action plan for the community.



Photograph 17 - Hoverfly on dandelion

When asked what elements of biodiversity they particularly enjoyed the responders often mention wildflowers. Birds, insects, the new willow art works in the village and the river were also recurring themes.



See Appendix 3 for the full results of the community consultation.

## 6.0 Biodiversity Action Plan

Action number	Action	Why	Proposed Locations	Who	Timeframe	Success measure
1	<p><b>Management of grassland – six-week meadows</b></p> <p>Currently the grassland around the church, Museum, community centre and village green are mown regularly. This means native flower species do not get an opportunity to flower. Six-week short term meadows can provide good pollinator forage while at the same time keeping grass relatively short (see Appendix 4). The school may be mown more frequently but when checked during surveys was rich in wildflowers during summer and early autumn. [Note: See proposed management map in Appendix 6]</p>	To increase flora and biodiversity in general	<ul style="list-style-type: none"> <li>• Church – outside grass areas along road to the north</li> <li>• Part of area of village green along river</li> <li>• School (continue to manage in same way)</li> <li>• Other areas as appropriate</li> </ul>	<p>Straide Community Development Group</p> <p>School</p> <p>RSS</p> <p>Museum</p>	Over 1-5 years	Number of areas managed for wildflowers
2	<p><b>Road verge management – wildflower verges</b></p>	To increase flora and biodiversity in general	<ul style="list-style-type: none"> <li>• Road verges along N58</li> </ul>	Straide Community	Over 1-5 years	Increased length of road managed for wildflowers

	Currently road verges are cut regularly, and parts of some are sprayed with herbicides (e.g., against the stone walls). By allowing road verges to grow we can increase the diversity of wildflowers. Verges can be cut on a six-week rotation (as above) or left to flower all summer, cutting at the beginning of September. (See Appendix 4).			Development group  Landowners and community grass cutting volunteers		
3	<b>Erect insect, bird and bat boxes</b> Birds in particular are often limited by the availability of nest boxes. Dipper box could be placed by the wall of one of the bridges. It may also be appropriate to install some barn owl and kestrel boxes in the farmland. See Appendix 5 for plans to make boxes.	To support insect, bird and bat populations in the locality	<ul style="list-style-type: none"> <li>Abbey grounds</li> <li>Trees around Church</li> <li>Look at incorporating swift boxes into new build (Museum)</li> <li>Trees around village</li> <li>Bridge - Dipper box</li> <li>Agricultural fields</li> </ul>	Straide Community Development  Local farmers  School  Museum  RSS  Church	Year 1 and 2	Number of bird, insect, and bat boxes erected
4	<b>Plant pollinator friendly perennial plants in flower beds</b> By increasing the variety of perennials in beds around the community centre and creating a new bed in the village green more pollinators can be supported. Perennial plants are relatively easy to maintain and	To support pollinators  To increase attractiveness of community centre and museum car park	<ul style="list-style-type: none"> <li>Flower beds around community centre and museum car park areas</li> <li>Village beds</li> <li>Gardens</li> <li>Museum sensory garden</li> </ul>	Straide Community Development, to co-ordinate  Museum  RSS	Year 1 and 2	Number of beds in village planted with pollinator friendly plants

	add colour and interest to the flower beds.	To increase attractiveness of village green				
5	<b>Plant more native trees</b> A couple of native fruit trees could be added in grounds of museum. The ash trees in the graveyard (that are dying of ash dieback) could be replaced by fruit trees. Apple trees would add interest both in spring (blossom) and autumn (fruit) and provide food for pollinators and birds.	To support local biodiversity	<ul style="list-style-type: none"> <li>• Grounds of museum</li> <li>• Graveyard</li> </ul>	Straide Community Development Group  Museum  Church	Year 2 and 3	Number of trees planted
6	<b>Plant bulbs in amenity grassland areas and school grounds</b> Snowdrop and Crocus bulbs could be added to some areas of amenity grassland.	To increase food availability for pollinators	<ul style="list-style-type: none"> <li>• Area under trees on outside of church</li> <li>• Pots in and around village</li> <li>• Part of area by community centre</li> <li>• Graveyard</li> <li>• Roadside verges</li> </ul>	Straide Community Development with volunteers  Museum  RSS  Church  School	Year 2-3	Number of bulbs planted
7	<b>Raise awareness of biodiversity by holding wildlife walks, talks and events.</b> For example, consider organising a bat walk to learn about bats in the area.	To increase biodiversity knowledge	<ul style="list-style-type: none"> <li>• Village</li> </ul>	Straide Community Development	Year 1-5 Consider annual biodiversity event during Biodiversity or Heritage week	Number of biodiversity walks and / or events held each year

8	<p><b>Collect native wildflower seeds and scatter on road verges and /or grow on as plug plants</b></p> <p>Some native wildflower road margins have been successfully managed this year (2021). In particular the road margin opposite Season Master. Some of the smaller road verges have also a good diversity of plants. By collecting local wildflower seeds from these areas, the local genes of the plants that have grown in the area over the years can be collected and grown elsewhere in the community (See Appendix 7). The Museum polytunnel could be ideal area to grow on some of these seeds.</p>	To support local biodiversity	Collect seed in areas of good diversity and distribute to area where diversity is poorer (e.g., some road verges)	<p>Straide Community Development Group with volunteers</p> <p>School</p> <p>Museum</p> <p>RSS</p>	Years 3-5	Number of species of wildflower seed collected
9	<p><b>Reduce and eliminate use of pesticides</b></p> <p>Some of the road verges on the main N58 and also on the graveyard and area around the Abbey appear to have been sprayed to reduce weed growth. Sprays negatively impact biodiversity. Ideally the use of herbicides and pesticides should be reduced and eliminated where possible.</p>	To support local biodiversity	In all areas	<p>Citizens</p> <p>Church and RSS for graveyards</p>	Years 1-5	Number of people no longer using chemicals
10	<p><b>Monitor local biodiversity</b></p>	To establish if changes made are	1km transect	Straide Community	Years 2-5	Number of records submitted



	<p>By recording plants and animals found in the area, the community can see that the changes they are making are having a positive impact on biodiversity. Look at setting up a regular butterfly or bee transects and encourage the school to get involved by doing Flower-Insect Timed Counts (FIT counts) (see Appendix 7).</p> <p>Consider having an annual biodiversity recording day where everyone in the community could be encouraged to record species of flora and fauna in their area. There could be a special prize for person who finds a new species for the area or who records the most species.</p>	<p>having a positive effect on the local biodiversity of the area</p>	<p>School grounds</p>	<p>Development Group</p> <p>Local wildlife champion</p> <p>Local primary school</p>		<p>to the National Biodiversity Data Centre</p>
<p><b>11</b></p>	<p><b>Hedgerow maintenance workshop</b></p> <p>Many of the hedgerows around Straide appear to be managed intensively. Intensively managed hedgerows do not flower and produce little fruit – leaving little food for insects (flowers) or birds (fruit). By having a talk about hedgerow management in the community awareness about how best to manage hedgerows could</p>	<p>Maintaining hedgerows every 2-3 years allows them to flower thereby providing food for pollinators and allowing fruit to develop and feed birds later in the season</p>	<ul style="list-style-type: none"> <li>• Road verges</li> <li>• Farmland</li> <li>• Gardens</li> </ul>	<p>Straide Community Development Group</p> <p>Farmers / Farming organisations</p> <p>Mayo County Council</p> <p>Gardeners</p>	<p>Years 1-5</p>	<p>Number of hedgerows managed in wildlife friendly manner</p>

	be highlighted to farmers and others who manage hedgerows.					
<b>12</b>	<p><b>River path from village green to the school</b></p> <p>It would be nice to link the centre of the village with the school. Being able to walk to school would reduce car journeys.</p> <p>Agreements would need to be reached with local landowners.</p> <p>Caution – breeding kingfisher in area</p>	To make a safe linking walk from village centre to school	<ul style="list-style-type: none"> <li>Riverside</li> </ul>	<p>Straide community development group</p> <p>Landowners</p> <p>Mayo Co. Co.</p> <p>LAWCO</p> <p>School</p> <p>Rural recreation officer</p>	Year 4-5	Create pathway
<b>13</b>	<p><b>Ringfort walk</b></p> <p>There are up to 9 ring forts within 1 km of the village. There would be several options to link forts into a walk.</p>	To highlight the natural and historical heritage of ring forts in the area	<ul style="list-style-type: none"> <li>Ringforts in area</li> </ul>	<p>Straide Heritage Group</p> <p>Landowners</p>	Year 4-5	Establishment of walk
<b>13b</b>	<p><b>Ecology survey of ringforts</b></p> <p>In addition to action number 13, an ecology survey of the ringforts would add further interest</p>	To investigate the natural heritage of ringforts in the area	<ul style="list-style-type: none"> <li>Ringforts in areas</li> </ul>	<p>Straide community development group</p> <p>Straide Heritage Group</p> <p>Landowners</p>	Year 4-5	Ecology survey completed

14	<p><b>Community compost facilities</b> Grass clippings are currently being dumped in a couple of areas. Grass clippings dumped in piles just tend to rot. Having a ready source of compost would be beneficial for museum polytunnel. Grass clippings would need to be mixed with other compostable material to make good compost.</p>	To prevent the dumping of grass-clippings in beside the new graveyard and in trees by village green where it is causing enrichment	<ul style="list-style-type: none"> <li>Graveyard</li> <li>Village green</li> </ul>	<p>RSS</p> <p>Museum</p> <p>Straide community development group</p>	Year 2-3	Successful placement of compost facilities
15	<p><b>Community garden and open space at rear of community centre</b> The need for community outdoor spaces has been highlighted during the recent covid-19 pandemic. See Appendix 6 for some suggested ideas as to how this space could be developed.</p>	To establish a plan for a community space at the rear of the community centre	<ul style="list-style-type: none"> <li>Rear of community Centre</li> </ul>	<p>Straide community development group</p> <p>RSS</p>		Completed recreational space
16	<p><b>Local native tree seed collection and growing</b> Collect local tree seed locally and grow on trees to plant in the area (Museum polytunnel could be used to help). These trees could be used to replace ash that are dying from ash die-back.</p>	To increase number of native trees	<ul style="list-style-type: none"> <li>Riverbanks where ash dieback has impacted trees</li> </ul>	<p>School</p> <p>Straide community development group and volunteers</p> <p>Museum</p>	Year 5	Number of trees grown
17	<p><b>Close off cattle drinking areas and replace with cattle water pumps</b></p>	To improve water quality of Straide River	Straide River	<p>LAWCO</p> <p>Local Farmers</p>		

	These areas are potentially leading to reduced water quality of the river.			Straide community development group		
18	<b>Conduct a bat survey of area</b> The river and bridges along with old houses and trees in the area are likely to be used by bat species. Daubenton's bats in particular, like to use river habitats	To see what bats occur in the area	Straide village	Straide community development group	Year 4	Records of bats
19	<b>Biodiversity records</b> Encourage community members to record flora and fauna using the National Biodiversity Ireland Biodiversity app.	To increase local knowledge of local biodiversity and to see if actions are increasing records	Straide and its environs	Citizens Straide community development group	Year 1-5	Number of records recorded
20	<b>Dipping platform on Straide River or hold river dipping workshop for children using existing banks</b>	To build awareness of what lives in the river among local children	Straide River	LAWCO Straide community development group School	Year 3-5	Dipping platform in place or event held
21	<b>Monitoring action</b>	In order to determine the success of the action plan it will be important to monitor how successful the actions are	N/A	Straide community development and volunteers and stakeholders	Year 3 and Year 5	Actions completed

**Photographs of areas needing action:**

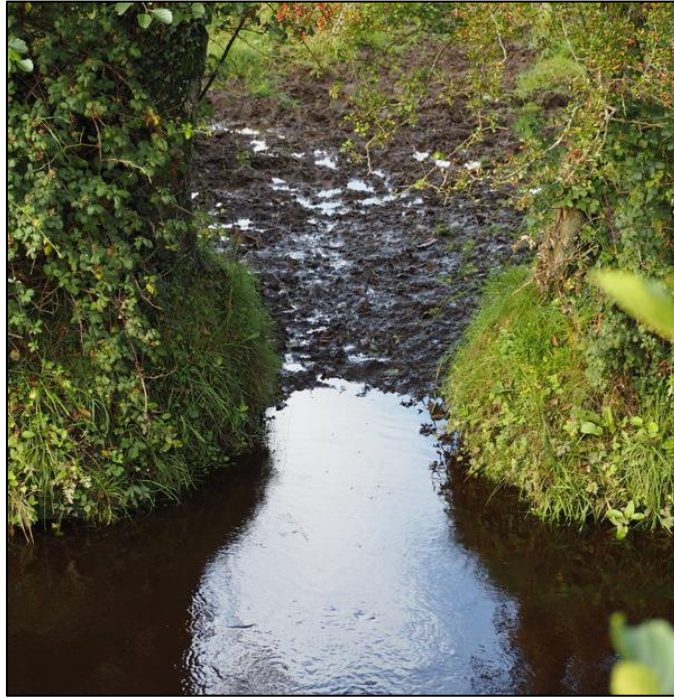
1. Grass clipping being “dumped” causing enrichment



2. Overuse of chemicals - herbicides



3. Cattle drinking areas directly from river



4. Poorly managed hedgerows – leaving cut and damaged stems



# 7.0 Appendices

## Appendix 1 – List of species recorded in Straide

### Flora recorded during surveys July – September 2021

Common name	Scientific name	Group
Alder	<i>Alnus glutinosa</i>	Tree
Angelica, wild	<i>Angelica sylvestris</i>	Flowering plant
Arum lily	<i>Zantedeschia aethiopica</i>	Flowering plant
Ash	<i>Fraxinus excelsior</i>	Tree
Bedstraw, ladies	<i>Galium verum</i>	Flowering plant
Beech	<i>Fagus sylvatica</i>	Tree
Birch	<i>Betula</i> spp.	Tree
Birds-foot trefoil, Common	<i>Lotus corniculatus</i>	Flowering plant
Blackthorn	<i>Prunus spinosa</i>	Tree
Bracken	<i>Pteridium aquilinum</i>	Fern
Bramble	<i>Rubus fruticosus</i> agg.	Climber
Buttercup, creeping	<i>Ranunculus repens</i>	Flowering plant
Buttercup, meadow	<i>Ranunculus acris</i>	Flowering plant
Carrot, wild	<i>Daucus carota</i>	Flowering plant
Cherry	<i>Prunus</i> spp.	Tree
Cleavers	<i>Galium aparine</i>	Flowering plant
Clover, red	<i>Trifolium pratense</i>	Flowering plant
Clover, white	<i>Trifolium repens</i>	Flowering plant
Coltfoot	<i>Tussilago farfara</i>	Grass
Cow parsley	<i>Anthriscus sylvestris</i>	Flowering plant
Cross leaved heath	<i>Erica tetralix</i>	Flowering plant
Daisy	<i>Bellis perennis</i>	Flowering plant
Dandelion	<i>Taraxacum officinale</i> agg.	Flowering plant
Dock Spp.	<i>Rumex</i> Spp.	Flowering plant
Eyebright	<i>Euphrasia arctica</i>	Flowering plant
Gorse	<i>Ulex europaeus</i>	Shrub
Harts tongue fern	<i>Asplenium scolopendrum</i>	Fern
Hawksbit	<i>Leontodon</i> spp.	Flowering plant
Hawthorn	<i>Crataegus monogyna</i>	Flowering plant
Hazel	<i>Corylus avellana</i>	Tree
Herb robert	<i>Geranium robertianum</i>	Flowering plant
Honeysuckle	<i>Lonicera periclymenum</i>	Climber
Horse chestnut	<i>Aesculus hippocastanum</i>	Tree
Horsetails	<i>Equisetum</i> Spp.	Flowering plant
Iris, yellow	<i>Iris pseudoacorus</i>	Flowering plant
Ivy	<i>Hedera helix</i>	Climber
Knapweed, common	<i>Centaurea nigra</i>	Flowering plant
Ling heather	<i>Calluna vulgaris</i>	Flowering plant
Meadowsweet	<i>Filipendula ulmaria</i>	Flowering plant
Mint	<i>Mentha</i> Spp.	Flowering plant
Nettle	<i>Urtica dioica</i>	Flowering plant
Oak	<i>Quercus petraea</i>	Tree



Oat-grass, false	<i>Arrhenatherum elatius</i>	Grass
Ox-eye daisy	<i>Leucanthemum vulgare</i>	Flowering plant
Parsley, hedge	<i>Torilis japonica</i>	Flowering plant
Plantain, ribwort	<i>Plantago lanceolata</i>	Flowering plant
Pondweed, broad-leaved	<i>Potamogeton natans</i>	Aquatic plant
Poplar, white	<i>Populus alba</i>	Tree
Privet, wild	<i>Ligustrum vulgare</i>	Tree
Purple-loosestrife	<i>Lythrum salicaria</i>	Flowering plant
Ragwort	<i>Senecio jacobaea / Jacobaea vulgaris</i>	Flowering plant
Reed	<i>Fragmities</i>	Flowering plant
Rowan	<i>Sorbus aucuparia</i>	Tree
Rush, soft	<i>Juncus effusus</i>	Rush
Scabious, Devils bit	<i>Succisa pratensis</i>	Flowering plant
Scabious, field	<i>Knautia arvensis</i>	Flowering plant
Sedges	<i>Carex Spp.</i>	Sedge
Selfheal	<i>Prunella vulgaris</i>	Flowering plant
Silverweed	<i>Potentilla anserina</i>	Flowering plant
Sitka spruce	<i>Picea sitchensis</i>	Tree
Sow-thistle,	<i>Sonchus arvensis</i>	Flowering plant
Spleenwort	<i>Asplenium adiantum-nigrum</i>	Fern
St John's-wort	<i>Hypericum spp.</i>	Flowering plant
Sycamore	<i>Acer pseudoplatanus</i>	Tree
Thistle	<i>Cirsium Spp.</i>	Flowering plant
Thistle, Marsh	<i>Cirsium palustre</i>	Flowering plant
Thistle, meadow	<i>Cirsium dissectum</i>	Flowering plant
Thistle, spear	<i>Cirsium vulgare</i>	Flowering plant
Toadflax, Ivy-leaved	<i>Cymbalaria muralis</i>	Flowering plant
Tormentail	<i>Potentilla Spp.</i>	Flowering plant
Vetch, bush	<i>Vicia sepium</i>	Flowering plant
Vetch, tufted	<i>Vicia cracca</i>	Flowering plant
Wall rue	<i>Asplenium ruta-muraria</i>	Fern
Willow	<i>Salix Spp.</i>	Tree
Willowherb spp.	<i>Epilobium spp.</i>	Flowering plant
Willowherb, rosebay	<i>Chamerion angustifolium</i>	Flowering plant
Yarrow	<i>Achillea millefolium</i>	Flowering plant

## Fauna recorded during surveys July – September 2021

Common name	Scientific name	Group
Cinnabar moth caterpillar	<i>Tyria jacobaeae</i>	Insect
Common carder bee	<i>Bombus pascuorum</i>	Insect
Dipper	<i>Cinclus cinclus</i>	Bird
Early bumblebee	<i>Bombus pratorum</i>	Insect
Garden bumblebee	<i>Bombus hortorum</i>	Insect
Green veined white butterfly	<i>Pieris napi</i>	Insect
Grey wagtail*	<i>Motacilla cinerea</i>	Bird
Hooded crow	<i>Corvus cornix</i>	Bird
Hoverfly	<i>Eristalis spp.</i>	Insect
Hoverfly	<i>Arctophila superbiens</i> (ID to be confirmed)	Insect
Hoverfly, Marmalade	<i>Episyrphus balteatus</i>	Insect
Jackdaw	<i>Corvus monedula</i>	Bird
Large white butterfly	<i>Pieris brassicae</i>	Insect
Magpie	<i>Pica pica</i>	Bird
Otter (spraint at bridge)	<i>Lutra lutra</i>	Animal
Red-tailed bumblebee	<i>Bombus lapidarius</i>	Insect
Rook	<i>Corvus frugilegus</i>	Bird
Six spot burnet	<i>Zygaena filipendulae</i>	Moth
Speckled wood	<i>Pararge aegeria</i>	Insect
Swallow	<i>Hirundo rustica</i>	Bird
The Magpie (moth)	<i>Abraxas grossulariata</i>	Moth
Tortoiseshell	<i>Aglais urticae</i>	Insect
Wasp	<i>Vespula spp.</i>	Insect
Water skater	<i>Gerridae spp.</i>	Insect
White tailed bumblebee	<i>Bombus lucorum</i> agg.	Insect

\*Bird species of red conservation concern

## Appendix 2 – Results from Straide Action Plan 2021-2026

Straide Action Plan 2021-2026 Overall Analysis	
Playground, Picnic & Recreation area	121
Grocery Shop/Coffee Shop	110
Upgrade Roads, Footpath, lighting	106
Trails, Walks	95
Recycle Banks	93
Village Planting, landscaping, seating	84
Better Broadband	83
Multi Use Sports facility	80
Farmers Market	56
Litter Pick Events	50
Childcare Services	48
Utilise the Community Hall for activities	46
Bus Shelter	44
Active Age/Retirement Group	37
Address flooding areas	36
Local link Transport	34
Tidy Towns	34
Straide Website	33
Community Garden	25
Local Heritage Sites	24
Outdoor Sanctuary	23
Support Community Biodiversity Projects	23
Community Notice Board	20
Research Older Persons Housing	19
River and activities	18
Renewable Energy	18
Compost Facility & Allotments	5
Business Network	5

## Extract from Straide Renewed Community Action Plan 2021-2026 (Mayo Community Futures)

### STRAIDE COMMUNITY ACTION PLAN 2021-2026

## Theme 4 – Environment

The residents of Straide would like to explore ways in which they can make their community more environmentally sustainable. As a first step they would like to create a Recycling Bank for a wider variety of recyclable materials. The establishment of a Farmers Market would give people the opportunity to buy and sell locally grown produce. They would like to create a Community Garden where plants, fruits and flowers could be grown and in time the addition of allotments, and a compost facility could also be established. The creation of a Biodiversity Plan along with community projects such as cycle to school or work and sustainability workshops should be supported and encouraged. The community would like to explore Renewable Energy initiatives as part of an overall strategy to make their community more energy efficient.

The community has highlighted a number of priorities that they would like to see initiated to make Straide a more Environmentally Sustainable Community.



### Main Priorities

#### Recycle Bank

- Identify what variety of recycle banks are needed and a suitable site

#### Farmers Market

- Research other Farmers Markets and identify local producers
- Establish a group that will oversee the set-up and running of this market



#### Community Garden

- Identify a suitable site for a Community Garden with the possibility of creating allotments and compost facility in time
- Arrange to visit other Community Gardens
- Encourage involvement of older people, youth and young children in the planting and harvesting of produce

#### Community Sustainability and Biodiversity Initiatives

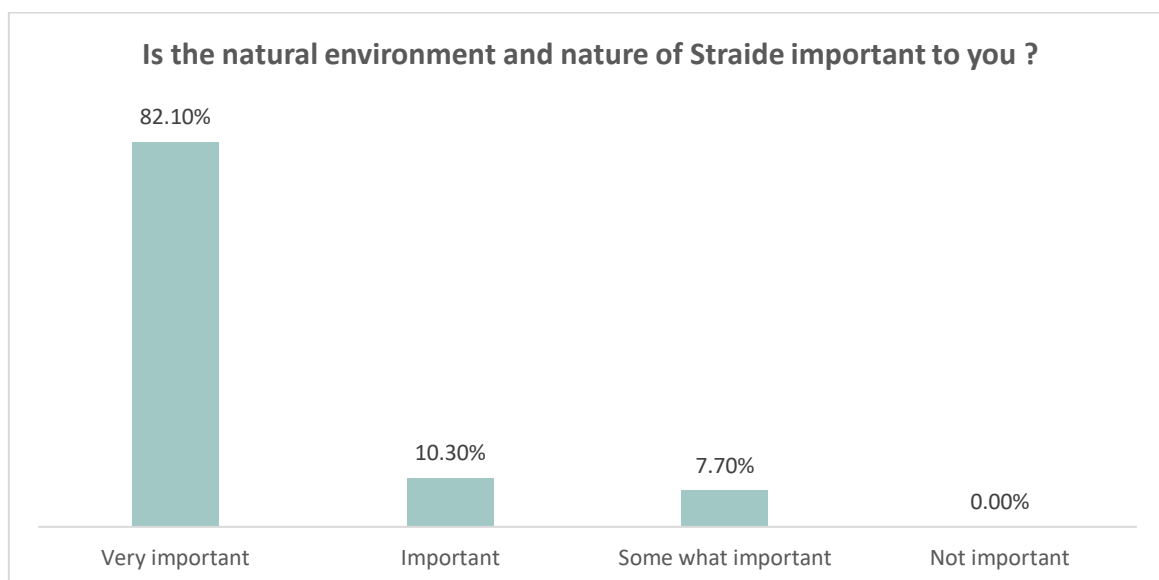
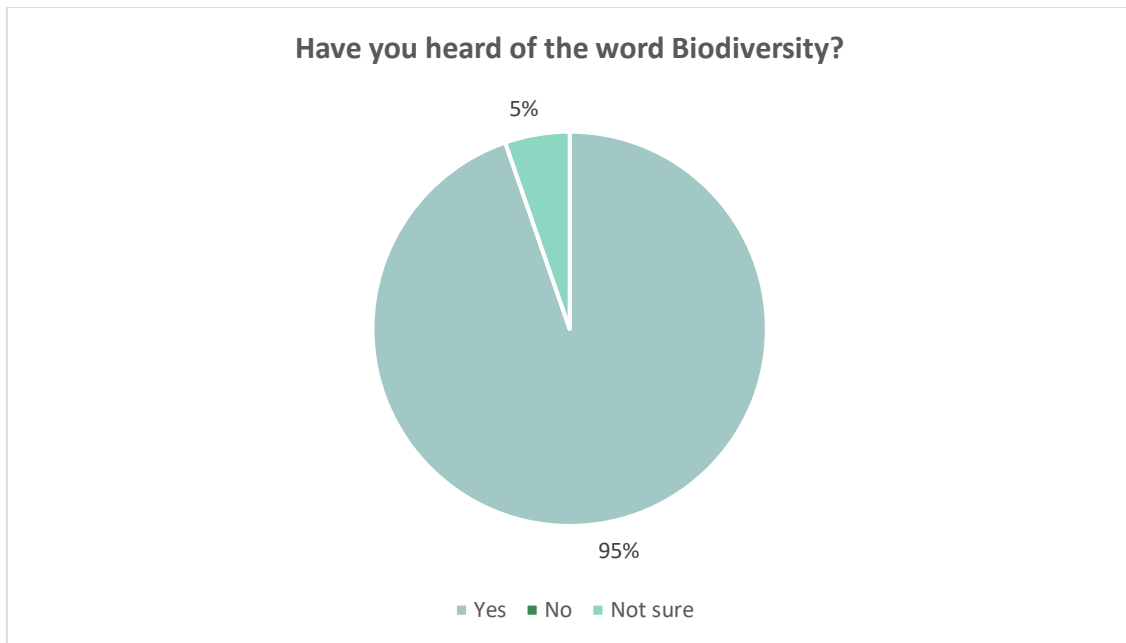
- Research and develop a Straide Biodiversity Plan
- Support cycle to school and work events
- Hold information events on food waste, food banks, rainwater harvesting, reducing artificial lighting. Provide information to help maintain Straide's natural ecosystem

#### Renewable Energy

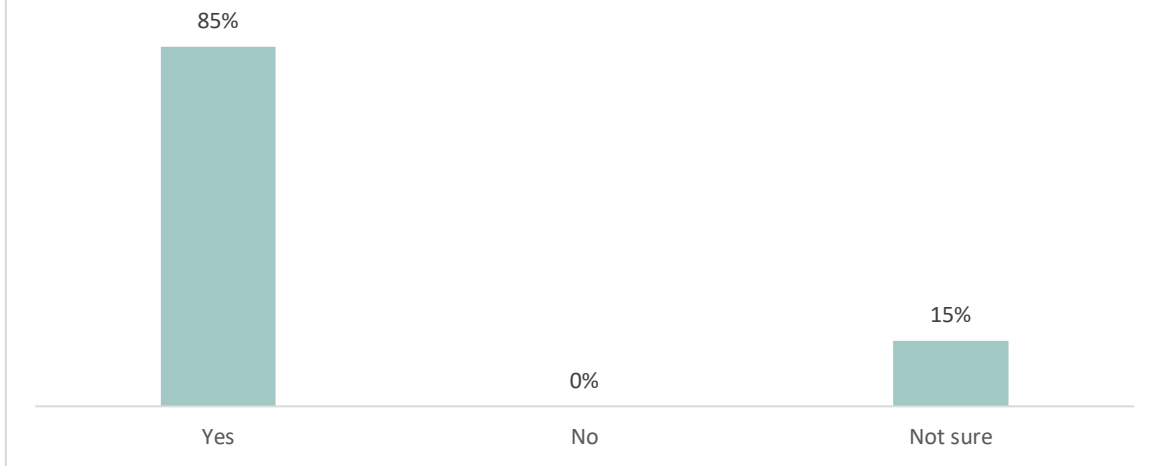
- Explore renewable energy initiatives such as solar panels, wind turbines and insulating homes
- Research current developments on energy sustainable communities

## Appendix 3 – Results of the online survey

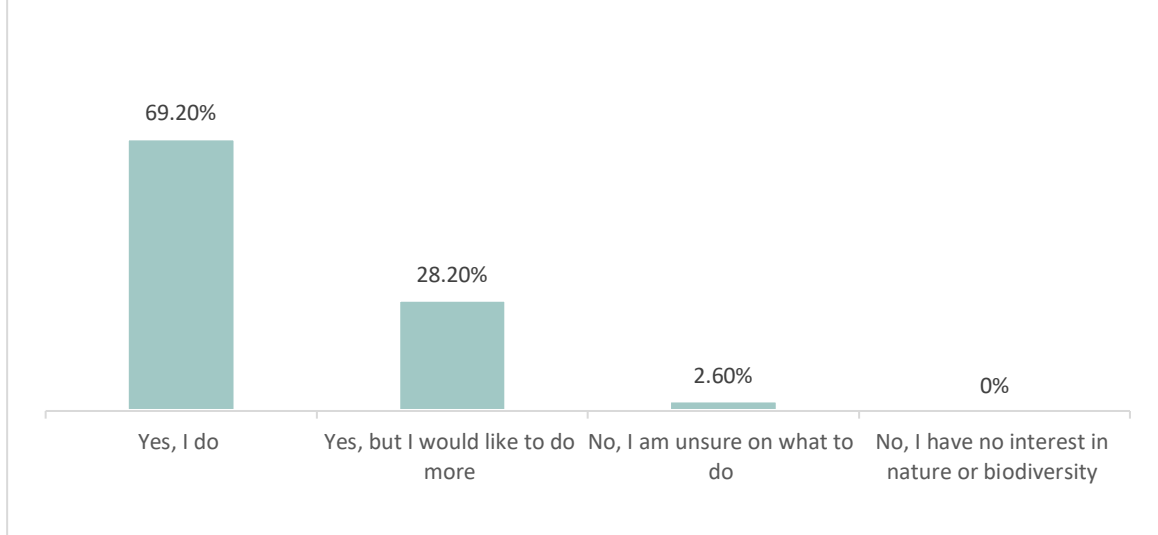
### Survey responses for Straide Biodiversity Action Plan report



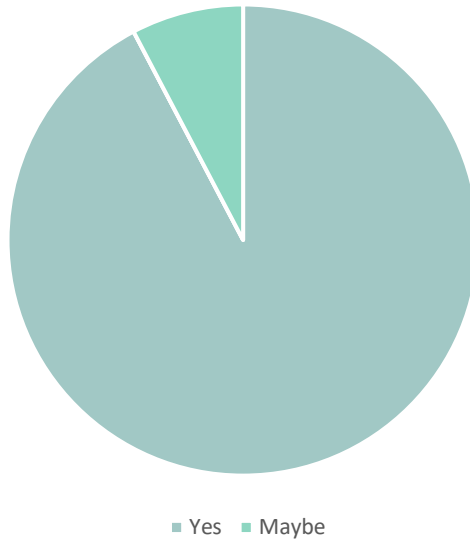
**Do you feel that more should be done to protect and enhance biodiversity and nature in the Straide area ?**



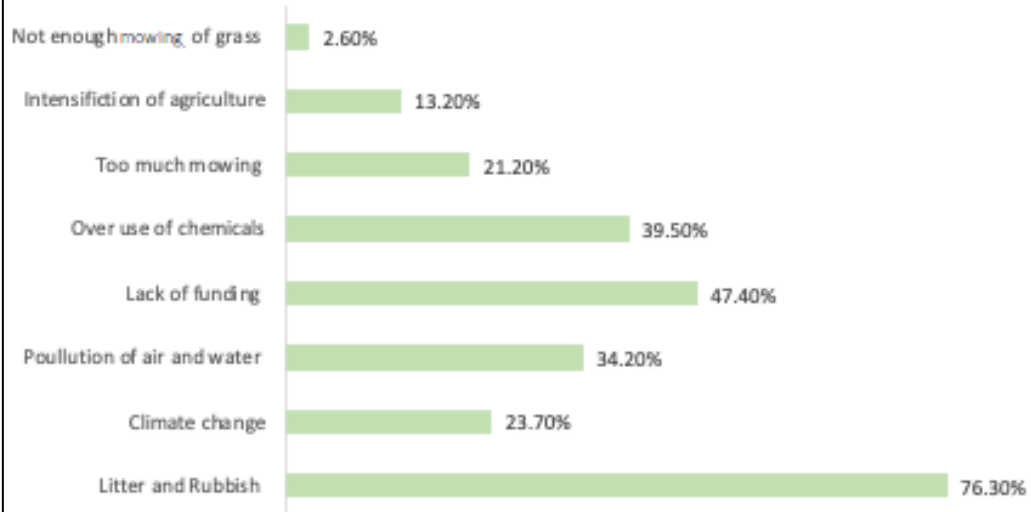
**Do you personally engage in positive actions towards biodiversity?  
(Things like feeding the birds, planting wildflowers, or pollinator-friendly flowers, putting up bird boxes etc. )**



### Would you support a Biodiversity Action Plan for Straide?



### Nature is coming under increasing pressures. What do you feel are the biggest threats to the local environment in Straide



### **What is your favourite thing about the nature, environment and/or biodiversity in Straide?**

- Wildflowers
- Clean air
- The wildflowers and willow structures
- We have the River Moy and its tributaries meandering through it, the lovely hills and mountains, the wildlife, I had a pheasant and her young in my back garden last week!! I have a wildflower patch and it is swarming with bees and butterflies. Straide is a perfect place to nurture nature.
- Wild birds & animals to be seen.
- The beautiful grounds
- Nature is all around us in Straide and there are so many different wildlife and plants around us and all very at home here!!!
- Colourful wildflowers along small areas last year were very attractive. Would like to see more colour in our village.
- Currently lots of native wildflowers.
- The diversity of habitats
- The wildlife, the river
- Flowers, birds and bees!
- Easily accessible
- The back roads and the plant diversity. Also the bog area is really special.
- The beauty of our village and the peacefulness of the area.
- Range of wildlife
- Straide is naturally v suitable because of land soils type. it's picturesque and historical aspects a great asset also
- Hedgerows
- Bog walks
- It can be seen and enjoyed everywhere by everyone.
- Colour and plants and flowers for pollinators
- Being able to switch off and relax, go for a walk through the fields or side roads and enjoy the outside world as it should be
- It's varied and available
- Wildlife
- Along the main road
- Wildflower planting
- The abundance of nature within Straide, whichever way you go, walk, bike etc
- I think everyone appreciates when an area looks well. I've enjoyed the recent art installations put into the village. And when the re wilding takes hold along the road it will also look well.
- The wildlife and wildflowers, spotting new flowers, plants and insects.
- Our river and beautiful wildflowers

### **What areas around Straide would you like to see being improved? Have you any ideas how this could be done?**

- Straide river is an under-utilised resource which is not really accessible apart from the green area in the village centre. Also, the main N58 road is a main thoroughfare and needs to have a dedicated walking trail and enhance the native plants along the route.
- Traffic calming through the village would allow us to spend more time in the village and perhaps spend more time addressing roadside planting and projects
- More tree planting, less grass cutting along roadsides
- Reintroduction of wild brown trout in Straide River/Moy.



- Safe path from school to hall.
- The river
- I would like to see traffic calming at Kelly's cross to the copper. With the green areas on either side of the road explode with planted flowers.
- Planting more wildflowers. No spraying of chemicals!
- Walking route along Straide river
- Perhaps we could put bird boxes near the bridges and encourage kingfisher etc to be more visible.
- Grass along the road needs to be cut not let go wild, it is crazy and untidy looking
- Grounds around community hall
- Village
- Main road wildflowers, more trees in public area
- The river
- Rivers and streams
- The green and community centre
- Straide river to introduce brown trout
- We have a huge number of forts and a couple of lakes that it would be fantastic to explore them more, find out what lives and grows around them.
- footpaths needed
- Amenities for children
- From speed limit to speed limit.
- The main village
- Roadways, Walkways. More litter picking days.
- Wildflower areas, walking trails
- Ballylahan bridge area where there is a lot of fishing activity. Would be nice to have more colourful plants in that area.

## Appendix 4 – Management of grassland

### OPTION 1 - VERGES

#### Delayed first mowing and six-week meadows

- Delay first cut of grass on verge so dandelions have time to flower.
- Establishing a short-term 6-week meadow. Cut grass every six weeks which is long enough to allow clovers to flower, thereby having additional food resources for pollinators. Cut and, ideally remove clippings as removing helps to reduce soil fertility which encourages more flowers to grow.



### OPTION 2 – VERGE WILDFLOWER MEADOW

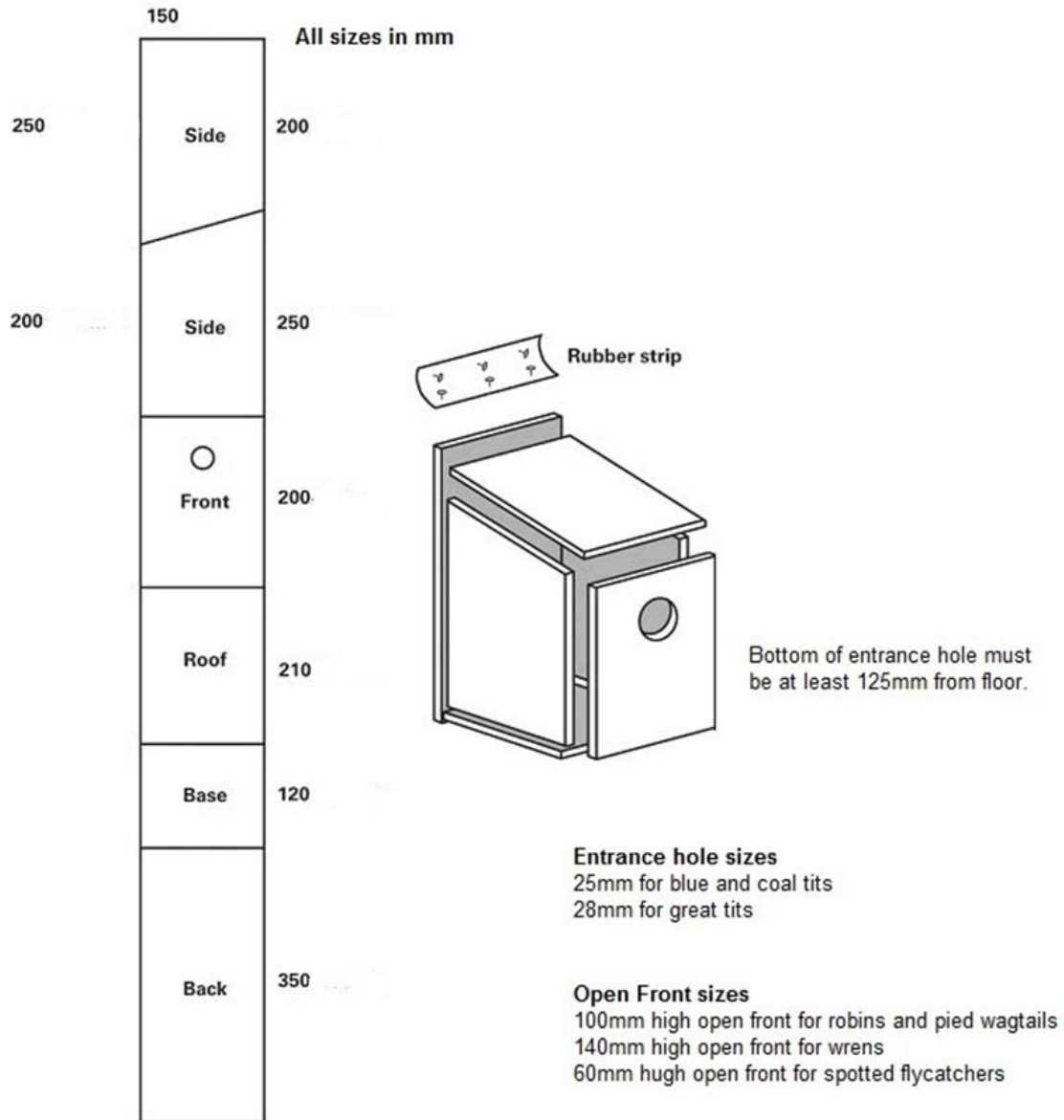
#### Mow in September

- Cut narrow strip along road edge regularly where neatness is required.
- If required a first cut can be made in early April.
- Leave rest uncut for spring and summer months.
- Place “Managed for Wildlife” sign in area to highlight fact areas is being left uncut for reason.
- Cut, remove and compost cuttings in September.




## Appendix 5 – Animal box plans

### Bird Box for small birds



- Ideally the box should be located at least 2m from the ground (preferably 3 - 5m) to ensure cats don't get to them.
- Place the nest box on a wall, fence or tree in a quiet area.
- Do not nail a box to a tree but instead use a wire strap, and remember to check it every year to ensure the wire isn't cutting into the tree trunk as it grows.
- It is best to have the box angled forward slightly and kept away from the wall or tree by a strip of wood.
- Unless the site is very sheltered the box should face between north and south-east to avoid the hot sun and the wettest winds.

**Information about installing in-built swift bricks and boxes from the Saving Swifts** ([https://birdwatchireland.ie/app/uploads/2019/10/Saving-Swifts-Guide\\_pdf.pdf](https://birdwatchireland.ie/app/uploads/2019/10/Saving-Swifts-Guide_pdf.pdf)) for new builds.



### Advice: installing in-built Swift brick and boxes


#### What is a Swift brick?

Commercial Swift nest bricks are made from hollow brick or concrete composite designed to allow access by Swifts and manufactured to modern building regulation standards. They can be integrated into the walls of buildings during the construction phase.

Swift bricks provide safe, permanent, low-cost nesting sites for Swifts for the lifetime of the building. They are best installed into new-builds or during extensions and renovation works. Unlike externally fitted boxes they blend into the fabric of the building and for this reason are often the preferred choice for architects.

#### Choosing bricks

Swift bricks are available commercially and come in various sizes, shapes and colours, so it should be easy to find a brick that fits your building design. Manufacturers will supply technical information on Swift brick types to help you at the design stage.



#### Why use Swift bricks?

- They are as close as it gets to a "natural" nest site.
- The brick is available to nesting Swifts for the life of the building. Once occupied, it could be used by a single pair for many years.

#### Positioning bricks

- ✓ **Do:** Place bricks any aspect N, S, E or W. Bricks tend not to overheat the way that externally fitted boxes can.
- ✓ **Do:** Place bricks at least five metres above ground. Boxes can never be too high, so, if in doubt, go as high as possible.
- ✓ **Do:** Face brick entrances onto an open aspect – no overhanging vegetation, trees, walls or other obstacles – so that the birds can fly directly in and out unimpeded.
- ✓ **Do:** Place bricks side by side in rows.
- ✓ **Do:** Keep out of reach of pets or other potential predators.
- ✗ **Don't:** Place bricks near plate glass windows because they are a known collision hazard for birds.
- ✗ **Don't:** Place bricks directly above ledges or other obstructions. Swifts drop before taking flight and can collide with obstacles below the nest entrance.
- ✗ **Don't:** Stack bricks one above the other.
- ✗ **Don't:** Place Swift bricks near spotlights or later fit spotlights near Swift bricks.

#### Fitting the bricks

Swift bricks are designed to fit alongside standard building materials and can be fitted by any experienced tradesperson.

#### How many bricks should be used?

Swifts nest in colonies, so any number between two and twenty is advisable. Bricks are relatively cheap. You might install four bricks in a single house or twenty bricks in a large school or commercial building.

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## Information about installing in-built Bat bricks to new builds

There are various styles of bat bricks available that can be incorporated into the building or alternatively boxes ones that can be hung on buildings can be used.



The bat brick is the cheapest and simplest. It is a standard sized brick, shaped especially to allow bats to access the cavity of a house. They can be incorporated during both new build and renovation projects. (A cavity chamber may need to be constructed to maintain an area free of insulating material where bats can roost).

The bricks are available in three standard colours - Red, Golden and Brown.

Estimated Cost: €18.99 each

More bat brick alternatives available here:

[https://www.nhbs.com/4?q=&hPP=60&idx=titles&p=0&fR%5Bhide%5D%5B0%5D=false&fR%5Blive%5D%5B0%5D=true&fR%5Bshops.id%5D%5B0%5D=4&fR%5Bshops.id%5D%5B1%5D=4&hFR%5Bsubjects\\_equipement.lvl1%5D%5B0%5D=Bat%20Boxes%20%3E%20Integrated%20Bat%20Boxes](https://www.nhbs.com/4?q=&hPP=60&idx=titles&p=0&fR%5Bhide%5D%5B0%5D=false&fR%5Blive%5D%5B0%5D=true&fR%5Bshops.id%5D%5B0%5D=4&fR%5Bshops.id%5D%5B1%5D=4&hFR%5Bsubjects_equipement.lvl1%5D%5B0%5D=Bat%20Boxes%20%3E%20Integrated%20Bat%20Boxes)

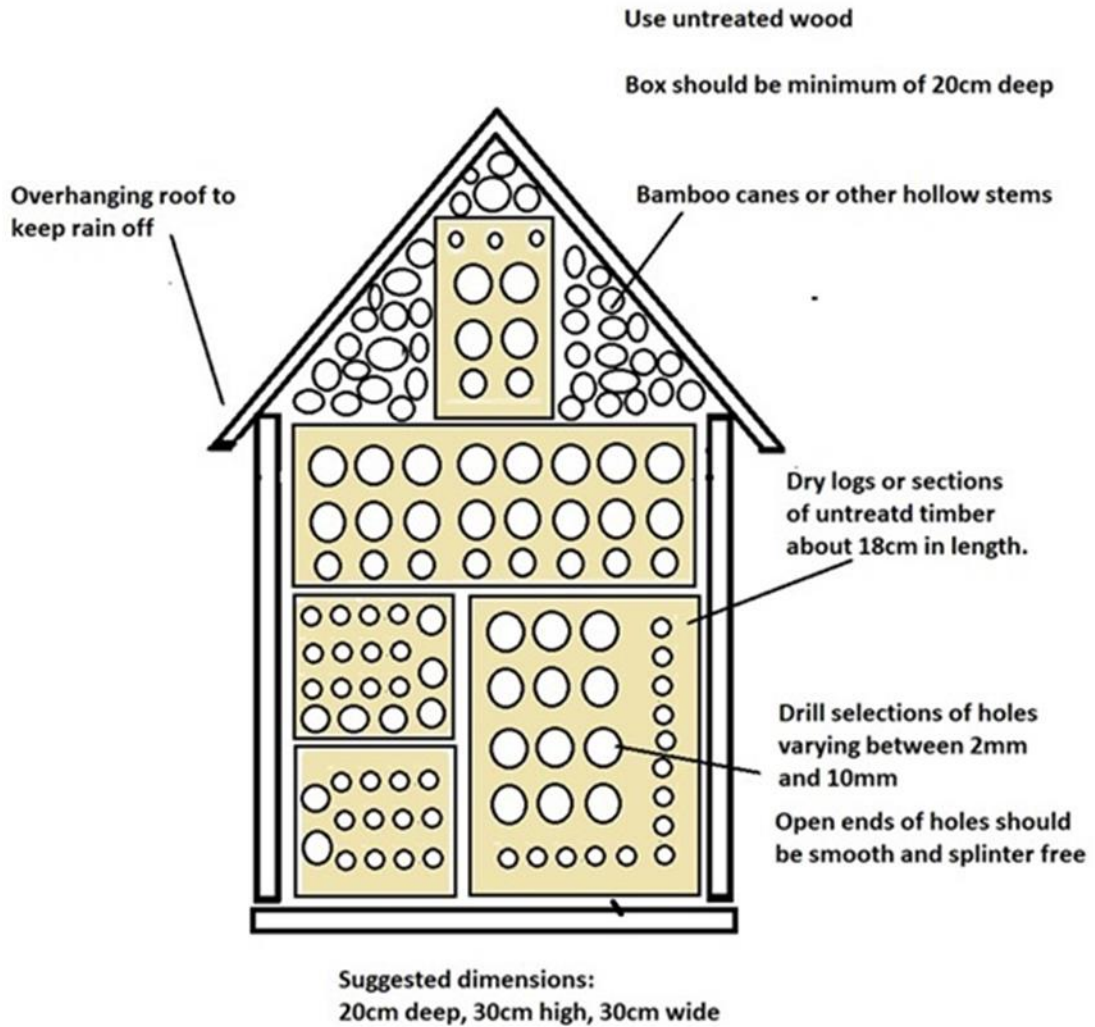
Large Multi Chamber Wood Stone Bat Box is an example of box that can be hung on building wall. It is best positioned at a height of between 3 to 6 metres in an open, sunny positions and in groups of 3 to 5 boxes facing different directions to provide a variety of micro-habitats.

Estimated Cost: €53.50

<https://www.nhbs.com/large-multi-chamber-woodstone-bat-box?bkfno=246918>



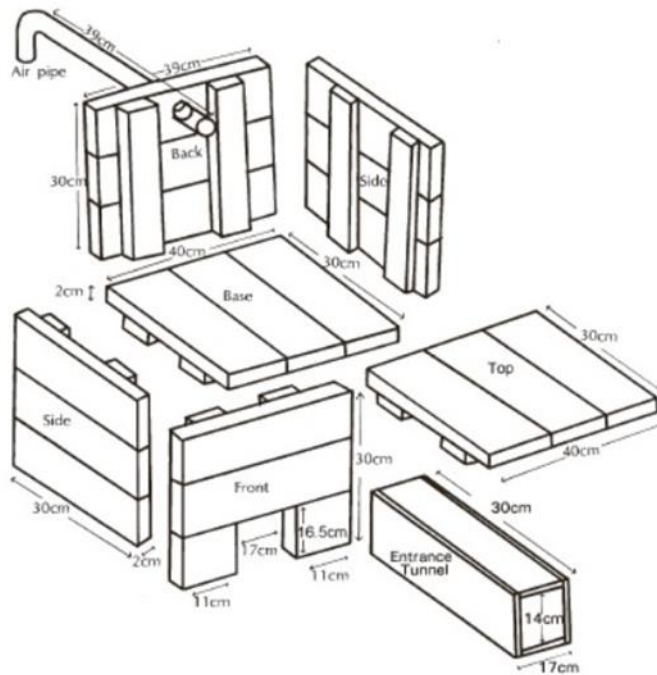
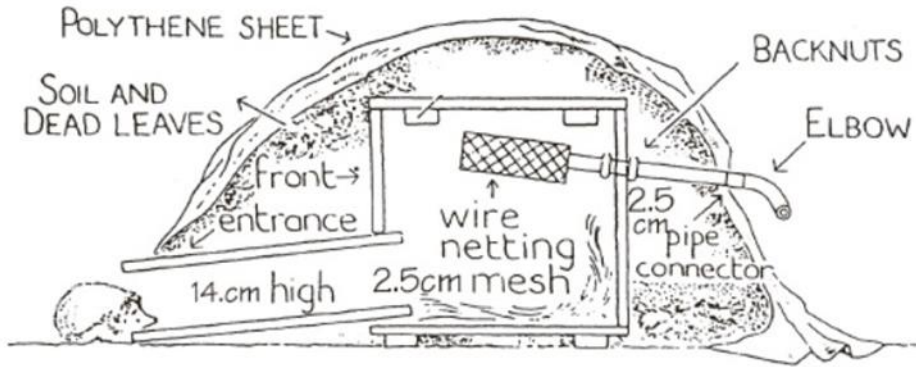
## Solitary Bee Box



**Fix firmly at about waist or chest height, for example on wall or fence.**

**Place box so it is facing south in a sunny position, ideally near some bee-friendly flowers and shrubs.**

Adapted from - [www.hedgehogstreet.org](http://www.hedgehogstreet.org)



## Appendix 6 – Ideas for incorporating more native flowers and cultivate pollinator friendly flowers into Straide

The table below lists native wildflowers that could be planted along road verges. These plants grow locally, and seeds could be gathered in the autumn scattered directly where flowers are desired. Alternatively, seeds could be planted in trays in the autumn and grown on as plug plants which can be planted out in late spring.

### List of suggested wildflowers that could be added to road verges to add colour and increase length of flowering time

Common name	Latin name	Flowering periods	Suitable for
Birds foot trefoil	<i>Lotus corniculatus</i>	June - Sept	Butterflies, bees
Bush vetch	<i>Vicia sepium</i>	Apr - Oct	Bees
Common knapweed	<i>Centaurea nigra</i>	July - Oct	Bees, butterflies
Devils bit scabious	<i>Succisa pratensis</i>	Aug - Oct	Butterflies, bees
Field scabious	<i>Knautia arvensis</i>	July - Sept	Butterflies, bees
Lady's smock / Cuckoo flower	<i>Cardamine pratensis</i>	Apr - June	Food plant for orange tip butterfly larva
Meadow buttercup	<i>Ranunculus acris</i>	Apr - July	Hoverflies
Meadow vetchling	<i>Lathyrus pratensis</i>	June - Aug	Bees
Ox-eyed daisy	<i>Leucanthemum vulgare</i>	June - Aug	Hoverflies
Ragged robin	<i>Silene flos-cuculi</i>	June - July	Butterflies
Red Bartsia	<i>Odontites vernus</i>	June - Aug	Bees
Red clover	<i>Trifolium pratense</i>	May - Sept	Bees, butterflies
White clover	<i>Trifolium</i>	June - Sept	Bees
Yellow rattle (hay rattle)	<i>Rhinanthus minor</i>	July - Sept	Bees (also weakens grasses)



The flowering plants could be added to area of verge along N58 close to the Interpretation sign.

**List of suggested wildflowers that could be planted along the wall along the N58**

Common name	Latin name	Flowering period	Comments
Bugle	<i>Ajuga reptans</i>	May-June	Good for butterflies and bees
Foxglove	<i>Digitalis purpurea</i>	June - Aug	Good for bees
Lesser Celandine	<i>Ficaria verna</i>	Feb - May	Previously <i>Ranunculus ficaria</i> Important early plant good for hoverflies
Primrose	<i>Primula vulgaris</i>	Mar-May	Good for pollinators
Red campion	<i>Silene dioica</i>	April - Aug	Good for butterflies and bees
Self-heal	<i>Prunella vulgaris</i>	June- Aug	Good for butterflies and bees

The table below lists bulbs that could be planted in and around the church and green areas in the village centre including the graveyard.

**Suggested list of pollinator friendly bulbs**

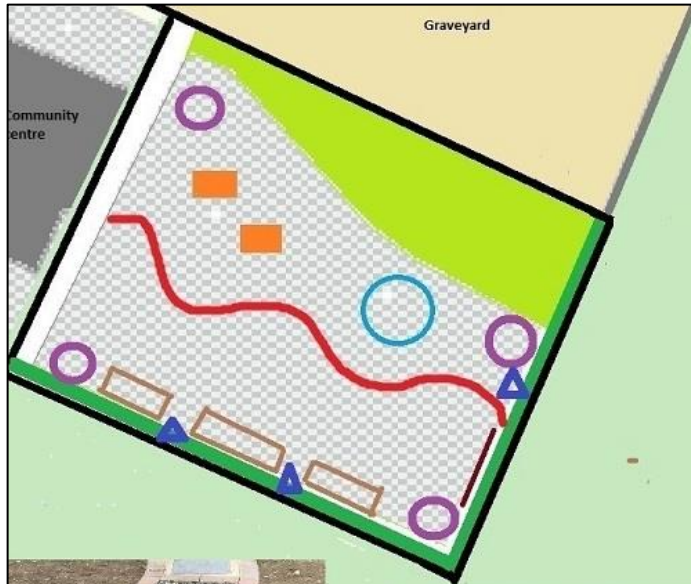
Common name	Latin name	Flowers	Comment
Crocus	<i>Crocus tommasinianus</i>	Feb - March	Bulb
Daffodil, dwarf*	<i>Narcissus pseudonarcissus</i>	Feb - March	Bulb. Narcissus 'Tête-à-tête' a dwarf variety that would suit location
Meadow Saffron	<i>Colchicum autumnale</i>	Sept - Oct	Bulb
Snowdrop	<i>Galanthus</i>	Jan - Feb	Bulb
Bluebell	<i>Hyacinthoides non-scripta</i>	April-May	Good for bees

\*Note daffodils will only be used by hungry bees but they do provide an added splash of colour

## Draft map of areas for proposed management



# Community Space Ideas



**Community Space Ideas**

Legend

-  Picnic benches
-  Sensory path
-  Raised pond
-  Planters
-  Trellis for climbers
-  Planted recycled tyres
-  Tiered wall planters



## **Appendix 7 –Resources**

### **All Ireland Pollinator Plan Resources**

#### **Flower-Insect Timed Count (FIT Count)**

<https://pollinators.ie/record-pollinators/fit-count/>

#### **Bumblebee Monitoring Scheme**

<https://pollinators.ie/record-pollinators/bumblebee-monitoring-scheme-2/>

#### **Seed collecting guide**

<https://pollinators.ie/wordpress/wp-content/uploads/2018/04/How-to-guide-Seeds-2018-WEB.pdf>

#### **Local Communities Actions for Pollinators**

[https://pollinators.ie/wordpress/wp-content/uploads/2018/04/Local-Communities\\_actions-to-help-pollinators-2018-WEB.pdf](https://pollinators.ie/wordpress/wp-content/uploads/2018/04/Local-Communities_actions-to-help-pollinators-2018-WEB.pdf)

#### **Other local community pollinator resources**

<https://pollinators.ie/communities/resources-for-community-groups/>

### **Other Resources**

#### **Gardening for Biodiversity (Heritage Council)**

<https://www.heritagecouncil.ie/content/files/Gardening-For-Biodiversity.pdf>

#### **Hedgerow Management**

[http://ww2.rspb.org.uk/Images/Englishhedgerows1\\_tcm9-133255.pdf](http://ww2.rspb.org.uk/Images/Englishhedgerows1_tcm9-133255.pdf)

### **Mayo's Hedgerows**

<https://www.mayo.ie/getmedia/4bf3ecb4-83b4-46e5-a7ed-608bbe2ade3c/Mayo-Hedgerow-Booklet-Final.pdf>

### **Management of Grasslands**

<http://www.magnificentmeadows.org.uk/advice-guidance/how-can-i-manage-my-meadow/managing-for-grassland-habitats>

### **Wetlands of Mayo**

<https://www.mayo.ie/getmedia/f035dfffc-21b3-4640-9924-a57b0b657dc6/Wetlands-of-Mayo.pdf>

### **Biodiversity Posters** (Butterflies, bumblebees, shieldbugs, wetlands, farms, woodlands)

<https://www.biodiversityireland.ie/resources/other/>

### **Saving Swifts** (Birdwatch Ireland)

[https://birdwatchireland.ie/app/uploads/2019/10/Saving-Swifts-Guide\\_pdf.pdf](https://birdwatchireland.ie/app/uploads/2019/10/Saving-Swifts-Guide_pdf.pdf)

Sign that can be used for areas managed for wildlife

# Managed for Wildlife

All-Ireland Pollinator Plan



National  
Biodiversity  
Data Centre  
Documenting Ireland's Wildlife



[www.pollinators.ie](http://www.pollinators.ie)

**Pollinator friendly plants suitable for more formal settings such as raised beds within the village. These plants would also be suitable for domestic garden settings.**

**Table showing examples of pollinator friendly perennials suitable for flower beds**

<b>Common name</b>	<b>Latin name</b>	<b>Flowers</b>	<b>Comment</b>
Allium	<i>Allium</i> spp.	June - July	
Aquilegia	<i>Aquilegia vulgaris</i>	May - June	
Aster	<i>Aster ageratoides</i>	July - Oct	
Betony	<i>Betonica officinalis</i>	June - Sept	Also called <i>Stachys officinalis</i>
Bugle spp.	<i>Ajuga</i> spp.	March - May	
Calamint, lesser	<i>Nepeta nervosa</i>	June - Sept	
Coneflower	<i>Echinacea purpurea</i>	July - Oct	
Cornflower	<i>Centaurea cyanus</i>	June - July	Or <i>Centaurea montana</i>
Crocus	<i>Crocus tommasinianus</i>	March	
Meadow Saffron	<i>Colchium autumnale</i>	Sept-Oct	
Delphinium	Delphinium	Jun-July	
Globe thistle	<i>Echinops ritro</i>	August	
Grape Hyacinth	<i>Muscari armeniacum</i>	March-May	
Hardy Geranium	<i>Geranium sanguineum</i>	June -August	
Hellebore's hybrids	<i>Helleborus</i>	April - Sept	
Jacob's Ladder	<i>Polemonium caeruleum</i>	July - August	
Japanese Anemone	<i>Anemone hybrid</i> <i>Anemone x hybrida</i>	July - Oct	E.g., 'Queen Charlotte', 'September Charm'
Lupins	<i>Lupinus</i>	June - July	
Oregano	<i>Origanum vulgare</i>	June - August	
Rockcress	<i>Arabis alpina subsp. caucasica</i>	April - May	
Rudbeckia	<i>Rudbeckia fulgida</i>	July-Oct	e.g., 'Early Bird Gold'
Sedum	<i>Sedum</i>	July - Oct	e.g., "Autumn Joy", <i>Sedum spectabile</i>
Snowdrops	<i>Galanthus nivalis</i> , <i>Galanthus elwesii</i>	Jan-Feb	
Verbena	<i>Verbena</i>	July - Oct	e.g., <i>Verbena bonariensis</i>
Wallflower	<i>Erysimum</i>	Feb - July	e.g., 'Bowles's Mauve'

**Table of recommended herbs for pollinators that can be planted in beds or pots**

Common name	Latin name	Flowers	Comment
Hyssop	<i>Hyssopus officinalis</i>	July - August	Perennial
Lavender	<i>Lavandula angustifolia</i>	July - August	Perennial
Marjoram	<i>Origanum majorana</i>	June - August	Perennial
Oregano	<i>Origanum vulgare</i>	June - August	Perennial
Thyme	<i>Thymus vulgaris</i>	May - August	Perennial

**Table of pollinator friendly annual flowers that could be planted in planters / containers or beds**

Common name	Latin name	Flowers	Comment
Cornflower	<i>Centaurea cyanus</i>	May - August	Annual
Cosmos	<i>Cosmos</i>	July - August	Annual
Love in the mist	<i>Nigella damascena</i>	June - August	Annual
Nasturtium	<i>Tropaeolum</i>	July - September	Annual
Night scented stock	<i>Matthiola longipetala</i>	July - September	Annual
Poppy, wild	<i>Papaver rhoeas</i>	June - August	Annual. If choosing other varieties, choose single flowers
Poppy, Californian	<i>Eschscholzia californica</i>	June - September	Single varieties
Pot marigold	<i>Calendula officinalis</i>	July - September	Annual
Scabious	<i>Scabiosa atropurpurea</i>	July - October	Annual
Snapdragon	<i>Antirrhinum</i>	July - September	Annual / biennial
Sunflowers, dwarf	<i>Helianthus annuus</i>	July - September	Annual, choose dwarf variety
Trailing lobelia	<i>Lobelia erinus</i>	June - September	Annual



## **Biodiversity Plan for Straide, Co Mayo**

October 2021

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This project has been funded by The Heritage Council.

An Chomhairle Oidhreachta  
The Heritage Council

