Is Ireland Making the Most Out of its Mountains for its Recreational Mountain Bikers?

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Chapter One

Introduction
1.1 Introduction

The numbers involved in mountain biking as a recreational activity have increased rapidly in the past decade (Mason & Leberman, 2000), requiring different management approaches, which have in the past often been reactive rather than proactive (Hendricks, 1997). With this trend occurring in Ireland, it is essential to study the effects of an increase in this user group on Irish trails in order to ensure a proactive approach is taken.

1.2 Statement of the Problem

The problem in this research project addresses the lack of knowledge and understanding of mountain biking as a recreational activity in Ireland. The research sets out to explore whether or not “Ireland is making the most out its Mountains for its recreational mountain bikers”.

1.3 Objectives

The author has established four objectives to help solve the problem:

1. Compare the characteristics, preferences, and attitudes of mountain bikers in the Republic of Ireland.
2. Examine the access issues involved with mountain biking in the Republic of Ireland and participation levels in trail building.
3. To get a better understanding of the issues currently involved in the Irish mountain biking scene.
4. To see what Coillte, is currently creating, in regards to mountain biking facilities and their plans for the future.
1.4 Outline of Research Methodology

In order to determine the necessary research objectives to solve the research problem, the researcher carried out an extensive academic literature review on the topic of mountain biking and recreational development.

Primary research was gathered using two different questionnaires aimed at the Irish recreational mountain biker community and two hiking/hill-walking clubs that are situated in the Dublin region. Two semi-structured interviews with Sean Herlihy Mountain Biking Ireland (MBI) and Recreational Officer for Coillte, Daithi Deforge, took place in order to get a better understanding of the key issues and challenges currently involved with mountain biking as a recreational activity in the Republic of Ireland. These issues and challenges are compared with the findings of the academic literature review and the results of the questionnaires. The researcher adds his own views and finally draws conclusions from the piece of research and makes recommendations aimed at implementing a strategy for recreational mountain biking.

1.5 Structure of the Thesis

The thesis is organized into six chapters, each of which comprises a distinct portion of the research.

Chapter One introduces and provides an overview to the thesis. The chapter identifies the problem being researched, presents the research rationale and the subsequent purpose of the research objectives.

Chapter Two explores the existing literature pertaining to the research topic. This information provides a foundation for the research. In addition, an examination of the literature from a global to a local perspective reveals gaps in the research, which can be filled by this and other studies. The literature review aims to inform the reader of this thesis on the subject matter area and also provides a framework for primary research.
Chapter Three outlines how the research was conducted, outlining the methodology used to gather the relevant data. It outlines research objectives and the methods used to obtain secondary and primary data. It outlines each of the stages of data collection and justifies the choice of methodologies.

Chapter Four presents the findings from the research. The results for the two questionnaires used are presented and the findings from interviews are established.

Chapter Five dissects the primary research and presents the results. The findings are categorized into subject matters developed by the objectives of the study. This chapter attempts to bring the findings from the literature review and the primary research together.

Chapter Six provides the conclusions drawn together by the author from the analysis of the research results. The conclusions relating to the problem and objectives of the study are presented. Recommendations and suggestions for further research were also outlined where relevant. Finally, possible limitations of the study were recognized.
Chapter Two
Literature Review
2.1 Introduction

The purpose of this research is to give the reader a basic understanding of the different aspects involved in mountain biking at an international and local level. Impacts of mountain biking are discussed along with many of the perceptions held by others regarding the recreational activity. This chapter finally looks at recreational tourism and the link between the two.

2.2 Mountain Biking.

The aim of this section is to provide the reader with an understanding of mountain biking as a recreational activity and its current status in Ireland.

2.2.1 Brief Definition and History

Mountain biking may be best described as a segment of cycling that is focused primarily on off-pavement travel. Mountain bikes are designed with wider tires, a more upright riding position, and lower gearing than their on-pavement counterparts, and can accommodate a wide variety of riding surfaces, including pavement, gravel, rock, grass, and most soils (Koepke, 2005). Mountain biking is a relatively new recreational activity that developed around the late 1970s and early 1980s (Ryan, 2005). It is evident that the popularity of mountain biking has continued to grow worldwide ever since. According to the National Survey on Recreation and the Environment (2003), bicycling is the second most popular land-based recreation activity in the United States. A study by Hollenhorst et al. (1995) indicated that the majority of mountain bikers in national forests were young, highly educated affluent males from urban areas.

As the number of mountain bikers has increased, the number of riders seeking opportunities to ride off-road has also increased. Without dedicated mountain bike trails or areas to ride, mountain bikers have typically found their own places to ride and have usually turned to fire trails and walking tracks (Ryan, 2005).

The terms “double-track” and “single-track” are often used in describing the trails used by mountain bikers. Doubletrack refers to routes that were either created by or are wide
enough to accommodate passenger or all-terrain vehicles (ATVs) (Koepke, 2005). Single-track, on the other hand, refers to a trail or pathway that is only wide enough to accommodate users travelling in single file. These trails, which are usually 12-24 inches wide, are preferred by many mountain bikers for their greater technical and physical challenge (Morey, Buchanan, & Waldman, 2002). Single-track trails tend to wind around obstacles such as trees, large rocks and bushes; blending into the surrounding environment (IMBA, 2007). It is the most sought after experience for mountain bikers, as it provides users with a closer connection to nature, segregation from motorized vehicles, and more challenging or varied experiences than double-track roads can provide (Koepke, 2005).

Within the context of a rapid growth in outdoor recreation over the last 20 years, mountain biking is a relatively new activity when compared, for example to hiking/hill-walking, rock climbing, and kayaking (Mason & Leberman, 2000). Mountain biking requires similar geographical characteristics to other outdoor activities and hence the pressures on public land have grown accordingly (Mason & Leberman, 2000). The numbers involved in mountain biking have increased rapidly in the past decade and accompanying this growth has been the development of clubs to represent mountain biker needs to land managers, as well as providing competitive and social activities for their members (Mason & Leberman, 2000). As mountain biking is a unique outdoor activity, it requires different management approaches, which have in the past often been reactive rather than proactive (Hendricks, 1997).

2.2.2 Types of Mountain Biking

Mountain bike technology is rapidly changing and as it improves, riding styles change. As bikes become lighter, have greater suspension, become stronger and more efficient to pedal, people are riding distances and trails that would have not been imaginable 20 years ago (Ryan, 2005). Mountain biking can be divided into many different categories offering different challenges for the participant. The two main different categories of mountain biking as described by Ben Marhant (2007) are:

Cross-country (XC) - This is the most common type of mountain biking. It means riding on climbs across different types of terrain. There is also cross-country racing, which is more physically demanding. Cross-country riding is commonly focused on racing in
which groups of riders follow a specific course, off-road, but has also become a general
term for riding. Racing is highly competitive and is similar to cross-country running.
There is a World Championship and a World Cup competition. Cross-country has been
an Olympic sport for the last three Olympiads. Riders use lightweight bikes,
increasingly using full suspension. Cross-country is the most prolific of all the
divisions of mountain biking.

Downhill (DH) – This is the most dangerous aspect of the sport. Courses are similar to
downhill ski runs but are very technical with exposed rocks, roots and jumps. The aim
is to get from the top of the hill to the bottom of the hill in the shortest time possible.
Like cross-country, there is a World Championship and a World Cup series but is not
currently an Olympic sport. Bikes have up to ten inches of suspension front and rear
and are very robust. Races attract big crowds due largely to the element of danger and
thrill of speed. Riders commonly wear full-face helmets and full-body armour.
Downhill bikes are designed specifically for downhill racing. They are built to take a
beating, and as efficient as a 40lb. bike can be for fast acceleration. They are all about
performance, especially suspension performance, and are not built to really go up hill at
all. These bikes are built to get down a downhill course as fast as possible, whatever it
takes.

Part of the development of downhill and the more extreme riding styles is that some
people will always be willing to test the limits of the technology. Similarly, trail
builders will build trails that test both their ability and new bike technology. Therefore,
land managers need to be aware that freeriding, in particular, is constantly evolving.
Because of this, trails will need to be adaptable to allow technical features to be
changed, or new ones added, in order to challenge riders. Land managers must also
provide a range of opportunities to test individuals at different skill levels.

2.2.3 Current Mountain Biking Scene in Ireland

Unlike mountain biking in the UK, where there is an increasingly healthy number of
trails and rides to satisfy all abilities and experience, mountain biking in Ireland has
remained recreationally isolated, having little or no say in access or trail building (Gray,
2006). The majority of desirable areas in the Republic are mostly owned by the
government owned forestry body Coillte, and the National Parks Authority (NPA).
Both these institutions in the past have shown little or no interest in promoting let alone allowing mountain bike riders on their lands (Gray, 2006). Coillte does not have an actual ban on MTB activities in its forests, but has gone to the trouble of erecting signs to prevent such activities in the more populous areas of Ireland, particularly the South of Dublin (Appendix A). However, the laws invoked to prevent this access have come under trespassing regulations, which were virtually impossible to enforce or prosecute (Gray, 2006). As a result, MTB activity continued in all areas under control of Coillte and the National Parks without any prosecutions. If you wanted to go mountain biking, all that was needed was a bit of common sense on topography and trail reading (Gray, 2006).

In Ireland, as mountain biking is acceptable, but is generally not encouraged or promoted, most areas to bikes are often only known to local riders (Gray, 2006). Riders seeking narrow single-track, will either use walking tracks illegally, make their own trails or go elsewhere (Gray, 2006). In Ireland, there are an increasing number of illegal trails and technical trail features (TTF) being constructed on public land (Gray, 2006). When riders make their own technical features they are usually unauthorized, unplanned, poorly constructed, environmentally unstable and often unsafe for riders and other users (Gray, 2006). While this is an undesirable situation for land managers, it clearly illustrates an unmet demand for specific mountain bike facilities (Gray, 2006).

**Current Actions**

All this changed in the later part of 2005 when Coillte released a program on recreational activities in their forests and for the first time acknowledged mountain biking as a sport both suitable and desirable for their forests (Gray, 2006).

Regarding facilities and access, a number of improvements have been made during 2006. Purpose built MTB Parks will be located in Limerick, Wicklow and an unnamed location in the North West, with Coillte working in partnership with Failte Ireland and local community groups (Gray, 2006). A National Downhill MTB Centre is also set to open to all members of Cycling Ireland, and will also be used for MTB competitive events (Gray, 2006). In the Wicklow area, the joining together of Coillte, MTB enthusiasts and a local club, has led to work beginning on Kindlestown Wood, with way
marked trails being developed, and educating local MTB riders on trail behaviour, etc (Gray, 2006).

Their recreational unit spent some time in the UK visiting the various MTB trail centres like Coed-y-Brenin and 7Staines as well as meeting with the creator of these trails, Dafydd Davis, in order to explore recreating the same opportunities in Ireland (Gray, 2006). These trails are to be built in conjunction with the tourist board, Failte Ireland, and as commendable strategy are sited away from the normal tourist locations around the country (Gray, 2006).

The three trails are being built near Killary Harbour in Mayo (16km of trails), Ballinastoe Forest in North Wicklow (26km), and in the Ballyhoura range on the Limerick/Cork border (88km) (Gary, 2006). All of these trails are being built by Dafydd Davis and are actively supported by the local councils and communities (Gray, 2006).

2.3 Success Stories and Lessons for Aspiring Destinations

The potential economic benefits of providing high quality mountain bike facilities in Ireland are difficult to quantify because of the limited number of opportunities that currently exist. However, it is possible to draw on international experiences to demonstrate the economic benefits to an area that actively seeks to attract mountain bikers.

2.3.1 Wales

The Welsh Mountain Bike initiative started with a single forestry worker who had a passion for mountain biking. Dafydd Davis worked in a small forestry reserve, Coed-y-Brenin, in the west of Wales, which had declining visitation rates. Working with an initial budget of 750 Sterling and a few dedicated volunteers, he managed to develop the area into a highly successful mountain bike park. As the initial trails at Coed y Brenin became popular, more trails were added and high profile events were held at the site dramatically increasing the number of visitors coming specifically to ride the trails.
2.3.2 Scotland

Seeing the success of the Welsh Initiative, and with a devastated tourist industry after the foot-and-mouth outbreak, the Forestry Commission in Scotland saw potential to develop mountain bike parks as a way of boosting visitor numbers to the south of Scotland.

The Forestry Commission decided to build seven mountain bike parks, known as 7stanes (from the Scottish word for stone), using European Union funding to initiate the project. The project now has a two million sterling budget and the length of the trail network continues to grow each year.

2.3.3 Whistler

Whistler Mountain Bike Park, in British Columbia, Canada, is very different from the mountain bike park of Wales and Scotland, which predominately cater for cross-country riders on single-tracks. With mountains and dramatic changes in altitude, such facilities are very popular with freeride and downhill riders.

Visitor statistics from Whistler show that mountain biking is mirroring the development of snowboarding in the 1980s. Initially, it was seen as an “extreme” or unpopular fringe activity. However it is now seen as an essential component for the survival of the resort and municipality during the summer months. When the lifts were opened to mountain bike riders in 1999, they recorded 10,000 mountain bike visits (Bennett, 2004). By 2005, the number of mountain bike visitors reached 98,000 (Barkman, 2006). This rapid growth in MTB tourists highlights the fact that there has been a significant growth in the sport and opportunities exist in other areas around the world to capitalise on this growing tourist market.

In Whistler, the government recognizes mountain biking trails, and puts municipal and tax dollars into maintaining the trails (Mitchell, 2007).

While communities and tourism organizations acknowledge that mountain biking tourism generates economic activity, quantifiable data is needed to demonstrate the
value of the trails, encourage investment in infrastructure, and establish appropriate trail management policies.

Jane Koepke (2005), from the Cycling Association of Yukon, highlights seven lessons for aspiring mountain biking destinations.

1. Destination image persists, so make sure it’s positive.

The mental images accumulated about a region can form a destination image that has the power to lure visitors for many years. Moab and British Columbia have capitalized heavily on the power of photography and media in developing icon destination images in the minds of a global audience. In designing marketing strategies, weaknesses, accuracies and inaccuracies and effectively addressed in promotional strategies.

2. A reputation is based more on substance than style.

The creation of a destination reputation relies on the initial discovery of a place by core enthusiasts and their subsequent word of mouth advertising. The reputations of Moab and Whistler for example, grew quickly first within the core mountain biking community, and subsequently the broader market of adventure travelers. Catering to the requirements of core enthusiasts thus ensures that subsequent larger segments of the adventure travel market will follow in their footsteps. The challenge lies in achieving a level of growth and development that ensures a viable industry encouraging enthusiasts to make repeat visits while providing positive word of mouth advertising.

3. Small is beautiful.

In smaller regions mountain biking can thrive and become a major economic contributor. West Virginia, Scotland, and Wales used their “smallness” to their advantage in marketing to large urban populations seeking an escape from city life. Small size, relative remoteness, and lack of a major airport need not prevent a destination from attracting major international competitions and reaping significant economic benefits.
4. Partnerships and politics produce results.

Mountain bike tourism can be helped enormously through partnerships, both at the community and higher political levels. Dafydd Davis’ vision in Wales would have never materialized without funding and political support from partners. In Whistler, partnering with local trail builders ensures that their trail product stays cutting edge. In West Virginia, combining government marketing power with volunteer efforts of the mountain biking community allowed the region to create and promote a strong calendar of mountain biking events.

5. Build it and they will come.

It is evident that investments in purpose-built single-track for mountain bikers tend to pay off. If a market-responsive destination image can be developed and the trail and scenery attributes meet visitor expectations, a region will be able to attract mountain bikers. In determining what or where to build, a potential destination needs to look closely at its existing trail infrastructure and its terrain and scenic resources, and determine how these can be combined or enhanced to create a trail product that meets market expectations.

6. Create an experience, and make it unique.

Differentiation from competitors is an essential component of destination positioning. The local culture, while not easily defined, mountain bike related or not, can be a useful way to differentiate a destination.

7. Numbers do count.

Mountain biking tourism tends to fly under the political radar in destinations that do not actively monitor mountain bike visits or expenditures. Ongoing monitoring and data collection takes place in Scotland and Wales, where mountain biking tourism was a planned initiative. This information has been critical in building support for large initiatives such as the Fort William World Championships. In addition to building a case for mountain bike and trails-based tourism, numbers help inform and direct
marketing efforts. They can also prove to be useful in evaluating the potential value of competing land or recreational uses in an area.

2.4 Impacts of Mountain Biking

A variety of social and physical impacts are attributed to mountain biking. In the early 1980s and 1990s researchers began the study of the social and environment consequences of mountain biking. The recreational use of natural areas inevitably results in some degree of change to resource conditions, and managers must consider the social acceptability and ecological significance of such changes in their decision-making (White et al., 2006). Management issues include the safety of trail users, conflict, crowding, and resource degradation (White et al., 2006). The increase in mountain biking popularity thus far has outpaced efforts to understand this activity’s associated impacts, leading to confusion, user conflict, and in some cases, strict regulations for mountain biking on public lands (Edgar, 1997). In the absence of sound scientific information, managers may apply a precautionary principle, and choose to restrict use or take regulatory action that is based on intuition, influence from advocacy groups, and questionable studies (White et al., 2006). It is necessary therefore, to understand the physical and social impacts of mountain biking to aid in the development of the best management practices that support sustainable mountain biking on established and properly constructed recreational trails.

2.4.1 Physical Impacts

A rapid increase in mountain biking over the past thirty years has led to concerns about the ecological impact to recreation environments, especially trails (White et al., 2006). Studies have taken place in Australia, Montana, the Southwestern U.S., and New Zealand (Geoft & Alder, 2001; Wilson & Seney, 1994; White et al., 2006; Mason & Leberman, 2000). They all seem to come to the same conclusions and agree that the degree of impact from mountain bikes, relative to those of walkers, appear to be similar. It has not been established in the research to date, that mountain bikes have greater overall impact on tracks that do walkers. However, it is obvious that mountain bikes do have some different types of impacts, but would not be appropriate to state that one is any “worse” than the other. It would appear that the main physical implication from the
advent of mountain biking. This really lies in the increase in user numbers they may represent, rather than the nature of the new activity in itself (Sprung, 2007). In recent years, many hiking and environmental groups have lobbied to ban mountain bikes from trails on the grounds that mountain bikes damage the environment (Sprung, 2007). Increasing popularity of mountain biking has outpaced efforts to understand the activities associated environmental impacts, which has in many cases led to strict regulations for mountain biking on public lands (White et al., 2006). In some cases managers have implemented actions such as spatial and temporal zoning, dispersal strategies, and trail closures to address concerns (Cessford, 1995a). Such direct management actions that limit access can be controversial and raise issues of equity (Cessford, 1995a). Furthermore, the lack of scientific understanding of the ecological impacts on mountain bike trails limits informed decision-making (Cessford 1995a). A nation wide study of U.S. state park directors conducted by Schuett (1997) demonstrated the potential for uninformed management actions. Schuett (1997) found that 67% of state park directors felt that resource degradation from mountain biking was a problem in their parks, but less than 13% of the park systems had actually conducted any studies to assess the resource impacts of mountain biking. Similarly, Chavez (1993) cited studies that suggested U.S. Forest Service and U.S. National Park Service managers were concerned about resource degradation from mountain biking, but managers could not discern whether damage was specifically because of mountain bike use.

Extensive research has been undertaken in the U.S., Canada, Australia, and New Zealand regarding the physical impacts of mountain biking (White et al., 2006, Thurston & Reader, 2001; Geoff & Alder, 2001; Cessford, 1995a, 1995b).

Mountain bikers will have impacts on the environment, including the soils, vegetation, water, and wildlife, like any outdoor recreationists. But because most riders and hikers tend to stay on the tracks, wider environmental consequences are minimal because the direct physical effects are generally confined to the track surface (Cessford, 2002). All forms of recreation – including bicycling, hiking, running, horseback riding, fishing, hunting, bird watching, and off-road motorized vehicles cause impacts to the environment (Sprung, 2007).
Wilson & Seney (1994) performed a study which examined the relative impact of hikers, horses, motorcycles, and off-road bicycles in terms of water runoff and sediment yield from 108 sample plots on existing trails in or near Gallatin National Forest, Montana. Multiple comparison test results showed that horses and hikers made more sediment available than the wheels of off-road bicycles and that this effect was most pronounced on pre-wetted trails (Wilson & Seney, 1994).

Goeft and Alder (2001) studied the erosion effects of bicycling in western Australia on trails with uphill, downhill, flat, curved, and straight sections. They discovered that erosion was influenced by slope, time and age of trail, but did not show a clear trend (Goeft and Alder, 2001).

In Ontario, Canada, Thurston and Reader (2001), from the University of Guelph, performed a study comparing the effects of experimentally applied mountain biking and hiking on the vegetation and soil of a deciduous forest. Three principle findings emerged from this study. “First, impacts on vegetation and soil increased with biking and hiking activity. Second, the impacts of biking and hiking measured were not significantly different. Third impacts did not extend beyond 30cm of the trail centerline” (Thurston & Reader, 2001, p. 405). The results indicated that at a similar intensity of activity, the short-term impacts of mountain biking and hiking may not differ greatly in the undisturbed area of a deciduous forest (Thurston & Reader, 2001). They declare that the immediate impacts of both activities can be severe but rapid recovery should be expected when the activities are not allowed to continue (Thurston & Reader, 2001).

Chiu and Kriwoken (2003) conducted an experiment on an abandoned fire road to compare track impacts from hiking and bicycling. The authors had hikers and bikers pass test areas 400 times each and measured the track before after and during the passes. Comparing flat and steep and dry and wet conditions, they did not find significant differences in the damage to the track caused by the different user groups (Chiu and Kriwoken, 2003).

The most recent report, by White et al. (2006), was a comparative study of impacts to mountain bike trails in five common ecological regions of the Southwestern U.S. The findings from the research reinforced results from previous research that certain impacts
to mountain bike trails, especially width, are comparable or less than hiking or multiple-use trails, and significantly less than impacts to equestrian or off-highway vehicle trails (White et al., 2006). A consensus has emerged that recreation impacts to mountain bike trails are largely confined to the main tread and mountain biking is likely a sustainable activity on properly managed trails (White et al., 2006).

The location of the track and condition of its construction through susceptible areas was more important in the occurrence of impacts than the type of activity present (Geeof & Alder, 2001; Wilson and Seney, 1994; White et al., 2006). Mountain bikes have the greatest potential to damage trails in wet and muddy conditions on steep uphill (spinning tires) and downhill slopes (skidding), which may prove to be problematic for managers, as many mountain bikers prefer challenging technical sections (Cessford, 1995a; Chiu and Kriwoken, 2003; Geeof & Alder, 2001; Wilson and Seney, 1994; White et al, 2006).

Although much of the environmental debate focuses on the detrimental effects of environmental development, there are also benefits, which can be noted. The existence of tourism in rural areas can make a difference between local shops remaining profitable, and therefore open, or not (Tribe, 2006). Similarly, the income and interest derived from tourists help to preserve heritage sites, contributing to restoration and upkeep (Tribe, 2006). National parks and forests provide not only facilities for tourism but also preserve habitats for flora and fauna (Tribe, 2006). Mountain biking can provide an environmental benefit with that of the preservation of natural areas for trails.

### 2.4.2 Social Impacts

Multiple-use trails are characterized by conflict between users and because mountain bikes often share trails with walkers, equestrians, and motorbikes a range of conflicts and concerns are evident (Carothers et al., 2001). If not resolved, these conflicts could ultimately lead to lost trail opportunities (Moore & Barthlow, 1997) due to insufficient cooperation among users. The concept of recreational conflict can best explain the social impacts of mountain biking on other users. The principal conceptual foundation of recreational conflict research has been the theory of “goal interference” (Manning et al., 1986). This proposes that the perceptions of conflict arise when the presence and/or behaviour of one group of users are incompatible with the social, psychological, or
physical goals of another group (Jacob and Schreyer, 1980; Gramman and Burdge, 1981). Watson et al., (1991), describes this more thoroughly by saying, conflict amongst outdoor recreationalists is partly a result of behaviour evaluated as unacceptable by one party and partly as a result of perceived inter-group differences (such as different lifestyles, differences in attitudes about the environment, and basic differences in reasons for coming to the site” (Watson et al. 1991: 61).

The subjective reasons usually given for disapproving of mountain bikes in off-road settings are complex and have been summarized by Cessford (1995b) more simply as perceptions of environmental impacts, perceptions of safety hazards, and perceptions that mountain biking is ‘inappropriate’.

2.4.3 Perceptions of Environmental Impact

Cessford (1995b), states that a perception that mountain bikes have more impacts on the environment than hiking/hill-walking is common to most statements about conflicts. The research available suggests that mountain bikers do not cause disproportionately greater impacts than walkers. Distinctive track marks on trails however, is an obvious difference that may play a significant role in how the overall effects of mountain bikes are perceived (Cessford, 1995b).

Perceptions however do seem to be changing and was highlighted in an Internet radio broadcast by Douglas Meyer (2006). Just a few years ago mountain bikers were considered a menace by hikers and environmentalists. Organisations such as the American Hiking Society (ASC) and the IMBA, although still somewhat suspicious of one another, have formed an outdoor alliance, which looks to lobby lawmakers on behalf of what they call the Human Community of Outdoor Enthusiasts (HCOE) (Meyer, 2006). Even environmentalists, once among the biggest critics of mountain bikers are being won over. For one thing, studies are showing that mountain biking is not nearly as damaging as once assumed and that mountain bikers can be good allies in efforts to protect natural areas (Meyer, 2006). Mark Bettiger (2006), Northeast Regional Director of Sierra Club National conservation policies explained, ‘pressures of development and urban growth make it so that you can no longer do it alone as an environmental group. The person that is next to you on that trail, whether on foot, horse, or bicycle are going to be your best allies in protecting those places.’
2.4.4 Perceptions of Safety Hazards

Mountain bikes are perceived to present a safety hazard to other users, which is as equally common to the view that they cause greater environmental impacts than other recreational activities. This is the case when they are considered to be riding too fast for the conditions; not slowing down when approaching blind corners; or where they surprise people because they move quickly and quietly (Moore, 1994; Arnberger, 2002). Although these are valid concerns for land managers, it appears that safety hazards are over-estimated by walkers (Cessford, 2002). Chavez et al. (1993) surveyed 40 resource managers in the United States and found only one reported case of walker injury due to mountain biking. In the German Alps, almost no reports of injuries involving bikers and walkers out of the many thousands reported in several years of accident statistics (Wöhrstein, 1998). Chavez et al. (1993); Horn, (1994); and Wöhrstein, (1998) all feel that perceptions of mountain biking as an actual safety hazard will lessen with increased familiarity with biking and the number of encounters with bikes. Whether a real hazard exists or not, it is apparent that knowing bikes may be present will make some hikers/hill-walkers feel uncomfortable (Cessford, 2002). Although, land managers do not have to deal with many issues, if any at all, regarding injury of hikers due to mountain biking, it is apparent that reducing this social impact issue is of concern to them (Cessford, 2002).

2.4.5 Perceptions that Mountain Biking is Inappropriate

The environmental impacts and safety hazards associated with mountain biking are the two most common reasons for recreation conflict perceptions of mountain biking (Cessford, 1995a). Perceptions that mountain biking is inappropriate however, are based upon assumptions by hikers/hill-walkers that the personal characteristics, motivations, behaviour types, environmental attitudes, and activity-styles are fundamentally different from their own (Cessford, 1995a). Cessford (1995a) states that the appearance, noise, and the presence of mechanization are emphasized by many hiker/hill-walkers to be inappropriate in natural settings.
2.4.6 Social Values vs. Interpersonal Conflict

More recent research has suggested that social values differences are an alternative explanation for conflict between users with different beliefs and values, even if there is no contact between them (Carothers et al., 2001). A study by Carothers, Vaske, and Donnelly (2001), compared interpersonal conflict with social values conflict. For interpersonal conflict to occur, the physical presence or behaviour of an individual or group of recreationalists must interfere with the goals of another individual or group (Carothers et al., 2001). On the other hand, social values conflict can occur between groups who do not share the same norms and/or values, independent of the physical presence or actual contact between groups (Carothers et al., 2001). Social value differences do exist between groups, as hiking for example, represents a traditional activity on most trails, whereas mountain biking is a relatively new sport (Chavez, 1999). Past research has demonstrated that traditional users frequently question the social acceptability of any non-traditional activity in natural resource settings (Blahna et al., 1995; Moore, 1994). Chavez (1999) believes that as the number of individuals participating in nontraditional activities like mountain biking increases, hikers’ tolerance levels for bikers may decrease and the potential for social values conflict can increase. This differs in the views of many that, as mountain biking becomes a more prominent recreational activity, hikers/hill-walkers will get used to them and become more accepting (Cessford, 1995a, 1995b; Geoff & Alder, 2001).

2.5 Mountain Biker Preferences, Characteristics, and Perceptions

The specific studies of mountain biker preferences have taken place in the United States, New Zealand, and Australia (Hollenhorst et al., 1995; Cessford, 1995a; Geoff & Alder, 2000). It was found that although members who were associated with a club were more likely to be involved with racing, results were very similar between recreation-only riders and recreation/racers (Geoff & Alder, 2000). Cessford (1995b) found that while the majority of mountain-bike riders do not venture off-road, those who do are likely to be looking for something more (Cessford, 1995b). The main preferences indicated by riders was a preference for challenging physical and technical riding, riding on routes in natural setting, and in a variety of riding experiences (Cessford, 1995b). Respondents of the Geoff and Alder (2000) survey indicated that respondents rode mountain bikes because it is fun, healthy, challenging and a social activity. 74 per cent rode at least two
to three times per week and preferred downhills (long, medium, and short), long curves, short curves, tight curves, steep slopes, jumps, rocks, logs and short uphill sections (Geoft and Alder, 2000). The most preferred settings found by the respondents were single tracks and native bush or forest (Geoft & alder, 2000). Cessford (1995a) found that the more experienced riders sought more difficult trails that less experienced riders could not ride. The difficulty of tracks therefore can act a filter of the different mountain bike riders present and advising cyclists about difficult terrain is self regulating in that riders avoid terrain which is unrideable or unsafe at their riding level (Keller, 1990). Opportunities for different trail experiences can be maximized by providing trails that vary in terms of terrain, difficulty, access, remoteness, naturalness, facilities and site management, social encounters, visitor impacts, and visitor management (Moore, 1994).

Specific rider characteristics, such as behaviour, perceptions, and demographics of mountain bikers have been examined in the United States (Chavez, 1993); the United Kingdom (Ruff & Mellors, 1993); Germany (Wöhrstein, 1998) and Australia (Geoft & Alder, 2001). Although participants were slightly younger in New Zealand and Germany compared with the US and UK, all researchers found that males around the age of 30 dominated the recreational activity (Geoft & Alder, 2000). Cessford (1995a) states that the most descriptive difference between hikers and mountain bikers has often been associated with a ‘wild teenage’ type image for mountain biking. Horn (1994) found that although mountain bikers have this image, their attitudes and preferences were more similar than was generally perceived. Strong similarities between the two groups include lifestyle, occupation, level of education and income, attitudes about the environment, and values of the area (Horn, 1994).

2.6 Recreational Planning

Local policy makers may be unable to reflect the complexity of the planning process, particularly when it should consider a variety of views representing different stakeholders (Mason & Leberman, 2000). The recent increase in the number of mountain bikers world-wide has prompted studies in the USA (Wilson & Seney, 1994; White et al., 2006) and New Zealand (Cessford, 1995a, 1995b; Mason & Leberman, 2000) which have indicated a growing concern with environmental impacts, demonstrated attitudes of other recreationalists to mountain bikers, and identified a
number of management issues. Over time, land managers will be required to respond to the needs of users, and land management responses will have to become more strategic (Ryan, 1995). Rather than being a reactive solution to perceived impacts or conflict, land managers have the opportunity to be proactive and deal with the issue before it becomes a problem (Ryan, 1995).

Williams (1998) indicated that tourism planning can help to shape and control physical patterns of development, conserve scarce resources, provide a framework for active promotion and marketing of destinations and can be a mechanism to integrate tourism with other sectors. Williams (1998) also linked planning to the notion of sustainability and argued that sustainability requires certain interventions to conserve resources and maximize benefits to the local community. He indicated that the most common form of intervention is a tourism development or management plan. Furthermore, Williams (1998) argued that planning can lead to the redistribution of tourism benefits and hence can be used to assist in the development of new tourism sites or the economic realignment of places that tourists have begun to leave.

However, planning for recreation and tourism is not necessarily a straightforward process. Williams (1998) suggested a major problem is that planning operates at a range of scales, from national, through regional to the local level, which can contribute to problems of co-ordination. Williams (1998) suggested another problem of tourism planning is that it encompasses many activities and, although it may address physical, economic, environmental, and business concerns it does not necessarily blend these together well. Coccossis (1996) agrees with this view and suggests that many see environmental conservation as a threat to economic and social development. Similar concerns are associated with outdoor recreation planning, where the increasing pressures on limited environmental resources have led to environmental degradation (Chavez, 1999) and conflict between different user groups (Hendricks, 1997). Reference to conflict infers that tourism planning is a political process. Gunn (1988) and Veal (1994) confirmed this view and suggested that planning for recreation and tourism relies heavily on values, and they argued that community values are particularly important. A recreation and/or tourism policy should therefore reflect the values of stakeholders and interested parties (Gunn, 1988; Veal, 1994).
2.7 Partnerships

Chavez (1996), stresses the importance of partnerships in alleviating conflict, in minimizing resource damage and in community development. Whether the tourism objective is economic development, conservation, social justice, or protected area management, the power of collaborative action is being discovered (Selvin, 1999). This integration has spawned a diverse array of new inter-organisational forms and agreements including multinational firms, coalitions formed by global accords, regional planning authorities, joint management of protected areas, and community-based cooperatives (Selvin, 1999). These emerging partnerships can be defined as situations where there is a pooling or sharing of appreciations or resources (information, money, labor, etc.) among two or more tourism stakeholders to solve a problem or create an opportunity that neither can address individually (Selin & Chavez, 1995). The benefits that can accrue from a partnership approach to recreational development include the ability to apply a greater level of resources to policy areas, increased effectiveness and efficiency and possibly greater legitimacy for initiatives and actions (McQuaid, 2002). Most writers on the collaboration theory of partnerships emphasize the need for common goals (Gunn, 1988; Selin and Chavez, 1995; Daniels and Cheng, 2004) but Aitchinson et al. (2000) specifically mentions their importance when working with the voluntary sector as their driving force is not necessarily about economical impacts but other outcomes such as the desired solution of getting the countryside open so that the quality of life of those who participate can be improved.

In 2001, Foot and Mouth Disease (FMD) and the terrorist attacks in New York on September 11, caused much apprehension for potential travelers, resulting in substantially reduced overseas visitor numbers to the UK (Williams and Ferguson, 2005). Williams & Ferguson (2005) explain how important the formation of partnerships was in recovering the severe loss in tourism to its countryside with a slow Government response to the crisis causing a prolonged suffering. The use of partnerships addressed this problem and may have encouraged a more sustained and mutually reliable set of solutions, which may in turn have led to a more successful and equitable outcome for those within the leisure and tourism industry (Williams & Ferguson, 2005).
There are many regional, national, and international groups that are important to the success of trail networks in Ireland that satisfy the goals of all stakeholders. A few significant groups are listed below that can use partnership strategies to enhance the progress of trail development around the country:

**National Trails Office (NTO)**

The National Trails Office has been established under the Irish Sports Council (ISC) in 2007, with a budget of €650,000, to guide the implementation and establishment of new trails, development of existing facilities and a promotional and marketing campaign (www.irishsportscouncil.ie). “The implementation of this strategy will create a trails network which will respect and protect our countryside and which will significantly improve opportunities for Irish people and visitors to participate in responsible outdoor recreation and to enjoy everything that is great about the Irish outdoors” (www.irishsportscouncil.ie).

**International Mountain Biking Association (IMBA)**

The International Mountain Bicycling Association (IMBA) was founded in 1988 by a group of California mountain bike clubs concerned about the closure of trails to cyclists (www.imba.com). These pioneering clubs believed that mountain biker-education programs and innovative trail management solutions should be developed and promoted. IMBA gives mountain bikers a national and international voice that is heard and respected by federal land managers, environmental groups, the mainstream media, and other trail users (www.imba.com).
Mountain Biking Ireland (MBI)

Mountain Biking Ireland (MBI) was formed in 2006 to act as single voice for recreational mountain bikers in Ireland. The goal of MBI is to address access issues throughout Ireland by developing links with landowners, councils and outdoor groups. MBI aims to (www.mbi.ie):

- Promote mountain biking as an exciting and growing sport in Ireland
- Establish a network of sustainable mountain biking trails all over Ireland.
- Promote environmentally sound and socially responsible mountain biking in Ireland.
- Affiliate to the International Mountain Biking Association (IMBA) and become IMBA - Ireland.

Mountain Meitheal

Mountain Meitheal was formed in 2000 by a group of Coillte workers and now includes many other recreational users. Mountain Meitheal has established itself as a voluntary, non-profit organization with the following aims and objectives (www.coillte.ie):

- To protect and conserve the mountain and forest environment by repairing, maintaining and building mountain and forest tracks while maintaining the challenge for recreational users, and striving to preserve a sense of solitude and a ‘wilderness’ experience;
- To spread an awareness of sustainable recreation;
- To promote the interests of the mountain environment and Mountain Meitheal members/volunteers; and
- To provide enjoyable projects and activities for its volunteers.
Dublin Mountain Initiative (DMI)

The DMI is a voluntary body established in July 2006 with the aim of starting a process that would lead to the development of an outdoor recreational area in the Dublin Mountains (www.dublinmountains.ie). The group sees the Dublin Mountains as a largely untapped resource and believes that such an area should be developed and managed in a sustainable manner with particular attention being paid to maintaining and improving the integrity and aesthetic value of the mountain environment (www.dublinmountains.ie). Its vision is that the Dublin Mountain area be recognised as an area of outstanding recreational amenity and developed as such for the benefit of all (dublinmountains.ie).

Leave No Trace (LNT)

In 1994, Leave No Trace Inc. was established in the U.S. as an educational program to avoid or minimize impacts to natural area resources and helps ensure a positive recreational experience for all visitors (Marion & Reid, 2001). The current mission of LNT, Inc. is to promote and inspire responsible outdoor recreation through education, research and partnerships (Marion & Reid, 2001). Due to its enormous success Leave No Trace Ireland was adopted in September of 2006 by the National Countryside Recreation Strategy to train and educate users through a variety of means in ways in which they can enjoy their access to the countryside but minimize their impact.

2.8 Linking Recreation and Tourism

The psychological perspective suggests that motivations for recreation and tourist activity emanate from the need to escape from routine and stressful environments and to seek recreational opportunities (Mannell & Iso-Ahola, 1987). Lebe and Milfeler (2006) describes rural tourism to use the countryside as its source and is associated with the search by urban dwellers for tranquility and space for outdoor recreation rather than being specifically liked to nature. Iso-Ahola (1980) suggested that recreation is a form of leisure experience and that tourism is recreation on the move, engaging in activity away from home in which the travel is the least part of the satisfaction sought. Organisation of physical planning and a sectoral approach by governmental agencies have been major constraints in integrating recreation and tourism (Honggen & Huyton,
1996). It is a commonly accepted assumption that leisure is for local residents and tourism is for visitors, and that tourism is viewed as profit-oriented while leisure is perceived as a social service (Honggen & Huyton, 1996). Involvement of park and recreation staff in local planning and public policy efforts would facilitate the acceptance of tourism development by local residents and enhance the local quality of life (Lankford et al., 1997).

2.9 Conclusion

In this chapter the environmental and social impacts were examined followed by the preferences and attitudes of mountain bikers and the perceptions commonly held regarding the recreational activity. Recreational tourism was scrutinized with an emphasis of the fact that planning is critical in liking recreation and tourism. Previous research and studies have taken place in many countries around the world but there have been no comparable studies conducted in Ireland, creating a gap in our knowledge in this area. Therefore, I set out to explore the subject at hand using the approach outlined in the following section.
Chapter Three

Methodology
3.1 Introduction

The purpose of this chapter is to outline the methodologies employed by the researcher and the reasons for their use. The methodology used by the researcher made pragmatic knowledge claims, focusing on the problem, using pluralistic approaches to derive knowledge about the problem. ‘Pragmatism is not committed to any one system of philosophy and reality. This applies to mixed-methods research in that inquirers draw liberally from both quantitative and qualitative assumptions when they engage in their research’ (Creswell, 2003). For the purpose of this study a mixed-methods approach was used utilizing questionnaires and semi-structured interviews. It is hoped that comparison of information through questionnaires and interviews with an extensive review of the literature will help solve the research problem. The primary objective of this research is to investigate whether or not Ireland is making the most out of its mountains for the mountain biking enthusiast.

The author began this thesis by studying an array of literature. The valuable information obtained from this source enhanced the understanding of the various issues involved in mountain biking as a recreational activity and its ability to be marketed as a tourism product.

3.2 Rationale for Research

In comparison with other outdoor sports, mountain biking has rapidly increased in popularity and could be regarded as the fastest growing sport in the United Kingdom (Standeven & DeKnop, 1999). This growth in mountain biking has also been seen in Ireland and it is evident that development of the sport from both a recreational and tourism perspective needs to be addressed. Most of the mountain biking literature has come from New Zealand, Australia, the United States, Canada, and the United Kingdom. There is a lack of mountain biking research in the Republic of Ireland and it is necessary to understand the recreational activity from an Irish perspective in order to develop strategies to accommodate this growth.
3.3 Research Problem

“Is Ireland making the most out of its Mountains for its recreational mountain bikers?”

3.4 Objectives

The purpose of the research is to explore whether or not “Ireland is making the most out of its mountains for the mountain biking enthusiast.” The objectives of this research should therefore establish the current standing of the planning structures in place and identify their potential for further development. It must be stated from the outset that the timeliness of this research coincides with the development of mountain bike parks around the country. This overlap is beneficial because those interviewed were both interested and informed about the issues at hand in developing the sport at a recreational and tourism level. Gibson and Nielsen (2000) have commented that research objectives should guide decisions about which questions to ask. For the purposes of exploring the research problem, the author has set the following objectives:

1. Compare the characteristics, preferences, and attitudes of mountain bikers in the Republic of Ireland.
2. Examine the access issues involved with mountain biking in the Republic of Ireland and participation levels in trail building.
3. To get a better understanding of the issues currently involved in the Irish mountain biking scene.
4. To see what Coillte, is currently creating, in regards to mountain biking facilities and their plans for the future.

3.5 Developing the Research Plan

The research plan is the second stage of research (following the determination of the research question) and deals with the actual means for gathering the information required. This includes areas such as time, cost, sample size and research approaches.

Five logical stages are involved in the survey process: brief proposal, data collection, analysis and evaluation, and preparation and presentation of the survey report (Chisnall,
The two standard forms of data collection are primary (new research carried out by the researcher) and secondary (analysis of others data and information). This study has incorporated both. Much of the research is exploratory, as this is the most appropriate means of addressing a new and undocumented area. ‘Exploration is particularly useful when the researcher lacks a clear idea of the problems they will meet during the study. Through exploration the researchers develop concepts more clearly, establish priorities, and improve the final research design. Important variables may not be known or thoroughly defined... exploration relies more heavily on qualitative techniques’ (Emory and Cooper, 1990). This is critical in the research process as it provides an understanding of the viewpoints and critical issues related to the structures in place regarding mountain biking at both recreational and tourism levels in Ireland.

3.6 Sources of Data

In order to achieve the objectives outlined above, the research process involved both primary and secondary data. The primary analysis was based on a series of interviews and two different questionnaires; one aimed at mountain bikers and one aimed towards hikers/hill-walkers. This investigation proved invaluable as it provided the author with up-to-date information on what was happening in the mountain biking scene at the grass roots level in Ireland.

Numerous sources of secondary data were consulted for the purpose of reviewing literature on current trends within the MTB industry both from a recreational and tourism perspective. A general overview of mountain biking and a brief overview of the mountain biking scene in Ireland had been established. Also, the different impacts (physical/social) were looked at in order to understand the issues involved in recreational/tourism planning. This information provided a base for the research as the author proceeded to discuss recreational/tourism management in general and how linking the two is imperative in providing a successful and sustainable mountain biking product.
3.7 Secondary research

Secondary research is carried out to gain a full and meaningful understanding of the research subject. This then allows the researcher to develop on ideas already prevalent and to prove or disprove theories. The author carried out secondary research in order to complete the first section of the report (Literature Review), which also assisted in the preparation of the primary research design. The author carried out an in-depth study on existing literature using the facilities at the Dublin Institute, Cathal Brugha Street. Materials from the IMBA, and information gathered through the Internet were also obtained for the purpose of secondary research. The research aided the preparation of questions for both the questionnaires and the semi-structured interviews that took place. It also assisted in the formulation of the research problem.

3.8 Primary Research

It was quickly identified that secondary sources alone would not provide sufficient insight for the purposes of this study. In fulfilling the objectives as outlined above the researcher wished to assess the structures in place from the local recreational perspective. It was necessary therefore to involve different stakeholders in order to create less bias with regard to any recommendations made. Most research would have been taken from a mountain biker perspective, however a questionnaire was developed to target hill-walkers in order to make the study more inclusive.

Primary data may be qualitative and quantitative. Qualitative research is an unstructured primarily exploratory methodology based on small samples, intended to provide insight and understanding. Qualitative research encompasses a variety of methods that are flexible to enable respondents to reflect upon, and express their views. It seeks to encapsulate the experiences and feelings of respondents in their own terms and is concerned with the statistical representation of information that is concerned with numbers and quantities. Qualitative research, attempts understanding, it asks rather than how many, while quantitative research is a research methodology that seeks to quantify data and, typically, applies some form of statistical analysis (Malhotra and Birks, 2000). The majority of the author’s research was of a qualitative nature. This is because the bulk of the research was human-centred as it involved personal perspectives on mountain biking.
3.9 Questionnaire

A questionnaire, sometimes called a schedule, an interview form or a measuring instrument is typically a formalized set of questions for obtaining information from respondents.

*The objective of the questionnaires used:*

Questionnaire 1 Questionnaire 1 sought the views of mountain bickers on the issues involved with mountain biking as a recreation activity

Questionnaire 2 is to see from a hiker/hill-walker perspective the issues involved with mountain biking as a recreational activity.

*The reason the researcher chose the questionnaire was as follows:*

The questionnaire proved to be a convenient and quick form of obtaining a large sample of data within a short time frame.

*The type of questionnaire:*

In general the type of questionnaire that is employed may vary from one researcher to the other. Various structures of questionnaires are used, from completely unstructured with open-ended questions to semi-structured questionnaires and in some cases, the employment of both types.

*The type that was chosen by the author:*

The author decided to create questionnaires that were open-ended in order to get the most amount of input possible from each participant. Many questions had a comment section at the bottom enabling participants to add any information or insight they wished.
3.9.1 Mountain Biker Questionnaire

The mountain biker questionnaire has been adapted from a 1995 study, which took place in New Zealand by its Department of Conservation (Cessford, 1995). The objectives were to provide a profile of mountain bike rider characteristics; describe their preferences for recreation settings and experiences; determine their attitudes toward key management issues; and to make recommendations for management options and future research needs. It is expected that results will be similar thirteen years later in Ireland.

For the mountain biker questionnaire, the author aimed for a sample size of 100 to give a broad spectrum of results. An attempt was made to distribute questionnaires to mountain bikers attending the Irish National MTB Cross Country Championships, in the Tollymore Forest Park, County Down. It was realized that before or after the race, it did not seem likely that anyone would be interested in filling out a questionnaire so it was apparent that other means of distribution was necessary. It was decided that the few who filled it out would be the pilot study and the questionnaire would be made available online to the mountain biking community. It was hoped that having the questionnaire online would force respondents to fill it out to a greater degree and also reach a wider audience such as those mountain bikers who do not participate in racing. It was developed using Survey Monkey and e-mailed to the members of the Mountain Biking Association of Dublin (MAD), with a cover letter briefly describing the thesis topic (Appendix B). It was then posted on the EPIC mountain biking forum. Within two days 100 responses were achieved and the survey was closed at 160 responses.

Methodology Critique

Mountain bikers from all over Ireland completed the questionnaire. Although this study is on the topic of mountain biking of Ireland, most information would have been taken from the perspective of mountain bikers in the Dublin region. Certain issues may be more or less prevalent in other areas of the country.
3.9.2 Hiker/Hill-walker Questionnaire

After seeing many of the results from the mountain biker questionnaire it was thought by the researcher that a questionnaire aimed at hikers/hill-walkers might make the thesis more inclusive. A questionnaire was then developed aimed at hikers/hill-walkers in order to get insight from their perspective. In the same way, questions were made as open-ended as possible with comment sections after questions where it was thought hikers/hill-walkers might add any extra insight. It was created online as well and emailed to the members of two of the largest hiking clubs in Dublin; The Wayfarers and The Ramblers, with a cover letter briefly describing the thesis topic (Appendix C). Three weeks after the survey was sent out only 30 responses were received. Although useful insight was given from the respondents it was hoped that more hiker/hill-walker participants would have taken part in the study.

Methodology Critique

As the questionnaire was focused towards mountain bikers it seemed as if many of the views expressed would be biased towards what a mountain biker would like to see done in response to the growing demand for mountain biking facilities. This prompted the researcher to create the hiker/hill-walker questionnaire that did not receive as many responses as anticipated. Perhaps, as the questionnaire was focused on the topic of mountain bikers, many individuals may have thought it was not in their interests to participate. Also, as the average age of hiker/hill walkers tends to be much older than a typical mountain biker, reliance on the Internet as a communication tool may be less prominent in the older age groups.
3.10 Personal interviews

Wilkinson (2000, p.47) identifies three types of interview. The first is carefully structured where the interviewer asks specific pre-defined questions in sequence. This approach is useful when a large amount of interviews will be conducted as it allows for easy collection of data. The second type is the semi-structured interview. The interviewer focuses on a theme or area and allows a discussion to develop on this theme. This approach is useful for smaller groups as it allows for exploration beyond the core issues. The third is a mixture of the two. Firstly, structured questions are asked. Then the themes that were raised are explored. All interviews were taped using an external microphone and a Sony MiniDisc recorder.

3.10.1 Interview with Sean Herlihy,
(Board of Directors, MBI) and (Treasurer, DMI)

A face-to-face interview involving unstructured questions was performed intending to elicit views from the mountain biking community on July 20th, 2007. A full transcription of the interview can be found in (Appendix D).

3.10.2 Interview with Daithai Deforge,
(Recreational Officer for Coillte)

A recorded telephone interview took place with Daithai Deforge on August 24th, 2007 in order to get a better understanding of what Coillte is currently building in regards to mountain biking facilities and their plans for the future. A full transcription of the interview can be found in (Appendix E).
3.11 Research Limitations

This piece of research will contribute to the existing body of knowledge on trail development for tourist and local recreational use. It positions itself to set a possible optimal approach for localities to make the most of the mountain biking market while progressing local recreational development.

A limitation of this study was the fact that the surveys distributed to both mountain bikers and hill-walkers were self-administered questionnaires. Therefore, the researcher was relying on respondents to complete the questionnaire accurately and truthfully, as will be seen in the discussion and findings. The author felt some of the questions could have been probed further had personal interviews been conducted.

3.12 Conclusion

The purpose of this chapter is to give the reader an understanding of how and why the research methods were firstly chosen and secondly acted upon. Sufficient detail has been provided to allow the study to be replicated and critiques of the methodology employed have also been provided. The following chapter (chapter 4) will present the data that was accumulated from this process. Then the data will be critically analysed and discussed (chapter 5) before conclusions and recommendations will be provided (chapter 6).
Chapter Four

Presentation of Results
4.1 Introduction

This chapter will present the findings from the two questionnaires and interviews taken. Much of the data from both questionnaires was qualitative and any analysis of quantitative data would have been calculated through the Survey Monkey software or using Excel. The transcriptions of the interviews with Sean Herlihy and Daithi Deforge can be found in (Appendix D) and (Appendix E) respectively.

4.2 Results of Mountain Biker Questionnaire

Basic Demographics and Experience

Questions 1 - 7 focused on the basic demographics of the participants and their overall experience levels.

1. How many years have you been mountain biking?

From the total population of 160, 159 participants answered this question. At first glance it was evident that there are many mountain bikers in the Republic of Ireland who have been biking for only a short period of time. The lowest amount of years in the activity was half of a year, while the longest mountain biker in the sport has been active in it for 21 years, producing a range of 19 years. The mean mountain biking experience was 5.64 years. Comparing the mean to the range showed that there is a large proportion of the part of the population with relatively few years of experience. To better describe the population a median was calculated to give the number of years experience falling in the middle of the sample, which was 3 years. Lastly, it was decided to find the mode of the sample to see how many years of mountain biking was most common among participants, which was 1 year.
Table 4.1 – Questionnaire participants’ mountain biking experience in years

<table>
<thead>
<tr>
<th>Range</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>5.64</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.2 – Years of experience of riders in years as a percentage

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Number of participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>One year or less</td>
<td>38</td>
<td>24%</td>
</tr>
<tr>
<td>Between one and two years</td>
<td>27</td>
<td>17%</td>
</tr>
<tr>
<td>Between two and three years</td>
<td>23</td>
<td>14%</td>
</tr>
<tr>
<td>Between four and five years</td>
<td>16</td>
<td>10%</td>
</tr>
<tr>
<td>More than five years</td>
<td>55</td>
<td>35%</td>
</tr>
</tbody>
</table>

2. **What is your age?**

Again, 159 people out of 160 answered this question. The youngest participant of the study was 16 years of age and the oldest participant was 54 years old. This gave a range of 38, highlighting the fact that mountain biking is an activity that is shared by many people varying in age. The mean age was 29.75 years old, the median age was 29 years, and the mode was 30 years. From this information it is evident that most of the mountain bikers in the Republic of Ireland are around the age of thirty.

Table 4.3 - Questionnaire participants’ age in years

<table>
<thead>
<tr>
<th>Range</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>29.75</td>
<td>29</td>
<td>30</td>
</tr>
</tbody>
</table>

3. **Are you male or female?**

Out of the 158 participants who answered this question, 146 (92.4%) were male and 12 (7.6%). This compares with other research in that mountain biking is a mainly male dominated activity; however females are also active and strongly encouraged.
4. Are you a member of a mountain biking club?

Although the questionnaire was e-mailed to MAD and posted on the EPIC forum, a wide variety of clubs took part in the survey. 65.6 per cent of the population was associated with a club and 34.4 per cent was not. The different clubs and amount of members who took part in this survey are listed below. Note that some are members of more than one club.

<table>
<thead>
<tr>
<th>Club</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain Biking Association of Dublin (MAD)</td>
<td>27</td>
</tr>
<tr>
<td>EPIC</td>
<td>44</td>
</tr>
<tr>
<td>Mountain Bike Club of Cork (MBCC)</td>
<td>11</td>
</tr>
<tr>
<td>Irish Mountain Bike Race Club (IMBRC)</td>
<td>1</td>
</tr>
<tr>
<td>021 Racing</td>
<td>2</td>
</tr>
<tr>
<td>Tem WORC</td>
<td>2</td>
</tr>
<tr>
<td>Lucan Cycling Club</td>
<td>1</td>
</tr>
<tr>
<td>Mountain Bike University of Limerick (MBUL)</td>
<td>9</td>
</tr>
<tr>
<td>Swords Cycling Club</td>
<td>1</td>
</tr>
<tr>
<td>UCD</td>
<td>2</td>
</tr>
<tr>
<td>Free Eagle Racing Team - Austria</td>
<td>1</td>
</tr>
<tr>
<td>Southern Extreme</td>
<td>1</td>
</tr>
<tr>
<td>Sopot Killers</td>
<td>1</td>
</tr>
<tr>
<td>MTB Rider.com</td>
<td>1</td>
</tr>
<tr>
<td>Banbridge Cycling Club</td>
<td>1</td>
</tr>
<tr>
<td>Not associated with any club</td>
<td>54</td>
</tr>
</tbody>
</table>

5. What kind of an off-road rider are you?

It is evident that although most have only been involved for a few years, they consider themselves to have a considerable experience (Done lots of hard off-road riding).

Figure 4.1 – Participants subjective level of mountain biking ability / experience
6. *How many days in the last year did you ride off-road?*

All participants answered this question and it appears that most involved in the activity cycle off-road quite regularly with approximately 75 per cent of the population biking one a week or more.

![Bar Graph of Off-road Days](image)

Figure 4.2 – Participants level of experience in days per year

7. What percentage of your rides involves the use of a car? If rides do not involve a car, approximately how long is the journey by bicycle to the trails?

Most participants use a vehicle to transport themselves and their bike to the trails. There is however a large percentage with little or no access to transportation and approximately one-third of the participants cycle to the trails most of the time. Although the travel time to the trails by bicycle varies considerably among the participants, most seem to have to cycle approximately 30 minutes to reach the trails.

**Mountain Biker Preferences and Attitudes**

The following questions were created in an attempt to discover the mountain biking preferences and the attitudes of the participants within the study. Questions 8 - 12 focused on the riding preferences of mountain bikers while question 13 used a rating scale to try and highlight trends in the attitudes of mountain bikers.
8. Some rides require you to carry or push your bike over undesirable sections. How much time would you tolerate carrying/pushing your bike before you'd avoid a ride and go elsewhere instead?

Overall it seems that most of the participants do not seem to mind carrying or pushing their bike for a period of time while on their ride.

Figures 4.3 – Amount of time participants are willing to carry or push bike
9. Which **FIVE** mountain biking features are most important to you?

Table 4.5 – Five most important mountain biking features to participants

<table>
<thead>
<tr>
<th>Mountain Biking Feature</th>
<th>Percentage</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill challenge (technical riding)</td>
<td>70.9%</td>
<td>112</td>
</tr>
<tr>
<td>Developing and improving skills</td>
<td>62.0%</td>
<td>98</td>
</tr>
<tr>
<td>Speed/excitement/risk</td>
<td>59.5%</td>
<td>94</td>
</tr>
<tr>
<td>Exercise/fitness/workout</td>
<td>58.9%</td>
<td>93</td>
</tr>
<tr>
<td>Physical challenge</td>
<td>57.0%</td>
<td>90</td>
</tr>
<tr>
<td>Exploring new areas</td>
<td>51.3%</td>
<td>81</td>
</tr>
<tr>
<td>Riding/socializing with friends</td>
<td>48.1%</td>
<td>76</td>
</tr>
<tr>
<td>Appreciating views/scenery/nature</td>
<td>41.8%</td>
<td>66</td>
</tr>
<tr>
<td>Racing and race training</td>
<td>21.5%</td>
<td>34</td>
</tr>
<tr>
<td>Peace/quiet/solitude</td>
<td>17.1%</td>
<td>27</td>
</tr>
<tr>
<td>Commuting around town/transport means</td>
<td>5.1%</td>
<td>8</td>
</tr>
<tr>
<td>Overnight trips/touring options</td>
<td>5.1%</td>
<td>8</td>
</tr>
<tr>
<td>Relaxation/easy riding/cruising</td>
<td>3.2%</td>
<td>5</td>
</tr>
</tbody>
</table>

It is evident that many features are very important to mountain bikers. Participants were asked to rate which five features of a possible thirteen were most important to them. The five most important features chosen in order are:

- Skill challenge (technical riding)
- Developing and improving skills
- Speed/excitement/risk
- Exercise/fitness/workout,
- Physical challenge (hard riding)
- Exploring new areas and socializing with friends were also frequently picked by participants as features important to them.
10. Which 3 features from the list above are of most important to your riding enjoyment?

To try and narrow down exactly what features riders enjoyed most about mountain biking from the list above, participants were asked to then rate their top three features in order of importance (first important, second important, third important). 154 participants answered this question and it is evident that the most important feature to most riders seems to be speed/excitement/risk, exercise/fitness/workout is of second importance and developing and improving skills is of third importance.

11. How important is each of the following features to your enjoyment of mountain bike riding?

24 different common features found while mountain biking were listed and participants were asked on a five-point rating scale to rate the importance of each. Again it is evident that mountain bikers generally seek speed/excitement/risk as 64 per cent of respondents felt that it was essential for all rides. Similar to the findings in other studies, it is evident that participants of the sport seek narrow tracks/paths (single-track) with 95 per cent of respondents either preferring it or finding it essential. Downhill riding seems to also be sought by the respondents with the majority seeking downhill of all types as preferable riding conditions. Technical riding seems to also be a very important aspect of mountain biking most important to riders as most prefer to ride tracks with rocks, roots, and logs on them and tracks that have steps or ditches. It is also evident that although 42 per cent of riders feel that “it’s ok to encounter walkers on the tracks some of the time,” most would prefer not to encounter them at all. On the other hand, it seems that many actually prefer to encounter other riders on the tracks in which they ride.
12. Can you describe your FAVOURITE riding conditions (Note the track type, track difficulty, environment, ride duration, etc.)

This was an open-ended question asking mountain bikers to explain in their own words what their favourite riding conditions are. 108 participants answered this question and although there seems to be a wide variety of preferred rides, most prefer to ride on dry and technical single-track in natural forest. The full list of responses can be seen in (Appendix F).

13. Please indicate how much you AGREE or DISAGREE with the following statements.

The use of a rating scale was used for this question in an attempt to try and examine some of the attitudes regarding mountain bike held by the participants of the survey. 18 statements were made and participants were asked, using a five point rating scale, how much they agreed or disagreed with each statement. Results from this question are below.

Table 4.6 – Mountain Biker Attitudes

<table>
<thead>
<tr>
<th>Mountain bikes should be allowed anywhere they can be ridden</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7%</td>
<td>22.3%</td>
<td>16.9%</td>
<td>36.5%</td>
<td>21.6%</td>
<td>3.52</td>
<td>148</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mountain bikes should not be allowed on established walking tracks</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.2%</td>
<td>38.5%</td>
<td>23.0%</td>
<td>14.9%</td>
<td>7.4%</td>
<td>2.59</td>
<td>148</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mountain biking is compatible with walking on tracks</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4%</td>
<td>12.1%</td>
<td>15.4%</td>
<td>49.0%</td>
<td>20.1%</td>
<td>2.59</td>
<td>148</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Walking tracks with many walkers are unsuitable for riding</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4%</td>
<td>9.5%</td>
<td>15.6%</td>
<td>52.4%</td>
<td>21.1%</td>
<td>3.82</td>
<td>147</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Easily damaged walking tracks are unsuitable for riding</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1%</td>
<td>16.2%</td>
<td>14.2%</td>
<td>50.7%</td>
<td>14.9%</td>
<td>3.56</td>
<td>148</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental damage by mountain bikes is over-estimated</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
<td>Rating Average</td>
<td>Response Count</td>
</tr>
<tr>
<td>------------</td>
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</tr>
<tr>
<td>0.7%</td>
<td>1.4%</td>
<td>10.8%</td>
<td>40.5%</td>
<td>46.6%</td>
<td>4.31</td>
<td>4.04</td>
<td>148</td>
</tr>
<tr>
<td><strong>Danger to walkers from mountain bikes is over-estimated</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>8.1%</td>
<td>12.8%</td>
<td>45.9%</td>
<td>33.1%</td>
<td>4.04</td>
<td>148</td>
<td></td>
</tr>
<tr>
<td><strong>A few irresponsible riders cause most problems with walkers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>3.4%</td>
<td>2.7%</td>
<td>40.9%</td>
<td>53.0%</td>
<td>4.44</td>
<td>149</td>
<td></td>
</tr>
<tr>
<td><strong>Un-informed walkers imagine most problems from mountain bike use</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>2.7%</td>
<td>10.1%</td>
<td>52.3%</td>
<td>34.9%</td>
<td>4.19</td>
<td>149</td>
<td></td>
</tr>
<tr>
<td><strong>Information on alternative places to ride would reduce conflicts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4%</td>
<td>6.8%</td>
<td>12.8%</td>
<td>52.0%</td>
<td>27.0%</td>
<td>3.97</td>
<td>148</td>
<td></td>
</tr>
<tr>
<td><strong>Responsible riding and attitude would reduce conflicts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.0%</td>
<td>4.7%</td>
<td>6.0%</td>
<td>46.3%</td>
<td>40.9%</td>
<td>4.19</td>
<td>1491.4%</td>
<td></td>
</tr>
<tr>
<td><strong>Riders should follow voluntary codes of behaviour (safety/impact)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4%</td>
<td>0.7%</td>
<td>6.1%</td>
<td>45.9%</td>
<td>45.9%</td>
<td>4.34</td>
<td>148</td>
<td></td>
</tr>
<tr>
<td><strong>Riding access to some areas will need to be limited</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.8%</td>
<td>20.3%</td>
<td>27.7%</td>
<td>39.9%</td>
<td>5.4%</td>
<td>3.17</td>
<td>148</td>
<td></td>
</tr>
<tr>
<td><strong>Riding access should be sometimes limited to specified days or seasons</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.8%</td>
<td>32.9%</td>
<td>19.5%</td>
<td>22.1%</td>
<td>4.7%</td>
<td>2.57</td>
<td>148</td>
<td></td>
</tr>
<tr>
<td><strong>Zoning different areas for riding and walking would work</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.7%</td>
<td>18.8%</td>
<td>17.4%</td>
<td>43.0%</td>
<td>12.1%</td>
<td>3.31</td>
<td>149</td>
<td></td>
</tr>
<tr>
<td><strong>If biking tracks were designated, riders would stick to them</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.8%</td>
<td>30.9%</td>
<td>16.8%</td>
<td>31.5%</td>
<td>8.1%</td>
<td>2.91</td>
<td>149</td>
<td></td>
</tr>
<tr>
<td><strong>I don't need views/scenery/nature for my enjoyment of riding</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.9%</td>
<td>34.2%</td>
<td>16.1%</td>
<td>12.8%</td>
<td>4.0%</td>
<td>2.21</td>
<td>149</td>
<td></td>
</tr>
<tr>
<td><strong>I don't need speed/action/excitement for my enjoyment of riding</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>52.7%</strong></td>
<td><strong>35.8%</strong></td>
<td><strong>8.8%</strong></td>
<td><strong>0.7%</strong></td>
<td><strong>2.0%</strong></td>
<td><strong>1.64</strong></td>
<td><strong>148</strong></td>
<td></td>
</tr>
</tbody>
</table>
Many mountain bikers felt that bikes should be allowed anywhere where they could be ridden and felt that the two recreational activities were compatible but were unsuitable if many walkers were present. Mountain bikers considered that the safety issues and environmental impacts of bikes to be over-estimated by walkers. They felt that the actions of irresponsible riders and the uninformed view of the activity was the major cause in any social conflict. They also felt responsible riding and attitude is essential in reducing these conflicts through following voluntary codes of behaviour,

Riders showed a preference for trails with appealing natural settings that could provide some speed, excitement, and risk. It is evident that they will generally bike anywhere they can find those qualities. Riders did emphasize that some actions would need to be limited but that self-regulation was the management approach that should be taken. Riders generally did not agree that seasonal zoning options would work and although many agreed that zoning different areas for riding would work, a considerable number of riders felt that regulations, if imposed, would not always be adhered to.

Access and Trail-Building Issues

Questions 14 – 18 were meant to be more controversial in an attempt to gather as much qualitative data as possible. The questions focused on access issues and current trail building taking place.

14. Do you know of any places where access for mountain bikes is a problem? (If yes, can you describe these places and problems?)

Of the 142 participants who answered this question 54.2 per cent knew of places where access for mountain bikes was a problem and 45.8 per cent did not. It is apparent from the results that many are not aware that technically, all Coillte “owned” forests are currently closed to mountain bikers. One participant states, “Most Coillte managed forests have signs prohibiting MTB use. However, these are the same areas in which most of the MTBing takes place. Since users are used to ignoring these signs it would be more difficult to introduce specific walker/rider trails as directions are likely to be ignored”. Comments on the access issues can be seen in (Appendix F).
15. Please name any tracks you would like to be allowed to ride on, but which are at present closed to mountain bikes?

An extensive list of places and tracks has been mentioned and can be found in (Appendix F). One participant states that, “Coillte forests have signs saying you shouldn’t ride there, but these are ignored. I’d like to see signs up showing that these areas are suitable for mountain biking, then there would be less conflict between bikers and walkers”.

16. If you ride on trails currently "illegal", do you think you will continue ride on these trails when Coillte finishes the mountain bike parks it intends to establish?

This question was created to generate comments from participants regarding the current policy of restricted mountain biking in the Republic of Ireland. Although it is not strictly enforced, all trails at the moment can be considered off-limits and are termed “illegal” by the researcher. 77.2 percent of the participants believed they would still ride on “illegal” trails when Coillte finishes the parks they intend to establish. This number is expected to be higher as many said they do not ride on “illegal” trails when in fact they do. From the comments generated it seems that the majority of mountain bikers will continue to ride these trails for a variety of reasons. Some felt that transportation would be an issue, riding in these designated area would be too restrictive, and many feel that “illegal” trails are generally more exciting. A few participants also pointed out that there won’t be enough “legal” parks to cope with all the clubs and each club tends to have a few trails in different areas. Many welcome the “sustainable” trails being built but feel they would get bored riding the same few trails all the time.

17. Do you partake in trail building?

Of the 146 participants who answered this question, 67 per cent are involved in trail building while the remaining 33 per cent do not.
18. If you answered yes to question 17, do you think you will continue to build trails when Coillte finishes the mountain bike parks it intends to establish?

All participants who partake in trail building answered this question and all but a few believe they will continue to build trails when the current trails being built are in place. Many participants feel that they will continue, as these trails will not cater to the more extreme end of the sport. One participant states that trail building should be ongoing. “Coillte/we should never be finished. Mountain biking is hugely developed in Wales and Scotland and I can’t imagine they consider their trail building programmes complete”. Another mentions that, “the UK has much better MTB infrastructure than Ireland where volunteer trail building co-exists with formal trails. This could be a model for us too”. It is anticipated by many that “Coillte appear to be focusing on family mountain biking and not mountain biking for those who dream of bigger and better things. Small scale ‘club’ trail building is vital for the continuation of the sport through and some form of licensing or permission system is needed, such as what is used on Vancouver North Shore trails.” Further comments can be viewed in (Appendix F)

19. Thank you very much for your time and input. If you have any other issues you would like to raise please feel free to do so in the space below.

It is evident how compassionate the participants of this survey are in regard to mountain biking. Many participants added insightful information and numerous are anxious to see the results. Further comments can be seen in (Appendix F).
4.3 Results of Hiker / Hill-walker Questionnaire

1. Are you male or female?

As expected, the participation level of women is much higher in hiking/hill-walking than in mountain biking. Of the 30 participants 57 per cent were male and the remaining 43 per cent were female.

2. What is your age?

As also expected, it is apparent that the average age of hikers/hill-walkers is much older than the average age of mountain bikers, with a mean age of 48 and a median of 50 years old.

3. How many days in the last year did you hike in a forest area?

![Bar chart showing the number of days hikers hiked in the last year.](image)

Figure 4.4

Of the 30 respondents, it seems that the majority of hikers/hill-walkers use the trails less frequently than mountain bikers would with 40 per cent of them using the trails once or twice a month. Overall, 90 percent of the respondents use the trails for hiking/hill-walking purposes once a week or less.
4. In general, do you consider the trails in the Dublin/Wicklow Mountains to be totally unacceptable, unacceptable, neutral, somewhat acceptable or totally acceptable?

<table>
<thead>
<tr>
<th>Trail Condition</th>
<th>Totally Unacceptable</th>
<th>Unacceptable</th>
<th>Neutral</th>
<th>Somewhat Acceptable</th>
<th>Totally Acceptable</th>
<th>Rating Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.0%</td>
<td>17.2%</td>
<td>24.1%</td>
<td><strong>44.8%</strong></td>
<td>13.8%</td>
<td>3.55</td>
</tr>
</tbody>
</table>

Although five of the respondents consider the trails in the Dublin/Wicklow Mountains to be unacceptable, the majority, are neutral or think that the current trails in place are acceptable for their needs. The comments received regarding this question showed that many hikers/hill-walkers tend to prefer to stay off the trails to heighten their wilderness experience. One participant believed that “the degradation in the last ten to fifteen years has been dreadful”. “More state expenditure on creating and maintaining trails along with volunteer work from the whole community is required”. Further comments can be viewed in (Appendix G).

5. Would you be willing to volunteer for trail maintenance projects in Coillte forests?

Of the 29 respondents, 45 per cent would be willing to volunteer for trail maintenance in Coillte forests and 55 per cent would not. From the comments received, it is apparent that a group called Mountain Meitheal is already in place, which facilitates voluntary efforts of hikers/hill-walkers. Many participants who would not be willing to volunteer are unable to due to health reasons or simply do not feel it is their responsibility.

6. Would you be willing to donate money to restore degraded trails in Coillte land?

Of the 28 respondents, a similar percentage was found with 46 per cent of the hikers/hill-walkers willing to donate money to help restore trails while the remaining 54 per cent would not. One participant mentioned, “Everyone has to help out. The Irish solution of always relying on the State does not work. In fairness, Coillte are the largest landowner in the State and provide more recreational access to their land than anyone else - Irish farmers please note”. Others feel that “this is the responsibilities of Coillte and should be funded through Sports and Tourism budgets”.

52
7. Approximately on what percentage of your hikes would you see mountain biking taking place?

It is apparent than when using the trails hikers/hill-walkers do not frequently see mountain biking taking place, with just over 55 per cent of the respondents claiming the see it happening less than 10 percent of the time. 40 per cent of the sample said that they see mountain bikers during 20 to 50 percent of their excursions.

8. How would you rate the effect of mountain biking on your experience of hiking/hill-walking?

<table>
<thead>
<tr>
<th>Effect on Hill-walking Experience</th>
<th>Very Negative</th>
<th>Negative</th>
<th>Neutral</th>
<th>Positive</th>
<th>Very Positive</th>
<th>Average Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20.0%</td>
<td>33.3%</td>
<td>36.7%</td>
<td>6.7%</td>
<td>3.3%</td>
<td>2.4</td>
</tr>
</tbody>
</table>

From this it seems that overall mountain biking lessens the experience for hikers/hill-walkers with over 50 per cent of them stating that mountain biking has a negative or very negative effect on their experience. Many however are neutral in relating the two while 10 per cent actually think the effects of mountain biking actually have a positive effect on their experience. A comment section was also added to this section in an attempt to see how mountain biking does affect the experience of hiking/hill-walking. It is interesting to see the different comments that were made as some varied greatly from one another. One participant believes that “bikers are not allowed on way-marked ways and behaviour in doing so is anti-social”. He/she continues to blame poor parenting for their anti-social behaviour. Many participants simply do not like mountain bikers due to their perceived aggressiveness and damage to trails. There are however many respondents that said mountain biking was welcome and it is the motorized vehicles which bother them. A few of the participants mentioned that mountain biking actually has very low impact tending to cause little erosion on trails hikers frequent. Further comments can be viewed in (Appendix F).
9. *Do you feel that there are problems with mountain bikers and hikers using the same space?*

Half of the participants feel that there are problems with mountain bikers and hikers using the same space while the other half do not. Respondents who answered yes to this question were asked to describe the problems. From the responses, it is evident that those who feel this way do so out of safety concerns and believe that mountain biking causes too much damage to the trails. Responses can be seen in Appendix (F).

10. *Do you think that some hiking trails should be converted to multiuse trails and allow mountain biking?*

Of the respondents, 46 per cent felt that some hiking trails should be converted to multi-use trails and allow mountain biking, while 54 per cent felt otherwise. A comment section was added to the end of this question in an attempt to highlight reasons hikers may be for or against this option. One participant mentioned, “Hikers and bikers travel together all over the fantastic forest and mountain trails of the Alpine countries and USA/Canada. What’s so special about Ireland?” One participant feels that “mountain bikers should be allowed to use all suitable trails on the understanding that they do so at their own risk and should give way to hikers when necessary”. It is of the opinion of many however, that although mountain biking is welcome in similar areas they should be separated through the use of separate trails. Further comments can be viewed in (Appendix F).
11. Common opinions on mountain biking.

Participants were asked to rate common opinions on mountain biking on a three point rating scale acknowledging how much they agree or disagree with each statement.

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Rating average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bikers are reckless and go past walkers too fast</td>
<td>37.9%</td>
<td>20.7%</td>
<td>41.4%</td>
<td>2.03</td>
</tr>
<tr>
<td>Only a few irresponsible riders cause most of the problems</td>
<td>10.3%</td>
<td>27.6%</td>
<td>62.1%</td>
<td>2.00</td>
</tr>
<tr>
<td>People over-estimate danger to walkers from bikes</td>
<td>31.0%</td>
<td>37.9%</td>
<td>31.0%</td>
<td>2.00</td>
</tr>
<tr>
<td>People over-estimate conflict between hikers/bikers</td>
<td>24.1%</td>
<td>41.4%</td>
<td>34.5%</td>
<td>2.10</td>
</tr>
<tr>
<td>Walkers are more interested in the environment</td>
<td>17.2%</td>
<td>17.2%</td>
<td>65.5%</td>
<td>2.48</td>
</tr>
<tr>
<td>Biking and hiking have similar impacts on tracks</td>
<td>72.4%</td>
<td>6.9%</td>
<td>20.7%</td>
<td>1.48</td>
</tr>
<tr>
<td>As bikers learn better behaviours conflicts will reduce</td>
<td>13.8%</td>
<td>27.6%</td>
<td>58.6%</td>
<td>2.45</td>
</tr>
<tr>
<td>As people get used to bikes conflicts will reduce</td>
<td>26.7%</td>
<td>36.7%</td>
<td>36.7%</td>
<td>2.10</td>
</tr>
<tr>
<td>Shared tracks for biking and walking won’t work</td>
<td>26.7%</td>
<td>20%</td>
<td>53.3%</td>
<td>2.27</td>
</tr>
<tr>
<td>Biking should be banned from Coillte land</td>
<td>50.0%</td>
<td>33.2%</td>
<td>16.7%</td>
<td>1.67</td>
</tr>
</tbody>
</table>

Figure 4.28 – Common Opinions of Mountain Biking

12. Thank you very much for your time and your input. If you have any other issues you would like to raise, please feel free to do so in the space below.

From the comments received it is evident that solutions would like to be found to allow both to co-exist without compromising the experience held by both groups. One participant states,

“I have climbed and hiked all over the world and the Irish countryside is by far the worst because of: a) the access problems b) the "them" and "us" attitude of Irish hikers - there's terrible elitism here. c) Most Irish hikers belong to clubs, which helps to propagate these attitudes, and also by being in a club, there is all take and no give when it means doing something positive to improve deteriorating trails. Very few club hikers volunteer for trail work and worse still, don't think they should have to. It’s someone else's job - not theirs!”

It is apparent that if anything is to change all parties need to come together in order to find solutions to the problems and perceived problems that exist.
4.4 Findings from Interview with Sean Herlihy
Board of Directors, Mountain Biking Ireland (MBI)
Secretary, Dublin Mountains Initiative (DMI)

Objective: To get a better understanding of the issues currently involved in the
Irish mountain biking scene.

The findings in this interview were extremely helpful in fulfilling the objective.
Some of the major issues have been separated.

Funding
Sean Herlihy explains that the five trails currently being built by Coillte, with funding
from Failte Ireland of approximately two million euro, will produce approximately 140
km of trails, which is equivalent to what was accomplished in Wales during their first
five years of trail production. Failte Ireland “are effectively financing the project and
see themselves as a marketing agency that provides financing”. Sean says that at the
moment there is a lot of money in Ireland now for development. It is mainly for tourist
development but will receive more money for these kinds of projects. The sites being
picked however are not being picked because mountain bikers use them, but because
“they are regions in the country that need it most and have the infrastructure and the
support around them to bring in tourism and unleash the potential that there is in this
kind of market”. Failte Ireland were not interested in even putting trails in Ballinastoe
but Coillte were adamant that trails be developed in the Wicklow Mountains. It is not
accessible for the majority of people but with more rounds of funding Coillte plan to
have more projects in the Dublin/Wicklow region. At the moment no trails are finished
but Ballyhoura should be complete by the end of November and Ballinastoe should be
completed by the end of September.

Sustainability
Sean explained that generally the sustainability issue in Ireland is not really an
environmental issue from the perspective of Coillte but more of a maintenance issue.
He states that, “any forestry land owner can get money to build trails but they won’t
receive any funding to maintain them or for general ongoing uses”. Where mechanical
work is taking place in Ireland the forestry process itself is doing far worse than the
trails ever will. There are true concerns of sustainability in national park areas however
where foresting is not taking place.
Access and Liability
In Ireland the access and liability issues are not clear. “In the French Alps for example, if you fall off your bike and break your neck it’s your own fault for falling off the bike and breaking your neck”. Sean explained that in Ireland it is much easier to get sued. This is the sole reason for erected signs on Coillte land prohibiting mountain biking. They are not legally binding and Sean has yet to come across a situation where Coillte has had to enforce it. “Until the liability and access issues are addressed, it’s really going to be that much more difficult for land owners to provide any sort of facility or even let mountain biking happen in their lands.” “One of the elements of the trails that are being built is that they are safe and that the are engineered in such a way to be safe.” Sean explained that in Wales and Scotland a rigorous process of design and assessment has taken place to produce a report explaining that a trail is safe. Provided they have built something of good quality, best practice of standard, and done everything they should liability will be reduced. In the future proper signage will be established informing mountain bikers what kind of trail to expect further reducing this liability. Negotiations are underway to remove signs in the future prohibiting mountain biking with signs welcoming mountain biking.

Trail-building
One big problem Coillte will have to face is bikers not necessarily changing the trails, but building more “illegal” trails around the trails that are being built. He states that “they will pick up the bits of manmade stuff they like and put in their own loops and trails which will create a bigger issue that will need to be faced. “The problem is that there are types of tracks people want and then there are the types of tracks Coillte and land owners are prepared to build.” “With really good professional trail design bikers are effectively deluded into thinking they are going fast, when they aren’t really, thinking that they are at risk, when they probably aren’t really, and getting something that’s relatively safe but feels like it’s probably not.” Coillte and the mountain biking community have started a process where “illegal” trails that are thought to be sustainable can in the future be turned into official trails. “[They] are trying to use IMBA standards, but need to sign legal documents for official access.
Recreational vs. Tourist Use

“One problem is that most of the trails being built are being built primarily as a tourist attraction.” The recreational users are pushing some of the projects underway in the Dublin region at the moment. Sean explains that as opposed to building something that people will travel to, facilities should be built purely from a recreational standpoint, by monitoring who is actually using it and identifying their needs.

Partnerships

In creating facilities from a purely recreational standpoint Sean explains how important partnerships can be. He mentions that the “local councils should be more involved in providing recreational facilities for people who live in the area”. He thinks that the “councils are starting to realize this as a lot of them are talking to [him] about putting some sort of trails in parks or the fringes of the hills”. “There is going to have to be a strategy for all the Dublin/Wicklow Mountains for biking and all the other disciplines such as walking and horseback riding.” He explains how important groups like the Dublin Mountain Initiative are in making it happen. “All stakeholders need to sit around and discuss plans for the future.” One problem is that different groups are doing their own thing. “Cycling Ireland are building their own trails, Coillte are developing their own trails, the National Park are talking about building trails, local councils are thinking about building trails, but nobody is working at a big overall plan.”
4.5 Findings from Interview with Daithi Deforge
Coillte, Recreational Officer

Objective: To see what is currently being created by Coillte in regards to mountain biking facilities and their plans for the future.

Current Work

- Five trails being developed at the moment. Signs will be way marked for mountain bikers but are expected to be used by walkers as well.
- The top 2 per cent of the market used the trails in Ireland as mountain bikers by and large are those willing to go out and build their own trails.
- Trails strictly aimed at the tourism market and are not aimed at the competitive side of the sport.
- Following exactly what was done in Scotland and Wales. Funding is provided by Coillte under these terms and conditions.
- Working with the local mountain biking community in Kindlestown on a pilot project to authorise a previously unauthorised trail. Sustainable IMBA guidelines must be used to ensure Coillte is not left with a hefty maintenance programme.

Plans for the Future

- Would like to build a trail system that gives sufficient appeal so that riders will discontinue using trails built by the MTB community. This is due to the serious health and safety issues that come with improperly constructed trails.
- Riders will not be subjected to strict enforcement when trails are developed it will be by provision. People using trails in certain areas simply can’t be enforced.
- In the future Coillte would like to work with smaller clubs around the country developing their trails as well to an IMBA standard.
- Whole idea of managing trails puts people in the parts that Coillte wants them in.
- Hoping that after this programme is complete they can go back to Failte Ireland for more funding to provide trails for the recreational users.
• Coillte can facilitate a lot of trail developments around the county but it is not in their mandate. But they can, subject to people coming on board to fund and promote the trails they can provide.
• “Some of our properties are just a stone throw away from the M-50. They can be more developed in the Dublin area to provide for a range of recreational uses and that is hopefully something we can pursue in the coming months as well.”
Chapter Five

Interpretation & Discussion
5.1 Rider Demographics and Experience

In Ireland it is evident that mountain biking is growing as a popular recreational activity. A sizeable proportion has been involved for many years but a larger proportion has more recently become a part of the mountain biking community. A higher proportion of riders, with few years experience, suggest that there has been more recent recruitment to the activity. If this trend continues, impacts associated with the recreational activity will also intensify.

Although most riders are associated with a mountain biking club, a large proportion of the participants are not. It is evident, however, that although many mountain bikers in Ireland may not be part of a club or organization, they use the local web resources for information regarding the recreational activity. 100 responses in two days were received, which further suggests that mountain bike riders in Ireland are highly involved with the sport. Perhaps this can be regarded as a limitation to the study and only received information from a representation of a subsection of riders. The use of a website may indicate that respondents are perhaps more keen than the average rider in Ireland.

Results are similar to previous basic demographic studies in New Zealand (Cessford, 1995a), the United States (Chavez, 1993), and Germany (Wöhrstein, 1998), in that participants are most likely to be males of the age of around 30. This is an important common finding as approaches to the development of riding in those countries could be applicable or suitable for Ireland. In the future however, this may change, as 75 per cent of the female riders have been mountain biking for two years or less. Although this is the case, many of them indicate that they have lots of off–road experience. This would suggest that new women participants are very active in the recreational activity. Should the very low proportion of women riders grow, the increase in overall numbers of riders would be great.

This has implications for managers when considering the current levels of mountain biking use. Managers should assume that current mountain biking use-levels will increase considerably in the future, and that a considerable part of any increase may represent a gradual growth in the proportion of women participating.
Analysis of experience levels indicates that although the majority of riders are fairly new to the recreational activity, most consider themselves to have a high level of experience. This higher level of self-rated experience could be attributed to the fact that most of the riders seem to bike off-road on a regular basis.

5.2 Setting and Experience

It is important to examine the different settings and experience preferred by riders to give management a better idea of what mountain bikers are looking for. Although experience levels vary, there are some features that are important to all riders, such as technical riding, developing and improving skills, speed/excitement/risk, exercise/fitness/workout, physical challenge (hard riding), exploring new areas and socializing with friends. Although these are essential characteristics desired by mountain bikers in Ireland, there would be some difference in opinions with varying experience levels. When asked to narrow down these preferences, speed, excitement, and risk are of most importance to them. This would have great implications for tracks being constructed; as speed and risk are two features Coillte wish to limit in order to reduce their liability. This could pose a problem for the mountain bikers represented by the study, as speed and risk are qualities essential to most rider satisfaction. It is possible that this position held by Coillte could limit potential future growth. It is evident that the stance on liability in the country needs to be fundamentally changed in the future to encourage growth.

In 2003, Ross Millar wrote a report on access and liability issues to recreational users in the countryside that still exist today. He has a background in recreation policy and practice, is an environmental planner, and is currently employed as a Director of Leisure in Local Government (Millar, 2003). Main points for discussion are listed below:

- All land in Ireland is owned, either by private individuals or State bodies, and recreational users do not have a legal right of entry to land.
- Access is at the discretion of the landowner, who may prohibit entry or withdraw consent without prior notice to recreational users.
- While the public is normally given access to State lands, including National Parks and Coillte property, there is no right of entry to these lands either.
• This situation contrasts with that which obtains in most other parts of Europe, where varying degrees of public access to land are formally defined.

Further research indicated that The Mountaineering Council of Ireland (MCI) is actively trying to change policies in place by the government affecting the liabilities faced by landowners. MCI is the National Representative for over 9000 hill-walkers and will prove to be an enormous asset in policy change. Although MBI is a fairly new organization, with very few members in comparison, it seems that as a group they are much less active in trying to establish change and influencing policy decisions. If trails designed with a higher degree of speed and risk are to be established, the mountain biking community will need to adopt a similar approach to educating and influencing central policy decisions affecting their sport. It could also hinder other areas of recreational and tourism growth, such as rock climbing, that tend to have a high level of associated risk. Perhaps communities of sports with similar elements of risk could work together to effect positive policy change around liability. A representational body of sports that have considerable inherent risk could work together to lobby for changes to the liability policy in Ireland.

Although changes to liability policy and law is required in the long term to ensure the growth of the sport and the associated tourism, in the mean time there are other options that can be utilized to help offer recreational mountain bikers the requirements of speed and risk. Sean Herlihy (MBI and DMI) suggests that it is possible to create trails that give the illusion trails are particularly fast and unsafe when in reality they are neither remarkably fast nor unsafe. Also, the addition of technical features could be a way for management to limit speed in certain sections while still maintaining a perception of risk. Cessford (2005) suggests that specific efforts to make known the availability of alternative settings for speed-related experiences would help increase rider acceptance of limits to the riding use of some tracks.

Single-track and downhill ridings of various types are the most sought after trail preferences of mountain bikers in Ireland. Technical sections with rocks, roots, and logs on them are important to rider enjoyment. As the tolerance for technical sections increases with rider experience it is evident that recommendations from Keller (1990) can help filter riders of different experience levels. This strategy could also help preserve tracks that can only maintain a limited number of riders.
5.3 Social Conflict

Analysis of the mountain biker questionnaire and the hiker/hill-walker questionnaire indicate that the same conflicts and perceptions exist in Ireland as found in other studies (Cessford, 1995a, 1995b; Horn; 1994).

While both hikers and mountain bikers agree that it is a few irresponsible mountain bikers who cause most of the problems, mountain bikers generally feel that their impacts are over-estimated and tend to avoid hikers when possible. Furthermore, mountain bikers seemed aware of the social conflicts caused by their activity, since they appreciated neutral or negative encounters with walkers in the forest. It seems as if hikers on the other hand, do not agree with previous studies that indicate mountain biking and hiking produce similar environmental impacts to trails. Perhaps hikers are uninformed or perhaps Ireland is an exception, due to a different trail type than trails studied elsewhere.

Many hikers however are aware that mountain biking is considered a low impact sport and the respondents who were younger tended to be more accepting of mountain biking as a compatible study. More research should be done regarding the age of hikers/hill-walkers and their attitude towards mountain biking. It seems possible that many of the hikers/hill-walkers who had a negative attitude towards mountain biking may have been hiking in the areas well before any mountain bikers were present. It could be a case that many feel that mountain bikers are encroaching on a wilderness experience that was at one time dominated by them. It seems possible that a newer generation of hikers/hill-walkers might be more accepting of mountain biking as a compatible recreational activity as they will be more familiar with riders. A higher percentage of hikers did lean towards the thought by Moore (1994), that as mountain biking becomes a more prominent recreational activity, hikers/hill-walkers will get used to them and become more accepting.

While conflict does exist between hikers and mountain bikers in Ireland, it seems to be a product of a lack of communication and education, between them, all other users and land managing agencies. One might wonder if mountain biking groups or the government should be actively promoting the limited impacts of mountain biking to hikers/hill-walkers.
5.4 Trail Building Issues

The questionnaire used by this researcher includes novel questions about trail building that have not been previously explored in other studies. It is surprising to see that such a large percentage of the mountain biking community are involved with trail building. This sizeable percentage of trail builders emphasizes the lack in supply of trails in the Republic of Ireland for the overwhelming demand. It also indicates that there may be a large amount of trails in Ireland that would be deemed unsustainable from the perspective of Coillte. These trails aren’t authorized, and as a result they can’t really be promoted to mountain bike tourists – how do you promote trails to visitors when even the locals are not supposed to be out there riding? This demand for trail building indicates that many mountain bikers may be interested in volunteering their services to provide trails, but proper programs need to be developed to encourage the development of sustainable trails. With such a large group of trail builders at hand, such programs could give Coillte and other landowners a competent workforce to establish sustainable trails at an extremely low cost. With a part of the mountain biking community involved in the trail building process, mountain bikers may be able to create trails that are of their own preferences, so long as their adhere to standards established by land owners. At this time however, Sean Herlihy justifies that it could be controversial to teach proper trail building skills when at the moment there are no legal places to build. Perhaps if this can take place at a larger scale, mountain bikers will not have as much of a desire or even enough time to build trails on their own. To understand this better further research is necessary to fully understand the different motivations that inspire mountain bikers to build trails.

From the comments received it is evident that the trails being established by Coillte at the moment will not satisfy all of the needs and preferences of the recreational riders in Ireland. It will be essential in the future for proper trail building programs to be established in order to ensure that trails that are being developed appropriately.
5.5 **Attitudes Towards Management Options**

There were disagreements between user groups on what could be done to accommodate the use of mountain bikes on public lands. While most mountain bikers felt the two were compatible, hikers were split in the view that trails should be turned into multi-use trails. Given the fact that mountain bikers have created many of their own unauthorized trails, it is evident that although mountain bikers feel they are compatible they are still looking for something more than what the walking trails have to offer. A probable reason why mountain bikers use trails frequented by hikers is that they are the only means of access to unauthorized trails built. Results from the hiker/hill-walker survey indicate that the majority of hikers see mountain bikers rarely when performing their recreational activity. This could be a sign that mountain bikers utilize trails that hikers are not interested in using or are unaware that they even exist. For this reason it is probable that converting trails into multi-use trails would not keep mountain bikers off of unauthorized trail but would only aid in facilitating transportation to them.

Although not agreed upon by all users, the most favourable option to both user groups was the option of spatial zoning. It is evident from the results however, that if spatial zoning was initiated by land management, mountain bikers would unlikely stick to the designated areas. One problem that exists is that different clubs have trails in many different areas. Suggesting that bikes be kept to certain areas seems unreasonable, as this would limit access to the different trails that have already been established. Self – regulation of mountain bikers therefore is the only management option that mountain bikers would adhere to. This however could be problematic, as everyone will have varying generalizations of what is actually reasonable. This solution may only intensify conflict between users in that both groups will differ in the opinions of what is responsible from an environmental perspective. Furthermore, when riders see damage done through the forestry process, it is unlikely that they will feel any of their impacts will, in comparison, make any difference.
5.6 Current Progress and Partnerships

Analysis of the interviews with Sean Herlihy (MBI & DMI) and Daithi Deforge (Coillte), and insight developed from two questionnaires helps give a better understanding of the current progress in Ireland and highlights the different partnerships that have been formed. Although projects underway at the moment are currently aimed at the tourist market, it is evident that it is step in the right direction to producing quality recreational facilities in the Republic of Ireland. Sean Herlihy and Daithi Deforge identified numerous partnerships that have been formed including the Dublin Mountain Initiative, a group representing all stakeholders who would like to see a proper recreational strategy for the Dublin Mountains. At a national level, communication between organizations such as the National Trails Office, Coillte, Failte Ireland, Mountain Biking Ireland (MBI), and Mountaineering Council of Ireland (MCI) need to communicate effectively to produce an overall strategy for the country. Sean Herlihy states that at the moment however, “different groups are doing their own thing. Cycling Ireland are building their own trails, Coillte are developing their own trails, the National Park are talking about building trails, local councils are thinking about building trails, but nobody is working at a big overall plan”. Committees such as DMI, with representation from all stakeholders would be very helpful in encouraging inclusiveness and ownership.

Local residents should have the right to be involved in the development of an industry which is likely to result in both benefits and costs to their community. The government may lack the resources to plan and monitor all aspects of community well being and shift the responsibility down to the local level. The benefits will include the local knowledge but could also include unrealistic expectations and dominance of certain members of the community over others. Some other problems that can limit the effectiveness could include the short-term economic goals over longer-term community objectives, a lack of public or private sector financing undermining local control, or a lack in training, interest, or commitment. A local community’s ability to control local tourism can be limited by central government funding policies which over-rule local preferences.
Other extremely important partnerships should be formed at an individual level. Many might feel that mountain bikers have a duty to develop relationships with hiker/hill-walkers. Not only could this be a way to help reduce any social conflict, but also common issues regarding the trails can be jointly raised to government bodies.

“Pressures of development and urban growth make it so that you can no longer do it alone as an environmental group. The person that is next to you on that trail, whether on foot, horse, or bicycle are going to be your best allies in protecting those places” (Meyer, 2006).
Chapter Six

Conclusions & Recommendations
6.1 Conclusions

A number of assumptions can be made arising from the findings and analysis of this research. The research was meant to solve the problem:

“Is Ireland making the most of its Mountains for its recreational mountain bikers?”

Below are the main points relating to the problem and research objectives that the author has identified:

- There is already a well established and active mountain biking community in Ireland and current trails are barely sufficient at present. This problem will be compounded as my research showed a strong potential for growth and that current mountain biking use-levels will increase considerably. Land managers should assume that current mountain biking use-levels will increase considerably in the future, and that a considerable part of any increase may represent a gradual growth in the proportion of women participating.

- Trails being constructed at the moment by Coillte, through funding from Failte Ireland, will not satisfy all of the needs and preferences of the recreational riders in Ireland. This is because many riders prefer features that at the moment, Coillte are not willing to offer. The trails currently being built, although a great addition to the current trail system, are aimed primarily at the tourist market.

- Mountain bikers require a wide variety of setting and experience characteristics. Technical riding, with the elements of speed and risk, are of great importance. Managers should take note of the varying preferences of mountain bikers when establishing recreational trails.

- Liability issues need to be addressed in order to maximize the opportunities available to recreational mountain bikers and other recreational users.
• Social conflict does exist between hikers/hill-walkers and mountain bikers. It is an issue that needs to be addressed in order to facilitate better communication and co-operation to achieve common goals.

• Most mountain bike riders, especially those in clubs, are responsible. With the right structure and support, a more responsible community can be developed and prompted to encourage better relationships with landowners and other recreational users.

• Unauthorized trail building is an activity most mountain bikers in Ireland are involved in, emphasizing a lack in supply of recreational mountain bike trails for the overwhelming demand.

• Self-regulation of mountain bikers is the only management option available to land managers with regard to zoning options.

• Community involvement is vital for recreational development but it must be part of a broader, integrated strategy involving a variety of public and private sector organizations within a recognized partnership.

6.2 Recommendations

Analysis of the research led to the discovery of possible solutions to some of the underlying problems prohibiting the progress of recreational development for trail users:

• Policy change should be sought to remove any possibility of liability to landowners who provide access to recreational land users.

• Sustainable recreational development from a local community approach should seek to optimize the benefits of recreation and tourism to all stakeholders according to local needs.

• Funding for recreational projects should be allocated to those groups who represent the stakeholders in the region of development. Local control over the
development of certain projects will help ensure that undertakings satisfy the needs of all users.

- Key environmental principles need to be processed and addressed to Irish mountain bikers so they can interpret the many theories themselves and formulate their own codes of practice that aim to protect the natural environment, using sustainable development as a guide.

- Greater communication and education between different user groups and managing agencies will be key in reducing conflict and establishing partnerships.

- Proper trail building workshops need to be established in order to limit further environmental damage to recreational trails. A large group of competent trail builders will be significant in providing a possible workforce to land owners, thus drastically increasing the progress of plans to establish a national trail network.

- Mountain bikers need to get off there bikes every once and a while and have a chat with a hiker. Maybe then they will not be perceived by many as “renegade” riders.

### 6.3 Areas for Further Research

- Research into the environmental impacts of mountain biking on Irish terrain would be beneficial in informing both walkers and mountain bikers in Ireland about their associated impacts. It is possible that soil gradients in Ireland, for example, differ from that of other studies thus intensifying or diminishing their related environmental impacts.

- It is only through further research that existing gaps in the knowledge can be filled regarding the development of recreational facilities and tourism. With an increasing number of people participating in a recreational setting, increased interest in sustainable development is likely to follow and the accumulation of
knowledge pertaining to sustainable recreational development and tourism is critical.

- The author believes that a better understanding of sustainable development needs to be established and more research needs to be conducted regarding limits, purpose and means of implementation. The fact that many mountain bikers feel that sustainable development is very difficult, if not impossible to achieve with the current forestry process in place, places grave doubts over the entire concept.

- As the trail building process is recently underway, and none are currently in use, it will be crucial to research the status in Ireland once trails have been established and frequented. Tourism numbers and thoughts of recreational users within the community, for example, will give a better understanding of Irelands progress in establishing their recreational needs.

6.4 Limitations

- Many aspects of study were focused around mountain biking in the Dublin Region. This may have been insufficient in providing a basis for what is occurring in the rest of the country. Although it is evident that a national strategy is needed, it would be likely that different regions will require their own.

- It was felt by the author that a sample size of 30 for the hiker/hill-walker questionnaire might have given results not reflecting the total hiking/hill-walking population. Although results did indicate specific trends, they may not have been representative of the masses.

- Associations between variables within the study were configured using the Survey Monkey application and Excel. Perhaps stronger relations could have been made using additional statistical software, such as SPSS.
6.5 Contribution of the Research

This thesis contributes a significant amount of quantitative and qualitative data. The significance of this data should be evaluated taking into consideration that the research builds on existing studies on mountain biking and recreational strategy. The research has brought to light many of the issues currently involved in creating recreational facilities for the local community. It highlights the significance of partnerships and the importance of community involvement in the establishment of recreational facilities that suit their needs.

This study identifies wide-ranging possibilities for future research. It can be used as a building block in creating a world class trails network in Ireland and in establishing a new culture of outdoor recreation in Ireland, making new and existing trails accessible to as many people as possible.

6.6 Conclusion

The research question asks, “Is Ireland making the most out of its Mountains for its recreational mountain bikers?” It is evident that steps are being taken in the right direction but at the moment much needs to be accomplished to realize what this beautiful country has to offer. Through community involvement and participation of all stakeholders, a trail network can be established satisfying the needs of all users. With local recreational development, tourism will follow.
References


Websites

www.coillte.ie
www.dublinmountains.ie
www.imba.com
www.irishsportscouncil.ie
www.mbi.ie
Appendices
Appendix A

Example of Signs Prohibiting Mountain Biking From Coillte Land

Source: Photograph
Appendix B

Cover Letter of Mountain Biker Questionnaire

I am a student at the Dublin Institute of Technology, completing a Masters in Hospitality and am trying to write a thesis on the topic of mountain biking. The study focuses on the physical/social impacts of mountain biking and the restriction of the sport from existing trails.

I thought that bringing a questionnaire to the Irish Nationals would be a good idea but it seemed as if filling out a questionnaire was the last thing anyone wanted to do. I have put it online and hope that you may have the time to take part in the survey. I hope that by having it online I will also reach bikers who don’t race in order to obtain results from bikers of all levels. It took me about ten minutes to complete and shouldn’t take any longer than fifteen. The dissertation due date is approaching fast so I will have to close the survey within a few weeks. I need at least 50 responses and would really appreciate all the help that I can get. If you would like to take part in the survey, please cut and paste the link below. Thank you very much for your time.

http://www.surveymonkey.com/s.aspx?sm=uFBEfNeFZ8_2b8Aq50C0kEaw_3d_3d

If you have any queries regarding the dissertation or the questionnaire itself, please do not hesitate to contact me.

Once again, I appreciate you taking the time to participate.

Regards,

Michael Niewland

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Appendix C

Cover Letter for Hiker/Hill-walker Questionnaire

I am a student at the Dublin Institute of Technology, completing a Masters in Hospitality and am trying to write a thesis on the topic of mountain biking. The study focuses on the physical/social impacts of the recreational activity. I have created an online questionnaire directed towards hikers in order to make the survey as inclusive as possible. I would hope to achieve at least 50 responses and would really appreciate all the help that I can get. If you would like to take part in the survey, please follow the link below. Thank you very much for your time.

http://www.surveymonkey.com/s.aspx?sm=dD8Vlsy1ijX4_2f3EZlroyQ_3d_3d

If you have any queries regarding the dissertation or the questionnaire itself, please do not hesitate to contact me.

Once again, I appreciate you taking the time to participate.

Regards,
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Appendix D

Interview with Sean Herlihy, Acting Chairman of Mountain Biking Ireland (MBI) and Treasurer of the Dublin Mountains Initiative (DMI)

The reason why it is hard to find somebody from Failte Ireland is that they are not involved, simple as that. They are paying for it but are not involved. They are effectively financing it and see themselves as a marketing agency that provides financing. Coillte are building the trails, they are the ones that are doing everything. Failte Ireland is just giving them the money for it. Total money allocated to building the 5 trails in Ireland is two million. Failte is putting in most of it and Coillte is putting in the difference. I’m not sure if its cash or time of own staff and resources. I suppose there might be inconsistencies in what Coillte is saying. The sustainability issue to be honest is not really an environmental, well it is, but from there perspective it is not really an environmental issue. What it is, is a maintenance issue. They will get lots of money to build trails and there are lots of ways to get funding for capital projects, like Cycling Ireland has lots of money to build projects. Any forestry landowner can get money to build something but they won’t get any money to maintain it and they won’t get any money for its ongoing uses. So when they say they want to build sustainable trails what they really want is something that is going to be completely maintenance free and they won’t have to do anything to it ever again. So what they are really talking about is maintenance free trails. Sustainability from the environmental sense, there are a lot of issues with silt running off trails, but in the Coillte forests, they are really not that big an issue because the forestry process itself is doing far worse than the trails ever will. So what they are really concerned about is that they are safe and will be in the same condition as always and won’t have to go around fixing them. If you are making tails in the uplands, in the national park areas when they talk about sustainability they really do mean areas where its peatland where there is no mechanical work, they are true concerns about sustainability but where foresting is being done they don’t really care. The stuff that they are building, some may like it but as it will be just winding single track it wouldn’t be fun to be walking on really and they are all going to have signs “not for walking – keep out” plus the bikes will have right of way on the trails so if you are walking you will have to keep jumping off to make way for bikers so there wouldn’t be too much trouble with walkers walking on them. The bigger problem they are going to have, is bikers I suppose, I wouldn’t say changing the trails but building more “illegal” stuff around bits that are already there. They will pick up the bits of manmade stuff they like and put in their own loops and trails, which will be a bigger issue that will need to be faced.

Do you think they will extend the trails in Ballinastoe to the Dublin Mountains?

Yes. Definitely. In general we are about 20 years behind the UK with regards to biking trails. They started a long time ago with small steps like first of these types of trails were finished in the UK about 10 or 12 years ago. In fairness when Coillte did decide to do it did go and make a fairly big first step. They put about two million into making about 140 km of trails so that is equivalent to what was accomplished in the first five years in Wales all in one go. There is a lot of money now in this country for development. Mainly for tourist development but development none the less and they will get a lot more money for these types of projects. There is already a couple of different initiatives on the way to try and develop proper recreation strategies for the Dublin Mountains and all these strategies put a heavy emphasis on bikes, cycling, and
everything else. Where the trails are located at the moment are purely for tourism purposes. The sites that are picked are not being picked because they are used by mountain bikers or because they are good places for Irish mountain bikers to go to, they have been picked because they are regions in the country need it most and can benefit and have the infrastructure and the support around them to bring in tourism and unleash the potential that there is in this kind of market. Ballyhoura was the flagship site. Ballyhoura came looking for trails and have a local community group that has been set up for walking tourism for years and are very very good at it and they came looking for MTB trails and they want them and I recon the local community is going to make a lot of money out of it. They want to be the Coed y Brenin of Ireland, and are setting themselves up for it with bike friendly accommodation ready down there with washing facilities, the whole lot. They are really banking on Irish bikers using it of course but rely on the market in the UK coming over and riding the Irish trails, which is why they are put in where they are put in. Coillte obviously want to fulfill a recreational requirement but solve some issues that they have with mountain bikes. Failte Ireland weren’t really interested in putting trails in Ballinastoe. It came to a negotiation process and Coillte pretty much put the foot down, and said, we are putting trails down at this site. Every other site is in the Midlands or the West. If Failte Ireland had there way the park would not be in Ballinastoe but somewhere in the Midlands or the West. But Coillte were adamant that they had to have somewhere in the Wicklow. As to why it was Ballinastoe, Coillte didn’t even decide that themselves. About 6 or 8 years ago, when they first got the idea of applying for these things, they asked people who were representing mountain biking at the time where was the best place in Dublin/Wicklow to put in biking trails, and Ballinastoe was picked. They realized now it’s not the best place but its to far down the road now to change it or move it at this stage. But they have been opening up and saying they will have more rounds of funding, there will be more projects going forward, and will develop stuff that is more accessible as for the majority of people. It’s not really their responsibility to provide these. The local councils really should be more involved in providing recreational facilities for people who live in the area. For example there is only one BMX track in all of Dublin and its unusable. And I think the councils are starting to realize that they have to create some kind of facilities and a lot of them are talking to us about putting in some sort of trails in parks or the fringes of the hills.

Is there any sort of initiative to get people to help build trails or is it all Coillte and their crew?

Dafydd Davis is the man. He invented this type of trail. He was the first to come up with the idea in Wales. The numbers skyrocketed in Wales. He started off with very little money. Built a couple of trails, it became hugely popular and the tourist revenue shot up in the area of Wales by more than five million a year. Now he has been going around the world replicating what he’s been doing. At the moment there is nothing that is completely finished. You can’t actually go and ride your bike on it but you can go in and have a look at what they’ve done. In Ballyhoura there is nearly one loop finished but it is not quite that finished. The plans would be that they have Ballyhoura finished by the end of November, and the stuff in Ballinastoe is supposed to be finished by the end of September. So it shouldn’t be too far down the road.

There are many recommendations and they are being addressed. One of the prime issues is that there is a funny situation regarding access and liability in Ireland. It’s not clear. You wouldn’t have a right to roam like you would in Scotland. If you go to the like of the French Alps for example and fall off your bike and break your neck it’s your
own fault for falling off the bike and breaking your neck. If someone falls off a bike here in Ireland they will sue everybody around them and have a fair decent chance at being successful suing whomever. So until the liability and the access issues are addressed, it’s really going to be that much more difficult for landowners to provide any sort of facility of even let mountain biking happen in their lands. One of the elements of the sustainable trails that they are building is that they are very safe and they’ve been engineered in such a way to be safe. I think everybody would like them to be a bit more dangerous and a bit more ropey but then the landowners wouldn’t have that because then if somebody does fall off and hurt themselves they are in a real risk of getting sued for it. In Wales and Scotland, because they have gone through such a vigorous process, to design these trails and they have a risk assessment incorporated in the process and all these various risks are looked at, and a proper report is made up saying this trail is safe for whatever reasons. If someone does fall off then they can say we did everything that was reasonably expected of us to provide a good quality, safe product. Now if there was something wrong with that process or they build the right trail and it got eroded and somebody had an accident then they could be liable again. But provided they have built something of good quality, best practice in standard and done everything that they could do it really does reduce the liability. On established trails around the world they treat it like skiing, where you know what level hill you are supposed to be on. And once you’ve told a person what they are likely to expect down the trail than that’s alright and you can build it. When it started off in Wales they started building, I suppose, the lower level of the scale, the yellows and the greens. Then that fulfilled the needs of the masses for a certain time and then I suppose with the progression of bikes and people just wanting more they have started going up to the blue and the black and they are staring to establish Freeride trails and Freeride parks. Here they are staring again with the easy enough stuff, but I’d say going forward we will reach a stage where we will have established blue and black trails but that won’t be for a few years down the road. The trails that they are building are all going to be way marked. There is going to be all sorts of signage and maps and all that kind of stuff. Other places that we are going to negotiating with them to use they are going to take down the no mountain biking signs and putting up cycling welcome signs. Every forest that has a car park has one of those signs saying, “no mountain biking”. They did it a couple years ago because there was a big case where a kid was coming down the hellfire club on his bicycle on the forest road and crashed straight into the foresters jeep. It was the young lads fault but the parents sued him nonetheless, and they did get a settlement, a big chunk of money and then those signs went up everywhere. They are not legally binding, there is no law that can prevent us from doing what they are doing at the moment, but maybe going forward. They are there to make it more difficult for anybody to make a claim. I have yet to ever come across a situation where Coillte tried to enforce it. The walkers take it upon themselves to enforce it but Coillte to date has not.

There is going to have to be a strategy for all the Wicklow Mountains for biking and all the other disciplines like it walking and horseback riding. At the moment there is no strategy for anyone. Hopefully they will actually get to the point where they have something in place but at the moment they don’t. It’s being done in bits and pieces. Going forward, to be honest with you, ten years down the road I’d say there would be a lot of mountain biking trails all over the place. We are lucky here in Dublin in that we are one of the few cities that have a resource like the mountains so close to us. You would have to go to Australia where a lot of the cities have mountains so close, but in the UK there’s none really that I know of. It’s a long drive to a mountain from any of the cities there. Likewise, in the U.S., there’s not that many cities that would have mountain ranges within an hours drive. In fact, you can cycle to the Dublin Mountains.
That’s near unheard of in most cities. The problem with Ballinastoe, that they are finding already, is that in Ballyhoura and some of the other developments, the local community has kind of got behind it and are very enthusiastic about it and plan to make a lot of money out of it when it opens providing accommodation and restaurants. That’s not happening in the town around Ballinastoe. The simple reason is that everybody living there knows that people coming there are all going to stay in Dublin. Either locals from Dublin or tourists who aren’t going to stay in Roundwood. They are going to stay in Dublin because its only an hours drive. They will do the mountain biking then drive back. So nobody is actually going to be spending that much money there. The problem is that most of the stuff being built is being built primarily as a tourist attraction. It’s not being built for a recreation for people here. So some of the projects that are underway at the moment in the Dublin area are designed primarily pushed by the recreational users. There is a thing called the Dublin Mountains Initiative, that is currently ongoing, and it’s showing a great deal of promise. I think it’s certainly going to happen. And you are going to have all sorts of recreational facilities in Dublin. It might take five years before it happens, but it will happen. And then you are going to have stuff being built purely from a recreational standpoint. Put in things that we actually want. Go down the road and see who is actually using it, and identifying their needs. As opposed trying to develop something that people would travel to.

Another problem is being able to offer the tracks that many riders want. The problem is that there are the types of tracks people want and then there are the types of tracks Coillte and landowners are prepared to build.

**The number one criterion for bikers in the survey is speed excitement and risk. How could speed and risk be incorporated?**

Where it’s at with the really good professional design is to try and effectively delude people into thinking they are going fast, when they aren’t really, thinking that they are at risk when they probably aren’t really, and getting something that’s relatively safe but it feels like it’s probably not. That’s where you get quality trail builders who do that kind of stuff. Dafydd Davis would be limited on that sort of stuff that he is allowed to build but the secret is to try and build a trail that MTB bikers can ride in completely different ways to maximize risk factors and that is a skill that is hard enough to come by. The way they provide different options, for example, would be to make a drop whereby an ordinary person just rolls down it thinking it’s a great big steep bank. The good biker comes along and thinks, “great”, and jumps off it. Then the really good biker comes along and jumps at the little mound they built ten yards before the hill and uses the steep bit as a landing. It’s that kind of thinking about the way different people do stuff, and combining things that the novices, intermediates, and experts can do on bikes. That skill, when its done well, and it’s done out in the likes of Whistler, where every level of person rides the same trail.

**Do you think that that is being done here?**

No. It’s not being done because the trails that are being done here in Ireland are for a certain market. The people who are building the trails now are not concerned with the requirements top-level downhillers or even the people who have been doing it for 20 years. They are looking more at the big chunk of people in the middle. The enthusiasts are what they would be called in the literature. They want that market so they are building trails for that market. Now these trails, I’m sure can be ridden different ways, and there will be different elements that tick that box. In fact Dafydd told me himself a
few times that he will be putting in options for different levels of MTBers. He
definitely would not be building the most extreme trails but he has made trails that have
lasted the course of time and are still being ridden today with as much enthusiasm by
that certain chunk of the market.

**IMBA has created a trail building school. Do you think at developing a trail building
school could be implemented here?**

We have a couple of projects here at the moment. Coillte are building their stuff, from
my side, the cycling community side, we’ve agreed with Coillte to go down a process of
identifying where we have illegal trails that we think can be sustainable, and be turned
into official trails. And they won’t be for the tourists they will be for us. We have a
pilot project in a place called Kindlestown in Wicklow. It’s a small little trail. It’s not
that impressive of a trail, but it was an easy first tick in the box. We brought Coillte
down to have a look at it and they had a couple of immediate problems right away so
they were fixed straight away. So we are now trying to upgrade the trails to reach
sustainable development. That can be done without a huge amount of work depending
on the trail. We are trying to use IMBA standards, but need to sign legal documents to
give official access to the place. But we will be going into the process of doing it
ourselves and bringing the trails to a standard that Coillte is completely happy with.
And my hope would be that once we have that we can turn around and go to all the
other “illegal” trails we have that we think are good. Provided they reach certain
criteria and are sustainable, I think Coillte will let us go down the road of upgrading
them and effectively keeping them and making them official.

All stakeholders need to sit around and discuss plans for the future. We have had a few
meetings already. They have a consultant who is creating a consultancy report about
the whole Dublin Mountain recreational plan for all users. On the national level there is
also a group called the Irish Trail Advisory Committee, who are a grouping of people
who use the trails full stop. On that committee cyclists are represented, so are the
various landowners, like Coillte and the National Parks and other key people involved
in trail provision and financing. And that’s going to develop a national strategy of how
trails are developed around the country everywhere. Our vision would be to see
something where everything is integrated properly. It will be a slow process as it has
only begun a year ago but since then it has picked up a bit of momentum going forward.
It is being run by the sports council and is the first real step towards developing
integrated long-term trail networks in Ireland. One of the problems they have identified
is that different groups are doing their own thing. Cycling Ireland are building their
own trails, Coillte are developing their own trails, the National Parks are talking about
building some trails, local councils are thinking about building trails, but nobody is
working at a big overall plan. Their role is to coordinate all these things so that you can
can get and overall network of trails. It’s a slow process but I think ten years down the road
we will have a trail network that is equal to the likes of Wales and Scotland.

At the moment all that the Forestry operation job to do is to is to make money off of the
forests. So everything they do, is purely driven by the economic side of thing. Some
areas they may leave some trees because they get enough pressure from different public
groups but buy in large they are in the timber cutting business. What we are hopeful of
what will happen in the long term and I think what they want to happen in the long
term, is that the government will change their agreement and they will actually get
funding to provide recreational facilities so it’s in their interests financially as well.
Some of these areas are not financially viable and would much rather provide
recreational facilities than cutting down trees. But the only money they get is what they sell in timber. They will continue to replant the same trees that are quick to forest because that is what they are paid to do the only way other species will be planted unless they are given funding by the government or told otherwise. That is why the Dublin Mountains Initiative is important. Coillte would like to design trails and build trails because the simple economics is that forestry is not an economical business anymore. Nowadays, from the economic side of it, there is very little point in planting a tree, for the sake of forestry. They would like a scenario where they can make money by providing what we all want. If they can prove that they can do it in the Dublin Mountains than they can do it anywhere. And then they will get the kind of funding that they want nationally.

**What would you like to see from Failte Ireland?**

To be perfectly honest with you, I wouldn’t like to see Failte Ireland do anything at all. I think that they are necessary because they are the ones who have the money, but I think the money for trail development should be given to the people who know about trail development such as the Irish Trail Office. The problem is that money from Failte Ireland comes with strings attached. They want that money to go into areas that need tourist development. That is fine but the benefits of us are secondary. If that money was given to the localities, and it never will because it is given to Failte Ireland to develop tourism, people who are better placed to develop recreational facilities for the Irish people in the localities they live in don’t have any money at all. They are just trying to convince Failte Ireland and other funding bodies to assist in recreational planning that may be completely different from Failte Irelands motivations.

The advantages that Ireland has for mountain biking as a tourist destination is that when they are finished these products we will have trails that are way marked, clearly identified, safe, sustainable, fun and everybody will enjoy them. People will ride them and have a great time. The people who will come back and be repeat visitors will do it because they enjoy the experience of being in Ireland. One of the biggest tourist attractions we have is that we are Irish. We like to go to the pub, have three or four pints and chat about shit. And that’s why a lot of tourists come here in the first place, purely because we are the way we are. People like chatting to us. You can meet a stranger, have a conversation, for six or seven hours, have a rake of drink and everyone thinks its great. And you can go out to a village, walk around and meet people and get involved instead of being treated as a tourist. People like that and that’s what people want.

The key to getting tourists here is to provide the facilities that they would like to see. Then the extra bit, the Irish bit, who we are, will keep people coming back. In terms of physicality’s of the trails and what people want to see on their bikes, they do want do come back for something different. My own opinion would be that the key to keeping people coming back, is to combine some of the unauthorized, “illegal” stuff, that really shouldn’t be there with some of the purpose built stuff that is there. Because to give it the extra dimension to keep people interested you will have to have something more than what will be offered.
Can you currently ride from Ballinastoe to the Dublin Mountains?

Yes.

So they can be linked?

Absolutely. They can be linked very, very easily. At the moment it is a common enough spin and is not unusual, but it’s not authorized, and you are riding on walking trails and bits that you really shouldn’t be riding on from a responsibility point of view and a sustainability point of view. I think you can certainly solve all those problems. And I think that if the powers to be decide to develop long distance routes out of Dublin to North Wicklow, there is no problem doing that. I have never seen a region that had more potential than the Dublin Mountains. And I mean everything within an hours drive from Dublin including North Wicklow as well. The potential is huge. There is an abundance of hills. They are not very big but it doesn’t really matter. Forestry, there is plenty of it, and forestry is the ideal place for mountain biking.

Very few people who make illegal trails have a conscious idea of what drainage and issues of that sort and don’t understand it themselves.

Do you think that having a trail building school, paid by Failte Ireland will be beneficial?

That will happen. It has happened to a small extent. There have been a few small workshops. I have been involved in one where we trained a small number of people, not a large number, not enough to make a big difference really. There will be and we do have funding and I know Coillte are very interested helping along with the funding to develop proper programs where you can learn how to be a proper trail builder. The problem at this time is that I am reluctant to teach trail building because at the moment there is nowhere legally where people can go and trail build. So I don’t want to perpetuate the problems that are here already. Once we have gotten to the stage where we have examples of how to do it properly on the ground and we are agreeing with Coillte on places that we can build trails, we are going to run loads of courses and get everybody doing building trails. But before we do that, we have to have a pilot project that has worked on the ground. Then we can go to the next step of developing trail builders so we can expand that one pilot project into a number of different projects. And that’s the key I think in the long term in developing good quality trails. Trails that are being put up at the moment will take thousands of riders and still be in the same quality they were in before anyone touched them. The stuff that is made by local riders, no matter how good a job they do, they will have a finite number of people that can ride them in certain conditions. And it’s Ireland so I can guarantee you it’s going to be raining all the time. The key to developing the trails is to determine what the level of use is going to be on the track. If you have a product that you are selling to the mass tourist market than Daffyd Davis’s trails are what you are looking for. If you have a smaller group of people riding them, than maybe the top end of the pyramid (experts) coming to ride and want something different, then having those trails there, but probably not as widely publicized, is probably the way to go. Having the alternatives that are not necessarily illegal but are not necessarily publicized, for the people who want to come back and do the extra bits will find out about it themselves because they are in the scene and they know what they are doing. If you want something that will just keep on bringing back the enthusiasts, ones who just want to ride the trails for a couple days then go away, then the simple answer is to just keep putting more of them
in. Because I know that in a lot of cases it is like a checklist. “Where have I been last?” “I’ve been to Ballyhoura, where will I go next?” “I’ll go to Dublin.” “Where will I go next?” “I’ll go do the stuff in Galway.” I think the answer to more tourists in developing a tourist product is just to have more trails. There are five sites around Ireland. Only three of them will really hit the target market. The thing about mountain bikers is that if you get involved in the sport and progress through the sport, you move up levels. The trails that are being built will be at the lower end coming into the sport and will progress to that higher level. That is a huge chunk of the market so it is not a bad idea to cater to them. But if you want to get the rest of the market, the ones from that level upward, then you need to build trails for them. The stuff at the moment isn’t for them but it may well be some day.
Appendix E

Interview with Daithi Deforge, Recreational Officer for Coillte

*What kind of market do you intend to reach with the trails being built at the moment and why?*

The whole direction behind what we are doing here is building recreational mountain bike trials, rather than something that is aimed at competition for example. Indeed for our funding partners in this, Faille Ireland, we had to be sure when we were putting our applications together for funding, we had to be sure that what we were delivering from there point of view was trails that could be marketed both to the domestic market and the overseas market. Its really following directions they have taken in Wales and Scotland in the last few years. To that end, we were looking in Coillte of building mountain bike trials that are going to be used by a wide range of different recreational mountain bike users. And also not something so daunting that it would put of the general, or largest part of the market which we are looking for which are recreational users.

*Do you think that the current trails that are being used by the local mountain bikers in Ireland play a part in the tourist experience?*

Well, we are kind of taking a couple of different approaches there. I suppose the approach we are taking for our five off-road cycle trails across the country that are being constructed at the moment. Two of those are intended to be multiuse trails. Two of them are in our forest parks and our forest parks have a sort of very wide general recreation use. They are used mostly by walkers, by hikers to a lesser extent, by trail runners, by parents with small kids in buggies, even wheelchair users in one of our parks. So the aim of two of those was to develop a good sustainable multiuse trail system that could be used by really everyone. And with our other three trails, one in Roundwood in Wicklow, on in Galway, and the big one we are developing in the Ballyhouras between Limerick and Cork will be signed and way-marked for mountain bike use but would also be quite appealing to walkers as well but mostly aimed at and marketed towards the mountain bike market. The mountain bike market is quite undeveloped in my opinion at the moment. The top 2% of the pyramid of users that use trails at the moment, because mountain bikers by and large at the moment are those who are actually willing to go out and build trails themselves that they want to use in an unauthorized or unsanctioned way for the last maybe 10 or 12 years in some places. The trails that they are still using, those unauthorized trails, are still being used, quite heavily. Indeed what we are looking at doing here in Roundwood, actually where I happen to be today at the moment, is to build a trail system that gives sufficient appeal to them and to discontinue using the trails that they would have built and to start using the trails what we have developed. And the reason for that really is that there are some quite serious health and safety issues on some of the trails that they have constructed and simply because they are mountain bikers. They are not trail designers and indeed they do not want to spend all of their time building trails, they want to be out riding them.
Once the trails are built will stricter enforcement be used to keep mountain biker off of unauthorized trails?

No. It won’t be by enforcement. It will be by provision. The whole issue about enforcement is that trying to stop people using trails in certain areas it just simply in our opinion can’t be enforced. I think what we have got to do, and it’s the direction we are taking now, is to build something that appeals to them more than something they have developed themselves. A lot of the trails they have built here in Balinastoe property in Wicklow are quite good this time of year but coming into October, November, and right through the winter and early spring, those trails are very mucky, they break down quite easily and they will take numerous different trail lines across the hill. It’s really a case of building stuff that appeals more to them to allow them to use those trails and I suppose in preference to the stuff they’ve already built. But another part of the approach as well is where MBI Mountain Biking Ireland approached us looking to developing trails in Kindlestown near Greystones. And that’s one where we have given a permit or a license to the local club to construct trails there but to construct them in a sustainable way and to use the IMBA guidelines for trail construction. We are then not left with a very hefty maintenance program on those trails and that those trails are built to correct and recognized standards. And I would see that with small clubs around the country in smaller sites we will be allowing them to develop some of those as well.

Is there anything that you think should be done but at the moment is not, by Coillte, Failte or any other particular group?

In terms of what we are trying to foster the idea that through the provision of trails, be those trails for mountain biking, walking, horseriding, or a combination of all three in one as a multiuse system that the whole idea of building trails manages use so it puts people in the part of the trails we want them in and we build something that’s sustainable in the long term for them as well. Not just from our point of view that they are low maintenance but that they continue to have longevity to users and are continued to be used for years and years. What we are encouraging as well … Through our development of our first five trails as part the Failte Ireland project in Coillte, we will be going back to Failte again to say, “look, this is what we can provide, this is what you can market overseas and to the domestic market, and if we can be funded to deliver these trails it can push a number of buttons not least the tourism one but indeed the one that we are going to involve ourselves with more over the coming years is pushing the whole idea of recreational use for occasional users for the vast majority of people who don’t want to go out and have a huge wilderness experience if you like but simply on a Saturday or a Sunday want to go for a stroll in their local forest. And that ties into a lot of the work we’ve been doing recently in looking at how we can liaise with the task force on obesity set up in the department of health recently and try to tie in delivering some of what they want to do and funding us to do it. I suppose the main issue for us really in Coillte is that we see that we can facilitate a lot of these trail developments around the country but its not necessarily in our mandate to provide them but we can subject to people coming on board to fund and to promote the trails we can provide.
Do the local communities play a part in what recreational facilities are provided by Coillte?

Absolutely, part of the Dublin Mountain Initiative, a group of various different bodies that was set up recently, was to look at how recreation can be managed and developed in the Dublin Mountains because obviously we are on the doorstep of over a million people at this stage. Some of our properties are literally just a stone throw from the M50 and that they can be more developed in the Dublin area to provide for a range of recreational uses and that is hopefully something we can pursue in the coming months as well.
Appendix F

Questionnaire Comments

Mountain Biker Questionnaire

12. Can you describe your FAVOURITE riding conditions (Note the track type, track difficulty, environment, ride duration, etc.)

1. My favourite riding conditions are riding through forest, or single track that is not too manicured. I like narrow track that have some obstacles, such as roots, switch back, trees, over hanging branches and some small steps. I prefer to ride in or near forest, where I can see the views occasionally (I don't like exposed riding too much). I like to ride for about 3 - 4 hours. I like to ride with people I feel comfortable with and friends, who I know will wait for me if I find the trail difficult ("hard core" riders tend to put me off as I do not want to hold them up). I prefer more challenging sections on uphill than downhill.
2. Dry winter when its not too warm but the tracks a bone dry and rock hard - prefer riding over exposed rocks or enclosed forest single track in these condition
3. Dry, grippy, very technical climbs and descents, approx 4-5hrs duration.
4. Dry - well drained and laid out tracks with a good mix of technical - some drops and small jumps - open - flowy, fast and fun!
5. Dry free draining track with short ups and downs single track decent and grace climbs.
6. Downhill,very difficult,steep roots and rocks,5 mins or more
7. Downhill with obstacles and jumps with intermittent single track and forest sections. Minimum of 3 min run
8. On Vancouvers north shore with my friends or in Whistler fast downhills rough technical jumps having fun with friends loads of savage corners to rail. But I enjoy road riding. digging trails etc.
9. Fast, technical, lots of jumps/drops, open sections, forest sections, easy sections, hard sections, not alot of walkers, a nice long track, rocky, rootie...
10. Single track,average difficulty,trees scenery & good mix of terrain, 2hrs,local
11. 2 hours+ in daylight conditions. Varying terrain with climbs and descents, with medium technical challenges. Single-track trails are best, whether through forest or open ground.
12. Single track, smooth flowing, some dh , some jumps, not too tecnical, good scenery, maybe a 5km loop so you can give up at regular intervals and in case of difficulty u dont have far to walk
13. Moderate difficulty - not too hard but something of a challenge * Single track * Open mountain terrain * Duration circa 3 - 4 hours
14. High, on real mountains. Dry, dusty (not too dusty!) singletrack descents, tight turns, berms, small drop offs. Climbing similar, but a bit less twisty. Uphill switchbacks.
15. Swerving single track through non-dense wood/forestry area, dry and smooth underground (preferably not a mudbath), mixed with some tricky technical bits, some kickers, some steep enough fireroad climbs, some technical descent sections, all in pretty nature with nice views, preferably no walkers/horses/big rocks in the way, about 2 hours duration, easily accessible
16. Man made single track with fast downhill and easy climbs
17. I like it all, XC, DH, FR, DJ but if im on my bike im happy!! But to pick just one real downhill tracks, both natural and man made... challenging tracks, nice surroundings, in the woods if possible, for aslong as my body keeps going!!
18. Rocky rooty dry downhill singletrack mixed with uphill fireroad ride duration 2-3 hrs
19. Very challenging trails with hard technical climbs and tough desents. Would like to be out for about 3 hours and feel that I've really being put through my paces both technically and physically.
20. Open mountain, followed by a technical wooded area on a nice sunny day for between 3-4 hours
21. A variation of trails all on the one day, flowy singettrack, technical descents, river crossings, fireroad climbs, jumps etc., with some difficult sections included. Preferably in good dry conditions.
22. Dice views, interesting uphills, no roads, no risk of taking out a walker on a fast downhill. fun fast down hills , with some rock to go over, steps and things. good technical uphills with challenging tight corners and rock. sheltered with forest cover so good fun to ride in bad weather and rain. 2-3 hours riding minimum.
23. Several hours (5 - 6), dry, warm, as much singletrack as possible, steep and technical downhill if possible, can be forest or open land (doesn't matter), with a small group of friends (4 - 8 people ideal), steady pace but not a race.
24. Deally the track would form a circuit so there was as little road to or from the track. Ideally it would all be single track running through natural forests (that would not be felled by coile for no apparent reason :( The track would need some challenging, tough climbs too, and would ideally be dry at least without huge amounts of mud/puddles.
Duration of about 2 hours, if its a circuit you can always go another lap to bring it up to a 4 hour Sunday spin
14. Do you know of any places where access for mountain bikes is a problem? (If yes, can you describe these places and problems?)

1. Massy's woods, Kindlestown woods: Often walkers in these particular area will complain at mountain bikers. Generally their concerns are not warranted. Three Rock mountain: on one side of this mountain a local resident regularly places very large rocks on a particular track, usually at blind turns where they are most dangerous to mountain bikers.
2. all areas of forest and open countryside in the republic is closed to mountainbike sport, without special permission. 
3. Forestry land and almost everywhere in Northern Ireland!
4. I usually ignore no MTB signs and use my common sense see comments below.
5. walkers and the traps they set. With no aparant thought given to the potential damage they WILL do to someone
6. Forestry managers although having given permission, destroy the DH tracks. Even though they are re-kownned trails.
7. Trouble with authorities for not having permission to be anywhere on your bike means a 45min hike for maybe 5mins of decent( under the category of downhill biking ) all while evading the land authority because you shouldnt be there in the first place...
8. In terms of being allowed there, 3 rock and leadmines, walkers often feel in danger or at risk. Mostly unnessecarily as all of the individuals i know are polite and courteous
9. Most Coillte managed forests have signs prohibiting mtb use - however these are the same areas in which most mtbing takes place. Since users are used to ignoring these signs it would be more difficult to introduce specific walker/rider trails - directions are likely to be ignored.
10. Amberley in Douglas-The dirt jumps keep getting ripped by the council because of someone complaining in the Estate behind the jumps. That person doesn't Know that infact it is not the MTBers but the teenagers who live in the park who go drinking down there everynight of the week.
11. At present mountain bikers are technically not allowed use coillte forests any trails built by clubs are illegal
12. certain areas in wicklow, ie Djouce mountain, the national park etc. Although I don't see it being a major problem, as there's tons of other places to go. Too many walkers or erosion of trails is a good reason not to bike somewhere
13. SIGNS PROHIBITING MOUNTIAN BIKING, NO ACCESS TO CARPARKS, NO SAFE PARKING.
14. Majority of Coillte forests are supposed to be "no mtb", though this is not enforced to any appreciable extent. Certain areas, Three Rock in particular, have issues with being too busy and with irresponsible riding and trail/jump building. Example of "no access" area: Tollymore Forest Pk, Co Down.
15. 3 rock, its actually a suburban forest, its big enough and versatile enough to accomadate everybody, even MXers, if it it was managed properly
16. MTBing is illegal on Coillte land and pretty much all non state landowners aren't willing to take the risk of officially allowing MTB's on their land either. Luckily so few people in Ireland enjoy the countryside that the chances of meeting anyone likely to complain are pretty low.
17. Cratloe woods occasionally where mountain bikers have the permission of the forest manager but some residents are not happy with this. threerock/ fairycastle- walkers conflict
18. Maulin River Valley (walkers have monopolised the Maulin / ride rock side) A mountainbike only trail is required to compliment the walker only trail that was built there by Mountain Meithel volunteers.
19. Crowded places like Howth can be a problem but being courteous usually stops any problems. It is not suitable for big groups.

20. Heavily used walking routes on weekends such as the Wicklow Way around Djouce, and local forests where local people walk dogs such as Kindlestown and Glen of the Downs.
15. Please name any tracks you would like to be allowed to ride on, but which are at present closed to mountain bikes?

1. Tollymore ( Mourne Mountains), Belfast Hills (Cavehill) and most other mountains and high ground in Northern Ireland
2. Not that there closed but there over run with walkers or other activities and we've just moved to other areas which have less traffic, we stay out of there way and likewise. 
3. I ride any track I wish too, but you have to respect other users of the track and the surrounding environment. 
4. Its not really close but Mallow DH trail is being damaged by the manager and is simply dangerous as a result. 
5. Off-road riding is technically disallowed on most state-owned and open areas. These areas should be available to bikers, walkers and other recreational users. 
6. Mt.Hillary - Mallow Epics many tracks in Wicklow Corrin Woods - Fermoy These are just 3 of many many tracks which have been destroyed or removed over the years, all venues being host to racing with Mt.Hillary at over 4 mins of decent being the longest available and deemed by many as one of the best tracks in the country. This was home of the National Champs 
8. Coilte forests have signs saying you shouldn't ride there, but these are ignored. I'd like to see signs up showing that these are areas suitable for mtb, then there would be less conflict between bikers and walkers 
9. No trails that are available to walkers should have bans. Complete bans to all traffic would be fine 
10. All tracks areas which are available to walkers. MTBing causes less environmental damage than walking. I have seen with my own eyes the damage caused by walkers to the countryside. 
11. Strictly speaking, the following are off-limits, I'd like use legalised, even if some restrictions (times or certain trails) were applied: Djouce Woods Kindlestown Three Rock/Ballyedmonduff Pine Forest Cruagh Woods Hellfire Woods Massy's Wood Curtlestown & Cloon Woods Bray Head National Park areas around Glendalough Carrick Mountain Barneslingan & Carrickgollogan Slievethoul (Saggart Woods/"Slade Valley") The Curraghe Carlingford/Sliave Foye Forest Mallow (DH track) Bree Hill Devil's Glen Wood 
12. A number of tracks in Connemara and East Clare hills 
13. Everything in Dublin & Wicklow including Coilte land & national park. With - Bike only trails where 1. Overcrowding is an issue 2. Dammage is an issue (due to flooding or over use) 3. Danger to other users is a real issue (not a percieved issue) 
14. There are many areas closed to mountain bikers, but the closure is not enforced. I would prefer if all Coillte Forests were open official, but with current enforcement it does not matter. 
15. The only one I can think of offhand is Kilrudery estate, but its different in the sense that its private land. The owner kindly lets the grounds be used for races once a year. 
16. My understanding is that no Coillte land is stricly legal for mountain biking. This would comprise most of the areas I would currently ride. There are no permanent managed trails in these areas. 
17. All Coilte forests. Are there any tracks at all that technically aren't closed to mountainbikers? 
18. Currently all Coilte land is officially closed to MTB'ers
16. If you ride on trails currently "illegal", do you think you will continue ride on these trails when Coillte finishes the mountain bike parks it intends to establish?

1. Most places have signs up saying you can not mountain bike or horse ride. So I guess we are riding trails 'illegally'. I will continue to ride these trails after the park is finished, as there will not be enough trails/space for all the riders, and if all the riders try to ride them, the land/ trails will be destroyed in a short space of time from over use.
2. If there are purpose built trails near me I will avoid illegal trails
3. the legal trails require a car to get to, where are local ones are nearer by bike.
4. The coillte trails will not satisfy the needs of "real" mountain bikers. They will suit the more leisurely "D4" type of mountain biker..
5. alot of the best tracks are on illegal trails
6. Half of mountain biking is about creations that people can make themselves.
7. Riding in these designated areas would be far too restrictive.
8. wouldn't alter my riding habits
9. The areas Coillte intends to develop will be fairly limited in size so for variety I will probably continue on "illegal" trails
10. the trails would require me to use a car at all times
11. coillte are building 13k of trail near dublin - it will make a good warm up trail!
12. Coillte's "sustainable" trails have their uses and are to be welcomed, but I'd get bored on the same few trails all the time. I want natural stuff as well as purpose-built trails, plus there's the exploring/going new places factor.
13. Due solely to time needed to reach Coillte trails, although I will ride Coillte trails at every opportunity!
14. coillte appaer to be focousing on family mountain biking, not mountain biking for those who dream of bigger and better things!!
15. Legal trails are most often too well finished to present a technical challenge without riders needing going so fast on them that an accident will lead to hospitalisation. Many trail designers don't make a distinction between what's technically difficult and what's dangerous in trail designs, assuming they're percieved as the same thing by MTBers.
16. Coillte trails will represent 2% of the trails in wicklow!
17. Of course, they can't expect to cram thousands of riders on a few little trails and to ride them over and over.
18. A few mountainbike parks throughout the whole country isn't enough for my needs and enjoyment. Also I like riding natural (not man made) trails.
19. If there are enough trails with loads of variety I wouldn't. We in conjunction with Coillte should never be finished building trails.
20. I am no deer that you can put into a zoo.
18. If you answered yes to question 16, do you think you will continue to build trails when Coillte finishes the mountain bike parks it intends to establish?

1. Probably, if everyone tries to ride on the few trail Coillte build, there will firstly be not enough room and secondly, it won't take very long for the ground to be cut up, especially in this weather. Plus, the trails Coillte build may not be accessible to everyone (i.e. if you live in Kerry you won't be able to ride the trails Coillte build in Dublin).
2. Yes, I build trails for myself and a small group of others. Mostly you have to be shown the trails, they would not be obvious to passer bys. The point of track building is making something harder than what you can do so I improve, pre built tracks for all will not feature this as much.
3. Yes but in responsible area's I've been riding a long time and know the hotspots and the not-spots.
4. Yes of course I will, the coillte trails are not going to be anywhere near the extreme standard I like to ride on so will continue to use and build other trails.
5. Yes, the mountain bike parks will be great but they can not push the limit of faster riders as the builders have to keep the slower riders in mind so we have to keep building tracks to push the people who want to do well in the sport.
6. Yes I build trails so my riding can progress as do the trails as I improve.
7. Yes. People will grow tired of riding on the same trails. The landscape, in the meantime, will continue to change through development, forestry, etc. Tracks will most likely continue to be discovered and developed.
8. Yes. No structural building, just clearing trails really.
9. Coillte will not cater for the competitive side of the sport. Clubs such as ours will need to continue to build our own trails so as we can run races and train on sufficiently difficult tracks.
10. Yes, mainly maintaining and repairing existing.
11. Trails will always be built, modified, extended. I get the impression that the mountain bike parks will initially only target begineers...
12. Yes, coillte appear to be focusing on family mountain biking, not mountain biking for those who dream of bigger and better things!! small scale "club" trail building is vital for the continuation of the sport though perhaps some kind if licencing or permission system is needed, such as what is used on vancouers north shore trails?
13. Yes, but it's all a question of where and what type of trail. Very busy areas are to be avoided, as are fall line trails.
14. Definently, cause trail building keeps the bikers in a certain area of the forest and it's easier to avoid the walkers. This is a healthy solution for everyone.
15. Yes - unless they're planning on building trails within easy cycling distance of my house I would see no point in destroying the eco friendliness of MTBing by having to drive to get there.
16. Trail building should be ongoing. Coillte/we should never be finished. Mountainbiking is hugely developed in Wales and Scotland, I can't imagine they consider their trail building programmes complete.
17. Possibly, my understanding is that in Britain which has a much better MTB infrastructure than we do that volunteer trailbuilding co-exists with formal trails. This could be a could model for us too.
18. Yes. these changes have the advantage that they are off walker trails and normally take routes, twist and turns that walkers would not be interested in following.
19. Thank you very much for your time and input. If you have any other issues you would like to raise please feel free to do so in the space below.

1. someone should make a website which has details of all mtb tracks in the country where users can upload images of a track and location details.
2. There will need to be enough bike parks to cater for all big population areas. If I have to drive more than 30mile than I will continue to use trails in Wicklow.
3. Good survey, keep up the good work, alot of us would be interested in reading ut finished work. Many thanks.
4. The main problems arise with walkers due to a small minority of idiots who do not respect other users of the trails. A bit of common sense and respect goes along way.
5. Please email to me the results of this survey - your theis as we need all the evidence we can to support our work to get scantedoned trails and access in Northern Ireland. You are slightly ahead of us.
6. The issue of access will always be there I walk, Blke and live in a mountain area. I was biking before there were walkers now they think they own my trails. Ditto with quad bikes recently, everyone blames everyone else. It is a question of being sensible there is single track I woudnt ride in winter as Id cut it up but walkers and horses continue to use it and it gets worse by the year.
7. The point made regarding a small number of renegade riders was a good one. Most MTB riders, especially those in clubs, are responsible. With the right structure and support, a more responsible community can be developed to encourage better relationships with landowners and other users of resources.
8. A lot of mountain bikers are willing to sit back and let others put the work into trails then ride them, pursue better conditions for mountain bikers, and set to complaining very easily.
9. There is very little (generally no) maintenance of existing trails in this country - both waking and mtb trails. One example which really bothers me is the climb to Fairy Castle (Two Rock) and the top of Tibradden nearby. These tracks are becoming wider and wider as walkers and mtbers seek the easiest (least muddy, least rocky) route. I would gladly participate in fixing up these trails so people could have less impact on the surrounding bogland (i.e. clearing, drainage, signage) but there is no cooperation with Coillte to do this work - anything carried out voluntarily is likely to be erased by forest operations. This has already happened in Djouce where the Mountain Meitheal walkers group did great work on hiking trails only to have them completely destroyed by logging.
10. I can see what one of the questions is aimed at. Not everybody is as lucky as me to have free access to a car, especially University clubs and groups of young people. A handful of MTB areas an hour or more drive from cities is not a reasonable demand to put on car-less people.
11. Mountain biking should be recognized by people as a valuable past time and not a nuisance. To achieve this, understanding between conflict parties (walkers and mountain bikers, horse riders and mountain bikers) needs to be raised so that it is possible to find solutions for a suitable co-use of trails. One problem is also that mountain bikers are often being blamed for trails that have been eroded by scramblers.
12. A little trail building is good and provided it is done responsibly and has an element of reducing environmental impact, it can only improve the situation. Conflict with other groups can be largely avoided through courtesy, however signage on downhills would help everybody - alerting other outdoors people to the danger and signs near junctions on downhills to slow riders.
13. Responsible MTBers could be seen by Coillte as custodians. Illegal dumping is a real problem where I ride and I will report anyone I suspect.
14. I would like to see the mountain bike parks have black runs and see races held at them too.
15. I'd like to see MTB Rules at all the Coilte Forest gates, advising mtbers to slow down on approaching walkers, close gates after opening, bring litter home etc etc
16. THE POTENTIAL FOR TOURISM IN THIS AREA IS CURRENTLY OVERLOOKED, BUT PROPER INVESTMENT AND MANAGEMENT COULD MAKE IT AN ESSENTIAL PART OF THE TOURIST TRADE.
17. Unless the land is private, it is belonged to the people of Ireland, this includes mountain bikers, unless a group is seen to be causing damage to other users, I don't see why people should be not welcomed. Something else which the relevant authorities are missing on, is the fact that on an international level mountain biking is very big and mountain biking tourism is significant. With great mountains in such close proximity to Dublin and Wicklow a huge opportunity is being missed.
18. STEP 1 A tiered approach to trails is the only way forward. Top level : Tourist / recreational trails Mid Level : Recognised rider built trails, built to a standard (IMBA) and maintained. Low level : Local trails, mix mash of seasonal trails (not to standard)
STEP 2 Education Impact study - how many bikers use the trails and what damage do they really do (compared to walkers) STEP 3 Spread the word and co-exist
19. Mountain biking is a serious revenue maker for Welsh and Scottish tourism - both with rubbish climates like us. MTBing is not as weather dependent as many activities and only the most adverse conditions will put us off. Whatever about Coilte being extremely slow off the mark, it would seem to me that Failte Ireland and the hospitality sector should be major players in the development of our facilities seeing as the could have so much to gain from it. Where are they? MTBers spend money - and lots of it. Just look at their bikes.
20. The designated areas are not within cycling distance from most of the urban areas so getting people to take up the sport will become more difficult
21. I think Irish institutions should do more to advertise this sport. Instead of stealing cars and burn them kids could learn to respect and enjoy nature. Could be a big chance to save the "still" GREEN isle. The environmental "destruction" by mountainbiking is nothing compared with cars (especially without catalysers), dumped waste and uprooting without reforestation!
22. Best of luck with the Thesis. The biggest single problem in Irish mountainbiking is non-availability of legal trails, lack of availability of trail maps and lack of access to the countryside.
23. There needs to be serious education put in to showing MTB for what it is, Purpouse built trails are all very well for weekend warriors, but for people like myself and the majority of my club, sanitized trails are not for us. It has also been said to me personally by the Head of Recreation that when Ballinsastoe is built, we'll be forced to use it and nowhere else. I'll let you use your imagination how I responded
Appendix G

Questionnaire Comments

Hiker/Hillwalker Questionnaire

4. In general, do you consider the trails in the Dublin/Wicklow Mountains to be ...

1. If you don't mind rougher trails in some areas
2. some trails are nice, but i prefer going off trails,
3. The degradation in the last 10 15 years has been dreadful 4. There has been a large amount of felling on Coillte land recently which has made the trails less interesting.
4. prefer not to have trails -part of wilderness experience
5. More State expenditure on creating and maintaining trails would be preferable
6. Question 4 is very vague. Some are in deplorable condition. Others are untouched.
7. It would be good if there were more of them
8. Voluntary work from the whole community is required as in other countri
9. sometimes danderous like blanket bugs or around a stream
10. Alot of our walking is not on trails but across open moor

5. Would you be willing to volunteer for trail maintenance projects in Coillte forests?

1. I participate in Wicklow Mountain Meitheal activities once or twice a year.
2. Generally, I feel those using the mountains should give something back, and health and my family commitments permit
3. have done voluntary work on pathways with Mountain Meitheal
4. However, I would be concerned about the impact heavy Coillte machinery could have on the trails
5. There is also a voluntary group called Meithel which creates trails in partnership with the landowners and state bodies
6. I have worked with mountain meitheal in the past
7. Is this questionnaire to do with biking? I would take the view that bikers should not be permitted particularly on sensitive moorland where they do obvious damage.
8. would not presently have the time
9. I am a member of Mountain Meitheal - see www.pathsavers.org
10. Due to back problem
11. Have back problems so can't do heavy labour
12. I would do this on occasion if more people were involved.
13. Many hikers already do through Mountain Meitheal. Personally I think that it should be the responsibility of the local councils to maintain.
14. In general this issue will not be solved purely by voluntary effort, however I support voluntary efforts.
6. Would you be willing to donate money to restore degraded trails in Coillte land?

1. but it wouldn't be at the top of my list for donating money
2. I would regard this as the responsibility of Coillte, particularly as most of them have been degraded by heavy felling machinery
3. This is conditional on causes of damage being restricted. No point otherwise
4. Responsibility of Coillte
5. Everyone has to help out - the Irish solution of always relying on the State does not work. In fairness, Coillte are the largest land owner in the State and provide more recreational access to their land than anyone else - Irish farmers please note!
6. I am a student and I haven't a lot of income;
7. Have supported Mountain Meirtheal which does conservation work on eroded tracks
8. However, I think Coillte should keep at it.
9. Why bring coals to Newcastle?
10. This should be funded from Sports and Tourism budgets.

8. How would you rate the effect of mountain biking on your experience of hillwalking/hiking?

1. Certain parts of the mountains should perhaps be reserved for bikers and cyclists but they are not allowed on way-marked ways and should never cycle on them. Their behaviour in doing so is anti-social and possibly illegal. The adults who have charge of them, including their parents, bear a good deal of the responsibility for this anti social behaviour. Where it is teenagers or young adults operating without supervision, they are of course responsible but poor parenting is a contributing factor as it is in so many other areas of life. It is ignorant, damaging to the trails, anti social and possible illegal.
2. distroying trails, dangerous when both on same trail and noise pollution.
3. I dislike being bustled off a path.
4. Mountain bikes have a low environmental impact. Other uses, such as quad & trail (motor)bikes, horses & even cows are much more damaging to trails & the environment
5. They destroy paths. They also do not slow down adequately when passing walkers
6. destroys landscape with tyre marks, & also bikers generally very aggressive
7. Mountain biking trails should be provided
8. It depends on where you hike. Some areas are unaffected. in others, around Aughavannah, they are usually present whenever I have hiked there.
9. Cause a lot of damage to paths especially in wet weather
10. I do not like them. They destroy the terrain
11. There is room for everyone in the mountains if everyone (bikers included) fix and maintain trails. Coillte already do this - other landowners must participate too - Irish farmers please note!
12. I admire them
13. Due to noise and also severe damage caused to soft ground Sun,
14. In general I welcome them, it's the motorized variety I detest
15. Not as bad as quad bikes, they are the real menace.
16. Can cause grooving in soft ground
17. Mountain bikes tend to co-exist without hassle, other than the odd shock of encountering a biker coming over a hill. Mountain bikes also tend to cause little erosion on trails hikers frequent. The biggest problem is quads and off road bikes doing huge damage to trails and having no respect for other users.
18. They are often to be seen near the city in forests where they have a habit of effectively taking over sections of paths. They can and do attempt to exclude or limit walkers despite being totally out of sync with common sense or local law.

9. Do you feel that there are problems with mountain bikers and hikers using the same space?

1. Anti social behaviour by one group will also create problems for another. This is self-evident and does not need to be spelt out. The solution is (a) better parenting and supervision of ill-mannered youngsters plus, in fairness to them, dedicated trails for bikers and cyclists.
2. conditions of trail degenerating because of biking and danger aspect - usually speed and sometimes very poor behaviour on part of bikers
3. Bikers frequently assume right of way, and also have a complete disregard for my comfort zone (as opposed to theirs).
4. The paths and open hillside are damaged by bikes. This is not a problem at higher altitudes, more closer to the main roads.
5. Both activities combined are wrecking some paths. Bikers are sometimes aggressive
6. See comment at 8 above.
7. see previous comment. bikers should have their own areas, away from walkers, & away from conservation trails voluntary put down by hikers volunteerign for this
8. Deterioration of moorland is the obvious consequence. Biking (and I include quad biking here. Concentrating biking on one fragile habitat will destroy it; moving biking around will spread the problem.
9. They are dangerous and extremely noisy
10. I have only one comment - bikers must be made fit bells or other audible warning devices to alert hikers as they approach them from behind.
11. Yes at the moment for reasons given in last answer, Also some bikers (not all) have no regard for others or wildlife
12. bikes ruin the tracks much more than walkers
13. My personal experience relates mainly to problems with quad bikes, we don't meet mountain bikers often enough for it to be a real problem
14. sometimes they try to cycle through you
15. Mountain bikers often, though not always, appear to be dangerous and occasionally aggressive. There needs to be proper relegation of mountain biking to small agreed areas. On open ground such as around Kippure I have seen significant damage from mountain bike tracks. Any reasonable environmental cost benefit analysis would question the far greater damage to use ratio of mountain biking.
16. Some erosion and muck on paths
10. **Do you think that some hiking trails should be converted to multiuse trails and allow mountain biking?**

1. Difficult to answer that question but it could be looked into. The starting point must be for bikers and cyclists to respect the existing rules
2. they are often used for biking anyways even if it's not allowed
3. its nice that bikers and hikers are in the same area, but its better to keep to different trails,
4. As reasons above
5. No objection to biking, but the damage to trails/hillside and occasional danger from whizzing cyclists suggests we should be separated.
6. Mountain bikers should be allowed to use all suitable trails on the understanding that they do so at their own risk & should give way to hikers when necessary
7. I think all outdoor activities should be welcomed and solutions found.
8. see previous comment
9. Yes as long as trails are not closed to walkers
10. And restricted to biking only. These trails should be metallled to prevent erosion.
11. Trails could be enjoyed by all
12. Hikers and bikers travel together all over the fantastic forest and mountain trails of the Alpine countries and USA/Canada - what's so special about Ireland?
13. W.ould be good to try some pilot trail.Would reduce damage to other areas unsuitable for biking.
14. Given the strain on existing trails, it would be difficult to agree to increasing it for any other traffic
15. Not without detailed proposals. In general on steep ground the irresponsibility of some bikers would be likely to cause accidents and this is a high price to pay for shared use.

12. **Thank you very much for your time and your input. If you have any other issues you would like to raise, please feel free to do so in the space below.**

1. Separate trails needed for bikers, away from hill walking trails - noise pollution big factor. Interesting you didn't ask if bikers should be asked to volunteer their time to repair trails? Gook luck!
2. Bikers already ignore the signs warning them off the Coillte tracks. Bikes need robust tracks (hard, stony ground) which will not be degraded by the passage of clubs. Irish tracks are mainly soft and boggy.
3. While bikers can be agressive, hikers can be elitist and snobby about their activities. I'm all on for getting people from all of society out of the cities and onto the hills. Lets find solutions.
4. I got a bit bored with hiking, so I was not out for about a year. I did notice bikers a few times being irresponsible, and the other walkers dont like them!!! However, I feel the mountain should be open for other sports like biking, but not at the same places, many of the ramblers are older people and bikes pose a threat to them. They have an impact on the ground more damaging than walkers.
5. Neutral above means don't know.
6. I have climbed and hiked all over the world and the Irish countryside is by far the worst because of: a) the access problems b) the "them" and "us" attitude of
Irish hikers - there's terrible elitism here. c) Most Irish hikers belong to clubs which helps to propagate these attitudes and also by being in a club, there is all take and no give when it means doing something positive to improve deteriorating trails. Very few club hikers volunteer for trail work and worse still, don't think they should have to. It's someone else's job - not their's!

7. As an active hiker and member of a large group, I haven't heard of any issues between hikers & bikers..

8. "Mended fences make good neighbours" Unmanaged mountain biking is likely to cause increasing friction. Accidents. Most walkers in clubs have third party insurance. Given the reckless speeds I have personally witnessed in places like Three Rock, I will never be happy without this being a requirement, amongst others, for mountain bikers where they impinge on other users.
Declaration

I certify that this thesis which I now submit for examination for the award of Msc in Hospitality Management is entirely my own work and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

This thesis was prepared according to the regulations of the Dublin Institute of Technology and has not been submitted in whole or in part for any award in any other Institute or University.

The Institute has permission to keep, lend or to copy this thesis in whole or in part, on condition that any such use of the material of the thesis be duly acknowledged

Signed: ___________________________  Date: ______________________

i
Abstract

This thesis set out to determine if Ireland is making the most out of its Mountains for its recreational mountain bike users. At present, government funding is being allocated to develop areas for mountain biking in Ireland that are in need of greater tourism. However, there is very little research into the demographics and riding preferences of the Irish mountain biking community. To address these fundamental issues, which are crucial to policy and management that governs development for mountain biking, the following research was conducted:

A review of the pertinent literature that outlines mountain biking, its development and the current policies that shape this matter.

Primary research was conducted using a questionnaire aimed at the Irish mountain biking community and a questionnaire aimed at hikers/hill-walkers. Interviews were also undertaken to help get a better understanding of the issues being faced. Findings from the questionnaire were similar to other countries, including that young male riders dominate mountain biking and tend to prefer a wide range of settings and experience. Furthermore, mountain biking shows a strong potential for growth in the future.

The thesis questions development policy and current liability stances taken by the government insisting that if growth in mountain biking from a recreational and tourism perspective is to continue, a new course of action must be taken.

The author suggests that through community involvement and participation of all stakeholders, a trail network can be established satisfying the needs of all users. With local recreational development, tourism will follow.

Finally, a number of conclusions are drawn and recommendations are made on the basis of the research findings. There is considerable potential for expanding this body of knowledge and the research project identifies areas for further research that would greatly expand knowledge on mountain biking as a recreational activity in Ireland.
Acknowledgements

This thesis would not be here today if it were not for the help, assistance and guidance of many people. I would like to specifically express gratitude to the following:

To David, for your wisdom and encouragement in getting it started.

To Prince, for his enormous help in getting it finished. Without you I don’t think it would have been possible.

To my housemates, Daniel and Daniela, who have been there for me every step of the way.

To Sean Herlihy, for the pints and your enthusiasm with mountain biking.

Paddy, and the rest of the mountain biking community, for their insight and devotion to the sport.

To the hikers who took part in this study even though it was on the topic of mountain biking. Your point of view was very helpful well appreciated.

To Deirdre Quinn, for all the guidance and support above and beyond the call of duty.

To all the library staff who put up with my face all summer long.

To my supervisor Peter Bohan, who put up with my disorganization all year.
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<tr>
<td>ATVs</td>
<td>All-terrain Vehicles</td>
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<tr>
<td>ASC</td>
<td>American Hiking Society</td>
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<td>DH</td>
<td>Downhill</td>
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<td>DMI</td>
<td>Dublin Mountain Initiative</td>
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<td>et al.</td>
<td>and others</td>
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<td>EPIC</td>
<td>Extreme Pursuits in Cycling</td>
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<tr>
<td>FMD</td>
<td>Foot and Mouth Disease</td>
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<td>HCOE</td>
<td>Human Community of Outdoor Enthusiasts</td>
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<td>Irish Sports Council</td>
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<td>Leave No Trace</td>
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<td>National Countryside Recreation Strategy</td>
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<td>National Parks Authority</td>
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<td>National Survey on Recreation and the Environment</td>
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<td>National Trails Office</td>
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<td>Trail Technical Features</td>
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