

OFF-ROAD CYCLING IN
NORTHERN IRELAND -
A STRATEGIC REVIEW

Report prepared for



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1 BACKGROUND

Despite high sales of mountain bikes and an increasing interest from tourists in exploring the countryside by cycle, the supply of places available to the public to cycle off-road is limited. Where such facilities exist they are lightly publicised if at all. Several strategies have identified the importance of developing off-road cycling facilities including:

- The 1997-2001 Mountain Biking Development Plan
- The Northern Ireland Countryside Recreation Strategy
- The Northern Ireland Cycling Strategy
- The NITB Cycling Survey 2000

Recently, a number of land-owning public bodies and potential suppliers of off-road access for cycling have become interested in exploring this potential on their own lands and have supported the Countryside Access and Activities Network (CAAN) in taking forward the preparation of a strategic review of the current situation, the need for off-road cycling provision, and the preparation of recommendations for future development.

This report addresses the current position of off-road cycling in Northern Ireland, provides a review of the current and potential markets, identifies case studies of sites and marketing approaches in Northern Ireland and elsewhere; and makes proposals for the way forward in developing further off-road facilities.

2 CYCLING MARKETS - UK & IRELAND

Off-road cycling has been relatively lightly researched to date with the main focus of most studies being the cycling market as a whole or cycling as a small element within general surveys of day trips or holiday activities. For this reason it is difficult to establish the size of the off-road cycling market in Northern Ireland or elsewhere. The following data assists however in building a useful picture.

2.1 GREAT BRITAIN DATA

In 1997 Forest Enterprise (Part of the Forestry Commission of England, Wales and Scotland) commissioned a series of cycling surveys. These comprised a leisure cycling household survey¹ and on-site cycling surveys at a number of its own key off-road sites. Key results were as follows:

- Around one quarter of adults reported cycling for leisure, with almost two thirds of these riding mountain bikes.
- Most adults who cycled for leisure did so in the countryside, on roads (61%), 48% cycle on roads in town, and 38% cycle in woodlands or forests. Of those who cycled in forests or woodlands 58% reported cycling on Forestry Commission lands in the recent past.
- The most common reason for not cycling in woodlands or forests was that they were too far away.

Site surveys (sites with specialist provision for off-road cycling) (961 cyclists - 6 sites)

- The most common group size was 2 with the average 2.9
- 76% of groups included adults aged 25-59 years, 33% of groups included children, 8% of groups included senior citizens.
- Around half had travelled from home that day, and for those who had stayed nearby, camping and caravanning was the most popular form of accommodation, with B&B and self-catering accommodation also featuring.
- More than half had travelled over 15 miles to reach the site
- More than half were repeat visitors
- More than half were staying for 4 hours or more
- 81% had used the waymarked trails
- Two thirds were aware of the forest cycling code
- Groups with no children were most common at Coed Y Brenin and least common at Sherwood Pines
- Visits to Forest Enterprise sites were high amongst the more prosperous groups and particularly groups A and B². Levels of visits were generally lower for low-income, council estate and multi-ethnic groupings

¹ Insertion of four questions into the RSGB's annual general omnibus survey for two weeks in January 1998 - survey of 3867 adults

² Survey used Acorn coded postcodes that divide postcodes into 54 types and 17 groupings. These were applied to the survey to establish approximate socio-economic groupings

- 70% had travelled to the site by car or van, with cycling to the site least common at Coed Y Brenin (5%) and most common at Sherwood Pines (47%)¹
- 58% of respondents cycled more than once a week in summer (70% in Coed Y Brenin)

The Forestry Commission/Forest Enterprise places counters at some sites, and undertakes car park surveys at others to try to establish use. Sherwood Pines Forest Park had 150,000 off-road cycling visitors in 2000, Coed Y Brenin Forest in Wales had 140,000 visitors of whom some 70% are estimated to be off-road cycling visitors. These two forests are widely promoted and are amongst the busiest off-road cycling sites.

In 1997 in Scotland, Highlands and Islands Enterprise, Highland Council and Highlands of Scotland Tourist Board commissioned a Highlands Visitor Survey which illuminated that 8% of visitors took part in cycling whilst on a holiday or visit, whilst 1% visited specifically to cycle (including mountain biking). (By comparison Britain whilst 1% of overseas visitors also took part in specialist cycling holidays, only 3% cycled as part of their holiday). 70% of all visitors were in the ABC1 category, which had a daily average spend of over £45.

*The Survey of cycling in Scotland*² is one of the most detailed and up-to-date cycling surveys available in the U.K. Key data for 1997 include -

- In 52% of households at least one person owned a bike, and 56% of bikes owned by adults were mountain bikes or hybrids (i.e. bikes capable of use off-road)
- 55% of cyclists were male and 45% female (48% and 52% of population respectively). Of adults' use of bikes - 55% used them for leisure, and 23% for keeping fit
- 41% of adults cycled at least once a week, 22% cycled 1-3 times/month, 37% less often
- Most trips were local; average round trip distances were just over 7 miles; 60% were for 5 miles or less, and 90% of trips were for under 2 hours (60% for under 1 hour);
- 41% of trips were on a main road, 33% on a minor road and 26% off-road - including cycle ways, forest tracks, footpaths
- Cyclists' main desires were for safe local cycle routes/paths, route markers and information on cycle routes and secure cycle parking.

Cycling is a particularly popular activity for countryside and woodland visits in Scotland. The *Day Visits Survey* estimates that in 1998 cycling was the main activity for 9% of all day visits to a forest/woodland (2m trips) and 5% of all day visits to the countryside (4.5m trips).

British Tourist Authority identified key markets for cycle tourism in 1997 as Dual Income No Kids (DINKs) and groups of students from Netherlands, Scandinavia, Germany, France and the USA. Domestic cycle tourism was also considered important with the view that cycle tourism has an ABC1 socio-economic bias and appeals to:

- More experienced cyclists
- Couples
- Groups

UK cycle tourism is estimated to be worth £285 million¹ of which £142 million² is contributed by people on specialist cycling holidays.

¹ Skewed by the presence of Centerparcs holiday village adjacent to the trails at Sherwood Pines

² System Three Scotland, 1999. *Survey of cycling in Scotland*. SNH Research, Survey and Monitoring Report No. 135, SNH, Edinburgh

David Bloy of Sheffield Hallam University identifies that cycle tourists³ to the UK have the following characteristics (based on a survey of 766 people requesting information on the National Cycle Network from Sustrans).

- They are more likely to be male than female (70%/30%)
- They are predominantly 45 years of age or over
- 4 out of 5 cycle tourists will have had one or more cycling holidays
- They enjoy challenge, remote scenery, and cycle to relax
- They enjoy getting away from crowds, but enjoy the company of others whilst cycling
- They cycle with friends rather than family

The UK Leisure Day Visits Survey⁴ in 1998 identified that 2% of all leisure day trips taken by residents were to take part in cycling or mountain biking. With a total day trip estimate of some 5940 million trips the overall estimate for cycling day trips is some 118 million. The overall number of trips has risen from 5117 million in 1994 to 2706 million in 1996. The percentage of those involving cycling has remained the same.

Scotland attracts 0.1m main activity cycling holidays, comprising 0.4m bed nights and expenditures of £13m⁵.

Cycling has a considerable economic impact, particularly in rural areas. The Coast-to-Coast route is estimated to have an economic impact of some £1.5 million

2.2 IRELAND DATA

Bord Fáilte's annual figures for cycling⁶ in 1995 would suggest a 1:3 ratio for specialist and general holiday cycling respectively. Mainland Europe and Great Britain predominate in the overseas market for cycling in Ireland, with mainland Europe topping the specialist market. Within this market Germany, France and the Netherlands have the highest participation. Air was the most popular means for people taking a cycling holiday to arrive in Ireland in 1995. This implies a reliance on cycle hire to gain access to the activity. Most overseas cyclists stayed more than 6 nights in Ireland with guesthouse, B&B and hostel accommodation being most used. The majority of overseas cycling holiday participants fell into ABC1 socio-economic groupings. Some 9% of holidaymakers to Ireland were believed to cycle in 1995. Per capita expenditure over a two-week holiday is estimated at £538 and the market is very seasonal with 61% arriving between July and September.

The numbers of overseas tourists believed to engage in cycling in Ireland whilst on holiday were 113,000 in 2000 (4.5% of visitors) and 129,000 in 1999. (These figures are similar to those for angling). Specialist cycling holidays, based on the 1:3 ratio identified in 1995 may account for some 35,000 participants.

2.3 NORTHERN IRELAND DATA

Assessing the specific market for off-road leisure cycling in Northern Ireland is difficult for a number of reasons:

1 Tourism Intelligence Papers, English Tourism Council, 2001

2 Sustrans 1999

3 Does not refer to off-road cycling holidays

4 A misnomer since NI data have not been included since 1991

5 Scottish Tourist Board, 1998, UK Tourism - Activity Holidays in Scotland 1997, STB, Edinburgh

6 Bord Fáilte, 1995, Survey of Overseas Travellers

- The primary source of data on leisure day visits, including comparative data for the U.K., would usually be the *Day Visits Survey*¹ (formerly the *U.K. Day Visitor Survey - UKDVS*). However, Northern Ireland has been excluded from that survey since the Northern Ireland agencies withdrew their funding in the early 1990s.
- There are distinct differences in data between data sources - i.e. *Northern Ireland Leisure Day Trips Survey 1990-1991*² (NILDTS) and UKDVS - possibly due to the former including some urban and non-leisure trips. Although based on smaller samples, the UKDVS data compares more favourably with data in the report on *Public Perceptions on the Northern Ireland Countryside*³

However, the following key indicative data are available for cycling in Northern Ireland. In 1997 the Department of Regional Development in Northern Ireland commissioned a study on cycle usage. The study had the following results:

- Cycle usage to travel to work is lower than in the rest of the UK where 71% of journeys to work are by car. The corresponding figure for NI is 80% with 0.8% of trips being by cycle compared with 3.3% in the rest of the UK
- 1 in 4 adults has access to a bicycle
- One third of households have at least one adult who has access to a bicycle
- 1% of trips in NI are by bicycle compared to 2% in Great Britain. In Sweden 10% of trips are by bicycle, in Germany 11%, in Switzerland 15% and in Denmark 18%

The Northern Ireland Passenger Survey 2000, an exit survey taken at airports and key ferry ports, identified that some 600 people came to Northern Ireland specifically to cycle, whilst some 6,800 participated in cycling whilst on holiday. This survey does not include either Irish residents who cycled in Northern Ireland or overseas tourists entering Northern Ireland through Ireland and so will underestimate, perhaps significantly, the numbers involved. Comparisons with the two previous years are contained in Table 1.

TABLE 1: NUMBERS OF OVERSEAS VISITORS TO NI UNDERTAKING CYCLING 1998-2000

YEAR	CYCLING AS REASON FOR VISIT	PARTICIPATED
1998	600	5800
1999	400	6900
2000	600	6800

SOURCE: NITB PASSENGER SURVEYS

Cycling represents the second most important countryside recreation activity for overseas visitors to Northern Ireland after walking.

A cycle usage survey was undertaken by Roads Service consultancy in May, June and September 2000 to establish a baseline for the NI Cycle Forum against which progress on levels

¹ Survey Research Associates, 1993, *U.K. Leisure Day Visits Survey*, for CRRAG, SRA, London (and subsequent *Day Visits Surveys*, SRA/SCPR.)

² Sports Council for Northern Ireland, Northern Ireland Tourist Board and Environment Service (DoENI), 1992, *Northern Ireland Leisure Day Trips Survey 1990-1991*, HMSO, Belfast

³ Ulster Marketing Surveys, 1993, *Public Perceptions of the Northern Ireland Countryside*, UMS, Belfast.

of cycle usage can be assessed. Surveys of use of 31 route sections, using traffic counters, on calmed or dedicated cycle routes including sections of the National Cycle Network were undertaken, with results as follows:

- Day average usage ranged from 3 on the Sandholes Rd in Cookstown to 165 on the Ormeau Bridge in Belfast.
- The Lagan towpath at Drumbeg had an average daily usage of 66 cycles
- The Railway Path in Dungannon had an average daily usage of 19 cycles. (Sustrans Data)

The NITB cycling survey carried out by PriceWaterhouseCoopers was conducted during August 2001 at 8 sites along National Cycle Routes and at one other site. Results were as follows:

- i. On average the study counted just under 5 cycles per hour at the sites, with sites in Newtownabbey and Stranmillis having the highest throughputs of 9 and 8.6 cycles per hour and Omagh and Limavady having 1 and 2 cycles per hour.
- ii. 86% of cyclists surveyed were resident in Northern Ireland and the remainder from out of state
- iii. Of those that came from out of state, almost 60% were from Great Britain, with Germany being the next most significant country
- iv. The most predominant age amongst the cyclists was 35-64 years
- v. C1 was the most predominant social class
- vi. 28% of all cyclists were female, whilst 40% of non-resident cyclists were female.
- vii. The main reason for cycling was described as leisure, whilst 1 in 10 cyclists was on a cycling holiday
- viii. 40% cycled every day, and a further 36% cycled at least twice a week.
- ix. 80% of all the cyclists surveyed were travelling in excess of 6 miles.
- x. Of those on a cycling holiday 45% were cycling more than 31 miles with 87% in excess of 11 miles
- xi. Overall, half were cycling alone, one in five as a couple and less than one in ten as a family group.
- xii. Half of those visiting from overseas however, were cycling as a couple with 11% as a family group and 22% alone.
- xiii. The vast majority of cyclists had made their own bookings rather than buying a package, and 16% had used the Internet to do so.
- xiv. Over half of those using accommodation had stayed in caravan parks or campsites, with B&B being the next most used at 16%. Only 3% stayed in hotels.
- xv. Expenditure averaged £37.34 per day amongst tourists, with non-residents spending an average of £46.05 per day.
- xvi. 13% used cycle hire overall, with a higher usage amongst those on cycling holiday (20%). Those cycling whilst on holiday (rather than on a specialist holiday) used cycle hire most (80%)
- xvii. 11.5% stated that they would like to see more off-road routes in NI, whilst 90% would recommend cycling in NI to friends and families.

In year 2000 there were an estimated 2 million trips made to Forest Service forests in Northern Ireland. Based on data gathered through visitor surveys at Forest Parks an estimated 2.3% or 46,000 of these were made by cycle.

The UKDVS¹ estimates that there were around 160,000 cycling leisure day trips in Northern Ireland in 1992 and the Public Perceptions study estimates some 0.1m cycling day trips over the summer of 1992. 46% of interviewees³, who visited the countryside, considered that *places to cycle* were *very valuable* (25%) or *quite valuable* (21%)

The Northern Ireland Leisure Day Trips Survey 1990-1991 found that 1.5 million (4.1%) of leisure day trips by people resident in Northern Ireland were undertaken to take part in cycling (this may include urban and some non-leisure trips). Three-quarters of main activity leisure cycling trips were in the countryside or at the seaside or coast. In all 25% of leisure day trips were made to take part in sport. Other findings were as follows:

- i. Average expenditure was £8.27 per trip with over 40% of this spent on food and drink. Cycle day trip expenditure was below the average at £6.07 per trip but higher than for hillwalking at £4.07 per trip.
- ii. Day trips to take part in cycling are estimated to have led to expenditure of some £9.1 million in 1990-1991
- iii. Cycling to a day trip destination was involved in 5% of trips (1.7 million trips)
- iv. Twice as many day trips were made by people in social class ABC1 (52%) compared to with those made by social class C2 (22%) and Social Class DE. In terms of the Northern Ireland population social classes ABC1 are substantially over represented.

Northern Ireland Tourist Board market managers have identified key cycling visitor markets as - the Republic of Ireland, Germany, Netherlands, Belgium, Canada and Northern Ireland. The study team would suggest that there is a significant market, especially for short-break and second holiday cycling visits from people resident in England, Scotland and Wales. The prior development of quality off-road cycling products will be vital to any market development opportunities.

2.4 SPECIALIST CLUB MEMBERSHIP IN NORTHERN IRELAND

- In Northern Ireland there are two representative bodies for cycling, both of which have an off-road interest. The two bodies have combined for development and event management purposes to form Mountain Bike North. The majority of cycling clubs in Northern Ireland have some members who participate in off-road cycling and who compete in specialised events. The number of cycling club participants overall who take part in off-road cycling is estimated at 2500.
- During the off-road cycling competition season which runs from January to September specialist events are held, normally on a fortnightly basis although sometimes more frequently. Examples of events are the downhill mountain biking league, which has seven events held throughout N. Ireland, and the fortnightly under age (5-16s) cross-country events held in Bangor Castle Park. Locations of other events are discussed in detail elsewhere in this report.
- Attendance at competitions can range from 60-120 competitors with 100+ involved in the Bangor events.
- The majority of people competing in mountain bike events are male (circa 98%) with an age profile of 6-50

2.5 SUMMARY OF MARKET DATA AND SIGNIFICANCE FOR NORTHERN IRELAND

In summary the following statements represent the Northern Ireland cycling market:

- More than 7400 out of state visitors cycle in Northern Ireland each year as part of their holiday. Of these more than 600 people come especially to cycle. At present the majority use quiet roads and traffic calmed cycle routes. Most visitors arrange their own holiday and obtain their information from guidebooks. Very few people buy cycling packages from tour operators. These people spend some £45 per head per day on accommodation, food and entertainment.
- A further unknown number of Irish visitors come north to cycle, and are joined by visitors to Ireland from Great Britain, continental Europe and North America.
- Between 160,000 and 1,500,000¹ cycling leisure day trips are taken each year by people resident in Northern Ireland. Three quarters of such trips are to countryside or coastline. Expenditure per person on these trips may average £8
- 12% of users of the NCN in Northern Ireland would like to see more off-road routes provided.
- More than 1000 off-road cyclists are in membership of some 47 cycling clubs in Northern Ireland². These people cycle regularly and participate both in informal cycling and in organised competitions run by the NI Cycling Federation and the Ulster Cycling Federation.
- Most mountain bikers are not in clubs.
- Cyclists vary in age depending on the type of activity undertaken: people taking cycle touring holidays tend to be 45+; those seeking trail or cross-country experiences are typically in their late twenties to mid thirties whilst those participating in downhill mountain biking are younger and may also be in their teens. BMX and trials have strong following of young cyclists.
- Males have a higher representation than females in cycling. Participation amongst female tourists is high, with a half of visitors in couples, females resident in NI have a lower participation than their male counterparts and in off-road cycling there may only be 10% female participation
- The majority of cycle tourists, people on cycling leisure day trips and people visiting specialist facilities for cross-country cycling fall into ABC1 socio-economic groups. The largest category of resident users of the NCN in Northern Ireland however was within social class C1. Classes D and E are underrepresented.
- The motivations of a cycling holiday are: challenge; quality scenery; mental relaxation, getting away from crowds (but in good company); exploring new areas; and having fun.
- Cycling holidaymakers tend to cycle with friends rather than family.

1 The wide difference between these two figures reflects a difference in data between UK LDVS and the NI LDVS. The lower figure may be taken as an underestimate at year 2001, whilst the upper appears inaccurate by a wide margin.

2 Ferris C., 1995, Countryside Recreation Strategy for Northern Ireland – Report of Survey.

FIGURE 1: OFF ROAD CYCLING MARKET SECTORS: RECREATIONAL AND TOURISM MARKETS

Market Sector (mainly off road cycling)	User characteristics	Routes and facilities	Growth potential	Potential spend
Casual off road trips				
Short off road trips	Home based Mostly occasional riders, mixed abilities Mainly 20-25 years, individuals, couples, families Up to 20 miles (some on road) Mixed socio economic profile	Cycleways, country tracks etc. Safe routes to country parks etc. with off-road routes Signs and information Secure cycle parking	High potential (existing & potentially large market)	None/ low
Part/Whole day off-road trips (own bike)	Home based Infrequent riders, mixed abilities Mainly 25-50 years, couples, families, groups 10-40 miles (some on road) mixed socio economic profile	Cycleways, country tracks, themed routes etc. Routes in forests, country parks etc. Signs & information & secure cycle/ car parking Cycle friendly transport Product marketing	High potential (existing & potentially large market)	Low/ moderate
Part/Whole day off-road trips (hired bikes)	Home based Infrequent riders, mixed abilities 18-55 years, couples, families, groups 10-40 miles (some on road) more affluent socio economic profile, including non car owners/ drivers	Cycleways, country tracks, themed routes etc. Routes in forests, country parks etc. Signs & information & secure cycle/ car parking Cycle hire Product marketing	Moderate potential (moderate market scale, taster for cycle ownership)	Moderate
Cycling Tourism				
Independent cycle tourism trips (including day trips)	Tourist accommodation or friends Keener & more competent cyclists 25-45 years, individuals, couples, groups	Cycleways, country tracks, themed routes etc. Routes in forests, country parks etc. Signs & information & secure cycle parking	Moderate/ high potential Especially selected	Moderate/ high expenditure in key tourist areas

on holiday) (own/hired bikes)	10-40 miles (some on road) more affluent socio economic group	Cycle hirers & cycle friendly accommodation Product marketing	tourist areas	
Packaged cycle tourism (bikes mostly provided in package)	Tourist accommodation Keener cyclists 25-45 years, individuals, couples, groups 10-40 miles (some on road) more affluent socio economic group	Cycleways, country tracks, themed routes etc. Routes in forests, country parks etc. Signs & information & secure cycle/ car parking Cycle hire Product marketing	Limited potential - except selected tourist areas	Low volume, moderate/high expenditure in key tourist areas
Recreational Cycling events				
Charity & fun events	Mainly home based All ages & abilities 8-100+ miles (some on road) mixed socio economic profile	Cycleways, country tracks, themed routes etc. Routes in forests, country parks etc. Cycle friendly transport (e.g. return trips) Events organisers & marketing	Moderate potential (high numbers on limited number of events)	High volume, low/moderate expenditures
Trailquest (recreational cycling orienteering)	Home or overnight accommodation All ages & abilities Up to 20 miles (off-road) Mixed socio-economic profile	Trailquest trails (usually in forests) map based leaflets & checkpoint markers, car parking & possible cycle hire Product awareness	High potential (moderate market size but limited number of repeat visits)	Low spend, unless staying away from home
Competitive & club cycling				
Off-road competitions and training Downhill events Cyclo-cross events Cross-country events Mountain bike trials	Home or overnight accommodation Dedicated, fit and experienced riders mostly younger ages; some all ages (e.g cycle orienteering), mostly males mixed socio-economic profile variety of distances/ times	Specialist off-road event courses, with start/finish, parking, amenities & spectator facilities courses/ land available for training Marketing of selected events	Moderate potential (limited numbers)	Low spend - unless high profile competitive event with spectators and media

Challenge events (e.g. iron man)				
Competitive cycle orienteering				
Other competitive activities				
Off-road club activity (non competitive)	Home or overnight accommodation Dedicated, fit and experienced riders mostly younger ages; some all ages, mostly males mixed socio- economic profile variety of distances/ times	Challenging routes in forests, country parks etc. Information on routes etc. Secure cycle & car parking	Limited potential (club members)	Low spend, unless staying away from home

Source: Table adapted and developed by Peter Scott Planning Services and Judith A Annett Countryside Consultancy from *Cycling Opportunities: Making the most of the National Cycle Network*, L. Lumsdon, Simon Holt Marketing Services, Stockport, 1996

3 CURRENT LOCATIONS AND ROUTES USED FOR OFF-ROAD CYCLING

The main development of off-road and traffic free cycle routes in Northern Ireland, in the past decade, has been through co-operative partnerships between Sustrans (a civil engineering charity), Government agencies, Rivers Agency, Local Authorities, NITB and in some cases, private developers. A network of national cycle routes extending to some 500 miles has been developed with part funding; grant aid from the Millennium Commission (awarded 1995) and is expected to cover some 1000 miles by 2005. A series of high quality maps and leaflets provides information on the routes, their facilities and links to public transport.

3.1 OFF-ROAD CYCLING

Off-road cycling covers a range of different types of cycling from easy family cycling opportunities through to competitive downhill races. For the purposes of auditing the locations where off-road cycling takes place the following sub-disciplines of off-road cycling have been addressed.

- Family cycling
- Cross-country or trail cycling
- Downhill mountain biking
- Trailquest or bike orienteering
- Off-road cycling on multi-use trails
- BMX or trials

Traffic-free cycling close to or beside roads has not been considered within the study, the main emphasis of the study being off-road cycling as a form of countryside recreation, predominantly in rural areas.

Information on venues currently used for cycling was sought as part of the study from the Northern Ireland Cycling Federation, Ulster Cycling Federation, Mountain Bike North, District Councils, Forest Service, Water Service and the National Trust.

As the study progressed it became evident that most Forest Service forests receive some usage and most other areas of woodland close to major settlements have regular off-road cycling users.

The following locations in Northern Ireland are known to have significant use at present for off-road cycling:

3.1.1 PLACES WHERE OFF-ROAD CYCLING IS CURRENTLY WELCOME

DOWNHILL MOUNTAIN BIKING

N. I. Forest Service has specifically provided the following sites for off-road, downhill mountain biking

- i. Moneyscalp mountain bike descent - a short technical downhill route developed by Forest Service with guidance from a local cycle group. The club manages events on the track and there is in addition a high level of casual use. On some days the track is at capacity. Users vary their descent and there is some informal route development.

- ii. Gortin Glen Forest Park - a mountain bike area has been designated in the park away from the focus of public use. The area offers several trails and allows for access between trails. Again there is a link between Forest Service and the local cycle club, which has an off-road section. Routes were developed in conjunction with enthusiasts. The local community has also taken an interest in the project and hopes to build on the facility to develop cycle tourism. BMX /trials area is currently under construction in the forest.

OFF-ROAD SECTIONS OF THE NATIONAL CYCLE NETWORK

The following sections of the National Cycle Network provide for off-road cycling

- i. The Lagan Towpath. Formerly a walking trail, parts of the towpath have been developed over the past five years to enable the route to accommodate dual use. The path runs from Belfast to Lisburn
- ii. The Newry Portadown Canal Route - Opened in 2001 as a walking and cycling trail, this route provides some 18 miles of predominantly off-road, level cycling.
- iii. The Derry-Strabane cycle route uses part of the line of the former railway as a dedicated cycle route
- iv. An off-road trail is nearing completion between Ballycarton and Binevenagh near Limavady.
- v. Part of the National Cycle Route along the North coast takes off-road paths through Downhill Forest.

OTHER OFF-ROAD TRAILS

The following additional off-road trails or sections of trails have been provided or developed:

- i. A route has been developed at Woodburn Forest near Carrickfergus as a joint venture between the local authority and NI2000 and with Water Service permission.
- ii. The Kingfisher cycle route goes through Castle Archdale forest on wide forest roads, before returning to the main road via the entrance to the Castle Archdale Country Park.
- iii. A linked series of cycle routes joining Belfast Parks already provides off-road cycling in the urban area and its fringes and will be an extensive network when completed. Similar plans are in progress around Derry.
- iv. The Loughshore Trail at Randalstown viaduct is almost complete. This will facilitate an off-road section of this trail leading around Lough Neagh.
- v. There are multiple off-road cycle routes designed into the new town of Craigavon, these, whilst serving primarily a local route network to school, churches and shops, also allow people to reach countryside sites such as the Balancing Lakes, Oxford Island and will allow access to the Lough Neagh end of the developing walkway along the Lagan Canal between Broad Water and Lough Neagh

BMX PROVISION

The following provision for BMX cycling activity has been made:

- i. There are BMX trials areas in several Belfast Parks and one in Glenside Community Woodland in Lisburn.

3.1.2 SITES USED BY ACTIVITY PERMIT FROM THE LANDOWNER ON AN OCCASIONAL BASIS

The following sites are currently used to stage off-road downhill, cross-country or trials/BMX competitions on a permissive basis:

- Gortin Glen Forest Park (Forest Service)
- Ballykelly Forest (Forest Service)
- Killyleavey Forest (Forest Service)
- Binevenagh Forest (Forest Service)
- Moneyscald Wood (Forest Service)
- Woodburn Forest (Water Service)
- Glenarm Forest (Forest Service)
- Castle Park, Bangor (Local authority)
- Red Hall - Island Magee (Private)
- Guildhall, Dromore (Private)
- Castle Park, Bangor
- Hannahstown Community Woodland

3.1.3 'TOLERATED' SITES

The following sites do not have official access arrangements or permits but appear to have a reasonably high level of use that is tolerated by the landowner:

- i. Whitespots Country Park - Ards Borough Council. This local authority owned Country Park has facilitated the NI Mountain Bike Championships in the past, although there is no designated training or competition area. This area already carries walking and motorcycling activity but has management problems. It should be noted that this area has an ASSI designation; however, consent has been obtained to permit motorcycle trial events. A code of practice has been established for such use. There is some overspill to the Clondeboye Estate where cycling is unwelcome.
- ii. Castlewellan Lake - the circuit of Castlewellan Lake by family cycle groups is tolerated by Forest Service
- iii. Peatlands Park - Environment and Heritage Service has no objection to people cycling gently along the wider, surfaced paths of the country park. This activity has not however been encouraged
- iv. Castle Archdale Country Park - cycling is a frequent pastime in this EHS country park and usage extends to the Forest Service Castle Archdale Forest. The Kingfisher cycle route goes through the park.

3.1.4 'NUISANCE' SITES

The following unofficial sites are known by local authority Countryside Officers and others to be used against the wishes of the landowners:

- i. Banbridge Golf Club - informal trails have been developed here including some that could result in falls into the Upper Bann River.

- ii. Clondeboye Estate woodlands - despite landowner objections cyclists are using this privately owned woodland for cross-country activities.
- iii. Cave Hill Country Park - an informal downhill mountain bike route has been developed by local cyclists in the park and is causing management worries for both safety and environmental reasons.
- iv. Roe Valley Country Park - general cyclist use of the pathways is considered to be an inappropriate use by EHS and is strongly discouraged
- v. Scrabo Country Park - use of the pathways and particularly the steep downhill routes in the park is strongly discouraged because of the density of use by pedestrians and the risks to cyclists.

3.1.5 'UNOFFICIAL' SITES WITH HIGH USAGE

The following sites have no permissions for cycling, yet are receiving relatively high numbers of visits from off-road cyclists:

- i. Rostrevor Forest and Kilbroney Park in Rostrevor sees a high use, particularly by young people. Descents are of sufficient length to satisfy downhill cyclists and there is the added attraction of a high, accessible car park on the forest drive.
- ii. Mourne Park near Kilkeel has a regular usage by both casual cyclists and serious downhill mountain bikers in training. The site is a combination of private mostly broadleaved demesne woodland and a commercial forest plantation. It is used for events, but has no permission for regular cycle use.
- iii. Belvoir Park Forest has a high usage by cyclists and managers have experienced trouble with the deliberate damaging of an ancient monument, which was attractive for trials. Usage is both concentrated in small areas and is linear with some people using the forest to gain access to paths along the Lagan and through to Stranmillis or to Shaw's bridge and Barnett's Demesne.
- iv. Cave Hill Country Park has an unofficial downhill run created by local cyclists. It is of concern to park managers both from the point of view of the safety of participants who may not have the skills to handle the track and of other park users who are mostly on foot and who find the cyclists a nuisance.
- v. Tollymore Forest Park has a high usage by a range of cyclists. There are unofficial trails all over the Park but the most significant concerns are with cyclists returning to Newcastle on a direct route from Moneyscalp Mountain Bike Trails, and cyclists ascending the Drinns and taking various descent routes from there, crossing pedestrian pathways en route. Tollymore is being advertised on the web site of an English mountain bike magazine (readers' favourite route section) although there is no permission for cycling and it is actively discouraged.
- vi. Sallagh Braes, a section of the Ulster Way in Co. Antrim is being used for cycling and is causing concern to Larne Borough Council, which manages the route and has received complaints from walkers. The ground is soft and considered unsuitable for cycling.
- vii. Slieve Donard attracts some of the fitter off-road cyclists, and the National Trust, which owns the land above the forest on the Glen River, considers that usage is increasing. Erosion problems on this path from its high level of use by walkers are already significant.

- viii. Redburn Country Park in Belfast attracts cyclists to a steep downhill run through broadleaved woodland. Trails in the park are not sustainable due to the gradients and the small size and heavy pedestrian use of the park.
- ix. Tardree Forest in County Antrim receives casual off-road use.

3.1.6 USE OF ROUTES IN THE WIDER COUNTRYSIDE

The previous sections have considered site based use rather than use of pathways in the wider countryside. There is evidence that off-road cyclists are active within the countryside access networks, based on information from the National Trust in relation to Slieve Donard and from Larne Borough Council about parts of the Ulster Way, and from encounters with cyclists on the Brandy Pad, St Patrick's Way and the Navar sections of the Ulster Way. In some areas this is causing no problems because of relatively light pedestrian usage and sustainable surfaces. In others such as on Slieve Donard, there are concerns that the pathways will not sustain this use without deterioration, or that there are safety issues in relation to the pedestrians who share the use.

3.1.7 CYCLISTS' RIGHTS WITHIN THE NETWORK OF ACCESS FACILITIES

The legislation on access to the countryside in Northern Ireland¹ gives cyclists a right to use public paths² provided that they give way to both pedestrians and people on horseback, but places no obligation on local authorities to facilitate the use of a path by cyclists. This right is subject to any order conditions made by a District Council and to by-laws

Cyclists have no right to use public rights of way other than public paths in the terms of the Order. Non-adopted carriageways in rural areas are the only category of public rights of way over which cyclists have a right of passage at common law³. Such carriageways are considered to be rare in Northern Ireland.

Cyclists have no rights on bridleways.

Cycling on permissive paths depends upon the terms of specific agreements signed between district councils and landowners.

3.1.8 LOCAL AUTHORITY COUNTRYSIDE OFFICER FEEDBACK

During the study local authority officers were asked to identify where off-road cycling was taking place and what if any the issues were. They were also asked to identify where there are development opportunities or development intentions identified through local authority access or countryside recreation strategies.

Key points are summarised below:

- i. Most Countryside/ Access Officers were aware of both official and unofficial sites in their area and provided listings.
- ii. Belfast parks provide extensively for off-road leisure cycling and links are either in place or being developed to link parks and create an extensive network. These routes are provided for general and family cycling.

¹ Access to the Countryside (NI) Order 1983

² Scott, 1994, Access to the Countryside in Northern Ireland.

³ Personal communication, Terry Eakin, Environment and Heritage Service, Northern Ireland.

- iii. In the majority of cases the list of unofficial sites is considerably longer than that for official sites.
- iv. Nuisance issues recorded by Countryside Officers included:
 - Persistent cycling, even where clearly prohibited
 - Management of off-road cycling issues becoming a strain on resources
 - Damage being caused to features of interest to other users
 - Conflicts between users with, typically, walkers complaining about the conduct of off-road cyclists
 - Erosion of footpath surfaces and of unsurfaced paths by cycle use
 - Private landowners experiencing difficulty discouraging cycle use from their lands
 - 'Underground' trail building activity.

3.2 CURRENT AND POTENTIAL PROVIDERS OF OFF -ROAD CYCLING ACCESS, THEIR CURRENT PROVISION AND THEIR VIEWS

3.2.1 FOREST SERVICE

Forest Service is an extensive holder of public lands with some 114 named forests, some comprising several individual forest blocks. At present off-road cycling is welcomed at two sites, Gortin and Moneyscalp, on a permanent basis, and special provision is made in the form of dedicated mountain bike trails.

A general forest by-law prohibits cycling in the forests and because of this the service has not been in a position to provide in a more comprehensive way for cycling.

The two Governing Bodies for cycling, the Northern Ireland Cycling Federation (NICF) and the Ulster Cycling Federation (UCF) seek and obtain permits from Forest Service to stage both downhill and cross-country mountain bike competitions on an occasional basis with permits being valid for a short training period and the event itself. During these events the NICF and UCF provide their own insurance cover.

The Forest Service is one of the agencies committed to the achievement of the objectives of the Northern Ireland Cycling Strategy and as such intends to provide short family cycle routes within some of its more suitable holdings. Prior to the study these sites had not been defined.

3.2.2 ENVIRONMENT AND HERITAGE SERVICE COUNTRY PARKS

Environment and Heritage Service (EHS) country parks are located as follows:

- i. Castle Archdale in Fermanagh
- ii. Peatlands Park near Dungannon
- iii. Roe Valley Country Park near Limavady
- iv. Redburn Country Park near Belfast
- v. Ness Wood Country Park near Londonderry
- vi. Scrabo Country Park near Newtownards.

Although the primary intention of country parks is to provide opportunities for countryside enjoyment, this enjoyment is viewed by EHS as primarily quiet enjoyment, mainly on foot.

The size, steepness or nature of the parks rules out the majority from being cycling venues. Cycling is tolerated at Castle Archdale, where the Kingfisher Cycle Trail uses the sealed main access driveway through the park; and at Peatlands where cyclists are allowed (but not encouraged) to use some of the broader routes (away from the lowland raised bog Area of Special Scientific Interest). Cycling could physically be accommodated at Scrabo but the levels of pedestrian use of the steep pathways make this undesirable.

Environment and Heritage Service is willing to provide short family cycling opportunities at Peatlands Park and at Castle Archdale Country Park, using the wider pathways available.

3.2.3 Sustrans

Sustrans activity with statutory partners has been primarily focussed to date on creating the extensive network of National Cycle Routes

In the near future, Sustrans intends to submit proposals for cycle routes (primarily on quiet roads and lanes in rural areas in NI), and will prioritise in the short term the five areas eligible for the Peace II funded National Resource Rural Tourism Initiative (NRRTI).

Routes proposed are circular, based from existing settlements and are intended to support the development of cycling visits and cycle tourism.

3.2.4 NORTHERN IRELAND CYCLING FORUM

The Northern Ireland Cycling Forum is a consultative, co-ordinating and strategic planning body serviced by the Department of Regional Development's Roads Service and involving those agencies with an interest in promoting higher levels of cycling and cycling infrastructure in Northern Ireland. It incorporates bodies with an interest in health, road safety, the provision of cycle friendly infrastructure and also the user groups and has been responsible for the development and publication of the Northern Ireland Cycling Strategy in 2000 and which it is currently updating.

The Forum has developed planned actions on a range of fronts including cycling to school, cycle tourism, sport and leisure cycling. Whilst the forum does not currently have any plans in respect of recreational mountain biking and cross-country cycling, its strategy does include the development of family cycling opportunities in venues such as forest parks. The Forest Service is a signatory to the cycling strategy and the proposals in the report in respect of family cycling represent their detailed response to both the NI Cycling Strategy and the off-road cycling review.

The Forum wishes to ensure that all cycling development activities are co-ordinated through the NI Cycling Forum.

3.2.5 WATER SERVICE

Water Service has significant upland landholdings in the form of extensive water catchments and reservoirs. Examples include Woodburn near Carrickfergus, Quolie near Glenarrif, the Silent Valley area in the Mourne, and Banagher near Dungiven. Water Service has no remit or budget to provide recreational facilities, but has co-operated with recreational initiatives on its lands where another body is prepared to play the lead role and to fund the development. All uses have to be consistent with maintaining a safe, potable water supply so the level of scrutiny of developments is high and a formal set of operating constraints is normally developed and provided. Under these arrangements usually fishing (mostly leased to the Department of Culture, Arts and Leisure for the public angling estate) is the main use and riding takes place in some forested sites. One cycle route has already been provided in

Woodburn through co-operation with Carrickfergus Borough Council and NI 2000. DARD Forest Service normally manages any forested Water Service lands and where this is the case both permissions are required.

Water Service is prepared to consider cycle routes on a site-by-site basis where there is a lead and managing body other than itself and where full funding and on-going site management is available from other agencies.

3.2.6 THE NATIONAL TRUST

During 1994 and 1995 the National Trust reviewed its policies towards access and recreation on a UK wide basis. As part of the outcome of the review it developed a set of principles, one of which identified access as both a benefit of the Trust's preservation of sites and as a principal purpose. A second principle identifies that if serious conflict arises conservation will take precedence over access.

On a UK basis some 71% of properties have cycling access of some kind. In general these cyclists are welcome, in particular as a means of reaching properties, and there is a positive programme of encouraging additional facilities for cyclists such as cycle hire, bike racks, adventure areas etc. Cycling is seen as a most appropriate activity where sites are extensive and where there are sufficient staff to manage the activity. The Trust intends to identify opportunities for cycling within its tenanted farms.

In Northern Ireland cycling is welcomed as a means of travelling to National Trust sites, but there is little known use of sites for cycling and no special provision has been made to date. Properties tend to be relatively small with walking being the main means of travel within the sites.

The Trust is willing to consider in more detail the potential for family cycle trails at Castle Ward in Co. Down and at Crom Estate in Co. Fermanagh.

3.3 EXPRESSED DEMAND FOR FACILITIES FROM CYCLISTS & CYCLE TOURISM BUSINESSES

The following companies offer cycle tours to Northern Ireland as either a main or secondary tourism product:

- i. Ardclinis Outdoor Adventure
- ii. Irish Cycling Safaris
- iii. Kingfisher Cycle trail
- iv. Causeway Cycle Tours
- v. Corralea Activity Centre and Cottages
- vi. Lakeland Country Breaks (packages)
- vii. Irish Cycle Tours

All of the companies above were contacted as part of the study with three replies. These businesses receive enquiries on a regular basis about off-road routes, and, if such were provided they would use them as part of their itineraries.

The following companies offer cycle hire with bikes being more suitable for road cycling or easy off-road trails, at present their clients are mainly limited to cycling on roads, with an increasing number of signed and interpreted road based cycle trails being available.

- i. McConvey Cycles- Belfast

- ii. Lakeland Canoe Centre - Enniskillen
- iii. Belleek Cycle Hire - Fermanagh
- iv. Portaferry Hotel
- v. Ross Cycles- Newcastle and Castlewellan
- vi. Strangford Arms Hotel
- vii. Happy Days - Londonderry
- viii. Life Cycles - Belfast
- ix. Cycle Ops Bicycle Hire Kesh, Fermanagh
- x. Old Schoolhouse Inn- Comber
- xi. Marble Arch Cycle Hire
- xii. John M Hanna- Lisburn

25 cycle retail businesses across Northern Ireland were contacted to establish whether in their experience off-road cycling seemed to be growing, what kind of people bought their off-road cycles and where these cycles were used. A further question was asked to establish whether the retailers had a view on local facilities that should be developed. Only four businesses replied with 3 out of 4 considering that sales (and off-road cycling) were increasing and one feeling that the market had reached a plateau. Sites listed as being used included Mourne Park, Moneyscalp, Tollymore, Tievenadarragh, Lead Mines and Tipperary Wood. Purchasers were mainly males with a wide distribution of ages.

3.4 LIABILITY FOR CYCLING USE OF THE COUNTRYSIDE¹

The degree of liability an occupier or owner of land may have towards a member of the public on or off a cycle will depend on the circumstances and the facts of the particular situation. It depends on whether the person is on a public right of way, whether they are there with permission and whether the occupier can reasonably foresee either the danger or the consequence.

In the case of a right of way the issue would be settled under common law², where there is a long standing principle that an occupier is under no responsibility towards users of such a highway for their safety and is not responsible for any dangers associated with it. In such a case deliberate action to make the highway unsafe would have to be proven.

The main framework for considering the liability of a landowner or occupier for cycling on other types of route or facility are the Occupiers Liability (NI) Order 1987 and the Occupiers Liability Act 1957.

Under the Act the occupier owes a 'common duty of care' to all visitors, i.e. to take such care as is reasonable to ensure that the visitor will be safe for the purposes for which s/he is permitted to be there. This would include anyone using a permissive path (i.e. a route used by permission). The Act does not impose an obligation on the occupier towards any visitor who willingly accepts a risk.

Under the Order the occupier also owes a duty to another category of person who is not a visitor (i.e. is not on the land with permission) In this case the occupier owes a duty in

¹ This section is intended as a helpful explanation of the current position rather than a legal guide. It should not replace the needs for occupiers to take appropriate legal advice for their own circumstances.

² Scott, 1994, Access to the Countryside in Northern Ireland.

circumstances where a) s/he is or ought to be aware of a danger on the land, and b) could reasonably anticipate that a person might be put at risk by the danger and c) could reasonably be expected to offer the entrant some protection. In the views of the Law Commission¹ this clause would operate in such a way as to exclude recovery in most cases because of the level of natural hazard that are expected by users of the countryside in such places. (e.g. forests, open country) In the case of unofficial cycle users therefore there is still a duty of care to ensure that hazards have been foreseen and acted upon where they would appear to represent a threat to users.

¹ Law Commission. Report on Liability for damages or injury to trespassers and related questions of occupier's liability, Cmnd 6428, para 41.

4 OFF-ROAD CYCLING IN ENGLAND, WALES & SCOTLAND

4.1 THE EXTENT OF OFF-ROAD CYCLING PROVISION

Off-road cycling provision is very extensive in the rest of the UK with most sites having developed over the past ten years. The Forestry Commission is the main provider of opportunities with a high proportion of its forest being open for recreational cycling. The opportunities are described for the public in a series of leaflets and on a searchable web site. Many local authority and private country parks welcome family cycling at low speed and in some cases special paths and trails are provided. The National Trust has provided cycling trails and hire facilities at some of its most extensive properties and continues to improve provision co-ordinated by a national cycling development officer for all National Trust regions including NI. There has been considerable trail development by Sustrans, which has led to the linking of on and off-road routes into trails such as the Coast-to-Coast (C2C).

There is unofficial, extensive and not always welcome usage of Long Distance Routes, such as the Pennine Way, the Southern Uplands Trail, the West Highland Way and the Pembrokeshire Coastal Path.

Whilst, like Northern Ireland, specialist events can be held, by permission, within almost any countryside facility, permanent specialist venues for downhill mountain biking have been provided e.g. at Innerleithen near Peebles in Scotland, and a number of specialist single track cross-country cycling forests with specially designed trails for mountain biking have been developed.

4.2 BEST PRACTICE AND CODES OF CONDUCT ARISING FROM OFF-ROAD CYCLING DEVELOPMENT IN GREAT BRITAIN

4.2.1 ROUTE GRADING

The Cyclists Touring Club, representative of recreational touring cyclists in Britain has worked with the Forestry Commission to devise a grading system that notifies cyclists of the difficulty of routes before setting off. Through trial and error which has included grading of 'sport', 'expert', and 'challenging', the following grading has been arrived at and is implemented within all forests throughout Great Britain:

- Green arrow = Easy
- Blue arrow = Moderate
- Red Arrow = Difficult
- Black Arrow = Severe

Trails are graded according to the nature of the terrain, steepness, technical difficulty, length, remoteness etc. In general routes are designed to be of one difficulty throughout rather than containing sections of varied difficulty.

4.2.2 RISK ASSESSMENT AND SAFE PRACTICE

In common with the situation in Northern Ireland, occupiers in England and Wales have a duty of care both for invited visitors and those that are cycling on their lands without permission. Risk assessment in terms of recreational use of lands is now common practice across all types of landowners to assess likely hazards and dangers to people and to minimise or eradicate risks. Forestry Commission has a framework for risk assessment and assessment of conflicts

between different users, as do others, which sets out to guide the way in which this is done. Dealing with the risks, particularly of cross-country and downhill mountain biking also involves providing information to other users who may encounter the activity.

In the case of cycling this risk assessment, reflecting the realities of the situation, considers both the invited user and the uninvited or unofficial user. In the case of the unofficial user an assessment is made of whether it can be turned into an official use and managed properly. In general terms if it is not considered that the activity can be stopped it is made official, to ensure that some risk management can be applied. In several cases this has involved working with local clubs, providing trail building programmes to ensure that trails are built safely, providing signage and information, zoning activities and ensuring that users are made aware of the range of safety issues.

The technical development branch of the Forestry Commission considers that conflict with different types of user and with land management operations can be reduced by

- Suitable, dedicated route design
- Ensuring route design meets the needs of the user
- Separation of users where possible
- Educating users through codes of conduct, e.g. Forest Enterprise Cycling Code, IMBA code.
- Use of warning signs, safety fences and way markers.

The branch also considers that safe use of cycle routes can be encouraged by:

- Devising a thorough and complete grading system suitable for use in forest conditions
- Educating riders through codes and rules of the way
- Constructing suitable easy routes for less experienced riders
- Constructing one-way single tracks that can be used at relatively low speeds and with speed calming measures
- Use of cycle route planning and construction of checklists
- Minimising hazards such as sprags, protruding stumps, and man made hazards during construction
- Designing trial areas using stone and earth features in preference to wooden features
- Developing sustainable routes usable in most conditions with suitable surface and drainage
- Using civil engineering advice to achieve appropriate route support, dimensions, bridges and specifications.

In general, routes are now being designed to avoid forest road crossings although, where these are inevitable, barriers and warning signs are erected. The barriers prevent cyclists from riding straight across the road, whilst both cyclists and road users are warned that there is a crossing ahead and of the kind of traffic that may be encountered.

4.2.3 MARKETING OFF-ROAD CYCLE ROUTES

Although very little off-road cycling information is apparent in Northern Ireland this situation is reversed when entering Tourist Information Centres in Great Britain, and a large number of leaflets are available to guide the cyclist to suitable sites. Amongst the best of these are the following:

- i. Mountain Biking Wales (2001) - leaflet for enclosure in mailing list and news-stand magazines and with tourism brochures. Entitled "When was the last time your bike saw a real mountain?" The brochure has an attractive cover showing an off-road open country river crossing experience featuring a young male foursome and opens out to identify six key sites where off-road cycling is welcome and where waymarked trails are provided. The most dominant text within the centrefold of the brochure is the web address www.mbwales.com. The brochure is a Wales Tourist Board publication with co-operation from the CTC and Forest Enterprise, and gives telephone contacts for each venue. The leaflet not only is helpful to potential mountain bike visitors in that it highlights good venues, but it also ensures that it is easier to go to an official venue than to find the way to unofficial sites.
- ii. The Forestry Commission regional booklet series including 'Cycling in the Scottish Borders' in which all of the forests in the region are set out, with their cycle routes and other facilities and with detail of the nature and difficulty of routes. A useful feature of these booklets is that they also identify where other useful information such as maps, tourist information is to be found and include an order form and contact details for other organisations. This helps the cycle visitor with putting together the elements of their activity visit. Another helpful feature is that the traffic volumes for the roads that link the forest or contribute to wider circular routes are included to allow visitors to judge how busy they will be.

The Forest Enterprise 'cycling in the forest' series, details routes in individual forests. E.g. Argyll Forest Park where 5 trails of different lengths and difficulty have been identified and waymarked. The leaflets provide all the information necessary to follow the trails and carry both management information about safety and weather conditions and information of special interest about nature and the landscape.

Leanachan Forest trailquest leaflet provides an attractive picture of a family cycling group happily cycling through a forest on an easy trail. It provides a detailed map that allows participants to use the permanent trail quest course in the forest. There are riddles to solve at each of the points marked on the map and full information is given about the nature and length of the trailquest courses available. The leaflet is supported by Sport Scotland, the EU, a local cycle hire outlet and is produced by the Forestry Commission. The development of the trails themselves received industrial sponsorship, sponsorship from the chairlift company, and technical input from the West Highland Wheelers Club. The forest also includes the off beat downhill course, the longest in Britain at 2.6 miles and with 600m vertical descent. There is for a separate leaflet for the downhill trail. The design of the two leaflets is very different, taking into account that these two adjacent facilities will appeal to very different markets

The 'Off-road cycling in Snowdonia' - leaflet details the cyclist's right of access on different categories of path and gives advice about off-road venues and trails that are accessible to cyclists. This leaflet, together with the increase in forests in Wales that have specific and exciting provision, has probably reduced the pressure on the more

sensitive open uplands, which would have come about from the increase in popularity of mountain biking.¹

The 'Cycling in Scotland' booklet details the whole range of provision in the country from quiet road routes, mixed routes including some on and some off-road cycling, and the provision of off-road trails. The guide includes details of accommodation, cycle hire and repair, and contacts for a range of organisations that can provide further information. The leaflet is targeted at the adult leisure cycling market and features images of couples, individual cyclists and small adult groups.

The 'Activity Wales' booklet is a glossy marketing tool aimed specifically at the active markets for adventurous outdoor activities. This guide begins by creating awareness of the potential of the Welsh countryside for activities amongst high quality scenery, and then goes into listings of the various providers and their accreditation to be able to provide the activities. Cycling features quite prominently in the publication. This guide recognises that the off-road cycling market, like other adventure market niches, is often involved in a wider range of holidays and short breaks involving other adventurous activities.

The Innerleithen downhill mountain bike trail is promoted mainly through a web site. Awareness of the web site is promoted through a simple postcard sponsored by Red Bull detailing the web site address and some outline detail. The excitement of the trail is expressed through a broken cycle part. The web site then provides information about the uplift for cyclists to the top of the downhill trail, the third party insurance option.

4.2.4 MATERIALS FOR OFF-ROAD CYCLING MANAGEMENT

Two examples were found of leaflets that provide information to manage cycle route use in open country contexts. These were for the Pentland Hills Regional Park and for Snowdonia.

- iii. In the Pentland Hills the main issue is the unsustainability of cycle use on some paths that are subject to erosion, particularly ridgeline paths. Routes have been identified and colour coded according to their suitability for bikes. The leaflet provided (adjacent page) has an exciting presentation and is clearly intended to appeal to mountain bikers. Although it sells itself as a 'How and Where' leaflet the primary intention is to ensure that usage is restricted to certain paths and that people are aware of their responsibilities to the countryside and to other users.
- iv. A leaflet has also been produced by the North Wales Mountain Bike Association detailing the national voluntary cycling agreement for Snowdonia. The leaflet details the paths which lead up Snowdon, Wales' highest mountain, gives the legal status of paths and identifies the temporal zoning arrangements agreed on i.e. no cycling on the Snowdon ascent or descent bridleways between 10.00 and 17.00 between 1st June and 30th September when pedestrian use is at its peak. From October to May there is full access along these routes. The leaflet is supported by a wide range of bodies including the Sports Council for Wales and Countryside Council for Wales. (leaflet on adjacent page)

4.2.5 REVIEW AND RECOMMENDATIONS FOR AN OFF-ROAD CYCLING CODE FOR NORTHERN IRELAND

The consultants have reviewed the format and contents of a wide range of cycling codes - especially codes relating to mountain biking and off-road cycling and including codes produced by national agencies (e.g. Sports Council for Northern Ireland, former Countryside

¹ Personal Communication Dave Williams, Snowdonia National Park Ranger (south)

Commission), cycling organisations (e.g. International Mountain Biking Federation, Cyclists' Touring Club) and other organisations and initiatives (e.g. Forestry Commission, Pentland Hills Regional Park, Kingdom of Fife Millennium Cycle Ways Project).

Examples of three contrasting codes are provided below (Figures 2-4). Figures 2 and 3 illustrate more all-embracing codes (i.e. key messages plus sub-text with supplementary messages). Figure 4 illustrates a simple code (key messages), with illustrations to assist in conveying the contents of the code in an easily understood and fun way.

FIGURE 2: THE INTERNATIONAL MOUNTAIN BIKING ASSOCIATION'S 'RULES OF THE TRAIL'

The way we ride today shapes mountain bike trail access tomorrow. Do your part to preserve and enhance our sport's access and image by observing the following rules of the trail, formulated by the International Mountain Bicycling Association. These rules are recognized around the world as the standard code of conduct for mountain bikers. IMBA's mission is to promote mountain bicycling that is environmentally sound and socially responsible.

1. Ride On Open Trails Only.

Respect trail and road closures (ask if uncertain); avoid trespassing on private land; obtain permits or other authorization as may be required. Federal and state wilderness areas are closed to cycling. The way you ride will influence trail management decisions and policies.

2. Leave No Trace.

Be sensitive to the dirt beneath you. Recognize different types of soils and trail construction; practice low-impact cycling. Wet and muddy trails are more vulnerable to damage. When the trail-bed is soft, consider other riding options. This also means staying on existing trails and not creating new ones. Don't cut switchbacks. Be sure to pack out at least as much as you pack in.

3. Control Your Bicycle!

Inattention for even a second can cause problems. Obey all bicycle speed regulations and recommendations.

4. Always Yield Trail

Let your fellow trail users know you're coming. A friendly greeting or bell is considerate and works well; don't startle others. Show your respect when passing by slowing to a walking pace or even stopping. Anticipate other trail users around corners or in blind spots. Yielding means slow down, establish communication, be prepared to stop if necessary and pass safely.

5. Never Scare Animals.

All animals are startled by an unannounced approach, a sudden movement, or a loud noise. This can be dangerous for you, others, and the animals. Give animals extra room and time to adjust to you. When passing horses use special care and follow directions from the horseback riders (ask if uncertain). Running cattle and disturbing wildlife is a serious offence. Leave gates as you found them, or as marked.

6. Plan Ahead.

Know your equipment, your ability, and the area in which you are riding - and prepare accordingly. Be self-sufficient at all times, keep your equipment in good repair, and carry necessary supplies for changes in weather or other conditions. A well-executed trip is a satisfaction to you and not a burden to others. Always wear a helmet and appropriate safety gear.

Keep trails open by setting a good example of environmentally sound and socially responsible off-road cycling.

FIGURE 3: THE CYCLING CODE (CYCLISTS' TOURING CLUB/BRITISH MOUNTAIN BIKE FEDERATION)

THE CYCLING CODE

1. Stay on the trail
Only ride bridleways & byways
Avoid footpaths
Plan your route in advance
Use the pathfinder/landranger maps
Tell a friend the route you intend to travel

2. Give way to horses and walkers
Make sure they hear you approach
Ride carefully when you pass

3. Bunching is harassing
Ride in twos or threes
Be sociable and polite to everyone you meet (especially the locals)

4. Be kind to birds, animals and plants
And keep your dog under control

5. Prevent erosion
Skids show poor skills

6. Close gates behind you
Don't climb walls or force hedges

7. Stay mobile
Wearing a helmet will reduce the risk of head injury
Take a first aid kit
Carry enough food and drink
Wear sensible clothing and footwear, especially in the winter or bad weather
Take a mobile phone if you have one
Take some money with you

8. Take pride in your bike
Maintain BEFORE you leave
Take essential spares & tools

9. Be tidy
Take your litter home
Guard against fire

10. Keep smiling

FIGURE 4: FOREST CYCLE CODE (FORESTRY COMMISSION)

FOLLOW THE FOREST CYCLE CODE



**1 Expect the unexpected
– keep your speed down.**



**2 Remember other vehicles
use forest roads as well as you!**



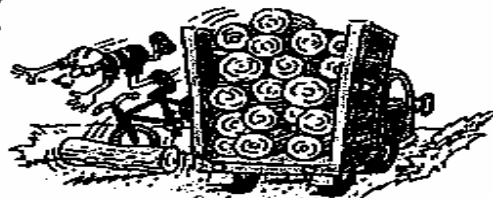
**3 Give way to walkers
– be friendly towards
other forest users.**



**4 Hail a horse and
avoid an accident!**



**5 Danger! Keep away from
forest operations.**



**6 Danger!
Do not pass any vehicle
loading timber until you
have been told to do so.**



**7 Footpaths
are for walkers only!**

**8 Cycle with care and
come back again!**



4.2.6 KEY THEMES AND MESSAGES

The review of cycling codes illustrates several key themes (e.g. key messages), which may be expanded on in sub-text. These themes may be expressed in a variety of ways and levels of detail, but common key themes include (not in any order of priority) -

- Responsible access
- Cycling with care and in control
- Consideration for others - especially walkers and riders
- The countryside code
- Bike maintenance and appropriate equipment and clothing
- Route planning and navigation
- Having fun

4.2.7 PRESENTATION OF CODES

The review of codes highlights the importance of -

- i. Using everyday English - the display of a summary of the IMBA's code, with its North American phraseology, in Coed y Brenin Forest in Wales proved confusing - especially terms such as *Always Yield Trail*
- ii. Keeping it simple - the Scottish Off-Road Cycling Code and the IMBA's Code seek to be all-embracing and as a result are unlikely to be fully read, understood or remembered
- iii. Using illustrations to convey images and messages - the Forest Cycle Code (Figure 3) is an example of good practice, in respect of conveying a set of simple, focused messages in a well-designed and easy-to-understand style, which can be reproduced in a variety of formats (e.g. leaflets, information boards). The inclusion of illustrations is particularly useful where there may be non-English speaking visitors
- iv. Flexibility - whereby messages can be added or modified to suit specific circumstances (e.g. messages relating to forestry or farming operations).
- v. Depending on the circumstances and media used to convey the code, it may be presented in:
 - Full text format - including key messages and sub-text (Figures 1 & 2), with, or without illustrations.
 - Summary, illustrative format - comprising key messages and illustrations (Figure 3).

4.2.8 PROMOTION OF THE CODE

Promotion of the code may be by means of its inclusion in -

- i. Cycling promotions leaflet - leaflet indicating the main approved opportunities for off-road cycling (e.g. map and descriptive text), off-road cycling clubs and operators (e.g. cycle hire outlets) and the code
- ii. Handlebar tag - a sturdy leaflet (e.g. encapsulated card) suitable for hanging on the handlebar of every new mountain bike and hire bikes explaining the code and access situation in Northern Ireland and encouraging riders to join a club

- iii. Cycle guidebooks and route maps - incorporating the code in the text of cycling guidebooks and maps of cycle routes
- iv. Information board - the code may form part of a display on a map board or information board at, for example, the entrance or key car park at a forest or country park with cycling trails, or on a cycle path
- v. Information post - individual messages and illustrations may be displayed on waymark or other posts on cycle routes (e.g. *Cycle with Care and in Control* on steep downhill section of a cycle track)
- vi. Web site - for example, as part of a cycling club's, cycle retailer's or activity holiday operators' Web site, or within a Web-site promoting specific cycling trails or events.

4.2.9 DRAFT CODE FOR DISCUSSION

The following Code is presented in draft for discussion. It could be used in full, or in summary (i.e. key messages in bold text). It is recommended that the key messages are illustrated in a humorous way (Figure 4 - Forest Cycle Code)

FIGURE 5: RECOMMENDED CODE FOR OFF-ROAD CYCLING IN NORTHERN IRELAND

Off-road cycling is fun, but you have a responsibility to care for -

- Your own safety
- The safety and enjoyment of others
- The countryside and those who live and work there.

If you are irresponsible, others may not get the opportunity to follow in your tracks.

1. Keep to trails and where cycling is allowed

- Keep to cycle trails and multi-use paths - avoid footpaths
- Avoid soft ground - where you may cause erosion and damage vegetation
- If in doubt, check with land managers where you can go

2. Cycle with care and in control

- Excessive speed leads to accidents - especially on steep and loose surfaces
- Expect the unexpected - such as vehicles, or obstructions
- Avoid skids - they show a lack of cycling skill or excessive speed
- Do not frighten farm animals and avoid farm and forestry operations

3. Give way to walkers and horse riders

- Warn walkers and riders of your approach -
- Slow down to pass walkers and riders
- Only ride in small groups

4. Remember the Countryside Code

In particular -

- Leave gates as you find them
- Take your litter home
- Avoid unnecessary noise

5. Maintain your bike and be well equipped

- Wearing a helmet may save your life
- Maintain your bike and check it before setting out
- Carry a 1st Aid kit for you and your bike
- Take food, drink and wind- and water-proof clothing, money and a mobile phone (if you have one) on longer trips

6. Plan your route and don't get lost

- Tell someone where you are going and carry identification
- Take a map and compass and use them

7. Have fun!

- Join a cycling club - it may introduce you to new places and people

5 CASE STUDIES OF GOOD PROVISION ELSEWHERE

5.1 COED Y BRENIN FOREST PARK, SNOWDONIA, WALES

This forest park, run by Forest Enterprise, covers some 11,000 acres of mid to north Wales near the town of Dolgellau in Snowdonia National Park. It is a mixed forest covering parts of five steep sided valleys and with ground rising to around 600m. The management emphasis for the Forest Park is on recreation though until recently there was little provision beyond a modest car park, small visitor centre and café, toilets and a series of waymarked trails. Prior to development as a mountain biking forest the annual number of visits was around 14,000. This low number was attributable to remoteness, lack of visitor facilities, and distance from other attractions in the National Park.

In the mid 1990s a freelance mountain guide and outdoor pursuits instructor Dafydd Davis was given the assignment of making recommendations that would increase visitor numbers to the park. Dafydd was a cyclist and found the forest interesting from this point of view. Others he invited to have a look at the forest backed up his instincts, and as a result 3 mountain bike trails were laid out to take advantage of the best of the forest's topography.

The first three trails set out were as follows:

- Fun - 11km with 500ft of climbing
- Sport -22km with 1200ft of climbing
- Expert 35km with 3500 ft of climbing.

The trails included purpose built single track but also utilised sections of forest road. The National Park Authority assisted capital development costs in respect of way marking and information boards. The labour force was provided through 'Drive for Youth' a charitable trust providing development for long term unemployed young people. At the time single-track development was unique in GB and was new to mountain bikers.

The trails brought increased usage and visitor numbers to the forest with usage rising to 27,000 by 1996/7 but this was considered slow. Further development was undertaken in the form of a new trail at a cost of £2000, which was entirely met through sponsorship by Red Bull. A new marketing campaign was undertaken to try to promote visitor numbers further.

The new trail, intended to be technical but accessible to people without much experience was 13km in length and involved 1800ft of climbing. It achieved a high level of awareness of the forest park as a specialist facility and numbers began to climb reaching 52,000 by 1998 and 140,000 by 2000

A fifth trail was added during 1999/2000 sponsored by and titled the MBR trail after the specialist off-road cycling magazine.

The increase in numbers to Coed Y Brenin reverses a trend in Wales overall of declining visitor numbers at attractions.

The type of visitor has also changed from a situation where prior to 1995 45% of visitors came from within 15 miles of the centre to some 70% of visitors in 1997 having travelled from more than 70 miles and having come specifically to mountain bike. By 1998 this percentage had risen to 75% with around 34% having made repeat visits.

The 1998 survey also identified that over 60% of visitors stayed in the area for 2 days or more and were spending on average £100 per head during their visit within the local area.

The estimated local economic impact of current levels of visits to the park is circa £5 million annually.

This local economic impact has led to the setting up of several cycle hire businesses and to accommodation that specialises in appealing to mountain bikers. A bike shop in Dolgellau provides repairs and parts. One hire outlet will deliver bikes to the park. The visitor centre is operated by a franchisee who collects the income from car parking and reapplies this to providing the service at the café, management of the toilets, playground and other facilities and to payment of the trail monitoring required to maintain the quality of the trails.

Forest Enterprise continues to develop this venue through building new trails, improving and maintaining existing trails, improving trail safety and achieving separation between facilities for walkers at the site and facilities for cyclists.

The site continues to be promoted through word of mouth and through very enthusiastic articles in the specialist mountain bike press. Most people who visit and write about the site have their expectations exceeded and this continues to ensure more visitors.

Forest Enterprise and the Wales Tourist Board have combined to provide a mountain bike Wales site advertising a set of five forests in Wales each with slightly different provision. Coed Y Benin and Afan Argoed offer specialist single track whilst three others provide off-road cycling primarily on forest roads and other trails. Forest Enterprise is of the view that provision of single track and other purpose designed trails improved safety and trail building is planned for those centres without this at present.

Key elements of good practice:

- i. Specialist site with unique features
- ii. Designed and constructed trails
- iii. Range of routes between 11 and 40 km
- iv. Provides demonstrable local economic impact
- v. Minimal development costs
- vi. Conscientious approach to safety, designed into the trails
- vii. Minimised use of forest roads and limited to uphill stages
- viii. One-way system of trails avoids head on encounters

5.2 SHERWOOD PINES, SHERWOOD FOREST, NOTTINGHAMSHIRE - WAYMARKED FAMILY CYCLE ROUTE

Sherwood Pines Forest Park is extensive mixed woodland between Nottingham and Worksop in the midlands of England. It is adjacent to a Centerparcs holiday village.

The forest park welcomes cyclists and has made special provision for them with green, blue and red cycle routes waymarked within the park and an area where black routes are available but not waymarked.

The cyclist's welcome consists of some very prominent and attractive wooden boards with 'Cycle Trails' in bold letters and a map outlining all of the route possibilities. The paths leading from the reception area through a start gate in the form of an arch, are wide and well surfaced, though not sealed. Close by the welcome boards is an obvious cycle hire, sales and repair facility that dominates the facilities available, beyond this is a café with 50 covers.

The park has toilets, and a large number of cycle racks to facilitate people visiting the toilet, picnic area, café and shop.

A printed full colour leaflet and map is available from the cycle hire outlet and shop at a cost of 30p. If following the waymarked trails this is unnecessary since waymark posts are placed at every junction. The map is useful to try to locate the black trails since there is a deliberate policy of ensuring that the off-road difficult area is both remote from the visitor centre and easy trails and slightly challenging to find.

Where routes are of 3 m width there is shared use between cycling and pedestrians. Single-track trails are segregated for use by one interest or another and are clearly signed as such. Mountain bike, off-road trails are single direction only. This is also the case with the dual descender.

Annual cycling visitor numbers for Sherwood Pines have reached 150,000 with the most prominent type of user being family groups including children.

Forest Enterprise is making considerable attempts to attract and manage the off-road cycling market. It has recently completed work on a dual descender downhill trail where two people can compete, and is planning more facilities. One purpose behind these facilities is to satisfy people's sense of adventure and ensure that building unofficial trails is minimised

With this in mind Forest Enterprise is currently advertising within national cycling magazines (through a press release) for voluntary trail building team members at Sherwood Pines to work with foresters on the 'Jungle Area' a trials area within the forest (quite remote from the visitor centre) and to improve black trail facilities elsewhere in the park.

Key elements of good practice:

- i. Very welcoming to cyclists, good use of existing forest trail
- ii. Close to urban populations, with route links from urban areas
- iii. Good management of unofficial trail builders
- iv. Minimal development costs
- v. Bike hire advice, information and repair all well provided by the cycle shop
- vi. Facilities remote from the general visitor and the main walks so conflict is minimised

5.3 PENTLAND HILLS REGIONAL PARK NEAR EDINBURGH

The Pentland Hills Regional Park is one of the four regional parks designated under the Countryside (Scotland) Act 1981 as ... *an extensive area of land, part of which is devoted to the recreational needs of the public*. The Park covers 92 sq. km and stretches southwards from Edinburgh. It includes a country park, but most land is private farmland or moorland. Former drove roads pass through the hills and these and the hill slopes and ridges provide a popular and extensive recreational resource for the population of Edinburgh and its hinterland. Surveys show that 4%-5% of the Park's 0.5-1m visitors each year may be cyclists. This level will be higher on specific routes used by cyclists

While, originally, the Park Authority had a negative attitude to off-road cycling, in more recent years, it has recognised that, where exercised responsibly (i.e. avoiding vulnerable hill ridges), this is a *bona fide* and healthy pursuit. Consequently, the Park's managers consulted cycling and other interest groups on their aspirations and attitudes to off-road cycling. While some consultees expressed concerns about potential hazards to pedestrians (and cyclists), where a few cyclists were using paths and farm roads recklessly, generally, there were few concerns. Most cyclists recognised the need for a balance between their rights and responsibilities and supported the introduction of a voluntary management scheme.

The management scheme has now been operating successfully for several years. It comprises

- i. An advisory leaflet on *advice on **how & where** to mountain bike in the Pentland Hills* - this contains a code for cycling in the Pentlands and a map showing colour coded cycle paths as follows:
 - Yellow paths - suitable for careful cycling
 - Green paths - vulnerable to erosion and requiring extreme care and avoidance when wet
 - Red paths - with a high risk of collision and which should be used with caution and at a safe speed (e.g. paths heavily used by pedestrians, including children and the elderly)
 - Blue paths - unsuitable due to erosion, risk of collision, etc. (e.g. hill ridges and slopes)
- ii. Map boards at strategic locations (e.g. popular car parks providing access to hill routes)
- iii. Occasional guided mountain bike 'safaris' led by a ranger using a mountain bike
- iv. Up-grading of preferred paths and tracks - as necessary

Key elements of good practice:

- i. Pro-active initiative to reduce impacts of off-road cycling on fragile hill lands and minimise conflicts between cyclists and farmers, walkers, etc.
- ii. Consultations with cycling groups prior to introducing management scheme
- iii. 'Approved' network of cycling/multi-purpose routes
- iv. Advisory leaflet and map boards, including advice and graded routes
- v. Information enables rangers to encourage responsible off-road cycling and lead safaris

5.4 INTERNATIONAL COMPETITION SITE & PERMANENT TECHNICAL DOWNHILL SITE, SCOTLAND

The Forestry Commission has for some years provided mountain biking routes at Glentress forest near Peebles south of Edinburgh. These routes have been popular and in a nearby forest interested downhill cyclists had sought out a downhill track and begun to use this both for training and competition. The length and extent of the downhill in this forest, Innerleithen was such that it was considered worth developing as a permanent downhill trail and specialist competition venue.

In autumn 2001 Forestry Commission received some £30,000 funding over three years, including sponsorship from Red Bull to improve the trails and to attract and manage high numbers of downhill cyclists.

The way in which the site is managed represents good practice in that:

- The course was designed by a top downhill cyclist and refined by active practitioners rather than forest managers
- Uplift to the top of the course is provided through the use of a 4x4 minibus and specialist bike trailer capable of taking 20 bikes.
- A small management team is permanently available when the track is open. As people set off on the course from the top staff at top and bottom keep in touch by two-way radio to ensure that all riders have reached the bottom of the course.
- Cyclists become members of a club to use the course and a charge is made which covers basic membership and third party liability insurance. For this fee riders are also kept in touch with events and special arrangements e.g. closure for maintenance. It is possible to become either a day or season member, so the system accommodates tourists
- Uplift is subject to a separate charge to cover costs, and the system is managed by a private sector organisation with a strong cycling interest.
- It is made very clear to people that good equipment is required to be able to ride the course and a hands on approach is used to making sure that riders with insufficient experience get up to the top of the course. The proximity of Glentress Forest means that people without the ability or equipment for the serious downhill course can be diverted there.
- The uplift and discharge of passengers is managed in a way as to space riders out through the course.
- The proximity of a village works well both for cyclists and retailers. The cycle shop is thriving, mainly due to the two facilities, and local services are well used.

Key elements of good practice:

- i. Use of sponsorship for course improvements
- ii. Course designed by top riders
- iii. Club approach providing management and insurance
- iv. Good personalised advice about skills and equipment
- v. Uplift to the top of the course

5.5 TROSSACHS CYCLING VISITOR DESTINATION

Since the development of the Callander-Strathyre Cycleway and the waymarking of forest cycle routes in the 1980s, the Trossachs has become one of Scotland's foremost cycling visitor destinations. The Trossachs lies north-west of Stirling in Central Scotland, in easy reach of the main cities and in the Loch Lomond and The Trossachs National Park. It includes several forests managed by Forest Enterprise in the Queen Elizabeth Forest Park.

An extensive network of routes has been developed, offering a wide range of types and lengths of cycle trips. While mostly catering for the leisure cycling market - including family and holiday cyclists, a new 1.5 km downhill track was opened in early-2001. Many of the routes include off-road sections and quiet country roads; for example -

- i. Callander-Killin Cycleway - part of the Glasgow to Inverness section of the National Cycle Route, this includes sections of former railway line, forest roads, quiet minor roads and constructed cycle track
- ii. Callander-Brig o'Turk Cycle Route (13 km) - this is a most attractive route, which after a section of minor road, follows an estate road, forest track, cycle path and farm road, through open country and forest, and alongside Loch Vennacher (30,000 trips per year 50% of which are by cycle)
- iii. Loch Katrine Cycle Route - this follows the Water Authority's private road for much of its length, with a return option by steamer
- iv. Forest cycle routes - Loch Ard and Achray Forests provide a variety of forest road and path options.
- v. Leaflets, off-road cycling guidebook entries and websites refer to many of these routes.

The development and promotion of the Trossachs as a cycling destination has provided major economic benefits throughout the Trossachs, including the growth of cycle hire outlets, accommodation and catering businesses. One business started in 1988 as a cycle hirer from a private garage and has become the 'Scottish Cycle Centre' including a bike/ hire shop and service centre, purpose built walkers' and cyclists' accommodation, and conference centre.

Key elements of good practice:

- Critical mass of routes based around a service and accommodation point
- Quality routes in attractive scenery
- Choice of route and route difficulty
- Caters both for specialists and occasional holiday cyclists
- Facility focus creates opportunities for cycle hire and accommodation business provision

5.6 SIGNIFICANCE OF THE CASE STUDIES FOR NORTHERN IRELAND

Northern Ireland clearly lags behind England, Scotland and Wales in terms of participation in off-road cycling and importantly in the availability of facilities to promote and encourage the activity.

Cyclists from England, Scotland and Wales are now used to receiving an active welcome at countryside sites, whereas, apart from at Gortin, Moneyscalp and the linear cycle ways, the best that a casual off-road cyclist can expect is to have a blind eye turned to their activity and the worst an encounter with an angry landowner or site manager.

Competitors in downhill, cross-country and BMX/Trials in England, Wales and Scotland have access to some specialised facilities where they can train on the same type of terrain as the competitions themselves. Competitors in Northern Ireland are very restricted in the scope of their training and may have to resort to unofficial entry to sites to maintain their skills and fitness.

Sites in England, Wales and Scotland are now clearly attracting people from Northern Ireland for weekend breaks and holidays¹ as a result of having developed excellent facilities. A similar potential exists to attract people from Great Britain to Northern Ireland where the forest resource and surrounding scenery equals that of areas such as mid Wales and the Scottish Borders.

There are significant differences between the scope, remit and resources of Forest Enterprise – the trading arm of the Forestry Commission in GB (which provides the bulk of off-road sites) and the scope and resources of the Northern Ireland Forest Service. If facilities are to develop in Northern Ireland a wider partnership of bodies and resources will need to be involved to share the load.

It is arguable that there is a latent market in Northern Ireland for the kind of facilities offered at for example Coed Y Brenin, Sherwood Pines, Clumber Park and Innerleithen, and that if similar facilities were offered then people would use them in relatively large numbers.

Web site promotion of sites and drawing sites to the attention of the main off-road cycling magazines appears to be the most effective method of promotion, after word of mouth, to people who already cycle. More active promotion in a range of more mainstream publications would be required to develop the more general and the family off-road cycling market.

The development of cycling trails is relatively inexpensive in relation to the numbers of potential users.

Trails based in remote rural areas, particularly close to villages can create significant gains in the local economy.

5.7 STRATEGIC ISSUES WITHIN NORTHERN IRELAND

- Off-road cyclists are concerned that although there is considerable participation in off-road cycling there are so few places to take part officially in the activity and most of these are provided for a general leisure cyclist rather than for people of an adventurous disposition. The two sites where mountain bike trails are provided are remote from centres of population.
- This problem is particularly acute for people who participate in down hill or cross-country competitions. Their training needs are for regular outings on terrain similar to

¹ Personal communications during the study with cyclists

that which they will encounter in competition. At present to compete seriously people either have to travel regularly to GB, use sites unofficially, or leave to live elsewhere.

- The Moneyscalp trails, whilst welcomed and well used by cyclists, are too short to sustain serious training and competition.
- The trails at Moneyscalp put pressure on Tollymore Forest Park, cyclists travelling to and from Moneyscalp use the forest park trails to reach Newcastle.
- Unofficial trail building in forests and other sites causes landowners serious concern for both the safety of participants and their own possible liabilities. In particular people are concerned that a trail, built by skilled mountain bikers would be used by someone without suitable skills, or the equipment to be able to manage their own safety.
- Cyclists, apart from those using the national cycle routes network do not know where they can and cannot cycle in the countryside. Unofficial information travels fast and many use unofficial sites on the recommendation of other cyclists without realising there is an issue. The extensive use of cycling web sites with posted information that may not be accurate compounds this issue.
- Currently there are few circular cycling routes. Most recent route development has been linear.
- Although there are many suitable sites there are no family cycle routes (except for Belfast Parks.)
- Cycling has wrongly acquired a bad image amongst Northern Ireland's countryside managers with an expectation that they will be noisy, inconsiderate, fail to give way to other users, use paths at inappropriately fast speeds, be unsafe in their activities, make insurance claims for injuries and cause path erosion. In contrast, on many sites in England site managers welcome their presence, produce marketing materials to increase numbers, make special provision, engage them in management and welcome the financial contribution they make to the management of sites.
- The small size of most country parks and National Trust properties means that cycling would be difficult to accommodate within the grounds.
- The poor access networks in Northern Ireland for walkers and people on horseback cause the same problem for cyclists, and are compounded by the restricted rights of cyclists on this network. Cyclists are channelled towards forests and estates for their activities.

Landowners may come across an official event on their lands without any permission having been granted. This has happened with Forest Service lands on a number of occasions.

6 STRATEGY FOR THE DEVELOPMENT OF NEW OFF-ROAD CYCLING ROUTES

Vision: -

'Attractive rural areas in which both visitors and local people can actively enjoy and explore networks of routes on cycles, away from roads, and where there are specialist facilities for those who participate in more adventurous off-road cycling'

6.1 KEY OBJECTIVES OF THE STRATEGY

6.1.1 TO PROVIDE ACROSS NORTHERN IRELAND, A SERIES OF FAMILY CYCLING ROUTES ON OFF-ROAD, QUALITY COUNTRYSIDE SURROUNDINGS

Specific route proposals are for:

- i. Castlewellan Forest Park
- ii. Gosford Forest Park
- iii. Hillsborough Forest
- iv. Castle Archdale Forest and Country Park
- v. Florencecourt
- vi. Castle Ward National Trust Property
- vii. Castlecaldwell Forest
- viii. Springwell Forest
- ix. Derrynoid Wood
- x. Glenarrif Forest Park
- xi. Peatlands Park
- xii. Crom - National Trust site - west bank
- xiii. Loughry College
- xiv. Craigavon Lakes
- xv. Lagan Valley Regional Park

6.1.2 TO PROVIDE FOUR MANAGED VENUES, DESIGNED BY SPECIALIST COMPETITORS, DISTRIBUTED TO SERVICE DEMAND THROUGHOUT NI AS A WHOLE, WHERE PEOPLE CAN REGULARLY TRAIN FOR DOWNHILL MOUNTAIN BIKING

6.1.3 TO MINIMISE THE CONSTRUCTION OF UNOFFICIAL DOWNHILL ROUTES

6.1.4 TO PROVIDE COMPETITORS WITH OPPORTUNITIES TO TRAIN TO REACH NATIONAL REPRESENTATIVE STANDARDS.

The following locations are proposed

- i. Iniscairn
- ii. Cave Hill Country Park
- iii. Rostrevor (with phase-out of Moneyscalp on completion of Rostrevor trails)

iv. Binevenagh

6.1.5 TO DEVELOP SEVEN VENUES FOR CROSS-COUNTRY SINGLE TRACK MOUNTAIN BIKING WHERE ROUTES ARE TARGETED AT LENGTHS OF 20 KM +, AT A QUALITY DESIGNED TO DELIGHT LOCAL CYCLISTS AND TO ATTRACT OUT OF STATE VISITORS.

The following locations are proposed

- i. Springwell, Binevenagh Cam area
- ii. Lough Navar
- iii. Ballypatrick
- iv. Killeter
- v. Rostrevor
- vi. Loughry College (XC circuit)
- vii. Gortin Glen

6.1.6 TO PROMOTE CYCLING OFF-ROAD AS A HEALTHY AND EXCITING ACTIVITY TO PEOPLE IN NORTHERN IRELAND

Achieved through:

- NI Trails leaflet/map and web site
- Press campaign and journalist opportunities
- Family events based on new family trails

6.1.7 TO PROMOTE NORTHERN IRELAND AS A VENUE WITH QUALITY OFF-ROAD CYCLING OPPORTUNITIES AS PART OF A WIDER CYCLE PRODUCT PROMOTION APPROACH

Achieved through:

- Web Site
- Targeted promotion
- Off-road cycling magazine articles and 'advertorials'

6.1.8 TO PROMOTE GOOD RELATIONSHIPS BETWEEN LANDOWNERS, OFF-ROAD CYCLISTS AND OTHER COUNTRYSIDE USERS

Achieved through:

- Off-road cycle code

6.1.9 TO ENSURE THAT OFF-ROAD CYCLING IS MINIMISED WHERE IT IS NOT WELCOME

Achieved through:

- Provision of official routes as above
- Off-road cycling code
- Landowner liaison capability

6.1.10 TO PROMOTE EXCELLENCE AND SAFE PRACTICE IN OFF-ROAD CYCLING AND OFF-ROAD ROUTE PROVISION

Achieved through:

- Trail building specifications
- Trail building programmes
- Clear signage programme

6.1.11 TO PROVIDE SUPPORT, EXPERTISE AND CO-ORDINATION IN ACHIEVING PROVISION AT A HIGH AND CONSISTENT QUALITY

Achieved through:

- Appointment of a Cycling Trails Development Officer
- Trail building specifications
- Trail building programmes

6.1.12 TO WORK WITH CYCLING CLUBS AND RETAIL OUTLETS TO PROMOTE GOOD PRACTICE CODES IN RELATION TO THE USE OF VENUES AND ROUTES.

Achieved through:

- Develop code of good off-road cycling practice for Northern Ireland
- Code supplied with each bike sold (sponsored)
- Liaison with cycle retailers to ensure two-way flows of up to date information about access availability and issues.

6.1.13 TO SEEK EXTERNAL FUNDING TO IMPLEMENT THE TRAIL DEVELOPMENT AND PROMOTION PROGRAMME

Achieved through:

- Application to Sports Lottery Fund
- Advocacy of the implementation of the programme through local funding mechanisms including the Natural Resource Rural Tourism Initiative, Area Partnerships, and possibly the Environment measure of the Building Sustainable Prosperity funds where actions will reduce pressure on other more sensitive sites.

6.1.14 TO ENCOURAGE THE DEVELOPMENT OF A MORE EXTENSIVE NETWORK OF TRAILS OPEN TO OFF-ROAD CYCLISTS IN THE WIDER COUNTRYSIDE THROUGH THE ACCESS TO THE COUNTRYSIDE WORK UNDERTAKEN BY LOCAL AUTHORITIES

Achieved through:

- Provision of advice and information on the development of appropriate infrastructure for off-road cycling.

6.1.15 TO DEVELOP ARRANGEMENTS TO MANAGE THE DOWNHILL SITES THROUGH CO-OPERATION BETWEEN FOREST SERVICE, MOUNTAIN BIKE CLUBS AND LOCAL CYCLE SHOPS

7 PARTNERS IN PROVISION AND MANAGEMENT

It is envisaged that no one organisation can develop the programme set out above. The majority of proposals are on Forest Service lands, simply as a result of their suitability and the level of infrastructure for cycling already available. However, Forest Service will not be able to supply the resources in terms of staff, capital or ongoing management and maintenance to be able to implement the programme on its lands.

It will therefore be necessary to implement the strategy through a process of teamwork between organisations and to develop the strategy in such a way that it can attract external funding from sources such as Sports Council for Northern Ireland Lottery Fund, The EU programme for Peace and Reconciliation (Peace II) Natural Resource Rural Tourism Fund, and the Environment strand of the EU Building Sustainable Prosperity programme.

Sustrans is currently engaged with District and other councils on a range of cycle route projects, elements of which will be off-road. It is important that CAAN explores co-operation with other existing cycling developments in the delivery working group of off-road routes in rural areas as part of co-ordinated overall approach to the development.

With this aim it is proposed that this strategy be considered as an overall partnership programme between CAAN members, principally the governing bodies of cycling, the Forest Service, the National Trust, the Water Service and the EHS. In this scenario CAAN can act as the funding applicant and the co-ordinator for the programme on behalf of those bodies.

It is proposed also that, in the interests of co-ordination, CAAN should seek to begin and maintain liaison with the NI Cycling Forum in taking forward the strategy

As indicated in the strategy above a development officer would be an important integral part of the programme with roles including:

- Providing co-ordination and capacity on behalf of partners
- Facilitating the design of trails
- Organising and managing contractors preparing trails
- Developing and ensuring consistent signage
- Organising launch events and press interest as trails are opened
- Managing and monitoring funding and progress.

8 COSTED PROPOSALS

The following costings have been provided for this report based on discussions with land managers at the majority of the proposed sites, on detailed assumptions about the lengths of new trail that will have to be constructed for each route, and on standard cost assumptions on trail building, provision of waymark posts, signboards and special access control gates. A more detailed set of costs is included in Appendix 1 and a full costing has been provided on disc as an adjunct to this report.

- Family routes- 15 routes totalling £156,882 -average cost £10,459
- Downhill mountain biking routes- 4 routes totalling £88,000 average cost £22,000
- Cross Country off-road cycle routes totalling £301,700 average cost £43,100.

The total cost of developing the route infrastructure proposed in the strategy is therefore estimated as £546,582.

There will be a need to co-ordinate and implement the programme through a specialist officer. Officer costs over three years including Nat Insurance etc and office services within CAAN equal £111,116 for 3 years.

An estimated budget for the production and delivery by the officer of promotional materials, codes, web site and training programmes totals £112,500.

The overall cost of the programme is therefore estimated to be £847,218.

N.B Following additional consultation with Karl Bartlett of Forestry Enterprise in Scotland (April 2002) the costs were revised and increased from £5 - £10 per linear meter for new trail.

TABLE 2: OVERALL PROJECT COSTS

Type of Cost	Total Cost
Staff costs	£111,116
Anxilliary costs	£112,500
Infrastructure Costs	£546,582
Total Project cost	£770,198
mgt/admin fee at 10%	£77,020
OVERALL TOTAL PROJECT COST	£847,218

TABLE 3: PROJECT OFFICER COSTS

PROJECT OFFICER COSTS	YEAR 1	YEAR 2	YEAR 3	OVERALL COST
Officer salary	£23,022	£24,222	£25,422	£72,666
Recruitment	£5,000	£0	£0	£5,000
Overheads (postage, photocopying, postage, rent, heating, lights)	£4,000	£4,000	£4,000	£12,000
Travel & subsistence	£3,500	£3,500	£3,500	£10,500
Essential car users allowance	£1,000	£1,000	£1,000	£3,000
Training & conferences	£1,500	£1,500	£1,500	£4,500
Set up costs (phone, computer, furniture)	£3,500	£0	£0	£3,500
Total costs	£41,522	£34,222	£35,422	£111,166

TABLE 4: INFRASTRUCTURE COSTS

TYPE OF ROUTE	TOTAL COST
Family	£156,882
Downhill	£88,000
Xcountry	£301,700
TOTAL	£546,582

TABLE 5: COSTINGS FOR THE PROGRAMME (BY SITE)

Venue	Trail type	Trail length (k)	Existing suitable trail	m of new trail required	Dust surfacing	Dust per km	Total dust	New trail £ per m	New trail cost	No of waymarkers	Cost per waymark	Waymarks cost	No of signboards	Cost per signboard	Signboard costs	Gates etc	Overall cost
Castlewellan	Family	5	4.5	500	0.4	£636	£254	10	£5,000	25	£50	£1,250	2	£1,000	£2,000	£0	£8,504
Gosford Forest Park	Family	4	4	0	0	£636	£0	10	£0	15	£50	£750	2	£1,000	£2,000	£0	£2,750
Hillsborough	Family	2	1.5	500	2	£636	£1,272	10	£5,000	25	£50	£1,250	1	£1,000	£1,000	£0	£8,522
Castle Archdale Forest & Country Park	Family	5	4	1000	0	£636	£0	10	£10,000	25	£50	£1,250	2	£1,000	£2,000	£0	£13,250
Florencecourt	Family	7	6.4	600	0	£636	£0	10	£6,000	25	£50	£1,250	1	£1,000	£1,000	£0	£8,250
Castlecaldwell Forest	Family	2.5	2.5	0	2	£636	£1,272	10	£0	6	£50	£300	1	£1,000	£1,000	£0	£2,572
Castleward	Family	4	2	2000	0	£636	£0	10	£20,000	15	£50	£750	1	£1,000	£1,000	£0	£21,750
Springwell	Family	4.5	4	500	4.5	£636	£2,862	10	£5,000	22	£50	£1,100	2	£1,000	£2,000	£1,200	£12,162
Derrynoid	Family	2	1.3	700	0	£636	£0	10	£7,000	10	£50	£500	3	£1,000	£3,000	£1,200	£11,700
Glenarrif Forest Park	Family	3	2	1000	2	£636	£1,272	10	£10,000	20	£50	£1,000	2	£1,000	£2,000	£1,200	£15,472
Peatlands Park	Family	5	4	1000	0	£636	£0	10	£10,000	20	£50	£1,000	2	£1,000	£2,000	£600	£13,600
Crom (West Bank)	Family	3	0	3000	0	£636	£0	10	£30,000	25	£50	£1,250	2	£1,000	£2,000	£600	£33,850

Venue	Trail type	Trail length (k)	Existing suitable trail	m of new trail required	Dust surfacing	Dust per km	Total dust	New trail £ per m	New trail cost	No of waymarkers	Cost per waymark	Waymarks cost	No of signboards	Cost per signboard	Signboard costs	Gates etc	Overall cost
Loughry College	Family	3	3	0	0	£636	£0	10	£0	10	£50	£500	1	£1,000	£1,000	£0	£1,500
Craigavon Lakes	Family	8	8	0	0	£636	£0	10	£0	10	£50	£500	1	£1,000	£1,000		£1,500
Lagan Valley Regional Park	Family	12	12	0	0	£636	£0	10	£0	10	£50	£500	1	£1,000	£1,000		£1,500
Iniscairn	Downhill	1.5	0	1500	0	£636	£0	10	£15,000	10	£50	£500	2	£1,000	£2,000	£600	£18,100
Cave Hill Country Park	Downhill	1	0	1000	0	£636	£0	10	£10,000	10	£50	£500	2	£1,000	£2,000	£600	£13,100
Rostrevor Downhill (phase out of Moneyscalp on completion of Rostrevor)	Downhill	2	0	2000	0	£636	£0	10	£20,000	10	£50	£500	2	£1,000	£2,000	£600	£23,100
Binevenagh	Downhill	3	0	3000	0	£636	£0	10	£30,000	10	£50	£500	2	£1,000	£2,000	£1,200	£33,700
Gortin	XC	10	8	2000	0	£636	£0	10	£20,000	10	£50	£500	2	£1,000	£2,000	£600	£23,100
Rostrevor XC	XC	11	0	11000	0	£636	£0	10	£110,000	30	£50	£1,500	2	£1,000	£2,000	£0	£113,500

Venue	Trail type	Trail length (k)	Existing suitable trail	m of new trail required	Dust surfacing	Dust per km	Total dust	New trail £ per m	New trail cost	No of waymarkers	Cost per waymark	Waymarks cost	No of signboards	Cost per signboard	Signboard costs	Gates etc	Overall cost
Springwell, Binevenagh Cam area	XC	20	20	0	0	£636	£0	10	£0	16	£50	£800	4	£1,000	£4,000	£1,800	£6,600
Lough Navar	XC	60	60	0	0	£636	£0	10	£0	50	£50	£2,500	4	£1,000	£4,000	£1,200	£7,700
Ballypatrick	XC	10	0	10000	0	£636	£0	10	£100,000	30	£50	£1,500	4	£1,000	£4,000	£1,200	£106,700
Loughry College	XC	6	0	6000	0	£636	£0	6	£36,000	20	£50	£1,000	1	£1,000	£1,000	£0	£38,000
Killeter	XC	40	40	0	0	£636	£0	10	£0	30	£50	£1,500	4	£1,000	£4,000	£600	£6,100
		234.5	187.2	47300	11		£6,932	256	£449,000	489		£24,450	53		£53,000	£13,200	£546,582

APPENDIX I: NOTES ON THE SPECIFICATION, COST AND MARKETING OF OFF-ROAD CYCLE ROUTES

The following information is provided as an addendum to the report to assist with subsequent development.

Project costing for the construction of a number specialist cycling tracks for off-road enthusiasts in several parts of the UK were made available to the study by Forest Enterprise. Examples drawn from these are as follows:

Site 1

- Single track construction: - width 500-700mm-materials MOT type road stone, rough sawn, treated timber. Labour force BTCV New Deal trainees, Total length 3200m. Construction cost £2560. Cost per m = 80p
- Waymarkers: 80x80mm posts, 1500mm high, treated planed timber, routed and painted with sponsor's logo and direction arrow. Cost per unit £12. No required 37. Total cost £444
- Additional signage: 4500mm triangular plywood signs, routed and painted, mounted onto 80x80mm posts, painted. Signs £18 per unit posts £3 per unit. No of units 10 Total cost £210
- Information panels: Full colour 1000mm x 750mmsheet showing map of the trail, safety guidelines and information such as the nature of the riding and specific hazards or features. Mounted on marine ply. Encapsulated. £400
- Leaflet and map - full colour A4 50,000 units at total £1,000
- Total cost for site 1 £4614
- Costs met by Sponsor
- Annual maintenance requirement estimated at £1000
- Predicted usage 15,000 - 20,000 people per year

Site 2

- Start/Finish surfacing 400m of 1750mm with MOT Type 2 roadstone (80mm to dust) Using 3 tonne Komatsu Digger, 3 tonne dumper and roller. Cost per m £8 and total cost £3200
- Single track width 500-700mm-materials MOT type road stone, rough sawn, treated timber. Labour force BTCV New Deal trainees, Total length 7000m cost £.80 per m. Total cost £5,600
- Information panel as Site 1 £400
- Trail guide as for Site 1 £1,000
- Total cost for site 2 £10,764
- Anticipated sponsorship at cost
- Estimated use 15,000-20,000 mountain bikers per annum.

Site 3

- Waymarking as in sites 1 and 2. 25 units @ £12 each total £300
- Single track construction with 500mm to 700mm MOT type 2 roadstone, treated roughsawn timber, 450mm plastic culvert pipes, Bobcat mini digger, whacker plate, motorised wheelbarrow. Total length 2550m £2 per m total £5,100
- Information panel as Site 1 £400
- Trail guide and map £1000
- Total cost £6,800
- Anticipated use 15-20,000 mountain bikers per annum
- Annual maintenance estimate £1000

The above Forestry Commission/Forest Enterprise mountain bike routes work out to an all in average set up cost of just under £2 per linear m. Personal communications indicate that when outside contractors are used

to provide the trail construction rather than New Deal staff, costs can range from £3/m to £6/m for single track. Several suppliers have become specialist contractors as a result of their experience.

In addition the following note was prepared for the off-road cycling review by Andrea Partridge of P4 Projects, a specialist cycle route contractor for situations outside forests:

The specification for the route will generally depend upon 3 factors:

- Existing ground / path conditions
- Quality of route required
- Quantity and type of other traffic that uses the route.

As such the detailed costings are illustrative and are based upon the following set of conditions:

- Route Type 1 - Unbound cross-field cycle path. This type of path would involve new construction on an existing field or grass area. To reduce costs, the path is laid on a geotextile material on top of the existing ground level as this saves on the removal of topsoil and improves drainage as the path level is above the existing ground level.
- Route Type 2 - Unbound former railway or existing path. The specification for this type of route depends very much upon existing path conditions. Drainage work will almost certainly be required. If a hard base is already in existence, this will save on quantity of sub-base required.
- Route Type 3 - Farm / forest cycle track. These paths should only require minimum minor surface repairs but again the level of work will depend upon existing conditions. The condition of the drainage and the level of other traffic using the track are critical factors that have to be taken into account.
- Route Type 4 - Sealed multi-use route. These routes are the most expensive to develop and create a more "urban" nature of route.

Illustrative Specifications and Costs per Metre

For a multi-use route i.e. walkers, cyclists and horse riders, it is recommended that the path is 3 metres in width. A route for walkers and cyclists can reduce in width to a minimum of 2 metres (if the path has a verge on both sides) but this would not be ideal and 3 metres is still the recommended width. If drainage and fencing is required, the width required would be increased further by 0.5 metre for each drainage ditch and 0.5 metre for verge / fencing. Total width required can therefore amount to 4.5 metres. The following specifications and costings are given for 2 metre and 3 metre paths.

Route Type	Specification	2 metre width cost per linear metre	3 metre width cost per linear metre
1	Geotextile	£1.20	£1.80
	150mm Type 1 sub-base (whinstone) or road planings*	£5.40	£8.10
	15mm min. 3mm to dust whinstone	£1.90	£2.85
	TOTAL	£8.50 per LM	£12.75 per LM
2	150mm Type 1 sub-base (whinstone) or road planings*	£5.40	£8.10
	15mm min. 3mm to dust whinstone	£1.90	£2.85
		£7.30	£10.95

	TOTAL		
3	150mm Type 1 sub-base (whinstone) or road planings*	£2.70 per sq m at 150mm thick	
4	100mm Type 1 sub-base (whinstone)	£3.60	£5.40
	50mm of Dense Bituminous Macadam	£10	£15
	TOTAL	£13.60 per LM	£20.40 per LM

* At the current time, road planings and whinstone sub-base are a similar price. The introduction on the aggregate tax will substantially increase the cost of whinstone and road planings will therefore be more cost effective.

Additional costs that may have to be taken into account with the contract are as follows:

Preliminaries for setting up and dismantling contractor facilities, traffic safety etc. Allow 5% of contract value.

Drainage - piped drains are approx. £17.50 per metre. Drainage ditches are substantially cheaper (say £2 per metre) and are easier to maintain.

Fencing - post and wire fencing is the cheapest at £3.50 per LM. Type of fence will depend on whether or not it has to be stock or deer proof.

For a standard railway reclamation or new cross-field path that includes drainage, fencing on both sides, 3m wide surfacing etc allow £40,000 per km i.e. £4,000 per 100m.

A 10 % contingency margin should be allowed on every contract

Ancillary Facilities

The following is suggested as possible ancillary facilities to assist cyclists in using the routes.

- Waymarkers -oak posts with circular waymarker discs inset into a routed area. This prevents the waymark from being levered off and allows the waymarker to be positioned to have the directional arrow pointing correctly. Waymarkers are easily replaced if the route changes. Indicative costs are as follows:
 - Oak Posts - 1.5metres x 130mm x 130mm pre routed - £15.80 each
 - Waymarker discs - printed plastic - 90mm diameter x 3mm thick - £0.93 each
 - Installation - suggest £2,700 to install 100 waymarkers remote from roads.
 - Finger Post

2 fingers text both sides	£348
2 fingers, 1 single-sided text, 1 double-sided text	£315
1 finger text both sides	£243
1 finger single-sided text	£210

Assumed that text sandblasted rather than routed.
 - Map information board -

GRP panel - full colour 500mm x 600mm	£275
Inset into:	
Timber post 0.8m x 2.5m x 100mm	£290

Design and map copyright costs approximately £400

- Gates - steel boom type gate 3.6m wide - £330
- Motorcycle Barrier - These are usually designed and built on site so are difficult to cost. Can be constructed of timber or hot dipped galvanised steel. Suggest £150-£200 per unit. Steel barrier designed for Tayport and built by Forest Enterprise blacksmiths, design available.

Marketing Programme Example

The Kingdom of Fife Millennium Cycle Ways had a comprehensive marketing plan with the following objectives:

- To develop events and activities specific to the identified key market segments;
- To maximise the public's awareness of the Project both locally and nationally through press coverage and advertising;
- To raise the profile of the Project amongst local businesses and to encourage them to develop support services for cyclists;
- To explore other ways of marketing the Project through other relevant organisations e.g. Health Promotion Councils, CTC, environmental groups etc;
- To develop ways of raising the profile of the project through theming of promotional material linked to the interpretive and orientation material;
- To maximise employer's awareness of the Project.

The Kingdom of Fife Millennium Cycle Ways marketing programme budget was £140,500. This was 4% of the total project budget and allowed for a comprehensive programme of events and activities to be developed.

In addition, the Interpretation budget of £185,000 and the multimedia budget of £252,000 were used to further enhance the marketing of the Project. The key elements of the marketing programme were as follows:

- House style and theming - this was developed through a logo competition with local primary schools. From this a house style was developed by the project's designers and was used on all printed material, interpretation panels, merchandising etc.
 - Advertising - in Area Tourist Board Publications, cycling and outdoor magazines, travel supplements in national newspapers, local newspapers, Scottish Tourist Board publications etc.
 - PR Campaign - Programme of Press Releases to ensure coverage of the Project through editorial in local and national papers, coverage on 2 TV holiday programmes and BBC children's programme, presence at main cycling events in the UK, attendance at UK and international activity and holiday exhibitions and travel fairs, large media events for opening major sections, programme of public exhibitions throughout Fife.
 - Newsletter - quarterly publication with 15,000 recipients across Britain.
 - Promotional leaflet - distributed widely throughout central Scotland.
 - Promotion to Businesses - the establishment of a business cycling forum to generate interest in the cycling to work sector. Latterly this involved work specifically with the tourism businesses, the development of a cyclist welcome scheme and promotional events.
 - Cycling Events e.g. Glenrothes fun day, guided bike rides, schools events, launch of the Kingdom Route rides.
 - Educational programme - development of the Fife Good Cycling Code, motorists' education pack, newcomers to cycling pack etc.
 - Events during National Bike Week including Bike to Work Day.
 - Website - with the development of the Internet during the life of the Project, a website was included in the marketing programme.
-

In addition to the above, the Project developed a state-of-the-art multimedia kiosk system. The 20 touch-screen kiosks were placed in TICs, libraries, shopping centres and visitor attractions and aimed to raise the profile of the Project. The system held information on all of the cycle routes, maps, 3D images of Fife, information on places to eat and stay and local attractions and allowed cyclists to design a route suited to their needs.

Interpretation was a key element of the Project. The budget allowed for the development of a series of 11 maps and 14 interpretive / start points on the cycle routes. In order to overcome the Ordnance Survey copyright costs, the Project paid for Fife to be remapped and whilst this increased costs, it saved on annual copyright charges. The maps were sold for a nominal cost in order to cover reprinting and updating costs.

APPENDIX II: ACKNOWLEDGEMENTS

The following people have made valuable contributions to the review of off-road cycling opportunities and to the development of the associated strategy.

The Steering Group for the study was as follows:

Chair	Caro-Lynne Ferris	CAAN
Members	Dick Schaible	Forest Service
	Terry Eakin	Environment and Heritage Service
	Jane McCallum	Mountain Biking North
	Alan Jones	Northern Ireland Cycling Federation
	Robby Lamont	Ulster Cycling Federation
	Richard Gillen	Local Authority Countryside Officers
	Stephen Bill	Northern Ireland Tourist Board
	Alan Pentland	Sustrans

Other contributors were as follows:

Basil Lenaghan - West District- Northern Ireland Forest Service
 Stephen MacCartney - North District Northern Ireland Forest Service
 Mark Parker- South East District - Northern Ireland Forest Service
 Hugh McCann - Environment and Heritage Service
 James McEvoy - Environment and Heritage Service
 Bob Bleakley - Environment and Heritage Service
 Stephen Patterson - Sustrans
 Alan Pentland - Sustrans
 Hugh Devlin- National Trust
 Keith Hunt - Water Service
 Dafydd Davis - Forestry Commission
 Marcus Sangster - Forestry Commission
 Richard Gillen - Limavady Borough Council
 Colm McCann - Belfast City Council
 Mark Strong - Ballymoney and Coleraine Borough Councils
 Clare Wright - Ards Borough Council
 Leslie Duff - Antrim Borough Council
 John Donnelly - 'Mike the Bike' Newtownards
 Jimmy Quinn - Kilkeel
 John O'Boyle - Belfast Hills Environmental Unit Bryson House
 Paul McDowell - Mourne Heritage Trust
 Eamonn Keaveney - Fermanagh District Council
 Andrew Lilley - Newtownabbey Borough Councils

Kim Dyer - Castlereagh Borough Council

Oliver McShane - Cookstown District Council

Linda Foy - Larne Borough Council

Shane Logan - Forest Service

Stephen Toal - Lisburn Borough Council

Martin Bradley - Strabane District Council

J. Ross - Ross Cycles, Castlewellan and Newcastle

Members of the NI Cycling Forum at its meeting on 19th Dec 2002
