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This booklet has been produced with the support of the local development company South and East Cork Area Development (SECAD), who believe it's publication to be of great benefit in spreading the Leave No Trace message as part of the development of the South and East Cork Bird Trail and other recreation and environmental initiatives SECAD are involved with.









Introduction

Leave No Trace is an outdoor skills and ethics programme designed to promote and inspire responsible outdoor recreation through education, research and partnerships. It is based on 7 principles which encourage people to make better decisions when using the outdoors, in order to minimise the impact of recreation on the outdoor environment. The Leave No Trace concept originated in the USA in the 1960's and was incorporated as a non-profit organisation in 1994. Leave No Trace Ireland was established in 2006 and today it is a conservation charity committed to raising awareness of Ireland's rich natural heritage and protecting the outdoors for future generations. Some examples of leave no trace in practice may include: being considerate of other users of the outdoors, keeping your dog under effective control, picking up your litter, avoiding causing unnecessary disturbance to wildlife and farm animals and leaving things as we find them for the benefit of others.

South and East Cork Area Development (SECAD) is a local development company, who through a 'bottom up' approach have been supporting people, community and enterprise across South and East Cork since 1995. Amongst other things, SECAD are actively involved in outdoor recreation development. One of the many projects SECAD are involved with is the South and East Cork Bird Trail, a driving route of over 100km stretching from Rocky Bay in South Cork to Youghal in East Cork. The bird trail takes you on a journey through a region of national and international importance for birds and is suitable for anyone who has an interest in birds and nature. As well as the South and East Cork Bird Trail and in terms of outdoor recreation, SECAD provide ongoing support to outdoor recreation companies and the Ring of Cork tourism network and also support and facilitate the development and maintenance of walking, cycling and water based trails. SECAD have identified the promotion of Leave No Trace as being vitally important in their role of supporting the development and enhancement of outdoor recreation across South and East Cork and this in turn has led to SECAD's role in supporting the development of this booklet.

The purpose of this booklet is to present to the reader, 101 things worth thinking about when leaving no trace in Ireland. Once we understand why we should or shouldn't do a certain thing, then it becomes easier for us to make a better choice. Hopefully this booklet will inspire people to leave no trace and will also help justify the leave no trace message by presenting relevant information that relates to the recreational impacts we are having on the Irish outdoors.



About the booklet

There are eight chapters in this booklet, one for each of the seven principles. Each chapter contains thirteen "things worth thinking about" that relate to the chapter's principle. There is one additional chapter where we have left it to the reader to decide which principle(s) the "things to think about" relate to. Much of the information in this booklet can be applied to more than one principle.

This booklet contains some really interesting facts and information. In producing the document we endeavoured to obtain the most up to date and relevant research material available. However, during the production of this first edition we have identified gaps where further research is required and Leave No Trace Ireland hopes to update this information in future editions.

A reference list is included at the end of each chapter and most of the sources of information can also be accessed on the Leave No Trace Ireland website.





Acknowledgements

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In particular, we would like to thank the Leave No Trace Ireland Education and Advisory Group, our programme manager Maura Lyons and our Leave No Trace Ireland Chairperson Richard Thorn for their expertise and guidance throughout.

Finally, the publication of this booklet would not have been possible without the kind support of our partner South and East Cork Area Development Partnership Ltd., an organisation who are committed to supporting Leave No Trace Ireland to promote the message of Leave No Trace in South and East Cork and beyond.

Sorsha Kennedy

Leave No Trace Ireland Research Officer

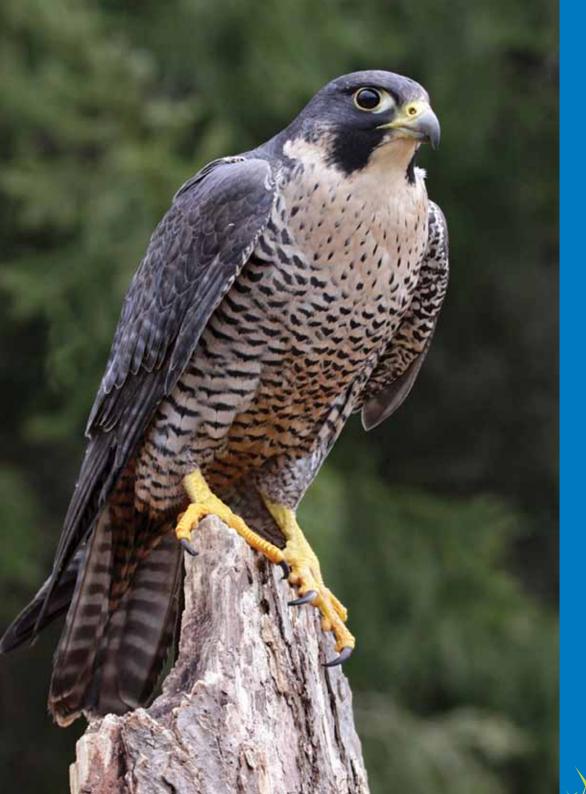
William O Halloran

Leave No Trace Ireland Research Group Chairperson

May 2015

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Plan ahead and prepare

- 1. Sir Ernest Shackleton began planning for his Trans-Antarctica Expedition of 1914 1917, in 1909, almost 5 years before he was ready to make his historic journey (Ward, 2001).
- A recent study on trampling in the Republic of Ireland revealed that upland heath and blanket bog showed no signs of recovery one month after 500 people passed through the area along the same line. This is an important point to consider when planning events such as an adventure race (Concannon and Murphy, 2012).
- 3. Consider wearing proper footwear when hillwalking, as over 30% of injuries attended to by Mountain Rescue relate to the lower leg (Mountaineering Ireland, 2015a).
- 4. Temperature decreases by approximately 1 degree for every 100 metres climbed and rain and wind are usually much stronger up mountains than in the valleys. The drop in temperature with height gained is called the Lapse Rate (Mountaineering Ireland, 2015b).
- Three out of every four fatal mountain accidents attended by Kerry MRT in recent years have befallen solo walkers or walkers who had inadvertently become separated from the rest of their party at the time of their accident (Kerry Mountain Rescue, 2015).
- 6. Cold, wind and rain, combined with exhaustion, are the principle causes of hypothermia (Kerry Mountain Rescue, 2015).
- 7. Recreational users do not have a legal right of entry to land in the Republic of Ireland (Hynes and Buckley, 2007).
- 8. While there has been a very long tradition of access to Croagh Patrick from Murrisk, there is no existing legal right of access on foot (Jones, 2013).
- 9. There cannot be many other sites where a relatively wild and natural mountain is climbed by so many inexperienced and ill-prepared walkers as on Croagh Patrick (Jones, 2013).
- 10. Drowning may not appear on most hill walkers' lists of potential dangers but several hill walkers have been drowned in the past, and it should be regarded as a very real danger (Kerry Mountain Rescue, 2015).
- 11. Many drowning incidents in Ireland occur in relation to leisure pursuits, chiefly that of bathing, walking, boating and fishing (Keegan, 2013).
- 12. Most canoeing accidents are caused by flood river conditions or wind on lakes and the sea, combined with insufficient levels of group or leader experience or training (Canoeing Ireland, 2014).
- 13. When planning where to go on activity, please consider wildlife. For example, a study on bird disturbance factors which focused on approximately 3000 Oystercatchers (Haematopus ostralegus) in a protected site in Dublin Bay, showed that the presence of these birds decreased by two thirds in parts of the site where kite surfing took place. The disturbance caused by kite surfing also negatively affected the ability of the birds to feed. Dogs were shown to also cause significant disturbance to the Oystercatchers (Fox, 2013).

"Rowing harder doesn't help if the boat is headed in the wrong direction."

Kenichi Ohmae

Plan Ahead and Prepare Reference List

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Be considerate of others

- 14. Under the Occupiers Liability Act 1995, a landowner or 'occupier' can give a 'recreational user' permission to enter their land. This does not, however, make the recreational user a 'visitor' and does not increase the duty of care owed by the landowner (DECLG, 2013).
- 15. Recreation activities such as mountaineering, walking and cycling can contribute to the regeneration of marginalised rural areas and enhance resident's quality of life, provided it does not generate conflicts between recreationists, landowners and Government authorities (Van Rensburg et al, 2006).
- 16. Cycling is one of the fastest growing sports in Ireland and membership of Cycling Ireland now stands at over 19,000 people (Cycling Ireland, 2013).
- 17. Canoeing Ireland has approximately 3,000 members, and estimate that there are 5,000 active canoeists in Ireland (Canoeing Ireland, 2014).
- 18. Approximately 60,000 people try canoeing every year through Canoeing Ireland's network of adventure centres and providers (Canoeing Ireland, 2014).
- 19. The surfer closest to the breaking part of the wave has right of way (Irish Surfing Association, 2010).
- 20. In 2011, 86,000 overseas visitors engaged in water sports (excluding sailing and angling) in Ireland, spending approximately €65m. Of these, surfing was the most popular activity followed by canoeing (Failte Ireland, 2013).
- 21. 220,000 tourists were recorded at the Croagh Patrick Visitor Centre in 2012 (Failte Ireland, 2012).
- 22. 2014 was the busiest year yet for the Cliffs of Moher Visitor Centre, since they opened in 2007, seeing over one million visitors (Cliffs of Moher, 2014).
- 23. Coillte forests receive 18 million visits per annum (Coillte, 2014).
- 24. Cynophobia is the extremely common 'fear of dogs'. It can restrict the sufferers' normal routine and limit their enjoyment of outdoor activities, particularly in places where many outdoor enthusiasts bring their dogs along, including beaches, the woods and local parks (Fritscher, 2015).
- 25. Having 'effectual control' of your dog, if off leash, means that it will return to the owner when called (Wicklow Uplands Council, 2015).
- 26. Many local Authorities have introduced 'bye-laws' to indicate areas where dogs must be kept on a leash or even prohibited (DECLG, 2015).

'Advice I would give is to keep surfing with "Aloha." Always feel that if anything goes wrong, it is your fault. If you hit a guy with your board – it's your fault.

If a guy hits you – it is your fault.'

Dorian "Doc" Paskowitz

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Respect farm animals and wildlife

- 27. Ireland is home to 28 species of land mammal, more than 400 regularly occurring bird species, more than 4,000 plant species, and over 12,000 species of insect (Notice Nature, 2010).
- 28. Between 1994 and 2013, the wild bird population in Northern Ireland has increased by 40%, however it should be noted that the underlying bird populations are not all increasing. For example, while the Blackcap (*Sylvia atricapilla*) has shown a very large increase since 1994, the Mistle Thrush (*Turdus viscivorus*) and Skylark (*Alauda arvensis*) continue to show decreases (DENI, 2015).
- 29. Bird populations are a good indication of the health of wildlife and of the countryside. Between 1994/95 and 2012/13 the total wetland bird population in Northern Ireland was estimated to have decreased by 26%. During that time, coastal populations declined by 18%, while freshwater populations declined by 39% (DENI, 2015).
- 30. A report from 2011 on declines in numbers of breeding wader birds at key sites in Donegal and Mayo raised concerns that recreational impacts could be contributing to declines at certain sites and minimising the disturbance caused by recreational activities such as golfing, walking and dogs was identified as a high priority (Fernández-Bellon and Donaghy, 2011).
- 31. The Corncrake (*Crex crex*), once a familiar sight and sound in the Irish countryside, now stands on the verge of extinction in Ireland (Wilson & Carmody, 2013).
- 32. There is a growing body of evidence relating to the negative impact of swim-with-cetacean interactions on the welfare of cetaceans (The Irish Whale and Dolphin Group, 2014). Berrow (2013), suggested the death of a calf of the Bottlenose Dolphin (*Tursiops truncatus*) 'Dusty' in Doolin, Co. Clare, may have been linked to Dusty spending prolonged periods interacting with humans, adding that young bottlenose dolphin mothers generally require the assistance of other, more experienced adult females to help raise their first calves.
- 33. Between 2011 and 2014, 23 seals were rescued by Seal Rescue Ireland, after being bitten by dogs (McMillan, 2014).
- 34. You are liable for injury or damage caused by your dog, to people or livestock (Citizens Information, 2013).
- 35. The sight and smell of a dog, on or off a leash, increases fear and stress within sheep. If the threat causes them to run, they can abort lambs or suffer injury which could result in a slow death. Even sheep that are not injured can lose up to 15% of body mass in the 24 hours following a dog attack (Torbay Coast & Countryside Trust, 2013).
- From 2000 to 2010 approximately 15% of all fatal farm accidents, involved livestock. Bull attacks
 accounted for just over half of these fatal accidents involving livestock (Health and Safety Authority, 2011).
- 37. There are 9 species of bat in Ireland and 2 of our common species are rare in the rest of Europe. In a European context, Ireland is a stronghold for the Lesser Horseshoe Bat (Rhinolophus hipposideros), brought to the verge of extinction over most of the continent (Fairley, 2015).
- 38. Biodiversity worldwide and nationally is under threat and has declined more rapidly in the past 50 years than ever before in human history. The wellbeing and prosperity of earth's natural environment, as well as human society, depends directly on the extent and status of biological diversity (Notice Nature, 2010).
- 39. Red lists, co-ordinated in Ireland by the National Parks and Wildlife Service and the Northern Ireland Environment Agency, identify species and habitats in most need of conservation interventions. More than a third of Irish bee species and non-marine mollusc species are deemed threatened on recent Red Lists and more than 15% of Irish water beetle species, butterfly species, dragonflies and damselflies are also threatened (EPA, 2015).

"If a man aspires towards a righteous life, his first act of abstinence is from injury to animals."

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Travel and camp on durable ground

- 40. A study on the durability of surfaces in four different habitat types in the Republic of Ireland showed that trampling (which led to the creation of a newly worn path) caused blanket bog to deteriorate most quickly followed by meadow, then upland heath and then mixed woodland. In terms of the visibility of each newly worn path one month after trampling the results were similar although the meadow did show a greater ability to recover than the upland heath (Concannon and Murphy, 2012).
- 41. In October 2014 Mountaineering Ireland had 11,554 members, comprising 174 clubs and approximately 1400 individual members (Mountaineering Ireland, 2015).
- 42. There are 776 trails on the national register of trails in the Republic of Ireland (NTO, 2015).
- 43. Coillte's estate offers over 2,000 km of walking and cycling trails across the Irish landscape (Coillte, 2015a) and Coillte forests receive over 18 million visits per annum (Coillte, 2015b).
- 44. The Bangor Trail in Co. Mayo, situated in the Republic of Ireland's first ever designated wilderness area, was used for hundreds of years as the main route for people and livestock, before the introduction of modern roads, between the Bangor Erris region and Newport (NPWS, 2015a).
- 45. It is estimated that as many as 30,000 people ascend Croagh Patrick on Reek Sunday alone and it has to be considered that the path is both the main ascent and descent of the mountain, effectively doubling the actual footfall on the path. This is in contrast to most mountain peaks where walkers tend to ascend by one path and descend by another (Jones, 2013).
- 46. The width of the path along the "summit cone" of Croagh Patrick is in excess of 30 metres and is clearly and actively "migrating" into the ecologically sensitive and important scree slope to the north of the path (Jones, 2013).
- 47. The Wild Atlantic Way is "The longest defined coastal touring route in the world" 2,500 km from Malin Head, Donegal to Kinsale, Cork (Monaghan, 2013).
- 48. Wicklow Mountain's National Park is currently the only national park in the Republic of Ireland which publicly state that wild camping is allowed under permit (NPWS, 2015b).
- 49. Ireland supports 60 Annex I habitats requiring special conservation measures, 16 of which are priority types considered in danger of disappearance. These priority types include turloughs, important orchid grasslands, active, raised and blanket bog, calcareous fens, yew woodland, alluvial forests, bog woodland, limestone pavements, coastal lagoons, sand dunes and machair (Fossitt, 2000).
- 50. In a study of impacts on designated conservation areas in Irish coastal habitats caravanning/camping was listed as a damaging operation in 53 areas (Neff, 1999).
- 51. Work by Ryle *et al.* (2009) and Cooper *et al.* (2005) found recreational activities to be one of the main threats to Irish machair, an internationally rare and protected type of sand dune habitat.
- 52. Damage to limestone pavements can arise from car parking, camping, development of infrastructure, the picking of rare and often endangered plant species, traffic congestion at popular sites, graffiti on monuments, the removal of limestone for personal use, and the construction of 'mini-dolmens' which destroy the fragile species and habitats in the areas (DENI et al., 2015).

"A nation that destroys its soils destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people." Franklin D. Roosevelt

Travel and camp on durable ground Reference List

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Leave what you find

- 53. While picking wild flowers has been a traditional pastime, we are now aware of the risks that it poses. It has certainly been a factor in the decline of certain species such as the Killarney Fern (*Trichomanes speciosum*), which suffered from collecting during the Victorian era (Office of Public Works, 2014).
- 54. Even common species such as the Bluebell (*Hyacinthoides non-scripta*) are now threatened by over-picking. Plants in Nature Reserves and National Parks are protected and should never be picked. Our rarest species are protected under the 1999 Flora Protection Order, which also includes, for the first time, a number of mosses, liverworts, lichens and algae (Office of Public Works, 2014).
- 55. The Common Frog (*Rana temporaria*) is the only species of frog found in Ireland and is listed as an internationally important species. Frogs and frogspawn are protected under the European Union Habitats Directive and by the Irish Wildlife Act (Irish Peatland Conservation Council, 2014).
- 56. Many of Irelands protected structures such as round towers, castles, tower houses, abbeys and tombs are built with stone walls. Aside from being protected structures (DEHLG, 2004), stone walls also support a diverse range of flora with abundant lichens, mosses and ferns (Fossitt, 2000).
- 57. There are upwards of 35,000 historic monuments and sites in Northern Ireland dating from 9,000 years ago to the recent past (DENI, 2015).
- 58. The Republic of Ireland has over 120,000 known archaeological monuments, many of which are found in the countryside (Doyle, 2006).
- 59. A survey on the destruction of Irelands Archaeological heritage carried out in 1998 revealed that 34% of the monuments ever known to have existed within the study areas had been destroyed, while 8% of those remaining had been damaged (O'Sullivan *et al*, 2001).
- 60. A study on paths surfaced with crushed limestone in a bog habitat revealed that our shoes can have a role to play in dispersing seeds from our gardens into areas such as national parks (Kennedy, 2013).
- 61. In Spain, a decrease in shell abundance correlated with an increase in tourism, over a 30 year period. The removal of shells has a damaging effect on the ecosystem, for example, hermit crabs and fish, which use shells for shelter are often limited by a lack of suitable shells (Kowalewski *et al*, 2014).
- 62. Water sports account for more than 40% of invasive species introductions in EU waterways (Anderson et al., 2014).
- 63. Invasive species can be carried from one water body to another as hull-fouling organisms, in bilge water, or entangled in water sports equipment (Caffrey, 2014).
- 64. 13% of the terrestrial and aquatic species of flora and fauna recorded in Ireland are high impact invasive species (Lysaght & Fitzpatrick, 2014).
- 65. For all established climbing areas within Ireland, bolting is not permitted (Mountaineering Ireland, 2003).

"It is our task in our time and in our generation, to hand down undiminished to those who come after us...the natural wealth and beauty which is ours."

U.S. President John F. Kennedy

Leave What You Find Reference List

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Dispose of waste properly

- 66. Cigarette related litter in the Republic of Ireland, in 2013, constituted the highest percentage (54.10%) of litter in locations surveyed this is comprised mainly of cigarette butts which constitute 49.90% of all litter items nationally (The Litter Monitoring Body, 2014).
- 67. Chewing gum is the single largest litter component in the food-related litter category, and also the second largest component nationally, comprising 15.32% of all litter recorded in the litter quantification surveys, carried out in 2013 (The Litter Monitoring Body, 2014).
- 68. During An Taisce's Big Beach Clean Weekend in September 2014, 103 Clean Coasts groups removed 33,442 litter items from 128km of coastline (An Taisce, 2014).
- 69. An annual survey of 14 beaches in Northern Ireland found the average number of litter items per kilometre of beach in 2013-2014 was 3,498; over 75% of the items were plastics. (DENI, 2015).
- 70. Globally at least, 43% of cetacean species, all species of marine turtles and approximately 36% of the world's seabird species have been reported to ingest marine litter (Irish Environment, 2013).
- 71. Because most seabirds feed on fish, they are often attracted to fish caught or entangled in discarded nets or fishing lines. Many birds, including ducks, geese, cormorants and gulls, can also become entangled in six-pack rings and other encircling pieces of marine litter (Miljō, A., 2001).
- 72. Clothing fibres are the most abundant form of waste material that we find in habitats worldwide. In one study 85% of human-made material, found on the shoreline, were microfibres, and matched the types of material, such as nylon and acrylic, used in clothing (Brown, 2014).
- 73. The PURE project has received over 7,650 reports of illegal dumping since it was established in 2006, with the removal of over 2,400 tonnes of rubbish from the landscape. If you lined up all the bags that the PURE project has removed from the uplands, they would stretch over 340 kilometres in length, longer than Glendalough to Galway (Pure Project, 2015).
- 74. If human waste is not disposed of properly, for example, by not utilizing the cat-hole method when camping, the composting process is side-stepped and pathogenic waste is dispersed into the environment. Various diseases and worms can then infect the nearby area, especially watercourses. This fact has been widely documented (Jenkins, 2005).
- 75. Based on an estimated population of 650,000 dogs in the Republic of Ireland, 100 tonnes of dog faeces is produced every day (The Dog Dunit, 2015).
- 76. Because of dog faeces, the existence of a high rate of soil and grass contamination with canine intestinal parasites has been demonstrated worldwide in leisure, recreational, public and urban areas, i.e. parks, green areas, bicycle paths, city squares, playgrounds, sandpits, beaches (Traversa et al., 2014).
- 77. Intestinal nematodes affecting dogs, i.e. roundworms, hookworms and whipworms, have a relevant health-risk impact for animals and, for most of them, for human beings. Both dogs and humans are typically infected by ingesting infective stages, (i.e. larvated eggs or larvae) present in the environment (Traversa et al., 2014).
- 78. Bananas have a hard time biodegrading in rocky and cold upland environments and can take up to two years to fully decompose. In the UK, scavengers such as herring gulls (*Larus argentatus*) and crows are doing better on the mountain plateaus and other litter hotspots than they would naturally, solely because of the amount of edible rubbish available. These species are displacing native UK birds such as snow bunting (*Plectrophenax nivalis*) and ptarmigan (*Lagopus*) on Ben Nevis (Roberts, 2011).

'There is no such thing as "Away". When we throw anything away it must go somewhere'
Annie Leonard

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Minimise the effects of fire

- 79. According to Nugent (2012), the causes of most Forest Fires in Ireland lie outside the forest boundary, with causes being both natural and human, however, human factors have greatest impact on fire incidence and severity.
- 80. The main risk season for out- of- control countryside fires is February to June, with March/April being the most critical time (Nugent, 2012). Coillte (2010a) estimates that approximately 1,500 acres of forests were burned in April 2010, about half of which was Coillte owned and half privately owned.
- 81. A 2004 fire in the Mourne Mountains, which burnt 198 acres of blanket bog close to the Silent Valley affected water quality in the reservoir for almost two years afterwards. This one fire cost £230,000 in increased water treatment costs (Climate Northern Ireland, 2013).
- 82. In summer 2011 forest fires across Coillte's estate destroyed 985 hectares (2,400 acres) of forests, with an estimated cost of approximately €5 million. According to Coillte, 550 hectares more than half of the area affected- was in Co Donegal (Donegal Daily, 2011).
- 83. Campfires in Coillte forests are allowed only in designated fire sites or with written permission (Coillte, 2010b).
- 84. Fires can cause long-term damage to ecosystems. The effect of a fire depends on its intensity, which is determined by the heat generated and the period of time the heat is applied (Liley et al., 2010).
- 85. Plant diversity can be reduced by fires on blanket bogs and peatlands, and graminoid dominance encouraged, particularly by repeated burns at short intervals (<20 years). Sphagnum and lichen communities on bogs may also be damaged by hot fires, which can lead to dominance of bryophytes mats (Liley et al., 2010).
- 86. Large fires can be very damaging to invertebrates delaying re-colonisation and threatening extinction. Species with low dispersal abilities and those with a lifecycle vulnerable to disturbance are most at risk (Liley et al., 2010).
- 87. It can take many years for arboreal or tree dwelling mammals, such as the pine marten (Martes martes) to repopulate severely burnt woodland (Liley et al., 2010).
- 88. Accidental Fire is an extensive danger to frogs (Irish Peatland Conservation Council, 2014).
- 89. During the bird breeding season any wildfire can destroy nests and eggs and unfledged young. In a severe fire, adult birds may also be killed by getting sucked into the fire by fierce air currents, generated by the heat (Liley et al., 2010).
- 90. Recovery of pre-fire levels of abundance and richness in bird populations, of scrub, heathland and grassland species, can take just (4-6 years), in comparison to the 20-30 years that it can take forest species (Liley et al., 2010).
- 91. After a fire, open ground bird species such as Larks and Pipits can move in and persist for some time in the recovering scrub vegetation (Liley et al., 2010).

Minimise the Effects of Fire Reference List

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Some more things to think about

Thinking about the interconnectedness of things, see if you can decide what principles the following "things to think about" apply to???

- 92. On average 140 people a year, lose their lives by drowning in the Republic of Ireland. In short, drowning in Ireland is prevalent (Keegan, 2013).
- 93. Conflict can be reduced if surfers familiarise themselves with surfing etiquette. For example, surfers need to respect the 'line up', an informal line of surfers, particularly at point and reef breaks where each surfer waits their turn, with the surfer whose turn it is next sitting deepest (Irish Surfing Association, 2010).
- 94. There were over 204,000 users on the Great Western Greenway in 2013 (A. Connor Tourism Officer Mayo Co. Co., personal communication, 10th February 2015).
- 95. In the Republic of Ireland 1 in 4 people own a dog. (K. Bentley Dogs Trust Ireland, personal communication, 18th March 2015).
- 96. It is an offence to allow a dog under your control to foul a public place. The faeces must be removed and disposed of correctly (DECLG, 2015).
- 97. At Hook Head Co Wexford about 15-20 years ago a lot of large crinoids were taken by fossil collectors using power saws (D. Jarvis UCC, personal communication, 13th November 2014).
- 98. According to O'Connell (2014), once in the sea, "plastics biodegrade extremely slowly, breaking into tiny fragments in a centuries-long process. During this period, they entangle and slowly kill millions of sea creatures, while hundreds of species mistake the plastic for food, ingesting toxicants that cause liver and stomach problems in fish and birds and often choke them to death."
- 99. Both balloons (which can take six months to degrade, or up to twelve months in salt water), and Chinese Sky lanterns can cause many different species of animal to become entangled, and can also result in a serious risk of choking and environmental contamination (Irish Wildlife Trust et al., 2012).
- 100. There are currently 5 fire rings in place in Coillte Forests, 3 in County Wicklow and 2 in the Nephin Mountain Range. There are also however, some barbeque stands in designated picnic areas in Coillte Forest Parks (D. de Forge - Coillte, personal communication, November 2014).
- 101. The Republic of Ireland's built heritage supports the equivalent of 25,000 full time jobs in the country (Ecorys and Fitzpatrick Associates Economic Consultants, 2015).

"What is the good of your stars and trees, your sunrise and the wind, if they do not enter into our daily lives?"

E. M. Forster

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- 1. Plan Ahead and Prepare
- 2. Be Considerate of Others
- 3. Respect Farm Animals 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

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