



Biodiversity Toolkit for Communities

How your community can
protect your outdoor blue
and green spaces.





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1. Leave No Trace Ireland

Leave No Trace Ireland is a not-for-profit company made up of partner organisations with a shared interest in encouraging responsible enjoyment of Ireland's natural environment. Our mission is to promote and inspire responsible outdoor recreation through education, research and partnership throughout the island of Ireland. As increasing numbers of people seek the beauty and exhilaration of outdoor travel and recreation, our collective mark on the environment and its natural processes increases. Litter, water pollution, disturbance of vegetation, wildlife, livestock and other people are all indicators of the need to develop a natural ethic that protects both natural and cultural heritage. Techniques designed to minimise the environmental and social impacts in these areas are incorporated in and promoted by the national Leave No Trace Ireland programme.



2. Leave No Trace and Biodiversity

What is Biodiversity?

Biodiversity is a word that refers to all living things, in other words, biological diversity. The tiniest microbe to the biggest whale, the smallest flower to the tallest tree, are all part of the earth's biodiversity. It is important to remember that humans are part of world's biodiversity. However, biodiversity refers not just to individual species but also to the ecosystems which they inhabit, and the differences between species. So, for example, Ireland has its own unique species of hare, the Irish hare, *Lepus timidus hibernicus*.



2.1 Why should communities protect biodiversity?

Biodiversity is important because without it the world would be a barren wasteland circling the sun. It provides communities with what we need to live; clean air and water, fertile soils, food, medicine, and raw materials to support industry. A rich biodiversity is a key indicator of a healthy ecosystem.

Biodiversity is under threat worldwide. It is estimated the current global extinction rate is 100 to 1000 times higher than the natural rate. In Europe, 42% of European mammals are endangered and 15% of birds. In Ireland, one third of our 98 wild bee species are threatened with extinction.

Community groups play a very important role in protecting biodiversity. By protecting and enhancing biodiversity in our green and blue spaces we set an example for others. Habitats lost in the wider countryside, for example, wildflower meadows, wildlife ponds, and hedgerows, can be planted and created in our communities. By creating biodiverse spaces, community groups can encourage people to form a closer connection with nature.

2.2 Biodiversity – The Environmental Impacts

No matter what we do in life, our actions have impacts on the world around us. It is important for us to use outdoor spaces responsibly, taking care to ensure our actions reduce the impact on biodiversity.

Our **negative** impacts on biodiversity include:

- Habitat loss through developments, road building etc.
- Habitat destruction (e.g. erosion in sensitive areas such as machair grassland, dunes and upland areas).
- Pollution (air and water).
- Litter.
- Spread of invasive species.
- Pesticide and herbicide use.
- Disturbance of wildlife.
- Fires (e.g. inappropriate camp fires, disposable barbeques, fires that get out of control etc.).
- Climate change.

The **positive** impacts of protecting our biodiversity:

- Improves general health and well-being.
- Growing a diverse range of vegetables, fruits and crops improves food security.
- Access to open and green spaces has been shown to give better health outcomes, e.g. shorter hospital stays for patients.
- Functioning ecosystems, which are a result of rich biodiversity, form natural barriers (e.g. flood plains and salt marshes) which reduce the impact of natural disasters such as flooding. Functioning ecosystems are also important for mitigation of climate change.
- Protecting our biodiversity protects part of our culture and heritage and provides inspiration for future generations.



3. Protecting biodiversity while using outdoor spaces in your community

Our outdoor spaces can be managed in a way that protects and enhances local biodiversity in the community. Being outdoors allows us to enjoy the wonders of nature. Research shows that being outside is good for our wellbeing. It helps us to concentrate more and reduces stress levels. A disconnect from open spaces results in a loss of “sense of place”, and reduced levels of physical activity, which in turn can increase obesity and associated diseases.

Leave No Trace Ireland principles and practices extend a sensitivity and hospitality to visitors to the outdoors, to culturally significant sites and to the natural environment. They are based on an abiding respect for nature, culture and people. The information for each of the seven principles is recommended as a guide to minimise the impact of your visits to the natural and cultural heritage areas in your community. Leave No Trace Ireland depends more on attitude and awareness than on rules and regulations.

3.1 Increasing Biodiversity in your community Green Spaces with Leave No Trace Ireland solutions.

Our greenspaces include parks, gardens, allotments, cemeteries, and recreation spaces, flowerbeds, hanging baskets or planters. They can all provide an important resource for local biodiversity. Changing or adapting management of these spaces can make a big difference to the biodiversity these areas can support. Here are some ideas that communities can undertake to conserve and enhance their outdoor spaces.



a. Parks

- Have areas of long grass and flowers as well as short grass areas. Cut paths through long grass encouraging people to explore while at the same time sticking to paths.
- Increase number of trees particularly trees that provide flowers and fruit for humans (e.g. Apples trees) and birds and other wildlife (e.g. hawthorn, rowan). Encourage people to harvest fruit in the autumn (for example by organising a community Apple Day).
- Plant for pollinators by using pollinator friendly flowers in formal flower beds. School children or other youth groups could be encouraged to adopt a flower bed, to plant it and look after it for a year.
- Create shelter areas for wildlife including areas of tall vegetation, hedgerows, bird and bat boxes, individual bug hotels etc. Ask Men's Shed or similar community organisation to build boxes and install them. Bird boxes could be made to look like fairy houses to encourage children to explore and learn.
- Erect interpretation boards with Leave No Trace principles to explain management of areas to local people and help educate communities. Organise competitions to design boards with local school children.
- Organise events that encourage people to use outdoor spaces, e.g. bat walks, pollinators fun days etc.
- Reduce or eliminate pesticide – instead use companion planting to encourage beneficial insects such as hoverflies which will prey on pest species
- Reduce or eliminate herbicide use - Hand weed and then mulch.
- Create log and / or brash piles for wildlife in sheltered out of the way areas.



a. Gardens and Allotments

- Encourage people to take up gardening and grow their own food, by holding open days at allotments and organising training days.
- Plant for pollinators by using pollinator friendly plants.
- Install bird, bat boxes and individual bug hotels etc.
- Reduce or eliminate pesticide – instead use companion planting to encourage beneficial insects such as hoverflies which will prey on pest species.
- Reduce or eliminate herbicide use - Hand weed and then mulch.
- Create compost piles.

c. Cemeteries

- Have areas of long grass and wildflowers as well as short grass areas. Create paths through long grass areas to encourage people to explore.
- Increase number of trees particularly trees that provide flowers and fruit. Organise a tree planting day.
- Create areas for wildlife to shelter, including areas of tall vegetation, hedgerows, bird and bat boxes, individual bug hotels etc. <https://www.rspb.org.uk/get-involved/activities/give-nature-a-home-in-your-garden/garden-activities/build-a-bug-hotel/>
- Erect interpretation boards to explain management to local people and help educate your community in the ethics of Leave No Trace.
- Reduce or eliminate pesticide – instead use companion planting to encourage beneficial insects such as hoverflies which will prey on pest species
- Reduce or eliminate herbicide use - Hand weed and then mulch.
- Create compost heaps.
- Create log piles for insects.

d. Recreation areas

- Consider having borders of long grass and wildflowers in areas around football pitches.
- Plant hedgerows around edges of pitch grounds to create shelter and wildlife corridors.
- Erect interpretation boards explaining Leave No Trace Principles and local biodiversity.

e. Hanging baskets, planters etc

- Plant with pollinator friendly plants.
- Have planting schemes that provide food for pollinators from March until October.
- Reduce or eliminate pesticide – instead use companion planting to encourage beneficial insects such as hoverflies which will prey on pest species.
- Reduce or eliminate herbicide use - Hand weed and then mulch.

3.2 Increasing Biodiversity in your community Blue Spaces

a. River walks

- Manage river banks and verges to encourage wildflowers by cutting in late autumn and removing cut vegetation to where it can be composted.
- Some areas may be suitable for tree planting. Consider planting fruit trees and trees that provide food for wildlife (e.g. hawthorn, hazel, rowan). Talk to Inland Fisheries or Waterways Ireland and organise a tree planting day for your community. <https://www.woodlandsofireland.com>
- Create shelter areas for wildlife including areas of tall vegetation, bird and bat boxes, individual bug hotels, log piles etc.
- Erect interpretation boards to explain management and Leave No Trace principles for biodiversity to local people and help educate the community.
- Reduce or eliminate pesticide – instead use companion planting to encourage beneficial insects such as hoverflies which will prey on pest species
- Reduce or eliminate herbicide use - Hand weed and then mulch.

b. Ponds

- Ponds, particularly those managed for wildlife, can greatly enhance the biodiversity of an area.
- Have some areas of tall grass/vegetation around the pond.
- Encourage native flora and fauna to colonise the pond.

Erect interpretation boards to explain management and Leave No Trace principles for biodiversity to local people and help educate the community.

c. Sea shore

- Encourage visitors to take home all their rubbish and 'Leave No Trace'.
- Encourage visitors to take part in beach clean-ups to reduce the amount of litter entering our oceans.
- Erect interpretation boards to explain management and Leave No Trace principles for biodiversity to local people and help educate the community.





4. Biodiversity Action Plan for your community

Step 1 - Review the local biodiversity in your community

- Complete a biodiversity audit of your local area. Involve local experts, school children etc.
- Use the Biodiversity Maps facility on the National Biodiversity Data Centre website to investigate your local biodiversity - <https://maps.biodiversityireland.ie/>
- Incorporate Leave No Trace Ireland ethos to inspire conservation of the biodiversity

Step 2 - Volunteer and get involved (citizen science)

- Send all your biodiversity records to the National Biodiversity website including records of invasive species
- Set up a monitoring transect to record your local bees and butterflies (www.biodiversityireland.ie/record-biodiversity/surveys/bumblebee-monitoring-scheme/)
- Log your positive pollinator friendly projects on the Actions for pollinators mapping system (www.pollinators.biodiversityireland.ie)

Step 3 - Demonstrate local leadership

- Create your own wildlife friendly garden
- Join your Tidy Town and other community groups and help them create biodiversity areas in your community
- Undertake Leave No Trace Ireland training and act as a mentor for your community



5. Useful Tips

Ten flowers for pollinators

There are lots of pollinator friendly plants and lots of list can be found on www.pollinators.ie. It is important to have flowers from spring to later autumn.

- Helleborus Hellebores (Jan-March)
- Salix Willow (only females trees bare the pollen producing catkins) (Jan-March)
- Calluna and Erica species Heathers (can have Spring, Summer and Autumn flowering varieties)
- Ajuga Bugle (March – May)
- Salvia officinalis Common Sage (May – June)
- Tropaeolum Nasturtium (June-Aug)
- Delphinium Candle Larkspur (July – Aug)
- Campanula Bellflower (July-Aug)
- Scabious (Aug-Oct)
- Echinacea Cone Flower (Aug – Oct)
-

Flowers suitable for hanging baskets

- Alyssum maritimum (e.g. Sweet white)
- Birds-foot-trefoil
- Dwarf campanula (e.g. Blaue clips)
- Everlasting pea
- Nasturtium
- Small scabious (e.g. 'Vivid violet' or 'Blue note')
- Sweet pea (e.g. compact varieties like Pink cupid)
- Trailing fuchsia (e.g. single flowered varieties like 'Princess Charlotte' or 'Eruption')
- Trailing lobelia
- Trailing thyme (e.g. 'Old English')
- Verbena (mound forming varieties e.g. 'Blue lagoon' or trailing varieties e.g. 'Desert Jewels mixed')





6. Reduce biodiversity loss in their open spaces by following the 7 principles of Leave No Trace Ireland

It is possible for every community to reduce their impact on biodiversity in their open spaces by following the 7 principles of Leave No Trace Ireland.

1. Plan ahead and prepare

“Good planning is living the experience in advance.” (Sir Edmund Hillary)

- When planning community outdoor activities in one of your open spaces think what impact that event or activity will have on the local habitat and / or associated species and make appropriate decisions to try and protect and conserve the local biodiversity.
- Be informed, before starting your visit/activity in the outdoors, take time to learn about the area you will be using. As every outdoor area and activity is unique, environmental concerns may vary from area to area. Learn how to Leave No Trace wherever you go.
- Plan for all weather options and the potential impact of poor weather on habitats (e.g. making paths muddy etc).
- Organisers of outdoor events have extra responsibilities. Look realistically at the capacity of the local facilities. Is there a plan in place to protect any special areas of biodiversity?

2. Be considerate of others

It is important to consider the rights of landowners as well as all the other people we share the outdoors with.

- Respect your hosts, local communities and their livelihood. All land is owned by somebody and you use that land with the goodwill of the owner (including land owned by the state) and not as a statutory right. Most land owners do not object to recreational users crossing their land, but appreciate being asked. For those who do not permit access, please respect their wishes.



- Respect other visitors in your community and protect the quality of their experience. Some people visit the outdoors to enjoy quiet and solitude.
- Let nature’s sounds prevail. Some outdoor activities are necessarily loud. Use mobile phones discreetly. Most of all, tune in to the sounds of nature.
- Be considerate of others when parking. Park safely with particular regard to allow for entry to property. Ensure you do not park on verges where there is planting. Do not disturb the local vegetation while parking.

3. Respect farm animals and wildlife

Encounters with wildlife inspire and give us moments of wonder. Unfortunately, wildlife faces threats from loss and fragmentation of habitat, invasive species, pollution, etc. We know that animals respond to people in different ways. Some species adapt readily, others flee, and potentially abandoning their young or critical habitat and some may be attracted and endangered by human food and rubbish. We are responsible for coexisting peacefully with wildlife.

- Our communities are often homes for wildlife. Always watch or photograph animals or birds from a safe distance to avoid startling them or forcing them to flee. Do not follow or approach them. Bring binoculars, spotting scopes and telephoto lenses to watch wildlife. Back away if animals react to your presence.
- Don’t disturb any nesting birds you may find. Birds, during breeding season, may leave their nests permanently or fail to incubate their eggs properly if they are disturbed.
- When walking your dog ensure they are under control. By keeping your dog under control at all times, you will keep people, dogs, livestock and wildlife safe. If public areas in your community require dogs to be on a lead at all times, please adhere to the guidelines. Remove pet faeces from your open spaces by placing it in a bin or if necessary carry it out for safe disposal.



- Birds living on water should not be fed bread. Vegetable peelings are better. Feeding wildlife damages their health and alters natural behaviours.
- If you are doing work on an old building remember it could be a roosting site for bats. If bats are present, the building should be surveyed by qualified person before any work commences.
- Use light sensitively. Lighting can impact on bats roosting sites, commuting routes and areas where they feed.

4. Leave what you find

“Leave What You Find” means retaining the special qualities of both our natural and built heritage areas — for the long term by not removing anything.

- Children love collecting things. Encourage them to observe rather than collect, particularly things like wildflowers, sea shells etc. Take only photographs, drawings or memories.
- Conserve the past. Archaeological and historical artefacts such as old walls, holy wells and hilltop cairns are reminders of the rich human history of the landscape and belong to all people for all time. Observe but do not disturb.
- Leave Natural Objects Undisturbed. Objects in nature derive much of their beauty from their surroundings and never look the same at home. Help people investigate the role of natural objects in their own environments, eg. Fallen trees are a valuable wildlife habitat and should not be removed or used for firewood, likewise discarded antlers and bones are a valuable added food source for scavenging animals. These things fill important ecological niches.
- Where your community may be planning some water-sports activities, take care not to transfer invasive species from one site to another. You can help prevent the spread of invasive species in your local community by following a few practical suggestions:
 - Do not transport flowers, weeds, or aquatic plants into natural habitats. Water, mud and soil may contain harmful seeds, spores, or tiny plants and animals.
 - Clean the dirt out of your boots and tyre treads and equipment before leaving the area.

5. Dispose of waste carefully

Anyone who uses the outdoors for recreation has a responsibility to clean up before he or she leaves. Overlooked rubbish is litter and litter is not only ugly - it can also be harmful to wildlife.

- Encourage everyone to take home and recycle their litter, including biodegradable food.
- Dispose of cigarette butts responsibly.
- Clean up after your dog and put it in the bin or bring it home.
- If facilities are available sort waste into recyclable, compostable, and so on.
- Do not burn waste, even that from pruning trees, gardening etc., compost instead.
- Take part in National Spring Clean
- Lead by example in your community

6. Travel and camp on durable ground

Be careful to avoid fragile ground. Try to choose a route that minimises damage to sensitive areas. In general, spread out when walking across vegetation. If each person takes a slightly different route, a distinct track is less likely to form because no single plant receives multiple footfalls. Walking single file is acceptable where there is little chance of trampling plants.

- Off track walking may not be appropriate in some areas. Endangered species may only grow where off-track walkers are the most serious threat to its survival. If you absolutely must travel through fragile terrain, try to place your footsteps in the least destructive locations.
- Be careful to avoid fragile vegetation, such as broad-leaf flowering plants, tree seedlings, woody stemmed plants, mosses and lichens.
- Leaf litter and dry grasses make good choices for travel and gravel is a very durable surface for walking.
- On the coast, take care not to walk on or through sand dunes. In general, they have fragile vegetation and a slow recovery period. Stick to the intertidal zone especially on durable sandy beaches.
- Avoid walking on sensitive areas that may be prone to erosion, e.g. Machair grassland, river banks etc.
- Use established campsites in your community. Use of these amenities can reduce damage to surrounding vegetation and other natural features.

7. Minimise the effects of fires

Fires can cause lasting impacts and can be devastating to forests, natural habitats, wildlife and property. Along with the destructive nature of fire, the natural appearance of many recreation areas has been compromised by the careless use of campfires and demand for firewood. Fires are inappropriate in fragile environments and /or where plant growth is extremely slow. Many lasting impacts associated with campfires can be avoided by using lightweight stoves, fire pans, mound fires and other Leave No Trace Ireland techniques. Check local regulations and conditions – it may be prohibited to build a campfire.

Build a minimum impact fire

- Judge the wind, weather, location and wood availability. Decide whether it's safe and responsible to build a fire.
- Use an established fire ring instead of building a new one
- Use a mound or fire pan – mound fires are built on pedestals of sand, gravel or on soil.
- Use dead and downed wood – don't snap branches off trees, wither living or dead because this scars them. Use only sticks from the ground that can be broken by hand.
- Manage your campfire – Never leave the fire unattended.
- Make sure the ash is cool to touch when your fire is finished and remove any rubbish.
- Scatter all the ashes widely with a small trowel
- Restore the appearance of the fire site
- Discourage the use of disposable barbeques in your area.
- Encourage everyone to dispose of cigarettes carefully.

7. Next Steps

Checklist

- Join Leave No Trace Ireland.
- Record biodiversity (<https://records.biodiversityireland.ie/start-recording>).
- Improve areas for biodiversity.
- Adopt the All-Ireland Pollinator Plan (AIPP). Lots of examples of what communities can do to help pollinators can be found here – (<http://pollinators.ie/communities/>).
- Educate others on importance of biodiversity in our communities through talks, interpretations boards, etc.
- Take part in Leave No Trace Biodiversity Training Course
- Become a wildlife champion for your community.
- Enter The Leave No Trace Special Category Award in the National Tidy Towns Competition

Joining Leave No Trace Ireland

Leave No Trace Ireland is seeking to engage with communities to achieve greater scale and impact across Ireland. Memberships are free for community groups and create awareness about the importance of responsible outdoor recreation in the Irish countryside, enhancing and protecting local biodiversity. Leave No Trace will work with members to help spread the message in their communities.

Category of membership: Community Groups

Membership: Free

Benefits: Each membership is fully customisable to meet member's needs. Benefits can include training opportunities, assistance with signage design, events.

Please send your membership request to: info@leavenotraveireland.org





Useful Websites

Leave No Trace Ireland

www.leavenotraceireland.org

Waterways Ireland

www.waterwaysireland.org

Coillte

www.coillte.ie

National Parks and Wildlife

www.npws.ie

Inland Fisheries

www.fisheriesireland.ie

Sport Ireland

www.sportireland.ie

National Biodiversity Data Centre

www.biodiversityireland.ie

Ireland's Pollinator Plan

www.pollinators.ie

OPW

www.opw.ie

Tree Council of Ireland

www.treecouncil.ie

Irish Wild Flowers

www.irishwildflowers.ie

Dept. of Rural & Community Development

www.drcd.gov.ie

Useful Contacts

Leave No Trace Ireland

Castlebar Street

Westport, Co Mayo, F28 KD63

Tel.: 01 9059009

Email: training@leavenotraceireland.org

Tidy Towns Unit, Government offices,

Ballina, Co Mayo.

Tel.: 076 100 6912 / 076 100 6836

E-mail: tidytowns@drcd.gov

Southwest Mayo Development Company

Carey Walsh Building, Georges Street,

Newport, Co Mayo

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