APPLYING 'LEAVE NO TRACE' IN THE TOURISM INDUSTRY:
A WILD ATLANTIC ADVENTURE

Abstract

'Leave No Trace' is a national programme aimed at raising awareness of Ireland's rich natural heritage and protecting the outdoors for future generations. This is achieved through education, research and partnership. The organisation has existed in Ireland for the last 10 years and its activity and influence are gaining momentum. Failte Ireland have adopted the programme in order to encourage environmentally responsible practices within the tourism industry. They state that 'The beauty of Leave No trace is that it's simple, reasonable and makes good sense' (Failte Ireland, 2010). However, a current challenge for the organisation is making its message relevant to the mainstream tourism industry. This research aims to examine how Leave No Trace principles can be applied within a variety of tourism businesses to contribute to the protection of the natural environment while benefitting the businesses, their product offerings and their clients. This research will utilise an innovative qualitative action research methodology encompassing a real 'Wild Atlantic Adventure' by bicycle in order to gather the data. The researcher will, at the same time, gather information and share expertise with business owners met along the way. This expertise comes as a result of being an experienced Leave No Trace Advanced Trainer with a broad knowledge of the tourism industry. The outcome of this research is the development, in partnership with Leave No Trace Ireland, of a toolkit designed to assist tourism businesses to apply Leave No Trace effectively in their own contexts.

Research Context

Recent years have witnessed a substantial recovery in Irish tourism performance with over 8.6 million international tourists in 2015 (Failte Ireland, 2016). There are several dynamics contributing to this trend, however, Failte Ireland's recently developed Wild Atlantic Way (WAW) programme appears already to have had a noteworthy impact. The WAW stretches from Donegal to west Cork with an overall aim "to develop a long-distance touring route that will achieve greater visibility for the west coast of Ireland in overseas tourist markets" (Failte Ireland, 2016). According to Michael Cawley, chairman of Failte Ireland, if awareness levels continue to increase, the true potential of this programme as a driver of tourism growth to the West of Ireland will be realised (Failte Ireland, 2016).

The western seaboard has always lagged behind economically. This "has been largely attributed to the decline in employment within the agriculture and traditional manufacturing sectors and the lack of suitable alternatives owing to a number of factors including the region's geographic isolation and relatively poor infrastructure" (Price, 2010, p. 20). Furthermore, recent years have seen a growing disparity in tourism numbers among the regions with Dublin benefiting the most as the average length of trip shortens and access to Dublin becomes easier.

Over the last 3 decades literature has extensively documented the benefits of tourism as a means of sustaining and improving the quality of life in rural areas through

diversification (Britton, 1991; King, 1993; Bramwell, 1994; Conlin and Baum, 1995; Buhalis, 1999; Long and Lane, 2000; Hunter et al, 2004; Lordkipanidze et al 2004). Employment, opportunities for indigenous enterprise development, the revitalisation of rural communities, conservation and preservation of cultural and environmental heritage and contribution towards the spatial balance of tourism activity are benefits particularly relevant in the case of the west of Ireland. Rural tourism development has also been explicitly identified nationally within the National Spatial Strategy 2002-2020 and the Action Plan for Jobs 2016 as a means of counteracting the negative impacts of agricultural decline and of contributing to regional economic and social balance. The Action Plan for Jobs 2016 specifically refers to the WAW programme as one which will "deliver balanced and sustainable revenue and jobs growth with greater geographical and seasonal spread and benefits to local communities in the West of Ireland".

As increasing numbers of tourists are enticed to enjoy the natural sites along the WAW their mark on the environment and its natural processes increases. Researchers believe that the sheer number of tourists visiting such sites has the potential to cause more harm than good (Lindsay et al., 2008; Day and Cai, 2012; Newsome et al., 2013; Das and Chatterjee, 2015). The impact of tourism on the natural environment is, by now, a well-established field of literature (e.g., Mishan, 1969, Mathieson and Wall, 1982, Hunter and Green, 1995, Mieczkowski, 1995; Holden, 2008). Tang (2015) identified the importance for the tourism industry in considering its environmental impacts, as its success relies on the appeal of attractive natural resources. Tourism can be particularly vulnerable to impacts such as dumping, water pollution, degradation of vegetation, or biodiversity loss (Kuo and Chen, 2009). Although it is not within the remit of this paper to examine negative impacts in detail, it is important in setting the context to note that litter, pollution, path erosion, disturbance to vegetation, wildlife, livestock and other people are indicators (already visible in some places on the WAW) of the need for greater environmental protection.

Despite a focus in the literature on the negative environmental effects of tourism, Orams and Luck (2014) state that "there are a number of cases where tourism has provided the impetus for improved conditions and enlightened management" (p.482). Newsome et al (2013) also claim that "natural area tourism can be beneficial to individuals, regions and countries – provided it is planned, developed and managed in a responsible manner" (p.2) adding that natural area tourism should be "underpinned by ecological sustainability and promoted and managed for optimal visitor experiences" (Newsome et al, 2013, p.14).

Failte Ireland are clearly mindful of the potential negative impacts of increased tourism. "The ruggedness of Atlantic Ireland belies its environmental sensitivity, which is reflected in the fact that a significant portion of the length of the Wild Atlantic Way is designated to protect its ecological, scenic, historic and cultural sensitivity" (Failte Ireland, 2015a). Evidencing this awareness, the WAW Operational

Programme 2015-2019 incorporates the development of an Environmental Surveying and Monitoring Strategy. An external monitoring group has been set up to oversee and guide this programme. The monitoring process examines the types, spatial patterns and intensity of existing visitor activities at areas known to receive maximum loading. This detailed research is to be commended and is evidence of what Orams and Luck (2014) refer to as 'enlightened management'. The outcome of this monitoring will provide strong evidence on which to base future interventions and management strategy.

One of the objectives of the abovementioned strategy is "to raise awareness and engender protection of the wealth of natural assets along the Atlantic coast" (Failte Ireland, 2015a, p5). Since the surveying and monitoring described focusses purely on the resource, it is not clear how Failte Ireland intend to achieve this objective which concentrates on people and their knowledge, behaviour and attitudes. Holden (2009) highlights the importance of tourists specifically, stating that their environmental ethics are deterministic to the balance of the tourism–environment relationship (Holden, 2009). Other studies further this case, highlighting education as crucial to reducing impacts by visitors to natural areas for all sites, from primitive through to the most developed (Cole, 1990; Lucas, 1990; Hammitt and Cole, 1998; Marion and Reid, 2007).

'Leave No Trace' is an outdoor ethics education programme which first began in the US over 20 years ago. It has been adopted (and adapted) in Ireland as a national programme aimed at raising awareness of Ireland's rich natural heritage and protecting the outdoors for future generations. This is achieved through education, research and partnership. The organisation has existed in Ireland for the last ten years and its activity and influence are gaining momentum. Its programme is based around seven principles: 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 (www.leavenotraceireland.org). Leave No Trace Ireland have a growing number of partnership organisations. Failte Ireland have been partners for a number of years and have adopted the programme in order to encourage environmentally responsible practices within the tourism industry. They state that 'The beauty of Leave No Trace is that it's simple, reasonable and makes good sense' (Fáilte Ireland, 2010).

Additional to the aforementioned surveying and monitoring strategy, one of the actions identified within the recent WAW Draft Operational Programme 2015-2019 (Failte Ireland, 2015b) is "to promote the Leave No Trace principles to both visitors and tourism providers" (action 37). However, the existing training structure used by Leave No Trace Ireland was not designed for the tourism context and will require customisation. It has not been established how this will be achieved and despite the clear need for a programme which increases awareness of our impacts on the natural environment and a growing amount of literature and learning resources for outdoor

users there are no existing resources designed specifically for the main stream tourism industry. If Failte Ireland want the tourism industry to adopt and spread these principles on the Wild Atlantic Way we need to identify the best way to encourage tourism businesses to get involved and communicate to them ways to practice and encourage responsible use of the natural environment. This challenge forms the premise of this research project.

Methodology

This research aims to examine how Leave No Trace principles can be applied by a variety of tourism businesses along the Wild Atlantic Way. This will be achieved through meeting the following objectives:

- Examine the current perceived role of tourism businesses with regard to environmental responsibility as individual entities and as an industry
- Establish current levels of awareness of Leave no Trace Ireland and initial attitudes towards the concept
- Investigate perceived positive outcomes and barriers to implementing Leave No Trace principles in tourism businesses
- Explore the most appropriate options with regard to communication and training tools to increase engagement with Leave No Trace in the tourism industry

This paper merely represents stage one of a larger project which aims to, following further research, work in partnership with Leave No Trace Ireland, Failte Ireland and the tourism industry to develop a toolkit designed to assist tourism businesses to apply Leave No Trace effectively in their own contexts.

In order to accomplish the above, this research was conducted using an innovative qualitative action research methodology encompassing a real 'Wild Atlantic Adventure' by bicycle in order to gather the data. The researcher, at the same time, gathered information and shared expertise with business owners encountered along the way. This expertise comes as a result of a combination of being both an experienced Leave No Trace Advanced Trainer and a tourism lecturer with a broad knowledge of the tourism industry.

Action research was deemed the most appropriate approach. Action research is learning by doing, whereby the researcher identifies a problem, does something to resolve it, and sees how successful their efforts were and, if not satisfied, tries again (O' Brien, 2001). Action Research approaches tend to be driven by the values of the researcher as well as the participants, who both share a common purpose and goal, which in this case is the sustainable development of tourism along the WAW. Due to this more collaborative partnership approach, the research is therefore conducted by, with, and for people, rather than on people (Coughlan and Brannick, 2010). It does not simply describe and explain the topic, but moreover initiates change. Dick (2002) observes that those who are affected by the change are usually involved in the research, which allows for understanding to be shared and the change to be pursued

with commitment. In the spirit of adventure, sharing and collaboration, a facebook page and twitter account were set up to record the journey, encourage others to get involved, allow participants to observe the greater project to which they contributed and raise awareness of the Leave No Trace programme and its relevance to tourism.

For this initial phase of the study the route from Coolaney, Co. Sligo to Westport Co. Mayo was chosen. This choice was based on convenience and also upon the existence of contacts nearby who could be called upon to rescue me if necessary (this was my first multi-day bike trip!). Some of the areas I had not visited before which provided me with further motivation. Much of this stretch of coast is rather underdeveloped when it comes to tourism and, although secondary to my main objective, I was interested in finding out how tourism businesses were being effected by the development of the WAW.

A sampling frame was formed from information gathered on the WAW website. All businesses with e-mail addresses who were on the chosen route were e-mailed. This e-mail introduced the project and myself and invited recipients to respond if they were willing to participate. This is known as self-selection sampling. This method reduced the amount of time necessary to locate participants and ensured that participants were likely to be committed to take part in the study, which was important as travelling by bike meant that I was restricted to a particular route and schedule. However, this sampling technique does lead to a degree of self-selection bias. For example, the decision to participate in the study may reflect an existing interest in environmental issues and it should be considered when examining the findings that this sample are likely to be more receptive to the Leave No Trace concept than some others in the industry. During this process I was also cognisant of the challenge of representing different types of businesses. The sample included hotels, B&Bs, activity providers, a café, a golf club, a visitors centre, a hostel and a garden. Based on the ground to be covered and the time available it was decided to aim for 3 interviews per day. Sufficient responses were achieved through the volunteering of email recipients. A small number had to be refused as they did not assimilate with the schedule or route. A total of 16 interviews were completed in total.

A semi-structured interview was the tool used for data collection. It incorporated 9 questions which gave the interview some structure whilst still allowing informants the freedom to express their views in their own terms. This method also facilitated data to be compared more easily during the analysis process. Interviews were held on the business premises and lasted between 15 and 30 minutes in length depending on how much respondents wished to elaborate on their answers. The interviews were recorded and transcribed and this data was subsequently analysed using Nvivo qualitative data analysis software.

Respondents were offered confidentiality in order to allow them to be open and prevent the withholding of useful information. Their quotes have thus been identified

by respondent numbers within the findings. Nevertheless, participants were happy for photos of themselves and their businesses to be posted on the 'Sophies Wild Atlantic Adventure' facebook page.

Findings and Discussion

To commence the interview, respondents were asked about their experience so far with the WAW programme. Most had noticed positive growth associated with the programme over the last two years. There were also specific patterns identified, for example, "a lot of one nighters … and our European market is increasing, German Swiss, Austrian, French, Italian" (Resp 10) and "a huge increase in cyclists and motorcyclists" (Resp 12).

Diagram 1: Environmental Responsibility
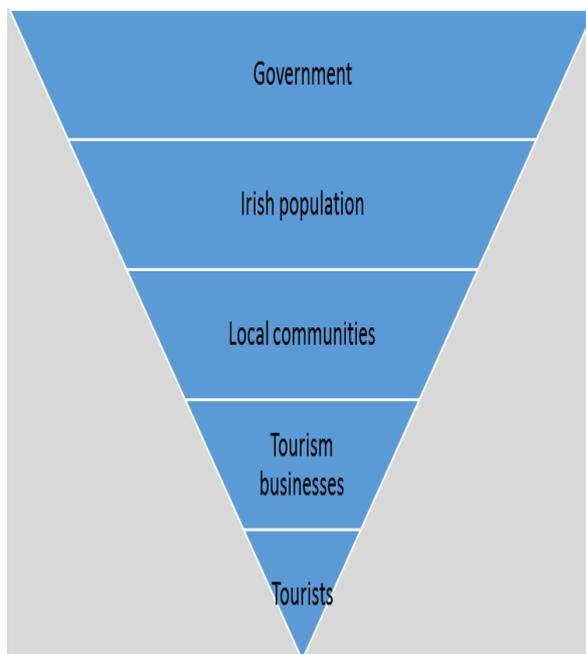
Interviewees were subsequently asked their opinion on the environmental responsibility of the tourism industry. Owing to the open-ended nature of this question, responses varied considerably and depended on the stakeholder group they focussed on. After a number of interviews, a picture began to emerge from the responses. Diagram 1 illustrates very generally who respondents attribute responsibility to in this context. The government's position at the top of the diagram indicates that they hold the greatest responsibility. This finding is similar to that of previous studies by Briedenhann and Wickens (2004) and Price (2010) who found that tourism businesses tend to redirect blame away from themselves and towards government agencies. Additionally, due to the generally small scale of tourism businesses (Lane, 1994; Shaw and Williams, 1994; Fuller-Love et al, 2006; Cawley and Gilmor, 2008; Price, 2010) their owners tend to feel underrepresented and powerless wen it comes to governance (Cawley et al, 2007).

Infrastructure was a major area of concern. Signposting, waste bins, 'hardened' pathways and other infrastructural elements were highlighted during the interviews. "If you had more waste bins I'm sure that everybody would use them" (resp 2). Hardening of pathways in popular walking areas was considered important to avoid erosion, "I think that proper pathways and signage is what's really needed, nobody's really sticking to one specific route so it just digs up everything" (resp 8). Croagh Patrick was mentioned as an example of erosion by interviewees. According to Jones

(2013), the width of the path along the "summit cone" of Croagh Patrick is in excess of 30 metres in width and is now encroaching into ecologically sensitive terrain.

Inadequate signposting has been cited by various sources over the last twenty years as a constraint on tourism development in the west of Ireland (WDC, 1999; Meldon et al, 2000; ITIC, 2003; Price, 2010; McCarron et al., 2015). However, some interviewees have found that parts of the WAW are now too heavily signposted, remarking that that the signposting itself is 'litter'. A specific scenic location in Mayo was described, "it's beautiful and then you come around the corner and it opens to you and there's a big sign WAW that's not necessary, it's in the middle of nowhere, there is no chance of taking the wrong turn or something" (resp. 5). Two separate interviewees in the local area commented specifically on the example of the development of tourism infrastructure at Downpatrick Head, near Killala, County Mayo. "A lot of people don't like it for a number of reasons because it detracts from the wild appeal of it" (resp. 12). On a practical note, it was also observed that "the installation has impacted the natural drainage of the headland so the headland is getting quite waterlogged and there's a lot of muck" (resp. 10).

Considering the situation from a broader standpoint, interesting cultural observations were made about the Irish and their attitudes towards the environment. Although Kelly et al (2007) document a growth in environmental concern and support for environmental initiatives in Ireland, observations made by interviewees were largely negative and in particular linked to roadside litter and dumping "I think Ireland is a bit slow in the whole getting involved … I think it's just peoples' mentality is different to the rest of the world" (resp. 3). Comparisons were drawn with European tourists "it depends enormously which countries people are from.. so if you have people from the continent like German, French, Dutch, etc. they are very much aware of the environmental impact I have to say" (resp. 2). These cultural differences were linked to education, awareness and more strict government regulation in European countries.

Although I was aware in advance that it was an issue, travelling by bike revealed the shocking extent of roadside litter and dumping. There seemed to be no corner of Sligo or Mayo which had been spared, even the most remote spots. The only let up occurred where there was an active local 'tidy towns' initiative or where individual homes or businesses kept their environs tidy. This was unsurprisingly raised as an issue several times. It was blamed on general poor environmental attitudes of locals, the cost of waste disposal, the lack of public litter bins and the irresponsible businesses practices of takeaway food producers. A 2013 study by Palomo-Navarro et al. (2013) proposes that decisions such as the privatisation of waste collection services and the introduction of new waste charges are contributors to illegal dumping in Ireland. It's obvious that if we want tourists to practice responsible environmental behaviour then we must set a good example, "the message then it is tidy up your own back yard first, because people do see it and if they think nobody cares then why should they care?" (resp. 5).

Community initiatives were highlighted by several interviewees as important, "we are a business but we're also part of the community … instead of it being put on one person that people pool together and make it work because it works for everyone, the tourists work for everyone" (resp. 7). Businesses recognised that it was in the interests of the industry as a whole to maintain the natural environment "that's what people come to see on the Wild Atlantic Way, its natural beauty" (resp. 1).

Several examples were offered regarding the role of the tourism industry in raising awareness among tourists of their possible impacts "maybe in tourism their role could be education but also management and setting a good example" (resp. 15). Considering that most places visited were relatively under developed with regard to tourism, it was perhaps unsurprising that interviewees felt that tourist numbers were, as yet, not a concern, "around here at the moment it's not an issue because we haven't got enough people" (resp. 4). Also noted was the type of tourists attracted by the rural areas of the WAW. An interviewee in northwest Mayo made the observation, "the people who come here look for intact environment, authentic experience … when it comes to our local experience I have to say they're very nice people who are very in tune with the environment" (resp. 5). There is little solid evidence within contemporary literature to prove that nature based tourists are more environmentally responsible however, Lanfranchi et al. (2014) state that an important element of their motivation is to preserve the natural and cultural features they have travelled to appreciate.

Figure 2: Responsible practices currently employed by tourism businesses
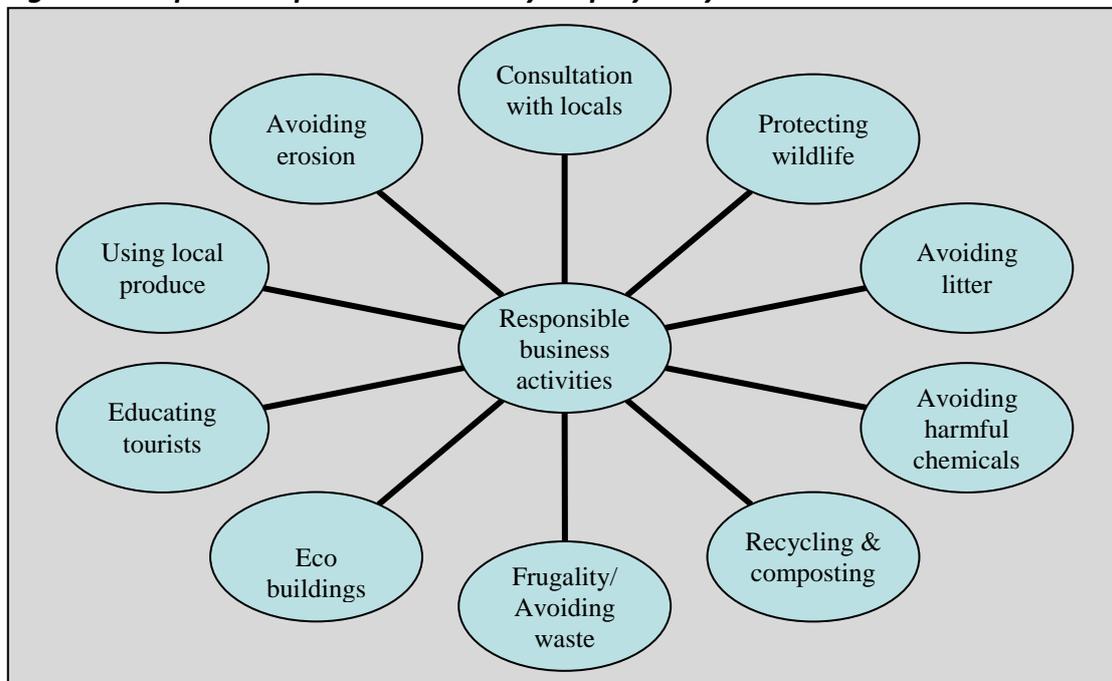
The above diagram illustrates the range of environmentally responsible activities currently carried out by the tourism businesses included in the research. The type of

practices undertaken are largely dependent on the type of business. Recycling and composting were by far the most common activities and cited by almost all respondents. Many did not declare any further activities, seeming unaware of further practices they could be applying. Most seemed regretful that they weren't already doing more and were open to ideas and suggestions to further their responsible practices. Research on the hospitality sector by Chan (2008; 2011) confirms that environmental knowledge and skill are essential factors in the implementation of environmental programmes. One simple idea was the use of reusable containers for lunches. One interviewee added, "when we give a boxed lunch to guests we give them a lunch box and we tell them to put all their stuff back into it and bring it back and we'll recycle it, we try not to wrap stuff in tin foil or anything like that" (resp. 10). Such simple ideas could easily be shared using a variety of communication methods.

Most respondents had not previously heard of Leave No Trace. Having read up on it in advance or introduced to the concept during the interview, they were all positive about the programme. One commented, "I think it's very much bringing the responsibility to the person" (resp. 2), illustrating the potential of Leave No Trace to inspire and empower people to take ownership. A few were familiar, one who had completed a basic Leave No Trace course said "well I tell people all about it but a lot of people haven't heard about it, I'd say 95% of people that I talk to" (resp. 16), further confirming an evident lack of awareness of the programme.

It is important to consider what motivates business owners to implement such strategies. Some are already 'tuned in', one saying "to me it's so natural to do it.. there would not be another way.. we're so privileged to be able to do it so I would almost ask why not?" (resp. 2). Best and Thapa's (2013) study on motivations for environmental management in the accommodation sector identified the existence of a 'green champion', (i.e. specific staff member who is enthusiastic and proactive about sustainability issues) as the principle factor effecting the level of environmental management implemented. This emphasises the need for tourism business owners to 'buy in' to the Leave No Trace concept. Many interviewees felt that the seven Leave No Trace principles were a way of passing on information and educating others. It was also important to some that the principles are not 'rules' for chastising people but rather a shared set of guidelines to assist people to minimise their impact.

From a commercial perspective there was an understanding that it was important for the natural environment to be protected and treated as a valuable asset in the interest of the economic sustainability of the product "well in the short term you really don't see it but in the long term interest of the tourism industry and preserving what we have which can be very fragile" (resp. 10). Competitive advantage and positive publicity have also been cited in tourism literature as motivations for adopting environmentally sustainable practices (Best and Thapa, 2013). It was surprising therefore that only two businesses, both hotels, brought up the benefit of responsible practices with regard to image and marketing "I think it's more for the image than anything" (resp. 3).

Not surprisingly, resources were highlighted as a barrier to adopting additional environmentally responsible business activities, "money basically, like any business the finances are very tight and trying to persuade anybody to spend any money.. if it's not going to make money" (resp. 3). Such constraints are reflected in tourism literature (Ayuso, 2007; Bramwell and Alletorp, 2001; Chan, 2008; Hobson and Essex, 2001; Knowles et al., 1999; Post and Altman, 1994; Stabler and Goodall, 1997; Tzschentke et al., 2008; Vernon et al., 2003). However, some interviewees were happy to overcome this barrier as they felt it was something personally important to them "it's a little bit more work at times but for me that's fine" (resp. 16), highlighting once again the importance of 'selling' the concept of Leave No Trace to the individuals themselves before expecting them to implement it.

Others felt that they did not want such practices to negatively effect their guests' experiences or the image of their business "I don't want them to think well she's mean.. I'd hate having to be all the time after them..." (resp. 6). Perhaps this would be less of an issue with a recognised programme, marketed and practiced throughout the industry. The final barrier identified relates back to figure 1 and focused on attitudes and education. One interviewee, referring to environmentally responsible behaviour in general, summed it up by saying "I think the main barrier is people, like we are our own worst enemy and we're also our best solution but it's just how do we change the problem into the solution" (resp. 15).

Respondents were asked what types of tools they thought would be most suitable to inform and educate themselves, their staff and other tourism businesses on the practical application of Leave No trace. Answers varied and revealed a need to use a variety of methods concurrently. With regard to Leave No Trace Ireland's current method of knowledge sharing, some liked the idea of attending a training, whereas others felt that they wouldn't have the time to attend. Time as a barrier may be somewhat addressed by running trainings on a local basis, in fact several business said that they would be happy to host a training on their premises. Business owners felt that the booklets and posters currently circulated by Leave No Trace Ireland are effective and many were enthusiastic about getting copies to distribute to clients.

Online sources such as webinars, short videos and social media were all considered as useful and positive "you catch people's eye on facebook and before they know it they've watched a five minute video and they realise that they've learned something" (resp. 7). Webinars were also considered a good idea to some. "I often do webinars actually I have one scheduled tomorrow, they're usually pretty good, they can be quite informative they just last an hour, and I do those because an hour is worth while if you come away with one idea" (resp. 10). As mentioned above, most businesses are demonstrating some environmentally responsible practices but are perhaps unsure about what else they can do "well I'd really like to know what can you advise me to do? what are other B&Bs doing? I certainly feel like I don't be doing enough" (resp.

6). Developing tools or a forum to communicate with tourism business owners would appear to be the best way of sharing some of the great ideas for responsible business practices that some businesses are currently using.

Conclusion

In conclusion, it should be remembered that this is merely the initial phase of a larger study. Nevertheless, some noteworthy findings have been revealed and ideas on the practical final outcomes of the study have already begun to emerge. Respondents viewed the role of the government and its agencies as central to environmental issues. They were happy to do their bit but generally there was a feeling of individual powerlessness which is often found among small businesses. The general lack of awareness of the Leave No Trace Programme illustrates the magnitude of the task of implementing it along the WAW, although the positive reception was encouraging. Any further development must nurture this positivity through illustrating the benefits to the business of implenting the principles and minimising the identfied barriers. There is clearly no simple solution in finding the appropriate approach to communicate with and train tourism business owners. However, it is evident that a multi method approach using innovative, attractive and user friendly resources is imperative to the success of applying the Leave No Trace programme within the tourism industry.

References

Ayuso, S. (2007) "Comparing Voluntary Policy Instruments For Sustainable Tourism: The Experience Of The Spanish Hotel Sector". Journal of Sustainable Tourism 15 (2) page 144

Best, M. and Thapa, B. (2013) "Motives, Facilitators And Constraints Of Environmental Management In The Caribbean Accommodations Sector". Journal of Cleaner Production 52 (1) pages 165–175

Bramwell, B. (1994) "Rural Tourism and Sustainable Rural Tourism" in Bramwell and Lane (eds) Rural Tourism and Sustainable Rural Development: proceedings of the second international school on rural development, 28 June-9 July, 1993, University College Galway, Ireland, pages1-6

Bramwell, B. and Alletorp, L. (2001) "Attitudes In The Danish Tourism Industry To The Roles Of Business And Government In Sustainable Tourism". The International Journal of Tourism Research 3 (2) page 91

Briedenhann, J. and Wickens, E. (2004) "Tourism Routes As A Tool For The Economic Development Of Rural Areas—Vibrant Hope Or Impossible Dream?" Tourism Management 25 (1) pages 71–79

Britton, S. (1991) "Tourism, Capital, and Place: Towards a Critical Geography of Tourism" Environment and Planning D: Society and Space 11 pages 451–478.

Buhalis, D. (1999) "Tourism in the Greek Islands: The Issues of Peripherality, Competitiveness and Development" International Journal of Tourism Research 1 (5) pages 341-359

Cawley, M., Marsat, J. and Gillmor, D.A. (2007) "Promoting Integrated Rural Tourism: Comparative Perspectives on Institutional Networking in France and Ireland" Tourism Geographies 9 (4) pages 405-420

Chan, E.S.W. (2008) "Barriers To EMS In The Hotel Industry" IJHM 27 (2) pages 187–196

Chan, E.S.W. (2011) "Implementing Environmental Management Systems In Small-And Medium-Sized Hotels: Obstacles." J. Hospit. Tourism Res. 35 (1) pages 3–23

Coghlan, D. and Brannick, T. (2010) "Doing Action Research in Your Own Organization", London: Sage

Cole, D.N. (1990) "Ecological Impacts of Wilderness Recreation and their Management" In J.C. Hendee, G.H. Stankey and R.C. Lucas (eds) Wildernes Management, pages 425-466 Golden: CO, North American Press

Conlin, M.V. and Baum, T. (1995) "Island Tourism: Management Principles and Practice" Wiley, Chicester

Das, M., and Chatterjee, B. (2015). "Ecotourism: A Panacea Or A Predicament?" Tourism Management Perspectives, 14 pages 3-16

Day, J. and Cai, L (2012), "Environmental and Energy Related Challenges to Sustainable Tourism in the United States and China," International Journal of Sustainable Development & World Ecology 9 (5) pages 379-388

Department of Jobs, Enterprise and Innovation (2016) "Action Plan for Jobs 2016" accessed 5th June 2016 from https://www.djei.ie/en/What-We-Do/Jobs-Workplace-and-Skills/Action-Plan-for-Jobs/

Dick, B. (2002) 'Action research: action and research' accessed 5th June 2016 from www.scu.edu.au/schools/gcm/ar/arp/aandr.h

Failte Ireland (2010) "Leave No Trace in Ireland" accessed 5th june 2016 from http://www.failteireland.ie/Utility/News-Features/News-Library/Leave-No-Trace-in-Ireland.aspx

Failte ireland (2015a) "Report To Monitoring Committee Of 2015 Environmental Surveying And Monitoring Programme Of The Wild Atlantic Way" accessed 3rd June 2016 from
http://www.failteireland.ie/FailteIreland/media/WebsiteStructure/Documents/4_Corporate_Documents/Strategy_Operations_Plans/Report-to-Monitoring-Committee-2015.pdf

Failte Ireland (2015b) "Wild Atlantic Way Draft Operational Programme 2015-2019" accessed 31st May 2016 from http://www.failteireland.ie/FailteIreland/media/WebsiteStructure/Documents/2_Develop_Your_Business/Key%20Projects/DRAFT-Wild-Atlantic-Way-Operational-Programme-25-03-15.pdf

Failte Ireland (2016) "The Wild Atlantic Way" accessed 26th May 2016 from http://www.failteireland.ie/Wild-Atlantic-Way/The-Wild-Atlantic-Way.aspx

Hammitt, W.E. and Cole, D.N (1998) "Wildland Recreation: Ecology and Management" New York: Wiley

Hobson, K. and Essex, S. (2001) "Sustainable tourism: a view from accommodation businesses" Service Industries Journal 21 (4) page 133

Holden, A. (2008) "Environment and Tourism" 2nd edition, Oxon: Routledge.

Holden, A. (2009) "The Environment-Tourism Nexus: Influence of Market Ethics" Annals of Tourism Research 36 (3) Pages 373–389

Hunter, B.A., Commins, P. and McDonagh, P. (2004) "An Approach to Developing Tourism in Rural Areas: Lessons Learned From a Regional Case Study" accessed 12th Aug 2006 from http://www.teagasc.ie

Hunter, C. and Green, H. (1995) "Tourism and the Environment. A Sustainable Relationship" Routledge, London

ITIC (Irish Tourist Industry Confederation) prepared in association with Tansey, Webster, Stewart and Co., (March 2003) "Submission to the Tourism Policy Review Group" accessed 26th Feb 2004 from http://www.tourismreview.ie/submissions.htm.

Jones, E. (2013) "Croagh Patrick Footpath Condition Report" accessed 7th Nov 2014 from http://www.mountaineering.ie/_files/Elfyn%20Jones%20Croagh%20Patrick%20Report%20-%20May%202013.pdf

Kelly, M.,Tovey, H., and Faughnan, P., (2007) "Environmental Attitudes, Values and Behaviour in Ireland" accessed 22nd May 2016 from https://www.epa.ie/pubs/reports/research/econ/ertdi%2065%20kelly%20report%20for%20web.pdf

King, R. (1993) "The Geographical Fascination of Islands" in Lockart, D. Drakakis-Smith, D. and Schembri, J. (eds.) The Development Process in Small Island States, Routledge, London, pages 13-37

Knowles, T., Macmillan, S., Palmer, J., Grabowski, P. and Hashimoto, A. (1999) "The Development Of Environmental Initiatives In Tourism: Responses From The London Hotel Sector" International Journal of Tourism Research 1 (4) page 255

Kuo, N.W. and Chen, P.H. (2009) "Quantifying Energy Use, Carbon Dioxide Emission, And Other Environmental Loads From Island Tourism Based On A Life Cycle Assessment Approach" J. Clean. Production 17 (15) pages 1324–1330

Lanfranchi, M., Giannetto, C. and De Pascale, A. (2014) "Nature Based Tourism: Natural Balance, Impacts And Management" Calitatea 15 (1) pages 224-229

Lindsay, K., Craig, J. and Low, M., (2008) "Tourism and conservation: the effects of track proximity on avian reproductive success and nest selection in an open sanctuary" Tourism Management 29 pages 730-739

Long P. and Lane B (2000) "Rural Tourism Development" in Gartner, W.C. and Lime, D.W. Trends in Outdoor Recreation, Leisure and Tourism Cabi Publishing, UK pages 299—308.

Lordkipanidze, M., Brezet, H. and Backman, M. (2005) "The Entrepreneurship Factor in Sustainable Tourism Development" Journal of Cleaner Production 13 pages 787-798.

Lucas, R.C. (1990) "The Wilderness Experience and managing the factors that influence it" In J.C. Hendee, G.H. Stankee and R.C. Lucas (eds) Wilderness Management, pages 469-499, Golden, CO: North America Press

Marion, J.L., and Reid, S.E., 2001. "Development of the U . S . Leave No Trace Program : An Historical Perspective" accessed 18th May 2016 from https://lnt.org/sites/default/files/Leave_No_Trace_History_Paper.pdf

Marion, J. L., and Reid, S. E. (2007) "Minimizing visitor impacts to protected areas: The efficacy of low impact education programs" Journal of Sustainable Tourism, 15, pages 5–26

Mathieson, A. & Wall, G. (1982), "Tourism: economic, physical and social impacts", Longman: Harlow, UK

McCarron, C., McCusker, P. and Ó hAnnracháin, C. (2015) 'The Wild Atlantic Way as a catalyst for tourism and sustainable employment development in the North West of Ireland', presented at the 11th Annual Tourism and Hospitality Research in Ireland Conference (THRIC 2015),

Meldon J., Sweeney, M. and Douglas, I. (2000) "Mayo-Sustainable Tourism in the Coastal Zone" An Taisce, Dublin.

Mieczkowski, Z. (1995) "Environmental Issues of Tourism and Recreation" Maryland: University Press of America.

Mishan, E. (1969) "The Costs of Economic Growth" Harmondsworth: Penguin

Newsome, D., Moore, S.A. and Dowling, R.K. (2013) "Natural area tourism: Ecology, impacts and management" 2nd ed., Channel View Publications, Clevedon

O'Brien, R. (2001), "An Overview of Methodological Approach of Action Research" In Roberto Richardson (ed.), Theory and Practice of Action Research, Joao Pesso, Brazil.

Orams, M. B., and Lück, M. (2014) "Coastal and marine tourism: Emerging issues, future trends and research priorities" In A. L. Lew, C. M. Hall and A. M. Williams (Eds.). The Wiley-Blackwell companion to tourism, UK: Wiley-Blackwell

Palomo-Navarro, A, McDermott, A., Dooley, J. and Farrell, R. (2013) "An Investigation Into Environmental Waste Enforcement In Ireland" Irish Geography 46 (3) pages. 213-230

Post, J.E. and Altman, B.W. (1994) "Managing The Environmental Change Process: Barriers And Opportunities" Journal of Organisational Change Management 7 (4) page 64

Price, S. (2010) "Constraints on the Development of Rural Tourism Enterprise Development in the West of Ireland" Unpublished PhD thesis, I.T. Sligo

Stabler, M.J. and Goodall, B. (1997) "Environmental awareness, action and performance in the Guernsey hospitality sector" Tourism Management 18 (1) page 19

Tang, Z. (2015) "An Integrated Approach To Evaluating The Coupling Coordination Between Tourism And The Environment" Tourism management 46, Pages 11–19

Tzschentke, A.N., Kirk, D., and Lynch, P.A., (2008) "Going green: decisional factors in small hospitality operations" International Journal of Hospitality Management 27 (1)

Vernon, J., Essex, S., Pinder, P. and Curry, K. (2003) "The greening of tourism micro-businesses: outcomes of focus group investigations in South East Cornwall" Business Strategy and the Environment 12 (1) page 49

WDC (Western Development Commission), (1999) "Blueprint for Tourism Development in the West" accessed 27th Oct 2003, from http://www.wdc.ie/publications_reports/blueprint_tourism.pdf.