



## COAST



**Leave No Trace Ireland Skills and Ethics**

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## **What is Leave No Trace?**

Leave No Trace is an Outdoor Ethics and Education Programme designed to promote and inspire responsible outdoor recreation through education, research, and partnerships.

As increasing numbers of people seek the beauty and exhilaration of outdoor travel and recreation by the coast, our collective mark on the coastal environment and its natural processes increases. Techniques designed to minimise the environmental and social impacts along the coast are incorporated in and promoted by the national Leave No Trace education programme as the following seven principles:

### **Principles of Leave No Trace**

1. Plan Ahead and Prepare
2. Be Considerate of Others
3. Respect Farm Animal and Wildlife
4. Travel and Camp on Durable Ground
5. Leave What You Find
6. Dispose of Waste Properly
7. Minimise the Effects of Fire

**Practising a Leave No Trace ethic is very simple – make it hard for others to see or hear you and LEAVE NO TRACE of your visit.**



### **Why Leave No Trace by the Coast?**

Ireland has approximately 7,500 km of rugged and spectacular coastline. This unique zone, made up of both land and sea, includes some of the most varied and best loved scenery; towering sea cliffs, rocky shores, rockpools, beaches, sand dunes, salt marshes, coves, and bays as well as some of our most fascinating wildlife. The coast has been a place of human settlement throughout history, providing us with a wealth of benefits; from food, shipping of goods, protection against storms, provision of habitats, to recreation, aesthetic benefits and wellbeing. The value of the coast is different for everyone. It offers a diverse range of habitats for us to enjoy and a multitude of water and land based activities. This dynamic environment is at the forefront of rapidly changing weather patterns, subject to battering by wind and sea, and driving rain and fog. Equally it can transform into a clear, calm, and tranquil setting. It is these interactions that have shaped and continue to shape the Irish coastline. This dynamic environment, offers us a new and unique experience each time we visit.



Our reasons for using the coast are as diverse as our values. We enjoy the coastal zone for physical pursuits and activity, to provide us with an immersive experience, to socialise with other visitors, for cultural experiences or often, a combination of interactions. Exploring new seascapes steeped in history and culture and participating in sports and coastal events, give many of us a sense of satisfaction. These experiences broaden our minds and provide a connection to a place, giving a sense of freedom from everyday stresses and bring us closer to nature. We enjoy exploring the coast on foot, on bike, by kayak, boat, and horseback. In Ireland, we are fortunate to have the outstanding natural beauty of our coast and its largely unspoilt nature. The Irish coast gives us cliff top walks, long expanses of beach and dune, sea-swept bog land, and dramatic views. We engage in activities such as reading, picnicking, sightseeing, painting, and photography. As well as more active pursuits, including sailing, diving, surfing, fishing, sea kayaking, and pony trekking. Engaging in outdoor recreation, significantly improves our physical and mental health, and overall sense of wellbeing, leaving us feeling refreshed and revitalised from everyday stresses.

The remarkable diversity and quality of the Irish coastline is one of Ireland's most important natural resources. It is also the focus of two of the biggest growth industries, recreation, and tourism. Our experiences are personally satisfying but they can have a negative impact on the environments we visit and the animals we observe. It is inevitable



that the numbers of visitors to the Irish coast will increase, putting additional pressure on our natural resources from recreational use. Despite its stark appearance, the coastal zone is fragile and sensitive to human disturbance and activity, with biodiversity loss and erosional processes

being of key concern. Many coastal habitats in Ireland are protected under EU and Irish law, yet despite this, the status of most habitats, are considered as inadequate or bad rather than favourable. Coastal wildlife and plants that have adapted to this harsh and energetic landscape, are under threat from human activity. Certain environments and species are more sensitive to human presence than others. Our presence can disturb many species of animal, leaving them feeling stressed which can affect their feeding and reproductive patterns. We can also unintentionally trample many plant and animal species present within vegetated areas such as sand dunes, crushing borrows or eggs, and along rocky shores, damage shelled creatures. Displaced wildlife, erosion, disturbance of livestock, litter, trampled vegetation, and polluted waters are just some of the results linked directly to recreational activities and human presence. It is essential that we endeavour to maintain our coastal heritage in its original state. Public education and awareness of minimal impact skills, through the Leave No Trace Skills and Ethics programme, are needed to prevent considerable damage in the future. Educated local communities can minimise their day-to-day impacts. Visitors will learn to reduce their cumulative impacts so as not to diminish the integrity of what is a significant part of our natural and cultural heritage, whilst continuing to enjoy the many recreational activities offered by the coast.

At the heart of Leave No Trace are seven principles for reducing the damage caused by outdoor activities. They are based on an abiding respect for nature, culture, and people. Leave No Trace depends more on attitude and awareness than on rules and regulations. Minimum impact travel and outdoor recreation practices must be flexible and tempered by judgement and experience. Techniques are continually evolving and improving. The general rule is to consider the variables of each area in terms of culture, wildlife, vegetation, soil, climate, and usage that it receives. Then, use this information to determine which recommended practices to apply. This code explains how you can best enjoy the coast and its wildlife, without causing harm. The original Leave No Trace Ireland Skills and Ethics programme is applicable for many situations and contains additional information. This edition of the Leave No Trace Ireland Skills and Ethics series has been adapted for the coast and compliments the original document. The practices in this booklet are appropriate for all coastal locations in Ireland. By following the code, and showing it to other people, you can help ensure that this wonderful part of Irish heritage survives for all of us to appreciate in years to come.

## **Plan Ahead and Prepare**

Before visiting the coast take time to learn about the coastal area you will be visiting. Find out about sensitive bird and animal populations, and weather conditions. Check with local authorities, tourism offices, community groups or local clubs specific to your activity. Beaches are subject to byelaws which can differ from county to county. Information can usually be found on the local authority website and sometimes signage is in place at the location itself. However, there are many locations where there is no signage, making it important to check other sources before your visit, so you are aware of what is permitted in the area you are visiting. Information can be found through the Environmental Protection Agency (EPA).

There are many locations that are protected under the EU Habitats and Birds Directives, which together make up the Natura 2000 network. Within the Natura 2000 network, Special Areas of Conservation (SACs) afford certain habitats and species protection and Special Protection Areas (SPAs) provide protection to bird species. These sites are considered important conservation areas on a European as well as an Irish level. For example, machair, is one of the rarest types of sand dune system in Europe, occurring only on the western coasts of Scotland and northwest Ireland. Protection of species include the bottlenose dolphin, harbour porpoise, common seal, and grey seal, to name a few. In national parks, nature reserves, Natura 2000 sites or other protected areas, special rules apply. Some activities require permits but these are often for specific locations. For example, a permit is required for groups of more than ten people camping within a National Park. There are also regulations regarding the disturbance of wildlife, rare and protected species, and in relation to hunting. There are still many activities that can be enjoyed without the need for permits. Further information can be found through the National Parks and Wildlife Service. Check this information before you go and heed any information posted at the sites.

Check local signage for byelaws and other safety information. Many of our activities along the coast involve going into the sea, with safety an important consideration. Heed signs and information, and be aware of potential hazards. Find out about, and follow the regulations governing recreational use of waterways and slipways. They are designed to minimise conflicts between users and protect everyone's health and safety.

The coastal zone is host to variety of environments. These include beaches, sand dunes, rocky shores, salt marshes and sea cliffs to name but a few. Each environment is unique with its own dynamics and characteristics. When exploring along the coast it is easy to become caught up in the scenery and your activity, so when travelling alone by the sea, make sure to let others know your planned route and what time you intend to return. Always



*Eamonn McCarthy 2012*

check the tide times before heading out along coastal walks as some areas of the coastline can be cut off by incoming tides. Make sure to carry a pocket copy of the tide tables. Tide tables can be found online (further information is provided at the end of the document). For water based activities such as sea kayaking, be sure to have the tide times, nautical charts and topographic maps for the areas in which you are travelling. Nautical charts illustrate known hazards in the water (e.g. currents and partially submerged rocks).

Be aware that some rocks and slopes may be slippery due to algae and seaweed, so tread carefully and have appropriate footwear. Try to keep away from soft sand and mud as it is easy to become stuck. If you are going to swim, make sure you stay close to the beach and be aware of rip currents that may be present. Knowledge of currents is also important for fishing recreational boating activities. For boating, it allows people to safely dock and undock their boats, manoeuvre them in confined waterways and safely navigate coastal waters.

Cliffs are a remarkable and awe inspiring site, yet are also unstable and potentially dangerous. They provide a very specialised habitat for plants and animals that live on them and are home to many sea bird species. Some bird species remain along the cliff face and forage at sea whilst others species come up onto the top of the cliff for foraging. Be mindful of their presence and of breeding and foraging sites. Please do not throw or push anything over the edge of cliffs. As well as being dangerous it can increase the rate of cliff erosion and



*Chris Hill 2014*

kill or disturb wildlife. When traversing along the coast next to sea cliffs be aware that rocks can come loose and fall down the cliff face. Some locations will have signage in place indicating where this is occurring but many locations will not. Be aware of local hazards and conditions. Wear appropriate gear relative to your activity.

Prepare for extreme weather, hazards, and emergencies. Remember that the weather can change very rapidly by the sea and visibility can often be reduced. Many of Ireland's coastal locations, especially along the west coast, are backed by mountains which affects the weather patterns of an area. Make sure you come prepared with the right gear. There are still many locations where there is no phone signal. Pack a whistle and fluorescent vest. Always carry a good map, compass (know how to use it) and plenty of food, water for a hot drink and warm clothing. Be prepared to have get yourself out of difficult situations. Plan meals to ensure you have adequate food for your activity.

If camping near the coast, find an appropriate campsite above the high tide level. Be mindful though that in many locations camping by the coast may be prohibited except at designated campsites, bring a camp stove and fuel, a pot, and matches.

### **Take Responsibility**

Ireland, as a coastal nation, is bounded by the North Atlantic Ocean to the west, the Irish sea to the East, the Celtic sea to the south and the inner seas off the west coast of Scotland to the north. Being surrounded by all this water means that Irish weather changes every day, which can be dangerous as it is easy to get disorientated or lost in bad weather or poor visibility. Getting lost has important implications for you, the people who attempt to rescue you and the environment. Remember that it is not just your personal safety that is put at risk. With the rapidly changing weather patterns, both you and your rescuers are at a greater risk should you become lost along the coast or at sea, and need to be rescued. Take responsibility for your own safety by practising self-awareness, caution, and good judgement. Significant impacts to the environment can result from rescue operations that involve vehicles or large parties of people. Minimise risk by planning a trip that matches your skills and expectations. Know your limits. Tell someone your plans either by email, a phone call, or a detailed SMS message and make sure to let them know once you have returned too. This way if something does go wrong, emergency services can assist you, as they'll know where you were going. Do not rely on being

rescued by others, instead be prepared to rescue yourself from tough situations. Be a competent navigator. Always carry a map and know where you are at all times. Do not build cairns or deface rocks or vegetation to mark your way, and avoid flagging. If flagging is absolutely necessary, be sure to remove it before leaving the area.

## **Be Considerate of Others**

All land in Ireland is either privately owned or owned by the state and there is no legal right of access to the Irish countryside. The foreshore, however, is accessible by the public. Landowners in Ireland have a long tradition of providing reasonable access for people to enjoy outdoor pursuits. Most landowners do not object to people crossing their land, but appreciate being asked. For those who do not want to permit access, please respect their wishes and consider alternative routes to the shore.

When travelling by vehicle, important considerations include to not block public access or rights of way and use to official car parks where possible. Often the land next to the foreshore is working land and in rural areas it is common to see livestock present. It is important to remember that farmers, wildlife rangers and land managers work throughout the week and may need access. Please don't drive on beaches, machair or fixed dunes as it damages both plants and animals living there.

Taking boats in and out of the water and anchoring them can damage the plants and animals which live and grow on the bottom and edges of waterways. Use existing boat ramps or established launching sites and moorings where available.

If you see livestock being moved or herded, be patient. Yield, by pulling in to the side of road and allow them to pass. They are often only travelling a short distance. Occasionally you may come across livestock along the beach. In this case give them a wide clearance and be careful not to scare them.

Consider other visitors to the outdoors. Many people come to the sea to relax and take in the scenery. Your group size will vary depending on whether you are with friends, family, or an organised group. Large groups can make others feel crowded and impact on the experience of other people. Even large groups should choose to mimic the style of small groups. Respect the quality and enjoyment of other peoples' experience as well. Try to keep the noise level down

as much as possible, especially at night. Excessive noise will disturb other visitors as well as the wildlife. Let nature's sounds prevail. Make room for others. If hiking along cliff top trails, horse riding or biking, pass with care and wait patiently for them to pass.

Make sure to be aware of local dog byelaws. Dogs may be prohibited from some beaches or areas. Clean up after your dog to help keep the beach clean for other coastal users.

Follow local horse riding byelaws.



## **Respect Farm Animals and Wildlife**

Ireland's wildlife is fascinating and varied. Those by the coast have found special ways of living in their environment. Wildlife that lives along the seashore have had to adapt to continuously changing conditions that include tidal action, exposure, and predation. Some have developed shells for protection, but many others use rocks, seaweed, and the sand to provide cover. Shelled wildlife share the beach with sea birds, marine mammals, and us. Wildlife faces many threats from loss and fragmentation of habitats, invasive species, pollution, disease, and over-exploitation. Wildlife disturbance can appear in many forms and animals will respond to people in different ways. Some animal species become habituated to the presence of people, whereby they will continue with their normal behaviours. However, this does not happen for all animals. Human disturbance can affect reproductive patterns, cause animals to use energy in fleeing from people, reduce their foraging time and result in high levels of stress. Other animals may seek out interactions with people for opportunities of food. Our food is unsuitable for wild animals as it can make them ill, affect their foraging behaviour and ultimately lead to a dependence on human food. These changes in behaviour affect both marine and land animals. When encountering wildlife, whether on sea or on land, your aim should be to minimise any disturbance that you might cause to wild animals and the habitats in which they live. The more you understand about a species, the more considerate you can be of the animals' needs.

When on the foreshore, minimise damage to rock pools by carefully replacing any upturned rocks. Take particular care to avoid damage to soft tissue animals in sea caves / low light areas.

Rocks and seaweed provide important cover for many marine animals that are found in rockpools. Removing rocks and/or seaweed exposes them to predators such as sea birds and damages their environment.

Seals are present along the Irish coastline. They spend a large proportion of their time in the open sea, but come ashore to pup, moult, and rest. Some species of seal breed on wave exposed rocky coasts or on sand or shingle beaches at the foot of cliffs. Other species prefer more sheltered waters. Seals are naturally curious animals, sometimes slipping into the water to come and have a closer look. Susceptibility to disturbance is site specific. You should always be alert to signs of stress before individuals start to move away or show aggression. When hauled out along the coast, seals may be disturbed by being closely approached from the sea or land.

Many birds are used to the presence of humans but as more people venture out along the coast and to more isolated locations, birds may be subject to higher levels of disturbance. This applies in particular to breeding sites which can be found on cliffs, within sand dunes, in burrows or on the ground, either hidden in vegetation or in the open. Different species breed at different times of the year. Different times of day such as late afternoon and early evening can be sensitive times in terms of disturbance for seabird colonies. Be aware of bird species present within an area and of known breeding locations. Keep a look out for signs of breeding activity so that these areas can be avoided.

In Ireland, many farm animals are present on land with access to the beach. When travelling across land that has livestock present try to pass as quietly as possible. Avoid sudden movements and do not surround or stress livestock. Pets, such as dogs should always be kept on their lead, away from livestock. Make sure to leave gates as you found them – open or closed, where present. Avoid feeding livestock as human food is detrimental to their health. If you see any animals in difficulty or damage to property, contact the land manager or owner. Livestock, such as sheep, will run from dogs and humans. In certain circumstances this can result in them jumping from a cliff face or running into the sea to escape.



Many coastal areas are not fenced. This does not mean that these areas should be driven on or pets allowed to roam freely. Please do not use beaches or dunes for off-road vehicles. Livestock may be present in addition to wildlife. Driving on sand dunes and beaches is one of the most damaging activities to biodiversity and habitats. It results in increased erosion which destabilises sand dunes, leading to an increased likelihood of flooding, and reduces the ability of the dune system to provide protection against storm weather. It also reduces vegetation cover and diversity, diminishing habitat quality for invertebrates and other animals. Driving leaves behind visible track marks which others are likely to follow. Not only are these track marks unsightly but as use continues, widen, and deepen, increasing the degradation of the environment. Please use designated car parks to park your vehicle or other durable areas that do not block access. If you do drive onto a beach, remember incoming tides can quickly close off exit points. Boating, fishing, and other water-based activities can damage shorelines and wetlands. Always choose durable sites to launch, anchor and dock your boat, and avoid tide pools, coral reefs, and sites rich in wildlife. Lifting your boat rather than dragging it will save impacting any surface.

## **Fishing**

Fishing is a popular pursuit that many people enjoy. Ireland's native marine life is rich and varied. To help sustain life in our seas, take only what you need and stay within legal limits. Observe size, season, and number restrictions. Release your catch unharmed if you don't need

it for food. If gathering your own bait, take only what you need and turn back all the rocks you have moved. Make sure your fishing gear is in good condition and used only in suitable conditions to reduce the likelihood of accidentally losing it. Tangled fishing line needs to be taken with you and disposed of properly. Information on fishing in Ireland can be found through fishing or angler's associations and through the Marine Institute.



## Wildlife Watching

You can see many animals at their best when they are behaving naturally. To help minimise disturbance when watching wildlife follow the advice below.

- To avoid disturbance at the coast, where present, please pay attention to signs that help you to minimise your impact.
- Aim to watch wildlife unseen so be cautious and quiet, avoiding sudden movements. Sudden movements scare wildlife and give you away.
- Keep a look out for wildlife and use binoculars to get a better view. Do not get too close and make sure to turn off your camera flash.
- Assess the situation, try to anticipate where the animal might go and what might frighten them to help you decide how to avoid disturbing them. Make any approach steady, predictable, and non-direct.
- Be careful where you are putting your feet to avoid crushing burrows, eggs, animals, and damaging plants and the habitats that the animals depend upon.



- Look for signs that wildlife has spotted you and be prepared to move out of sight, back off or take an alternative route.
- Stay close together when in a group to reduce the level of disturbance. Ensure that wildlife doesn't get surrounded and has an escape route.
- Let animals move away and please don't chase, feed or touch wild animals. Feeding wild animals damages their health, changes their natural behaviours, and exposes them to dangers such as predators.
- Keep your dog clear of birds and other animals.
- Don't linger for too long when you are close to wildlife.
- Report wildlife sightings – these are all of interest to the National Biodiversity data centre.

### **Sensitive Sites and Times of the Year**

- Known animal breeding sites should be avoided during the critical times of the year. Breeding sites can be in a wide range of locations from cliffs, to dunes to rocky shores.
- Keep activities such as launching and landings away from bird breeding grounds and roosts, and breeding and haul-out sites of seals.
- Consider breeding times of bird species throughout the year.
- Avoid nesting and feeding sites of birds. Migratory shore-birds rely on maximum time for feeding each day to ensure a good weight for migration. Nesting birds with chicks will not allow chicks to eat when humans are present – chicks will starve if people are present all day.
- Consider basking sharks and marine mammals that enter Irish coastal waters at different times of the year.
- Protect fragile sand dunes. Carry boats instead of dragging them. Tread carefully to avoid disturbing bird nests. On beaches, do not leave boats in the fragile foredunes.
- Make sure your pets keep well clear of birds and other wildlife. Keep dogs on a lead if necessary, and don't take pets where they're not allowed.



## Travel and Camp on Durable Ground

Beaches and sand dunes are prone to erosion and easily damaged by people and vehicles. Trampling either by foot or by vehicle is one of the most damaging activities that can take place



in the coastal zone. Take care not to drive, camp, walk on or through sand dunes. Sand dunes have fragile vegetation and a slow recovery period. Trampling in sand dunes tends to result in tracks or paths developing which cut across the dune generally from the road towards the beach. This leads to compaction of the soil, increased erosion, damage to

vegetation, reduced biodiversity and the greater the number of paths there are, there is a greater likelihood of flooding on the dune during very high tides and storm events. This leads to further erosion and increases soil salinity. Sand dunes are mobile and undergo natural rates of erosion and sediment replenishment which is aided by vegetative cover and topography. By damaging the vegetation and reducing biodiversity, we increase erosional rates, alter the topography, interrupt natural cycles, and limit the ability of the dune system to provide protection to human settlement. This in turn affects the availability of food for many animal species, as well as breeding and roosting sites. It is important to remember that the coast is a fragile place despite its appearance. To avoid these kinds of problems, recreationists need to recognise “durable surfaces”. Durable surfaces are surfaces that are minimally affected by camping and hiking. They include rock outcrops, sand (with sand dunes being an exception to this), gravel, trails, or water.

## Watch Where You Go

To help protect the coast, keep to established paths and dune boardwalks where they are present. However, there are many areas where there are few, if any trails and no established campsites. These areas that see little human traffic are often referred to as pristine areas. If you would like to travel off trail, use the most durable surfaces such as rock, sand, gravel, and navigable water. Stick to existing tracks where soils are not prone to erosion and rare species are not present. Along stretches of coastline where there are no designated trails, hiking at low

tide is generally best practice because the hard sand, gravel, or rock of the intertidal zone (the area between the highest and lowest tides) is exposed. In this area, be careful to avoid crushing intertidal life such as mussels, barnacles, and algae. It is best to walk “wide” over sandy soils to spread compression away from the middle of the track. If you absolutely must travel over fragile terrain such as sand dunes, try to place your footsteps in the least destructive locations and encourage your companions to step in the same spots.



Use established campsites that are big enough for your group. Where there are no car parks provided, park close to the road rather than drive on fragile habitats. Certain areas have designated campsites. Use of these amenities can reduce damage to the surrounding vegetation and other natural features. If camping outside of a designated campsite it is preferable, if weather and tides permit, to camp on the shoreline, especially if it is a sand or gravel beach. Use your tide tables and visual signs to find the high tide mark. Look for a level spot rather than creating one and look out for obvious bird nesting activity and other signs of animals so that you can avoid these areas. Be aware of areas where camping may be restricted or landowner permission may need to be sought. There are six national parks within Ireland, information regarding camping in these areas can be found through the National Parks and Wildlife Service (NPWS) or by directly contacting the National Park.

Choose an area that seems safe, free from wildlife and well suited to low-impact camping. Consider your visual impact on other users or wildlife. Be unobtrusive and keep noise down. In pristine areas, vary your route to water, to the “toilet” and to sleeping areas to prevent tracks from forming. Pitch late (just before dark) and pack up early (gone by 9am) to cause as little disturbance as possible. Make sure to avoid bird roosting sites. Keep your stay to a minimum, one night in one location is good, two or more nights and you start to damage vegetation. Leave your campsite as you found it. Before departing, naturalise, and disguise the site by replacing any rocks or sticks you may have moved. Re-cover scuffed up areas with natural materials.

## Leave What You Find

Beach combing is a long-established activity that many people enjoy. By leaving behind items such as rocks, shells, plants, fossils, and other objects of interest we pass the gift of discovery on to those who follow.

## Preserve the Past

Discovering evidence of earlier times is exciting. It is important to learn to recognise historical and cultural sites so you can avoid damaging them. Be alert for shell middens (mounds of shells), grave markers and other human artefacts.

## Leave Natural Objects Undisturbed

Natural beach litter such as driftwood and seaweed may be home to small creatures and so please leave them in place. Man-made litter should always be removed. Teach children to care for nature. Remind them that natural objects help to fill important ecological niches, such as a sea shell can become the home of a hermit crab. Don't take wildlife home. Practice catch and release methods.

Observe sea creatures in buckets and then release them back where you found them. Take care when touching soft bodied animals as they are very delicate. Instead of taking objects with you, take pictures instead. Let photos, drawings and memories be your souvenirs. Be mindful that it is not permitted to remove some objects such as gravel and rock from the beach and coastline. Areas that are protected under EU legislation will have their own regulations in place. Be mindful of protected species, as it is prohibited to pick or collect these. When in the sea, avoid bringing up corals, starfish, or sea urchins as this can destroy years of growth. Be careful not to disturb the equipment of farmers, anglers, fishermen and others who derive their income from the land and sea. Best practice is to leave what you find.



## **Invasive Species**

An invasive species is an organism that causes ecological and/or economic harm in a new environment where it is not native. These introduced plants and animals can cause large scale irreversible changes to ecosystems. They pose significant risks, including direct competition for resources, predation, disease, and degradation of habitats.

Invasive species can be introduced to an area in a variety of ways. They can be transported on the hulls of boats, in the tread of your boots and vehicle tyres, and be attached to tents, packs, and other equipment. Once established in a location they can then spread to other locations and habitats.

We can help prevent the spread of invasive species by following a few practical suggestions:

- Do not transport flowers, weeds, or aquatic plants into natural habitats.
- Empty and clean your packs, tents, boats, fishing equipment, vehicles, and other gear after every trip, onsite before departing.
- Water, mud, soil, and sand may contain harmful seeds, spores, or tiny plants and animals.
- Clean out the dirt of your boots and tyre treads.
- Never discard or release, live bait.
- Make sure pets are immunized, and their coats are free from seeds, twigs, and harmful pests such as ticks.

Further information on biosecurity can be found on the National Biodiversity Data Centre (NBDC) website.

## **Foraging**

Throughout human history, people have relied on gathering food items as a form of sustenance.

Today, however, foraging is primarily a leisure activity rather than a necessity. In recent years, interest in foraged foods has seen a dramatic increase which raises some issues of sustainability. There are several steps that you can take to ensure that you forage in a sustainable way,



*Group foraging for seaweed (Fáilte Ireland 2013)*

whereby you enjoy the process and the results of foraging whilst minimising your impact on the environment.

- First, don't break the law to forage. Find out if foraging is permitted and what restrictions may be in place. Observe local byelaws and restrictions on the collection of animals and plants.
- Never gather a rare or protected species. It is your responsibility to be aware of what conservation designations / listed species there are in any area you plan to use.
- Know what you gather, if you don't have a knowledgeable tutor or guidebook then only eat what you are 100% certain is safe and not a protected or poisonous species.
- Limit sessions to 'taster sessions', not 'harvesting sessions' for full meals. Bring your main food source with you and use the minimum of foraged items to supplement or add flavour to your meal.
- Don't be greedy; once it's gone it's gone, leave a healthy amount so animals / plants can repopulate / recover quickly. Picking species such as limpets will have an impact on wildlife – it's a major source of food and therefore survival, so leave plenty behind.
- Don't pull up whole plants. Use appropriate equipment - a good knife or pair of scissors can help to remove the desired part of plant without causing too much damage to the rest of the plant, and to surrounding vegetation
- Learn which part of a plant can be picked without causing harm – tips are often the growing point and often mentioned as the best bit of the plant to eat but when picked can cause the plant to die, or have severely reduced growth, flowering, and fruiting.
- Pass on knowledge and methods without harming life if possible by employing methods such as 'catch and release' of fish / crustaceans.
- Limit using key species such as limpets, as harvesting too many will have an impact on the habitat.
- Shellfish, such as crabs and lobsters, take several years to grow to maturity; over collecting in an area soon depletes stocks. It is advisable not to collect shellfish, but if you must collect, only take mature fish or shellfish and only what you need for yourself. Information on the collection of shellfish and regulations can be found on the Sea-Fisheries Protection Authority webpage at [www.sfpa.ie/Sea-FisheriesConservation](http://www.sfpa.ie/Sea-FisheriesConservation).

## **Dispose of Waste Properly**

### **Waste**

“Leave No Waste”. Anyone who participates in recreation along the coast has a responsibility to clean up before he or she leaves. To minimise the amount of packaging bought to the coast, repack food into recyclable containers before you leave your home. Once at the coast and before departing, inspect your rest areas and campsite for rubbish and spilled foods. Pack out general rubbish, kitchen waste, including leftover food, and search the area for “micro-rubbish” such as bits of food, chewing gum, cigarette butts and organic litter such as tea bags, orange peel, fruit remains, egg shells and nut shells. Even organic litter although biodegradable, takes years to break down and attracts scavengers that harm other wildlife. Pack durable bags to carry your rubbish out (and maybe someone else’s). Get involved and take part in the Clean Coast programme by doing a 2-minute beach clean. More information on the Clean Coasts programme can be found online.

Plan meals to avoid generating messy, smelly rubbish. Pack out all waste – don’t count on a fire to dispose of it. The leaving behind of food waste will attract animals, including many animals that may not normally visit an area and makes the site unattractive to other visitors.

Overlooked rubbish is litter. Litter along the beach and coastline negatively impacts on everyone. Many of us enjoy visiting an unspoilt coastline. Litter is unsightly and ruins everyone’s outdoor experience, lowering people’s moods and has implications on whether people choose to return to an area. It also poses a hazard to both us and animals. For animals, litter can be deadly. Animals scavenging for food can ingest bits of dropped food packaging. This damages their digestive systems. Plastic rings from beer packs and plastic bags kill shorebirds, turtles, and other marine mammals. Lost fishing equipment can ensnare or injure wildlife so be careful not to leave any behind. Dispose of waste line safely; and if it is safe to do so, retrieve missing or broken gear.

Do not place rubbish bags next to a full bin. This attracts scavengers, causes harm to animals and often attracts more litter and encourages dumping. Instead, look for the next appropriate waste disposal facility. Report any pollution to the local council.

## Human Waste

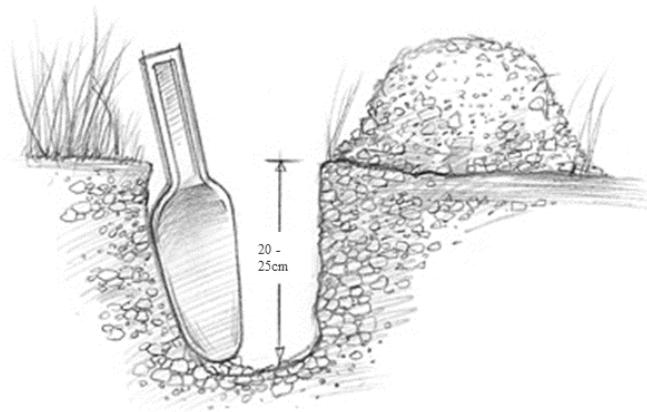
“Where’s the toilet?” is an important question, especially in the outdoors. The four objectives of human waste disposal are:

- Avoid polluting water sources.
- Minimise contact with insects and animals.
- Maximise decomposition.
- Minimise the chance of social impacts.

Wherever possible, take time to locate and use toilets for human waste disposal. Some coastal areas are next to settlements where facilities are available and some beaches have facilities provided. However, this is not the case everywhere.

When on land, if you must go, deposit human waste in a “cat hole”. A “cat hole” is a dug hole

of 20-25cm depth and at least 30 metres (70 steps) from tracks, waterbodies, camps, and watercourses. To promote decomposition, choose a site in organic soil, rather than deep sandy mineral soil. Bring a trowel to dig the hole, and gently remove a sod of earth and carefully put to the side.



After use and before replacing the sod of earth, mix some soil into the faeces to promote decomposition. Replace the sod and disguise the location by lightly tramping around the edges. “Naturalise” the site by scattering leaf litter or other natural material. Human waste should not be deposited under rocks because it will decompose slowly there.

Make sure to pack out/remove all used toilet paper and hygiene products in an impermeable bag. All plastic bathroom waste, including hygiene products, wet wipes and cotton buds need to go into a bin. Please do not flush these items down the toilet when you find the nearest facilities, as they potentially will end up on our beaches.

## **Animal Waste**

Just as human waste can be unpleasant and cause pollution, dog fouling has the same effect. Dog owners and handlers must ensure that dog mess is disposed of safely and does not disturb others. Always carry impermeable or compostable bags for this purpose and carry out your dog's waste, disposing of it in the appropriate bins.

## **Special Environments**

There are many unique environments to be discovered along the coast. These include sand dune systems (including machair, a rare type of sand dune restricted to the western coasts of Scotland and northwest Ireland), cliffs, rocky shores, salt marshes and beaches to name a few. Several of these habitats are protected under the EU Habitats Directive. When in these environments, it is necessary to carry out your waste.

**Beach & Shoreline:** The ocean, rich in bacteria, is generally viewed as an acceptable environment for small-scale human waste decomposition, below the high tide line and only if necessary. Wave and current action quickly break down the faeces into small pieces which are then further broken down by the bacterial life in the sea. If performed properly, sea dispersal will leave no signs along the coastline for the next visitor to encounter. When along the beach and shoreline, it is important to think of other users and the level of use that the beach receives, for example, the beach may be a popular bathing area, so consider the situation and environment that you find yourself in. Always try to locate the nearest facilities.

Careless use of soaps and detergents can harm plants and animals and impact on other recreationists. For dishwashing and bathing, make sure you are at least 30 metres away from water sources, using little or no soap. When you are camped in a saltwater environment that has no specific regulations for waste water disposal, the best place to get rid of it is below the high tide line or in the ocean itself. For bathing in the ocean environment, consider going without soap. If you choose to bathe with soap, do so below the high tide line. This technique will allow the gravel or sand to filter the water. Avoid washing directly in salt water that is rich in intertidal life. Toothpaste, near the sea, can be spat below the high tide line.

## **Minimise the Effects of Fire**

Fires can cause lasting impacts and can be devastating to 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 the demand for firewood. Campfires are beautiful by night. But the enormous rings of soot-scarred rocks, overflowing with ashes, partially burned logs, food, and rubbish are unsightly by day. Many lasting impacts associated with campfires can be avoided by using lightweight stoves, fire pans, mound fires and other Leave No Trace techniques. Fires and barbecues are inappropriate in fragile environments such as sand dunes but they may be permitted along the beach below the high tide line.

## **Check Local Regulations and Conditions**

There are several points to consider before starting a fire. Check local regulations, byelaws and with local land managers regarding lighting a fire. It may be prohibited to build a campfire in some areas. Consider alternatives to a fire. Lanterns, candles, and torches are excellent sources of light for after dark. Where fires are permitted and appropriate, use techniques to reduce your impact on the land and avoid leaving unsightly and ecologically damaging fire scars.

## **Build a Minimum Impact Fire**

First, consider if you need a fire. What is its purpose? And is it truly needed? If a campfire is important to you:

- Carry out a risk assessment taking into consideration location, nearby vegetation, tents, and wind direction. Decide whether it is safe and responsible to build a fire. If in doubt, don't have a fire.
- Have a trowel or small shovel and plenty of water to hand for saturating the ashes with water.
- Pack a first aid kit with burn treatment gel and cling film.
- Do not use accelerants to light your fire.
- Keep your campfire small and manageable.
- Clear the surrounding area of any excess debris.

There are several techniques that can be used to build a minimum impact fire. On the beach, where it is permitted, a beach campfire is made by excavating a shallow depression in the sand or gravel along the shoreline, below the high tide mark. In this instance, it is necessary to plan

for tides. Do not place rocks around the fire that have been in water, as water in cracks can flash to steam and cause explosions with rock shards. Regarding driftwood, take, and use only smaller pieces leaving behind the larger pieces of wood. Once the fire is out and the ash has cooled, make sure to remove all the ash, and scatter it before refilling the depression. If left in place the ash will “float” through the sand or gravel, and the fire site will be obvious to others.

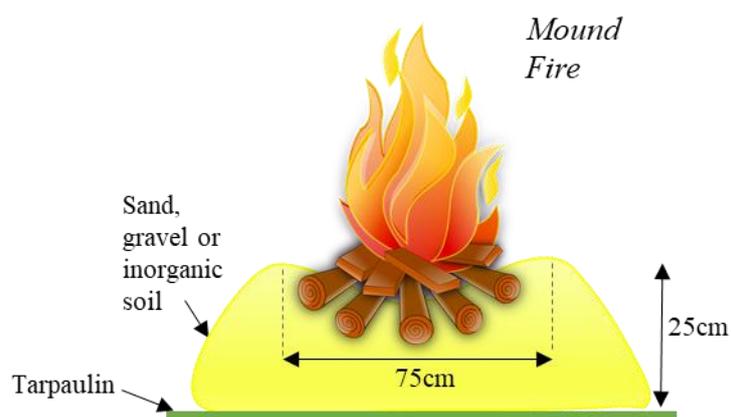
If you must have a fire above the high-water mark, use established fire rings if present or make a pan fire or mound fire. Keep fires and disposable barbeques raised off the ground as the heat generated, scars and scorches the surrounding vegetation and damages the subsoil. This in turn leads to increased levels of erosion.

### **Pan Fire**

Fire pans are metal pans that make good containers for low-impact fires. Use a pan on a durable surface devoid of any vegetation. Line the pan with a few inches of inorganic soil, sand or gravel and elevate it with stones to prevent damage to the ground below.

### **Mound Fire**

To build a mound fire collect sand, gravel or inorganic soil using a stuff sack from below the tide line or the high-water mark (it will require several loads). Lay down a heat resistant



tarpaulin or ground cloth and construct a pedestal 25 cm thick and 75 cm in diameter on top. A thick enough mound used with the tarpaulin insulates the ground from the heat of the fire. Be sure to return the materials used in your mound to its source once the fire is completely out.

## Use of Dead and Downed Wood

You are free to pick twigs and small sticks from the ground. To avoid damaging the environment do not take twigs, branches, or bark from growing trees or shrubs. Leave in place larger pieces of downed wood, as these play an important role in nutrient recycling and whilst decaying, are home to many invertebrates. Leave larger pieces of driftwood found along the beach in place but you may use small twigs.

## Manage Your Campfire

- Never leave your campfire unattended.
- Don't try to burn leftover food or rubbish that would have to be removed later.
- Burn the wood completely to ash.
- Drown your fire in water when its ready to be put out. Stir the remains to make sure all the ash is exposed to the water. Everything should be cool to the touch.
- Remove all litter.
- Scatter the ashes widely with a small shovel or pot lid.
- Restore the appearance of the fire site.

## A Few Terms Defined

- **Established campsite:** Campsite made obvious by unvegetated ground or a "barren core."
- **Habituated:** Animals that are comfortable in the presence of humans and have become accustomed to frequenting developed areas, campsites, trails, or roadsides.
- **Invasive species:** Plant or animal that is not native to this country and that can aggressively out-compete native species.
- **Inorganic soil:** Soil that consists primarily of minerals with little or no plant and animal remains.
- **Naturalise:** To restore a site to its previous state so that it appears untouched by human use.
- **NATURA 2000 and SPAs:** In 1992 the Council of the European Communities adopted the Habitats Directive, on the conservation of natural and semi-natural habitats and species of flora and fauna. The Directive seeks to establish "Natura 2000", a network

of protected areas throughout the European Community. It is the responsibility of each member state to designate Special Areas of Conservation (SACs) to protect habitats and species, which, together with the Special Protection Areas (SPAs) designated under the 1979 Birds Directive, form Natura 2000. In Ireland, the National Parks and Wildlife Service are responsible for designating and monitoring the health of these sites. Certain restrictions may apply to these areas as they represent some of the most sensitive and priority landscapes on a European scale.

- **Machair:** A coastal grassland formed by wind-blown calcareous sands. It is one of the rarest habitat types in Europe and is characterised by herbaceous plants. It is restricted to the western coasts of Scotland and northwest Ireland. Protected under the EU Habitats Directive.
- **Pristine:** A place where signs of human impacts are absent or difficult to detect.
- **Rip Current:** A fast flowing area of water that can pull people or objects away from the land.
- **Tracks:** Paths created by travelling on non-durable surfaces between campsites and other sites of interest such as mountain summits.
- **Trail:** Trails which are managed and signed such as National Waymarked Trails.

## Get Involved

There are a number of ways to become involved with Leave No Trace:

**Adopt the Principles** – Start to incorporate some of the techniques mentioned in this booklet when out and about in the countryside.

**Training** – Participate in Leave No Trace Training. Leave No Trace is based on a tiered education programme, with three types of training. For more information on Leave No Trace training please visit the training section on [www.leavenotraceireland.org](http://www.leavenotraceireland.org).

**Support** – Support the organisation by becoming a member or partner of Leave No Trace Ireland. For more information please visit the support section on [www.leavenotraceireland.org](http://www.leavenotraceireland.org).

Leave No Trace Ireland is a network of organisations and individuals with an interest in promoting the responsible recreational use of the countryside and wild places. Leave No Trace Ireland's main financial partners are;

## **Further Information**

Please find below several organisations and webpages that may be of interest.

### **Bird Watch Ireland**

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

### **Clean Coasts Programme**

[cleancoasts.org](http://cleancoasts.org)

### **Environmental Protection Agency**

Information on beaches - [www.beaches.ie](http://www.beaches.ie)

Environmental information - [www.epa.ie](http://www.epa.ie)

### **Fishing**

[www.fishinginireland.info](http://www.fishinginireland.info)

### **Foraging**

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

### **Irish Coast Guard**

In an emergency dial 999 or 112 and ask for the Coast Guard.

Further contact details can be found on the Department of Transport, Tourism and Sport webpage at [www.dttas.ie/maritime/ircg/contact](http://www.dttas.ie/maritime/ircg/contact).

### **Irish Wildlife Trust**

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

### **Leave No Trace Ireland**

[www.leavenotraceireland.org/](http://www.leavenotraceireland.org/)

## **National Biodiversity Data Centre**

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

## **National Parks and Wildlife Service**

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

## **Shellfish**

Sea-Fisheries Protection Authority - [www.sfpa.ie/Sea-FisheriesConservation](http://www.sfpa.ie/Sea-FisheriesConservation).

## **Sunrise and Sunset**

[www.timeanddate.com](http://www.timeanddate.com)

## **Tide Times**

The United Kingdom Hydrographic Office provides tidal information for both the United Kingdom and Ireland - [www.ukho.gov.uk/EasyTide/EasyTide/SelectPort.aspx](http://www.ukho.gov.uk/EasyTide/EasyTide/SelectPort.aspx).

## **Weather**

Weather forecasts for Ireland are provided by Met Eireann - [www.met.ie](http://www.met.ie).

On the website, you can find marine weather and sea area forecasts as well as regional information.

## **Water Safety**

Information on which beaches have a life guard can be found on the Irish Water safety website - [www.iws.ie](http://www.iws.ie).

Additional information regarding water safety and recreational activities can be found at [www.safetyonthewater.ie](http://www.safetyonthewater.ie).

## **Photographs**

Photographs courtesy of Leave No Trace Ireland's access to Fáilte Ireland's Content Pool [images online], available: [www.irelandscontentpool.com/media/](http://www.irelandscontentpool.com/media/)

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