



John Muir Pollinator Way Report: Argyll and Bute

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Saving the small things that run the planet

Summary

The John Muir Way, opened in 2014, stretches 134 miles through nine local authority areas, including Argyll and Bute.

This B-lines project, the first in Scotland, has identified new opportunities for grassland habitat creation, enhancement and management along the route of the John Muir Way as it passes through Argyll and Bute as well as 1.86 miles either side of this. Through this mapping exercise a number of sites have been identified including 8 schools and nurseries; 5 care homes; 8 places of worship and cemeteries; 1 historic landmark and building; and 2 train stations. Additionally, 1 golf course (38.98 ha) and 5 public parks and play spaces (7.54 ha) were identified.

There are a number of sites within this project that have nature conservation designations, including 10 Local Nature Conservation Sites (533.85 ha), 1 Site of Special Scientific Interest (1,825.29 ha) and 1 Local Nature Reserve (23.05 ha). A further 1 site (0.53 ha) has previously been identified as having an Open Mosaic of Habitat on Previously Developed Land.

By mapping new opportunities this will aid in the future development of projects that will provide real benefits to our declining populations of pollinating insects of bees, wasps, hoverflies and butterflies as well as other wildlife that these habitats support.

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1. Introduction

The route of the John Muir Way stretches 134 miles (215 kilometres (km)) from Helensburgh in the west to Dunbar on the east coast (Figure 1). This walking and cycling route was opened in 2014 to commemorate the 100th anniversary of John Muir's death.



Figure 1. Route of the John Muir Way from Helensburgh in the west to Dunbar on the east coast.

During its 134 miles stretch, the John Muir Way passes through nine different local authority areas and goes through and close to several towns, including Helensburgh, Balloch, Lennoxton, Kirkintilloch, Falkirk, Edinburgh and Dunbar. This walking and cycling route passes through a varied landscape with a wide range of habitats including agriculture, coastland, parkland, housing as well as sites with various conservation designations. Many of these sites are important for a range of wildlife and plant species and allow the movement and mixing of species along and out with the route.

In Argyll and Bute, the route of the John Muir Way is almost 9 miles long starting at Helensburgh and heading east to Balloch in West Dunbartonshire. During this section you can leave Helensburgh either along the A82 with a bicycle or walk over the hills (Gouk Hill and Ben Bouie) that overlook Loch Lomond National Park.

1.1 B-lines

Since the 1940's, Britain has lost over 97% of its species-rich grassland to agriculture, housing developments and industry. B-Lines are an imaginative solution to the problem of the loss in wildflower meadows and the subsequent decline of pollinating insects. The B-Lines are a series of 'insect pathways' along which Buglife aims to create and restore at least 150,000 hectares (ha) of wildflower-rich habitat stepping stones across the UK. They link existing wildlife areas together, creating a network that will weave across the British landscape. This will provide large areas of brand new habitat benefiting bees and butterflies as well as a host of other wildlife.

B-Lines bring a range of benefits to wildlife, people and agriculture, including helping to conserve our native pollinators and a range of other wildlife; contributing towards the 2020 Biodiversity targets; helping our wildlife respond to climate change by making it easier for them to move around; increasing the number of insect pollinators and the benefits these bring to our farming sector (pollination being an important 'ecosystem service'); bringing nature to people; and giving opportunities for everyone to play their part and help create the B-Lines network.

Making the B-lines happen will take time and will need farmers, land owners, wildlife organisations, businesses, local authorities and the general public to work together to create flower-rich grassland in the best locations.

'John Muir Pollinator Way' is the first B-lines project in Scotland. Through this study, this project has mapped opportunities for wildflower grassland creation, enhancement and management along the route of the John Muir Way as it passes through Argyll and Bute. This B-lines map will include not only areas that are currently used as amenity grassland such as at public parks and in school grounds but also sites that have nature conservation designations and are currently managed for their important grassland habitats. By mapping these opportunities it identifies where current habitat is, how it can be better managed and where projects should focus to further benefit wildlife and communities in the future.

2. Method

Opportunities for the creation, enhancement and management of grassland meadows and other habitats important for pollinating insects and other invertebrates were mapped using an online Geographic Information System (QGIS) along the 9 mile route of the John Muir Way as it passes through Argyll and Bute as well as 1.86 mile (3km) either side of this. This area covers a total 5,704 ha of land.

Potential opportunities on sites with no nature conservation designations were identified based on if they held grounds for habitat creation and enhancement, these sites were then marked by a round circle and included high schools, primary schools, nurseries, care homes, places of worship, cemeteries, historic landmarks, historic buildings and train stations.

Scotland's Greenspace Map, available from Scottish Natural Heritage (SNH) provides information about the type and extent of greenspace in urban Scotland in towns and cities with a population of over 3,000. This map was compiled in 2011 from greenspace data provided by the 32 Scottish local authorities and categorises greenspace into 23 different open space types (for example, public parks, private gardens, play areas, semi-natural, community gardens and allotments). Using Scotland's Greenspace Map, public parks, play spaces and golf courses were identified and mapped on the B-lines using polygons to calculate the area of each site; further information on the location and names of public parks and play spaces was obtained from several of the local authority websites. Additional areas of amenity grassland identified on Scotland's Greenspace Map, including residential, business and transport were not mapped due to the number of sites and complexity in mapping them.

Sites designated for nature conservation within this project were downloaded from the SNH website and mapped using polygons so that the size of the area could be calculated for each site; this included Local Nature Reserves (LNR) and Sites of Special Scientific interest (SSSI). Information on Local Nature Conservation Sites (LNCS) was obtained by asking Marina Curran-Colthart the biodiversity officer for Argyll and Bute for information. Shapefiles of these sites were also provided by the local authority.

As well as sites designated for nature conservation, all wildlife reserves were looked for within the project area. There were none within this area of Argyll and Bute.

In 2013, Buglife identified sites on Scotland's vacant and derelict land register with the UK Biodiversity Action Plan (UKBAP) priority habitat 'Open Mosaic of Habitat of Previously Developed Land' (OMHPDL) and the shapefile which included the polygons for these sites was uploaded onto this B-lines opportunity map (Macadam *et al.* 2013).

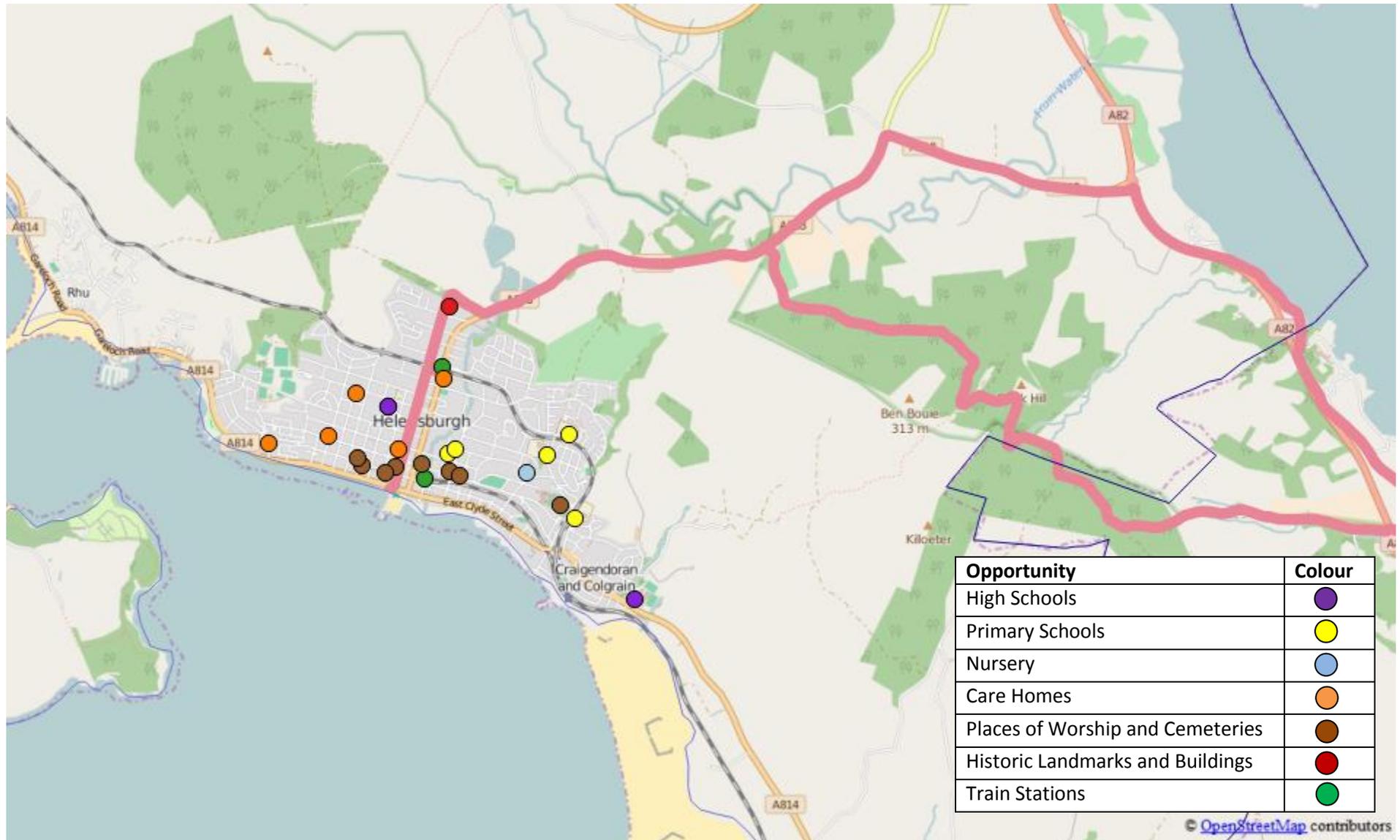
3. Results

A full list of opportunities identified can be found in Appendix 1.

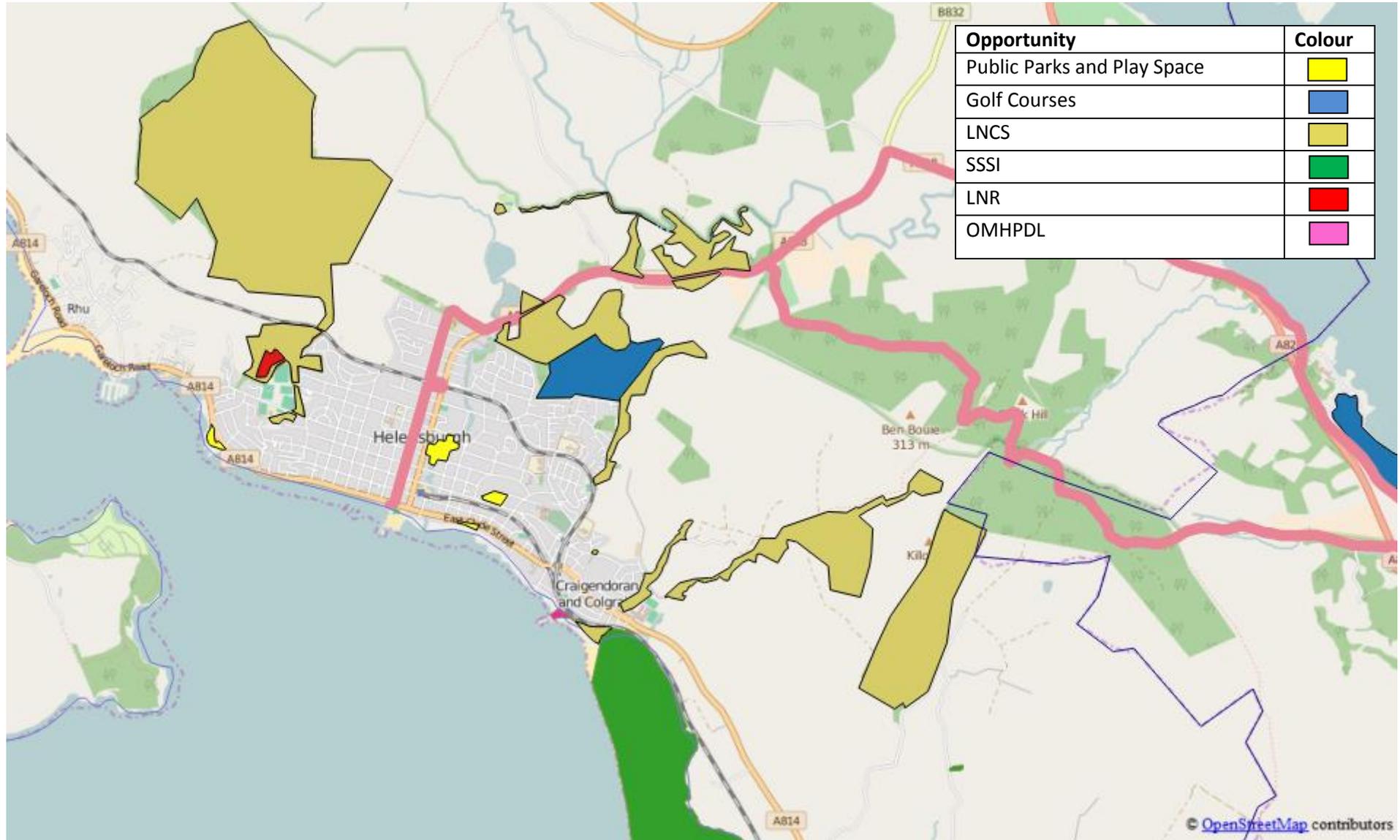
A total of 2 high schools, 5 primary schools and 1 nursery (registered with the Royal Horticultural Society Gardening Scheme) alongside 5 care homes, 8 places of worship and cemetery, 1 historic landmark and building and 2 train stations were identified within the town of Helensburgh (Table 1; Map 1). Just on the outskirts of Helensburgh is 1 golf course which covers an area of 38.98 ha (Table 1; Map 2). There are 5 public parks and play spaces in Helensburgh that cover a total area of 7.54 ha that includes a variety of habitats from woodland, ponds and amenity grassland (Table 1; Map 2). There is only 1 site designated as a SSSI (1,825.29 ha), 1 as a LNR (23.05 ha) and a further 10 that have been designated as LNCS with a total area covering 533.85 ha (Table 1; Map 2). There is one site that has been identified as having an OMHPDL and is 0.53 ha in size (Table 1; Map 2).

Table 1. Total number of opportunities identified for each category within Argyll and Bute including the size of the area for sites designated for conservation along with public parks and golf courses.

Opportunity	Total number	Total Area (ha)
High Schools	2	-
Primary Schools	5	-
Nursery	1	-
Care Homes	5	-
Places of Worship and Cemeteries	8	-
Historic Landmarks and Buildings	1	-
Train Stations	2	-
Golf Courses	1	38.98
Public Parks and Play Spaces	5	7.54
LNCS	10	533.85
SSSI	1	1,825.29
LNR	1	23.05
OMHPDL	1	0.53



Map 1. Opportunities of non-designated sites identified in Argyll and Bute.



Map 2. Opportunities of sites designated for conservation along with public parks and golf courses identified in Argyll and Bute.

4. Discussion

The John Muir Way is 134 miles long and has a varied landscape, passing through nine different local authority areas, various towns and cities as well as rural habitats. The 5,704 ha of land covered by this project in Argyll and Bute has identified various opportunities for grassland habitat creation, enhancement and management within the grounds of schools and cemeteries, golf courses and public parks. Each of these potential opportunities differ in the communities involved from across Argyll and Bute and surrounding area and the habitats present but all have the potential to significantly increase and improve habitat for pollinating insects and other wildlife across the heartland of Scotland.

4.1 Schools

A total of eight schools and nurseries were identified within this projects area and includes two high schools, five primary schools and one nursery. Most schools in Scotland have outdoor grounds that may include areas of amenity grassland as playing fields that are used by school children during breaks and during physical education (PE) lessons. Alongside these large areas of amenity ground, schools often have other outdoor areas that are may be used as a school garden or are left as areas of additional amenity grassland. It is these areas that can be enhanced for wildlife by creating biodiverse school gardens or changing the management to reduce the cutting of the area. This would not only benefit pollinating insects and other wildlife but also the school children who could help create the habitats and use them for learning and play. Wildflower meadows within the school grounds could be created with the help of the school children and parents and be managed with the help of the local authority if required.

To further benefit pollinating insects such as solitary bees, school children could be encouraged to create homes for them in wood working class. These can be installed in south facing and warm areas around the school and will create homes for wood nesting solitary bees and other invertebrates.

Of the eight schools and nurseries identified in this survey, only one (the nursery) is registered with the RHS School Gardening Scheme which aims to inspire and support schools to provide children with gardening opportunities to enhance their skills, outdoor learning and boost their development.

All of the schools identified are registered as an Eco-school, many of which have various awards associated with this. Eco-Schools are an international initiative designed to encourage whole-school community action on 'Learning for Sustainability'. This environmental management tool is a learning resource and a recognised award scheme which empowers children and young people to take action towards an economically, socially and environmentally just world. The Eco-Schools programme is managed in Scotland by Keep Scotland Beautiful.

Other school initiatives that aim to get children out of the classroom and either into their local community or developing their school grounds include Polli:nation a UK wide initiative supporting pupils from 260 schools to turn their school grounds and other areas within their local communities into pollinator friendly habitats. Unfortunately, none of the schools selected in Scotland are within this project's area although they will still be able to get involved in this initiative.

Priority Project 6 through Scotland's Biodiversity- a route map to 2020, aims to increase secondary and primary schools access to greenspace and nature for outdoor learning as part of the wider 'Learning for Sustainability' agenda. Through this, it aims to work with 100 schools by 2020 that have pupils who live in the 20% most deprived areas. Of the schools identified in Argyll and Bute none are classed as having pupils who live in the 20% most deprived areas.

There is a lot of scope for schools to get involved with enhancing their grounds for wildlife and for the pupils through the RHS School gardening scheme and Keep Scotland's Beautiful Eco-schools as well as other initiatives. It may be that further support is required to encourage more schools to actively get involved for the benefit of the school children and for declining insect pollinator populations.

4.2 Care Homes

There are five care and residential homes that were identified in the project area. It is well documented of the health and well-being benefits for people with local and easy access to wildlife as well as the increase in recovery time of patients in care homes.

It is important to provide opportunities for people in care and nursing homes and hospices to get involved in wildlife and gardening projects in their home grounds. Many of these homes often have grounds that residents can walk around either on their own or with visitors. By enhancing these areas for wildlife through the installation of planters and green walls planted with native wildflowers they will provide colour attracting life to the gardens that will make a happier and healthier place for the residents to live and enhance their experiences and quality of life (Figure 2).



Figure 2. Example of a green wall that holds a variety of plants, including wildflowers. This particular green wall also has a variety of homes for insects and other bugs.

4.3 Places of Worship and Cemeteries

There are at least seven places of worship and one cemetery identified within this project.

Many cemeteries and churchyards are well known to be important habitats for a range of wildlife including bats, birds and foxes as they are often less intensively managed as other urban green spaces. A range of habitats are often found at these sites including mature and veteran trees, old walls, wildflowers, bare ground and shrubs. By creating habitat and enhancing areas already present within the grounds this will add colour and life to the churchyards and cemeteries that will not only improve health and well-being of visitors but will provide important stepping stones for wildlife through an area.

Not all the churches identified have grounds that could be enhanced or managed but they can help to inspire local communities to actively get involved with community led projects that could benefit the local area away from the church. It is important to identify which of these churches have access

to an outdoor space and what habitats are currently present within these that could be enhanced or better managed for wildlife. This in itself could be a project that engages with communities across Scotland with their local place of worship.

4.4 Historic Landmarks and Buildings

The single site designated as a historic landmark and building is Hill House on the edge of Helensburgh that is owned and managed by the National Trust for Scotland and is visited by thousands of tourists every year.

Due to its historic value it is unlikely that this landmark could be influenced with creating large wildflower meadow areas and other habitat, especially in sensitive areas at the site, but it may be that small projects could influence management within small areas of the site for the benefit of pollinating insects and other wildlife. This could be through the installation of solitary bee homes for wood nesting species and the creation of small wildflower areas within the gardens themselves.

4.5 Train Stations

There are two train stations within Helensburgh that are used by thousands of people every day. Helensburgh Upper has some grounds that could be enhanced for wildlife through the planting of native wildflowers. This could be alongside the planters that are generally widely used at many of the stations. By planting wildflowers within the planters or surrounding grounds this will help reduce costs of buying seasonal garden plants and reduce maintenance time. Green walls shown in Figure 2 could be placed alongside walls that are outside to further enhance the station for pollinating insects that would also provide colour and life benefitting passengers using the stations.

4.6 Golf Courses

The single golf course identified in this project area is 38.98 ha on size and is on the outskirts of Helensburgh.

Golf courses are well known to act as important areas for wildlife, especially in an urban area due to the various habitats present, such as woodland, hedgerows, rough grassland, ponds, ditches and heathland. Golf courses cover 1% of land in the United Kingdom. Generally between 40 – 60% of a golf course is out of play representing a significant land resource that can potentially be made available for wildlife protection and nature conservation. Many golf clubs are recognising that a naturalistic golf course environment which is attractive for wildlife is also generally more attractive to golfers.

Buglife's current meadow creation project 'Fife's Buzzing', a three year project funded by Heritage Lottery Fund and Fife Environment Trust, has enhanced Dunnikier golf course in Kirkcaldy for biodiversity by planting native and diverse wildflower species into areas that are not in play and around ponds. These have helped create a healthier place for wildlife and for the people using the course as well as getting the local community and schools involved with habitat creation events through volunteer activities.

The Golf Environment (GEO) was founded to support the golfing industry, helping it to deliver and be recognized for a positive impact for the people and nature that it touches, now and in the future. They are currently developing an awards system that encourages golf courses around the world to create areas within their grounds to further benefit wildlife. Through their system, individual golf courses will be able to identify what they are currently doing that is benefitting local wildlife but also other activities that would provide further benefits. This could positively benefit not only pollinating insects with the planting of native species of wildflower within meadow areas that are local to the golf course, but also aquatic invertebrates through the enhancement of ponds and wildlife such as

Longhorn beetles that require dead wood for their lifecycle with the enhancement and creation of areas of dead wood.

4.7 Public Parks and Play Spaces

Scotland's Greenspace Map, available from SNH, was used to identify and map the location of public parks and play spaces across the project area. Scotland's Greenspace Map was compiled in 2011 from greenspace data provided by the 32 Scottish local authorities and categorises greenspace into 23 different open space types (for example, public parks, private gardens, play areas, semi-natural, community gardens and allotments). As some of this information is incomplete, such as the names of the parks, information was also obtained using local authority websites and other sources.

A total of five public parks and play spaces were identified covering a total of 7.54 ha. Many of these parks are well used by local communities and visitors every day for walking, cycling, running or playing.

Most parks have large areas of amenity grassland that is cut several times over a year and has very little benefits to biodiversity because of this. Through Buglife's Get Britain Buzzing campaign, we have been transforming mown grassland in parks into colourful wildflower areas for both people and wildlife to use and enjoy. In Scotland these projects have so far occurred out with the project area of the John Muir Pollinator Way in Glasgow, Perth and currently in Fife and North Lanarkshire. For example, just over half way through the three year 'Fife's Buzzing' project, Buglife has engaged with 1,057 people in the creation and enhancement of over 5 ha of wildflower meadow at 13 parks across Fife.

Through these projects we have recognised that it is important that if changing the management at parks and/or creating wildflower areas for wildlife that local communities are consulted before hand so they can decide on the best areas within their local park and the size of the area to be created and managed. It may be that all of a park is well used over the year by dog walkers and picnickers so only small edge areas could be enhanced. It is these small areas that could encourage the creation of larger areas once the public understand the change being undertaken in their local area.

Local authorities across Scotland and the rest of the UK are facing major cutbacks and are looking at ways to reduce spending. Several are known to be looking at reducing their grass cutting regime within certain areas of amenity grassland. This is great news for pollinating insects that will be able to find forage and nesting habitat within areas that are cut less regularly but not if these aren't properly managed by being cut and lift once a year. It is important that wildflower meadow areas are managed appropriately to prevent grasses becoming dominant and turning into rank grassland. Management of grasslands is site dependent and could involve grazing or cutting once a year and removing the cuttings. With a reduction in grass cutting, councils are realising that they don't have equipment to cut and lift once a year and so hire a contractor to do this, which can be an expense they can't afford within the current climate.

Hermitage Park which is close to the city centre has a designated Friends of Groups that is actively involved in ensuring the parkland is maintained to a high standard for people and wildlife. Friends of groups could apply for funding to enhance their local park for biodiversity through the creation and management of grassland.

4.8 Local Nature Conservation Sites

Of the 157 LNCS in Argyll and Bute, a total of 10 were identified in this project area and cover a total area of 533.85 ha.

LNCS are sites that have been designated as being important for nature conservation due to the habitats and wildlife that are present. For sites identified through this project a range of habitats are present, including woodland, heathland, reservoirs, ponds, ditches and grassland meadows. It is important that management plans are written for each site and that the correct regime is in place to ensure long-term survival of the site and its habitats for the future protection of wildlife. As it was very difficult to find information about individual sites it is assumed that management plans, if there are any are not accessible to the public or have yet to be completed.

4.9 Site of Special Scientific Interest

SSSI are those areas of land and water (to the seaward limits of local authority areas) that are considered to best represent our natural heritage, due to their species diversity and habitats, rocks and landforms present as well as a combinations of these features. SSSIs are protected by law and it is an offence for any person to intentionally or recklessly damage them. SSSI are designated by SNH under the Nature Conservation (Scotland) Act 2004.

There are over 1,425 SSSIs across Scotland, of which only one is within this project and this covers 1,825.29 ha. This is the Inner Forth and has inter-tidal sand and mud flats important for a range of birds and other wildlife.

Most SSSIs are in private ownership and SNH works closely with their owners and managers to ensure appropriate management of the sites natural features and to ensure that decision-makers, land managers, their agents and advisors, as well as local authorities and other public bodies, are aware of SSSIs when considering changes in land-use or other activities which might affect them.

Any Scottish public body proposing to carry out an operation that may affect an SSSI must notify SNH before starting. SNH provides each SSSI owner and occupier with a site management statement that describes the interest of the site and explains the management needed to conserve its protected natural features. For those sites which are known for their grasslands it is important that these management plans are stuck to and that the meadows are appropriately managed to ensure long-term survival of the site for their biological features.

4.10 Local Nature Reserves

There are 72 designated LNRs across Scotland that provides wild spaces where some of our rare species as well as our common species can thrive. LNRs offer a more natural environment than parks and gardens, but are still readily accessible to, and for a wide range of people.

Duchess Wood is the only LNR within this project area and is 21.49 ha in size. This LNR is mostly mixed deciduous woodland with an interesting ground flora. There is amenity grassland to the south of this site that could be further enhanced for wildlife. Most LNRs have been designated due to their important habitat that may include woodland or grassland or even both. All LNRs should have management plans that are strictly followed to protect the site for the habitats that it supports along with the wildlife that depends on this.

4.11 Open Mosaic Habitat on Previously Developed Land

OMHPDL is a UKBAP priority habitat as its mosaic of habitats provides homes for a number of wildlife species and allows a natural process of succession to occur which is often limited in the over-managed countryside. Derelict sites often have areas of bare ground, early successional communities, grasslands, wetland, scrub depending on how long the site has been abandoned, soil conditions and local climate.

In 2013, a report by Macadam *et al.* remotely assessed sites on Scotland's vacant and derelict land register for OMHPDL using Google Earth maps. Of the 4,118 sites on the 2011 register, 586 were selected as potentially having OMHPDL and should be ground truthed and this amounted to over 5,600 ha of land. Of this total, only one lies within this project area and is 0.53 ha in size. Most of the sites that were identified as having OMHPDL appear to have areas of bare ground and grassland on site. Ground truthing these sites would help to identify if the site has the UKBAP priority habitat OMHPDL and whether management is required to ensure long-term viability of the site.

Brownfields with OMHPDL are known to be important for wildlife due to a lack of management and low nutrients in the soil that often creates a mosaic of habitats. Many rare and scarce species have been recorded at brownfield sites, often as many that are associated with ancient woodlands. Due to natural succession, many of these sites have a limited lifespan but as sites are lost to development, new sites are added that allow succession to start again.

4.12 Other Opportunities

During the mapping of opportunities for this B-lines project, other areas were recognised as being possibilities but were not mapped due to a lack of information, the number of these sites as well as the complexity of mapping them. This includes areas of amenity grassland identified on Scotland's Greenspace Map, including amenity sites recognised as residential, business and for transport. These areas of amenity grassland include road verges through our urban areas as well as regularly mown areas of amenity that are not classified as parks or play spaces but can often be large in size. All of these areas of amenity are opportunities for creating habitat for pollinators across an urban area that will allow the moving and mixing of individuals and species across these areas with more natural areas of habitat.

As well as passing through urban areas, the John Muir Way also passes through agricultural areas which were not mapped due to a lack of information on the location and use of fields. By creating wildflower strips and planting hedges along field edges this will create habitat corridors for pollinating insects and other wildlife allowing them to pass through agricultural areas safely to other areas and this will also help with the mixing of individuals and species. Wildflower strips provides additional benefits by increasing free pollination services of crops and attracting insects such as hoverflies, soldier beetles and lacewings who's larvae feed on pests such as aphids.

5. Conclusion

The 134 mile route of the John Muir Way passes through villages and towns in nine different local authority areas. Various organisations are currently involved with a variety of different projects along and around the route of the John Muir Way. For example, this includes Sustrans who are heavily involved with the cycle path network, Inner Forth Landscape Initiative which has a range of projects for biodiversity and people in Grangemouth and Bo'ness, Edinburgh Living Landscapes that are creating and managing grassland habitats within the City of Edinburgh as well as a number of community groups within the villages and towns will manage local community gardens for both people and wildlife.

This project has identified a number of opportunities in Argyll and Bute for creating important grassland habitat within parks, golf courses, school grounds and others for pollinating insects that will allow the movement and mixing of individuals and species across Scotland. This will also benefit other wildlife, particularly other invertebrates, and plants.

In Helensburgh there are a number of opportunities for creating strips of native wildflower and grassland areas alongside road verges and within the public parks and play spaces. Not only will these new habitats benefit wildlife but also local communities by getting people actively involved in

projects and through the addition of colour and life to their areas that will benefit people's health and well-being.

This project has additionally highlighted a number of sites that have been designated for nature conservation that should be managed for the habitats present at their site. By being appropriately managed this will ensure long-term survival of these sites and habitats for wildlife and people to use and enjoy.

By mapping the opportunities at new identified sites and within currently managed sites through this project, this will aid in the future development of projects that will provide real benefits to our declining populations of pollinating insects of bees, wasps, hoverflies and butterflies as well as other wildlife that these habitats support.

References

Macadam, C., Bairner, S. and Cathrine, C. 2013. Open mosaic habitats on previously developed land: survey and recommendations for habitat planning and management in Scotland. Scottish Natural Heritage Commissioned Report No. 606.

Scottish Natural Heritage Greenspace Scotland Map, available at: <http://www.snh.gov.uk/planning-and-development/advice-for-planners-and-developers/greenspace-and-outdoor-access/scotlands-greenspace/dataset/> last accessed 29th March 2016.

Scottish Natural Heritage Information Service, available at <http://www.snh.gov.uk/publications-data-and-research/snhi-information-service/> last accessed 29th March 2016.

Appendix 1

Opportunities within local communities and landscapes

High Schools

Hermitage Academy, Cardross Road, Helensburgh, G84 7LA

Lomond School, 10 Stafford Street, Helensburgh G84 9JX

Primary Schools

Colgrain Primary School, Red Gauntlet Road, Helensburgh, G84 7TZ

Hermitage Primary School, Argyle Street East, Helensburgh, G84 7EW

John Logie Baird Primary School and Pre-under 5 unit, Winston Road, Helensburgh, G84 9EP

Parklands School, 27 Charlotte Street, Helensburgh, G84 7EZ

St Joseph's Primary School, Old Luss Road, Helensburgh, G84 7LR

Nursery

The Cottage Kindergarten, 31 East Montrose Street, Helensburgh, G84 7HR; RHS School Gardening registered

Hospitals and Care Homes

Argyle Lodge Nursing Home, 21 West Argyle Street, Helensburgh, G84 8XP

Cairndhu House Nursing Home, 2 Cairndhu Gardens, Helensburgh, G84 8PG

Morar Lodge Nursing Home Ltd, 54 Glasgow Street, Helensburgh, G84 9NS

Northwood House Residential Care Home, 112A Sinclair Street, Helensburgh, G84 9QF

Victoria Integrated Care Centre, 102 West King Street, Helensburgh, G84 8EQ

Places of Worship and Cemeteries

Cemetery, 66 Old Luss Road, Helensburgh, G84 7LN

Christian Science Society, 136 West Princes Street, Helensburgh, G84 8BH

Church with grounds, 52 East King Street, Helensburgh, G84 7QR

Helensburgh Baptist Church, 11 East King Street, Helensburgh, G84 7QQ

Helensburgh Parish Church, 20 Colquhoun Square, Helensburgh, G84 8AG

Helensburgh United Reformed Church, 10 James Street, Helensburgh, G84 8AU

Park Church, 15 Charlotte Street, Helensburgh, G84 7QS

St. Michael and All Angels, 79 West Princes Street, Helensburgh, G84 8BL

Historic Landmarks and Buildings

The Hill House, Upper Colquhoun Street, Helensburgh, G84 9AJ; owned and managed by The National Trust of Scotland

Train Stations

Helensburgh Central Station, East Princes Street, Helensburgh, G84 7QF

Helensburgh Upper Station, Helensburgh, G84 9LG

Golf Courses

Helensburgh Golf Club, 25 Abercromby Street East, Helensburgh, G84 9HZ

Public Parks and Play Space

Amenity Residential Play Space, 7 Redgauntlet Road, Helensburgh, G84 7TL, grid reference NS 31202 81819

Eastend Public Park, 24 Adelaide Street, Helensburgh, G84 7RD, grid reference NS 30427 82312

Hermitage Park, 5 Sinclair Street, Helensburgh, G84 8TU, grid reference NS 29825 82741; this park has a friends of group

Public Park and Garden, 137 East Clyde Street, Helensburgh, G84 7AA, grid reference NS 30144 82090

Public Play Space, A814, Helensburgh, G84, grid reference NS 27949 82913

Sites with conservation designations

Site of Importance for Nature Conservation

Blackhill Mire, Argyll and Bute site code 16, site size 35.58 ha, grid reference NS 30700 83800

A large area of wet Heathland dominated by a Heather/Harestail cotton-grass mire community. This site represents a relic area of mire vegetation which bounded Helensburgh. Of interest is a colony of Large heath butterfly (*Coenonympha tullia*) which indicates the importance of the mire habitat. Other insect records include Emperor moth (*Saturnia pavonia*), Clouded buff (*Diacrisia sannio*), Oak egg moth (*Lasiocampa quercus*), Lattice heath moth (*Chiasmia clathrata*), Ruby tiger moth (*Phragmatobia fuliginosa*), Small tortoiseshell (*Aglais urticae*), Small heath butterfly and Drinker moth.

Camis Eskan Glen, Argyll and Bute site code 20, site size 49.98 ha, grid reference NS 32800 81900

A long narrow glen cut by the Red Burn which rises from a boggy, Sphagnum dominated area. From its source, the Red Burn flows through a marshy area dominated by Purple moor-grass and then cuts through sandstone to form a steep sided glen. Further downstream the glen becomes partially wooded. To the south of this section are a number of tributary streams which rise from the western slopes of Killoeter and besides these are acid-grassland communities.

Craigendoran Marsh, Argyll and Bute site code 21, site size 2.3 ha, grid reference NS 31113 81152

A site of infill supporting a habitat of marshy grassland. The northern boundary lies adjacent to a railway line and Craigendoran Station. The southern boundary is marked by sea defences composed of a bank of large boulders and rubble.

Drumfork Wood, Argyll and Bute site code 19, site size 6.43 ha, grid reference NS 31700 81600

Mature broad-leaved woodland located at the eastern edge of Helensburgh. This wood acts as a shelterbelt and is well used by the local community with footpaths throughout. At the northern tip of the wood is a pond with a rich aquatic flora and damselflies including Azure (*Coenagrion puella*) and Blue-tailed (*Ischnura elegans*).

Duchess Wood, Argyll and Bute site code 13, site size 21.49 ha, grid reference NS 28700 83700

A semi-natural broad-leaved woodland surrounded by amenity grassland and housing. The wood is well used by the public and has several established footpaths. The site is on sloping ground with several streams and has an acid soil. The woodland is probably an ancient relic Oak/Birch community. The site has however been previously managed and exotics have been introduced. As a result of dense shade and trampling, causing impaction and erosion, some areas of the wood have a poor ground flora. However, less disturbed areas have a rich flora. This site is also designated as an LNR.

Fruin Water, Inverlauren Wood and Daligan Marsh, Argyll and Bute site code 18, site size 31.82 ha, grid reference NS 31800 84800

A series of valuable habitats associated with the Fruin Water. The site is adjacent to the boundary of, but out with, the Lower Clyde Project area. Inverlauren Wood is high quality broad-leaved woodland with an extensive canopy. Insect records from the wood include the butterflies, Purple hairstreak

(*Neozephyrus quercus*), Meadow brown (*Maniola jurtina*), Orange tip (*Anthocharis cardamines*), Small pearl-bordered fritillary and green veined-white.

Garrawy Glen, Argyll and Bute site code 17, site size 13.09 ha, grid reference NS 31500 83000

A narrow, broad-leaved wooded glen cut by the Drumfork Burn, with an interesting flora. The floral communities of the upper sections of the glen are influenced by peat and reflect an acidic character. The lower sections are influenced by cornstone giving rise to floral communities favouring base-rich conditions. The site borders a housing estate, golf course and agricultural land.

Helensburgh Reservoirs Swamp, Helensburgh, site size 2.01 ha, grid reference NS 30727 83960

An area of open water with swamp and wetland habitat adjacent to Helensburgh Reservoir No. 1. A walkway passes around the entire site.

Highlandman's Wood, Argyll and Bute site code 14, site size 294.72 ha, grid reference NS 28614 84740

A large and young Sitka plantation with occasional plantings of broad-leaved trees. Ground flora is principally Heathland, flushes and marsh beneath a developing canopy. The site is of particular interest in supporting a large number of birds, particularly raptors, and a good array of insect species. Insect species include Birch sawfly (*Cimbex femoratus*), Sawfly (*Abia sericea*), Wood tiger beetle (*Cicindela sylvatica*), Green tiger beetle (*Cicindela campestris*), Mother shipton moth (*Callistege mi*), Drinker moth (*Euthrix potatoria*), Small heath butterfly (*Coenonympha pamphilus*), Small pearl-bordered fritillary (*Boloria selene*), Green veined white (*Pieris napi*) and Golden ringed dragonfly (*Cordulegaster boltonii*).

Killoeter, Argyll and Bute site code 22, site size 76.43 ha, grid reference NS 33800 80800

The south-east flank of Killoeter is predominantly Scots pine and Larch plantation. Further north the hillside has been planted with Sitka spruce and the occasional Larch. At the southern area, above Moor Cottage, is an open area of dry Heathland. Insect records from this site include the butterflies Meadow brown, Small heath and Small pearl-bordered fritillary.

Site of Special Scientific Interest

Inner Clyde: SNH site code 1701, size 1825.29 ha, grid reference NS 312811 to NS 494698 (North shore) NS 300766 to NS 492696 (South shore)

The Inner Clyde Estuary is located to the west of Glasgow in central west Scotland. Although the Clyde Estuary is heavily industrialised along much of its length, upstream of Gourock Bay and Helensburgh there are very extensive intertidal sand- and mud-flats. These have an abundant invertebrate fauna, the species composition of which has been changing consequent to recent improvements in the quality of water within the estuary. The Inner Clyde Estuary is important for a range of wintering waterbirds, notably Redshank (*Tringa tetanus*).

Notified Natural Features:

Biological: Coastlands: saltmarsh

Non-breeding birds: Cormorant (*Phalacrocorax carbo*), Eider (*Somateria mollissima*), Goldeneye (*Bucephala clangula*), Oystercatcher (*Haematopus ostralegus*), Red-breasted merganser (*Mergus serrator*), Red-throated diver (*Gavia stellata*), Redshank (*Tringa tetanus*).

Local Nature Reserve

Duchess Wood, SNH site code 13, site size 21.49 ha, grid reference NS 28700 83700

A semi-natural broad-leaved woodland surrounded by amenity grassland and housing. The wood is well used by the public and has several established footpaths. The site is on sloping ground with several streams and has an acid soil. The woodland is probably an ancient relic Oak/Birch community. The site has however been previously managed and exotics have been introduced. As a result of dense shade and trampling, causing compaction and erosion, some areas of the wood have a poor ground flora. However, less disturbed areas have a rich flora. This site is also designated as a SINC.

Sites with Open Mosaic Habitat on Previously Developed Land

Craigendoran Street, Helensburgh, SVDL site code 119, grid reference NS 30870 81299

This derelict site is 0.53 ha in size and is previous railway land with areas of bare ground, grassland and some scrub.

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[@buzz_dont_tweet](https://twitter.com/buzz_dont_tweet)

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