BARRIER-FREE TOURISM

IN THE NATURAL

ENVIRONMENT FOR PEOPLE WITH

PHYSICAL DISABILITIES

WITH SPECIFIC

REFERENCE

TO EASTERN CAPE FACILITIES.

THESIS
Submitted in partial fulfilment of the requirements for the
Degree of Master of Social Science (Social Work),
of Rhodes University

By

SALLY LYNN CHAPMAN

January 1998
ABSTRACT

Social workers are becoming increasingly involved in community projects, thus allowing them to reach more people. One of these areas involves the sensitising of society in the removal of barriers which prevent people with disabilities from living balanced and integrated lives. One aspect requiring particular attention is the natural environment which, until recently, has been neglected.

In order to increase the knowledge of the researcher in the field of environmental accessibility, twenty six people with physical disabilities were interviewed to ascertain which factors they saw as important and relevant when assessing the natural environment. Their ideas were incorporated into practical assessments of a game reserve and a possible hiking trail for people with disabilities. As it is of vital importance to include the consumers in studies of this nature, selected people with varying abilities and disabilities assisted in these "hands on" studies.

Qualitative interviews were also conducted on the owners of facilities who were in the process of making their facilities accessible. This allowed the researcher and selected people with disabilities to evaluate positive and negative experiences, thus adding to their knowledge base and building capacity for people with disabilities.
ACKNOWLEDGEMENTS

I would like to express my sincere and heartfelt thanks to the following people for their support and encouragement:

1. My husband Barry
2. My family, and in particular, my parents and sister Merrie
3. All those people with disabilities who assisted me, accompanied me and encouraged me in this study
4. Shane Smith for his technical expertise
5. My friends and colleagues
6. Rob and Julie Filmer of Eco-Access
7. The owners and managers of those facilities that were studied
8. Anneliese Pierskalla and Felicity Coughlan from the Social Work Department at Rhodes University
9. All those members from the National Environmental Accessibility Programme and the East London Access Committee who have taught me so much
10. Dolf Fedler for his very appropriate illustrations
11. God for giving me the strength to persevere
DECLARATION

I hereby declare that this dissertation is my own unaided work and that any assistance obtained has been fully acknowledged in the text. No part of this dissertation has been previously submitted to any other university.

SALLY LYNN CHAPMAN

12 January 1998
CONTENTS

Definitions ix
List of Figures xii
List of Tables xiii
List of Illustrations xiv
List of Appendices xv

CHAPTER 1
INTRODUCTION
1.1 Why social work research? 1
1.2 Reasons for the choice of the research subject 2
1.3 Objectives of the research 6
1.3.1 Experience of people 6
1.3.2 Assessment of facilities 6
1.4 Research goals 7
1.5 Research design and methodology 7
1.6 Limitations of the research 8
1.7 Problems experienced with the research 10
1.8 Value of the research 10
1.9 Organisation of the research 11

CHAPTER 2
LITERATURE REVIEW
2.1 Introduction 13
2.2 Barriers affecting people with disabilities 13
2.2.1 Barriers caused by the disability 14
2.2.2 Society's image of disability 14
2.2.3 Dignity 14
2.2.4 Signage 15
2.2.5 Architectural barriers 15
2.2.6 Barriers to communication 16
2.2.7 Written communication barriers 17
2.3 Why are there barriers? 17
2.3.1 What is "normal"? 18
2.3.2 Training of architects 19
2.3.3 Cost 19
2.3.4 Ignorance 20
2.3.5 Lack of concern 20
2.3.6 Aesthetics 21
2.3.7 Difficulties in removing barriers 22
2.4 The National Building Regulations of South Africa 22
2.5 Consultation, Monitoring and Publicity 25
2.5.1 Consultation 25
2.5.2 Monitoring 26
2.5.3 Enforcement 26
2.5.4 Publicity 27
2.6 Statistics and Rights 28
2.7 Other countries' progress towards accessibility 29
2.7.1 Developing countries 29
2.7.2 Britain 29
2.7.3 United States of America 30
2.8 Transport 32
2.8.1 Private vehicles 33
2.8.2 Air travel 34
2.8.3 Rail travel 34
2.9 Accessible tourism 38
2.10 Tourism in the natural environment 41
2.11 Tourism information on accessibility 43
2.12 Criteria for assessing the natural environment 47
2.13 Training 48
2.14 Conclusion 48

CHAPTER 3
RESEARCH DESIGN AND METHODOLOGY
3.1 Introduction 52
3.2 Research design 52
3.3 Research methodology 53
3.3.1 Interview schedule 53
3.3.2 The respondents 55
3.3.3 The check list 59
3.3.4 The participants 59
3.3.5 Studies on the natural environment 60
3.3.6 Review of work undertaken 60
CHAPTER 4
ANALYSIS OF DATA FROM INTERVIEW SCHEDULE

4.1 Introduction 63
4.2 Sample 63
4.2.1 Gender, disability and marital status 63
4.2.2 Age spread 65
4.2.3 Respondents love of nature 65
4.2.4 Summary of sample selection 66
4.3 Use of facilities in the natural environment 67
4.3.1 Facilities already being used 67
4.3.2 Problems encountered and reasons for non-use of the natural environment 69
4.3.3 Facilities they would like to use 74
4.3.4 Visits to a game reserve and a hiking trail 76
4.4 Financial constraints 77
4.5 Rustic qualities of the natural environment 79
4.6 Motorised wheelchairs 79
4.7 Summary 80

CHAPTER 5
ANALYSIS OF A GAME RESERVE

5.1 Introduction 82
5.2 Double Drift Game Reserve 82
5.3 Privacy 83
5.4 The hearing and visually impaired 87
5.4.1 Representative 87
5.4.2 Interpreter for the hearing impaired 87
5.4.3 Emergency procedure 88
5.4.4 Lighting 89
5.4.5 Notices and points of interest 91
5.4.6 Raised map 93
5.4.7 Guide-Dogs 93
5.5 People with physical disabilities 94
5.5.1 Shower versus bath 94
5.5.2 Grab rails 95
5.5.3 Lever-action type tap handles
5.5.4 Beds
5.5.5 Grab rails or monkey chain for bed transfer
5.5.6 Plug point for a ripple mattress
5.5.7 Toilets
5.5.8 Meals
5.5.9 Picnic sites and game hides and viewpoint
5.5.10 General toilets
5.5.11 Telephone
5.6 Aspects affecting all disabilities
5.6.1 Training of staff
5.6.2 Written information on accessibility
5.6.3 Training for people with disabilities
5.6.4 Transport
5.7 Summary

CHAPTER 6
ANALYSIS OF HIKING TRAILS
6.1 Introduction
6.2 Interests of respondents
6.3 The needs of the respondents and participants
6.3.1 The visually impaired
6.3.2 The hearing impaired
6.3.3 The physically disabled
6.4 Summary and implementation
6.5 Planning and recommendations

CHAPTER 7
ANALYSIS OF DIFFICULTIES ENCOUNTERED
7.1 Introduction
7.2 The facilities
7.2.1 Chandlers
7.2.2 Quintetta Guest Farm
7.2.3 The Red Bishop Golf Course and Restaurant
7.3 Problems experienced
7.3.1 Size of bedroom
7.3.2 The bathroom
7.3.3 Usage
7.3.4 The National Accessibility Scheme 128
7.3.5 Cost 130
7.4 Analysis and summary 130
7.4.1 Who is responsible? 130
7.4.2 Consultancy 131
7.4.3 Attitude 132
7.5 Conclusion 133

CHAPTER 8
CONCLUSIONS AND RECOMMENDATIONS
8.1 Introduction 135
8.2 Summary and recommendations 135
8.2.1 Interest in, use of, and potential for utilisation of the natural environment 135
8.2.2 The study of a game reserve 138
8.2.3 A hiking trail 140
8.2.3 Hiking trail 112
8.2.4 Awakening, partnership and consultancy 141
8.2.5 Publicity 144
8.3 Future research 144
8.4 Conclusion 145

APPENDICES 146

BIBLIOGRAPHY 166
DEFINITIONS

1. **Accessibility**: This refers to a barrier-free environment, in terms of architectural barriers for the mobility impaired as well as barriers to information for the visually or hearing impaired.

2. **Associations for People with Disability**: Many of these organisations were previously known by the outdated term of "Cripple Care". Whereas in the past, these organisations were run by members of the public for people with disabilities, the balance is changing. Most of these organisations now have people with disabilities, the consumers, on their board of management.

3. **Bush wheelchair**: This has two wheels in tandem which allow easy passage on paths too narrow for a conventional wheelchair. It has a steerable front wheel which allows a path to be picked around and over obstacles and a low centre of gravity for stability. (Sales Brochure)

4. **Disabled friendly**: Accessible to and independently usable by disabled people. (Patton 1995: ix)

5. **"Disabled People South Africa"** (DPSA) Their aim (July 1997) is to be an effective and efficient democratic national assembly of all persons with disabilities which mobilises them to advocate for their rights for the attainment of equal opportunities in an integrated social, political and economic environment".

6. **Eco-Access**: is "an organisation which works with communities, environmentalists and persons with disabilities to develop accessible wildlife destinations and activities". It also aims to "educate and encourage persons with disabilities to assist in solving environmental issues" (Steyn in Rehabilitation in South Africa 1995: 18)
7. **Ecotourism:**

7.1 "Includes anything to do with transport, accommodation, and any activity, programme or facility linked to the natural or cultural environment that a traveller of any sort could participate in" (Filmer & Filmer 1996a:1).

7.2 "An enlightening, participatory travel experience to environments, both natural and cultural, that ensures the sustainable use, at an appropriate level, of environmental resources and, whilst producing viable economic opportunities for the tourism industry and host communities, makes the use of these resources through conservation beneficial to all tourism role players" (Hattingh 1997:1).

8. **Facility:** "A facility includes any physical structure, for example, trail, hotel or scenic viewpoint" (Filmer & Filmer 1996a:2).

9. **Low vision.** The World Health Organisation refers to someone who has low vision as someone who has 6/18 vision or lower. For the purposes of this study, a person who has low vision is one who has difficulty in functioning optically in everyday life because of visual acuity (Ramlal 1997:2).

10. **National Environmental Accessibility Programme** (NEAP) is the umbrella body for accessibility in the country with representatives in each province. It aims at advising, motivating for and monitoring issues of access. At a local level, there are Access Committees with various names in various cities which carry out the NEAP work. NEAP National refers to the national office from which planning is done.

11. **Person with a disability:** "... may include anyone with a physical, mental or sensory impairment, that is, people with limited or no function of one or more limbs (often using crutches or wheelchairs), people who have poor, partial or no sight, people who are hard of hearing or deaf and people who have any degree of mental disability" (Filmer & Filmer 1996a:2).
12. **Participants**: For the purposes of this research, "participants" refer to those who assisted in the practical studies.

13. **Respondents**: For the purposes of this research, "respondents" refer to those who responded to the interview schedule.

14. **Ripple Mattress**: A mattress, connected to a power point, which inflates and deflates various sections of it, thus preventing pressure sores. It is particularly useful to quadruplegics.

15. **Tapping Rails**: These run alongside a hiking trail. They are approximately 20 cms high and are used for the blind person to tap his long white cane alone in order to follow the trail independently. Eco-Access Information Sheet (Undated: 17).

16. **Unica**: a shower rose which can fit onto a tap fitting or onto an adjustable vertical bar for varying heights in a shower.
LIST OF FIGURES

1. Figure 4.1 Age spread 65
2. Figure 4.2 Love of nature 66
3. Figure 5.1 Own accommodation 84
4. Figure 5.2 Own bathroom 85
5. Figure 5.3 Own braai facilities 86
6. Figure 5.4 Shower versus bath 94
7. Figure 5.5 Grab rails 95
8. Figure 5.6 Bed height 97
9. Figure 5.7 Staff training 103
10. Figure 6.1 Camber 116
11. Figure 6.2 Even ground 117
12. Figure 6.3 Gradient 118
LIST OF TABLES

1. Table 4.1  Gender and disability  63
2. Table 4.2  Marital status  64
LIST OF ILLUSTRATIONS

1. Illustration 2.3 Rail travel 35
2. Illustration 2.4 Minibus taxis 36
3. Illustration 2.5 Bus travel 37
LIST OF APPENDICES

1. Interview schedule 146
2. Check list 153
3. Report on Double Drift 157
4. Letter to respondents and participants 165
CHAPTER 1

INTRODUCTION

1.1 WHY SOCIAL WORK RESEARCH?

It might be asked why this research is being done by a social worker. The practice of social work with people with physical disabilities has often been centred on work with individuals - helping them to adjust to their life-altering disability and to function positively. Increasingly, as the very existence of Non-Governmental Organisations (NGOs) are threatened, it becomes obvious that there is no time, money or manpower to deal with every single person in this state of crisis.

Community work is seen as one solution where larger issues are dealt with which affect every person with a disability. In November 1997, at a planning and prioritisation session of The Association for Rehabilitation of Persons with Disability (Rehab), the organisation dealing with various disabilities in East London, accessibility was felt to be one of these key issues.

There are social workers in at least four cities in South Africa who are motivating for the removal of environmental barriers. They work very closely with people with disabilities as well as other members of the community. A number of years ago,
those involved in this access work required some sort of identity and infrastructure.

The National Environmental Accessibility Programme (NEAP) provided the identity after its formation in 1993 and in many centres, the infrastructure was provided by Associations of People With Disabilities (APD), Disabled People of South Africa (DPSA), Disabled People Information Services (DPIS), etc. Thus, in many centres, this work was undertaken by a team, co-ordinated by a social worker.

1.2 REASONS FOR THE CHOICE OF THE RESEARCH SUBJECT

The South African Tourism Board (Satour), in conjunction with experts in the disability and architectural field, under the banner of NEAP, have done a great deal of research into the tourism needs of people with disabilities. They have almost completed research into their three star National Accessibility Scheme by which accommodation, restaurants and other tourist facilities can be assessed and provided with a disability star rating. This team have also drawn up the first draft for criteria to assess Bed and Breakfast and Guest House Establishments. The criteria will have to go through a period of testing, feedback, and adaptation before finally being accepted and put into practice. The same procedure is planned for Game Parks in the future.

This research did not intend to encroach on Satour and NEAP's professional and
ongoing research. It aimed at a more "hands-on" research experience with people
with disabilities in the natural environment in the central region of the Eastern Cape.

As the current provincial representative for the National Environmental Accessibility
Programme, some of the researcher's tasks include:

* Conducting access studies on facilities at the request of the owners
* The provision of regulations and advice to facilities wanting to become accessible
* Publicising the need for a barrier-free environment
* Motivating owners of restaurants, sports facilities, shopping complexes, etc to make
  their facilities accessible
* Liaising with architects, engineers and building inspectors about various aspects of
  accessibility
* Co-ordinating the East London Access Committee
* Encouraging role-players in other centres to become involved
* Keeping contact with NEAP on a national basis

There are experts in the fields of architecture and building regulations, relating to
people with disabilities, in certain cities. With many years of experience in the
disability field, they are knowledgeable about issues of access and are thus competent
to act as consultants. Although there is literature on various aspects of barrier-free design, the researcher, a relative newcomer to the field of environmental accessibility, believes that much of the information required comes through experience and is not found in the literature. Tapping the knowledge and experience of local people with disabilities is one way of learning and could serve as the basis for a resource centre in this area for the future. Individual people with disabilities are, at times, consulted. However, many feel that they can only speak for their own abilities and disabilities and not for those who are different from themselves. Obtaining a collective opinion would, therefore, be of great assistance to the researcher. It would not mean that the feelings and needs expressed by one person only should be ignored but it would serve as an indicator.

Part S of the National Building Regulations (SA. Department of Trade and Industry 1986: 40 - 41) relates to people with disabilities and therefore provides specific details about door widths, gradient of ramps, toilet specifications, etc. These regulations only apply to certain categories and size of buildings. Whilst it is hoped that all new hotels will be made accessible and adhere to Part S of the National Building Regulations, the truth is that there are many loopholes which will only be rectified when new and enforceable regulations are in place. If, according to the
present regulations, it is possible to build a Retirement Complex which is not accessible, then there is not much hope of finding many barrier-free facilities in the natural environment. They would not generally be considered a priority for people with disabilities by the general public.

Filmer & Filmer (1996a: 8) believe that ecotourism is "probably the fastest-growing industry in the world today". Included in this interest in the natural environment are people with physical disabilities who, up until recently, were not catered for at all in terms of their special needs. This balance is slowly changing. The topic is starting to be researched on a limited scale in this country and a handful of facilities in the natural environment have become accessible. The researcher chose the natural environment for this study as:

* Her interest lies in the natural environment

* People with disabilities have reported the lack of facilities available to them in the natural environment

* There are, as yet, no criteria for assessing the natural environment
1.3 **OBJECTIVES OF THE RESEARCH**

The objectives of this research were divided into 2 areas:

1.3.1 **Experience of people:**

It gained a deeper understanding of the needs and interests of people with physical disabilities with reference to tourism facilities and their use in the natural environment.

1.3.2 **Assessment of facilities:**

It encompassed case studies on six Eastern Cape facilities, taking into account the needs expressed by the people interviewed and selected people with disabilities who would assist with these case studies. The objectives were:

* To assess the game lodges and other facilities at Double Drift Game Reserve, leading to recommendations about necessary changes in order to make one or more of them accessible

* To assess the possibility of making the Umtiza Hiking Trail accessible or of developing an accessible hiking trail at the Amalinda Fish Station. It would provide guidelines as set out by Eco-Access (Undated: 1 - 19), Beechel (1975: 1 - 49) and others on changes necessary in order to remove barriers
* To study progress made and difficulties encountered in making Quintetta Guest Farm, The Red Bishop Golf Course and Restaurant and certain areas of Chandlers Guest House accessible.

These studies will provide guidelines for others working in the access field.

1.4 **RESEARCH GOALS**

By researching the experiences and needs of people with disabilities and, together with them, studying various facilities in the natural environment, a body of knowledge would be compiled which could be used when studying other facilities or when asked for advice about altering or creating facilities in the Eastern Cape.

1.5 **RESEARCH DESIGN AND METHODOLOGY**

The research design encompassed both qualitative and quantitative aspects. The qualitative aspect referred not only to the feelings of people with disabilities but to the feelings of those people who had attempted to make their premises accessible.

The quantitative aspects encompassed the needs of people with disabilities and their relation to the actual physical environment being studied.
An extensive literature review was done, covering accessibility in the natural environment as well as literature about accessibility in general.

The following part of the study was to interview twenty six people with physical disabilities. This was followed by a study of facilities in the natural environment together with people with disabilities and lastly, owners of facilities who had made attempts to become barrier-free, were interviewed.

As this was a small study, complex statistical analysis was unnecessary: the answers to the closed ended questions were numerically analysed while common themes were sought in the more descriptive answers to open ended questions. This data was used to make recommendations to facilities studied and will form the basis of criteria used for future studies until more formal criteria have been developed on a national scale.

1.6 LIMITATIONS OF THE RESEARCH

1.6.1 As a practising social worker, the researcher had time limits. Although a much larger sample would have been preferable, this was not possible. Thus, due to the small sample (26), it was difficult to generalise. This sample was made smaller by dividing it into various disabilities, thus dividing the impact of the study even further. An
example of this was the fact that only one partially sighted and three blind
respondents were interviewed, thus making it difficult to obtain a complete picture of
their needs in the areas that were quantifiable. For those aspects that were not
quantifiable, Rubin & Rubin (1995:72) state that for qualitative interview studies,
"researchers want to make broader statements about more complex responses than yes
or no, approve or disapprove" as is needed in a survey.

1.6.2 The number of facilities studied were similarly limited by time and financial
constraints, thus limiting the study to a pilot study.

1.6.3 The financial constraints of the facilities studied may also prevent the
recommendations from being implemented. The Daily Dispatch (November 21
1997:2) writes that "bitten by budget-bound bureaucracy, their (game rangers)
guardians are leaving the protected wildlife of the Eastern Cape in droves."

1.6.4 A further limitation is the Eurocentric slant of the study. The researcher's inability to
speak Xhosa and her perception that few black people have, until recently, had the
opportunities to visit and appreciate places in the natural environment, resulted in
only two black people being included in the study. She saw it as important to include
only those who had experienced and appreciated the natural environment.

1.6.5 Although the researcher has had practical experience in the field of accessibility, she
is a social worker and not an architect which may have placed certain limitations on
the study.

1.7 PROBLEMS EXPERIENCED WITH THE RESEARCH.

Besides the limitations of the study, as mentioned above, problems encountered were naturally those of environmental barriers. Every visit had to be planned with suitable participants in mind - participants who were sufficiently disabled as to be able to give the necessary input but who would be able to adapt to the environment as it was then. As an example, the participant in a wheelchair would have found the barriers insurmountable had it not been for the assistance of her husband.

1.8 VALUE OF THE RESEARCH

1.8.1 This study should not only be viewed as a pilot study but as a starting point, in what is hoped will be an ongoing process in creating a barrier-free tourist environment in the Eastern Cape. It is envisaged that any publicity generated by facilities becoming accessible will provide impetus to other tourist and ecotourist facilities to begin planning for the inclusion of and consultation with people with physical disabilities.

1.8.2 Additional criteria will be developed where necessary, and valuable experience will be gained, which will be helpful in future studies.
1.8.3 It is hoped that this study will encourage people with disabilities to make more use of outdoor facilities.

1.8.4 It is hoped that it will benefit tourists with disabilities visiting the area.

1.8.5 It may be possible for other students to become practically involved in alterations which have to be made, thereby following the trend set by the Centre for Ecotourism at the University of Pretoria, as related by Filmer & Filmer. (1996b: 140)

1.8.6 This study is the only known one of its kind in the Eastern Cape.

1.8.7 As many people from disadvantaged backgrounds have not had the opportunity to appreciate nature, it is hoped that, once more accessible facilities are available, sponsors can be found and outings can be arranged which will be educational, therapeutic and relaxing.

1.8.8 Reasons for non-use of the natural environment by nature lovers were explored and attempts will be made to find solutions to some of the problems.

1.9 **ORGANISATION OF THE RESEARCH**

**Chapter One** consists of a general introduction.

**Chapter Two** includes a review of the literature.

**Chapter Three** explains the design and methodology of the research.

**Chapter Four** looks at details of the sample used, utilisation of the natural
environment by people with disabilities and problems encountered.

Chapter Five deals with the views of the sample population on their needs in a game reserve and it's practical application, with people with disabilities, at Double Drift Game Reserve.

Chapter Six deals with the views of the sample population on their needs on a hiking trail and it's practical application, with people with disabilities, at Umtiza Forest and the Amalinda Fish Station.

Chapter Seven describes the positive and negative experiences of those people who have attempted to make their facilities accessible.

Chapter Eight includes a summary, recommendations and future research.
CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Smit (1995: 31) writes that a scientifically based study of the literature is a fundamental facet of the introductory argument. The extensive review of literature available on access issues was enlightening. This review covers not only accessibility in the natural environment but also accessibility in general and places certain regulations and practical aspects of the built environment in perspective.

This chapter traces the history of access issues both in this country and abroad and includes the American Disability Movement. It includes details about types of barriers, reasons for barriers, consultation, enforcement of regulations as well as details of the South African situation in terms of legislation, tourism and ecotourism for people with disabilities. It highlights the lack of certain information on accessible facilities in the natural environment.

2.2 BARRIERS AFFECTING PEOPLE WITH DISABILITIES

In order to remove barriers, it is necessary to investigate what these barriers are.
Beechel (1975: 3) wrote that "those who have some physical or mental impairment are quite often undeveloped socially, physically, mentally or culturally due to a lifestyle that has been restricted partly by impairment and partly by a world that has not been designed for them".

2.2.1 Barriers caused by the disability

The first barrier, therefore, is that caused by the physical constraints of their disability; their inability to walk, see or hear or their partial mobility, vision or hearing.

2.2.2 Society's image of disability

Secondly, the distorted image which society has of people with disabilities causes barriers. "Disabled people don't go out much", "Disabled people cannot speak for themselves", "Disabled people are comfortable in care centres", etc.

2.2.3 Dignity

Another barrier, an emotive one, relates to dignity. "One of the pleas made by disabled people is that facilities...need to be so located as to be available with dignity of movement. Entering, say a restaurant via the back lane, past the garbage cans and
staff toilets, is not everybody's definition of accessibility" (National Council for the
Care of Cripples Undated: 10). The same could be said about being carried up a
flight of steps in a wheelchair.

2.2.4 Signage

Lack of signage denoting wheelchair access is an unnecessary barrier as people with
disabilities do not always know if there is an alternative accessible entrance. It is
important for a building to display the international symbol of access if it is accessible
or to point to an alternative accessible entrance. This will be discussed in greater
detail in Chapter Seven.

2.2.5 Architectural barriers

The Fifth barrier, relevant to this study, is that imposed by the environment. There
are many architectural and environmental barriers. These not only include the
obvious such as steps instead of ramps but ramps that are too steep, doors that are too
narrow, toilets that are too small to accommodate a wheelchair, slippery floors that
are dangerous for elderly people or those on crutches, threshold of doors which
exceed 15 mm, uneven pavements, revolving doors, heavy doors, carpets at entrances
to buildings, dangerous objects in the path of travel, protruding objects, no lifts or lifts
too small to accommodate wheelchairs, door handles, light switches or lift buttons too high for wheelchair users, taps, washing machine or stove controls that are difficult to grip, etc. These barriers affect many more than those who are obviously disabled. The United Nations expert group (1974: 4) wrote that "the aged, mothers with prams, wheelchair users, pregnant women, people with chronic heart or bronchial conditions, the person with a crutch: all are daily impeded, inconvenienced and endangered by architectural barriers".

2.2.6 **Barriers to communication**

These refer to the spoken word. People with varying degrees of hearing loss do not hear their name being called at pension pay-out points, announcements on coach tours or railway stations, danger signals such as sirens or fire alarms, television with no written captions or everyday conversation. Alternatively, they may only hear snatches of conversation because of background music or noise. A group of foreign hearing impaired tourists were recently stranded at the East London airport with no interpreter. Due to flight delays, they were not met at the airport as planned, causing considerable confusion and frustration at the inability to communicate with airport officials. (East London Access Committee Meeting 29 October 1997: 3) The hearing impaired are not obviously disabled. When they do not answer a person or
answer inappropriately, they unwittingly receive labels which can be very hurtful.

Kenyon (in Keith 1994: 138) writes that "the deafness which alienates and
dehumanises is caused by inaccessible words. To be denied access to language which
takes liberties with you is an assault on your control over your life. The human
contact deaf people need is what causes us the greatest unhappiness".

2.2.7 **Written communication barriers**

The inability to read newspapers, to "watch" television with limited verbal
communication, to read prices at supermarkets, menus in restaurants, signposts, bus
names, etc are all classed as barriers to communication. Having to request help with
accounts, bank statements, completion of withdrawal slips at banks, or at automatic
teller machines are not only invasions of privacy but lead to abuse. A few years ago,
The Standard Bank requested NEAP to identify suitable places for Braille automatic
teller machines. Their efforts were applauded but few people read Braille.

2.3 **WHY ARE THERE BARRIERS?**

The fact that there have been barriers in society for thousands of years is no
consolation to people with disabilities in this modern age. Some of the many reasons
for these barriers can be listed as follows:
2.3.1 What is "normal?"

Over the years, many people have written about the fact that only "normal" people were catered for when designing buildings. The ongoing articles over a period of many years illustrates the slow pace of change. A report by the United Nations Expert Group (1974: 4) quoted Panayiotis Psomopoulos of the Athens Centre of Ekistics, Greece, as saying that "one major cause of disabiling settlements is that they are built for a non-existent population. Buildings, roads and open spaces cater to a fictitious model of the human being - exclusively for a man (not a woman) in the prime of life and the peak of his physical fitness", the mythical "Mr Average".

Goldsmith (1976: 21), made the oft quoted statement that "the human being is an extraordinarily flexible animal, able to adapt successfully to even the most demanding conditions imposed by his environment. Over the centuries the designers of buildings have taken advantage of this apparently unlimited ability to tolerate discomfort, inconvenience and danger. The idea of fitting buildings or equipment so that they actually suit people is relatively new, and so is the concept - ergonomics - by which it is known". Imrie and Wells (in Town and Country Planning 1992: 278) wrote that "a recent report estimated that in Britain approximately 18% of the population are male, fit, aged between 18 and 40, of moderate build and height, have good sight and hearing, and are right-handed. Yet this fraction of the population has dominated
design thinking in planning and the built environment".

2.3.2 **Training of architects**

Thompson (1997 a: 7) writes that "it has become a well established fact that the training provided to design professionals in South Africa is totally inadequate to ensure even a basic understanding of the application of Part S of the National Building Regulations. This has been confirmed by numerous students and practising design professionals". It has often been said that every architectural student should spend a day in a wheelchair or with a sight simulator to experience life as a person with a disability.

2.3.3 **Cost**

It should be pointed out that it is not always the architect at fault. Property developers who control the purse strings call the tune and sometimes prevent accessible features which cause additional expense. However, Golden (1997a: 2) and Cohen (1997: 4) reported on studies which proved that, when buildings were planned with accessibility in mind from the outset, it would add between one-tenth and one-half of 1% to the total cost of the building. Alternatively, if an existing building were to be made accessible, it would cost a lot more. Thompson ( 1 June 1996: 2) reported that
another 7% had to be added to the cost of the project to make the revamped
Conference Centre in Durban accessible. It can be a shortsighted approach to build
inaccessible buildings. As an example, a national gym chain refused to spend the
extra money to make their gyms accessible, although the architect saw it as a
challenge to design such a building. Later, due to pressure from NEAP, this national
chain has reconsidered and has requested NEAP to conduct accessibility studies in all
centres.

2.3.4 **Ignorance**

There are people who have never had dealings with people with disabilities and have,
therefore, not given accessibility a thought. They are completely ignorant as to their
needs.

2.3.5 **Lack of concern**

There is that group of people that does know about accessibility but does nothing
about it. De Jager (1989: 11) writes that, "during the process of building
developments, the developer is concerned mainly with producing a building in as
short a time as possible, at the lowest possible cost, in order to make a good return on
his investment. This often occurs to the detriment of the building...but more importantly to the detriment of the disabled user, in that little thought is spared for them. There prevails the attitude that the plight of the disabled is someone else's problem".

2.3.6 **Aesthetics**

The new and totally inaccessible buildings on the East London beach front bear testimony to the fact that many people are more concerned with aesthetics than practicality and sentiment. However, the researcher has come across people who believe that aesthetics and practicality need not be mutually exclusive. Accessible buildings have been built which are aesthetically pleasing. The East London Access Committee has visited a three story home, built on sloping ground, which was adapted and made accessible following the spinal injury of a family member. The ramps and wooden pathways were made into very attractive features.

Another argument put forward is that making a historical building accessible detracts from its looks. However, in 1995, the East London City Hall was made accessible after consultation with an architect from the Historical Monuments Commission. In the researcher's opinion, this has in no way detracted from the aesthetics of the
building. On a much older note, the Tower of London has been made accessible (Smith 1995).

2.3.7 **Difficulties in removing barriers**

It is sometimes difficult to remove barriers in an existing building. An example of this is the King David Hotel in East London. Despite all attempts, the new lift remains only partially accessible. Wheelchair users have to remove the footrests of their wheelchairs in order to enter as the lift shaft is too small. In the same building, a wheelchair ramp, in order to accommodate the correct gradient, would have been so long that it would have encroached on the pavement. The ramp had to be placed at another door, sloping into the building instead of out.

2.4 **THE NATIONAL BUILDING REGULATIONS OF SOUTH AFRICA**

Ultimately, National Building Regulations which are enforceable are the only solutions to ensure a barrier-free environment. According to Cohen (1997: 7), each Municipality had its own by-laws 15 to 20 years ago. A decision was made to commonise them but, in spite of promises, no mention was made of regulations pertaining to accessibility when this new legislation was promulgated in 1985. At that stage, NEAP had not been created and the organisation, DPSA was very new and
was not seen as a consultant group. As such, people with disabilities had no platform from which to campaign for their rights. A small group of very able and tenacious people with disabilities contacted Ministers Dawie de Villiers and Kent Durr who ordered that disability legislation be included in the National Building Regulations. Legislation in other countries was studied and the people with disabilities decided that the Australian Model was the easiest to follow and best suited their needs. Formal and rather heated meetings were held between this group and those responsible for legislation. Clause by clause had to be discussed and negotiated. Certain clauses had to be conceded in order to get any disability legislation through at all. These revised regulations, promulgated in 1986, were thus a compromised document which had no "teeth" (Cohen 1997: 7).

Part S of the National Building Regulations (SA. Department of Trade and Industry 1986: 40 - 41) is read together with Code 0400 of the South African Bureau of Standards (SABS 0400 1990: 151 - 155). In 1993, the South African Bureau of Standards published a Code of Practice (SABS 0246: 1993) which is also read in conjunction with Part S of the National Building Regulations but provides diagrams, thus facilitating interpretation. Clear details regarding parking, ramps, entrances, handrails, gradients, landings, lighting, toilets, auditoria, etc are provided.
Many municipalities never knew about the revised 1986 regulations and still operate on the 1985 draft. As an example, Haig-Smith (3 December 1997) reported on a church which was to be made accessible. Approaches were made to the Municipality for correct specifications, only to find, on completion, that the 1985 regulations were apparently supplied. The adapted toilet had a door too small for a wheelchair to pass through.

Not every building is subject to these regulations. According to Part S of the regulations, a magistrate can impose a fine of R5000 for those buildings which are in contravention of the regulations. However, this does not mean that the building has to be made accessible. Some developers choose to pay this fine and leave the building inaccessible. Thompson (1997c: 9) reported that even with a sympathetic building control department, accessibility is not always easy to enforce. There is a lot of pressure on architects to keep the cost down and local authorities would prefer to see development, rather than retard it by imposing stipulations. It is also easier for large companies with much "clout" to get away with certain regulations than it is for small companies. NEAP see revised regulations, without loopholes and grey areas, as essential and are working towards this. However, regulations alone without advising, monitoring, and enforcing are not enough.
2.5 CONSULTATION, MONITORING AND PUBLICITY

2.5.1 Consultation

It is essential that every facility claiming to be accessible or wanting to become accessible should be assessed by people knowledgeable about the regulations and the needs of people with disabilities. These consultants should always include people with physical disabilities. In these days of democracy and consumer rights, it is important to include the consumers in an advisory capacity. People with disabilities know their needs and limitations better than anyone else.

There are many instances where this was not done: of well-meaning people building suicidally steep ramps, the provision of a marble shower seat for people with disabilities in an exclusive hotel when the bathroom could not accommodate a wheelchair, toilets with doors that do not close when a wheelchair is inside, grab rails which are beyond the reach of someone sitting on a toilet, etc. Toilets for the disabled are often placed inside the men's or women's toilet area which makes it difficult for a husband to assist his disabled wife or vice versa. Part S of the National Building Regulations (1986: Schedule 1.5c) states that a building can reduce the number of sanitary fittings by two if there is a unisex accessible toilet. If consultation takes place, these aspects can be discussed, money can be saved and
people with disabilities can have useful facilities.

2.5.2 Monitoring

The Integrated National Disability Strategy (SA. Constitutional Assembly 1996: 37) highlights the need for the development of a culture of awareness in the field of environmental accessibility, controlled by Disabled People's Organisations (DPO's) who have a clear understanding of the problems. In this country, motivation for change, advising and monitoring has largely been done by NEAP which is co-ordinated by an architect and administered largely by disabled people or DPO's. To be effective, they need to continually monitor new developments, ascertain whether plans include accessibility and follow up during the building phase and upon completion. Experience has shown that problems do occur between the times of submission of plans and the completion of the building: buildings are planned with accessibility in mind, but, upon completion, contain steps instead of ramps or a toilet that cannot accommodate a wheelchair.

2.5.3 Enforcement

Progressive Architecture (1978:27) reports on a decision in America in 1975 "when a judge filed an injunction against the opening of a completely finished major station
in the new billion-dollar Metro of Washington, DC because it was not fully accessible. South Africa does not have the same culture of litigation and this has had a detrimental effect on the removal of barriers. The only case of litigation in South Africa was reported by Cohen (1997: 5). Phoenix Airlines had supposedly discriminated against a person with a disability and legal action was pending. However, the airline went insolvent before this could eventuate.

2.5.4 **Publicity**

Any publicity generated helps to educate and remind people about a barrier-free environment. A recent article about the introduction a barbie doll in a wheelchair in America provided laughs but also gave good publicity to the cause. Children complained that the wheelchair did not fit through the doors of their doll's house, resulting in the manufacturer promising to widen the doors (Business Day June 1997).

Publicity should provide incentives for other facilities to become accessible. It was discussed at a recent meeting of the East London Access Committee (29 October 1997: 3), that it should be with a matter of pride that a facility is able to place an access symbol at their door.
2.6 STATISTICS AND RIGHTS

Filmer & Filmer (1996 a: 2) provide estimated figures of between 10% and 15% of the country's population as being disabled which "provides a huge potential touring market, especially when one considers that most people do not travel alone".

Thompson (1997b: 2) writes that "the growth in the number of elderly people has implications for the number of people with some form of disability, as the prevalence of disability increases markedly with age".

However, in spite these of statistics, Cohen (1997: 5) believes that accessibility is a human right, and as such is included in the new Constitution of South Africa. Sachs (1997: 1) writes that South Africa has the only constitution in the world where disability rights are written in, a tremendous victory for the country and for people with disabilities generally. The Constitution (1996: 7) states that "the state may not unfairly discriminate directly or indirectly against anyone on one or more grounds, including...disability, religion...". Sachs believes that the lack of a ramp into a building may be regarded as indirect discrimination.
2.7 OTHER COUNTRIES PROGRESS TOWARDS ACCESSIBILITY

2.7.1 Developing countries

Much of the overseas literature which dates back 20 or 30 years is relevant to our country today. Thus, while it can be demoralising reading about the accessibility of many first world countries, it can also be encouraging to note that, 20 or 30 years ago, countries like America and Britain were at the same stage as South Africa is today.

We in South Africa can learn a lot from the way other countries have achieved a more barrier-free society. It is encouraging to note that a developing country like South America has a town called Curatiba which has a completely accessible transport system. (National NEAP Meeting 24 November 1995: 2)

2.7.2 Britain

Even developed countries have a long way to go before achieving a complete barrier-free society. Keith (1994: 61-71), from London, describes her absolute frustration, panic, helplessness and anger at arriving at places which are said to be accessible but are not or to be told that she cannot go to a theatre, even if her husband is prepared to carry her down 3 flights of stairs, because of the fire regulations.
2.7.3 **United States of America**

Golden (1997a: 8-9), referring to the Americans with Disabilities Act, which is complaints driven, said that accessibility has to be monitored and worked at. Filmer & Filmer (January 1996a: 4-5) explain the consequences of the Americans with Disability Act. "A disabled tourist has...the right to accessible transport, accommodation...and recreational opportunities. If an organisation or public company refuses to become accessible, they are liable to legal action. The result of this is that America is fast developing a culture in which people with disabilities can participate in all aspects of life, including tourism and ecotourism: new tourism facilities... are automatically being made accessible; existing facilities are being modified; more and more people in the tourism industry are including people with disabilities in the planning and development of facilities, and ultimately, more and more disabled people are travelling". Golden, (1997a: 8 - 9) who believed that the real work began only once legislation was in place, elaborated on aspects which had helped the disability movement and the cause of accessibility, culminating in the promulgation of the Americans with Disabilities Act (ADA) and gave advice to the accessibility movement in South Africa:

* One of their strengths came from their cross-disability representation. They formed a strong coalition and stood together, showing that they would sacrifice the whole
project for one clause on HIV.

* Secondly, a lot of work was done with the Human Rights Commission and was linked up with other social injustices, whether they were the Civil Rights Movement, Black People's Movement, Gay Rights, etc, thus forming a network that they could call on to march with them and help their cause.

* Thirdly, Golden (1997a: 8 - 9) believed that every opportunity should be seized to help the cause, as they had done in America. There are many opportunities available in South Africa. These can be used as stepping stones.

* In America in the 1980s, a fourth level was worked on, namely that of educating Congress and the Courts. The attitudes of those in power had to change and this required education. People with disabilities were asked to keep diaries of discrimination: "could not get onto bus", "could not get into building" etc. It was published in an unpolished form and used in political campaigns to further their aims; a politician's endorsement about the needs of disabled people would help.

However, the situation in the United States is far from ideal. Dietsch (August 1997:11) writes that attempts are being made to clarify the Americans with Disabilities Act for architects. "Practitioners can ask five officials to explain the same passage of the law and get seven different answers... The ADA’s Standards of
Accessibility, which are enforced by the Department of Justice, do not currently agree with many state and local building codes, nor with building conventions set by the American National Standards Institute. Only two states at present "have had their codes approved as ADA - compliant by the Justice Department".

2.8 TRANSPORT

In 1974, the United Nations Expert Group (1974: 24) discussed the fact that "transportation support facilities...should accommodate the needs of the handicapped and not become barriers to otherwise accessible systems". These transport support facilities are still valid today and could include pedestrian bridges over railway lines, station platforms that are lower than the trains and accessible toilets at railway stations or petrol stations. Some of the solutions are simple and relatively inexpensive: prolonged handrails at the beginning and end of stairs and contrasting colours on stairs and at ends of platforms to safeguard people with visual handicaps. Weiner (1997: 2) added others such as a flap on the lowest step on a bus for someone who cannot take a big step up, identification kits for visually disabled travellers and sensitivity training for drivers. Unfortunately, a lot more than this is needed in South Africa. Golden & Weiner, (1997: 1 - 11) together with representatives from NEAP and DPSA have studied the South African transport system and have written a
report with recommendations about possible changes.

The National Council for the Care of Cripples (1973: 5) minuted a report on approaches to petrol companies requesting accessible toilet facilities at petrol stations. Twenty four years later, the East London Access Committee minuted the fact that the first accessible toilets at three new petrol stations in the city were in the process of being built (26 November 1997: 2). Approaches by NEAP at national level have resulted in Ultra Cities building the correct unisex accessible toilets. It may however, be a long time before people with disabilities, who are touring the country, can stop plotting their route according to accessible toilets at petrol stations.

In spite of limitations in options and price ranges of transport facilities, people with disabilities are more mobile that they were and are increasingly being seen at airports and leisure facilities. Presently, their options are as follows:

2.8.1 **Private vehicles**

A person with a disability has to choose a car very carefully. If not suitable for his needs and abilities, it will require adaptation. It is very often the more expensive cars that are suitable and adaptations such as hand controls or mechanical wheelchair
hoists are also costly. These aspects make it very difficult for the average person with a disability, struggling to find employment, to own his/her own car. For those fortunate enough to afford cars, it is one of the few ways for them to tour. There are no suitable cars for disabled drivers to hire in South Africa.

2.8.2 **Air travel**

Air travel, is another option open to people with disabilities who can afford it. Wheelchair users are lifted into the larger planes in Passenger Assisted Units and into smaller planes in the rather undignified slipper chairs (National NEAP Meeting 19 August 1994:6). Other undignified aspects of air travel include the personal questions regarding bowel and bladder habits, mobility, etc, which have to be answered before permission is granted for a disabled person to fly. For the frequent flyer, this can be overcome by applying for a Fremac Card whereby all these details are kept on record and the recorded information is accessed when a reservation is made.

2.8.3 **Rail travel**

Trains, with their high steps, narrow passages and small toilets were certainly never built with people with disabilities in mind, as can be seen in the "tongue in cheek" illustration by Fedler (1989) on the next page.
The Daily Dispatch (16 December 1997) reports on a harrowing experience by a nine-year-old paraplegic who travelled to East London by train. Due to lack of facilities promised, he had to be "passed through the train window like a piece of baggage". Metro Rail is working on a prototype of a commuter coach which will be accessible to people in wheelchairs and mothers with prams. Stations on regional commuter routes are being accessed at present (Chapman an Nyangiwe 27 August 1997: 1 - 4).
2.8.4 Minibus Taxis

Generally, the drivers of minibus taxis appear to be unhappy about transporting people in wheelchairs who often move slowly and take up more space with their wheelchair. Fedler's cartoon (1989) below, is descriptive.

Figure 2.2 Minibus Taxis

Weiner (1997: 3) believes that a small subsidy would have to be made available to make taxi travel an option for people with physical disabilities.

2.8.5 Bus travel

Golden (1997b: 2) believes that there should be no more new busses put on the road
that are not accessible. In the United States, approximately 65% of their busses are accessible. For a small percentage of the total cost (5% - 10%), busses could be made accessible. The trend is for low slung busses in the urban areas where roads are relatively good. Weiner (1997: 2) reported that transport managers in the United States were resistant to accessible transport ten years ago because of the enormous cost involved. However, this fear has proved groundless. More people use the service now and these same managers are promoting accessibility as it increases ridership. Fedler's illustration (1989) highlights the plight of the tourist with a disability.

Illustration 2.3 Bus travel.
A Dial-A-Ride system is on trial in the Greater Johannesburg Metropolitan Council but funding is a problem. People with disabilities in that area have attempted social action methods as described by Lombard (1969: 91-94) by disrupting council meetings and chaining their wheelchairs to gates to demand 5% of the transport budget to run this service. It has been said that 5.1% of the population are mobility impaired. (Thompson P 10 June 1997)

As far back as 1974, the United Nations Expert Group (1974: 24) spoke about transport as the right of every person with a disability. A good transport system is the lifeblood of any country. People need transport for every aspect of their lives, including leisure time and tourism. Until the transport system in South Africa includes people with disabilities, they can never be fully integrated into society or travel to any destination that the general population can reach.

2.9 **ACCESSIBLE TOURISM**

Gheorge (in Disability International 1996: 30) writes that "tourism and recreation are necessary ingredients in the lives of disabled people. All people have a desire for leisure, including disabled people. Tourism, as a use of leisure time, is recognised as a barometer of the state of a civilisation and quality of life, particularly for disabled
people". He quotes Kumm, of the Hudson Institute "who suggests that even before the end of the century, tourism will become one of the most important or perhaps the most important 'industry' in the world".

There are two factors which should be born in mind when considering tourism in relation to people with disabilities. Firstly, Filmer & Filmer (January 1996a: 3) write that special facilities, such as Braille Trails, should not be created for people with disabilities as they "tend to segregate rather than integrate people... An accessible facility or programme needs to be developed because there is a need by the general tourist and then made barrier free".

Secondly, it is important to recognise the individuality of people with disabilities. Goldsmith (1976:14) writes that to lump all "the disabled" together "is bald,... is stereotyping, and it categorises as homogeneous a diverse group of people with no behavioural commonalities on which it is proper to generalize". People with disabilities have as many interests and preferences as regards tourism as the general population have.

In terms of accessibility, however, people with disabilities are united. In 1995
Satour, with the help of NEAP, undertook a national survey of the South African disabled and aged tourism market. This survey showed that "over three million South Africans are often excluded from the joys of a holiday in our country because they are faced with insurmountable barriers in the form of steps, narrow doorways..." (Satour 1996: 2). Of the respondents, 48% went on holiday the previous year, "50% of whom stayed with friends and relatives - presumably because of the lack of appropriate facilities in South African establishments". It also showed that, amongst the physically disabled, "100% of those who travel experience problems with parking; 88% were dissatisfied with accommodation facilities; 80% with transport; 78% with public facilities".

Vollmer and her husband from Cape Town (in Essentials October 1997: 33-34) are planning to run a Guest House catering specifically for the needs of the overseas disabled visitor. As they are both in wheelchairs, they fully understand the needs of people with disabilities and see themselves "assisting with the planning of tours which would emphasise use of wheelchair-friendly resorts. From personal experience I know that commercial tour operators are unable to handle disabled tourists and even the latest hotels do not have appropriate facilities".
In South Africa, where many people do not have the basic necessities of houses and wheelchairs, tourism is far removed from many people's priorities. However, not only are local people with disabilities touring more that they did twenty years ago but overseas tourists could be providing a great source of revenue to the country. Patton (1995: 14 - 15) quotes a BBC television programme which indicated that "South Africa was not a favourable tourist destination for the disabled because of inadequate attention having been given to the provision of appropriate facilities". South Africa is presently a very popular tourist destination for the general tourist, one of the main attractions being our national parks. It is for this reason that Patton writes that "environmental accessibility for the disabled is not merely a human rights issue, but also an economic one". The revenue generated from these tourists will indirectly assist our country's more pressing needs. Patton also quotes Denman and Clarkson (1995: 13) who estimate that "by welcoming disabled tourists and marketing tourism venues accessible to the disabled, potential profits for a country's tourist industry can be increased by at least 10% to 15%".

2.10 **TOURISM IN THE NATURAL ENVIRONMENT**

A relatively new company in Gauteng called Eco-Access is providing inspiration, advice and much needed publicity in order to educate the man in the street about
accessibility in the natural environment for people with disabilities. One of the relatively new words being used for the natural environment is "ecotourism" which Filmer & Filmer (1996a: 1-8) believe is "probably the fastest-growing industry in the world today". They believe it "conjures up many different thoughts, ideas and wild images in the mind of the ecotourist. For some, it includes a rock climb and a ride on an elephant's back, while for others it means a stay in an upmarket game or cultural lodge. For some it means hitch-hiking and for others it means luxury planes and buses. For people with disabilities, it means exactly the same". Beechel (1975: 3) stated that "because people have some physical or mental impairment does not mean that their needs for, or abilities to benefit from, outdoor recreation are impaired.... While the benefits are the same, the need for these benefits may be greater among the very people who cannot engage in outdoor recreation because their needs have not been met".

Oliver, (1996: 11) believes that sport, although possibly overemphasised, allowed him, as a person with a disability, to maintain a positive self-identity and it embedded him in a network of social relationships. Being part of the natural environment, in an individual or a group setting, can have the same benefits. Nesbitt (1945:8) writes in his classic book that "I lost my legs, but ...I have gone on horseback on long journeys
and slept under the stars. In a light canoe I have ridden Rhodesian rapids. In the loneliness of the African veld I have lived alone. Perhaps I was trying to escape from the world because I was a little afraid of it...because I had no legs. But I met people who were the salt of the earth. I found God in them and in the miracle of hills and running water. I learnt to laugh at myself”. Life has changed since those distant days, and today, one has to go to national parks, private farms or hiking trails to find this sort of peace and tranquillity and safety.

Filmer & Filmer (1996a: 9) provide another, and very different, aspect of ecotourism which could develop into a valuable resource in a poor area. They believe that people with disabilities could also become involved as owners and providers of services. They write that "a large South African ecotourism company is now paying people with physical disabilities to package soaps, shampoos and other toiletries for bathrooms in their game lodges. The weaving skills of visually impaired people are used to make washing baskets and mats. People living in communities close to the lodges are being employed for their skills, knowledge and enterprise".

2.11 TOURISM INFORMATION ON ACCESSIBILITY

The reality about accessible tourism and ecotourism facilities is that people with
disabilities have to check and double check every aspect of their trip before leaving home. Aspects to be considered are the availability of specialised toilets at garages along the way and the accessibility of accommodation. When a person with a disability was asked to deliver a paper at a conference in Port Elizabeth, he was informed by the hotel staff that it was accessible. On arrival, he was mortified to find that his wheelchair could not fit through the bathroom door. A sense of humour obviously helps but is not enough!

Guide books for people with disabilities, such as the OFS Holiday Guide (Theron: 1994), Accessibility Guides to Pretoria (Undated), Hong Kong (1990) and English National Heritage Guides (1997), are a great help as they are often compiled by people with disabilities or DPOs and have useful information on accessible tourist facilities. The Rotaract Club of Durban (1996: 2) believe these guides have a secondary purpose, that of encouraging change. As a result of the Access Booklet published by the Rotoract Club of Durban, the researcher has, with the assistance of students from Rhodes University as well as a number of people with disabilities with various skills, almost completed a similar one for East London. Satour's National Accessibility Scheme will provide a major breakthrough for people with disabilities in this country when introduced. Facilities graded by Satour/NEAP will appear in
the Satour's tourist guide book aimed specifically at people with disabilities (Tourism without barriers brochure July 1995). (See Chapter Seven for more details.)

Eco-Access, Schaefer, NEAP and others are working on a national register of accessible outdoor and environmental facilities. The researcher is compiling a similar register in the Eastern Cape. By doing this, they are making it easier for people with physical disabilities to obtain information about accessible facilities.

Filmer & Filmer (1996b: 140 - 144) write that the Centre for Ecotourism at the University of Pretoria works "exclusively on the 'eco' side of tourism and has been very involved with hiking trails, ... with outdoor adventure and with the construction of environmentally and aesthetically friendly overnight huts, bird hides and the like". They list the South African Hiking Federation as receiving technical advice from a physically disabled person and Eco-Access working hand-in-hand with the Bird Club. They believe that "Wilderness Wheels Africa" appears to be "the most accessible and comfortable way for disabled people to see and experience the area". It "offers safaris into the heart of the African bush. The safaris are different ..., as guests do not go to lodges, but have fully accessible tents, 4X4 vehicles, toilets and showers, and the client, disabled or not, is offered a rustic, yet luxury camping experience
throughout Southern Africa. Tours to various places in South Africa, Botswana, Zambia or Zimbabwe, where an accessible houseboat on Lake Kariba, with its fishing and game viewing, is the order of the day”.

Not nearly as comfortable but also exciting is "Disabled Adventures" which Schafer (in RESNA '95) describes as an "outdoor recreation club for PwD", with an emphasis towards those with a spinal cord injury”. They have worked to develop and promote access and increase awareness of the need for and benefits of outdoor recreation for people with disabilities. This organisation was formed after the Outeniqua Wheelchair Challenge, where they undertook a three day hike over 36 kms of forestry roads in the Outeniqua Mountains. Nine adults, including eight paraplegics and an above-knee bilateral amputee and a young boy with cerebral palsy were assisted by twenty able-bodied people.

Cape Nature Conservation, with financial backing from the Hiking Federation of South Africa, has developed the Palmiet Hiking Trail which is designed for the visually impaired without the need for assistance or guides. It is lined with tree trunks

1 People with disabilities
which act as a tapping rail and has Braille labels (Imfama 1996: 19). There are other
trails of this nature being developed in certain parts of the country.

2.12 **CRITERIA FOR ASSESSING THE NATURAL ENVIRONMENT**

Beechel (1975: 2-30) and the Eco-Access Information Sheet (Undated,a: 2-15) have
set out guidelines for hiking trails for people with various disabilities. These include
details of tapping rails, hand rails, trail surfaces, etc, all of which tell the visually
impaired person something about the trail, when to stop, read a Braille notice, feel a
tree, etc. The details cover options for various disabilities. The appropriate
decisions to be made in this regard include not "what to do" but "how much to do".
The extent to which the trail will be made accessible and thus the level of dependence
which it will allow, is naturally dependent on the cost and manpower available for the
initial outlay and continued maintenance. These details will be looked at in Chapter
Six.

As far as game parks are concerned, no specific criteria exist in this country. It has
already been mentioned that Satour and NEAP will be developing criteria within the
next few years. The National Buildings Regulations provide good guidelines but
more details are required; for example, would most people with disabilities prefer
a bath or a shower, is the height of the bed relevant, should the kitchen be accessible?

These are some of the factors that this study will be looking at.

2.13 TRAINING

Thompson (1997b: 1) emphasises the need for trained staff in the tourism industry, saying that "no physical improvements will ever be effective without staff who are trained and committed to providing excellent service to all their visitors, whatever special requirements they may have".

2.14 CONCLUSION

In order to understand accessibility in the natural environment, it is necessary to view accessibility in its entirety, thus providing the total picture instead of covering one corner of the canvas.

As a social worker in the field of accessibility, the researcher believes that this literature review has made certain responsibilities evident. One of these areas is transport. Both minor inexpensive suggestions as well as some major and costly ones should be followed up with various role players in an attempt to improve transport options for people with disabilities. Planning an accessible transport system took on
a whole new meaning when considering the possibility of hosting the 2004 Olympics and the Paralympics. NEAP was represented on the Olympic Committee for this and many other aspects of accessibility. The fact that the South African bid was not successful was to the detriment of people with disabilities throughout the country as there was no longer a target date to become accessible. Without this impetus, accessible transport requires new motivation and direction. Without people with disabilities and representatives from NEAP, DPSA, etc motivating for change, no change is likely to happen.

In looking at legislation and facilities in developed countries, it is obvious that South Africa has a long way to go. The National Building Regulations require drastic reviewal with built-in enforcement methods and widespread publicity. NEAP, on a national level, is looking at these issues.

It is also important that the tourist venues or tour companies which are accessible should receive good publicity. In so doing, they provide recognition for their achievements, encouragement to other venues to keep accessibility in mind and provide information to people with disabilities. It is obvious that accessibility requires much more widespread publicity in order to reach not just architects and
developers but the shop round the corner doing minor renovations, the proposed Bed and Breakfast establishment, the layout of the supermarket, and most certainly, the training of all staff in any field of tourism. This training would lead to greater sensitivity about the needs of tourists with disabilities and the awareness of the fact that disability is not always obvious. The researcher, through her involvement with the East London Access Committee, will continue with the plan to use a free-lance journalist on the committee to highlight different areas of access on a regular basis and use every opportunity available to publicise needs and opportunities.

Filmer & Filmer of Eco-Access have done sterling work in researching the needs of people with disabilities and providing advice to newcomers in the field. Their guidelines for hiking trails are particularly helpful for this study.

More information is required about the built environment, and, in particular, for this study, how far to go to make facilities in the natural environment accessible. While the same high standards of accessibility cannot be expected in the natural environment, a certain level is necessary so as not to exclude people with disabilities.

The above infers that there are a few opportunities for people with disabilities who have the drive to pursue their interests, financial backing to visit certain areas and the
assistance and support that they require. There are, however, many more people
with disabilities who are so burdened with the drudgery of day to day survival and
who have none of the above to make their lives more meaningful. It is hoped that this
study will, in some way, assist those who have the means to, and deserve the
pleasure of, visiting the natural environment. It is also hoped that this study will
explore and lead to options for those lacking resources or opportunities.
CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter contains the core of this study - the specific aims and the methods used to achieve these aims. These aims are all interrelated in that they are what Grinnell & Williams (1990: 61) describe as truth goals - goals "aimed at increasing knowledge for the indirect benefit" of all client systems by increasing the researcher's knowledge in the access field. It is hoped that they will also prove to be what Grinnell & Williams call evaluative goals - goals "aimed at providing direct service to a specific client system". In this case, this would refer to those who would make use of and benefit from a barrier-free natural environment. This would only be applicable if the recommendations made at the end of this study are implemented.

3.2 RESEARCH DESIGN

The research encompassed both content related and qualitative aspects. The study of the environment was a measurable process as was the study of the practical needs of the people with disabilities. These can be described in nomothetic terms. The attitudes of people with disabilities and those of the owners of facilities undergoing
change, on the other hand, were qualitative and their views and interpretation of their situation could be described in idiographic terms (Cohen & Manion 1986: 8 - 9).

It is important to conduct a study with people rather than on people. The researcher relied heavily on the views of people with disabilities; their experiences, their needs and their interpretation of the environment that was being studied. She considered the study to be a partnership between herself and the subjects.

3.3 RESEARCH METHODOLOGY

3.3.1 Interview schedule

Huysamen (1994: 149) writes that the response rate of a postal questionnaire "often comes down to below 50% of the target population if the latter involves the general population". Patton (1995: 9) received a 28% response rate by the project deadline for a similar research. For this reason and the relatively small sample of 26, an interview schedule was chosen as one of the research tools. This was also suitable for those who, due to physical limitations or illiteracy, were unable to complete a questionnaire.

Questionnaires from research by Patton (1995: 65) and the American Wilderness...
Inquiry, Inc. (1992: 57) were studied and certain questions were adapted for use in this study.

The interview schedule consisted of a combination of open and close ended questions. It provided opportunities for respondents to provide additional information and relate experiences, thus providing the grounded theory that the researcher was looking for, as described by Rubin & Rubin (1995:4). It was divided into four parts:

* Identifying particulars which provided insight into the ages, disability and marital state of those who used the natural resources or would like to use them.

* Questions on the use of Game Reserves and Hiking Trails by people with disabilities, problems experienced and reasons for non-use. This was one of the requirements of the Department of Nature Conservation in order to ascertain interest prior to opening up a Hiking Trail.

* Questions for those with specific disabilities and abilities where respondents were asked to rate the importance of certain aspects of the accommodation, facilities and trails. Certain questions were included as they were relevant to the study and were not found in the literature. Other questions were included, in spite of appearing in the literature, in order to ascertain how important these factors were to people with
disabilities. The researcher was sensitive to the fact that certain questions on the interview schedule were fairly intimate in nature and not easy to answer and therefore placed them towards the end of the interview schedule. Bell (1993:81) writes that some researchers believe that this is necessary so that one would at least have answers to the earlier questions if the respondent decided to abandon the questionnaire. For this reason too, the confidentiality of the interview was stressed.

* Further information. Respondents were asked whether they were interested in becoming part of a network of information on the natural environment in the area in order to set up a local database with continued input from them. This in turn would provide information to others who make use of the natural environment.

As was done by Patton (1995: 8), the interview schedule was forwarded to Filmer & Filmer of Eco-Access for their advice and suggestions and the necessary changes were made. (See Appendix I)

3.3.2 The respondents

Three people were interviewed to pretest the interview schedule in order to ascertain whether the questions were clear and unambiguous to the respondents and minor
changes were made  (Grinnell 1988:314).

Twenty six people with physical, hearing and visual impairments were interviewed. As it was important to interview people with physical disabilities who were interested in and would make use of facilities in the natural environment, purposive nonprobability sampling as described by Grinnell & Williams (1990: 126) was used to target these 26 people. They were all known to the researcher, either as present or previous clients of Rehab or as members of certain committees connected to Rehab or disability issues. For the purposes of this research, they will be known as "respondents".

The main selection criteria was their known love of nature and the outdoors. The researcher was of the opinion that someone who was not interested in nature would not be prepared to compromise the high standards of luxury and accessibility that one may expect to find in a sophisticated urban environment for the sake of other benefits in the natural environment. Prospective respondents were asked how they felt about nature and were accepted or rejected for the study according to their answers. The suitability of this method of choice is described in Chapter Four.
Another selection criteria was their ability to speak English or Afrikaans. An attempt was made to obtain a balance in terms of race groups but this was difficult. The study thus had a Eurocentric slant.

Similar studies have excluded people on the grounds of non-utilisation. The American Wilderness Inquiry, Inc. (1992: 13) excluded five respondents from their study because they "had not used or attempted to use the NWPS" (National Wilderness Preservation System). Filmer & Filmer (Undated c: 3) wrote that "because of our past history in South Africa, many disabled people have been marginalised... As a result, disabled people are often of a lower, economic, educational and social status... There has also been a lack of access to the natural environment and consequently a lack of awareness on their part". Due to the fact that black people with disabilities have generally been more marginalised than whites, they have had fewer opportunities to be part of nature and many therefore would not, at this stage, be in a position to comment on various factors in the natural environment. This study accepted or rejected respondents in terms of their love of nature and not in terms of previous visits to places in the natural environment.

An attempt was also made to include people with various degrees and types of vision,
various degrees of hearing and different mobility skills, for example, those using crutches or walking frames, those in wheelchairs with upper body strength and those with limited or no upper body strength. Where possible, attempts were also made to use specialists in their field; a blind couple who had taken part in Blind Navigator's Rallies, a wheelchair user who had been chairman of the East London Access Committee, a young hearing impaired man who had been a trail blazer by attending a main stream school, etc. These are what Rubin & Rubin (1995: 66 - 69) call "enculturerd informants" in the disability field, thus also providing a balance in choice of interviewees "to represent all the divisions within the area of study".

Five respondents from a home for people with disabilities were interviewed together in a focus group, as described in Huysamen (1994:150 - 151), for completion of the interview schedule. The researcher went through each question with the respondents. Staff members from the home recorded answers for those who were unable to write due to physical limitations. The balance of 21 respondents were interviewed individually. Each respondent was warned that the study would not necessarily bring about actual changes in the facilities being studied.
3.3.3 **The check list**

The issues, rated as important by the respondents in the interview schedule were used to form check lists to conduct access studies in the natural environment. The list was supplemented by details from the National Building Regulations (1986), Satour's Accessibility Scheme (Scheepers 20 August 1997), An Eco-Access Information Sheet (Undated, a: 1-14), Beechel (1975:20 - 22), Chairman Industries (Undated: I - 4), Greeff (14 August 1997: 1 - 3) and Thompson (1997b:1- 64). (See Appendix 2.)

3.3.4 **The participants**

Assisting in the various practical studies were selected people with disabilities, in future referred to as "participants". Purposive nonprobability sampling was used to target seven people with physical, visual and hearing disabilities to assist in the studies. They were selected because of their interest in the outdoors, their knowledge of accessibility and their different disabilities, leading to different problems in accessing the physical environment. Their involvement was essential and they included:

* Two people on crutches (one also with leg braces)

* One person with a visual impairment, together with her Guide Dog
* One person with a hearing impairment

* Two people in wheelchairs, one of whom was accompanied by her able-bodied husband and small grandchild

* One person with only one arm

3.3.5 Studies on the natural environment

Purposive nonprobability sampling was used to study the facilities, namely Double Drift Game Reserve, the Umtiza Forest and the Amalinda Fish Station. They were selected because of their close proximity to East London, the interest of their staff in the field of the outdoors for people with disabilities or in their agreement to be part of a study of this nature. (See chapters five and six for details).

3.3.6 Review of work undertaken

Rubin & Rubin (1995:4) write that "through qualitative interviews, researchers evaluate all kinds of projects and programmes, whether for social reform or managerial improvement. Interviewers talk to people who are trying to solve social problems and examine their successes and failures". Qualitative interviews were thus conducted on the owners of three facilities who had attempted to make their facilities accessible. This provided the researcher with knowledge of problems
experienced, usage, costs, etc. To a certain extent, the problems experienced by them could be generalised and the solutions to these problems would assist the researcher in future studies/consultancy work. (See Chapter Seven for details).

Purposive nonprobability sampling was used to target these three facilities, chosen because all had voluntarily attempted to become accessible. They included Chandler's Guest House, Quintetta Guest Farm and The Red Bishop Golf Course and Restaurant. The researcher hoped that they would provide a valuable learning experience for herself, the participants assisting in the study and possibly for the owners of these facilities.

3.4 **ANALYSIS OF DATA**

As this was a small study, complex statistical analysis, as described in Huysamen (1994:194 - 197) was unnecessary. The answers to the closed ended questions were numerically analysed and presented as frequencies of response, similar to the American Wilderness Inquiry, Inc. (1992: 14). Common themes were sought in the more descriptive answers to open ended questions. Rubin & Rubin (1995:226) wrote that "as you continue with the data analysis, you weave these themes and concepts into a broader explanation of theoretical or practical import to guide your final
These common themes referred to the needs and ideas of the respondents as well as the facilities studied. The ideas of the full group were incorporated when analysing some of the questions on the interview schedule and relating them to Double Drift Game Reserve and a hiking trail whereas for other questions, they were divided into categories, namely, the hearing impaired, the visually impaired and the physically disabled. For the purposes of this analysis, "the physically disabled" will refer to those who are mobility impaired and have some other functional limitation other than hearing or sight. Suggestions and problems experienced by the participants are mentioned where relevant.

3.5 REPORT BACK AND CONCLUSION

After analysing the data, reports were written to Double Drift Game Reserve (See Appendix Three) and to the Department of Nature Conservation. A letter was written to Satour about the difficulties experienced by Chandlers Guest House. Letters were sent to the respondents and participants, thanking them for their help and providing them with feedback about the study. (See Appendix Four). The researcher was of the opinion that, by making people with disabilities partners in her study and providing them with feedback, they would come to the conclusion that they had a role to play in removing barriers and would also hopefully also visit the facilities studied.
CHAPTER 4

ANALYSIS OF DATA FROM INTERVIEW SCHEDULE

4.1 INTRODUCTION

The researcher is of the opinion that data collected during this pilot study will assist with future planning in the field of tourism in the natural environment for people with disabilities.

4.2 SAMPLE

4.2.1 Gender, Disability and Marital Status

Table 4.1 Gender and Disability

<table>
<thead>
<tr>
<th>Disability</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing impaired</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Visually impaired</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Spinal injuries</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Multiple Sclerosis</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Amputation</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Chronic Arthritis</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Polymyositis</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Spino Cerebellar Degeneration</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Sjogrens Syndrome</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Stroke</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>19</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

As can be seen in Table 4.1, more men were found for the study than women.
This was particularly evident with those with spinal injuries but was not consistent with other studies and cannot be generalised. In the American Wilderness Inquiry, Inc (1992: 14), 55% of respondents were men, 43% were women and 2% did not indicate gender.

Table 4.2 Marital Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>14</td>
</tr>
<tr>
<td>Single</td>
<td>6</td>
</tr>
<tr>
<td>Separated</td>
<td>3</td>
</tr>
<tr>
<td>Divorced</td>
<td>2</td>
</tr>
<tr>
<td>Widowed</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.2 illustrates the marital status of the respondents. The issues of Gender, Disability and Marital Status, were seen by the researcher to be important issues when considering visits to the natural environment. After many years of work in the disability field, various assumptions were made by her. Firstly, a severely disabled person, such as a quadruplegic, was apparently less disabled if he/she had a spouse or parent to assist than those who were alone. Secondly, it is usually accepted that men are physically stronger than women, and would, therefore, find it easier to assist a severely disabled wife away from home where there is no established routine and usually no specialised equipment. When the roles are reversed, it is less likely that a wife would take a disabled husband to visit unknown surroundings. No reference to this could be found in the literature.
4.2.2 Age spread

Figure 4.1 Age spread

Figure 4.1 illustrates a normal age spread amongst the respondents. The mode in the American Wilderness Inquiry, Inc. (1992: 14) was in the 30 to 39 year age bracket. The researcher is of the opinion that, in spite of the modes in these two studies being in the 30 to 50 year age bracket, any projected planning for people with disabilities should be with all age groups in mind.

4.2.3 Respondents love of nature

The main criteria for sample selection was the respondent's love of nature.

Figure 4.2 on the next page illustrates that this was achieved. The Likert scale
(Bell 1993: 140), was used where a score of 1 represented a view that the natural environment was "unimportant" to the respondent whereas, for a score of 5, it was viewed as "essential". The mode for this question was clearly 5.

Figure 4.2 Love of Nature

4.2.4 **Summary of sample selection**

The researcher is of the opinion that it was useful to include all disabilities in the study. However, the relatively small sample used prohibited her from speaking with conviction on behalf of all categories of disability. The exceptions were the mobility impaired who were well represented as it was felt that their disabilities were more inhibiting when studying the physical environment.
4.3 USE OF FACILITIES IN THE NATURAL ENVIRONMENT

4.3.1 Facilities already being used

Five of the twenty six respondents live in a Home for the Aged and Disabled which organises regular outings to places in the urban area, but more importantly, to accessible places in the natural environment. Residents are always interested in hearing about new places becoming accessible. Due to the physical care they require, however, many of these residents would be limited to day outings. The places that they and other respondents have already visited include:

* Five have been to the East London Esplanade

* Five have visited the beach, 1 visits Nahoon River as wet hard sand is wheelchair-friendly

* One has been to Marina Glen

* Three have been to the Gonubie Boardwalk

* Three have been to the Zoo which has an accessible toilet and tea room

* Two have been to Tilty Hill Touch Farm

* Two have been to Reptile World

* One visits fishing spots

* Two have been to the Amalinda Fish Station

* Three have visited the Red Bishop Golf Course Restaurant
* Two have been to the Pineapple Research Station

* Two have been to Winterstrand and Palm Springs

* One has been to a cottage on the Wild Coast

* Two hunt on private farms

* One owns a Time Share in the vicinity of the Kruger Park

* One goes to Game Parks

* One has visited the World of Birds in Hout Bay

This fairly broad range of facilities appears to indicate that many of them were open to new ideas and would welcome more accessible facilities. While the East London Esplanade and the beach appear to be more popular, this may be due to the fact that they are within easy reach and are more accessible than other outdoor pursuits. The American Wilderness Inquiry, Inc. (1992: 27 - 28) found that certain facilities were used more frequently than others by people with disabilities due to the fact that they:

* had "more accessible terrain, including more opportunities for water-based travel (canoe, kyak, raft)". The researcher found this interesting as people with certain disabilities would be more mobile in water and would therefore enjoy water-based activities. (See 4.3.2.).
were within a day's drive from urban centres

* had a "higher level of utilization by organizations and outfitters serving people with disabilities". This aspect is supported by the fact that the Home for the Aged and Disabled, as reported earlier, arranges regular outings for residents.

* those which had "available information on access and travel within the unit". As will be seen in Chapter Five respondents in this study believed written information on accessibility to be vitally important.

4.3.2 **Problems and reasons for non-utilization of the natural environment**

The problems encountered and reasons for non-utilization of facilities in the natural environment related to the following points:

* **Transport** was a problem encountered by many of them. Fourteen of the twenty six respondents had spouses but most of them were either working or disabled themselves. Six of the respondents were severely disabled and an added deterrent was the difficulty in helping them in and out of a vehicle. This required training and practise without the use of a specialised vehicle where they could remain in their wheelchairs. This was supported by the fact that the Matron of Silver Crown Home for the Aged and Disabled in East London had reported at a management meeting (22 October 1997) that certain residents
were house-bound due to the lack of a specialised vehicle. Filmer & Filmer (1996 a. 5) report that "for the disabled traveller in South Africa, there is almost no way of getting from the international airports to tourist venues", thus illustrating the fact that it is not a localised problem.

* One reported that lack of **specialised parking** spaces close to facilities at times precluded people with physical disabilities. As a social worker, the researcher has been responsible for establishing a committee to screen applicants for parking discs for special parking bays for people with disabilities. She is aware of the frustrations of, for example, a wheelchair user who cannot get out of his car and into his wheelchair in a normal width parking bay or a person suffering from cardiac problems who cannot walk any great distance and requires parking close to the facility.

* Related to transport was the question of "**being a nuisance**" to family and friends who were busy. One respondent said that he did not suggest outings as every outing with a quadruplegic was a major undertaking and he did not want to overburden his wife. Another respondent reported the wish to go canoeing but it required a great deal of organising and he believed that it was not fair on his family or friends. One respondent believed that part of his rehabilitation related to overcoming this burden of believing that he was a nuisance. He saw himself
as too dependent on his wife. He needed to expand his world, develop new interests and learn to ask other people for assistance. The visually impaired reported the need for a sighted guide. This appears to confirm studies done elsewhere. Wilderness Inquiry, Inc. (1992:32) in America reported that only 9% of the respondents in their survey visited wilderness areas on their own.

Although this statistic was not obtained from this particular study, the figure may be even lower in South Africa where there are less people with resources to buy their own cars or specialised equipment to allow for such independence.

* Ten referred to accessibility, either believing that facilities were not accessible or they were not sure whether they were accessible. Certain facilities mentioned were only partly accessible - they could not reach all areas of the nursery, the airport, the zoo, etc. Gradients were too steep, the restaurant at a game reserve was too small to accommodate a wheelchair or the table too low to accommodate a wheelchair. Few of the facilities had accessible toilets. As a practical example, one respondent wanted to go to Hogsback but doubted whether there were any accessible toilets there. Inaccessible toilets appear to be a universal problem, and, in the researcher's opinion, the first priority. Users with disabilities in the American Wilderness Inquiry, Inc. (1995: 38) comment on the need for "accessible toilet facilities at entry points" and "ranger stations
need to have truly accessible toileting facilities".

* Five respondents worried about how they would manage with their disability in a new environment, largely due to previous intimidating experiences they had had. Schafer (1995: 3) listed one of the positive benefits of taking part in outdoor recreation was that people with physical disabilities gained confidence in their ability to cope with "the challenges of hiking in unfamiliar outdoor environments and coping with inaccessible overnight accommodation".

* Six respondents lived on limited pensions and could not afford certain facilities. One reported on a game reserve in the Eastern Cape which provided an accessible chalet but which proved more expensive than the regular chalets.

* Two respondents had not had the opportunity of venturing out of their immediate environment since becoming disabled. Although none of the respondents listed it, the experience of the researcher had shown that adjusting to a life-altering disability takes time. As an example, when someone with a spinal injury returned home from the Spinal Injury Unit at Conradie Hospital, their whole day, initially, was filled with bathing, toileting, dressing, etc. It took time to adjust to this routine and for some, it could be anything up to a year or two before they start to pick up the threads of their lives again and venture outside of their immediate environment.
Three of the twenty six respondents were not interested in a hiking trail. One of these had been a keen hiker before his accident but believed that "hiking" from a wheelchair would not provide the challenge which he had previously enjoyed.

The visually impaired reported problems which included "could only see the animals with the aid of binoculars" and "had no way of visualising what all the animals looked like". One respondent had previously experienced the opportunity of feeling a lion cub and the skin of an elephant which made realisation more meaningful. This has an important educational component, for all disabilities, particularly for children. Filmer & Filmer (Undated c: 5) make the valid comment that "many disabled children and adults have never had the contact with nature that able-bodied people have. Most able-bodied children have played in the mud, picked fruit from a tree and had contact with farm animals. Because disabled people have often spent much time in hospital, have been treated as fragile, have not been recognised as able participants in the environment and have spent a great deal of time just surviving, they have often missed out on these opportunities. Environmental programmes, therefore, need to meet these basic environmental experiences before becoming involved in the philosophy and logic of lifestyle activities such as recycling". The English Heritage "Guide for Visitors with Disabilities" (Undated: 6-47) lists many
venues which have touch facilities, Stonehenge being one of them.

* Three respondents referred to danger. One hearing impaired had not heard a wounded lion roaring. Another respondent reported that many animals were only dangerous when cornered. This could pose a problem as people with disabilities were often unable to get out of the way in a hurry. A third respondent reported that she could not see danger, a rhino, at very close quarters when walking. Her friend, not accustomed to being a sighted guide, turned and ran away without telling her why!

* One respondent reported that there were no facilities for the hearing impaired at the East London Airport, making travel difficult for this group of people.

Patton (1995:31) did not provide details but found that the three fundamental reasons for non-utilization of national parks "were financial, social and physical (both en route and within the parks themselves)" which appears to indicate a similarity.

4.3.3 **Facilities they would like to use**

Many places which the man in the street took for granted and did not think twice about were barred to someone with a disability. The respondents listed places
they would like to see or activities that they would be interested in as:

* Two would love to visit Hogsback
* One wanted to see a waterfall: they all had inaccessible paths to negotiate
* One wanted to fish off the rocks
* One wanted to go to the Wild Coast again: none of the hotels were accessible
* Five wanted to visit Game Reserves
* Two wanted to visit a short Hiking Trail
* Three wanted to go to the beach
* One wanted to experience the peace of the veld
* Two wanted to visit any places of scenic beauty
* One wanted to be able to get into a swimming pool
* One respondent believed that knowledge about specific facilities or sports was not available. His interest was Scuba Diving but he had no knowledge of other people with disabilities who did in fact take part in this sport in other parts of the country or in other countries. Another example was a report about the Atlanta Paralympics by a member of the team from the Eastern Cape. (Thompson G 24 July 1997) He expressed the wish to form a wheelchair rugby team for the following Paralympics, a sport that very few present at his lecture had ever heard of but which has subsequently received attention.
The researcher did not include the hearing impaired in this group as the
respondents considered their limitations to be different from other disabilities.

4.3.4 Visits to a Game Reserve and a Hiking Trail

Of the twenty six respondents, sixteen had visited a Game Reserve before
becoming disabled and twelve had visited a Game Reserve since becoming
disabled, many just for a day trip. The researcher believes that this does indicate
an interest in game reserves. It seems to indicate that many more would visit
game reserves if some of the problems reported in Section 4.3.2 were attended to.

Of the respondents, 38.5% preferred to go on an organised outing, 34.6% preferred
to go privately and 26.9% would not mind either way. Three believed that going
on an organised trip, where their needs were catered for, would give them the
confidence they needed prior to a private trip. One, who was profoundly deaf, felt
that it would be a good opportunity for them to help each other and get to know
people with other disabilities. Group travel was discussed in all the studies: the
(1995: 3). It appears that, although most people with disabilities value
independence, there are definite benefits of group travel. Schafer (1995: 3)
believed that one of the benefits was the interaction and help gained from more experienced peers. Patton referred to those who would be assisted by an interpreter "to convey the surrounding environment". In the American Wilderness Inquiry, Inc, as many as 73% of respondents utilised the services of a "professional guide or outfitter", 51% were accompanied by family and friends and only 9% visited Wilderness areas alone.

Similar statistics related to hiking trails. Of the twenty six respondents, fifteen had visited hiking trails before becoming disabled and nine had visited hiking trails since becoming disabled. None of the nine were wheelchair users. Of those interested in attempting a short accessible hiking trail, ten preferred to go on an organised outing where there needs were catered for, four preferred to go privately with family and friends and eleven would not mind either way. Twenty five out of the twenty six questioned, including the one not interested in a long trail anymore, felt that they would enjoy a short hiking trail.

4.4 FINANCIAL CONSTRAINTS.

Eleven respondents believed that people with disabilities should automatically receive reduced rates at facilities in the natural environment whereas fifteen
believed that the reduction should not be automatic but income-related. They all agreed that those who lived on limited incomes should receive reduced rates.

Comments included:

* "Society does not owe us anything but we do have many more expenses than the average person and it would help the whole family to have an outing."

* "People with disabilities should not be made to feel different. They should be made to feel proud and this happens when they contribute to society."

In reality, many people will be excluded unless some discount system for those on limited incomes is adhered to, particularly in the economically deprived Eastern Cape. Amongst the participants in this study, two lived on limited incomes and would not normally be able to afford a visit to a game reserve. A discount had been promised to the group for the study but it never materialised. The National Parks Board offers a 40% discount to those in receipt of disability grants, a major problem being the "lack of awareness of such benefits by the disabled community and indeed also by many of the employees of the National Parks, who are not always aware of the discounts" (Patton 1995: 31-32). Amongst the suggestions in the American Wilderness Inquiry, Inc. (1992: 39) was one referring to fees; "specialized permits for non-profit groups...they can't afford fees".
4.5 **RUSTIC QUALITIES OF THE NATURAL ENVIRONMENT.**

Five of the nineteen respondents who were mobility impaired felt that the changes necessary for them, which were more pronounced than for the other disabilities, would affect the rustic qualities of the environment. A number of them believed that there were ways of making these alterations so that they blended in with their surroundings, one example being a boardwalk instead of a cement path.

4.6 **MOTORISED WHEELCHAIRS.**

Thirteen of the nineteen mobility impaired respondents believed that a motorised wheelchair would not affect the tranquillity of the surroundings. A few believed that, although not of their choice, these should be approved if they allowed greater independence to some. It was interesting to note that in America, "the NPS\(^1\) does allow the use of manual and motorised wheelchairs...An important criterion in determining whether a manual or motorised wheelchair is allowed ...is that it must be suitable for indoor use. If a device is not suitable for indoor use it is considered a motor vehicle and excluded for use in the NWPS\(^2\)" (Wilderness

\(^1\) National Park Service

\(^2\) National Wilderness Preservation Service
Inquiry, Inc. 1992: 15). The difference between a developed and a developing country is highlighted by the fact that there are no fewer than four motorised wheelchairs available for tourists to use at Dover Castle and Secret Wartime Tunnels (Guide for Visitors with Disabilities Undated: 15). When considering the total number of mobility impaired people in South Africa, a very small percentage can afford motorised wheelchairs and certainly no tourist facility possesses one for public use.

4.7 SUMMARY.

It appeared that there was tremendous interest in the natural environment, irrespective of the type of disability. The Wilderness Inquiry Inc. (1992: 18) reported that there was "no correlation between the physical, sensory or cognitive abilities of an individual and the need for solitude, beauty, challenge, risk, discovery, or adventure".

The chief limiting factors included environmental barriers, transport, lack of assistance, worry about how they would manage and finance. Many of them would prefer, at least initially, to go on an organised tour. This would provide good scope for service groups or the East Cape Tourism Board to organise outings
on a regular or annual basis. One of the functions of social work is to identify needs and, having done so, to attempt to meet these needs by making use of various community resources. The researcher will, therefore, bring these needs to the attention of those people who would be in a position to assist in what could be an enriching experience for all concerned.
CHAPTER 5

ANALYSIS OF A GAME RESERVE

5.1 INTRODUCTION

In this chapter, the analysis of the practical needs of people with various disabilities, in relation to a visit to a game reserve, are discussed. These range from sleeping and toilet needs to picnic sites, staff training and communication. (See Appendix Three for the report on the accessibility of Double Drift Game Reserve.)

5.2 DOUBLE DRIFT GAME RESERVE

Double Drift Game Reserve was used for this case study. It is under the control of the East Cape Tourism Board and is situated between Fort Beaufort, Alice and Grahamstown in the Eastern Cape on the Great Fish River. The Inyathi Game Camp, a specified viewing area, is stocked with a variety of animals, excluding the predators. There are different types of accommodation within the reserve catering to different sized groups. Staff are available to cook for visitors if they provide their own food. A number of changes would be required to make Double Drift Game Reserve accessible for people with disabilities. In terms of accommodation all but Mbabala Lodge would be very difficult to alter. The specific needs obtained from
the interview schedules were thus focused primarily on Mbabala Lodge when dealing with accommodation issues.

5.3 PRIVACY

When assessing facilities, it is important not only to cater for the needs of people with disabilities but also to cater for their feelings. This will ensure that they will revisit the facilities and advertise them to others. Filmer & Filmer (15 August 1997) reported on an assessment of a facility in the natural environment in Gauteng. Time was spent in looking at toilet heights, door widths and grab rails in consultation with a group of people with disabilities. On completion of the study, the group were asked whether they would readily revisit that facility. None of the group felt comfortable about staying there as the ablution facilities were too public. Given their disabilities, they valued privacy to maintain their dignity. For this reason, the researcher believed that it was important to establish the respondent's needs for privacy in terms of accommodation, bathroom and braai facilities when visiting a game reserve.

In this study, on a rating scale of 1 to 5 on the Likert scale (Bell 1993: 140), where 1 was regarded as "unimportant" and 5, "essential", the mode was 3, the respondents regarded it as relatively important to have their own accommodation. (See Figure 5.1)
However, the majority of respondents felt that they would either prefer to go or would not mind going on an organised excursion (See Chapter Four), accepting that it might imply sharing of accommodation. In its practical application at Double Drift Game Reserve, where only Mbabala Lodge could easily be altered, visitors requiring adapted facilities would have to share. This accommodation was best suited to groups or large families.

In a sophisticated metropolitan environment, expectations would generally include an en suite bathroom, but one would not necessarily expect these in the natural environment. However, there is a fine line between "roughing it" because you are living or moving close to nature and closing the door on people with disabilities
because their basic needs are not being accommodated. Figure 5.2 below illustrates that the mode for this question was 5 where the respondents saw it as essential to have their own bathroom in order to function independently and with dignity, even in the natural environment. At Mbabala Lodge it would be essential to share except for those in the en suite bedroom. However, this could not be compared to the game reserve, described by Filmer & Filmer (15 August 1997), which had communal ablution facilities. A communal single-sex bathroom would preclude or certainly make it difficult for a spouse or parent to assist the person with a disability and would make it more difficult for a visually impaired person to negotiate unknown terrain in order to reach the bathroom.

Figure 5.2 Own bathroom
In discussing braai facilities, Figure 5.3 illustrates the mode for this aspect was 1, 53% of them believing that it was either unimportant or only slightly important if they had to share a braai with others. Two of the respondents welcomed joining others as they did not have the mobility or motor movements required for a task such as braaing.

Figure 5.3 Own Braai Facilities

The researcher is, therefore, of the opinion that the privacy needs of the respondents appeared to relate to their more personal needs and did not indicate that they were antisocial. In Patton's study (1995: 39), 28 out of 40 respondents "expressed a desire for shared and upgraded facilities, two expressed indifference, but ten indicated they would feel more comfortable with separate facilities".
5.4 THE HEARING AND VISUALLY IMPAIRED

5.4.1 Representative

The hearing and visually impaired were not representative of the total population. However, a few interesting and relevant aspects were identified by both groups.

5.4.2 Interpreter for the hearing impaired

Nel (23 September 1997) reported that there are few white profoundly deaf people and virtually no black profoundly deaf people who can speak. The majority of profoundly deaf people in South Africa use sign language. In this specialised field, there is a general lack of Speech Therapists in the country and, in particular, Xhosa speaking Speech Therapists. Nel reported that there were only between three and five of them in the country. There are therapists teaching hearing impaired Xhosa speaking people to speak but the use of an interpreter to achieve this is not ideal. To relate this to the natural environment, the three respondents rated the importance of an interpreter using sign language who could point out birds, trees, and other points of interest as follows:

* Relatively important - one respondent

* Very important - one respondent

* Essential - one respondent
In spite of this, the researcher believes it is most unlikely that this service would be provided by facilities in the natural environment which once again places the onus on people with disabilities to meet their own needs. They would have to find their own interpreters to accompany them. Group travel is one method of alleviating this problem. Patton (1995: 14) writes that "while many people will reject this and seek a more independent package, for disabilities that may require an interpreter to help convey the surrounding environment, this form of tourism can have many benefits".

5.4.3 Emergency procedure

The hearing impaired viewed an emergency evacuation monitoring system as follows:

* Very important - one respondent
* Essential - two respondents

Two of them described a vibrating paging device which could be placed under a pillow and activated in an emergency but admitted that it was expensive. Other devices described by Thompson (1997b: 60 - 62) and the Code of Practice (SABS 0246 1993: 17) include 24-volt fire alarm circuits which are connected to bedframe vibrators and stroboscopic lights. However, the respondents were of the opinion that these systems were unlikely to be installed in an unsophisticated environment. For
this reason, they believed that it was acceptable to be woken by a staff member with a master key in an emergency. Thompson (1997b: 62) provides examples of notices which people with disabilities could place on their door to warn staff in case of an emergency. Thompson (1997b: 3) also points out that "'special needs' are only 'special' if the environment makes them so; disabled people only become handicapped by the way their surroundings emphasise their disability...An example could be someone with impaired hearing who uses a hearing aid, but who could be at risk when sleeping if unable to hear a fire alarm".

5.4.4 Lighting.

In terms of good lighting in the bungalows and along pathways, the hearing impaired scored as follows:

* Very important - one respondent

* Essential - two respondent

Good lighting would not only assist the person who was lip reading but also those communicating by means of sign language. The partially sighted respondent and participant felt that good lighting in bungalows or along paths was essential. Besides the obviously disabled person, elderly people require three times the amount of
light, for the same tasks, than a younger person requires (Rehab Lecture Notes 1993: 3). The practical application of this is not always easy in a game reserve.

Electricity at Double Drift Game Reserve derives from solar power or generators which are switched off at certain hours but which were also known to fail at awkward times, leaving one with paraffin lamps or candles as alternatives. Under these conditions, the researcher is of the opinion that the technical specifications as listed in the Code of Practice (SABS 0246:1993: 18) would not have a great deal of meaning.

Thompson (1997b: 58) writes that the importance of good design is essential as it can overcome would-be barriers. "Well planned lighting, both natural and artificial, the use of colour, particularly through contrast, and the careful and considered selection of graphics, pattern and texture can all do much to determine how well people with impaired vision can use their residual sight. Certainly for such people, glare and dazzle can completely eliminate their capacity to use their remaining vision". As an example, at a lecture on Low Vision, it was illustrated that, when someone with limited vision was pouring a glass of Coca Cola, she would hold it against a light coloured wall for contrast whereas when pouring a glass of milk, she would require a dark background for contrast. These aspects would greatly assist the low vision person and should be readily available for those planning new facilities (Guide Dog
School April 1991). However, the researcher is of the opinion that it would not be fair to expect an existing structure to make these changes.

As far as light switches were concerned, the partially sighted respondent and participant both felt that it was very important to have light switches in contrasting colours for better visibility. As the switches at Double Drift are of the pull variety and thus even more difficult to find, an easy solution would be bright orange beads, for better visibility, at the end of the string. They would also have to be lowered so as to be the recommended height of 1000 mm for wheelchair access (SABS 0246: 1993:11). As no reference could be found to the best colour for the low vision person to see, the researcher believes that orange would be suitable. A product on the market called "Hi-Marks Fluorescent Tubing" for marking stoves, washing machines, etc for better visibility, is bright orange.

5.4.5 Notices and points of interest

Facilities often provide notices, whether they consist of regulations, points of interest or directions. In the researcher's experience, the general population automatically believe that blindness is synonymous with Braille. However, there are other
considerations for the blind or low vision person:

* The two partially sighted people felt that notices in large print, particularly for ablution facilities, were essential. This would also help many elderly people whose vision was not good.

* Two felt that notices on audio tape were essential as few people read Braille.

* Only one of the three blind people felt it essential to have notices in Braille. The Grahamstown Library for the Blind have 2371 Braille readers throughout the country (Clark 1997). The Eco-Access Information Sheet (Undated, b: 6) states that "as few as 5% of South Africa's blind population reads Braille."

To translate this into practice, it appears that there would be a greater need for large print and audio tape than Braille at the Environmental Centre at Double Drift Game Reserve. However, as the expense of having a few notices or regulations transcribed into Braille would be minimal or of a voluntary nature by the South African Library for the Blind, it is the researcher's belief that all three methods of providing notices should be introduced to cater for people with different abilities. Clear large notices would also assist the hearing impaired.
5.4.6 Raised map

Two respondents believed that a raised map of the area was essential while two believed it was unimportant. One of them was of the opinion that, to someone who had no visual memory, a raised map would not have a great deal of meaning. The visually impaired participant however, was unable to visualise the course of the Fish River and felt a map would have been a great help. Respondents in the American Wilderness Inquiry, Inc. (1992: 38) commented that "Braille and raised line maps would help the blind".

5.4.7 Guide-Dogs

The participant questioned whether her Guide-Dog would be allowed in a game reserve. Correspondence later obtained from Lord (Guide-Dog School 3 September 1997) illustrated the very strict veterinary and general rules advocated by them. Although, at the time of this study, discussions between the Guide-Dog School and the National Parks Board were still in progress, the Guide-Dog School were of the opinion that the management at every game reserve should formulate their own rules about Guide-Dogs. The management at Double Drift Game Reserve had no hesitation in allowing a Guide-Dog into their game reserve and the dog presented no problems.
5.5 **PEOPLE WITH PHYSICAL DISABILITIES**

This group refers to those with physical limitations other than vision or hearing. The statistics quoted in this category included nineteen respondents who had varying degrees of mobility impairment. Experiences of participants were used as examples. Patton (1995: 19), himself a wheelchair user, believed that "most wheelchair users value their independence. The able-bodied people who accompany them are usually friends or family. These people will assist when required to, but they are there primarily for companionship, and not as physical labourers. To minimise the amount of assistance needed by disabled visitors, should be one of the NPB's goals".

5.5.1 **Shower versus Bath**

Figure 5.4 Shower versus bath

![Shower vs Bath Chart](chart_image.png)

**KEY**

1 - Unimportant
2 - Slightly important
3 - Relatively important
4 - Very important
5 - Essential
Contrary to the hopes of the researcher, Figure 5.4 on the preceding page illustrates that there was no significant indication of preference for a bath or a shower. Although the mode for a bath was 1 (unimportant), there was only a slight preference for a shower instead of a bath. No reference to these preferences could be found in the literature. However, Thompson, who is working on the revision of the National Building Regulations, suggests (1997b: 44) that "in all bathrooms there should be a shower of the 'roll-in' type" in addition to a bath. This is not necessarily his suggestion for a facility in the natural environment. In terms of the study of Double Drift Game Reserve, Mbabala Lodge would require the least structural alterations to make their showers accessible.

5.5.2 **Grab rails**

Figure 5.5  Grab rails
The mode for this question was 5, ten respondents believing that grab rails in the shower were essential. It was interesting to note that five respondents rated grab rails as unimportant, not because they did not need them but because they could not use them due to limited hand function, thus illustrating an instrument validity error.

Similar figures applied to a shower seat. The importance of grab rails became apparent during the study at Double Drift Game Park. Two participants who walked with crutches but otherwise appeared fairly mobile were unable to use the shower. They had nothing to hold onto or to sit on when releasing their crutches or callipers. Grab rails and a shower seat would also be useful for elderly people. They are not included in present legislation but are recognised as necessities and will ultimately be required for Satour’s National Accessibility Scheme (Scheepers 1997: 5) which is presently being finalised.

5.5.3 **Lever-action type tap handles**

Although the mode for this question was 1 where seven respondents rated lever-action taps as unimportant, there was only a slight preference as six respondents rated them as essential. Again, a few of those who did not require lever-action taps were certain quadruplegics who could not manage any taps. The experience of the
researcher with many arthritis sufferers was that they were unable to open any taps other than the lever type and were unable to grasp stove controls or jars with screw lids. None of the taps in the study were of the required type recommended for people with disabilities. Thus, although the statistics may not clearly confirm this need, it is an accepted need, hindering independence, and appears in the regulations (National Building Regulations 1986. SS5.3d).

5.5.4 Beds

Figure 5.6 Bed height

As Figure 5.6 illustrates, a slightly higher than normal bed was believed to be an important aspect for those transferring from a wheelchair as well as for those suffering from arthritis, the mode being 5. Patton's (1995: 33) study arrived at a
similar conclusion.

A firm and stable mattress was also felt to be important to those transferring from a wheelchair. Although the mode was three, there was a clear tendency towards five, 52.6% either believing a stable mattress to be very important or essential. No reference to mattresses could not be found in the literature.

5.5.5 Grab rails or monkey chain for bed transfer

Thirteen of the nineteen respondents rated this point as unimportant whereas five rated it as essential. These five represent almost 20% of those interviewed. One quadruplegic described how he had struggled for a long time to turn himself in a hotel bed as it had no grab rail or monkey chain and was away from the wall which could sometimes be used for leverage. Satour's National Accessibility Scheme (Scheepers 1997: 7) refers to a "Clip in suspension rail above bed". It is not clear what percentage of people with disabilities should require a particular facility or piece of equipment before it should be introduced or adapted. Cohen (1997: 5) and Sachs (1997: 7) see the lack of a ramp, required by all wheelchair users, as secondary discrimination and possible cause for litigation whereas the lack of a grab rail, found by almost 20% of the sample population in question may not be regarded in the same light.
5.5.6 **Plug point for a ripple mattress**

While only one respondent required a plug for a ripple mattress, others reported needing plugs for electric toothbrushes (which enable greater independence), for charging the battery of a motorised wheelchair and one required a plug for a heater or electric blanket as his body was unable to control either heat or cold. A plug in the bedroom would, therefore, be very useful but would pose problems with solar power or generator power as was the case at Double Drift Game Reserve.

5.5.7 **Toilets**

Nine out of the nineteen respondents felt that a higher than normal toilet was essential. Most of them were in wheelchairs and it made transfer to the toilet easier as the heights would be the same. One respondent suffered from severe arthritis and reported that bending was painful. This confirms accepted regulations for people with disabilities (National Building Regulations 1986 SS5.2f). The researcher was of the opinion that the expense of installing a higher toilet was not warranted on condition that grab rails were installed. There was adequate spacial clearance around the toilet.
5.5.8 **Meals**

There was a fairly even spread among those who felt that the kitchen did not have to be accessible, either because they had a spouse to assist or because they were unable to perform tasks in the kitchen, and those who felt it was important to have an accessible kitchen so that they would not have to rely on others. As there are staff to prepare food for guests if they desire it at Mbabala Lodge, the researcher is of the opinion that it would be unnecessary expense to alter the kitchen so as to make it accessible. In terms of a table suitable for a wheelchair user (for both height and leg room), thirteen of the seventeen wheelchair users viewed it as essential that they had room to accommodate their legs and the wheelchair under the table. One wheelchair user believed that sitting at a table not only allowed him greater independence but prevented social isolation. The table at Mbabala Lodge was suitable and long, making it a good venue for socialisation.

5.5.9 **Picnic Sites and Game Hides and Viewpoint**

Fifteen of the nineteen who were mobility impaired believed that it was essential that any picnic sites should be accessible, with similar figures for game hides. Double Drift Game Reserve had an accessible picnic site but no accessible toilet. The magnificent view of the Fish River was inaccessible to most people with disabilities,
thus robbing them of a special experience. Filmer (1994: 137) describes the absolute frustration of arriving at a famous viewpoint, only to find that there are steps which you cannot negotiate alone with your wheelchair. Patton (1995: 58) reported that view sites in the parks studied by him were, at best, not easy to negotiate and at worst, inaccessible.

It is at places of this nature where a bush wheelchair would prove itself. It does require the assistance of a second person but is described by Langmore in the sales brochure (undated) as "perfect for the urban user who wants the freedom of leaving the beaten track".

5.5.10 **General Toilets**

Double Drift Game Reserve had no accessible toilets except for one at Mbabala Lodge, thus restricting certain people from venturing too far away and preventing day visitors with disabilities from visiting the park. Cooper (1997) reported on the peace of mind provided by the knowledge of an accessible toilet when travelling. He explained that many wheelchair users require a large amount of water intake to prevent kidney infections and this in turn necessitates frequent trips to the toilet. Without the knowledge of accessible toilets, people with disabilities live restricted
lives and are prevented them going out unless on a well planned route. In contrast
with other countries, an English Heritage "Guide for Visitors with Disabilities"
(Undated: 4-21) listed twenty one venues in the semi-natural environment in
Southern England, as having accessible toilets whereas fourteen were listed without
accessible toilets.

5.5.11 Telephone

The mode for this question was 4, this score indicating that they felt it "very
important" to be able to use the telephone when necessary. A public telephone had
recently been installed at Double Drift which was not suitable for use from a
wheelchair. Van Niekerk (1997: 17) suggested that contact should
be made with Regional Telkom Managers, requesting authorisation for the erection
of every third telephone booth to be installed at a lower height to suit wheelchair
users, as was done in certain areas. While the researcher was of opinion that this
was acceptable, it did not help a person with a disability when there was only one
telephone. Thompson (1997b: 51) lists the specifications necessary for selected
telephones as:

* Telephone not higher than 1000 mm above floor level

* Dialling instructions shall be visible from a wheelchair
* A shelf is helpful for directories and taking notes, fixed at 800 mm above floor level.

5.6 ASPECTS AFFECTING ALL DISABILITIES

5.6.1 Training of staff

Figure 5.7 Staff training

Figure 5.7 illustrates the value that the twenty six respondents placed on adequately trained staff, the mode being 5, rating it as "essential". Boltman (1997: 5) believes that it is not only buildings that should be accessible but staff as well. She believes that awareness, understanding and sensitivity are important. Thompson (1997b: 61) has similar sentiments, saying that "helpful and friendly staff can insure an enjoyable holiday even when, for example, the physical design of the hotel is not ideal."
Problems and distress (are) caused when communication has broken down, or when staff, presumably untrained, just do not think. Providing a high standard of customer care for the disabled people should always be seen as an integral part of the standard training procedures than ensure guests have an enjoyable stay”.

It was reported by the NEAP representatives in the Northern Province that she had been requested to train staff of Translux about disability issues (19 August 1994: 3). This has potential for suitable people with disabilities who could become involved in training of this nature.

5.6.2 Written information on accessibility

As it is easy to provide a verbal message of accessibility without knowing anything about the subject, the majority of the respondents (fourteen out of nineteen mobility impaired) believed it was essential for facilities to provide written information on accessibility. In this way, they would have more confidence about venturing out. The hearing impaired believed that written information about the facility was essential as they were not in a position to make telephonic enquiries. Patton (1995: 64) wrote that “what many potential disabled park users require, is simply the confidence of knowing what facilities are provided that are sufficient to meet their
needs”. He stressed the need for professional guidebooks.

5.6.3 **Training for people with disabilities**

Three out of the five visually impaired people considered training for the visually impaired as essential. This training would include bird sounds and nature appreciation. The researcher has been on a hike with visually impaired people from overcrowded and deprived backgrounds and the majority of them had never been taught to appreciate nature. Their joy at getting out and being part of nature was evident by the noise they made, thus frightening all the birds away! A tape of bird and/or animal sounds of the area placed in the Environmental Centre would be of educational value to all visitors. The Eco-Access Information Sheets (Undated: 9) states that "recreational, educational and/or interpretive programmes and experiences...are the most effective and enjoyable when participants have the opportunity to get actively involved. An effective way to get participants involved is to make use of as many senses as possible".

5.6.4 **Transport**

Fox, speaking at a conference in New Zealand reported that "accessible transport is a fundamental aspect of accessible environments" (ICTA Conference 1996: 537).
According to the participants of this study, the game viewing vehicles were totally unsuited to people with disabilities. The majority of people visiting Double Drift Game Reserve do so by car which naturally would cater for their individual needs. In spite of good intentions, it is not always easy for tour operators to provide a user-friendly service. A local tour operator, who regularly visits Double Drift Game Reserve with elderly and slightly disabled people, was unable to find a low-slung bus, (which would be better suited to the needs of people with disabilities), to purchase. (Penrose Marks 14 October 1997)

5.7 SUMMARY

The abilities of the participants to access the built environment at Mbabala Lodge can be summarised as follows:

* Although the visually impaired person had extremely limited vision, she managed exceptionally well with minimal assistance required.

* The two relatively mobile people on crutches were unable to use the shower as there were no grab rails and shower seat when they took their callipers and crutches off.

* The person in the wheelchair would not have managed with the facilities as they were without the help of her husband, hence the need for alterations.

* The hearing impaired person experienced no problems as his hearing problem was
mild and he had people to assist when necessary.

Many other facilities at Double Drift Game Reserve were unsuitable. (See Appendix Three for report.) Ideally, one would recommend that all barriers be removed. However, a certain amount of realism is necessary in these times of dwindling finances and control (Daily Dispatch 21 November 1997: 2). Three issues should be taken into consideration:

* It is necessary to separate those changes that are essential from those which are not essential but would improve the quality of the visit for people with disabilities. The essentials could be seen as accessible showers with grab rails and seats as well as toilets with grab rails.

* It is also necessary to study the attractions of the game reserve. It would serve very little purpose in making Mbabala Lodge accessible if people with disabilities were unable to reach those facilities overlooking the Fish River which are part of the attraction of Double Drift Game Reserve. It was recommended, therefore, that they be made accessible for day visitors who are disabled.

* Naturally, any additions or changes at this game reserve should be done with accessibility in mind. Publicity about the needs of people with physical disabilities cannot be overemphasised.
Staff training was an important issue so that staff would be sensitive to the needs of people with disability, particularly in an emergency. This training could be offered to facilities of this nature. It could be undertaken by a social worker, together with a suitable person with a disability as part of capacity building. Once this person had experience and confidence, he/she could take over this role. In the past, training could have been regarded as a service by an organisation such as Rehab. In today's economic climate, however, it would have to be viewed in a different light - as an income generating project which could eventually be taken over by a person with a disability to provide an income for them.

Although the objective of this study was not to find solutions to problems, the researcher is of the opinion that making a reserve of this nature accessible to a variety of people could become a community responsibility. This does not exonerate the state from taking responsibility for accessibility but it could be seen as a shared responsibility. The community could be mobilised into donating time and money to make bird tapes, transcribing Braille fact sheets, donating cement and equipment to make the necessary changes, etc. By achieving this, it would create publicity which is important in encouraging other facilities. Patton (1995:63) writes that "while there is a large amount of good will, and intention, on the part of the NPB, this has yet to be
transferred into universally acceptable practice and provision of the special facilities and services that disabled people require if they are to partake independently in nature-based tourism". 
CHAPTER 6

ANALYSIS OF HIKING TRAILS

6.1 INTRODUCTION

One of the objectives of the research was to assess the possibility of making a hiking trail accessible: either by adapting an existing one in the Umtiza Forest or developing a new one at the Amalinda Fish Station, both of them being on the outskirts of East London. The Department of Nature Conservation was approached. The idea was not new to them as they had previously assisted with a hike for visually impaired people in East London. However, to include wheelchair users in such a scheme would mean a number of adaptations to an existing trail or the creation of a new trail. As Filmer & Filmer (1996a: 3) advised against specialised facilities for people with disabilities, which tend to segregate, any changes made would have to be made with the general population in mind. The Department of Nature Conservation expressed interest but requested that an interest survey be undertaken. This was in line with the aims of this research and details of hiking trails were included in the interview schedule. The initial assessment of the physical environment did not include a wheelchair user as the terrain was totally unsuitable. A mobile physically disabled person and a
visually impaired person thus accompanied the Chief Nature Conservator and the researcher. The discussion that follows takes place around the responses of the respondents and the participants.

6.2 INTERESTS OF RESPONDENTS.

It has been established in Chapter Four that there was interest in the natural environment and in a short hiking trail. Respondents expressed the longing to "be part of nature", to "get away from it all", "experience peace and tranquillity" and see "places of scenic beauty". One of them owned a three-wheeler motor cycle and reported "riding into the veld" from time to time. It appeared that this longing or need is very real as people with disabilities seldom have the opportunity for this peace and tranquillity. This was born out by the two participants who spoke at length about their enjoyment of these visits. The American Wilderness Inquiry Inc. (1992: 31) listed the priorities of people with disabilities in visiting wilderness areas in terms of percentage of responses, similar to the sentiments of those in this study:

- To experience scenery/natural beauty: 93
- To experience nature on its own terms: 81
- To experience a personal challenge: 78
- To share the experience with family and friends: 70
To experience solitude 53
To enjoy fishing or hunting 20

6.3 THE NEEDS OF THE RESPONDENTS AND PARTICIPANTS

6.3.1 The Visually Impaired

An Eco-Access Information Sheet (Undated: 16) stated that international research had shown that erecting self-guiding mechanisms, for example, tapping rails, guide ropes, hand rails, etc, purely for the use of visually impaired people, is often not worth the cost, due to the expense of erecting them, damage from vandalism or weathering and the fact that visually impaired people cannot reach a trail independently and therefore always have a sighted guide with them. It was important to gauge the views of the local visually impaired people in response to this statement.

Three respondents expressed the view that they would love the freedom of walking without a guide and saw it as a challenge. They believed that Braille notices and points of interest would be helpful if walking on their own (See Chapter Five for details about Braille readers) and a rail was necessary if the territory was uneven as it would provide guidance and balance. It was interesting to note that the Eco-Access Information Sheet (Undated: 17) stated that "tapping rails do not provide a
mental barrier to the 'wilderness', whereas hand rails often seem to create a barrier 'not to be crossed'.

One respondent believed that she would generally be happier with a knowledgeable sighted guide instead of struggling on her own and having to hunt for points of interest. It was not surprising to the researcher that the three who valued independence and challenges were very independent blind people who had undergone mobility training at the Guide Dog School. The spouse of the respondent who preferred assistance was, in the researcher's opinion, overprotective.

Although the sample was very small, and the majority valued independence, they generally agreed with international research that a sighted guide was usually present and additional time and expense on the trail were not warranted.

Additional aspects listed by respondents as being helpful included:
* A knowledgeable sighted guide who knew how to lead, interpret the environment and handle danger was necessary
* Clear large markings for the partially sighted, where necessary
* Access to water was necessary
* Access to shade was necessary

Additional aspects listed in the Eco-Access Information Sheet (Undated: 17) included a brightly coloured strip placed on the tapping rail for the partially sighted and the suitability of various materials to use as hand rails so that they would not perish too soon, be hot to the touch, splinter, etc. After listening to many discussions at Access Meetings by people with various disabilities, the researcher is of the opinion that the question of the correct materials for and shape of handrails is often not adequately researched, either in the natural or urban environment.

6.3.2 The Hearing Impaired

The needs of the hearing impaired were quite different. The only point mentioned by them was the danger of being separated from the rest of the party and getting lost. Although this would not be of relevance on a short hike, it could be very important on a longer hike. One participant mentioned the use of the vibrating device on a hike to warn the person not to stray too far from the rest of the party. Another option would be to instruct members of the party to remain together and not spread out too much. Carlson (in Beechel 1975: 25) believes that it is important to assure the hearing impaired of their personal safety. Most would feel safer if supplied with a whistle
before venturing into unfamiliar territory. Although they would not be able to hear it, any hearing person in the party would be able to locate them. The value of a group outing with an interpreter is discussed in Chapter Five.

On a short hike therefore, there would be no major problem for the hearing impaired. Details could be discussed prior to a hike and were not relevant to this stage of the planning.

6.3.3 The Physically Disabled.

Eco-Access (Undated: 1-19) has determined criteria for a hiking trail. It is not always easy or possible to adapt the environment to suit the needs of people with physical disabilities. For this reason, certain existing criteria were included in the interview schedule in order to ascertain how crucial it was to make them absolutely correct:

* One of these aspects was Camber. Figure 6.1 on the next page illustrates that the mode for this question was 5 as the respondents viewed it as essential to have the correct camber. The respondents who were amputees reported finding it very difficult to walk either on a hiking trail or on a city pavement that sloped to one side. A wheelchair-user would not only find it unsafe but would find it difficult to
propel on a path sloping sideways. The Eco-Access Information Sheet (Undated: 1-19) discuss that the fact that a camber of "not greater than 1:40 although less than 1:50" is recommended. It therefore appears that this is an important aspect which should be born in mind when adapting or creating a trail.

Figure 6.1 Camber

*Even ground* was another aspect. Figure 6.2 on the next page illustrates that only 1 respondent viewed a smooth hiking trail as essential, the mode being 3 where 10 viewed it as only relatively important. Patton (1995: 37-38) reported that "pathways provided an interesting contrast between the ideal requirements of wheelchair users and those of non-sighted people. One blind respondent
disapproved of sand and tarred paths, and preferred cobble or gravel tracks. In opposition, wheelchairs require as smooth a path as possible. A hardened gravel path would appear to be the best compromise". In practice, in this study, all the participants at Double Drift Game Reserve found a loose gravel path difficult, whether they were in wheelchairs, on crutches or visually impaired. Thompson (1997b: 13) also believes that "gravel surfaces must be avoided."

Figure 6.2 Even ground

* Gradient. The mode for this question was 5 where they saw the correct gradient as "essential". See figure 6.3 on the next page. For those who are normally independent, a steep gradient interprets into loss of independence.
The Eco-Access Information Sheet (Undated: 11) suggests that "the ideal gradient for trails is 1:20 with a maximum gradient of 1:12. In summary, it appears that the correct gradient is crucial and is easy to measure with the newly designed gradient gauge.

Figure 6.3 Gradient

A positive example of the benefits of publicity was reported in Eco-Access (September 1997: 3). A group requiring sponsorship for a bird hide approached SASOL. Dr Erica Reynolds from SASOL knew about the work undertaken by Eco-Access and therefore insisted that the group consult Eco-Access. She also insisted that, if they wanted sponsorship, no gradient should be steeper than 1:12!
* The width of a trail was not discussed as it would have to be the standard width for wheelchair access. The Wilderness Inquiry, Inc in the United States (1992: 19) reports that most trails in wilderness areas are too narrow for wheelchairs. Two out of the three parks studied by Patton in this country had trails that were too narrow for wheelchairs (1995: 50 - 55).

* Additional aspects reported by the Eco-Access Information Sheet (Undated.a: 15) include the fact that elevated pathways should have "railings to ensure that the person in the wheelchair does not roll or tipple off the pathway", passing points and information boards at suitable heights.

6.4 SUMMARY AND IMPLEMENTATION

The Eco-Access Information Sheet (Undated,a: 14) also states that "adventurous wheelchair users ... often do not require ALL the facilities to be built to South African standard specifications. The ideal, however, is total access...the person can go only where his/her chair can go".

It appears that respondents see gradient and camber as crucial. Even ground, without too many bumps, is not seen as essential by all but would obviously be advisable, if at all possible. The researcher is of the opinion that each area should be viewed and
practically tested on merit by people with various disabilities and abilities at the time of construction. The researcher is of the opinion that the Eco-Access Information Sheet (Undated: 1-19) cannot be improved upon and is, therefore, a necessity in every practical study.

However, cost of initial construction and maintenance are important factors in the decision making process. A trail has to be viewed as a long-term project; if a facility does not have the manpower to maintain it, schools or service clubs could be called upon to maintain it as a service to the community.

The first area studied was the Umtiza Hiking Trail. It was felt that it would be possible to create a short trail on relatively flat hard ground, thus avoiding the steep gradient and stream which would prove expensive and difficult to adapt. As the importance of inclusion was stressed, it was felt by the Chief Nature Conservator that a trail of this nature would be useful for educational purposes as well as for many elderly people. The visually impaired participant believed that the bird sounds and tranquil surroundings would be wonderful for many city dwellers. It would be necessary to avoid trees and roots. It also provided shade and had water nearby. A suitable toilet was necessary.
The second area studied was the Amalinda Fish Station. The researcher was of the opinion that, because of its name, very few people realised that it was in fact a very attractive small game reserve on the outskirts of the city. Plans were underfoot to make alterations in 1998 and, because of this study, plans would include the needs of people with various disabilities. The Chief Nature Conservator believed that it may also be possible to make a trail through part of this area, thus enabling not only people with disabilities but the general public to be closer to nature and the animals. It would be possible to accommodate the correct camber and gradient, in spite of a steep slope, by creating lateral paths. It would, however, be necessary to consult wheelchair users about the composition of the trail.

Two respondents believed that any area studied with a view to creating a hiking trail should be changed as little as possible so as to accommodate their needs. In America the Wilderness Inquiry, Inc (1992: 1 - 18) reported that "on the surface, the concurrent goals of equal accessibility and preservation of wilderness areas, seem to be antithetical. However, at a closer look, we do not believe that is actually the case. It is not, in our estimation, a question of one goal or legal mandate taking precedence over another. It is a question of finding effective ways to balance the intent of both and finding ways to provide the highest level of access with the lowest level impact of
the environment. The same report quotes the policy of the United States Forest Service which "seeks to maximise wilderness values while providing opportunities for persons with disabilities to enjoy wilderness on its own terms". While the American study refers to a different type of wilderness, the statements are, nevertheless, relevant to the South African situation and should always be born in mind.

The researcher is of the opinion that both trails studied would be assets to people with disabilities as they were so different in nature. If a choice had to be made between the two, she believes that the Department of Nature Conservation should study which one would be best used by the general population. Naturally any other changes made to their entrance, picnic and toilet facilities should be done so with people with disabilities in mind. Beechel (1975: 21) reported that most trails that are not close to urban centres reported disappointingly low use by handicapped persons. Both trails in this study are close to an urban environment.

Filmer & Filmer (Undated, c: 5) write that "part of society's education process is the breaking down of barriers that exist between able-bodied and disabled people. Integrating groups is one way of achieving this. The natural environment has proved to be a great equaliser and is often an area where able and disabled siblings, for
example, can participate on an equal footing. Activities that encourage the use of other senses could also give disabled members of a group an advantage, something they rarely experience.

6.5 **PLANNING AND RECOMMENDATIONS.**

At the end of the study, the following decisions were made:

6.5.1 The researcher would organise a follow-up meeting between the Chief Nature Conservator, selected people with disabilities and herself, early in 1998 to make further plans.

6.5.2 Wheelchair users would be consulted as to the composition of the trail.

6.5.3 Copies of the necessary gradients, cambers, door widths and toilet specifications would be provided and all the Eco-Access Guidelines carefully studied.

6.5.4 Suitable volunteers would be sought to assist with the clearing of the bush initially and the continued upkeep of the trail.

6.5.5 A shorter questionnaire would be considered which could be used on a larger scale to ascertain the feelings and needs of people addressed by the Education Officers of the Nature Conservation Department and those working with people with disabilities.

6.5.6 Once a trail was accessible, publicity could be arranged and people sought to assist with hikes for those who preferred organised outings.
CHAPTER 7

ANALYSIS OF DIFFICULTIES ENCOUNTERED

7.1 INTRODUCTION

The researcher is of the opinion that this area was the most valuable part of the study as it highlighted certain unmet needs relating to accessibility.

With experience, the researcher has come to the conclusion that two very different approaches are adopted by people working in the access field. There are those who are almost dogmatic and militant when approaching the owner of a building about making it accessible and there are those who use a gentler, more persuasive approach. While the researcher is not condemning the former approach and sees it as justified for someone who has spent a lifetime in a wheelchair, being barred from "normal" life and activities because of environmental barriers, the approach of the East London Access Committee, many of whom are themselves people with disabilities, has been of the latter. It may be that they are not opposites but different ends of a continuum and there may come a time when this committee adopts a more militant attitude when coming upon opposition and disinterest. It may also be that the researcher is a social worker who, in her own opinion, are generally not too comfortable about some of the lobbying techniques described by Biklen (1983: 236).
To take the more gentle approach one step further, it was decided to conduct qualitative interviews, as described by Rubin & Rubin (1995: 4) on the owners of three facilities which had either become accessible or were in the process of becoming accessible. In this way, positive and negative experiences could be discussed and answers sought to certain problems.

7.2 THE FACILITIES

7.2.1 Chandlers

Although this Guest House is in an urban area and not in the natural environment, it was decided to learn from their experiences in making their facilities accessible. The only wheelchair user who had stayed there had reported that the owners were experiencing problems in their adaptations and were rather negative about the changes they had made - a dangerous position as they could easily influence any other would-be Bed and Breakfast establishments (Cooper 10 September 1997).

Chandlers is a Business Class Guest House. The owners decided to include two wheelchair-friendly rooms while on the second phase of their development and requested the necessary information. The researcher provided details from the Code of Practice (SABS 0246: 1993) for their architect.
7.2.2 Quintetta Guest Farm

This guest farm is on the edge of town. It has a swimming pool, attractive surroundings and many animals which give visitors the impression of being in the country. The accommodation is unsophisticated but clean. It is close enough to the city to be used for urban visits. It has, in fact, been used by people with minor disabilities who had attended a disability conference in the city.

7.2.3 The Red Bishop Golf Course and Restaurant

The restaurant, pub and patio area of this golf course, situated next door to Quintetta on the edge of town, has proved a very popular venue for many, including people with disabilities. It also has one of the few wheelchair-friendly unisex toilets in the city. Members of the East London Access Committee had originally been delighted to visit a facility where the owners themselves had taken the initiative and planned accessibility from the outset.

7.3 PROBLEMS EXPERIENCED

7.3.1 Size of bedroom

As there were no guidelines available for size of wheelchair-friendly rooms, the owner of one of the facilities used the existing plan for the bedroom without taking
the size of a wheelchair and its turning circle into consideration. As a result, even with minimal furniture, there was minimal space for wheelchair manoeuvre.

Thompson (1997c: 26), reported that, "if the initial planning clearly addresses these parameters, significant savings can be affected as opposed to the cost of abortive and retrofit solutions which are commonplace in South Africa at present". Thompson has brought out a draft of an "Accessible Tourism Guide" (1997b: 1-64) which answers this and many other questions. During the interview, one owner expressed the wish for information of this nature to be readily available on a commercial basis.

7.3.2 **The Bathroom**

The lack of available data or designs on bathrooms suitable for wheelchair users resulted in the two facilities offering accommodation having similar problems with their bathrooms. Both bathrooms were very spacious with roll-in type showers. They had no shower doors or curtains, leaving the guest feeling vulnerable and exposed. Both facilities reported having requests from regular able-bodied guests to be placed elsewhere in future. Neither facility had completed their disabled-friendly bathroom, having no grab rails or shower seats and were thus not in a position to call themselves wheelchair-friendly. Both had mirrors too high for wheelchair users and one had a very slippery floor, making it dangerous.
7.3.3 **Usage**

Due to the fact that one of the facilities was well patronised, advertising had not been necessary. The owners were thus unhappy about the fact that, without advertising, their accessible rooms were underutilised. They appeared to be in a Catch 22 situation; they did not want to spend even more money to make it completely accessible but, without doing this and without advertising, it would remain underutilised. In this instance, it would be necessary to make the accessible rooms acceptable to both wheelchair users and the general public to prevent underutilisation. To achieve this, the researcher believed that expert advice was needed.

7.3.4 **The National Accessibility Scheme**

If an owner believes that his facility is accessible, he can apply to Satour for grading of his facility. "Participation in the scheme is voluntary and this initiative forms part of Satour's National Grading and Classification Scheme. The scheme offers accreditation on three levels and interested parties are required to meet the criteria of any specific level of accreditation before applying for recognition" (Tourism without barriers brochure July 1995). If the facilities concerned qualify for accreditation in terms of the scheme, they receive a plaque and "will be included in a special tourist guide book aimed specifically at the disabled". A "small application fee" covers the
cost of the inspection, grading plaque and administrative costs. The owners of one facility studied believed that Satour's National Accessibility Scheme was not an economically viable proposition for them, regarding it as unnecessary advertising for minimal additional patronage.

While the researcher understood the sentiments of these owners, the concept of this scheme was welcomed by people with disabilities. The assessment of facilities by Satour, in conjunction with NEAP, would provide "reliable and consistent information about accessibility" Thompson (1997b: 4). Hulbert & Hulbert (August 1995) had reported on the very practical assistance provided by the "OFS Holiday Guide" by Theron (1994) when travelling in the area. However, Patton (1995: 25) points out that the Golden Gate National Park, the only national park in the province, is not listed in this booklet as the "application to Satour was of a voluntary nature".

Whilst the researcher also appreciated the necessity of qualifying on all counts before being granted the access symbol, there was also a "downside". A restaurant which was accessible in terms of entrance and table space but not in terms of the toilet, would not be able to display the symbol. They may lose trade from wheelchair users who would be unaware that parts of the building were accessible.
7.3.5 **Cost**

The owner of one of the facilities reported that it had been a very costly exercise to make their facility accessible. The researcher informed them of reports by Golden (1997a: 2) and Cohen (1997: 4) where the cost of making a building accessible, if planned as accessible from the start, had amounted to between 1/10th and 1/2 of 1% of the total cost of the building. Although the owners had not worked this out in relation to the total cost of their building, they believed that this had put it in perspective for them.

7.4 **ANALYSIS AND SUMMARY**

7.4.1 **Who is responsible?**

The problems voiced by the owners were very real problems which would affect their business. Although it was the responsibility of the owners to find solutions to these problems, the researcher and participants believed that every effort should be made to assist them. In doing so, these owners could adopt a more positive outlook on the issue of accessibility. For this reason, various people with specialist knowledge were requested to advise them. In addition, the researcher wrote to Satour requesting more information regarding specific aspects of their National Accessibility Scheme.
7.4.2 **Consultancy**

It was obvious that not enough guidance was available for owners who wanted to make their facilities accessible. While many may have seen this as the role of the architect, the researcher's experience had proved that architect's did not always have the knowledge or the interest to obtain the necessary information and interpret it according to the environment and the needs of people with disabilities. This was confirmed by Thompson (1997c: 25) It would thus be helpful for the organisation in each area dealing with access matters to extend their services to provide a "hands-on" type of guidance which could supplement the knowledge of the architect. However for this to happen and given the dire straits facing NGOs, resulting in wide-scale retrenchments, a shift in emphasis from a nominal consultancy fee, irrespective of the time taken, to a market-related hourly consultancy rate would be required. This should also be undertaken by people with disabilities who had knowledge of the regulations and literature available. After a discussion at the NEAP Summit (1997: 16), it was decided that a uniform fee for consultancy work throughout the country was not practical as there were widely differing capacities among its members. It would therefore, be necessary for each area to set its own fee, according to the experience of the consultant and the people with disabilities who would be assisting.
It was also obvious that there was not enough practical information available for those who were wanting to make their premises accessible - businesses who could not afford to make mistakes and required all the information at the outset. Thompson, an architect, who heads NEAP nationally, had produced a draft copy of a booklet, Accessible Tourism Guide (1997b: 1 - 64), quoted frequently in this study. It covers aspects such as the layout of a bedroom with exact dimensions of floor space, placement, size and height of furniture, etc. A recommendation would be made to NEAP National that this draft be assessed and formally adopted and distributed for sale, thus filling a gap in the market. It should be advertised through the Institute of Architects and NEAP.

7.4.3 Attitude

The researcher found the attitudes of the owners interesting and viewed them as possible microcosms of society at large:

* Worry and slight annoyance at the loss of business resulting from problems experienced with their wheelchair-friendly rooms

* Complaints received and problems experienced were not viewed as insurmountable problems but as challenges

* No problems experienced but they were of the opinion that anyone who complained
about aspects of accessibility need not return!

7.5 CONCLUSION

It was interesting to note that two out of three of these qualitative interviews had produced similar problems, namely complaints by the general public about the use of an accessible bathroom. Although this sample was far too small to produce saturation point, as reported by Glaser & Strauss (in Rubin & Rubin 1995: 72 - 73), it was possible to see how this could happen. However, when dealing with buildings which have endless varieties of possibilities, this is unlikely to happen.

It was felt by the researcher that these interviews had been productive and enlightening and had highlighted the very real need of consultancy, adequate literature for those planning accessible facilities, and, finally follow-up interviews.

It must be stressed that these consultants do not see themselves as quasi-architects but as supplementers of the knowledge and expertise of the architect. Because of their contact with NEAP on a national level, they have access to a great deal of material on various fields of access and are able to learn from what has been done in other areas. They have access to the national chairman of NEAP, an architect who, as a
wheelchair user himself, has much experience in the field of accessibility. The researcher contacts him from time to time for interpretation on the National Building Regulations and other issues. He, and others of his calibre in the NEAP hierarchy, have been responsible for most access legislation and progress that has happened to date.

Social workers or others undertaking this work at organisations such as Rehab and DPSA are the obvious people to provide the link between the people with disabilities who should be acting as consultants, NEAP National and those requiring information, whether they be architects, developers or owners of facilities.
CHAPTER 8

CONCLUSIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

The researcher is of the opinion that every respondent, and certainly every participant, enjoyed being part of a study of this nature. Without exception, they added serendipitous information which assisted in the study.

8.2 SUMMARY AND RECOMMENDATIONS

8.2.1 Interest in, use of, and potential for utilisation of the natural environment

The main problems preventing people with disabilities from making better use of the natural environment appeared to relate to transport, concern as to how they would manage in strange surroundings, finance, lack of accessibility or lack of knowledge about accessibility. A number of those who were severely disabled were very conscious of the fact that any deviation from routine would require extra work on the part of their carers.

It appears that there is tremendous interest in the natural environment by people with disabilities. They already visit a wide range of facilities and listed many others
that they would like to be able to visit. A number of them hankered after the "peace", "beauty" and "solitude" of the natural environment. It became evident that many people with disabilities are rarely able to be alone with nature as many of them require assistance in reaching a destination in the natural environment. Thus, any visit to the natural environment should provide opportunities for peace and solitude.

While there are those who shy away from groups visits, the literature review and the thoughts expressed by many respondents and participants illustrated the very real benefits for people with disabilities and the able-bodied public assisting:

* An outing could provide tremendous joy and camaraderie to those people with disabilities who are isolated

* It could give them confidence in their abilities to socialise and to venture out of their comfort zones

* It could create in those people who are disabled but independent and active, an awareness of, and a sense of responsibility towards, those less fortunate than themselves who require a role model and a mouthpiece to express their needs

* It would be easier to arrange interpreters or specialised equipment for a group than for an individual
* It could provide a growing awareness on the part of the able-bodied public assisting that people with disabilities are differently able and can achieve in many areas other than mobility, sport, vision, hearing, etc.

* This study illustrated the educational potential for those who have never had the experience and opportunity of an outing of this nature

* The visit to the game reserve also illustrated the opportunities for cross-disability and cross-cultural learning experiences

* It would provide support to those family members who have difficult lives and do not often have an opportunity to get out

The researcher believes that there would be much scope for churches, service groups, tour companies or the East Cape Tourism Board, to organise outings to these facilities on a regular or annual basis.

Community participation could also add to facilities at game reserves, hiking trails, bird hides, etc, thus sharing the load of overburdened facilities trying to provide a good service.

What this means to a social worker is that he or she could make various groups,
organisations and facilities aware of this potential. The researcher believes that being part of the natural environment, either alone or in a group, has tremendous therapeutic potential, particularly in the early days of adjusting to a disability.

8.2.2 The study of a game reserve

The South African Bureau of Standard's Code of Practice (SABS 0246:1993) was particularly helpful in assessing facilities at the game reserve. Satour's National Accessibility Scheme provided some assistance but was too detailed and "sophisticated" for a facility in the natural environment. The researcher is of the opinion that, until Satour have completed their National Accessibility Scheme for the natural environment, a standard check list is helpful, similar to the one used for this study (See Appendix Two) as adapted from that used by Greeff (1997: 1 - 3).

It was interesting to note that two facilities studied had received complaints by able-bodied guests that they did not like using the large roll-in shower. This illustrates the importance of inclusive facilities, acceptable and suitable for people with disabilities and the able-bodied public.

The most crucial aspects in the study related to showers and toilets. Without
a general accessible toilet, people in wheelchairs would not be able to visit Double Drift Game Reserve for a day outing. Other important areas included suitable table heights, lighting, interpreters, picnic sites, view sites, etc. Staff training was felt to be important. It would allow staff to be sensitive to the needs of people with disabilities, thus enabling them to be effective in their day to day dealings with people with disabilities and to know what to do in the case of an emergency. Social workers and others, including people with disabilities, could make owners of facilities aware of this need and provide the training service.

Another aspect believed to be particularly important was that of written information on the facilities in terms of accessibility. This would not only assist the hearing impaired who were unable to make telephone calls but would allow all people with disabilities to make an informed decision about the use of the facilities. This should preferably be in a Guide Book but could also take the form of a brochure.

The researcher is of the opinion that a brief letter regarding important access issues should be sent to known facilities in the natural environment by the East London Access Committee. This would prompt the owners of facilities to include accessibility in any future plans.
The exercise of working together as a team was a learning experience for the researcher and the participants. All the participants were happy to share their particular experiences of the facilities and provided good practical advice. However, as any team member will vouch, teamwork requires time, discipline, co-ordination and practise. Lessons were learnt and future studies of this nature would allow for shared responsibility.

It was not known whether Double Drift Game Reserve would, in fact, make any of the changes recommended.

### 8.2.3 A Hiking Trail

The small sample of visually impaired people concurred with international research on hiking trails as listed in the Eco-Access Information Sheet (Undated: 1 - 19). Although some of the respondents would enjoy the freedom of walking on their own on a specially adapted trail with guide ropes, tapping rails, etc, they realised that it would be difficult and expensive to create and maintain.

Those who were mobility impaired viewed aspects such as the correct camber and gradient as very important. While the Eco-Access Informations Sheet
(Undated: 1 - 9) providing guidelines for a hiking trail, was believed by the researcher to be ideal, she also viewed it as essential that the visually impaired and the mobility impaired should be present for any further discussions about the trail.

The respondents believed that, in accommodating their particular needs, there should be as little damage as possible to the environment. The researcher is of the opinion that, if a choice had to be made between the two possible trails, the Department of Nature Conservation should study which one would be best suited to the general population so as to make it inclusive. Beechel (1975: 21) wrote that "most trails that are not close to urban centres reported disappointingly low use by handicapped persons." Both trails in this study are close to an urban environment and would thus be suitable.

8.2.4 Awakening, Partnership and Consultancy

Two respondents thanked the researcher for taking up these issues on their behalf, one reported on her enjoyment of a "challenging interview" and yet another believed it had forced him to look at important issues which he had previously not given much thought to. For this reason, the researcher is of the opinion that this study in partnership with people with disabilities made many of them aware, for the first time
since becoming disabled, of their ability to play an active role in issues of access. One way of determining the long-term effects of this observation would be to monitor how many of the respondents and participants continue with the many facets of access work. Not only could many of them be regarded as specialists in their field whose expertise could be drawn on but they could also play lobbying and advocacy roles, fighting a cause on behalf of themselves and many other people with disabilities. Many years ago, Alinsky (1971: 189) wrote that "the most unethical of all means is non-use of any means." People with disabilities have taken the lead in initiating NEAP in 1993 and in challenging legislation pertaining to people with disabilities. This should be brought to the attention of local people with disabilities who are not already involved in this work, thus serving as a challenge to them to realise that they do have a responsibility to themselves and others and that they can make a difference.

To be effective, they would require a thorough knowledge of the National Building Regulations pertaining to people with disabilities. The recommendation therefore, would be to arrange for the training of selected people with disabilities in these regulations. This would enable them to become monitors, consultants and trainers about certain disability issues.
By achieving this, the load of the social worker in the field would be lightened. Her role can be seen as slowly changing from the present, where she is responsible for all the above mentioned duties, to what is referred to in the American Wilderness Inquiry, Inc. (1992: 36) as a "clearinghouse", allocating certain duties to team members according to the problem and the expertise of the team, thus allowing for capacity building.

It became obvious that not enough guidance was available to those wanting to make premises accessible. This specialised information should be readily available and the central person would need to be available and approachable, providing on the spot guidance, encouragement and referral. This should be provided within the framework of the post, whether employed by NGOs or NEAP. This person, together with people with disabilities, would be seen as supplementing the knowledge and capacity of the architect, to form a team.

Although it may appear to be contradictory to the spirit of support of those facilities, this consultancy, if it is to take place at all, needs to be market-related. This is born out of necessity due to the financial constraints of the NGOs undertaking this work at present.
Another recommendation would be for Thompson's draft "Accessible Tourism Guide" (1997b: 1 - 64) to be formally adopted, published and be made readily available by advertising it in architectural magazines and through the NEAP hierarchy.

8.2.5 **Publicity**

Accessible facilities need to be publicised. This would result in better usage of accessible facilities, thus preventing the owners of facilities like Chandlers (Chapter Seven) from becoming demoralised due to lack of patronage by people with disabilities. Publicity would also provide incentives for other facilities to become accessible. Filmer & Filmer (1996a: 8) believe that the process should begin with the establishment of an awareness of disability and of the needs of people with various impairments as well as the benefits to the service provider of barrier-free design and thinking.

8.3 **FUTURE RESEARCH**

This study can be seen as a pilot study. It is hoped that it will provide the basis of ongoing research in a team context. It is, however, an expensive study; although discounts were promised by the Eastern Cape Tourism Board for the stay at their
game reserve, these discounts were never forthcoming. As two of the participants lived on very limited incomes, this cost aspect will have to be clarified before any future work can be undertaken.

8.4 CONCLUSION

Jagoe (1995: 3), the Director of the Disability Unit at the University of Cape Town, writes that by "enabling people to participate equally, we feel that our policy serves to take the focus off the individual, and aims it at the institution, where it belongs". In the same way, it is hoped that in the not too distant future, the general public will see the removal of environmental barriers as their responsibility.
### APPENDIX 1

**INTERVIEW SCHEDULE ON FACILITIES IN THE NATURAL ENVIRONMENT FOR PEOPLE WITH DISABILITIES**

Please tick the answer applicable where options are provided.

**SECTION A: IDENTIFYING INFORMATION**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male □</td>
<td>Female □</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Marital status:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Age category: 11 - 20 □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21 - 30 □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31 - 40 □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>41 - 50 □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>51 - 60 □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>61 - 70 □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>71 - 80 □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>What is the nature of your disability?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>How does it affect you? (in a wheelchair, walk with crutches, peripheral vision only, partial hearing, no hearing, etc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION B: GENERAL**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Did you ever visit a Game Park prior to becoming disabled?</td>
<td>□</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES □ NO □ BORN DISABLED □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Have you ever visited a Game Park since becoming disabled?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES □ NO □ BORN DISABLED □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>If the answer to 2 was No, what are the reasons? (Tick all that apply)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>They are not accessible</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>I do not know whether they are accessible</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>The Game Park staff are unable to tell me whether they are accessible</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4</td>
<td>I am worried about how I will manage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5</td>
<td>I feel that there is no point as I can no longer see/well</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Because of my hearing problem, I cannot telephone to make a reservation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.7</td>
<td>I feel that there is no point as I can no longer hear/well</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.8 I am not interested
3.9 I cannot afford to go to a Game Reserve
3.10 I have no transport to get there
3.11 Other

4.1 If the answer to question 2 was Yes, did you encounter any problems relating to your disability? YES ☐ NO ☐
4.2 If Yes, what were they? _______________________________________________________________

5. Would you Prefer to go to a Game Reserve:
5.1 On an organised excursion with people who understand your disability and cater for it? ☐
5.2 With family or friends ☐
5.3 Other ☐

6. Did you visit a Hiking Trail prior to becoming disabled? YES ☐ NO ☐ BORN DISABLED ☐

7. Have you attempted a Hiking Trail since becoming disabled? YES ☐ NO ☐ BORN DISABLED ☐

8. If the answer to 7 was No, what are the reasons? (Tick all that apply)
8.1 They are not accessible ☐
8.2 I do not know whether they are accessible ☐
8.3 The Hiking Trail staff are unable to tell me whether they are accessible ☐
8.4 I am worried about how I will manage ☐
8.5 I feel that there is no point as I can no longer see/well ☐
8.6 Because of my hearing problem, I cannot telephone to make a reservation ☐
8.7 I feel that there is no point as I can no longer hear/well ☐
8.8 I am not interested ☐
8.9 I cannot afford to go to a Hiking Trail ☐
8.10 I have no transport to get there ☐
8.11 Other ☐

9. If the answer to question 7 was Yes, did you encounter any problems relating to your disability? YES ☐ NO ☐

10. What were they? _________________________________________________________________
11. Would you be interested in attempting a short Hiking Trail? YES □ NO □

12. Would you Prefer to go on a Hiking Trail:
12.1 On an organised excursion with people who understand your disability and cater for it □
12.2 With family or friends □
12.3 Other □

13. If there were a Game Park or Hiking Trail, which catered for your needs, would you have the means to get to them? YES □ NO □

14. On a rating scale where:
1 was unimportant
2 was slightly important
3 was relatively important
4 was very important and
5 was essential,
How important would you rate the following?:

14.1 The natural environment □
14.2 Staff knowledgeable about disability issues when telephonic reservations/enquiries were made □
14.3 Your own rondavel/chalet? □
14.4 Your own bathroom and toilet? □
14.5 Your own braai area? □

15. Other than Game Parks and Hiking Trails, what facilities in the natural environment do you already use?

16. Describe how easy/ difficult this use is?

17. What facilities in the natural environment do you want to use?

18. What are the reasons that you don’t use these facilities?
SECTION C: HEARING IMPAIRED PEOPLE

In a Game Park, and on a Hiking Trail, where:

1 was unimportant
2 was slightly important
3 was relatively important
4 was very important and
5 was essential, how would you rate the following?

1. Good lighting in bungalows, along pathways
   and public areas
2. An interpreter who can use sign language to
   point out birds, trees etc
3. An interpreter who knows how to deal with someone
   with a hearing problem when there is danger
4. Written information about the hiking trail or game park, etc
5. Knowledge by the organisers of the facility that you have a hearing
   problem in case of communication about an emergency

SECTION D: PHYSICALLY DISABLED PEOPLE

In a Game Park or Hiking Trail, how would you rate the following where:

1 was Unimportant
2 was Slightly Important
3 was Relatively Important
4 was Very Important and
5 was Essential

1. Written information on accessibility
2. A ramp with the correct gradient
3. A roll-in shower
4. Grab rails in the shower
5. Shower seat
6. A bath
7. Bath seat
8. Bathroom with grab rails
9. Basin the right height for a wheelchair user
10. Taps that are easy to use, ie lever type taps
11. Toilet slightly higher than normal for easy transfer from a wheelchair
12. Enough space for wheelchair in front of the toilet
13. Enough space for wheelchair on side of toilet
14. Correct ht. of bed for transfer from a wheelchair
15. Plug point for a ripple mattress
16. A suitable and stable mattress
17. Grab rails or money chain for transfer to the bed
18. Accessible kitchen area
19. Table correct height for a wheelchair to fit under
20. An adjustable braai for easy reach
21. Accessible picnic sites in the game park
22. Accessible Game Hides
23. A telephone within reach, ie from a wheelchair
24. A motorised wheelchair in the natural environment
25. Suitable camber of pathways for good balance
26. A hiking trail which was solid but not totally even?
27. A hiking trail with a gentle gradient
28. Do you believe any of these points would affect the rustic qualities of the natural environment? YES □ NO □
29. Do you believe that a motorised wheelchair would affect the tranquility of the surroundings? YES □ NO □
30. Are there any other points you rate as important? ________________________________

31. Any Comments? ________________________________

______________________________
SECTION E: VISUALLY IMPAIRED PEOPLE

In a Game Park or Hiking Trail, how would you rate the following where:
1 was Unimportant
2 was Slightly Important
3 was Relatively Important
4 was Very Important and
5 was Essential

1. Good lighting in bungalows, along pathways and public areas
2. Light switches in contrasting colours for better visibility
3. Notices and points of interest in Braille
4. Notices and points of interest in large print
5. Notices and points of interest on audio tape
6. Raised map of the area
7. Paths and steps with contrasting lines for better visibility
8. Training for the visually impaired person to know bird sounds and appreciate nature
9. Any other things you would rate as important?

10. International research has shown that erecting self-guiding mechanisms, e.g. tapping rails, guide ropes, hand rails, etc, purely for the use of visually impaired people is often not worth the cost, due to the expense of erecting them, damage from vandalism or weathering and the fact that visually impaired people cannot reach a trail independently and therefore always have a sighted guide with them. What are your views on the matter?

11. What do you see as essential on a short Hiking Trail suitable for people with visual impairment?

12. Any comments?
SECTION F: FURTHER INFORMATION

1. Do you believe that people with disabilities should automatically receive reduced rates at facilities in the natural environment, eg a Game Park?
   YES ☐  NO ☐

2. If the answer to 1 was NO, do you believe those with a limited income should receive reduced rates?
   YES ☐  NO ☐

3. Would you be interested in hearing more about accessible game parks as they are created or in notifying me if you hear about any?
   YES ☐  NO ☐

4. Would you be interested in hearing more about accessible hiking trails as they are created or in notifying me if you hear about any?
   YES ☐  NO ☐

5. If the answer to 2 or 3 is YES, please supply the following details:
   Name ____________________________________________
   Address __________________________________________
   Tel No ___________________________________________
   Fax No ___________________________________________

6. Any comments ______________________________________

THANK YOU SO MUCH FOR ASSISTING WITH THIS STUDY
APPENDIX 11

CHECK LIST

1. **PARKING:**
   Space: Distance: Surface:

2. **PATHS:**
   Width Surface Quality Camber Rails Protrusions
   a) 
   b) 

3. **APPROACH:**
   **Front:**
   Steps Contrast Ramp Gradient Rail
   **Back:**
   Steps Contrast Ramp Gradient Rail

4. **ENTRANCE:**
   Width Handles:

5. **LIVING QUARTERS:**
   Space Lighting
   Height of switches Contrast of light switch

6. **DINING AREA:**
   Space Space under table Movable Table
   Private Public

7. **KITCHEN:**
   Space for wheelchair Space under sink Type of taps
   Space under work surface Height of cupboards

8. **GENERAL:**
   Lighting Height of light switches Contrast
   Facilities for hearing impaired
   Plugs
9. **BEDROOM:**
- Space
- Type of mattress
- Height of bed
- Plug point
- Bed next to wall
- Space for grab rail or monkey chain
- Height of cupboard space
- Height of mirror
- Type of pillow
- Curtain closure

10. **BATHROOM:**
- **Shower:**
  - Roll-in
  - Lip
  - Grab rails
  - Shower seat
  - Height of rose
  - Type of taps
- **Bath:**
  - Shelf
  - Grab rails
  - Seat
  - Location of taps
  - Type of taps
- **Basin:**
  - Height
  - Taps
  - Type of taps
  - Space underneath for wheelchair
- **Toilet:**
  - Height
  - Flush type
  - Grab rails
  - Space side
  - Space front
  - Seat type
- **Mirror Height:**
- **Door:**
  - Inward opening
  - Outward opening
  - Close with wheelchair in

11. **STOEP:**
- Steps
- Ramp
- Contrast
12. **NOTICES:**
   - Large print
   - Braille
   - Audio tape

13. **EMERGENCY PROCEDURES:**
   - Flashing lights
   - Audio
   - Mastery key
   - List of disabled guests
   - Notices for doors

14. **BRAAI:**
   - Height
   - Access
   - Public
   - Lighting

15. **PUBLIC ABLUTIONS:**
   - **Shower:**
     - Roll-in
     - Lip
     - Grab rails
     - Shower seat
     - Height of rose
     - Type of taps
   - **Bath:**
     - Shelf
     - Grab rails
     - Seat
     - Location of taps
     - Type of taps
   - **Basin:**
     - Taps
     - Height
     - Type of taps
     - Space underneath for wheelchair
   - **Toilet:**
     - Height
     - Flush type
     - Grab rails
     - Space side
     - Space front
     - Seat type
   - **Mirror Height:**

16. **RECEPTION:**
   - Steps
   - Counter height
17. **MISCELLANEOUS:**

Glass doors marked
Telephone access from wheelchair
Access to other facilities, eg shop
Clear large signage
Non-slip surface
Accessible pool
Accessible view
Accessible picnic site
Accessible bird hide
Access to shade
Access to water
Accessibility of transport for game drives
Raised map of the area
Cost structure:
  a)
  b)
  c)
  Touch facilities
  Informative staff when making enquiries/reservations
  Written information on accessibility
Guide-Dogs allowed
APPENDIX III

SUMMARY OF DOUBLE DRIFT REPORT

This study has illustrated tremendous interest, by people with physical disabilities, in the natural environment and, in particular, in Double Drift Game Reserve. It is our belief that a number of people with disabilities from this area and elsewhere would be attracted to Double Drift if it were made accessible. At present, none of the facilities could be classed as accessible. The people with disabilities who assisted with this study had to be carefully chosen: they had to be severely enough disabled so as to speak with authority about their needs but sufficiently mobile as to make use of the facilities in their present form. The main points are as follows:

1. With alterations, mainly to the showers and toilets, Mbabala Lodge could be made totally accessible. To make the other accommodation accessible would be extremely difficult and probably not worth the effort. It would mean, however, that if a disabled couple visited Double Drift, they would have to stay in Mbabala Lodge which is a large house.

2. However, knowing about the beauty of the Fish River, it is unlikely that anyone with a disability would visit Double Drift Game Reserve if they were unable to reach the river with its very nice facilities and magnificent view. It would thus be advisable to make certain alterations to the braai/pool deck at Mvubu Lodge and Chalets so that people with disabilities staying at Mbabala Lodge or visiting for the day could make use of these facilities. The changes necessary would include a parking area close by, suitable solid paths with the correct gradient and a unisex accessible toilet.

3. A report had previously been received about the path to the Dining Area at Mvubu Chalets. It was steep and slippery, even in dry weather and posed a risk for elderly or disabled people. Lateral paths would make it easier to negotiate.

4. The picnic areas along the river near Double Drift Lodge are wonderful but there are no accessible toilets.

5. The facilities at reception require attention as none of them are accessible, making it difficult for disabled day visitors.

6. It cannot be overemphasised that any future developments should be planned with disabled people in mind.
REPORT ON ACCESSIBILITY OF DOUBLE DRIFT GAME RESERVE FOR PEOPLE WITH DISABILITIES.

Key:
* Positive aspects
# Problem areas
^ Recommendation

1. MBABALA LODGE.
1.1 Parking.
* At the back: suitable, close and spacious.

1.2 Entrance.
* From the back, there is a small ramp onto the stoep and a flat entrance into the kitchen door.
# Door handle round - very difficult for someone with a disability.
# From the front, there is a step up to the path and another into the house.

1.3 Living rooms.
* Passages and rooms are spacious with plenty of room for a wheelchair to manoeuvre.
* Dining room table suitable for most wheelchairs to fit under. There are a few comfortable chairs in the dining room as well.
# Light switches too high for a wheelchair user (1490 versus the recommended 1000 to 1100 to floor)
# To reach the lounge/TV room, there is one step down onto the stoep and one step from stoep into lounge. These should be ramped.

1.4 Bedrooms.
* All bedrooms are spacious with good stable mattresses.
* In most rooms, beds can be moved against walls which helps a quadriplegic move in bed.
# A grab rails against the wall, just above the bed would be a great help, possibly in one room.
# A plug point for a ripple mattress (used by a quadruplegic), electric toothbrush or charging of a wheelchair battery would be a help.

1.5. **Bathrooms.**

1.5.1 **General bathroom.**

![Diagram of general bathroom layout]

- Lip of shower is a problem, as is the level of the shower. A roll-in shower for wheelchair would be a great help.
- Grab rails and folding shower seat would be necessary
- Plastic toilet seat is a bit low and not very secure for transfer from a wheelchair. See on page 12 and 13 of SABS. We would not advise putting another toilet in but this could be kept in mind for future developments.
- Taps not easy for a disabled person. See 13.3 on page SABS.
- There would be more space for a wheelchair if the door was made to open outwards.
  - Basin suitable
  - Height of mirror suitable.
- It would be a help if the door opened outwards.

1.5.2 **En suite bathroom.**

![Diagram of en suite bathroom layout]
# Tiles in shower very slippery
# Lip of shower a problem - 200 mm as is the height of the shower.
# Taps difficult for a disabled person
# Towel rail of 1350 too high
* Free standing basin is suitable.

1.6  **Braai.**
* Suitable and close.

2. **MVUBU CHALETS.**

2.1  **Parking.**
* There is plenty of parking and the shade cloth provides much needed shade.
# However, the parking spaces under the shade cloth are too narrow for a wheelchair user.
  A parking bay for a disabled person needs to be 3.5 m wide to accommodate a wheelchair next to the car.
# The distance of the parking from the chalets poses a problem for certain people with disabilities.

2.2  **Paths.**
# The gravel paths are long and extremely difficult for a wheelchair user, person on crutches or elderly person slightly unsteady on their feet. They are also slightly narrow for a wheelchair is places.
# The railings are attractive but flimsy and while they do provide a guide to a low vision person, the group felt that they provided a false sense of security as they could not put any weight on them if they tripped.

2.3  **Entrance.**
# There are a few chalets with only one step into the chalets which could easily be ramped.
  See 7.4 on page 3 of SABS Code of Practice.
# There are 3 or 4 steps onto the deck from the side but entrance could be gained through the chalets.
# There is a threshold of 35 mm from the balcony into the chalet. Refer to point 11.3 of the Code of Practice.
* It was encouraging to note that there were white stripes on the wooden steps for better visibility for the low vision person.
2.4 The Bathroom.
* Bathroom door is 640 mm, too narrow for most wheelchairs.
* Not much space between shower wall and opposite wall (702) or to make a 90 degree turn to reach toilet in a wheelchair.
* Shower lip poses a serious problem for some.
* Width of shower door poses a problem if the person is being helped
* A shower seat and grab rails would help
* The door opens inwards which encroaches on wheelchair space
* Basin only slightly higher than recommended but has no space underneath for wheelchair
* Flush toilet action and taps are not easy for people with disabilities
  * Solid wooden toilet seat is good
  * Mirror height is suitable

2.5 Bedroom.
* Mattress type and height are good
* Would be difficult to place bed against wall as required for a quadriplegic, as would a grab rail of monkey chain which assist transfer and turning in the night.
* Possibly due to solar power, no plug points were seen for some of the necessities of a person with a disability, eg to plug in a ripple mattress, an electric toothbrush or battery for a motorised wheelchair
* Difficult for wheelchair user to open and close curtains
* Light switch (string) difficult for a low vision person to locate but this could be shown to them when they arrive and thus overcome. A bright orange ball on the end of the switch would help.

2.6 Kitchen.
Not suitable for a person in a wheelchair:
* Table tops too high
* Sink too high and wheelchair cannot get underneath it.
* Cannot reach the window from a wheelchair
* Sliding cupboard doors would be preferable, so as not to encroach on wheelchair space.
* Gas controls out of reach.

2.7 Balcony
* Access from chalet would be acceptable if back door was ramped
* Braai is slightly high - 1040
* Railings are good
* Table height (600 from floor to bottom of table) may be a bit low for some in wheelchairs but suitable for others
3. **MVUBU LODGE**

3.1 **Parking.**
* Suitable

3.2 **Paths.**
* Easier to negotiate than gravel but a bit narrow in places and previous reports have been received from elderly people of slippery and dangerous slopes to one chalet and to the dining area. A more gentle gradient would help as would a grab rail and a non-slip surface.

3.3 **Accommodation.**
* One step into rooms
* Round handles difficult for arthritics and quadriplegics, etc to use. See 11.5 on page 10 of SABS
* Door handle slightly high, ie 1370. See 11.5 on page 10 of SABS
* No Power plugs
* Would not be difficult to place a bed against a wall and make grab rails available

3.4 **Bathroom area.**

![Bathroom Diagram]

* Passage to toilet too narrow and does not allow a 90 degree turn to toilet
* Lever action toilet flush necessary
* Grab rails necessary
* Lip into shower difficult for some
* Grab rails and a folding shower seat would be necessary
* Taps slightly high, ie 1320. An telephone-type shower-spray unit with hose on a fixed pin would help
* Lever action taps necessary
* Height of soap dish slightly high, ie 1290
* Pedestal type basin difficult for a wheelchair user
3.5 **Dining area.**
- Basin slightly high, ie 860 as opposed to the recommended 820
- Path to dining area steep and dangerous, even for elderly person who was not "disabled"
- One step into dining area and one step out to deck
- Good space in dining area
- Space under the table a bit small for some, ie 640 from floor to table
- Table movable

3.6 **Pool and braai area.**
- Very difficult to reach along long uphill gravel path
- Magnificent once there and quite accessible!
- Shade
- Toilets not accessible.

4. **DOUBLE DRIFT LODGE.**

4.1 **Parking.**
- Suitable and close

4.2 **Approach.**
- Rear approach, usually used, has one step. Easy to ramp.
- Front approach has 6+ steps.

4.3 **Entrance.**
- Door 730
- Door handles are round.

4.4 **Dining room.**
- Movable table
- 790 from floor to table
- One step down to lounge

4.5 **Bedrooms in main building.**
- Enough space
- Mattresses not as stable as Mbabala Lodge
- Outside bunk bedrooms not accessible.
4.5 **Bathroom.**
# No space for wheelchair to access basin or bath

4.6 **Toilet.**
# Step down to toilet area and 2 bedrooms
# Door won't close with wheelchair inside. Toilet could be moved to the right but see summary recommendations.

4.8 **Braai.**
# One step down from stoep.
* Close

5. **RECEPTION AREA.**
# One step up to reception
# Reception desk slightly high
* Good paths
# One step up to toilets, shop and environmental centre
# Toilet doors won't close with wheelchair inside
# Bathroom door won't close with wheelchair inside
# Telephone being installed is too high for a wheelchair user and path a bit rough
^ Plan any new developments with access in mind.

6. **PICNIC SITE ON FISH RIVER BEYOND DOUBLE DRIFT.**
* A few of the tables are accessible
# Toilet not accessible
APPENDIX IV
27 Lower Ridge Road
Bonnie Doon
5241
15 November 1997

Dear

RESEARCH ON ACCESSIBILITY IN THE NATURAL ENVIRONMENT

I would like to thank you very much for helping me with my study on accessibility. Your contributions were a great help and I did appreciate them.

After studying your views and those of the others I spoke to, a group of us visited Double Drift Game Reserve to study its accessibility. We believe it is a wonderful place which is not generally known in the area. We stayed in Mbabala Lodge, an old farm house, which sleeps 10 and is very comfortable. With not too many changes, it could be made completely accessible for people with physical disabilities, the only urgent changes being to the shower and grab rails in the toilet. Unfortunately, the smaller units overlooking the beautiful Fish River would be very difficult to make accessible. As it is unlikely that anyone would want to go to Double Drift without seeing the lovely view, we have recommended that the pool deck and braai area overlooking the river be made accessible so that people staying at the farmhouse could still enjoy the view. There is no accessible toilet there, at the nice picnic spot on the banks of the river or at the reception area. We have made recommendations but cannot guarantee what response we will have.

Three of also visited Umtiza Forest and the Amalinda Fish Station. The Chief Nature Conservator is very interested in the construction of a short accessible hike in the Umtiza Forest. It was stressed that any facility should be needed and used by the general population and not only by people with disabilities. For this reason, he believed that a trail of this nature could also be used for education purposes and for older people. The Amalinda Fish Station will be undergoing changes in the new year. The Chief Nature Conservator has promised to include access in their plans. He will also consider a trail through this lovely reserve which has zebra, eland, springbok and a few other animals. It is on our doorstep and a visit to it makes a good outing. I did not take anyone in a wheelchair to these two venues as they are totally inaccessible at present. I will contact one or two wheelchair users for advice on the composition of the trail if they do decide to proceed with these ideas.

I close by wishing you a really Happy Christmas and a good 1998. With best wishes,
BIBLIOGRAPHY


7. CHAIRMAN INDUSTRIES. Undated. Grab rails.


29. FILMER R & FILMER J. 1996a. *Creating a culture of ecotourism that includes people with disabilities*.


32. FILMER R & FILMER J. Undated. *c*. The environment - one for all and all for one.


48. IMFAMA. August 1996.


53. LANGMORE G. Undated. Sales brochure - bush wheelchair.


56. NATIONAL COUNCIL FOR THE CARE OF CRIPPLES. Undated. *Can they go where you go?*


<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Details</th>
</tr>
</thead>
</table>


80. SOUTH AFRICA.
MINISTER IN THE OFFICE
Pretoria: Government Printer.

SA.

82. THE COUNCIL OF THE
SOUTH AFRICAN BUREAU
persons. The Council of the South African Bureau of
Standards.

83. THE COUNCIL OF THE
SOUTH AFRICAN BUREAU
Accessibility of buildings to disabled persons. The
Council of the South African Bureau of Standards.

84. THE ROTORACT CLUB OF
DURBAN. Wheeling around Durban. 1996. Durban: Wasserfall
Every.

Print.


