**Biodiversity Information Pack**

**How to increase biodiversity in your local grass spaces**

One outcome of our alternative grassland management approach is to make it a more valuable space for wildlife and communities to use.

There are many simple ways in which you can improve an area for people as well as biodiversity.

# What is biodiversity?

The word simply means the variety of life on earth. It includes every living thing, from plants and animals to fungi and micro‐organisms. Think of the incredible variety within the animal kingdom alone, from tiny seahorses to titanic whales in the ocean, and the mighty elephant to the pygmy shrew on land. Over

* 1. million species have been identified, but scientists estimate there could be as many as 14 million! The biodiversity we see today is the fruit of billions of years of evolution.

# Why is biodiversity important?

Biodiversity plays a vital role in our everyday life. It sustains the ecosystems that provide us with food, fuel, clean water, health and wealth. For instance, the air we breathe is produced by plants. Insects and fungi break down dead plants to produce soil. Bacteria help break down our waste. Biodiversity provides us with the food we eat as well as the materials in our everyday lives, such as textiles and timber. Many of the drugs we treat our illnesses with have their origins in biodiversity, such as the cardiac stimulant Digitoxin which comes from the common foxglove.

 

Each ecosystem is finely balanced, and if one or more species is lost, the function of the ecosystem can become disturbed. It is therefore in our interest to manage for biodiversity.

Bees are a good example. These industrious little insects are important pollinators. Cross‐pollination helps at least 30% of our crops to thrive. Unfortunately, bee populations are declining in Fife and further afield. It has been said that without bees, we would only have a few years left to live!

# The threats that face biodiversity ‐ and us

Sadly, we are losing biodiversity at an alarming rate. Scientists estimate 150 to 200 species are lost every 24 hours. It is human activity that is causing this greatly accelerated loss.

The destruction of habitats is the number one cause of species extinction. Introduced invasive species, pollution, population growth and over‐consumption are also to blame. What many of us don’t realise is that we are in fact harming ourselves by damaging the biodiversity we rely on. We have to act urgently to protect biodiversity and safeguard our future.

# We can make a difference

Fife is fortunate to have a wealth of fantastic habitats, from its stunning coastline to the blustery twin peaks of the Lomond Hills. Many of these habitats are rich with biodiversity. We are also fortunate in that we have the power to protect (as well as destroy!) biodiversity.

Through your projects, you can help make a difference by protecting – and even enhancing ‐ the wildlife and countryside of Fife.

# Some projects which benefit wildlife

Sow a wildflower meadow

Wildflower‐rich grassland is one of the most threatened habitats in the UK. Wildflowers meadows are beautiful in themselves and also provide valuable food and shelter for a range of species. They attract invertebrates including butterflies and bumblebees, as well as birds and small mammals such as voles and shrews. Even creating small patches of native wildflower meadows in urban areas or along road verges can be of great benefit to wildlife.

Create a pond or wetland

Ponds are oases for wildlife. Indeed it is said that a garden pond can do more to enhance your garden for wildlife than any other feature. They can attract frogs, newts, birds, bats and hedgehogs as well as a variety of plants. Try creating a mix of habitats including a boggy area, shallow section and slightly deeper open water. Even a small pond can be very beneficial.

Put up bat and bird boxes

Birds and particularly bats need mature or even dead trees in which to nest and roost. Our countryside is heavily managed and there are far fewer old and dead trees than there should be. You can give birds and bats a helping hand by putting up boxes as artificial nesting and roosting sites. Consider different types of nest boxes, for instance for swifts and swallows or kestrels and owls.

Create wildlife corridors

Our countryside is heavily fragmented due to our activities, such as industry and agriculture, as well as the urban areas we live in and the roads that connect them. This creates ‘islands’ of natural habitat, where isolated populations can suffer from lack of food or inbreeding. Connecting up these fragmented habitats, for instance with a hedgerow, a woodland corridor or by creating a ‘stepping stone’ pond between two others, can greatly benefit wildlife. This also better enables wildlife to adapt to climate change and deal with threats.

Plant a woodland

Fife is one of the least wooded regions of Scotland, and Scotland is one of the least wooded countries in Europe! Woodlands are very valuable habitats for all sorts of wildlife and also help mitigate climate change, prevent flooding and filter urban pollution. Plant native trees and shrubs if possible. Or why not look at improving existing woodland by diversifying the tree species, planting an understorey or removing invasive non‐native species such as *Rhododendron ponticum*?

Plant a traditional orchard

Old orchards are associated with many species such as moths, bees and bats. They are an important habitat. Orchards as well as flowering and fruiting hedges provide pollinating and nesting opportunities for insects and birds.

Replace a fence with a hedgerow

If a barrier is needed, consider a natural one! Wherever possible, use native shrubs to create a hedge instead of erecting a new fence. If a fence is due to be replaced or repaired, consider planting a hedge instead. As well as creating a habitat, you will create a more attractive, greener environment.

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Report your wildlife sightings

A good way to help protect our local wildlife is to send information about sightings to the local records centre. If we don’t know where our wildlife is, it’s harder to

protect it. For instance, information about protected species is given to planners and developers so that they don’t accidentally harm it. Use the form in this pack and send information to the Fife Nature Records Centre.

Hang on to dead wood

Dead wood is a very important part of the woodland ecosystem. In a natural woodland, about a fifth of the volume should be deadwood. What’s more, about half of all woodland species depend on deadwood at some point in their life cycle. Leave dead trees standing wherever possible. Create habitat piles from fallen branches to provide shelter for hedgehogs, nesting sites for wrens, and food for insects and fungi.

# Bear wildlife‐friendly plants in mind

Most wildlife‐friendly plants are native. This is because our local wildlife has lived with these plants for a long time and adapted to make use of them. Our native animals may struggle to make use of exotic plants. For instance, pollinating insects such as bees and butterflies may not be able to reach the nectar in exotic flowers. Also, some species such as pansies and double begonias offer very little nectar and pollen.

The plant list has been subdivided into habitat types. These include:

* + - woodland, shrubs and hedgerows
    - riverbanks, ponds and wetlands
    - grassland and meadow
    - beds, borders, walls and containers
    - orchards

The plants listed are suggestions and there are many more possibilities!

# Woodland, shrubs and hedgerows

Try to purchase local provenance trees wherever possible. Try the Woodland Trust Scotland for native tree packs.

\*The non‐native Spanish bluebell hybridises with our native bluebell and is a threat to the wild populations. It is therefore important to plant only the native variety. Scotia Seeds is an accredited supplier of native bluebells.

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| **Trees** | | **Shrubs, hedges and woodland edges** | | **Herbaceous** | |
| Ash Aspen Bird cherry Crab apple Cherry Holly Juniper  Pedunculate oak Rowan  Scots pine Silver birch Whitebeam Goat willow Yew  Small‐leaved lime | *Fraxinus excelsior Populus tremula Prunus padus Malus sylvestris Prunus avium Ilex aquifolium*  *Juniperus communis Quercus robur Sorbus aucuparia Pinus sylvestris Betula pendula Sorbus aria*  *Salix caprea Taxus baccata Tilia cordata* | Blackthorn Bramble Broom Crab apple Crack willow Dog rose Elder  Field rose Hawthorn Hazel Honeysuckle  Gorse Rowan Holly | *Prunus spinosa Rubus fruticosus Cytisus scoparius Malus sylvestris Salix fragilis Rosa canina Sambucus nigra Rosa arvensis*  *Crataegus monogyna Corylus avellana Lonicera periclymenum* or *L. xylosteum*  *Ulex europaeus Sorbus aucuparia Ilex aquifolium* | Bluebell\* Bugle  Common dog violet Dog’s mercury Foxglove  Greater woodrush Herb robert Primrose Ramsons  Red campion Sweet cicely Wild daffodil Wood sorrel Wood anemone Wood cranesbill | *Hyacinthoides non‐scripta Ajuga reptans*  *Viola riviniana Mercurialis perennis Digitalis purpurea Luzula sylvatica Geranium robertianum Primula vulgaris Allium ursinum*  *Silene dioica Myrrhis odorata*  *Narcissus pseudonarcissus Oxalis acetosella Anemone nemorosa Geranium sylvaticum* |

# Grassland and meadow

Try Scotia Seeds for native wildflower seed mixes suitable for different types of ground, including dry, wet, woodland, hedgerow and coastal. These are a few of the mixes they offer

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| **Meadow mix for well‐drained, loamy soil in open sites** | | **Bees, birds & butterflies mix** | | **Wet meadow mix** | |
| Yarrow  Common knapweed Lady’s bedstraw Meadow vetchling Autumn hawkbit Ox‐eye daisy Birdsfoot trefoil Burnet saxifrage Ribwort plantain Cowslip  Selfheal  Meadow buttercup Common sorrel Devils‐bit scabious Tufted vetch Common bent Meadow foxtail Sweet vernal grass Crested dog’s tail | *Achillea millefolium Centaurea nigra Galium verum Lathyrus pratensis Leontodon autumnalis Leucanthemum vulgare Lotus corniculatus Pimpinella saxifraga Plantago lanceolata Primula veris*  *Prunella vulgaris Ranunculus acris Rumex acetosa Succisa pratensis Vicia cracca Agrostis capillaris Alopecurus pratensis Anthoxanthum odoratum* | Cow parsley Foxglove Viper’s bugloss Goat’s beard Mullein Yarrow Kidney vetch  Clustered bell‐flower Greater knapweed St John’s Wort  Field scabious Meadow vetchling Birdsfoot trefoil Greater trefoil Wild marjoram White campion Red campion Hedge woundwort Devil’s bit scabious | *Anthriscus sylvestris Digitalis purpurea Echium vulgare* Tragopogon pratense *Verbascum thapsus Achillea millefolium Anthyllis vulneraria Campanula glomerata Centaurea scabiosa Hypericum perforatum Knautia arvensis Lathyrus pratensis Lotus corniculatus Lotus pendunculatus Origanum vulgare Silene latifolia*  *Silene dioica Stachys sylvatica Succisa pratensis* | Sneezewort Common knapweed Meadowsweet Meadow cranesbill Water avens Yellow flag iris Autumn hawkbit Ox‐eye daisy Greater birdsfoot trefoil  Ragged robin Ribwort plantain Selfheal  Meadow buttercup Common sorrel Devils‐bit scabious Common bent Meadow foxtail Crested dogs tail | *Achillea ptarmica Centaurea nigra Filipendula ulmaria Geranium pratense Geum rivale*  *Iris pseudacorus Leontodon autumnalis Leucanthemum vulgare Lotus uliginosus Lychnis flos‐cuculi Plantago lanceolata Prunella vulgaris Ranunculus acris Rumex acetosa Succisa pratensis Agrostis capillaris Alopecurus pratensis Cynosurus cristatus*  *Deschampsia caespitosa* |

# Orchards

Choose traditional Scottish varieties if possible. You’ll not only support biodiversity, but will help protect traditional and often threatened varieties of fruit trees which are part of our cultural heritage.

For advice, contact the Allotments Officer. For orchard packs, try Scottish Fruit Trees, a social enterprise.

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| **Apple** | **Plum and damson** | **Pear** | **Nut** |
| Scottish: Beauty of Moray  Bloody Ploughman Scotch Bridget Hawthornden Tower of Glamis James Grieve  Other heritage varieties: Coul Blush  Early Julyan Gogar Pippin Hood’s Supreme  Lady of the Wemyss Lass O’Gowrie  Pine Golden Pippin Thomas Jeffrey | Scottish plum: Burnet Gordon Castle  Other heritage plum varieties: Victoria  Marjorie’s Seedling Opal  Czar  Belle du Lovain  Red Magnum Bonam  Damsons: Merriweather Shropshire Prune Farleigh | Other heritage varieties: Conference  Beth  Doyenne du Comice Durondeau Williams  Jargonelle | Hazelnut Walnut |

**Bio-Diversity Projects - FUNDING SOURCES**

The funders below offer awards for a range of projects associated with Bio-Diversity projects.   It is important that you make sure that your project fits with the funders’ priorities and eligibility criteria.   You can approach a number of the funders below to compile a cocktail of funding for a particular project.  However, please ensure that this fits with the funders conditions of award.   If you are in any doubt, or you would like some more direction, please contact the Funding and Monitoring Team, Fife Council, 01592 583498.  For additional funding sources please try the National Funding Portal at [www.fifedirect.org.uk/grantsandfunding](http://www.fifedirect.org.uk/grantsandfunding)

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| **NAME & CONTACT DETAILS** | **GRANT AMOUNT** | **SUMMARY** | **WHAT IS ELIGIBLE** |
| **GREENSPACE SCOTLAND – YOUNG PLACECHANGERS IDEA FUND**      To start this search please use:  [Young Place changers Idea Fund](https://www.youthscotland.org.uk/news/young-placechangers-ideas-fund-opens-for-applications/) | Maximum: £3,000 | The Young Placechangers Ideas Fund supports Youth Groups to engage with others in their communities to act to improve the environmental quality, biodiversity, playability and vibrancy of neighbourhoods. Young Placechangers are young people between the ages of 12-25 who want to change their local environment for the better. | This could be their local greenspace, street, community centre garden, whole village, neighbourhood or town. The Young Placechangers will lead community placemaking projects in their local communities. Groups can apply for: Seed corn funding - to engage with the wider community and develop their ideas; Ideas Fund - to involve their local community to further develop their idea and deliver changes on the ground such as the physical improvement of spaces, event programmes and sessional staff/youth worker costs. |
| **ESMEE FAIRBAIRN GRANTS**    To start this search please use:  [Esmee Fairnbairn - Environmental Grants](https://esmeefairbairn.org.uk/environment) |  | Funds organisations who can move, engage and inform people, and connect with the bigger picture of policy-making, social justice, or quality of life | * Excites and inspires people to get involved in nature or environmental issues and act to make a difference, or * Makes environmental issues relevant to people’s everyday lives and what they care about, or * Enables groups that may be disconnected from nature, for example in urban areas, to become more engaged. |
| **NATIONAL LOTTERY COMMUNITY FUND – AWARDS FOR ALL**    To start this search please use:  [Awards For All](https://www.tnlcommunityfund.org.uk/funding/programmes/national-lottery-awards-for-all-scotland#section-1) | £300 - £10,000 | Funding is available for voluntary groups, schools, local authorities and health bodies in Scotland to carry out projects that will improve local communities and the lives of people most in need. | Can fund:  •equipment  •one-off events  •small capital projects  •staff costs  •training costs  •transport  •utilities/running costs  •volunteer expenses |
| **SCOTTISH NATURAL HERITAGE**    To start this search please use:  [SNH – Biodiversity Challenge Fund](https://www.nature.scot/funding-and-projects/biodiversity-challenge-fund-bcf) |  | The Biodiversity Challenge Fund (BCF) is a competitive fund with a budget of up to £2 million which aims to enable targeted action for priority habitats and species, accelerating efforts that will help Scotland meets its international biodiversity commitments. | Priorities:   * Farmland – making more space for flower-rich habitats and grassland, streams, hedges, native woodland and ponds for pollinators, amphibians, and at-risk mammals and birds * Coast and wetlands – reviving and extending key ecosystems; coastal sand dunes, continental dunes and coastal habitats impacted by salt (halophytic); mires and fens * Urban networks – for example waterways, native woods, ponds and wildflower meadows, verges and green corridors * Combating invasive species – targeting key areas to be cleared of invasive species e.g. Rhododendron, Japanese knotweed, Himalayan balsam, giant hogweed, and problem mammals * Connecting reserves and protected areas – supporting management and partnerships to give added value and benefits around protected areas |
| **NATIONAL LOTTERY HERITAGE FUND**    To start this search please use:  [National Lottery Heritage Fund](https://www.heritagefund.org.uk/news/new-funding-scotlands-biodiversity) | The National Lottery Heritage Fund continues to prioritise nature and wants to encourage projects applying to the Biodiversity Challenge Fund to also apply for match funding up to £100,000. | The National Lottery Heritage Fund and Scottish Natural Heritage are working together to fund projects which will help save endangered species, improve habitats and increase access to nature. | Supports large-scale projects which will improve the health and resilience of the natural environment. |
| **PATAGONIA – ENVIRONMENTAL GRANT**    To start this search please use:  [Patagonia - Environmental Grant](https://eu.patagonia.com/gb/en/grant-guidelines.html) |  | Patagonia funds only environmental work and are most interested in making grants to organizations that identify and work on the root causes of problems and that approach issues with a commitment to long-term change. They support small, grassroots, activist organizations with provocative direct-action agendas, working on multi-pronged campaigns to preserve and protect our environment. | They help local groups working to protect local habitat, and think the individual battles to protect a specific stand of forest, stretch of river or indigenous wild species are the most effective in raising more complicated issues – particularly those of biodiversity and ecosystem protection – in the public mind. |
| **FIFE ENVIRONMENT TRUST**      To start this search please use:  [Fife Environment Trust](https://www.fifeenvironmenttrust.org.uk/) | Large £10k – £50k    Small up to £10k | Project costs associated with the reclamation, remediation, restoration or other operation on land to facilitate economic, social or environmental use.  Providing, maintaining or improving a public park or other public amenity. | Priority will be given to projects that demonstrate partnership working, community involvement and/or innovative use of amenities to enhance, maintain or introduce real community led social, economic or environmental improvements |
| **VIRIDOR CREDITS ENVIRONMENTAL COMPANY – SLCF**  To start this search please use:  [SLCF](https://www.viridor-credits.co.uk/apply-funding) | Maximum: £25,000 | The fund offers funding to projects through the Scottish Landfill Communities Fund (SLCF). | It will consider applications across all types of projects included in the SLCF Objects including: land reclamation, community recycling, public amenities and parks, biodiversity and historic buildings |
| **SCOTTISH FORESTRY – FORESTRY GRANT SCHEME**    To start this search please use:  [Scottish Forestry - Forestry Grant Scheme CSGNC](https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/forestry-grant-scheme/woodland-creation/central-scotland-green-network-contribution) | Varies | The Central Scotland Green Network (CSGN) Contribution is a single capital payment which applies to eligible Forestry Grant Scheme (FGS) woodland creation planting options. This payment recognises the additional costs of planting and establishing new woodlands within the area where they will provide environmental, economic and social benefit and help to deliver the aims of regional forestry and woodland strategies. |  |
| **THE NATURESAVE TRUST**      To start this search please use:  [The Naturesave Trust](https://www.naturesave.co.uk/naturesave-trust/)      Currently closed for applications due to COVID 19 | Average: £1,312 | The Naturesave Trust was set up to promote the adoption of sustainable development. It obtains 100% of its funding from the premiums generated by Naturesave Insurance. | The principal areas of funding are: **Environmental and Conservation Projects – Working with communities and organisations to protect wildlife and improve biodiversity**; Social Enterprise Projects – Working with charities and voluntary organisations to support vulnerable and disadvantaged groups; Community Renewable Energy Grants – Providing startup ‘seed corn’ grants for community renewable energy projects; Environmental Performance Reviews – The Trust also funds independent reviews for commercial customers of Naturesave Insurance. This free advice is designed to help their SME businesses customers to become more sustainable and reduce costs. |
| **ERNEST COOK TRUST**    **To start this search please use:**  [**Ernest Cook Trust**](http://ernestcooktrust.org.uk/grants/) | Varies | All grants awarded from 2019 will be for environmental education projects, outdoor learning and ‘learning from the land’ | * **connecting with nature** * climate change * environmental pollution * **loss of biodiversity** * farming and food production * renewable energy * mental and physical wellbeing * social justice |
| **POSTCODE LOCAL TRUST**    To start this search please use: [Postcode Local Trust](https://www.postcodelocaltrust.org.uk/) | £500 - £20,000 | Postcode Local Trust provides funding under the themes: Improving biodiversity and green spaces, increasing community access to outdoor space, and combatting climate change and promoting sustainability. |  |
| **ACTION EARTH**    To start this search please use:  [Action Earth](https://volunteeringmatters.org.uk/project/action-earth/) | £50 - £250 | Awards from £50 to £250 are available to groups of volunteers carrying out environmental activities | This could include improving ponds, woodlands, meadows and other green spaces to make them more wildlife friendly. Create new habitats by planting nectar-rich flowers, fruit-bearing trees or shrubs. |
| **EDINBURGH AIRPORT FUND**      To start this search please use:  [Edinburgh Airport Fund](https://www.edinburghairport.com/about-us/community-and-environment/community-board)    Currently closed due to COVID 19 | Varies | The Community Fund was established to ensure local communities benefit from Edinburgh Airport activities. It provides financial support to community groups and charities that are committed to improving the opportunities, facilities and services available to local people. | Will consider applications which support the long-term development and sustainability of projects which fall into one or more of these areas:   * Sport, health, wellbeing * Community * Education * Environment |
| **GREGGS FOUNDATION**    To start this search please use:  [Greggs Foundation - Environmental Grants](https://www.greggsfoundation.org.uk/environmental-grant%22%20/o%20%22This%20link%20will%20open%20a%20new%20window%22%20/t%20%22_blank) | Up to £2,000 | The Environmental Grant fund is dedicated to improving the local environment - whether that means turning a piece of wasteland into a garden or organising litter picking days on the beach. The look to fund projects that improve the physical environment in a way that also benefits the wider community. | * Improves the local environment * Ensures involvement of local communities * Delivers a sustainable and measurable difference * Supports people in need |
| **TESCOS BAGS FOR HELP**    To start this search please use:  [Tescos Bags For Help](https://www.groundwork.org.uk/sites/tescocommunityscheme) | £1000 - £4000 | Funding is available for a range of indoor and outdoor projects that benefit your local community. | Outdoor spaces such as allotments and community gardens, grants are available to fund the purchase of items such as sports kits, camping equipment, spades, litter pickers or specialised medical equipment.  Funding is also available for improvements to community buildings, for example scout or guide hut, church or village hall or sports changing rooms. |

# FIFE NATURE RECORDS CENTRE

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