

# Mountaineering Ireland's vision for the future of Ireland's mountains and upland areas



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Mountaineering Ireland's vision for Ireland's mountains and upland areas – June 2017. 1

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## 1. Background

Mountaineering Ireland's commitment to care for Ireland's mountain landscapes is reflected in the organisation's mission statement which states:

Mountaineering Ireland exists to represent and support the walkers and climbers of Ireland and to be a voice for the sustainable use of Ireland's mountains and hills and all the places (coastline, crags, forests) we use.

To be an effective voice for Ireland's mountains Mountaineering Ireland needs to engage with relevant policymakers and other organisations that have an interest in the uplands. In doing so it is essential that Mountaineering Ireland is clear on what its own future vision is for these areas. In summer 2016 Mountaineering Ireland initiated a consultation and policy development process with the following objectives:

- to agree Mountaineering Ireland's vision for the future of Ireland's mountains;
- to develop a strong statement about the importance of Ireland's mountains;
- to empower Mountaineering Ireland members to be a voice for Ireland's mountains.

Mountaineering Ireland held six regional consultation meetings during autumn 2016 which were attended by a total of 143 members including representation from 48 affiliated clubs and a number of individual members. A report from those regional meetings was published online in December 2016, see <a href="http://www.mountaineering.ie/aboutus/news/2016/default.aspx?id=68">http://www.mountaineering.ie/aboutus/news/2016/default.aspx?id=68</a>.

Arising from this, a draft vision, supported by a statement on the importance of Ireland's mountains was published in February 2017 and discussed at Mountaineering Ireland's Members' Forum in March 2017. Following acceptance of the vision at the Members' Forum this final draft was prepared and approved by the Board of Mountaineering Ireland in June 2017.

# 2. Mountaineering Ireland's vision for Ireland's mountains and upland areas

# **2.1** What Mountaineering Ireland would like to see for the future of Ireland's mountains and upland areas

For the majority of the members of Mountaineering Ireland, Ireland's mountains are more than a place to walk and climb. Members have a deep connection with Ireland's mountains and upland areas, and respect for the people who own the land and others who live and work there. Mountaineering Ireland members want to continue to enjoy these places responsibly and they want others to have the opportunity to do likewise.

Mountaineering Ireland represents a community of interest in mountain, upland and coastal areas which may be drawn from a wide geographic area. Mountaineering Ireland wishes to work with upland community groups, with landowners and other organisations that share an interest in Ireland's mountains and their hinterlands, to make a case for greater policy support and investment in Ireland's uplands, with the aim of achieving a positive and sustainable future for these important areas.

Mountaineering Ireland accepts that change is part of an evolving, living landscape, but such change needs to be planned and done in a well-considered and long-term way. To achieve sustainable management of Ireland's mountain and upland areas the very limited extent of Ireland's upland environment, and its inherent fragility, must be fundamental considerations. It is imperative that in the management of landscape, balance is achieved between individual interest and the common and long term good.

It is important to Mountaineering Ireland that recreation is recognised as a valid land use and a public good. As shown later in Section 3, Ireland's upland areas provide many benefits to society, including contributing to our built and cultural heritage, biodiversity, scenic landscapes, better water quality, carbon storage and of course the provision of opportunities for recreation. These non-market services can be described as public goods.

Mountaineering Ireland believes there is a strong argument for re-focusing farm payment schemes towards rewarding hill farmers for delivering a sustainably managed environment, on the basis of the public good this provides. This investment would benefit upland areas and society as a whole.

There is scope for landowners to supplement farm income by diversifying into areas such as farmbased tourism and service provision, however this will not suit every farm and the return on investment may be modest and difficult to achieve.

Mountaineering Ireland acknowledges that some of the changes evident in Ireland's upland environment arise from walking and climbing activities. In view of worsening upland path erosion, and the pressing need to invest in managing already eroded routes, Mountaineering Ireland does not support the development of new marked trails above a height of 300 metres, other than where there is a pre-existing sustainable path.

Mountaineering Ireland believes that education should have a key role in building people's understanding of why Ireland's mountains and upland areas are important and in encouraging people of all ages to respect and care for these special places.

Mountaineering Ireland supports the well-established principle that people who go into mountains and other parts of the countryside for recreation activities are aware of the risk in what they are doing and should take responsibility for their own safety.

Mountaineering Ireland believes there is an urgent need for an holistic and area-based approach to supporting upland areas, with policy measures focused on maintaining communities, supporting sustainable farming practices and conserving upland landscapes. In this regard Mountaineering Ireland welcomes the plans by the Heritage Council and the Irish Uplands Forum to put in place a programme of support for locally-based upland partnership groups committed to working towards the sustainable management of their area.

Above all else, Mountaineering Ireland wants to celebrate and promote Ireland's mountains and upland areas, to show that these areas are special and worthy of greater attention and investment, and that they must be conserved and looked after for the benefit of future generations.

#### 2.2 Mountaineering Ireland's vision for Ireland's mountains and upland areas

# Mountaineering Ireland's vision is that Ireland's mountain landscapes will be valued and protected as environmental, cultural and recreational assets.

This will be achieved by:

- **Engaging with policymakers** to secure the policies and resources required for the long-term protection and management of Ireland's mountains and upland areas;
- Working in collaboration with landowners, upland communities and other relevant organisations;
- **Celebrating the benefits** that society gains from Ireland's uniquely special mountain environment;
- **Encouraging all to have respect** and care for these fragile places and the people who live and work there.

#### 2.3 How Mountaineering Ireland will work towards this vision

The Board of Mountaineering Ireland will appoint a working group to pursue this Vision, with the initial purpose of developing an Advocacy Plan by October 2017.

Relevant actions arising from the Advocacy Plan, and from the regional meetings held in 2016, will be considered for inclusion in Mountaineering Ireland's Strategic Development Plan for 2018-2021.

Progress on implementation of the Advocacy Plan will be reported to Mountaineering Ireland members through the Irish Mountain Log and Mountaineering Ireland's Annual Review.

## 3. The importance of Ireland's mountains and upland areas

#### 3.1 Overview

As the national representative body for walkers and climbers on the island of Ireland, Mountaineering Ireland has a particular interest in ensuring the sustainable use of Ireland's upland areas, incorporating mountains, hills, bogland, forests, cliffs and coastline. Although Ireland's mountains are not high by international standards, Ireland's diverse geology has bestowed us with a rich variety of mountain and upland landscapes, all with strong regional distinctiveness.

Every person living on the island of Ireland gains benefits from Ireland's mountains and upland areas. The benefits enjoyed by hillwalkers and climbers are extensive, including adventure, physical challenge, camaraderie, the acquisition of skills and connection with nature. For some the mountains provide an antidote to pressurised urban living, others find that the mountains provide mental and spiritual solace. The many ways that Ireland's mountains and upland areas benefit those who do not even visit these places are less apparent, but nonetheless significant. Ireland's mountains and upland areas:

- Are defining visual features in the landscape and vital areas of relatively wild land;
- Support human wellbeing by providing high quality places for passive and active recreation, with associated mental and physical health benefits;
- Have distinctive landscapes that have been influenced by many centuries of low-intensity farming activity;
- Provide some of Ireland's most beautiful scenery, which is also the cornerstone of the rural tourism industry;
- Are living, lived-in landscapes;
- Are Ireland's largest expanses of semi-natural habitats, and important for biodiversity;
- Have a role in flood mitigation and the supply of drinking water;
- Hold much of Ireland's carbon store in peaty soils;
- Contain some of the best-preserved examples of Ireland's archaeological heritage and are significant within our cultural heritage.

Most of Ireland's mountains and upland areas are privately-owned, either by individuals or jointly as commonage. The primary land use across most of Ireland's upland areas is low-intensity farming, however this is increasingly under threat due to low average farm income, the increasing age profile of farmers and changes in hill farming practices.

Virtually none of Ireland's uplands are accessible to the public by right. Access depends on the goodwill and tolerance of the landowner. In the vast majority of situations recreational users enjoy unhindered access; however the growth in tourism and recreational activity is exerting ever greater pressure on this unmanaged situation. While State bodies such as Coillte and the National Parks & Wildlife Service own significant tracts of land in upland areas, and both these organisations operate a policy of open access, there is no legal right of public access to this land.

It is Mountaineering Ireland's position that Ireland's upland areas are vital natural assets which should be wisely managed for societal benefit through appropriate planning and landowner involvement, in a way which ensures ecological integrity and the maintenance of these cherished natural landscapes.

#### 3.2 Defining features in the landscape and vital areas of relatively wild land

Within the context of the island of Ireland, mountains and upland areas are very significant elements of the landscape, which contribute to our sense of place and provide a stable backdrop to a constantly changing urban or suburban environment.

For many people the appeal and value of Ireland's mountains lies in their relatively wild character, the lack of manmade structures and development, the openness of mountain landscapes, and the way in which the mountains contrast with the crowded urban environment in which the majority of people spend most of their lives.

In Scots Gaelic the word 'landscape' translates as 'the face of the land'. Landscape is everything around us and it sustains human life. Perhaps because of its scale and pervasiveness the importance of landscape is often under-appreciated. This has particular implications for Ireland's mountains and upland landscapes, which have fewer people and organisations to advocate on their behalf.

While 22% of the island exceeds 150 metres in elevation (loosely described as the uplands), many people are surprised to learn that just under 6% of Ireland's land area is over a height of 300m, and only 0.35% lies above the 600m contour (Egan, 2014). Ireland's mountain environment and landscape is a very scarce resource. Only a portion of this area remains in a relatively wild or undeveloped condition.

Ireland's extremely limited stock of undeveloped mountain land is irreplaceable and it is being depleted every day by renewable energy developments, afforestation, extractive industry, the erection of new fences and communications masts, the construction of new roads and tracks, and other built development including inappropriately sited housing.

Mountaineering Ireland contends that this situation is unacceptable and not in the best interest of the nation. Ireland's undeveloped or semi-natural landscapes support health and well-being, they are highly attractive to overseas visitors, they have a role in securing foreign direct investment, and images of these places are used extensively in marketing Ireland's agricultural exports.

Mountaineering Ireland urges the mapping of Ireland's undeveloped landscapes as a spatial planning tool and the development of guidance for assessing impacts on these areas as part of the planning process. The work of the Scottish government in mapping and describing their wild land areas may provide a relevant model for Ireland. Scotland's third National Planning Framework recognises wild

land as a 'nationally important asset' requiring strong protection and Scottish planning policy sets out how this should be achieved (SNH, 2017).

The Vision in the National Landscape Strategy for Ireland (DAHG, 2015a) provides a rationale for the application of this approach in Ireland:

'Our landscape reflects and embodies our cultural values and our shared natural heritage and contributes to the well-being of our society, environment and economy. We have an obligation to ourselves and to future generations to promote its sustainable protection, management and planning.'

#### 3.3 High quality places for passive and active recreation

Ireland's mountains inspire, shape and enrich the recreation experiences enjoyed by hillwalkers and climbers. Mountaineering Ireland members have identified 'peace and quiet', 'natural beauty', 'wildness' and 'escape' as the main attributes which make their mountain experiences special (see below, also Mountaineering Ireland, 2016). The quality of the environment and the quality of the recreational user's experience are inextricably linked, with undeveloped natural landscapes providing the highest quality experiences. The mountains are more than a space to walk and climb in, they are an integral part of that experience. The relative lack of built artefacts in the wild landscape is a crucial part of the mountain experience.

The elemental quality of recreation in mountains and upland areas provides the perfect counterbalance to the busyness of everyday life, with opportunities ranging from extreme physical challenge through to walks that slow, rather than increase, the heart rate. Mountains provide people with an opportunity to connect physically, emotionally and spiritually with the natural world.

While the economic and social costs of physical and mental illnesses associated with pressurised urban lifestyles are growing, the benefits of the natural environment in enhancing physical and mental health are increasingly recognised in both research and practice (Bowler *et al.*, 2010; POST, 2016). Research from the UK also shows that outdoor recreation generates a significant economic impact, as well as making a contribution to tackling the cost of physical inactivity (Comley & Mackintosh, 2014). To put it simply, recreation in mountains and natural environments make people's lives better.

Strategically directed investment in education, infrastructure and recreation management will protect the quality of future recreation experiences and prevent increased participation in outdoor recreation activities impinging on landowners and upland communities. Extensive provision of built facilities is neither a necessary or desirable action to achieve this goal.



Word cloud showing most popular responses to the question of 'What makes Ireland's mountains special?'

#### 3.4 Influenced by centuries of farming activity

Ireland's mountains and upland areas are largely made up of privately owned land; owned individually or as commonage (commonages can be owned jointly by a number of people, or they may be land owned by an individual where others have shared rights, e.g. for grazing). The distinctive landscapes of Ireland's upland areas are the product of many centuries of traditional and extensive farming practices. Right up to the summits of our highest mountains, these lands have been influenced by farming activity.

Due to the constraints imposed by the landscape itself, including the lower productivity of the land, farmers in upland areas have limited capacity to generate income from their land by producing and selling food, however there is a growing acceptance that the uplands provide many benefits to society which could be described as 'public goods' or 'ecosystem services'. If society needs and values these services, such as carbon storage, flood prevention, water filtration and biodiversity, then those that provide them should be supported.

As the primary land-use across most of the uplands is currently low-intensity farming, and such farming systems have a very high reliance on direct payments, agricultural policy will, in the short-term at least, have a major influence on the future management of these areas. There is potential for future farm payment schemes to reward hill farmers based on the quality of the environment and the benefits their land provides for society. While the Burren Programme (<u>www.burrenprogramme.com</u>) provides a positive example in this regard, every mountain is different and due to the many variables involved it is an extremely complex process to achieve appropriate and sustainable grazing levels. Other locally-led agri-environment schemes are due to be established shortly based on the Burren model; provided there is sufficient focus on research, this

programme presents a welcome opportunity to develop good practice in upland management in other areas.

#### 3.5 Beautiful scenery and its importance for tourism

Fáilte Ireland's annual Visitor Attitudes Surveys consistently show that the friendliness of the people, the beautiful scenery and the natural, unspoilt environment are the main factors that influence overseas visitors in choosing Ireland as their holiday destination.

Upland areas have a vital role within Ireland's rural tourism offering. Fáilte Ireland research shows that 1,193,000 overseas visitors engaged in hiking or walking as part of their holiday in 2014. These visitors had an overall spend of €915 million (Fáilte Ireland, March 2016). Hiking has also been shown to be the most popular active leisure pursuit amongst domestic holidaymakers (Fáilte Ireland, September 2016). This activity presents an opportunity for rural residents and rural communities to generate income through the provision of services to visitors. This seems to be most successful where services are promoted collectively through local organisations and cooperative enterprises. Instead of copying other countries, Ireland should play to its strengths, by being proud of the relatively wild character of Ireland's rural landscape, rather than diminishing this quality with things like excessive signage.

The centrality of quality scenery to visitor experiences, and the State's role to protect this, are highlighted in Ireland's current tourism policy 'People, Place and Policy - Growing Tourism to 2025':

'The quality of our natural scenery and physical environment, physical heritage, and the range of activities for visitors, are areas in which the State has a key role to play, through preservation of that which is irreplaceable and the development of that which enhances the visitor's overall experience.' (DTTAS, 2015)

#### 3.6 Living, lived-in landscapes

Ireland's mountains and upland areas are living landscapes, home to people who have a resourcefulness born of coping with remoteness and poorer services. Perhaps because of the many challenges they face, the sense of community and pride of place tend to be strong in upland areas.

Research by the Irish Uplands Forum amongst upland community groups found a great commitment to addressing local challenges and a capacity to develop innovative solutions. Local distinctiveness is also an advantage (Hill, 2016). With appropriate support measure these attributes provide opportunities for continued vitality within upland communities.

#### **3.7 Repositories of biodiversity**

Irelands' mountains and uplands (areas over 150m in altitude) form our largest expanses of seminatural habitats and are of major conservation importance, with numerous habitat types listed under Annex I of the EU Habitats Directive and many rare and threatened bird and animal species being recorded in these areas. Irish upland habitats include blanket bogs, heaths, flushes and springs, semi-natural grasslands, dense bracken and areas of exposed rock and scree. Over 40% of the total land area designated as Special Areas of Conservation (SAC) in Ireland occurs in the uplands (Perrin *et al*, 2014). Natural and semi-natural habitats provide important food and shelter for the pollinators that support the sustainability of food production and help protect the health of Ireland's environment (NBDC, 2015).

#### **3.8 Flood mitigation and the source of drinking water**

Flood mitigation is one of the ecosystem services that can be provided through better management of upland habitats. Upland habitats in favourable condition have greater capacity for absorption of rainfall, thus slowing the flow of water to areas downstream (O'Meara, 2015). Improved habitat condition could be achieved by incentivising landowners to maintain appropriate grazing levels, through peatland restoration projects, minimal drainage of wetland areas, and by planting small woodlands of native species such as birch, alder and willow in the uplands.

Most of Ireland's drinking water (81.9%) comes from surface water, i.e. rivers and lakes, which in turn have their origin in upland areas (DECLG, 2012). These small streams and rivers make up 77% of Ireland's river network, and due to a low level of dilution they are extremely susceptible to pollution (WRBD, 2007). The condition of the natural environment in the catchment around these upland streams and rivers has a direct bearing on the quality of this water and therefore also the cost to treat it.

#### 3.9 Carbon storage in peat soils

Peat soils cover 20.6% of Ireland's land area, with the greater part of this in the form of blanket bog in upland areas (Renou-Wilson *et al*, 2011, p.xi). Ireland possesses 8% of the world's blanket bogs, making this an important resource in a global context (IPCC). Although most of Ireland's blanket bogs are protected under national and EU legislation, only 28% of the original blanket peatland resource is now deemed suitable for conservation (DAHG, 2015b).

Peatlands contain a fascinating biodiversity and they hold great value for archaeologists, but one of the strongest reasons to look after Ireland's blanket bogs is because they are a huge carbon store and have an important function in controlling the greenhouse gases that cause climate change. This function is reversed (i.e. carbon is released back into the atmosphere) when the peatland is damaged through drainage, cutting or burning.

The peaty soils which predominate in Ireland's upland areas are often thin and fragile, and at risk of being lost through changes in land use, erosion and overgrazing. As it has taken thousands of years for Ireland's peaty soils to form they are effectively non-renewable and must be protected. A different approach to the management of Ireland's peatlands could secure the multiple benefits provided by these areas, including their attraction for recreation, education and tourism.

#### 3.10 Significant built and cultural heritage

Ireland's upland landscapes contain some of the best-preserved examples of our archaeological heritage. For over 6,000 years people have journeyed into upland areas, to settle, to farm, to hide from others, to obtain resources, to worship their gods or to bury their dead. The physical traces of many of these activities, especially those that involved building with stone, are still clearly visible on

the slopes and summits today. Their survival is in part due to the less intensive agricultural practices in the uplands compared to the surrounding lowlands. These physical remains are complemented by written and oral accounts of worship and legend, in some cases extending back thousands of years. The cultural importance of Ireland's mountains continues to evolve and be celebrated through photography, art, poetry and song. Landscape is integral to our sense of identity at both local and national level.

## 4. Challenges facing Ireland's mountains and upland areas

Mountaineering Ireland has identified a number of challenges facing Ireland's mountains and upland areas. The examples below, grouped under thematic headings, provide evidence of the need for stronger policy and better practice to protect and support these areas.

#### 4.1 Landscape

- Ireland's very limited stock of wild or undeveloped land is being depleted every day by a wide range of developments such as windfarms, roads and afforestation. Unfortunately there is no mechanism in place to measure the loss of Ireland's undeveloped land, as there is in Scotland.
- The changes to upland landscapes are often small the upgrading of a track, a new sign, or an additional cairn on the hills, but the cumulative impact of many small changes can over time be dramatic.
- There is a virtual absence of integrated planning for upland areas both at a national and local level, embracing community development and all aspects of land-use including recreation.
- The prominence of uplands within the overall landscape and their openness means that changes to the upland landscape are highly visible and may impact indirectly across a wide area.
- Mechanisms are required to ensure effective development control and enforcement by local government planning authorities to deal with unauthorised developments in mountains and upland areas.
- The lack of legislation to protect Northern Ireland's Areas of Outstanding Natural Beauty, designated in recognition of their national importance as landscapes of distinctive character and special scenic value, has allowed inappropriate development in these 'protected' landscapes.
- Poor legal protection for wild and scenic landscapes has resulted in an over-reliance on nature conservation designations to protect upland areas, with nature sometimes being portrayed negatively as a restriction on development.

- The lack of protection for landscape is more apparent where nature conservation designations don't provide a means to address problems, for example to deal with the damage caused to non-designated upland landscapes by irresponsible use of off-road vehicles.
- Undeveloped land is seen by some people as a waste, or not having value, where in fact these areas provide significant benefits to society that are not associated with intensively-farmed land.

#### 4.2 Agriculture and community

- The labour intensive nature of farming in upland areas, combined with the low rate of return and the high age profile of hill farmers are leading to land abandonment, with consequent decline in the quality of very significant natural resources, and adverse social and economic impacts on upland communities.
- Changes in agricultural practice have also had adverse impacts on upland landscapes (e.g. through reclamation, burning, the fencing of previously open hillsides and the construction of wide access roads on the hills).
- Mountains and upland areas are physically distant from decision-making, have a lower population, fewer employment opportunities, poorer services and infrastructure (e.g. roads, broadband, public transport), and rarely have a representative body to highlight their issues.

#### 4.3 Biodiversity

- Habitat loss, fragmentation and degradation are widely acknowledged as key drivers in the decline of Ireland's biodiversity (DAHG, 2015b; NBDC, 2015). The underlying causes are varied including afforestation, agricultural intensification and development pressure.
- There is a failure to adequately protect areas designated for nature conservation including the European-designated Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), Areas of Outstanding Natural Beauty (AONBs) and Areas of Special Scientific Interest (ASSIs) in Northern Ireland, and Natural Heritage Areas (NHAs) in the Republic of Ireland. All of these areas require legislative protection, management plans and resources to implement those plans; without those elements they are protected in name only. It is also necessary to build understanding and acceptance within local communities, and the general public, of the inherent fragility of these areas, why they are designated and how they provide value to society.

#### 4.4 Outdoor recreation and tourism

 Due to increased recreational and tourism activity, once-faint mountain paths have evolved into worn and muddy scars, with the worst damage on blanket bog and steep ground (see <u>www.helpingthehills.ie</u>). There is a shortage of the skills and resources required to deal appropriately with upland path erosion, and in most upland areas the absence of an upland management group to take a lead in addressing the management of recreation.

- Over-development of natural landscapes for tourism and recreation (e.g. by inappropriate trail development, as well as unnecessary signage and safety features) can diminish the quality of the landscape and lessen the user's sense of escape and exploration.
- All land in Ireland, is either owned privately (>80%) or by the State (<20%). Although there is no legal right of entry to land in Ireland for recreation\* the vast majority of landowners have traditionally allowed informal access to upland areas. However this goodwill and access could easily be withdrawn, particularly if there is inappropriate behaviour, litigation by recreational users or increased commercial activity on privately-owned land. The complex pattern of land ownership in Ireland's hills and countryside makes it more difficult to secure agreement regarding recreational access. The lack of certainty regarding access for recreation in Ireland contrasts with most of Europe, where varying degrees of public access to land are formally defined.

\*Other than land owned by Waterways Ireland and Forest Service land in Northern Ireland.

- The current growth in outdoor recreation activities such as walking, mountain-biking and running, combined with the success of projects such as the Wild Atlantic Way, a proliferation of charity and challenge events, and a growth in the commercial provision of recreation activities, are all bringing more people, and exerting ever greater pressure on the goodwill of individual landowners and on the natural environment. Current plans to increase the number of visitors to rural Ireland by 12% in the next three years through targeted tourism initiatives, including increased promotion of Activity Tourism will further exacerbate this pressure (AHRRGA, 2017). Without active management this situation is clearly unsustainable.
- There is need for a National Outdoor Recreation Strategy to guide the development of the outdoor recreation sector, national structures to oversee implementation of this strategy, and resources to support delivery of the plan at local level.

#### **Appendix 1 – References**

AHRRGA (2017) *Realising our Rural Potential – Action Plan for Rural Development*, published by the Department of Arts, Heritage, Regional, Rural & Gaeltacht Affairs, available online: <u>http://www.ahrrga.gov.ie/app/uploads/2017/01/162404-rural-ireland-action-plan-web-2-1.pdf</u>

Bowler, D. E., Buyang-Ali, L. M., Knight, T. M. and Pullin, A. S. (2010) *A systematic review of evidence for the added benefits to health of exposure to natural environments*, published in BMC Public Health 10:456, available online <u>http://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-10-456</u>

Comley, V. & Mackintosh, C. (2014) *RECONOMICS - The Economic Impact of Outdoor Recreation in the UK: The Evidence*, published by the Sport & Recreation Alliance, London, available online: <u>http://www.sportandrecreation.org.uk/policy/research/reconomics</u>

DAHG (2011) Actions for Biodiversity 2011-2016 – Ireland's National Biodiversity Plan, published by the Department of Arts, Heritage & the Gaeltacht, available online: https://www.npws.ie/sites/default/files/general/national-biodiversity-plan-english.pdf

DAHG (2015a) *National Landscape Strategy for Ireland – 2015-2025*, published by the Department of Arts, Heritage & the Gaeltacht <u>http://www.ahrrga.gov.ie/app/uploads/2015/07/N-Landscape-Strategy-english-Web.pdf</u>

DAHG (2015b) *National Peatlands Strategy,* published by the Department of Arts, Heritage & the Gaeltacht, available online:

https://www.npws.ie/sites/default/files/publications/pdf/NationalPeatlandsStrategy2015EnglishVer s.pdf

DECLG (2012) *Reform of the water sector in Ireland - Position Paper,* published January 2012 by the department of Environment, Community & Local Government, available online: <u>http://www.housing.gov.ie/sites/default/files/migrated-</u>

files/en/Publications/Environment/Water/FileDownLoad%2C29192%2Cen.pdf

DTTAS (2015) *People, Place & Policy – Growing Tourism to 2025*, published by the Department of Transport, Tourism & Sport, available online:

http://www.dttas.ie/sites/default/files/publications/tourism/english/people-place-and-policygrowing-tourism-2025/people-place-and-policy-growing-tourism-2025.pdf

Egan, P. (2014) Figures based on GIS analysis for the island of Ireland (unpublished)

Fáilte Ireland (March 2016) *Activity product usage among overseas tourists in 2014,* published online by Fáilte Ireland:

http://www.failteireland.ie/FailteIreland/media/WebsiteStructure/Documents/3\_Research\_Insights /1\_Sectoral\_SurveysReports/Activity-product-usage-among-overseas-tourists-in-2014.pdf?ext=.pdf

Fáilte Ireland (September 2016) *Tourism Facts 2015*, published online by Fáilte Ireland: <u>http://www.failteireland.ie/FailteIreland/media/WebsiteStructure/Documents/3\_Research\_Insights</u> /3\_General\_SurveysReports/Failte-Ireland-s-tourism-facts-2015.pdf?ext=.pdf Hill, A. (May 2016) *Upland Communities Study*, published by the Irish Uplands Forum, available online: <u>http://irishuplandsforum.org/wp-content/uploads/2016/10/Irish-Uplands-Communities-Study-2016-FINAL.pdf</u>

HNV (2015) *High Nature Value Farmland Distribution*, map produced through the vIDEAL HNV Project, available online: <u>http://www.high-nature-value-farmland.ie/hnv-distribution/</u>

IPCC A to Z Peatlands – Blanket Bogs, webpage published by the Irish Peatland Conservation Council, <u>http://www.ipcc.ie/a-to-z-peatlands/blanket-bogs/</u>

Mountaineering Ireland (2016) *Developing Mountaineering Ireland's Vision for the Future of Ireland's Mountains - report on member consultation process October – November 2016,* available online: <u>http://www.mountaineering.ie/\_files/20161221182250\_dadac5fa.pdf</u>

NBDC (2015) *All-Ireland Pollinator Plan 2015-2020*, published by the National Biodiversity Data Centre, Waterford, available online: <u>http://www.biodiversityireland.ie/projects/irish-pollinator-initiative/all-ireland-pollinator-plan/</u>

O'Meara, C. (2015) *New approaches to flood prevention*, article published by the Irish Landscape Institute, available online: <u>http://www.irishlandscapeinstitute.com/news/articles/new-approaches-to-flood-prevention/</u>

Perrin *et al* (2014) *Guidelines for a national survey and conservation assessment of upland vegetation and habitats in Ireland, version 2.0* <u>https://www.npws.ie/sites/default/files/publications/pdf/IWM79.pdf</u>

POST (2016) *Green Space and Health - Houses of Parliament POSTnote 538*, published by the Parliamentary Office of Science and Technology, available online <u>http://researchbriefings.parliament.uk/ResearchBriefing/Summary/POST-PN-0538</u>

Renou-Wilson, F. et al (2011) BOGLAND: Sustainable Management of Peatlands in Ireland, publishedbytheEnvironmentalProtectionAgency,availableonline:http://erc.epa.ie/safer/iso19115/displayISO19115.jsp?isoID=236

SNH (2017) Wild Land section of Scottish Natural Heritage website, see <a href="http://www.snh.gov.uk/protecting-scotlands-nature/looking-after-landscapes/landscape-policy-and-guidance/wild-land/">http://www.snh.gov.uk/protecting-scotlands-nature/looking-after-landscapes/landscape-policy-and-guidance/wild-land/</a>

WRBD (2007) Further Characterisation of Small Streams and Development of a New Small Stream Risk Score (SSRS) Project Output Report, published by the Western River Basin District Project.