Biodiversity Action Plan

Culdaff, Co. Donegal

Introduction

A Biodiversity Action Plan (BAP) takes account of environmental issues and challenges presenting in Culdaff at this time and provides a framework to manage biodiversity in the area. As it is an 'open' document, it is something that will need to be regularly reviewed and updated by the tidy town group. BAP's are by no means the answer to all biodiversity issues in an area, they are however, a guide to help enhance and protect biodiversity taking into account its current health and future potential.

What is Biodiversity?

Biodiversity, or biological diversity, means all living things. This includes all life from flora to fauna, from microbial to the largest plants and animals.

Threats to biodiversity

Biodiversity is under constant threat in Ireland and worldwide from three main sources, habitat loss, invasive species and climate change.

Habitat loss is as it says, where a plant or animals habitat (where it lives and its surrounding environmental factors) have been removed and not replaced. As our towns and cities expand, biodiversity comes under constant strain from this expansion. But it's not only development that leads to habitat loss, cutting or destroying hedgerows, spraying roadside verges and clearing of scrub land are all examples of habitat loss that is often applied with good intentions.

Wasp galls on Sessile Oak

Invasive species are plants or animals that are brought in from another country, establish themselves and out-compete the local flora and fauna. Currently Japanese knotweed is getting a lot of attention as an invasive species with councils throughout Ireland and Britain charged with tackling it. This plant out competes other native plants resulting in biodiversity loss. However, there are currently 48 invasive species regarded as high impact in Ireland and 78 as medium impact. A list of these species may be found at http://www.biodiversityireland.ie/projects/invasive-species/species-lists/

In Ireland, climate change is predicted to lead to warmer and drier summers, milder and wetter winters and an increase in the frequency of extreme weather events. Such climatic changes will disrupt Irish wildlife and our natural environment. Flora and fauna in general react slowly to changes in climate pattern and might not be able to adapt to our extremes in weather and our rising temperatures, no matter how small. There are many examples of climate change on Irish plants and animals; one of the most visual is the expansion of the Little Egret across Ireland.

Where once they were a very rare site on the south coast they are now frequently seen in Inishowen, Culdaff estuary having Egrets present regularly.

What is Biodiversity? contd.

Flood control will also become a bigger issue with climate change. Inishowen already has a rivers trust that is working towards informing and involving the public in what is required to climate proof the region.

Reasons to protect and enhance biodiversity

In 2008 the department of the environment stated that Irelands biodiversity is worth 2.6 billion euros. It is estimated that pollinators alone (butterflies, bees, moths and hoverflies) in Ireland contribute 52 million euros per annum. In 2015 revenue from overseas visitors amounted to 6 billion euros with Irelands natural unspoiled environment cited by 86% of visitors as an important reason for visiting. Recreational angling contributed 836 million euros to the Irish economy in 2015.*

Nettle weevil

By protecting and enhancing the local biodiversity a community can:

- Increase the quality of life for residents through enhanced bird life, plant diversity and environment.
- Increase pollination of flowering plants and crops by insects such as bees and butterflies.
- Pest control via bats, birds and pest eating insects.
- Increased numbers of plants, especially trees in an area will lead to cleaner air in the local environment.
- Insects, invertebrates and fungi help breakdown dead and decaying material which improves soil quality.
- A reason for tourists to visit, stay and explore.
- An increase in awareness and respect of their local area empowers residents to protect and enhance the biodiversity of the area.

** Figures from Ireland's National Biodiversity Action Plan 2017-2021*

What will our BAP contain?

Within objective 3 of the national biodiversity action plan 2017-2021, Target 3.1.1 states the need to engage with local communities and stakeholders to help achieve the objectives of the plan.
This BAP will contain a synopsis which documents the biodiversity highlights of your town/village according to the Fossil habitat classification of Ireland. A number of action goals will be highlighted for areas that can enhance their biological diversity
It will describe a number of actions that can reasonably be achieved within a set timeframe.
Sets out some goals and aspirations that can be achieved by the community.
Contents will include:
Basic habitat map highlighting areas of biodiversity rich habitats

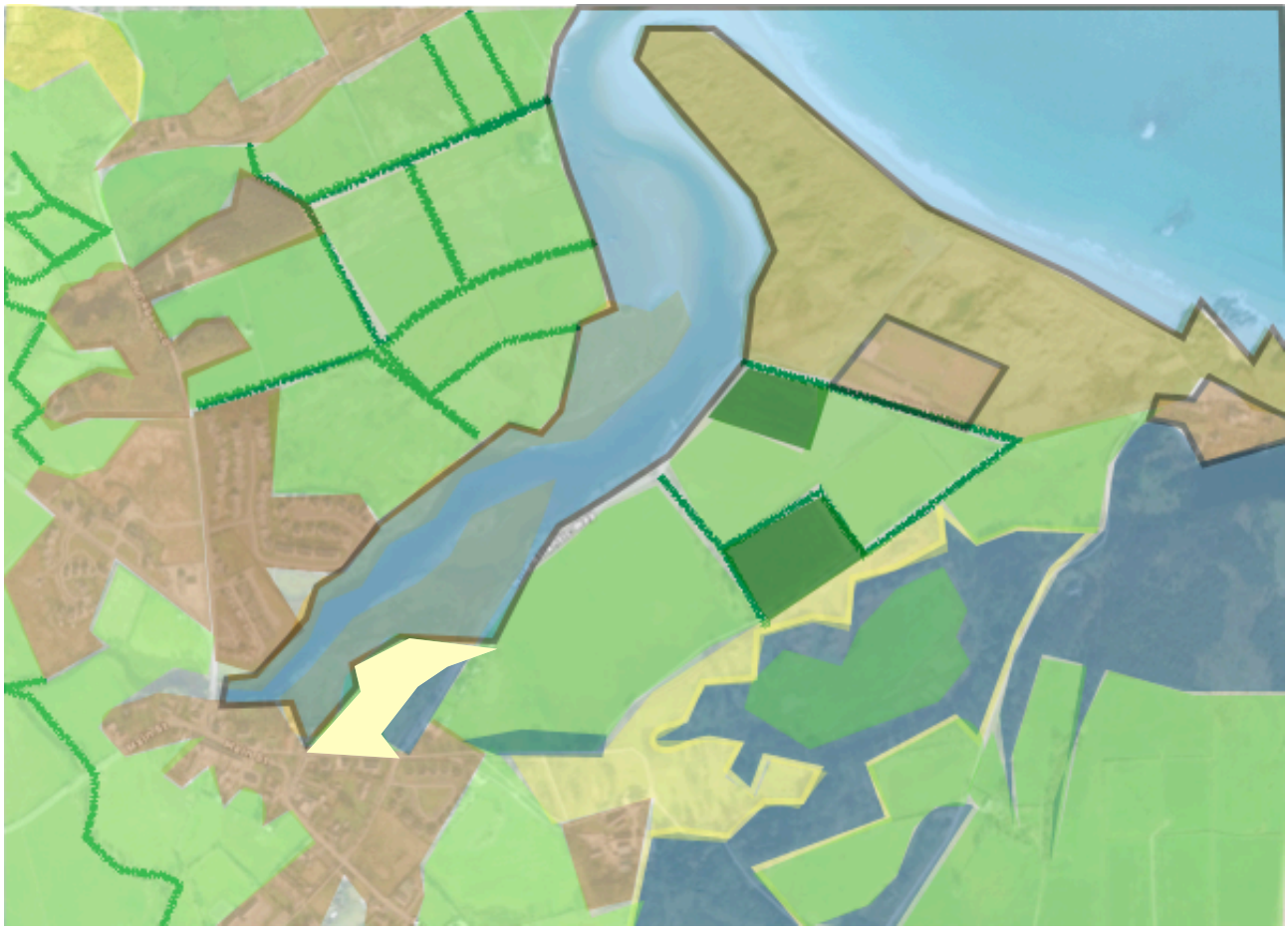
Map for where suggested biodiversity improvements could go
Table of recommendation actions
Section with notes on conducting each action
Recommended native plants for pollinator areas

Culdaff biodiversity in context

Culdaff is located on the Northwest of the Inishowen peninsula, one of the most northerly regions in Ireland. It is a small rural town with a population of approximately 200 people. Culdaff river which runs through the heart of the town supports trout, salmon and associated species. The river drains into Culdaff estuary and beach which supports a large variety of birdlife and associated species. A rocky shore habitat is just south of the large dunes and sandy beach. The surrounding land around the town is mainly dairy grassland with a significant stretch of mixed native and non-native woodlands on the hill to the south.

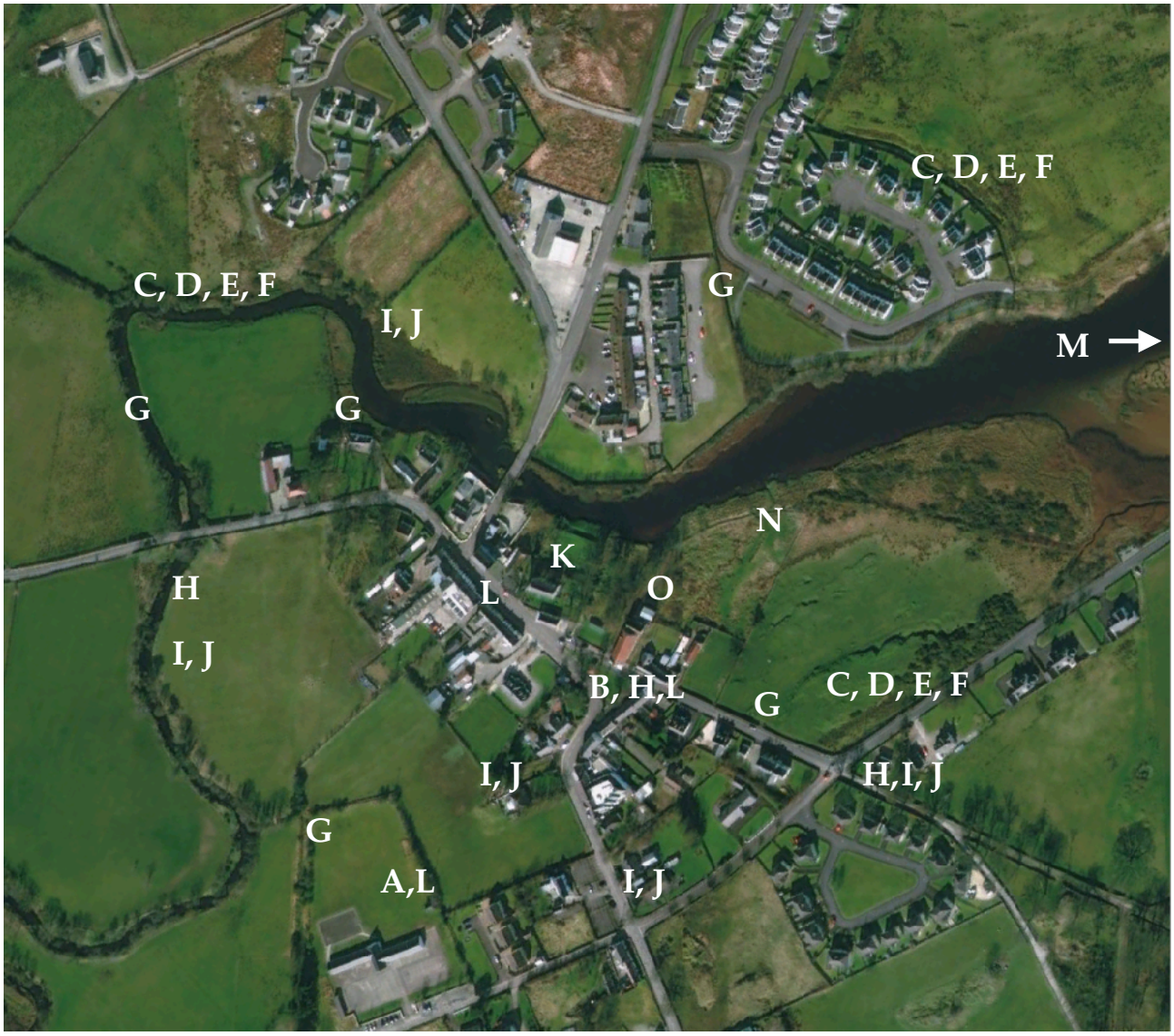
The coast including the saline section of the estuary is a special area of conservation and a proposed natural heritage area. It is especially significant because of the Machair dunes and sea cliffs. "This site is of high conservation value because of the extensive area of unspoilt coastal and heath habitats and the range of plant and animal species that these habitats support"* This area will not be significantly addressed in this action plan as there is currently a grazing management scheme on the dune system.

* NPWS Site Synopsis North Inishowen Coast SAC 002012



Habitat Map - Culdaff town and surrounding area			
Fossit classification	**Corresponding local habitat**	**Biodiversity level**	**Key**
GS Semi-natural grassland	Meadows/marginal grassland	Medium/high	
GA Improved grassland	Agricultural land	Low	
WL Hedgerow	Hedgerows	High	
WD Mixed broadleaf/ conifer woodland	Mixed woodland and scattered trees	Medium/High	
BL Buildings and artificial surfaces/ Stone walls	Buildings homes and gardens	Medium	
CD Machair dunes	Dunes	High	
WD4 Conifer plantation	Conifer plantation	Low	
Special Area of Conservation (SAC)	Inishowen coast and Culdaff river tidal area	High	

Areas of Action



- Each letter symbolises an action that can be seen in summarised version in table 2 and further explanations for each action are available from pages 9 - 18.
- Each action is a recommendation only, the more actions that are achieved the more local biodiversity will be enhanced.
- Each action area is only a suggestion, there may be many more areas that similar or other positive actions could be conducted and some of the recommended actions may not be possible due to land ownership etc.

Table 2 - Actions

ACTION	CODE	REASON	LOCATION(S)	TIMEFRAME
Enhance local schools biodiversity in line with their biodiversity green flag program	**A**	To improve the local biodiversity in that specific area and use this action as an opportunity to involve and educate the local community	St Bodens National School	*Years 1-2*
Use natural methods of weed and pest control	**B**	Reducing herbicide and pesticide use will reduce the amount of harmful chemicals entering the system in the area	In the diamond area, in public spaces, private gardens where possible and generally throughout	*Ongoing*
Ensure correct management off local hedgerows	**C**	Enhance natural linear habitats and protect from over-zealous cutting and grubbing	Throughout	*Ongoing*
Identify enhanced wildlife corridors	**D**	Linking natural and manmade nature corridors allows the opportunity for free movement of biodiversity	Throughout	*Years 2-5*
Increase pollinator friendly plants in hedges and ditches	**E**	By increasing pollinator plants the numbers of pollinating insects will be increased	All hedges and ditches	*Ongoing*
Link together pollinator areas	**F**	To give a continuous and ultimately, virtually unbroken run of pollinator corridors throughout the area linking natural areas around the townland	Throughout	*Years 2-5*
Plant native trees	**G**	Increase general biodiversity with suitable native tree species	In green spaces between housing estates, near the main bridge and at the rivers edge where possible	*Years 1-5*
Erect bat boxes	**H**	Increase species diversity of bats in the area	In housing estates, mature trees and where tree-lines are present	*Years 1-2*

Table 2 Contd.

ACTION	CODE	REASON	LOCATION(S)	TIMEFRAME
Identify nesting birds in buildings in breeding season	**I**	To protect current breeding spaces and identify potential for nest boxes for a variety of species - in particular swifts	Throughout	*Years 1-5*
Erect bird boxes	**J**	Maintain & increase bird species in the local area	In the diamond area especially within view of benches; in public spaces, private gardens where there are suitable trees	*Years 2-5*
Create a wormery	**K**	Provide a steady supply of compost for feeding pollinating plants etc.	In suitable land near the town hall	*Years 2-5*
Erect bird feeders	**L**	Attract birds to the area and supplement their diet during harsh winter months.	In the diamond area especially within view of benches; in public spaces	*Years 1-2*
Link in with clean coasts program	**M**	Helps to keep awareness and enhance beach area / protection of dune habitat.	Culdaff beach and estuary	*Years 1-5*
Create a river boardwalk trail	**N**	Open the area to locals and tourists	From diamond area to the coast.	*Years 3-5*
Construct beehives, keep and manage indigenous honey bees	**O**	Helps bolster beleaguered bee populations and fits well actions **E** and **F**	In suitable land near the town hall	*Years 1-5*

From little acorns… Local student with an oak sapling

Actions expanded

A

The biodiversity green flag is a two year program which aims to improve both a schools biodiversity and awareness with the wider community. Getting involved in helping the school achieve this plan through the green schools 7 step program, consultation with school management and engagement with the students will help improve their biodiversity and make a very valuable link to the local community. The program looks to teach students the importance of eco-system services that biodiversity provides for us all. The tidy town group is in a unique position to enhance this experience for the students will engaging with the parents.

B

Use of organic herbicides is preferable for areas with invasive species. Ordinary weed control should not need any chemical use, aiming to use blow torch's and hand picking control in the long term would be a more sustainable target. To completely eliminate all chemical use from the area would be the ultimate goal.

C

Hedges often suffer from a desire to apply a 'neat' effect on them. Allowing hedges to grow, raising their height over five years and filling in older hedges with native stock will bring huge amounts of biodiversity locally. As so many of Irelands native plants and animals are originally woodland species, hedgerows provide refuge for a great variety of life.

D

So much of Irelands wildlife relies on hedges to get from place to place. The more these can be linked, the more robust the biodiversity. By identifying old remnant hedgerows, healthy hedgerows, gardens, wild areas and managed woodland, it is possible to fill the gaps between each of these linear habitats and blend a mosaic of 'wildlife corridors' which provide a safe haven for plants and animals to survive and ultimately thrive.

E

The all Ireland pollinator plan includes a large variety of agencies working together both north and south in a bid to enhance habitats for pollinating insects. In the last four years (2013-2107) our bumblebee species have declined by 14% and it is estimated that our 99 species of bee (only one of which is a honey bee) will suffer an intinction rate of 30% plus by 2030. One third of our food comes from pollinated plants. Reversing this trend of decline is very possible with the help of robust planting, hedge cutting management, eliminating chemical use and awareness raising. A huge amount of resources can be accessed at http://pollinators.ie

A list of pollinator plants for each season is available on the next page.


How do you know if a plant is pollinator friendly?
Do you see pollinators visiting? When choosing plants at a garden centre, you will quickly spot which flowers insects visit most.
Choose single-flowered varieties or perennials (double-flowered or annuals are generally poor sources of pollen and nectar).
See our website for more actions you can take to help pollinators in your garden, business, farm, school or local community.
Daffodils, Tulips, and traditional bedding plants like Geraniums, Begonias, busy Lizzy, Petunias, Polyanthus or Salvia splendens have virtually no pollen and nectar and are of little value to pollinators.
Farmland:
Gardens:
All-Ireland Pollinator Plan 2015-2020
Rudbeckia
Heathers
Eupatorium
Aster
Salvia
Single flowered Dahlia
Autumn
Mahonia
Willow
Viburnum
Crocus
Snowdrop
Helleborus
Winter
www.pollinators.ie
National Biodiversity Data Centre


Pollinator-friendly plants for
YOUR GARDEN
Our pollinating insects are in decline. One third of our 99 bee species are at risk of extinction. By choosing pollen-rich flowers for your garden, you will help provide much-needed food our Bumblebees and other pollinating insects as well as creating a beautiful colourful garden. There are lots of pollinator-friendly plants to choose from.
To learn more about the All-Ireland Pollinator Plan, see www.pollinators.ie
All-Ireland Pollinator Plan 2015-2020
Grape hyacinth
Wallflower
Lungwort
Berberis
Broom
Rosemary
Borage
Comfrey
Spring
Allium
Foxglove
Catmint
Calamint
Bellflower
Scabious
Lamb's-ear
Globe thistle
Stonecrop
Verbena
Lavender
Sneezeweed
Summer

F

Similar to identifying and linking old and new hedgerows (see section **D**), it is possible to identify and link together areas that have a diverse range of pollinating plants. Bumblebees, just one group of pollinators, make nests underground in soft mud and exposed banks. Leaving areas for them to nest free from chemicals and disturbance will enhance their chances of breeding success. Most bumblebee species prefer to forage for nectar for themselves and pollen for their larvae within 200 - 500 metres of their nest site. By planting pollinator friendly plants in between these areas already in situ, a natural corridor can be made which will increase foraging success of bees and other pollinators.

G

From the hardy Downy Birch that can grow on acidic and nutrient poor soil to Trembling Poplar or Aspen for very wet areas, there is a tree for all conditions that Donegal can offer. Below is a list of native trees worthy of consideration. Remember that all trees should be sourced from local stock, planted as very young (1-2 years) trees and planted between December and March.

Birch	Attracts huge numbers of insects. Downy Birch is hardier and more tolerant of acidic soil than Silver Birch.
Willow	Attracts insects and can be used for sculptures such as living chairs, domes etc. Goat Willow and Eared Willow are very hardy.
Juniper	Threatened in Ireland, was the dominant plant 12,000 years ago approx. Has historic value and is host to 42 types of plant eating insects. Provides berries and shelter for birds.
Oak	Attract more insects than any other plus support huge amounts of epiphytes such as mosses, lichens and ferns. Sessile Oak as well as being our national tree is the hardier than our other native Oak, Pedunculate Oak.
Ivy	Not a tree, but provides bird and bat cover, early berry provider (March) and late pollen provider (October).
Rowan	Masses of flowers in the spring for insects and berries in autumn for birds. Will grow at a higher altitude than any other Irish tree.
Blackthorn	Great for bird's nests and pollinating insects and enhancing a hedges security. Can tend to spread by suckers if allowed.
Hawthorn	Also great for birds nests, hedgerow reinforcement and pollinating insects. Hawthorns flower in May after their leaves appear. Blackthorn flowers in April before their leaves appear.

Willow flowers

Scots Pine	A hardy and native pine tree that can tolerate poor, shallow, acidic soil. There was a time in Donegal where this tree would have featured high into the mountains where our blanket bog habitats are now to be found.
Alder	The common Alder is another water loving species. It also fixes nitrogen into the ground; enhancing the quality of the soil over time. Its cones provide autumn food for many bird species.
Aspen	Another water loving tree. Tends to sucker and can take over a damp patch of unused land.
Ash	Common Ash prefers reasonably fertile and well drained land. It is the most common tree in Irish hedgerows today.
Holly	Grows well in shaded places as an understory tree and supports lots of insect life.
Whitebeam	Hardy, rare (in its natural form) and decorative tree.
Bird Cherry	Hardy, provides food for pollinating insects and birds.

Caddis fly eggs

H

By erecting simple bat boxes a habitat is created for bats to roost in. Any area hugely benefits from the presence of bats, one bat will consume upwards of 3,000 insects per night. Bats, birds, wasps, spiders and other natural pest control can help to mitigate for the lack of insecticides and move an area towards organic and chemical free living. See instructions courtesy of the RSPB below.

Bat boxes

They should be made from untreated wood, i.e. wood which has not been pressure-treated with chemicals. Bats are sensitive to smells and preservative chemicals may be harmful to them. They should be made from rough-sawn wood (rather than smooth, planed wood), have good, tight joints – bats hate a draught, have a narrow slit at the back of the box, with a rough piece of wood leading up to it that they can clamber up. The very best bat box is one with two or more internal compartments, and one that is as large as possible – a deep cavern makes bats feel really safe, and keeps the air temperature more constant.
Make sure you have the right wood. To make your own bat box, get hold of some untreated, rough-sawn wood. That can be easier said than done! You will probably need to go to a saw-yard rather than a timber merchant, as you're unlikely to find it at a DIY store.

Make sure you look for the Forest Stewardship Council (FSC) logo. If your wood feels too smooth, roughen it by dragging the teeth of a saw across the surface – this helps bats get a good grip as they clamber around their new home.

Building your bat box.

You'll need a sheet of timber 15cm wide by at least 1.1m long, as thick as possible to keep the bats insulated from too much cold and heat inside (ideally 1.5cm or more).

Note: the dimensions shown are for 20mm thick wood. If your wood is different to that, the dimensions of the Base should be 150mm by 130mm minus 2 x thickness of the wood, e.g. if the wood is 18mm thick, the base should be 150mm x 94mm.

Mark the wood with a pencil, according to the diagram, and then cut it in to the sections.

Nail all the pieces together as shown in the diagram, making the joints as airtight as possible.

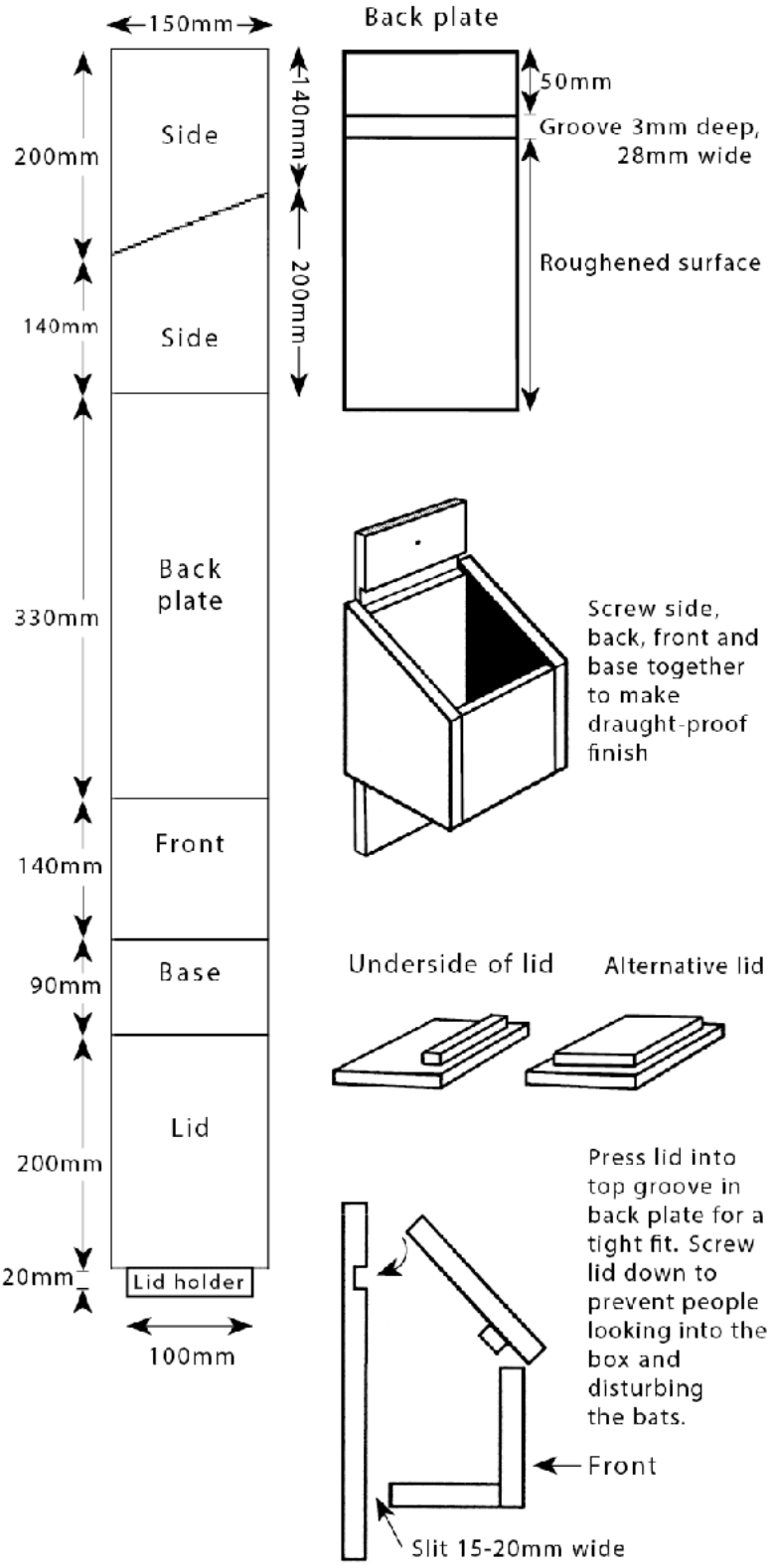
Choose your location. You could put it under the eaves of your house or, if you have a large garden, on the trunk of a mature tree. Ideally, look for a spot that is at least 3m (10 feet) from the ground, sheltered from strong winds and exposed to the sun for part of the day. Position your box so it faces between south-west and south-east. Make sure there is a clear flight line in.

Now put your bat box up. Drill holes at the top and bottom of the box's backing plate and fix the bat box to the wall with screws or plugs. If you're fixing it to a tree, you can use adjustable ties so you don't cause any damage to the tree. If you don't have these, use timber-screw bolts.

All bats and their homes are protected by Irish law so it's important you don't disturb them. Watch and enjoy from a distance. If you don't see any bats going in or out, look out for their black droppings underneath the entrance. They are little dry pellets that crumble to dust. The most likely new residents will be pipistrelles - there are two very similar species which are widespread in villages and towns around Ireland.

(Instructions courtesy of the RSPB)

Emperor moth found by local school students



(Instructions and image courtesy of the RSPB)

I

Knowing where birds are breeding and what species are in an area can help steer work and direction of planting. April/May is the right time to conduct a survey of breeding birds. June is the time to look for species such as swift that might be exploring the area. Once species are identified a plan can be put into place for enhancing their potential nesting sites and foraging grounds. Protection by informing land owners can greatly increase the chances of birds not being disturbed accidentally.

J

By erecting bird boxes the number of blue, great and coal tits (in conifer woodlands) can dramatically increase. Robins can also nest in boxes with a more open entrance. Placing the boxes a reasonable distant apart from each other (at least 50 meters) and facing north increases chances. Once birds establish breeding this increases peoples engagement and appreciation of their presence. If these boxes are successful it is possible to attract more diverse species such as dippers and wagtails by the river, barn owls or kestrels by woodlands etc.

Instructions for bird boxes:

Nest Box Location: North or North East Walls to avoid prevailing wind/rain and direct sun. On a tree is ideal but the side of a building can work equally well. Box angled downwards slightly to avoid water entering the entrance hole and flooding the nest. Reasonable distance from other nest boxes, from bird feeders and from other ideal nest sites such as cavities in an old wall. Ideally shrubs and trees nearby.

Time of year: Ideally before the end of February as birds are prospecting for nest sights from then. Any time outside of this can also work, boxes put up in April have been successful that season. Also some birds use the boxes for shelter in winter.

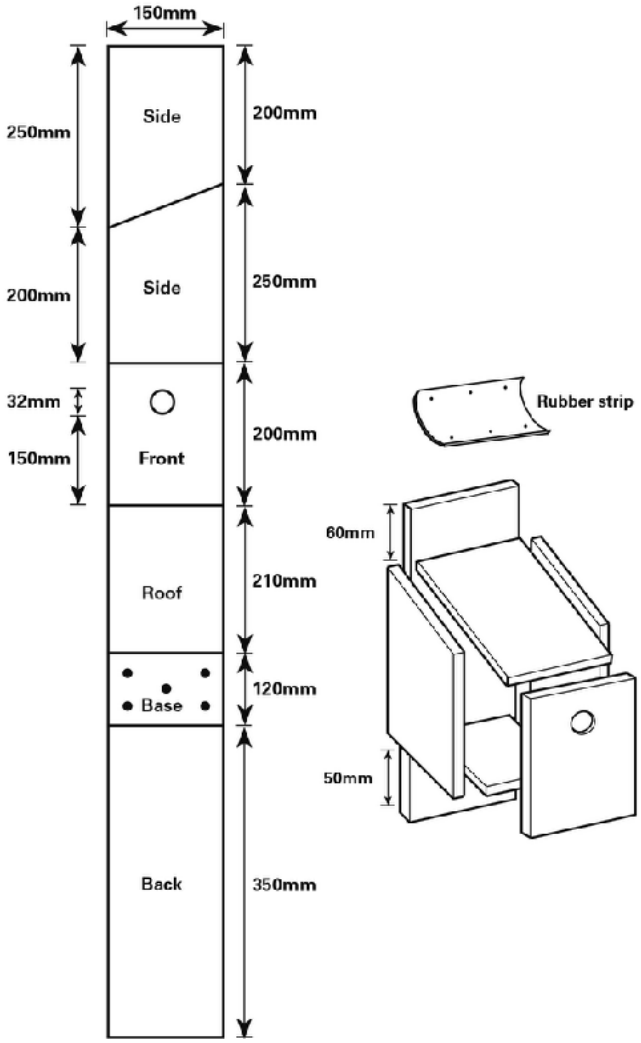
Nest Box Type: Small hole at front ~ Blue tits and Great Tits 2-5 metres up. These two species are by far the most common users of nest boxes. Large rectangular entrance ~ Robins and Wagtails, 1-3 metres.

Maintenance: After use between November and January boxes should be cleaned of old nest material and scalded with boiling water to kill any bird parasites. Boxes should not be disturbed once up between the months of February and October. Eggs / nest material should never be removed during these months.

Cameras: Fixed line ~ Preferred method, 1 power source required, gives a stronger signal. Direct line from camera to recording device or screen.
Wireless ~ 2 power sources required. The power for the camera could be battery as opposed to mains. Still good signal, can beam signal to a receiver within line of sight up to 50 metres. Receiver can be inside glass and is wired to a recording device or straight to the screen.
Hard drive boxes or (with a special adaptor) laptops can be used to record footage and create a movie of the birds nesting which can be potentially streamed to promote the area.

Notes: Birds will often prospect a variety of sites so if nothing happens this season be patient. Some birds build several nests in a season and only one is used. Droppings are usually carried away by birds that use nest boxes so the site should remain

quite clean. Small song birds will lay one egg a day for up to 13 days, then incubate the eggs for approx. 2 weeks, then feed the chicks until they fledge about three weeks later. Cameras can be used for a variety of wildlife projects; one of the most popular is to mount them in a waterproof box beside a bird feeder, excellent for survey work.



(Image courtesy of the RSPB)

K

Creating a wormery would be a positive step to managing self-sustaining compost. This in turn would help generate a system where by the community could feed and nurture its planting while utilising the communities organic waste matter. The community could also add to the wormery if the content was monitored. This is a system that would need both research and on-going management. Once in place, however, it would be a lasting resource that would have the potential for a lot of buy-in from school groups, local community groups and households. Having a renewable and sustainable source of compost 'on-site' would be a wonderful asset which would attract lots of attention from all. It would also save considerable cost; compost can add up financially as a resort for any community group. Advice and management instructions are available from a variety of sources, the RHS website having some excellent concise instructions.

L

Erecting bird feeders in busy seating areas brings both a sense of joy and wonder to local communities and tourists. Feeding birds easily and economically by making 'birdcakes' in the winter will help maintain the population of local finches and tits. Feeding birds all year round has been proven in studies to keep birds in area, these birds in turn taking pest insects from the locality. It does not harm young birds as sometimes is said; the young birds will only supplement their diet with the bird feed. Niger seed attracts Goldfinches, peanuts and sunflower seeds attracts many other small woodland birds. Cheap porridge oats is a great way to bulk up bird food economically. Cleaning bird feeders regularly is essential to prevent the spread of disease in birds.

Instructions for winter bird-cakes

Donegal school children making bird feeders

Ingredients:

1 x small (less than 30 cm) stick or an open pine cone
1 x block of cheap *salt free* lard softened in a warm room
1 x handful of porridge oats
1 x handful of currents/ raisins
1 x piece of string
1 x 30 cm x 30 cm piece of baking or brown baking paper
Apron (this can get quite messy!)

Method:

Tie the string to the stick or dried and open pine cone (they open naturally after a few days in a warm room). Squish about 1/4 of the lard around the stick or into the gaps in the cone. *Salt free lard is very important as salt is very bad for the birds*. Push a few of the raisins or currents into the fat. Coat the whole feeder with the porridge oats. These can be the cheapest you can find in the store. Wrap the bird feeder in the baking or brown paper and put it into the fridge overnight. The next day, tie it to a tree, fence etc. but make sure it is out of reach of any cats. Robins will normally eat any fallen bits that the other birds drop.

M

Linking with the An Taisce clean coasts program can bring multiple benefits. From promoting 2 minute beach cleans to organising marram grass planting projects the clean coast program helps raise awareness and protect our marine environment. With the vast amount of plastic that we wash into our seas on a daily basis, clean coasts help to highlight this issue while arming the volunteers involved with the knowledge require for conducting beach cleaning and protection in a safe and sustainable manner.

In An Taisce's clean coasts own words:
The Clean Coasts programme through the Clean Coasts volunteering effort aims:

1. To facilitate community guardianship of adopted stretches of coastline.
2. To establish and support Clean Coasts groups who form a network engaged in coastal management, environmental actions, and education activities.
3. To enhance the value of the coastline by reducing the impact of litter and other environmental damage thus restoring the aesthetic appeal and increasing the amenity and economic value to local communities and tourists.

N

A river-side boardwalk would be a wonderful enhancement to the town. Not only would it guide locals and tourists to a beautiful and peaceful area of natural beauty but it would give a level of ownership to all the community. With a level of ownership comes both pride and protection. The same may be said for all enhancements to the biodiversity and awareness of nature within the Culdaff area.

A boardwalk would initially require a scoping survey to assess the feasibility of the project before any works could be planned. The advantage of a board walk is that as well as opening a previously inaccessible area to all, it protects nature by raising the footfall above the existing flora and allowing the fauna of the area free passage.

O

By keeping indigenous honey bees not only are local populations helped but there is the added benefit to local agriculture, domestic vegetable growing and garden flowers. This would fit with the national pollination plan and would be seen as a 'gold standard' target for any tidy town or community group. Consultation with local beekeepers would be recommended.

Reviewing and ongoing work

Culdaff tidy town group should review the report and work progress on an annual basis. Biodiversity action plans usually constantly evolve as the various actions are started.

Dog Violet flowers in hedgerows

Useful links

An Taisce the national trust:	www.antaisce.ie
Bat Conservation Ireland:	www.batconservationireland.org
Biodiversity Data Centre:	www.biodiversityireland.ie
Birdwatch Ireland:	www.birdwatchireland.ie
Boom Tree Bees:	www.boomtreebees.com
Botanical Society of Britain and Ireland:	www.bsbi.org.uk
Cleancoasts:	www.cleancoasts.org
Composting, RHS:	www.rhs.org.uk/advice/profile?PID=444
Conservation Volunteers:	www.conservationvolunteers.ie
Crann:	www.crann.ie
Native Irish wildflower seeds:	www.wildflowers.ie
Heritage Council:	www.heritagecouncil.ie
Inishowen Rivers Trust:	www.inishowenriverstrust.com
Inishowen Wildlife Club:	www.inishowenwildlifeclub.com
Irish Moths and Dragonflies	www.irishmoths.net
Irish Peatland Conservation Council:	www.ipcc.ie
Irish Seed Savers:	www.irishseedsavers.ie
Irish Wildlife Trust:	www.iwt.ie
Lichens:	www.lichens.ie
National Parks & Wildlife:	www.npws.ie
Notice Nature - Hedgerows:	www.noticenature.ie/Hedgerow.html
Pollinator plan:	www.pollinators.ie
Sustainable water Network:	www.swanireland.ie
The Ordnance Survey of Ireland:	www.osi.ie/mapviewer
Water and Communities Office:	www.watersandcommunities.ie
Wildflowers of ireland:	www.irishwildflowers.net