Ecotourism – Sustainable Tourism in National Parks and Protected Areas

Banff National Park in Canada and Nationalpark Gesäuse in Austria – a Comparison
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LIST OF ABBREVIATIONS

AT  Alternative Tourism
CBD  Convention on Biological Diversity
CNPA  Canada National Parks Act
CPAWS  Canadian Parks and Wilderness Society
GCET  Global Code of Ethics for Tourism
GDP  Gross Domestic Product
IUCN  World Conservation Union; International Union for the Conservation of
       Nature and Natural Resources
LDC  Less Developed Country
NGO  Non-Governmental Organization
NMCA  National Marine Conservation Area
OECD  Organization for Economic Co-operation and Development
TCH  Trans Canada Highway
TIES  The International Ecotourism Society
UN  United Nations
UNCED  United Nations Conference on Environment and Development
UNESCO  United Nations Educational, Scientific and Cultural Organization
WCED  World Commission on Environment and Development
WTO  World Tourism Organization
WWF  World Wildlife Fund
1 INTRODUCTION

In the year 2003 I got the chance to spend five months as an exchange student at the University of Calgary in Canada. The tourism programme at the University of Calgary significantly contributed to my personal interest in tourism worldwide and especially raised my awareness of environmentally conscious development. After my return to Vienna I started to raise the idea of this master’s thesis, which was intended to include my major fields of interest – tourism development and the protection of the natural environment.

Canada is very famous for its national park services and its outstanding natural beauty. After having visited some of Canada’s major hotspots of national park tourism, I began to ask myself if this system of national parks is comparable to any other system around the world. Triggered by my personal interest in one of Austria’s national parks, which is situated in my home area of Styria, I started considering a possible comparison of the Canadian and the Austrian national park systems. Immediately I was excited about my plan of comparing one of Canada’s oldest, biggest and best developed national parks to Austria’s youngest national park, which is considerably smaller in size and which definitely stands at the very beginning of its existence.

The result of a long period of planning, considering, researching and traveling to Canada is this master’s thesis. Its major part consists of an international comparison of national park management systems in Canada and Austria. Therefore special emphasis is given to Banff National Park in the Canadian province of Alberta, and Nationalpark Gesäuse in the Austrian federal state of Styria.

Stephan Obenaus, September 2005
EXECUTIVE SUMMARY

The first section of this thesis will deal with overall definitions of tourism and modern trends in this highly fragmented industry. Tourism will be broken down into mass tourism and alternative tourism. In order to indicate the connections between tourism and the growing awareness of depleting natural resources, the second section will be dedicated to sustainable development. Therefore, the buzzword of sustainability will be mentioned and its significance for sustainable development and for the tourism industry will be evaluated.

Resulting from that and as an integral part of the whole concept, attention will be paid to the modern movement of ecotourism. Ecotourism will be defined as an alternative to mass tourism development and its origin will be outlined. After certain characteristics of, and requirements for, ecotourism, a subsection will be devoted to relevant types of ecotourism. Therefore, it will be compared to mass tourism, alternative tourism and nature-based tourism. In order to find out who is taking part in ecotourism, the group of ecotourists will be investigated in the last part of this section.

With regard to the ecotourism movement, the perfect settings and surroundings for this considerable young movement will be introduced – national parks and protected areas. Especially the very important categorization system of the IUCN – The World Conservation Union – will be connected to the international appearance of protected areas. In order to indicate the correlations to the tourism industry, the major part of this section will be dedicated to tourism in parks and protected areas, its trends and its positive and negative impacts.

Considering the international comparison of national park systems, two sections of this thesis are intended to introduce the Canadian national park system and the Austrian national park system. Starting with the Canadian system, its historical development, the organization of Parks Canada Agency and some interesting facts about the current development will be of high relevance. For the introduction of the international comparison, it is necessary to introduce the Austrian national park system in general. Simultaneously, the sections concerning the
Austrian system will reach from the historical development and some economic facts to the tourism development in Austria’s national parks.

In order to conclude the international comparison into further details, two specific examples of national parks in Canada and Austria will be introduced. Especially in the view of management policies, tourism development and ecological challenges the two parks will be compared and differences and similarities will be discussed. The size, the age and the significantly differing conditions for tourism development will be evaluated as the major differentiations between the two systems.

In accordance with the comparison of national park systems, in the last section a final step will be taken in order to link tourism development with sustainable development in terms of ecotourism. The concept of the highly sustainable ecolodges, as an alternative means of accommodation, will be introduced. According to the example of Canadian ecotourism development, a case study of a Canadian ecolodge will be outlined and described. The last subsection of this thesis will be used to evaluate the feasibility of the ecolodge system for Austrian tourism development with special regard to national park tourism in Austria.
2 TOURISM

In this first section of this thesis, I will provide overall definitions of the term tourism and will provide a short breakdown of how it has evolved. Furthermore, I will focus on certain trends in the tourism industry with specific focus on the growth of mass tourism development. In contrast to mass tourism, I will draw attention to the growing environmental consciousness in tourism, which nowadays tends to have strong impacts on the entire industry.

2.1 DEFINITION AND EVOLUTION OF TOURISM

For people of the Western Countries, the term tourism is generally associated with traveling for the pleasure of traveling. Tourism is modern, tourism is active and tourism is international. Encouraged by proceeding globalization, tourism is on its way to becoming one of the strongest driving forces in the global economy. With recent developments in telecommunications and transportation, tourism worldwide will continue to act as a significant force in the global economy. Future global trends seem to support tourism development rather than to impede it.

Although the booming tendency of global tourism development is young and represents a modern trend, the evolution of the term tourism is comparatively old. Estimating the real age of tourism is quite difficult, as the emergence of movements for tourist purposes and first declarations of the term tourism do not coincide. Although the origins of tourism movement go back to the age of the Ancient Greeks (c. 484-425 BC) the first appearance of the word tourism in well-known dictionaries dates around 1800. During the middle ages, the most obvious reasons for traveling arose. At that time, people traveled mainly for religious purposes and crossed whole continents in order to visit sanctified places or holy shrines (Ceballos-Lascuráin 1996: 1-2).
While religious traveling was made by different classes of populations, traveling during the eighteenth and nineteenth centuries was reserved for rich European aristocrats. At that time, middle class citizens simply could not afford to travel for pleasure and tourism remained non-accessible for the masses until the Industrial Revolution. Due to widespread social and technological developments, tourism and travel was extended to a new middle class who now could afford to travel for pleasure, which triggered the well-known tourism development (Ceballos-Lascuráin 1996: 1-2).

What differentiates modern society from that of the nineteenth century is not only the tremendous technological and political change caused by the Industrial Revolution. Political changes are strongly manifested in social and cultural transformations which reflect changes in human priorities and which actively affect wishes to live. Therefore it can be concluded that tourism as a modern phenomenon is more affected by these changes than by any other sector (Butler and Pears 1995: 1).

2.2 TRENDS IN TOURISM

Nowadays, in the twenty-first century, the globalization of the world and the interconnection of world economies do not impede tourism development. In fact, the opposite is true. Globalization is the driving force for modern tourism development and causes strong growth rates within this industry. World Tourism Organization (WTO) forecasts tourism development up to the first twenty years of the new millennium. Figure 1 shows increasing tourism arrivals and its growing importance between 1950 and 2020:
A demonstration for the global dimension of tourism is the existence of an organization which is concerned with major tourism matters worldwide. The WTO is the leading international organization in the field of tourism and serves as a global forum for tourism policy issues and practical source of tourism knowledge. Influenced by international orientation, one of the WTO’s goals is the transfer of technologies and the establishment of international co-operations in the tourism industry. In order to maximize the positive effects of tourism, the WTO is a precursor in encouraging the Global Code of Ethics for tourism.¹

It is understandable that the appearance of international tourism, which is positively affected by the well organized framework of the WTO, turns out to raise the importance of tourism as well as general interest worldwide. Especially since the end of World War II, mainly due to the development of civil aviation, international tourism has risen steadily to become one of the most important global industries. Currently tourism produces 4.4% of the world’s gross domestic product (GDP) and employs 200 million people globally.

¹ http://www.world-tourism.org/aboutwto/eng/menu.html (date of retrieval: 10 July 2005)
2.2.1 **Growth of Mass Tourism**

With regard to the development of tourism throughout the last few centuries, altering conditions have led to substantial changes in the structure of the industry. As already mentioned, the Industrial Revolution had an immense influence on the accessibility of the world. The development of the worldwide railway system, the invention of the privately owned motorized car and the rise of civil aviation had a tremendous impact on globalization and changed the way people live.

A much more recent phenomenon with more immediate effects on the emergence of mass tourism is the growing importance of leisure time in modern Western life. Mostly among First World countries it can be observed that an extensive desire to move has caused a change in the balance of work and leisure. Following the economic system of supply and demand, tourism facilities have spread simultaneously, especially since the 1960s. Over the last forty years it has been proven that the convenience of taking a holiday relates directly to the willingness to spend money on it. Therefore, the emergence of package holidays with increasing opportunities for a large number of people has had dramatic effects on the rise of mass tourism (Mowforth and Munt 1998: 82-90).

Thus, the rapid growth of mass tourism is not the result of a single influence or conditional changes isolated from each other. It is the combination of changing conditions and emerging opportunities. The increased inherent demand of leisure time and worldwide traveling coupled with new opportunities to reach remote areas around the world have resulted in tourism for the masses, which is now the most powerful service industry in the world.

2.2.2 **Contemporary and Alternative Tourism**

Resulting from the intensive mass tourism development that we have realized over the last few centuries, negative impacts have come to light. In modern tourism terminology, massive tourism development can be identified as a beast which has rather predatory characteristics than high qualities for natural resources. Contributing to its controversial character, mass tourism is stamped with a non-local orientation,
whereby money does not stay within the region and does not generate income in this particular region.

“It is quite often the hotel or mega-resort that is the symbol of mass tourism’s domination of a region, which are often created using non-local products, have little requirement for local food products, and are owned by metropolitan interests” (Fennel 2003: 4).

A huge variety of problems caused by mass tourism has become increasingly evident over recent years. Ahead of all negative effects there is environmental, social and cultural degradation, followed by unequal distribution of financial benefits which all have raised public awareness.

Water pollution in the Mediterranean Sea, deforestation and soil erosion in the Himalayas or littering upon Nepalese mountain tracks are some current examples of environmental problems which have become matters of global concern. In order to address these problems, the call for the development of alternative forms of tourism seems to be louder now than ever before (Mowforth and Munt 1998: 90-92).

Referring to contemporary and alternative tourism alike, the need for different types of tourism has emerged over the last few decades. Alternative tourism seems to be a highly contemporary form of tourism. Different types of alternative tourism provide countries the opportunity of reducing influences from outside. It is the decision-making power that has to be won back from multinational tourism institutions and foreign companies.

2.3 GROWING ENVIRONMENTAL CONSCIOUSNESS IN TOURISM

Although tourism is a very fast growing industry, there are still many developers who consider tourism to be a relatively non-polluting industry. In terms of resource consumption, tourism is one of the leading malefactors and definitely has a considerable impact upon our environment. Specifically extreme forms of mass tourism which tend to be concentrated within certain areas exert harmful impacts in a very damaging way. No doubt Austria’s well-known and popular winter tourism facilities with its hotel complexes and spread slope systems are good examples of
the harmful side of tourism and have to be considered guilty of the alarming condition of some Austrian mountain areas.2

*Environmental deterioration* is a term that has recently caused growing awareness of the negative effects of tourism. Coltman (1989: 236) argues “when the number or intensity of tourists that exceeds an area’s physical ability to cope with them, there is bound to be deterioration in basic natural resources such as land and water”.

In addition to the natural resources of water and soil, environmental attention also has to be paid to air pollution. The advent of modern mass tourism has been strongly supported by the development of international traffic and it is this huge variety of transportation vehicles that plays a dramatic role in worldwide pollution.

Modern society has reached a high status of amenities through modern means of transportation, which nobody would easily give up just because of environmental degradation. It should be clarified that environmental consciousness cannot be implemented by restricting modern amenity usage, but has to become engrained in the mind of the modern society. Therefore environmental consciousness is meant to be encouraged by modern society as a modern and desirable lifestyle choice.

Especially in tourism the rise of environmentalism can be observed during the last few decades. In the view of the expanding environmental idea that continues to spread over almost all modern industries, I would like to draw attention to two frequently used terms: *Sustainability* and *Sustainable Development*.

### 3 SUSTAINABLE DEVELOPMENT

A major step towards the core part of this thesis will be the topic of sustainable development. With the concept of sustainability as a key element, sustainable development is not only used in the field of tourism. For this work sustainable

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2 Winter tourism and the environment: “During the winter months there appears to be little environmental damage, as the ground is covered with snow. But to create ski runs, trees may have had to be cut down, and under the ski runs there can be substantial vegetation damage and soil erosion where the runs have been packed down. This deterioration becomes visible only during the summer months” (Coltman 1989: 244).
development will be especially incorporated in the field of tourism development and therefore the role of sustainable tourism development will be discussed.

3.1 SUSTAINABLE DEVELOPMENT – DEVELOPMENT FOR FUTURE GENERATIONS

First of all it has to be stated that sustainable development is generally not restricted to tourism. Development for future generations exists in almost every industry worldwide due to the rising need for environmentalism throughout the global economy. Since some organizations such as the World Commission on Environment and Development (WCED) have made sustainable development their core mission, it has reached a high level of attention and can be defined as follows:

“Management of resources in such a way that we can fulfill our economic, social, cultural, and aesthetic needs while maintaining the essential ecological processes, biological diversity, and naturally occurring life support systems” (Wight 2002: 222).

Tourism, with its underlying characteristics, fits perfectly into the idea of sustainable development. Tourism is very active, and as an industry it heavily depends on the maintenance of healthy environment. The concept of sustainable development therefore is very essential to tourism because it treats the over-use of resource bases, raises awareness for environmental management, and focuses on the need for change in all areas where tourism planning is concerned (Butler and Boyd 2000: 161).

3.2 SUSTAINABILITY AS A KEY ELEMENT

As sustainable development implies, sustainability is of major concern for modern development. Although the fast-growing mass tourism movement during the second half of the twentieth century reaffirmed environmental thinking to some extent, the system of sustainability emerged uncoupled from tourism. Generally being the basic idea of sustainable development, it is obvious that sustainability itself is strongly related to tourism development. Sustainability emerged in the 1980s generalized and related to the modern thinking of environmentalists, who protested against the environmental destruction caused by rapid growth.
Sustainability was an integrative constituent of the Brundtland Report which was composed by the WCED in 1987. According to this report, the world’s most critical environmental problems were examined and it was concluded that “only through the sustainable use of environmental resources will long-term economic growth be achieved” (Fennel and Dowling 2003: 3).

Based on the report by the Brundtland Commission and the WCED in the year 1987, the topic of sustainability was presented to the public and identified as the World Conservation Strategy. Its heavy bearing on the tourism industry was only one part of the whole concept presented. Sustainability was meant to be a goal for the whole society including tourism as a highly relevant industry.

3.3 SUSTAINABILITY IN TOURISM

Tourism in its original form used to be very wasteful in terms of natural resource base. Highly developed mass tourism centres with incisive hotel complexes, increased worldwide transportation and traffic facilities, and the reckless littering behaviour of tourists are only a few examples that have caused the need for change in the tourism industry.

Every single facility that is extensively used for tourist purposes will be faced with big problems of natural recovery in the near future. A good example of depleting resources is the vast amount of ski hill infrastructure throughout the Alps. As one of the countries which operate a large number of winter tourism facilities, Austria can be proud of having such a strong economic motor inside its boundaries. It is not reprehensible to argue that for Austria’s economy, winter tourism in all its dramatic peculiarities is the most important industry and gets promoted accordingly.

In countries like Austria, where tourism has such a high economic significance, but at the same time depends heavily on natural resources like mountains and lakes, the time has come to rethink the system. Unlimited tourism development will soon hit a snag as natural resources are exploited and ecosystems are destroyed.
Environmentalists and “tourism prophets” seem to have the only feasible answer: tourism development and the concept of sustainability have to be synchronized. The needs of the present tourist and host regions have to be concerned with environmental, social and economic values for the future generations. It is not enough to identify responsible thinking for future generations, but also ecological and social responsibility needs to be encouraged and enhanced steadily (Fennel and Dowling 2003: 5).

3.4 SUSTAINABLE TOURISM AND ITS ROLE IN SUSTAINABLE DEVELOPMENT

There is a whole system of phrases and expressions that create environmental consciousness among tourism planners and operators. In order to avoid confusion, it can be seen as a process that spreads along the whole field of tourism development and has been elaborated through the last few decades. At the beginning, there was the idea of sustainability and sustainable development. After the whole concept of environmentally sustainable thinking had emerged in the minds of tourism planners, it was discovered that it would perfectly match the need for changes in tourism.

According to the emergence of sustainable tourism development it is proven that the milestone for its emergence was the Brundtland Report by the WCED in the year 1987. Previously, many ideas in this field had been developed at the IUCN – The World Conservation Union and referenced in the World Conservation Strategy published in 1980 (Ritchie and Crouch 2003: 33).

While examining the principles of sustainability in tourism, manifold works of different authors show dissenting assumptions and ramifications. No doubt sustainability in tourism has to follow certain principles and criteria, but definitions differ from author to author. Mowforth and Munt (1998), for example, argue that sustainability in tourism can be broken down into ecological, social, cultural and economic sustainability. In this thesis, I would like to draw most attention to ecological sustainability, as this concept is of major concern for the topic of this paper. Concerning ecological sustainability in particular, Mowforth and Munt (1998:
89) point out that “the need to avoid or minimize the environmental impact of tourist activities is clear”, and furthermore that “the calculation of carrying capacities is an important method of assessing environmental impact and sustainability”.

In terms of different views of different authors, opinions often show big gaps and some authors elaborate on that more than others. For example, Ritchie and Crouch (2003) operate on a more detailed basis and spread their thought a bit further. In one of their works, they claim the following:

“From a destination management standpoint, it is important to appreciate that sustainable tourism does not attempt simply to control development, but that it also seeks to encourage the development and promotion of appropriate forms of tourism” (Ritchie and Crouch 2003: 34).

The emergence and promotion of alternative tourism, i.e., appropriate forms of tourism, is the only way of implementing environmental consciousness in the minds of the people. Promoters and marketers will be concerned with the creation of demand for sustainable forms of tourism, competing exploitive mass tourism development.

There is a lot to be done as convenient and promising offers in mass tourism have never before been more popular. No matter the environmental impacts, more hotel complexes are built, more beaches and ecosystems are occupied and more people are transported around the world for mass tourism purposes. The most difficult factor of this movement is that the economic value of mass tourism is growing significantly. Year by year, enormous amounts of money are spent by tourists around the world for holidays, and therefore create very favourable purchasing power situations in countries where this income generation would not be possible without mass tourism.

As a matter of fact, the need for a counter-development has never seemed more urgent than now; and this trend is still increasing. If environmental consciousness does not appear in the minds of the masses, it has to be raised. In order to promote a certain form of tourism that sets new trends in the market and implements a change of thinking in the minds of people, it has to show a linkage which will reach a well known status – ecotourism.
4  ECOTOURISM

The next section will be dedicated to the hotly debated topic of ecotourism. Apart from the origin and the main characteristics, it is very important to draw attention to requirements for an ecotourism business. In order to get specifically into detail about ecotourism, specific types of ecotourism will be examined and possible similarities will be evaluated. Nature-based tourism, adventure tourism and alternative tourism are special forms of ecotourism business and therefore will be discussed in more details. In order to find out what kinds of people are interested in ecotourism, the last section will deal with the group of ecotourists and their characteristics.

4.1  DEFINITION OF ECOTOURISM

The fact that ecotourism is viewed as a step beyond sustainable tourism and is basically less generalized can be shown by the definition of the term. Ecotourism is seen as a green alternative to other forms of tourism. The expression green alternative is self-explanatory; another possible definition of ecotourism is alternative or unconventional form of sustainable tourism. The system of ecotourism is therefore of huge importance for the promotion of sustainable tourism as it can be seen as an imprint indicating sustainable and environmental consciousness.

Nowadays, it is argued by many authors that the terms sustainable tourism and ecotourism are used frequently and interchangeably. Still it should be noted that both terms are not the same and that they have quite different meanings. Many authors have tried to differentiate the two terms over the last few decades. Here is one possible approach:

“Sustainable tourism is what which can continue without damaging the environment, as well as integrating the local community and involving them in the planning and implementation of tourist development. Ecotourism is a type of low density, low impact tourism, thus it can be considered as a form of sustainable tourism” (Nagle 1999: 127).

Originally, ecotourism was meant to take place in remote areas, which normally guaranteed a low population density. Ecotourism tries to raise environmental
consciousness by exploring ecology and ecosystems and by providing environmental type experiences. Taking part in ecology actively and getting first hand impressions of how ecosystems work influence peoples’ ways of thinking, which finally raises awareness of conservation and protection.

4.2 ORIGIN AND DIFFERENTIATION OF ECOTOURISM

It is not easy to identify the definite origin of a term that is discussed as heavily as ecotourism. No doubt it is a modern phenomenon which has grown in importance due to the destruction of natural sites and ecosystems as well as the increase in wealth and standard of living. The fact that its relevance has grown tremendously over the last few years does not mean that the roots of the expression are not much older. Referring to some well-known authors, the term ecotourism was first used in the mid-sixties. At that time, four principles of ecotourism were identified, which can be described as follows:

- “Minimizing environmental impacts
- Respecting host cultures
- Maximizing the benefits to local people
- Maximizing tourist satisfaction” (Weaver 2001: 5)

Especially in view of maximizing the benefits to local people, the emergence of ecotourism was fostered by the increased dissatisfaction caused by mass tourism. Dissatisfaction coupled with growing environmental concern has led to increased demand for nature-based experiences of an alternative nature. Accordingly, what was very important for the demand for ecotourism, less developed countries (LDCs) began to realize that ecotourism could be a means of earning foreign exchange on the one hand, and at the same time stands for a less destructive use of resources on the other (Weaver 2001: 5).

As a big number of popular natural sights are situated in LDCs, mass tourism has even reached more remote areas and has caused huge amounts of damage to them over the last few decades. In order to discourage mass tourism in LDCs, which has created immense natural destruction, ecotourism provides good opportunities for LDCs to concentrate on environmental conservation and the promotion of tourism respectively. The country of Costa Rica is a great example of an LDC which has
taken advantage of the ecotourism boom. It is an international trend that tourists turn to more exotic adventures offered by ecotourism. For an LDC like Costa Rica, ecotourism is a great opportunity in order to become more independent from farming, logging, mining, or industrial development. Therefore, Costa Rica leads the way towards sustainable development in terms of preserving natural resources for the incredibly growing industry of ecotourism. While many other LDCs are still focusing on rapid industrialization and urbanization, Costa Rica managed to bring in about 1 million visitors annually and to generate approximately $1 billion a year. In Costa Rica, this heavy growth of the ecotourism industry instead of industrialization significantly decreases ecological degradation and the exploitation of natural resources.\(^3\)

Ecotourism has to be related solely to expressions defining it; terms like “responsible” or “sustainable” originally express the intent of the concept of ecotourism, and therefore have to be the major concern for all ecotourist products. Again it has to be referred to the situation in LDCs, where reality often does not promote the basic ideas of ecotourism.

“Some nature based tourism products in developing countries are not considered ecotourism because they do not improve the welfare of local people. As an example, much of the money generated from wildlife safaris in east Africa does not directly benefit the tribal people who were displaced when the parks were created” (Patterson 2002: 2).

From this statement it seems to be obvious that not every tourism business that claims to be “eco” is necessarily ecotourist. In order to reach the maximum amount of conservation and protection, ecotourism has to follow certain rules and promote specific characteristics.

4.3 CHARACTERISTICS OF AND REQUIREMENTS FOR AN ECOTOURISM BUSINESS

There are no overall rules governing ecotourism, but many characteristics have been defined for its evaluation. Evaluation against general characteristics can

\(^3\) http://www.american.edu/projects/mandala/TED/costa-rica-tourism.htm#general (date of retrieval: 28 September 2005)
indicate if a business is to be considered an ecotourism business or simply a generic tourism enterprise.

According to Patterson (2002: 2), characteristics of an ecotourism business are that it:

- “Uses low impact and recreation techniques.
- Limits visitation to areas, either by limiting group size and/or by the number of groups taken to an area in a season.
- Supports the work of conservation groups preserving the natural area on which the experience is based.
- Orients customers on the region to be visited.
- Hires local people and buys supplies locally, where possible.
- Recognizes that nature is a central element to the tourist experience.
- Uses guides trained in interpretation of scientific or natural history.
- Ensures that wildlife is not harassed.
- Respects the privacy and culture of local people.”

Other authors have elaborated and discussed not only characteristics but have set out special requirements for ecotourism. The difference is that without meeting these requirements, a business cannot be defined as an ecotourism business. A list of possible requirements for ecotourism can be found in the work of Ceballos-Lascuráin (1996: 28):

- “It promotes positive environmental ethics and fosters ‘preferred’ behaviour in its participants.
- It does not degrade the resource.
- It concentrates on intrinsic rather than extrinsic values.
- It is oriented around the environment in question and not around man.
- It must benefit the wildlife and environment.
- It provides a first-hand encounter with the natural environment.
- It actively involves the local communities in the tourism process.
- Its level of gratification is measured in terms of education and/or appreciation.
- It involves considerable preparation and demands in-depth knowledge on the part of both leaders and participants.”

Apart from detailed lists of characteristics and requirements, it can rather easily be assumed that ecotourism is an alternative to mass tourism. Although this assumption has previously been noted, this is the most significant definition. It can be explained by the fact that the experiences gained from ecotourism differ significantly from those of mass tourism. The assumption that the “disillusionment with mass
tourism may have triggered the emergence of ecotourism” (Weaver 2001: 18) is prominent.

4.4 RELEVANT TYPES OF ECOTOURISM

The need for change in the tourism industry arose from exploited natural resources and environmental destruction. The need for the so called change of thinking or the altering attitudes of tourism planners was caused by the quickly worsening impacts of mass tourism development all over the world. Tremendous problems have been faced due to growing mass tourism demand and rocketing tourism infrastructure.

4.4.1 Mass Tourism and Alternative Tourism

Although forms of sustainable tourism and ecotourism were originally meant to be reactions to the impacts of mass tourism, modern tourism definitions and statements by popular authors regard ecotourism as one part of mass tourism and alternative tourism. More precisely, Weaver (2001: 25) argues:

“Ecotourism exists within the broader classification of tourism types which, at an initial level, can be divided into ‘mass tourism’ and ‘alternative tourism’. Mass tourism is seen as the more traditional form of tourism development where short-term, free-market principles dominate and the maximization of income is paramount.”

It seems to be obvious that alternative tourism emerged as a reaction to the negative consequences of mass tourism development. However this does not necessarily mean that alternative tourism is less harmful than mass tourism. The degree of sustainability which a certain form of tourism guarantees depends substantially on its orientation and policies. A definition of alternative tourism by Weaver contains certain expressions, which in my point of view reliably indicate what degree of sustainability can or should be reached. If alternative tourism strategies contain approaches towards appropriate-, eco-, responsible- or controlled-, the system can be considered as contributing to sustainable development.
4.4.2 Nature-Based Tourism versus Ecotourism

Due to the narrow meaning of these two terms, it can easily be assumed that nature-based tourism and ecotourism are equal. This is not essentially true as nature-based tourism, related to its impacts on ecosystems, is more harmful than ecotourism. Interchangeability can arise because both forms are meant to provide special experiences related to natural environments and wildlife populations.

Considering well-known definitions of both terms, it definitely can be pointed out that ecotourism is one part of nature-based tourism. All types of nature-based operations adopt a very broad concept and incorporate environmental awareness. Ecotourism as a very specific form is part of the broad concept of nature-based tourism, or it can be said that ecotourism describes a nature-based operation in the field of tourism. “The most obvious characteristic of Ecotourism is that it is nature based” (Weaver 2001: 7).

There is one definition of nature-based tourism which encounters a really important factor. Nature-based tourism is “primarily concerned with the direct enjoyment of some relatively undisturbed phenomenon of nature” (Weaver 2001: 7). The important factor herein is that nature-based tourist operations need undisturbed surroundings in order to provide experiences, but most often do not protect these natural surroundings properly. Flying up a mountain in a helicopter or driving through the jungle using heavy and noisy vehicles can provide nature-based experiences but definitely does not contribute to the protection of the ecosystems in question.

Nature-based tourism as a broad concept is rather oriented towards providing this experience no matter the impacts on natural environments it may cause. It is often the case that many more negative environmental impacts result from nature-based tourism and therefore it is considered to be human-oriented as opposed to nature-oriented. Ecotourism on the other hand, as one specific feature of nature-based tourism, “has been applauded by many as a suitable saviour for threatened wildlife populations” (Weaver 2001: 26). It is much more focused on saving ecosystems and wildlife rather than on providing experiences for visiting tourists.
Although both types are part of alternative tourism, the differences can be shown once again by using an illustrative example. Where there is an area with undisturbed living wildlife and an intact ecosystem, nature-based tourism would aim at bringing as many tourists as possible and providing them with the best experiences there. Ecotourism, if operated in the same area, would aim rather at bringing as few tourists as possible in order to guarantee the ability for wildlife to live in its undisturbed surroundings and keep the ecosystem as untouched as possible. According to this, it can be concluded that nature-based tourism is rather quantity-oriented while ecotourism is rather oriented towards quality and thus wants to protect this certain kind of quality.

4.4.3 Adventure Tourism versus Ecotourism

The distinction between adventure tourism and ecotourism can be controversial. Considering the background of these types, it appears that there are a lot of similarities. It is definitely the rural and outdoor-oriented lifestyle that triggers people to spend their leisure time away from their daily life and to become part of the nature. Therefore, outdoor recreation is one of the strongest factors of modern tourism development. It can be assumed that this trend supports the emergence and growth of ecotourism, which to a certain extent is true. But it has to be pointed out that outdoor-oriented, nature-based or adventure tourism is only economically viable if certain limits or boundaries are not exceeded.

Limits that define the sustainability of adventure- and ecotourism are at the same time the differentiating factors between the two terms. Adventure tourism is defined as:

“an outdoor leisure activity that takes place in an unusual, exotic, remote or wilderness destination, involves some form of unconventional means of transportation, and tends to be associated with low or high levels of activity” (Fennel 2003: 29).

According to this definition of adventure tourism and to that of ecotourism as previously stated, it seems that there are many overlapping concepts. An interesting approach of differentiating them is that ecotourism is more oriented towards passive nature observation while adventure tourism is characterized by participation in action. For a further designation of the term adventure tourism it is important to notice that
for an activity in adventure tourism there must always be an element of uncertainty for the participant.

As it is argued by Fennel (2003: 29), “it is risk that plays a primary role in the decision to engage in adventurous activity, and furthermore, it is the activity more than the setting that provides the dominant attraction for pursuit of adventure recreation and tourism”.

Adventure tourism uses nature to create adventurous surroundings which are necessary to provide thrilling snatches and exciting experiences. Ecotourism on the other hand focuses more on educational aspects of nature. People are supposed to merge with their environment and understand why nature is worth being protected. Ideally, it tends to create a learning environment with the desired outcome of raising environmental awareness for nature and ecosystems.

4.5 ECOTOURISTS

What characterizes an ecotourist? Due to the ambiguity of ecotourism there is no set definition, but rather a set of characteristics. The reasons for that can be considered in limited studies of the market, a weak understanding of definitions and simply the fact that ecotourist markets are not homogeneous. A huge variety of tourism products or experiences can be viewed as ecotourism-related, but on the other hand there is a huge variety of diverging activities, motivations and characteristics.

The results of a study executed by Tourism Australia show that ecotourists normally exhibit certain elements of understanding when going on vacation:
• “taking vacations in natural locations;
• understanding the term ecotourism;
• attitudes towards nature and nature-based tourism;
• reasons for choosing where to take a vacation, in particular the role of nature and learning about nature;
• the extent of planning for the vacation;
• nature-based activities conducted while on vacation” (Weaver 2001: 38).

The interesting outcome of the above survey is that nearly half the traveling public have strong interests in nature and see learning as one determining part of their travel intentions. Apart from the fact that ecotourism for most people shows strong links to learning affects and educational experiences, ecotourists generally are well-educated. That does not mean that ecotourists must have highly developed knowledge in nature conservation or environmental protection, but eighty four percent of them have an average of seventeen years of education and have obtained a college degree. Furthermore, the educational level is linked to salary and quality of life. People with higher incomes can make the choice to eat organic food, drive more fuel efficient cars, and travel to ecotourist destinations that may cost more.

Figures like these indicate the level of education, which is of high importance to ecotourism planners.

“This high level of education has several implications for developing your business. A higher level of education often generates a high level of income. This means you are dealing with a more sophisticated and informed audience” (Patterson 2002: 6).

Especially the educational level of potential ecotourists is of major interest to the development of ecotourism policies and marketing of ecotourism destinations. As the educational component is the strongest figurehead of ecotourism, and it is particularly the educational experience that is to attract tourists, ecotourist products have to be promoted extensively to educated target groups. Basically it can be stated that ecotourism attracts every age group among potential tourists. Nowadays some form of higher education is an attribute of nearly every age group and therefore an interest in ecotourism can be found in the tourists in their twenties up to those in their late sixties and early seventies. The only fact that really makes a difference is the distinction between nature-based ecotourism and adventure-based ecotourism.
Both types, nature-based and adventure-based tourism, are strongly related to the concept of ecotourism and in many respects they go hand in hand. The main difference is that different age groups are attracted to either nature-based or adventure-based ecotourism. This can be supported by a US study carried out to demonstrate this fact:

“Age may influence activity participation rates. In the USA, those under 24 years have a higher than average participation rate for physically demanding activities such as hiking, kayaking/white-water rafting, biking, rock-climbing and sailing” (Weaver 2001: 43).

On the other hand, it can be assumed that “where activities are less strenuous, ages are higher” (Patterson 2000:7). Although more passive ecotourism activities like bird watching for example, are not kept back for elderly people, age generally increases as activity levels decrease.

For the last few decades in tourism development, the long tradition of male dominance in tourism activities has been replaced by female dominance in ecotourism activities. The fact that nowadays woman predominate the scene of young, frequent ecotourists, definitely contributes to the modern role of woman.

“The reason for this increase in female participation is not clear, but could be related to woman’s increasing independence and incomes, the higher population of older woman, their growing majority in universities (and thus their higher education levels), and the desire to socialize with like-minded woman” (Weaver 2001: 43).

5 NATIONAL PARKS AND PROTECTED AREAS

Ecotourism as a sustainable form of modern tourism development is the right course for the future. In this section, protected areas, which are perfect settings for environmentally conscious actions, will be introduced. National parks which have increased in importance worldwide as perfect surroundings for the ideas of ecotourism will be emphasized as good examples for protected areas. Based on a sophisticated classification system of protected areas, IUCN – The World Conservation Union will be introduced. The major part of this section will be dedicated to tourism in protected areas. Attention will be paid to trends in sustainable tourism development in parks and protected areas, benefits of tourism in parks and
protected areas and possible negative impacts of tourism in parks and protected areas. Finally, the question will be raised what the real purpose of parks and protected areas is and why they are needed.

5.1 WHAT ARE PROTECTED AREAS?

Over the last few decades, during the most rapidly growing era of tourism, a lot of landscapes, sites and facilities have been dedicated to mass tourism. Countries which focused on mass tourism development have used natural sites and landscapes for their purpose and have caused dramatic changes in their environment and ecosystems. As a reaction to areas altered by mass tourism development, the new generation of responsible ecotourists has created areas for their kind of nature experience. Protected areas manage perfect surroundings for ecotourists and their interests in natural and responsible activities. Ceballos-Lascuráin, from the IUCN – The World Conservation Union (1996), defines protected areas as follows:

“Generally, a country’s prime areas of natural and cultural interest have been assigned protected area status at national and sometimes also international level. Therefore, much tourism, and particularly ecotourism, involves visits to protected areas” (Ceballos-Lascuráin 1996: 29).

According to their name, it could wrongly be assumed that protected areas are strictly dedicated to nature protection and do not permit any kind of human development. However, this is not true as protected areas create perfect settings for ecotourists and its nature-based ambitions contribute to the diversification of market niches in tourism. Along with the formation of protected areas, the tourism industry has responded to current trends by providing special niche market packages in the field of adventure and ecotourism.

“Protected areas are very attractive settings for the growing demand for outdoor, appreciative activities in natural environment. Challenges for protected area managers are to ensure that while visitors have opportunities to participate in desired activities, they are aware of and maintain the values” (Eagles, McCool and Haynes 2002: 21).

The creation of protected areas for the main purpose of maximizing natural conservation while simultaneously promoting it in order to attract tourists is a challenging business. The conservational purpose of protected areas is clear, but
revenues need to be raised as the business of nature conservation or environmental protection is an expensive one. Considering the principles of conservation policies, the ecotourism industry describes the perfect solution for raising revenues as values and attributes overlap in most instances.

As the “average protected area visitor” (Eagles, McCool and Haynes 2002: 21) does not exist, market segmentation is a common measure of promoting protected areas to the right target groups. Because not every protected area can withstand the same amount of human usage, market segmentation as a tool can be used in view of focusing the right number of visitors depending on the natural condition of protected areas. What is definitely meant by combining different factors to a system which decreases environmental destruction and simultaneously enhance tourism usage can be clarified by the following statement:

“Marketing exploits these visitor segments by comparing and matching them with the biophysical and cultural attributes of the park, and then sensitively promoting appropriate protected area attributes to the targeted segment. This reduces adverse impacts on the protected area, increases the economic benefits and makes it more likely that visitors are satisfied” (Eagles, McCool and Haynes 2002: 21).

There is one expression in the middle of this definition which has not yet appeared in this thesis, but will tremendously influence its further direction. Park or National Park, as it will be designated in the following, “traditionally has been the most common and well-known type of protected area” (Ceballos-Lascuráin 1996: 29), for a very long period of economically conscious thinking.

5.2 ORIGIN OF PARK SYSTEMS

In the late eighteenth and early nineteenth centuries, interest in cultural and natural features of natural environments arose. At this time, English travelers who were driven by the motivation of getting to know the continent from a cultural perspective, visited the alpine areas of Switzerland and were attracted by the romantic landscapes with high mountains. The Alps in Switzerland appeared to be the first real natural areas which attracted tourists for cultural and natural recreation. Hence, they could be considered the beginning of ecotourism destinations. It was basically at the same time that first approaches emerged to ensuring the integrity of
natural environments in order to maintain their attractiveness to tourists. This need for protection and the idea of maintenance for human usage was the driving force for converting natural areas into protected areas.

Apparently, the idea of national parks as protected areas was born on the European continent, but nevertheless the concept of national park service has its roots on the North American continent. Nowadays, it is a well known fact that Yellowstone National Park in the USA was the first real national park that was formed worldwide. Without getting into detail about the exact history of Yellowstone National Park, it has to be admitted that its first appearance in history can be dated in the year 1872. During the following fifty years, a whole range of American national parks were created which nowadays are well known, such as Yosemite, Grand Canyon, Crater Lake and some others.

Situated on the same continent, the Canadian national park system emerged more or less simultaneously. With the creation of its first national park in the year 1885, Canada started an era of protected areas which nowadays hardly can be compared to any equivalent. As the main part of this work will be dedicated to an international comparison of national park systems, the Canadian system and especially its oldest national park will be discussed into further detail in one of the next sections. In order to emphasize some fundamental structures about parks and protected areas, attention is drawn to an international system of classification which has tremendous significance for the international appearance of national parks.

5.3 IUCN – INTERNATIONAL CATEGORIZATION OF PARKS AND PROTECTED AREAS

The IUCN - The World Conservation Union was founded in 1948 and has turned into the world’s largest network for protection and conservation. Currently, the union consists of 82 member states, 111 government agencies, around 800 non-governmental organizations (NGOs) and more than 10,000 experts and scientists from 181 countries worldwide. With its headquarters in Gland, Switzerland, this multicultural and multilingual union follows the mission of assisting and encouraging
societies around the world in conserving the integrity of natural environments and of ensuring the ecologically sustainable use of natural resources.  

In view of the growing environmental concern followed by the creation of a countless number of protected areas, the IUCN has created a facilitating tool to balance the different conceptions of protected areas around the world. According to certain management objectives, the IUCN defined six management categories on the basis of which protected areas can be classified and diverge from each other. For each protected area, no matter on which continent it is situated, these categories provide the basic concept for incorporating conservation and protection policies into development (Ceballos-Lascuráin 1996: 32).

Altering degrees of values and priorities related to natural protection have led to the need for different organizational forms of protected areas. The categories for classification, which are specified in table 1, stand for a valuable measure in order to link suitable policies of natural protection with feasible organizational forms of protected areas.

<table>
<thead>
<tr>
<th>CATEGORY I</th>
<th>Strict Nature Reserve/Wilderness Area: protected area managed mainly for science or wilderness protection</th>
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<tbody>
<tr>
<td>CATEGORY Ia</td>
<td>Strict Nature Reserve: protected area managed mainly for science</td>
</tr>
<tr>
<td>Definition</td>
<td>Area of land/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.</td>
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<tr>
<td>CATEGORY Ib</td>
<td>Wilderness Area: protected area managed mainly for wilderness protection</td>
</tr>
<tr>
<td>Definition</td>
<td>Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition.</td>
</tr>
<tr>
<td>CATEGORY II</td>
<td>Natural Park: protected area managed mainly for ecosystem protection and recreation</td>
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</tbody>
</table>

**Definition**
Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purpose of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

<table>
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<tr>
<th>CATEGORY III</th>
<th>Definition</th>
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<tr>
<td>Natural monument: protected area managed mainly for conservation of specific natural features</td>
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**Definition**
Area containing one or more specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.

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<thead>
<tr>
<th>CATEGORY IV</th>
<th>Definition</th>
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<tr>
<td>Habitat/Species Management Area: protected area managed mainly for conservation through management intervention</td>
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<th>CATEGORY V</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Protected landscape/seascape: protected area managed mainly for landscape/seascape conservation and recreation</td>
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**Definition**
Area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced and area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

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<tr>
<th>CATEGORY VI</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems</td>
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</table>

**Definition**
Area containing predominantly unmodified natural systems, managed to ensure long term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.

(Source: Ceballos-Lascuráin 1996, quoted in IUCN 1994)

This outline of the classification categories by the IUCN is an exhaustive list and will not be investigated in the following chapters of this underlying thesis; however, it is supposed to deliver insight into the tools that have been incorporated to organize natural protection.
In view of the purpose and the title of this thesis, the following sections will elaborate on category II, the national park. The definition of category II will be of major significance for the following chapters. A national park, related to the definition of the IUCN, seems to combine attempts towards ecological integrity and the placement of recreational experiences in one joined concept.

5.4 TRENDS TOWARDS SUSTAINABLE TOURISM IN PARKS AND PROTECTED AREAS

The modern world of tourism is characterized by rapid changes in manifold fields of social and cultural life. Nowadays, even more than decades ago, the world is more dynamic than static, which implies that park planners and tourism operators need to understand how change may affect their aspirations and decisions. Social and cultural changes are strongly reflected in trends. Modern tourism development, especially in the field of sustainable development and ecotourism, undergoes a number of trends that have to be incorporated in every form of tourism planning.

5.4.1 Rising Educational Levels and Demand for Travel

The educational level and the effects it has on modern tourism development have already been discussed in previous chapters. The only aspect which has to be pointed out here is the trend towards life-enriching travel experiences, which tourists are increasingly interested in. Especially young people show lively interest in “learning-while-traveling experiences”, which can be gained in the form of specific learning travel programmes. Often in the form of “guided adventure tours”, tourists seek environmental experiences in nature based surroundings like national parks. In order to embrace the growing demand for that, national park management worldwide tends to concentrate on these kinds of segments.

5.4.2 Importance of Service Quality

From its definition and origin, ecotourism definitely demands a certain amount of quality. Especially if it is compared to mass tourism, which is rather quantity-orientated, ecotourism needs services with a special focus on quality. In terms of
specialized recreation with emphasis on environmental education, ecotourism in national parks dissociates from high impact quantity-orientated mass tourism programmes. Furthermore, ecotourism sets high standards in quality and encourages low-impact tourism packages with a certain focus on environmentally responsible operations.

5.4.3 Proliferation of Travel Options

Globalization generates sophisticated travel options for everybody. International travel gets more and more affordable and efficient means of air travel are able to cope with huge numbers of passengers in a minimum of time. As is shown in figure 2, international travel faces immense growth rates worldwide and tourism figures have rocketed over the last few years.

Figure 2 – International Tourist Arrivals

(Source: http://www.world-tourism.org/facts/tmt.html; date of retrieval: 10 July 2005)

Considering these current facts and figures as well as the forecasts for the near future, park managers around the world need to be prepared for increasing numbers of visitors. They not only will present challenges in terms of culture and language, but also will be a good source for income and employment and will make it possible to convey cultural and ecological values to the world.
5.5  BENEFITS OF TOURISM IN PARKS AND PROTECTED AREAS

Primarily, parks and protected areas are created in order to conserve natural habitats from the development around it. Moreover, the landscapes of protected areas should be separated from the harmful industrial world and circumstances need to be created, which retain ecosystems as they are supposed to be. Apart from this, the purpose of a national park is to show these circumstances to the people, so they can get in touch with them and learn from them.

Therefore, the biggest benefit from tourism in protected areas is the educational aspect and experience, which make the visitors understand and appreciate the values of ecotourism. The idea of national parks is to take natural environments and implement their beauty and fascination in the minds of the people. People are supposed to learn and understand how important untroubled ecosystems are for humankind and how valuable it is to protect them.

5.5.1  Enhancing Economic Opportunity and Social Benefit

As already mentioned above, tourism development is following trends worldwide. Within the last few years, interests in natural ecosystems and knowledge about natural processes have grown tremendously in the tourism sector. In combination with booming opportunities for long distance travel, protected areas tend to attract many international tourists. As it is often regarded as a source of foreign exchange, tourism is an efficient motor in raising employment and income in local areas or regions. For instance, I would like to point out that in the year 2000, tourism in Costa Rica generated over US $1,138 million in foreign exchange. The total number of visitors to Costa Rica grew from 1,032,000 visitors in 1999 to 1,100,000 visitors in 2000.\(^5\) For a LDC like Costa Rica, favourable tourism development can improve a lot in terms of economic opportunity and social benefit.

\(^5\) http://www.american.edu/projects/mandala/TED/costa-rica-tourism.htm#general (date of retrieval: 28 September 2005)
It is very important to notice that the economic benefit of ecotourism is strongly related to one condition - there must be products and services for tourists to spend money on. Ecosystems that are protected and guarded would always survive on their own, but if local communities want to generate revenues and enhance quality of life, the protected area will have to be marketed and promoted. In addition, the income of revenues and the economic success of a region create the basis for the management of protected areas. However, these areas function at their best and only if funds are available.

5.5.2 Protection of the Natural and Cultural Heritage

With regard to the economic benefits of a protected area, raised revenues help to offset the costs of conservation. Tourism is the key factor in bringing people to protected areas, and therefore it can build public and political support. Funds generated through entrance and service fees inside the park or protected area help to maintain management objectives and service quality.

Apart from natural conservation, tourism in protected areas plays an important role in preserving cultural heritage in the host region. Through tourism development demand rises for historic, architectural or archaeological resources, which generates funds for maintaining and conserving important sights and buildings. Through tourism, local communities can be directly involved in providing authentic experiences about the region. This raises native people’s awareness for valuable traditions and their cultural heritage as well as increases pride in their regions or communities.
5.5.3  Enhancing Quality of Life in the Host Community

Directly affected by economic benefits, local people in protected areas face improved quality of life and better living conditions. Local tourism development, which creates facilities and services for tourism usage, can also be used by local residents, thus improving their living conditions. Eagles, McCool and Haynes (2002: 29) give some good examples of local communities’ needs that can be met by tourism development.

- “Improved communications: upgrading roads for tourism access gives neighbouring villages better access to the outside world. Telecommunications access to protected area offices can be vital to local communities in times of emergencies;
- Education: some protected areas provide language, literacy and numeracy training to their staff, skills than can be applied in the community as well;
- Training: the training that parks staff receive in such matters as vehicle maintenance or food hygiene will be of practical use in local communities;
- Health care: the medical services available to parks staff and visitors can be shared with local communities.”

5.6  NEGATIVE IMPACTS OF TOURISM IN PARKS AND PROTECTED AREAS

In literature, negative impacts are often related to the potential risks of tourism in parks and protected areas. Considering all the facets of tourism development and the characteristics of parks and protected areas, it can clearly be stated that negative effects do result from tourist visits. This does not imply that negative impacts can not be managed and alleviated. It is the task of protected area stakeholders and park planners to determine how impacts and risks can be reduced and prevented.

5.6.1  Costs of Tourism

Following an overall concept, negative impacts of tourism in protected areas are calculated in costs of tourism. Therefore tourism planners face three types of costs, “financial- and economic costs, socio-cultural costs and environmental costs” (Eagles, McCool and Haynes 2002: 30). Environmental costs are the most crucial in terms of sustainability. Furthermore, it is the nature conservation that fosters the
creation of protected areas and national parks. Therefore, it will be elaborated on the environmental impacts in the following section.

### 5.6.2 Risks of Tourism in Parks and Protected Areas

The most obvious reason for the controversy of tourism in protected areas is the fact that it is drawn to environments which are inherently sensitive in terms of ecosystems and natural habitats. The question if tourism is acceptable in protected areas is based on assessments that have to be as detailed and accurate as possible.

“However, in assessing these, it is important to consider what environmental impacts would have occurred if the park, and its tourism industry, were to be replaced by some other land use, such as agriculture, forestry, mining or urbanisation” (Eagles, McCool and Haynes 2002: 32).

Table 2 indicates some interesting examples of potential risks from tourism activities, which are especially crucial in protected areas.

<table>
<thead>
<tr>
<th>Element</th>
<th>Examples of risks from tourism activities</th>
</tr>
</thead>
</table>
| **Ecosystems** | • The construction of accommodation, visitor centres, infrastructure, and other services has a direct impact on the environment, from vegetation removal, animal disturbance elimination of habitats, impacts on drainage etc.  
• Wildlife habitat may be significantly changed (travel routes, hunting areas, breeding areas, etc.) by all kinds of tourist development and use. |
| **Soils**      | • Soil compaction can occur in certain well-used areas.  
• Soil removal and erosion also occurs, and may continue after the disturbance is gone. |
| **Vegetation** | • Concentrated use around facilities has a negative effect on vegetation.  
• Transportation may have direct negative impacts on the environment (e.g. vegetation removal, weed transmission, animal disturbance).  
• Fire frequency may change due to tourists and park tourism management. |
| **Water**      | • Increased demands for fresh water.  
• Disposal of sewage or litter in rivers, lakes or oceans.  
• Release of oil and fuel from ships and smaller craft.  
• Propeller-driven watercraft may affect certain aquatic plants and species. |
| **Air**        | • Motorised transportation may cause pollution from emissions (from plane, train, ship or automobile). |
Wildlife

- Hunting and fishing may change population dynamics.
- Hunters and fishers may demand the introduction of foreign species, and increased populations of target animals.
- Impacts occur on insects and small invertebrates, from effects of transportation, introduced species, etc.
- Disturbance by visitors can occur for all species, including those that are not attracting visitors.
- Disturbance can be of several kinds: noise, visual or harassing behaviour.
- The impact can last beyond the time of initial contact (e.g. before heat-rate returns to normal, or before birds alight, or mammals resume breeding or eating).
- Marine mammals may be hurt or killed by boat impacts or propeller cuts.
- Habituation to humans can cause changed wildlife behaviour, such as approaching people for food.

(Source: Eagles, McCool and Haynes 2002: 33)

5.7 TOURISM MANAGEMENT IN PARKS AND PROTECTED AREAS

Considering the negative impacts and risks from tourism development, management strategies in national parks are indispensable tools. Creating an adequate management strategy, it should always be considered that the goals of tourism in national parks are threefold: “conserving the environment, enhancing the quality of life of the resident community, and improving the tourism product and service” (Ceballos-Lascuráin 1996: 101). In order to guarantee a maximum amount of benefit for local communities, preference should be given to quality improvement rather than quantity expansion. A certain status of independency is to be reached by preferring local investment development instead of externally-financed, large-scale projects.
5.7.1 Creating a Tourism Management Strategy

A tourism management strategy is definitely the first step towards implementing a community’s objectives in terms of national park tourism development.

“The first decision to be taken in developing a tourism planning strategy involves determining the appropriate level of tourism for the area in question. This in turn depends on the purpose and significance of the protected area, the objectives of associated communities and carrying capacity” (Ceballos-Lascurain 1996: 101).

Famous tourism authors often refer to the so-called creation of an adequate ecotourism strategy by incorporating four different steps. These four steps, which have to be taken into consideration when using this methodology, are listed in table 3.

Table 3 – Steps towards an Adequate Ecotourism Strategy

| Step one: Assess the current tourism situation | • Where are we now?  
|                                               | • What is the status of the natural resource?  
|                                               | • What is the level of tourism demand?  
|                                               | • What facilities are available?  
|                                               | • Who are the beneficiaries of current tourism?  
|                                               | • What are its costs?  
|                                               | • What is the internal/external situation with respect to the park and surrounding areas/communities?  
|                                               | • What cultural resources are present?  
|                                               | • What do tourists come to do?  
|                                               | • What could they come to do? |
| Step two: Determine the desirable tourism scenario | • Where would we like to be?  
|                                               | • How could tourism management be improved?  
|                                               | • If starting from scratch, what might be done differently?  
|                                               | • How could the tourists’ experience be enhanced?  
|                                               | • How might the impact of the tourists be minimized?  
|                                               | • What opportunities are being missed?  
|                                               | • What would the park like to communicate to the visitor? |
| Step three: Strategic planning to decide on the level and type of tourism desired | • Training park guards in tourism management  
|                                               | • Building a visitor centre  
|                                               | • Setting up an ecological monitoring system  
|                                               | • Printing promotional brochures  
|                                               | • Developing a handicraft cooperative with local communities |
Lobbying the government to establish an entrance fee system so that funds can be channelled directly back into park management

Selecting those tour operators who will bring groups to the park

**Step four:** Draft a formal tourism strategy document

- Documentation of the tourism strategy
- Publication and circulation of it to potential sources of financial and technical assistance and other interested parties

(Source: Ceballos-Lascuráin 1996: 102 – 104)

### 5.7.2 The Park Management Plan

In accordance with the tourism management strategy adopted in a national park, the strategic elements will be incorporated in a management plan. The main purpose of a management plan is simply to describe how tourism and related services are managed and organized. The plan should never be considered final, nor does it consist of static concepts; it rather “represents the desired future state or condition of the protected area and the most efficient and equitable path to that future” (Eagles, McCool and Haynes 2002: 41). The current importance of management planning in national parks cannot be found in the distant past. While at the beginning of protected area management, planning tended to be rather ad hoc, tourism strategies and management plans have been developed just over the last centuries. It was in the 1980s when strategic statements of goals, policies and actions were first channelled into detailed management plans. Nowadays, it is vital that strategic management is implemented in accordance with the respective. Figure 3 shows this circulation of strategic management measures around management objectives.
The concept of strategic management planning has reached a very sophisticated status in the ecotourism business. Many national park agencies can be found which are required by law to develop and to follow specific management plans. The IUCN itself devotes a lot of work to the concept of strategic management planning; and plenty of good examples and inputs can be found in literature. The following list shows guidelines for the development of management plans in national parks:

- “The natural and cultural environment within the protected area should form the basis for all other uses and values affecting the park and its management. These fundamental assets must not be put at risk;

- Protected area tourism depends on maintaining a high quality environment and cultural conditions within the area. This is essential to sustaining the economic and quality of life benefits brought by tourism;

- The protected area management organisation exists to protect the values for which the area was originally established through, among other things: active management of tourism and tourists; sharing of responsibility for management with tourism operatives, local communities and visitors; and providing potential economic opportunities for tourism;

- Protected area visitors expect to find facilities, programmes, and recreational and learning opportunities within the park, but not all demands can be met, as some of these expectations may be inconsistent with park goals and objectives;
Visitors actively seek the best service quality they can afford for the money they have available. They do not necessarily seek the cheapest opportunities available;

Visitors desire diversity in the recreational opportunities afforded, but not all parks can or should set out to provide for every demand;

Planning should occur within, and acknowledge, the regional context of a particular protected area. This means that the types of tourism opportunities afforded in other protected areas should be inventoried as part of the planning process; and that the planning of tourism within a protected area should take account of tourism demands and provisions in nearby areas; and

Managing expectations is jointly the responsibility of park managers and other tourism operators” (Eagles, McCool and Haynes 2002: 44).

5.8 WHY DO WE NEED PARKS AND PROTECTED AREAS?

It has already been mentioned that national parks are best suited to embody sustainable tourism development and that ecotourism can flourish at its best within the boundaries of national parks. Lots of experts would admit that this is an overall view but in order to understand the real purpose of national parks as protective areas, one has to examine the matter in more detail. It is generally well understood that nowadays in the view of growing mass tourism development; we need parks and protected areas in order to trigger environmental consciousness among tourists.

The history of national parks in Canada, which will be described in further detail later, shows strong relations between Canadian national parks and the cultural background of Canadian mentality. Therefore, in Canada a lot of work has been done to find out what the real functions of national parks are. The question “Why do we need parks and protected areas?” can partly be answered by the next three subsections, which contain the major functions of parks and protected areas.

5.8.1 Protecting Ecological Processes

In terms of air and water protection a lot of positive effects can be reached by national parks. “Watershed protection and absorption of carbon dioxide” (Parks Canada Agency 2000a: 9) can be viewed as positive effects within national parks, but as water and air do not follow boundaries, people living outside the park benefit from these effects as well.
5.8.2 Protecting Biodiversity

Not least since the United Nations Convention on Biological Diversity signed in Rio de Janeiro in 1992, preserving biodiversity has been recognized as one of the most urgent missions worldwide. Canada followed its role as a leading example for ecologically conscious management, agreeing on a duty to conserve biodiversity by establishing new national parks. These parks can contribute significantly to protect biodiversity.

“Canada, with our extensive system of national parks and other protected areas, has a unique opportunity and a responsibility to conserve and sustain biodiversity” (Parks Canada Agency 2000a: 10).

5.8.3 Centres for Research and Education

As broad human intervention is prohibited in national parks, they can provide excellent experiences in wildlife behaviour and natural processes. Guided tours in the middle of undisturbed ecosystems, centres for research and education and activities that teach how to be part of ecosystems make national parks hubs for environmental understanding and show the limits of acceptable change. As people carry the knowledge outside the park, research and understanding can even help to improve management and restoration of developed landscapes outside of national parks, which furthermore reflects the overall benefits of national parks and protected areas.
In this section the Canadian national park system will be introduced. After a short breakdown of the history of Parks Canada, the organization of the Parks Canada Agency will be discussed. As the ecological integrity of Parks Canada’s ecosystems currently is not very favourable, a strong need for a change of thinking among Canadians will be evidenced.

6.1 HISTORIC FACTS ABOUT PARKS CANADA

Together with the USA, Canada faces the longest tradition of national parks worldwide. Over the last one hundred years, Canada has developed a network of parks and protected areas, considering the size of the country, is a unique example worldwide. At the time of strong industrial development in Canada, Rocky Mountain National Park was created as a mirror of Yellowstone National Park in the United States, and had the purpose to preserve the nature’s beauty for Canadians to enjoy. After it had taken some time for Canadians to consider national parks as places for wildlife protection and vegetation conservation, in the 1960s the first national park policy was created to provide more guidance to protection and human use (Parks Canada Agency 2000a: 3-4).

_Parks Canada Agency_ dedicates its policies to the _Parks Canada’s Mandate_ which reads as follows:

“On behalf of the people of Canada, we protect and present nationally significant examples of Canada’s natural and cultural heritage and foster public understanding, appreciation and enjoyment in ways that ensure their ecological and commemorative integrity for present and future generations.”

In the twentieth century, the concept of Canadian national parks and of national parks in general changed from purely recreational space for humans to a greater emphasis on wildlife protection, vegetation management and a general

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concern for the health of the entire ecosystem. At the moment, Canada is proud to have an extensive system of protected areas. In addition to its thirty-nine national parks, Canada’s protected areas are also divided into National Historic Sites and National Marine Conservation Areas. Among the national parks are areas recognized as World Heritage Sites, and some Wetlands protected by national parks have international importance due to their high biological value. Canada’s first national park, Banff National Park, was established in 1885 and Parks Canada Agency was established in the year 1911. In accordance with Canada’s obligation to add parks to its protected areas’ system, more than twenty national parks have been created since 1970, representing over half of the total number of parks in the entire Canadian system (Parks Canada Agency 2000a: 3).

In order to summarize facts about national park services in Canada, table 4 shall give a clear picture about historical development. Figure 4 shows a map of Canada with its national parks.

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1885</td>
<td>Canada’s first national park (Banff) was established</td>
</tr>
<tr>
<td></td>
<td>26 km² of reserved land around the Banff hot springs were declared as</td>
</tr>
<tr>
<td></td>
<td>national park.</td>
</tr>
<tr>
<td>1900 -</td>
<td>Wildlife protection – in the Wood Buffalo National Park and the Elk</td>
</tr>
<tr>
<td>1920</td>
<td>Island National Park</td>
</tr>
<tr>
<td>1911</td>
<td>Dominion Parks Branch – World’s First National Park Service</td>
</tr>
<tr>
<td></td>
<td>The Dominion Forest Reserves and Parks Act placed the dominion parks</td>
</tr>
<tr>
<td></td>
<td>(nowadays called national parks) und the administration of the world’s</td>
</tr>
<tr>
<td></td>
<td>first national parks branch. This branch changed names variously over</td>
</tr>
<tr>
<td></td>
<td>time: Dominion Parks Branch, the National Parks Branch, Parks Canada,</td>
</tr>
<tr>
<td></td>
<td>Canadian Parks Service, and now the Parks Canada Agency. James B.</td>
</tr>
<tr>
<td></td>
<td>Harkin, commissioner of the Dominion Parks Branch in this year declared</td>
</tr>
<tr>
<td></td>
<td>the parks being accessible to automobiles over the next 25 (plus) years.</td>
</tr>
<tr>
<td>1913</td>
<td>Dominion Forest Reserves and Parks Act – an influential statement was</td>
</tr>
<tr>
<td></td>
<td>included:</td>
</tr>
<tr>
<td></td>
<td>“Parks shall be maintained and made use of as public parks and pleasure</td>
</tr>
<tr>
<td></td>
<td>grounds for the benefit, advantage and enjoyment of the people of</td>
</tr>
<tr>
<td></td>
<td>Canada...”</td>
</tr>
<tr>
<td>1930</td>
<td>National Parks Act established by federal government</td>
</tr>
<tr>
<td></td>
<td>No new parks could be established or any change made in the boundaries</td>
</tr>
<tr>
<td></td>
<td>of existing parks except by an Act of Parliament. The “dedication</td>
</tr>
<tr>
<td></td>
<td>clause” states that “Parks are hereby dedicated to the people of Canada</td>
</tr>
<tr>
<td></td>
<td>for their benefit, education and enjoyment...and shall be maintained</td>
</tr>
<tr>
<td></td>
<td>and made use of so as to leave them unimpaired for future generations”.</td>
</tr>
<tr>
<td></td>
<td>Mineral exploitation was prohibited and only limited use of green</td>
</tr>
<tr>
<td></td>
<td>timber, essential for park management purpose, was allowed.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950s</td>
<td>Shift in wildlife management policies and practices (End of predator control, i.e. wolf)</td>
</tr>
<tr>
<td>1960s</td>
<td>New national park policies evolved addressing protection and human use. Zoning systems were incorporated to designate appropriate use within the park boundaries. Rapid expansion of park system, including public hearings on management plans and policies.</td>
</tr>
</tbody>
</table>
| 1964 | **First comprehensive statement of national parks policy is tabled in the House of Commons**  
"Most fundamental and important obligation" is the preservation of significant natural features in national parks. |
| 1970 | **First National Parks System Plan approved**  
A natural region system plan is established to guide park expansion activities. Goal is to represent the characteristic physical, biological and geographic features of each 39 natural regions within the national parks system. |
| 1976 | **Canada signs the World Heritage Convention**  
Nahanni National Park designated the world’s first natural World Heritage Site by UNESCO. |
| 1979 | **Revised National Parks Policy introduces ecological integrity as a guiding principle**  
The maintenance of the ecological integrity of national parks is a prerequisite to use. |
| 2000 | **Panel on the Ecological Integrity of Canada’s National Parks releases report**  
The panel (launched in 1998, report on March 23, 2000) reviewed Parks Canada Program with a mandate to focus the national parks program on conserving and restoring ecological integrity as a first priority. |
| 2001 | **Canada National Parks Act (CNPA) proclaimed on February 19, 2001**  
It states that maintenance or restoration of ecological integrity, through the protection of natural resources and natural processes, shall be the first priority of the Minister when considering all aspects of the management of parks. It further limits commercial development in national park communities, fixed the boundaries of all communities in the national parks and capped commercial development in those communities. |
| 2002 | The federal government announced the most ambitious expansion of national parks and national marine conservation areas in over one hundred years. |

6.2 PARKS CANADA AS AN ORGANIZATION

The following section deals with the organization of Parks Canada, its structural positions, the current management policies as well as the organization’s visions and changes for the near future; all facts being based on a special report by Parks Canada on “conserving Ecological Integrity with Canada’s National Parks”. Therefore, in the year 2000 a panel of Canadians with expertise in ecological science and related fields was asked to examine the issue of ecological integrity in Canadian national parks. The main purpose of the panel was:

“to assess the strengths and weaknesses of Parks Canada’s approach to the maintenance of ecological integrity in Canada’s national parks and, based on this assessment, provide advice and recommend how best to ensure that ecological integrity is maintained across the system of Canadian National Parks” (Parks Canada Agency 2000b: 1-2).

According to a shift in views and responsibilities during the twentieth century, environmental protection and conservation gained a more sophisticated status in Parks Canada management. Extensive use of Canadian national parks by tourists over decades and the persistent view of “devoting parks to people for their recreation and pleasure” have caused dramatic changes in ecological conditions. As a result,
Canada’s core mandate for national park management in the twenty-first century is a clear vision of conserving, restoring and maintaining ecological integrity. Designating an area as a national park is not enough in order to protect ecological integrity. Maintaining and restoring ecological integrity in such a diverse and widespread national park system as in Canada is not an easy undertaking. According to Parks Canada’s own *State of the Parks 1997 Report*,

“only one of the 38 National Parks that were established at that time (there are now 39) was considered to be in pristine condition. Thirty-one of 38 National Parks reported ecological stresses from significant to severe, and in 13 parks these stresses had increased in intensity since 1992” (Parks Canada Agency 2000b: 1-8)

Considering these facts and figures, the clear objective for Parks Canada must be first and foremost the protection of ecological integrity. Without necessary shifts in decision making, staffing, training, and relations with park neighbours, the path towards successful parks management with a conservation focus is on the one hand very burdensome; but on the other hand, it is the biggest challenge Parks Canada is facing. On a management level, these shifts are the basic concept of becoming a learning culture where evaluation and feedback are leading measures in order to enhance the integrity of the national park.

### 6.2.1 Parks Canada under Fire!

Based on a study by Lovelock (2002), it can be proved that in Canada, there is tremendous conflict as regards contributing towards sustainable tourism in parks and protected areas. Sources for conflict have arisen because of certain criticism of national parks management in Canada, namely of the Parks Canada Agency. Major criticism comes from the *Canadian Parks and Wilderness Society (CPAWS)*, which, originally, was meant to collaborate in harmony with Parks Canada. Unfortunately, the relationship between Parks Canada and CPAWS, a “media-oriented pressure group” (Lovelock 2002: 13), appears to be not particularly well developed. For the first time, CPAWS gained more publicity in the 1960s in response to “a need for an informed, non-governmental organization to promote park values” (Lovelock 2002: 11).
On the one hand the two organizations were meant to collaborate actively in the view of managing Canada’s national parks more effectively. Nowadays, as a result of a relationship which is simply not as positive as it should be, criticism is arising and co-operation is not prolific. On the other hand it is not the role of CPAWS to explicitly co-operate with Parks Canada as a governmental organization. CPAWS, as an unbiased lobby group which promotes Canada’s biodiversity, pressures the Canadian government to preserve the environment. If pressure groups like CPAWS were not fighting for environmental protection, the government would be able to implement whatever it wanted do and Canada’s ecological integrity could hardly be increased.

In 2002, CPAWS named Banff National Park as an example for poor management decisions as certain wildlife species were being put at risk by excessive development. Furthermore, CPAWS sued Parks Canada for failing its core mandate of fostering ecological integrity as the first priority in park management (Lovelock 2002).

6.2.2 Planning for Ecological Integrity

According to the definitions of strategic planning, which have already been pointed out above, a strong emphasis on planning can be found in the management of Parks Canada. Planning in the course of protected area management can be described as “the process by which policy is placed into a structure that enables implementation” (Eagles, McCool and Haynes 2002: 41) and the planning process can be seen as “the steps to be gone through in preparing a plan” (Eagles, McCool and Haynes 2002: 41).

For Parks Canada, all actions around the complex system of translating policies into plans, translating plans into actions and evaluating the consequences of such actions extensively focus on the implementation of ecological integrity. In other words, ecological integrity gains much attention for strategic management planning and its main tool, the Parks Canada management plan. The Parks Canada Agency considers this a requirement for sustainable management in the near future.
In order to meet future requirements, much importance is attached to learning through *adaptive management*. Its meaning, which is described by the Parks Canada Agency as, “a formal process for continually improving management policies and practices by learning from their outcomes” (Parks Canada Agency 2000b: 3-1), stands for Parks Canada’s best practice in order to incorporate ecological integrity into its management planning.

As a by-product of the learning experience from adaptive management, and more negatively of making mistakes, unanticipated outcomes are not seen as a component of risk. This particular factor of uncertainty is considered a positive input, thus providing promising opportunities to learn for the future. Another important factor which has to be incorporated in combination with learning while doing policies is a sophisticated feedback programme. With adequate investments in feedback, the learning effect about consequences of current policies can be improved and necessary adjustments in management actions can be effected within reasonable time.

It is the central task of adaptive management to increase the effectiveness of the planning process. Over the last few years Parks Canada has tended to execute expensive and time-consuming planning policies. But yet it was confronted with inconsistent implementation of these plans. Consequently, effectiveness still has to be enhanced within Parks Canada. To clarify this, Parks Canada operated with “too much planning and too little doing” (Parks Canada Agency 2000b: 3-5), which means that a lot of planning occurred in isolation from the central task of incorporating ecological integrity.

As a reaction to a system that loses much power due to a lack of efficiency, the panel from Parks Canada found means and ways to change the current planning framework. Therefore, highly valuable enhancements for the Parks Canada Management Planning framework could be submitted. Some examples are shown below:
• “Management plans need to be more strategic by spelling out and incorporating a clear vision for the greater protected areas networks and regional ecosystems of which national parks are a part.
• Reduce planning products to the fewest documents and reports possible, each with one clear purpose and explicitly linked with each other.
• Inclusion of suggested tools and techniques for consultation, and a call for more effective consultation with the public and other agencies.
• Better co-ordination and early involvement by the National Office and an enhanced role for regional co-ordination through Service Centres.
• Addressing ecological integrity issues at national historic sites, national historic canals and other sites” (Parks Canada Agency 2000b: 3-6).

6.2.3 Building Capacity for Learning and Education

Resulting from a research study conducted by the panel, it should be a clear vision for Parks Canada to invest in learning and education centres. Information should be provided to society about Canada’s natural environment, specifically concentrating on biodiversity in all protected areas and towards a sustainable managed landscape. Apart from the visions for the near future, it can be discovered that Parks Canada currently lacks in natural and social sciences to effectively inform society about ecological integrity in national parks.

“The use of science in the management of Canadian national parks has had a very uneven history. Given the dramatic changes that are occurring in the Canadian landscape, the parks will not survive as intact ecosystems unless steps are taken to use science in their management. This can be achieved only by improving the quality of the Canadian Parks Service program, and upgrading the understanding by parks managers and planners of the importance of using science in their work” (David Lohnes 1991, quoted in Parks Canada Agency 2000b: 4-1).

In order to create a learning environment within Parks Canada, a scientific framework has to be worked out. Science is the precondition for learning and understanding as it enables the learning experience to be sustainable and makes uncertainty more certain. The necessary information to understand Canadian ecosystems and to learn about the importance of ecological integrity can only be obtained through scientific knowledge. Therefore, investment in sophisticated scientific programmes is a clear vision for Parks Canada’s future development.

Generally, national parks are seen as perfect settings for ecological understanding and education; they create centres of knowledge about human
impacts on protected areas. In Canada, information on national parks forms an integral component of the national educational system, as Parks Canada works closely together with social and natural scientists from universities and other science-based agencies. Furthermore, there are strong links to provincial and territorial authorities and even regional and local communities are included in order to improve society’s knowledge of natural ecosystems.

In Canada, it is not only the scientific programme that keeps improving; this programme also meets acceptance and agreement. Canadians look at their parks in a way to help them understand ecosystems and the state of the country’s environment. People tend to actively take part in policies and programmes that are supposed to protect their parks and ecosystems. These positive attitudes of Canadians towards their national parks help to foster a culture of continuous learning about natural environment.

Driven by the need for scientific enhancement and by the agreement of the broad popularity, Parks Canada sees learning and education as one of its obligations. Therefore, the agency makes strong efforts to integrate it into its management plans and tries to make learning and education part of the strategic management framework. In doing so, Parks Canada works intensively on building “science capacity”, which can be defined as “the capability of Parks Canada to acquire and use scientific information relevant to managing and educating for ecological integrity” (Parks Canada Agency 2000b: 4-6). This capability should not purely consist of people from Parks Canada, but should also include experts from different organizations other than Parks Canada, such as national and social scientists, federal agencies, universities or non-governmental organizations.

“It is obvious that an organization managing 39 national parks, protecting nearly 250,000 square kilometers of land and receiving over 14 million person-visits annually requires a substantial science capacity to plan, implement and integrate research necessary for management, visitor education and outreach. As the system grows, so will the need” (Parks Canada Agency 2000b: 4-6).

This statement, which is a direct reflection of Parks Canada’s initiative and desire to engrain the science application, summarizes the need for a strong science capacity.
6.2.4 The Need for Active Management and Restoration

Normally, it is one of the guiding principles and an operating policy of a national park that ecosystems should evolve without a large amount of human intervention. In other words, it is the best practice for the emergence of the biodiversity of ecosystems if human intervention is reduced to a minimum, as nature is able to care about itself. In modern national park management this is not as true as it seems to be. Parks Canada discovered a certain need for active management, because in the past counterproductive activities had damaged ecosystems tremendously. Considering this, modern ambitions towards ecological integrity are undermined by the effects of past actions.

Compared to the long history of national parks in Canada, current actions towards conservation and protection have only been relevant for the last few years or decades. Strong efforts remain to make up for all the years in the past, when conservation of ecosystems and ecological integrity were not on the agenda of national park management. Active management can do its best to compensate past actions and is required to restore natural processes within national parks.

In general, management of ecosystem processes within Parks Canada has been minimal up to now. Yet there is a need for change as the goal of maintaining ecological integrity is inconsistent with the ideas of a laissez-faire park management. According to the Parks Canada Agency, there is a huge range of possible management actions that could be taken:

“Fire restoration, periodic flooding, restoration of key disturbances, species re-introduction, management of harvested species, and management of hyper abundant native or non-native species” (Parks Canada Agency 2000b: 5-1).

Due to actions like those, many areas can be found in Canadian national parks which have been highly altered from their historic condition. On the one hand, it seems to be a little extreme that national park management interfered with the faces of landscapes and changed their structures over time, but on the other hand active management like this can save certain species and ecosystems that otherwise might be lost. Following the recommendations of the panel by Parks Canada Agency, it can be assumed that active management definitely is an important part of conserving
ecological integrity in national parks. Therefore, it can be seen as a highly functional conservation tool, providing that certain conditions are met:

- “The goals for active management are explicitly defined and reviewed by knowledgeable persons;
- Active management occurs within the context of an adaptive management framework;
- The active management program is formally evaluated at fixed intervals” (Parks Canada Agency 2000b: 5-2).

6.3 THE CANADIAN MENTALITY

There are strong efforts towards ecological integrity and a policy shift is being fostered in Canada at the moment. But the necessity for a fundamental change of thinking in Canada lies deeply anchored in the mentality of the Canadian citizens. It is not hard to believe that Canadians love their national parks. Canadian mentality shows strong relations to an outdoor-oriented, adventure-driven lifestyle which can perfectly be lived out in the natural surroundings of Canadian national parks.

Although Canadian National Parks enjoy a well established status among eco-tourists worldwide, a comparably high percentage of 25% of all visitors to Canadian National Parks are Canadians.⁸ Among the Canadian population, 81.1% live in urban centres like Toronto, Calgary or Vancouver. Resulting from that, a huge reliance by Canadians on primary industries and commodity production can be observed. Based on the long distances between Canadian urban centres, the car is the most important means of transport and major roads are frequented extensively. For Canadian tourism development, which is supposed to become more sustainable in the near future, motorized access to remote areas still is much too common. Canadian lifestyle shows a very high reliance on the primary industry of oil and gas, which therefore became a powerful business. The usage of non-renewable energy resources has to be decreased in the long run, in order to provide sustainability for future generations.

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⁸ Murther Mike (Senior Park Planner, Banff National Park), Personal Interview, 7 February 2005
Hence, it is often the so-called Canadian mentality that sees nothing but endless forests, expanses of tundra, great rivers and lakes and protected lands that reach beyond the horizon in their national parks. Among Canadians, a general opinion about wilderness is endless and that the widespread Canadian wilderness cannot be damaged has emerged. Measured on the numbers of Canadian visitors to National Parks and considering the dramatic condition of some ecosystems, the following question arises – somewhat paradoxical it might seem - “Do Canadians love their National Parks to death?”

7 NATIONALPARKS AUSTRIA – THE AUSTRIAN NATIONAL PARK SYSTEM

In order to conclude an international comparison, the second system of national park service has to be introduced. Therefore, this section will be dedicated to Nationalparks Austria, the Austrian national park system. Historical development, a list of Austria’s national parks and some economic facts will give insights in the Austrian system and will help to provide an international comparison. Furthermore, the role of Austrian national parks in connection with tourism development will be evaluated. As an important part of this section, the question will be raised if ecotourism is the right development for the alpine area of Central Europe and what relevance ecotourism can reach in Austria.

7.1 HISTORICAL DEVELOPMENT

A lot of differences between Austria and Canada in terms of culture and history can be experienced. Many Europeans say that the North American continent, including Canada, simply does not have any history, and what is considered history is not a very shiny one. In contrast, the European continent is proud to look at a very famous and well-known history of cultural development and sees itself as the unique cultural example of heritage worldwide. This is definitely different in view of one historical development which we Europeans can never compete with. It is the long history and experience of the North American continent regarding its national parks. What happened in the USA and Canada during the second half of the nineteenth century took until the early twentieth century to be realized on the European
continent. At that time, the first European national parks were set up in Sweden and in the alpine areas of Switzerland. Compared to these extremely early examples of European national park development, it was not until the early 1980s that Austria engaged in the creation of national parks.

Resulting from the differences in the historical development between Canada and Austria, the reasons or incentives of creating national parks are not really comparable. During the late nineteenth century, Canada was proud to dedicate its natural beauty to the enjoyment and recreation of the Canadian population. Referring to historical development, in Canada, national parks were created just for the enjoyment of citizens, although reasons and purposes have changed over time.

In Austria, like in other Central European countries, initiatives for the creation of national parks were often associated with interest conflicts. Conservation projects, which resulted in the emergence of national parks, were often effected as a reaction to the opening of mountain regions to winter tourism or the erection of hydro-electric power stations. The most popular example for that was the fight for the very famous Danube Floodplains near Hainburg in Lower Austria, which are internationally known as Hainburger Donauauen. In the eighties, this ecosystem around the river Danube was intended to be sacrificed for the erection of a dam, which would have been part of a big hydro-electric power station. The whole area of outstanding natural beauty was supposed to be flooded for the reason of electric energy production. After the project had been averted by demonstrations und nature activists, the area around the Danube Floodplains in Hainburg was transformed into one of Austria’s six national parks – Nationalpark Donauauen in Lower Austria.

Because of conflicts among the different interest groups in Austria, cooperation towards the creation of national parks could only be enabled through collaboration. Generally speaking, groups of interest within the country of Austria are inhabitants, land owners, scientific bodies, political decision makers and environmental organizations. As the majority of any national park area in Austria is in private ownership, it is mandatory that landowners get economically compensated for the devotion of land (Nationalparks Austria 2004).
Nowadays Austria is proud of calling six national parks its own. Despite the fact that Austria’s tourism landscape is mainly shaped by the Alps, national parks represent all of the country’s most important types of landscapes. The Nationalpark Seewinkel in the flat east of Burgenland, which is a unique steppe lake area in Europe, and the Nationalpark Thayatal along the former Iron Curtain between Austria and the Czech Republic show outstanding natural beauty.

7.2 AUSTRIA’S NATIONAL PARKS

Two parks of Austria’s existing six national parks, which cover a total of 2,356 square kilometres representing 2.8 per cent of the national territory, cross the border to neighbouring countries. The Thayatal valley in the north of Lower Austria, which was formerly divided by the Iron Curtain, nowadays represents a national park area in both countries i.e., Austria and the Czech Republic. With its declaration as a national park and its trans-national contribution to sustainable development, it represents a special example of the reunion of a formerly separated continent (Nationalparks Austria 2004).

Table 5 - Overview of Austrian National Parks

<table>
<thead>
<tr>
<th>National Park</th>
<th>IUCN Category</th>
<th>Area (hectares)</th>
<th>Year of Establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hohe Tauern</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carinthia</td>
<td>II</td>
<td>40,000</td>
<td>1981</td>
</tr>
<tr>
<td>Salzburg</td>
<td>V</td>
<td>80,500</td>
<td>1984</td>
</tr>
<tr>
<td>Tyrol</td>
<td>V</td>
<td>61,000</td>
<td>1992</td>
</tr>
<tr>
<td>Neusiedler See - Seewinkel</td>
<td>II</td>
<td>9,700</td>
<td>1993</td>
</tr>
<tr>
<td>Donau - Auen</td>
<td>II</td>
<td>9,300</td>
<td>1997</td>
</tr>
<tr>
<td>Kalkalpen</td>
<td>II</td>
<td>21,000</td>
<td>1997</td>
</tr>
<tr>
<td>Thayatal</td>
<td>II</td>
<td>1,300</td>
<td>2000</td>
</tr>
<tr>
<td>Gesäuse</td>
<td>II</td>
<td>11,000</td>
<td>2003</td>
</tr>
</tbody>
</table>

(Source: Nationalparks Austria 2004)
Apart from certain parts of the Nationalpark Hohe Tauern, which is situated in three provinces of Austria, namely Carinthia, Salzburg and Tyrol, every national park in Austria is classified as category II according to the classification system of the IUCN. Almost every national park project in Austria meets the IUCN requirements of being rated as a “protected area managed mainly for ecosystem protection and recreation” (Ceballos-Lascuráin 1996: 40).

For an area planning to be rated as a national park in Austria, rigid requirements for IUCN category II have to be met:

- “The area has to contain characteristic examples for a nature region, the appearance of nature or landscapes with outstanding beauty. The region has to contain plants, animals and ecosystems which play an important role for science, education, recreation and tourism.
- The region has to be big enough to contain two or more entire ecosystems, which cannot be changed significantly by human usage or availment.”

Over the last couple of years, Austria has created national parks which are definitely modern and adequate places of Austrian nature conservation policies. The current situation and the international reputation of Austrian national parks are partly based on three principles:

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9 http://www.nationalparks.or.at/article/archive/8615 (date of retrieval: 12 July 2005; translated SO)
• “Voluntary agreement of landowners\textsuperscript{10}
• Adequate compensation for economic drawbacks
• Acting in accordance with the international criteria for the IUCN - protected area category II National Park\textsuperscript{11}

Principles like these can be viewed as the substance for the Austrian national park development as they guarantee that quality requirements are met and landowners, inhabitants and regional environmental organizations can be incorporated in the management process.

7.3 ECONOMIC SITUATION OF NATIONAL PARKS IN AUSTRIA

Resulting from strict accordance with principles and goals and due to a growing awareness on quality management, Nationalparks Austria earned big success during the summer season 2004. All national park regions generated € 451m added value through overnight tourism in 2004. Therefore, 33% (€ 150m) were accounted for by national park related tourism, which means that tourists who visited Austria for the reason of visiting an Austrian national park generated 33% of the overall added value. Another 29% of the added value was generated by daily visitors, who did not spend the night in one of Austria’s national park regions.

It is an interesting phenomenon that Austria’s national park regions are less negatively affected by tourism-related declining years of Austria’s economy than mass tourism regions. In years of economic success, national park regions showed tendencies to profit from Austrian economic processes disproportionately. Due to this development Austrian national parks raised numbers of overnight stays by 4.9 per cent from 2000 to 2003.

Considering all these facts and figures, Nationalparks Austria has managed to reach a rather high status in terms of economic processes and success. Apart from

\textsuperscript{10} The major landowner of Nationalpark Gesäuse is the federal government of Austria. The government of Austria owns almost 99.9% of the park’s area and provides most of funds for its management. Therefore, Nationalpark Gesäuse is obliged to follow strict regulations of the IUCN category II. The IUCN standard of Nationalpark Gesäuse is the most crucial requirement of getting substantially funded by the federal government of Austria.

\textsuperscript{11} http://www.nationalparks.or.at/article/articleview/31553/1/8615 (date of retrieval: 1 August 2005)
that, national parks management in Austria made highly valuable steps towards adequate centres for research and education. With more than 300 employees all over the country, Nationalparks Austria succeeded in creating visitor attraction for all different age groups. High-quality offers for visitors and tourists are key factors in raising the necessary demand for a successfully managed national park framework.\textsuperscript{12}

A special key factor for the success of Nationalparks Austria can be seen in the role of education and research and in the combination of national park programmes and education in schools. In Austria, national parks are seen as centres of education and research and thus offer special packages for project trips. In the year 2004, more than 65,000 children from schools all over the country made their way to Austrian national parks and used guided tours for school-related projects. Some parks even go a step further and try to reach young people with willingness to do research outside of parks. Following the message called “\textit{Der Nationalpark kommt in die Schule}” (‘The national park goes to school’), well-trained national park staff offer special project programmes in schools and foster the linkage between modern national park management and high-quality school education.\textsuperscript{13}

7.4 AUSTRIAN NATIONAL PARKS AND TOURISM

Tourism in Austria’s national parks is an increasing economic force and can be seen as the most important factor in generating revenues. The steadily rising numbers of visitors and tourists who come to Austria’s national parks from inside and outside the country simply indicate that a lot of good work has been done in order to foster national park tourism as one of the leading industries in Austria. Currently, almost every sixteenth bed which is booked in Austria is situated in one of the 64 national park centres (Bundesministerium für Wirtschaft und Arbeit 2001a).

Generally speaking, tourism has always been the biggest service industry in Austria, especially regarding mass tourism centres along the Alps which were built in order to meet the exploding demand for alpine winter tourism. As the long history of tourism in Austria has always been tremendously oriented towards mass tourism and

\textsuperscript{12} \url{http://www.tourismuspresse.at/print.html?_lang=de&id=258004} (date of retrieval: 12 July 2005)

\textsuperscript{13} \url{http://www.tourismuspresse.at/print.html?_lang=de&id=258004} (date of retrieval: 12 July 2005)
has been anything else but sustainable, sustainable tourism programmes have to be fostered in Austria’s national parks.

National parks can play an important role in diminishing counteracting interests among inhabitants, politics and tourism. Adequate tourism management inside national parks is able to demonstrate that nature conservation and tourism activities can co-operate successfully. *Nationalparks Austria* has recognized that environment, nature and ecosystems stand for predominating resources for modern tourism development as there is a rising demand for recreational activities in intact and life-enriching landscapes. Although, in Austria there is still a lot of sceptic attitude among citizens towards modern tourism development, the acceptance of national park projects has increased over the last couple of years. Positive changes in attitudes are fostered by a co-operation between national park managements and national tourism associations, which is considered a very favourable and collaborative development. In Austria, nearly every group which is concerned with national park services or sustainable tourism development tends to recognize favourable presentations of national parks and the integration in the regional tourism development is seen as the main goal that has to be reached (Bundesministerium für Wirtschaft und Arbeit 2001a).

As to national park tourism in Austria, it can be said that restrictions in visitor numbers and quantity-related cutbacks are currently not necessary and are thus not seen as a problem in the near future. But it has to be realized that this is only true for ecotourism or sustainable tourism in national parks because in Austria’s mass tourism centres the situation is a different one. Austria’s winter tourism centres in alpine areas are simply centres for mass tourism and are currently not very successful in contributing to sustainable development and ecotourism. This probably can be compared to the situation in Canada, where restrictions towards lower visitor numbers are implemented to reach the core objective of improving ecological integrity.
In Austria’s national parks, where visitor numbers are not as precarious as in mass tourism centres, positive efforts are made in order to foster sustainability in any kind of tourist activity. Predominating measures to keep tourists where they are supposed to be can be summarized in a management policy called visitor management.\textsuperscript{14}

### 7.4.1 Visitor Management

The purpose of visitor management in Austria’s national parks is twofold. On the one hand, regions which are ecologically sensitive can be protected as efficiently as possible; and on the other, visitors and tourists can be guided to certain attractions of the park which are especially representative. In other words, visitor management maximizes benefits and minimizes harm. According to the purpose of visitor management, interests of tourism and of nature conservation have to be combined in a pool of measures which can be taken. Tourists and visitors ought to be managed by persuasion and example rather than by law and regulation. Every measure has to be considered in advance because as soon as tourists have made their way to a national park, it is not possible to guide them without restrictions. In other words, if visitor management is supposed to replace restrictions of attendance, it has to reach visitors before they arrive (Synge 2004).

As visitor management strictly differs from prohibition, it is important to notice that it should encourage tourists to show environmental consciousness voluntarily. Tourists have to see national parks as very special landscapes and ecosystems that are worth being protected, and therefore, they should not be abandoned from the parks through restrictions. Furthermore, based on “alpinism”, there is a long tradition in Austria that people can wander and hike freely above the tree line, which also applies to national parks. A very special challenge for modern visitor management is the fact that the tradition of alpinism is about ten times older than Austrian national park systems, which implies that national parks have to be managed with maximum respect for old traditions.

\textsuperscript{14} http://www.nationalparks.or.at/article/articleview/31748/1/8518 (date of retrieval: 8 September 2005)
“Approaches of visitor management should encourage visitation in certain areas by provision of very good services and hiking on well-managed, long-established trails, so as to remove the likelihood of visitors wandering into fragile and sensitive areas. Staff has found that without a trail, people wander in all directions, but if there is a clear and unmistakable path, nearly all stick to it!” (Synge 2004: 26)

Benefits of visitor management are obvious, as safety can be improved tremendously and visitors are less likely to get into sensitive wildlife areas. As a result, visitor management can be considered one of the most important features of modern national park management. Consequently, visitor management has to start with the promotion of the park to the public, followed by very high attractiveness of paths and trails in order to encourage visitors to stay on them without moving into other areas. If visitor management is carried out appropriately, the park can absorb many more visitors than it could do otherwise without damage. Austria’s national park management is in a very favourable situation in terms of visitor numbers and development in the near future. Figures show that visitor numbers keep on rising due to improvements of sustainable national park programmes; but still numbers are not soaring as much as in Canada. That gives national parks the opportunity of guiding and managing visitors and tourists precautionarily; and therefore the effects of tourism development can be controlled (Synge 2004).

In some Canadian national parks, it is too late for similar measures, because visitor numbers have reached a very alarming status over the last few decades. Ecotourism and conservation policies towards sustainable development are needed in Canada’s national parks in order to attain a higher status of ecological integrity. As the movement of ecotourism has been developed as the result of negative developments in Canada and the USA, it cannot be used in European tourism terminology analogously.

7.4.2 Ecotourism in the Alps – Ecotourism for Austrian National Parks

Section 3 was dedicated to ecotourism, its history and its relevance to modern sustainable forms of tourism development. Its relevance to tourism in national parks shows obvious connections to tourism on the North American continent, South Africa, New Zealand and Australia. As a consequence, the whole concept of ecotourism rather fits into these continents and has been heavily promoted there.
As the country of Austria is, in terms of tourism, mainly dominated by the Alps, some research has been carried out with regard to ecotourism in alpine areas. According to a study by the “Institut für Integrativen Tourismus & Freizeitforschung (2002)” (‘Institute for Integrative Tourism and Leisure Studies’ 2002), it can strictly be argued that a direct transformation of the concept of ecotourism from North America to the European Alps would lead to tremendous misunderstandings. Especially the definition of ecotourism by the WTO cannot be used analogously for tourism development in the Alps. A form of tourism which is characterized by “passive enjoyment of nature and strong interest in traditional cultures” has always existed in the Alps. Hence, the usage of the WTO definition of ecotourism for the Alps would mean that traditional alpine tourism in Europe is ecotourism.

Even if the implementation of ecotourism policies is definitely favoured by the fact that it already exists in some form in the alpine area it does not fit perfectly into the European tourism context. Rather than focusing on single protected areas or conservation zones, ecotourism has to be oriented towards the natural and cultural beauty of the Alps as a general. The perfect scenario would lead to trans-European co-operation in terms of alpine ecotourism, which furthermore could produce specific international ecotourism concepts.

On the national and regional level, it would be very favourable to create promising collaborations between different tourism service producers. Marketing concepts which can be linked together and which are apt to make possible producer-product-marketing partnerships can be viewed as the future vision of an adequate alpine ecotourism strategy. Hence, ecotourism is not a new brand in the field of sustainable development but promotes quality assurance of existing tourism offers. For Austria, as for every European country, high-quality standards can be assured by offering regional attractions to the right target groups, which can be guaranteed by thorough planning and by implementing the right management strategies. If strong emphasis is put on strategic marketing planning, existing tourism services can be altered towards the sustainable development of ecotourism. In the Alps, the definition of ecotourism meets a highly developed tourism structure with a long tradition, which as a key service sector has determined society for years. Ecotourism concepts and
strategies have to be altered and assimilated in order to meet the alpine context of
tourism. This is especially crucial for tourism in national parks as the general concept
of ecotourism can be viewed as the perfect strategic framework for sustainable
tourism in protected areas (Institut für Integrativen Tourismus & Freizeitforschung
2002).

8 BANFF NATIONAL PARK IN CANADA AND
NATIONALPARK GESÄUSE IN AUSTRIA – A
COMPARISON

After two extremely different systems of national park management were
introduced, I would like to go into further detail by comparing the Canadian and the
Austrian national park system. Parks and protected areas have reached a very high
status in sustainable tourism development nowadays. Due to global disparities and
cultural dynamics, there has emerged a variety of organization structures all over the
world. As a result, it is of very high interest to compare different systems in different
cultures. Facing the size of the North American continent, the special conditions for
the management of Canadian national parks seem to be apparent. A comparison of
two national parks which substantially vary in size could bring good insights into the
major differentiations and could show certain similarities. Therefore, this section is
dedicated to park management practices in two different countries which are situated
on two different continents. In order to discover as many differences as possible, I
selected two national parks that could not be more diverse.

Banff National Park which represents the Canadian part of this comparison is
the oldest, the most popular and one of the biggest national parks in the huge
country of Canada.

On the other hand, Nationalpark Gesäuse as the Austrian counterpart
represents the youngest national park of Austria, which was established in 2002 and
still is in an early stage of development.
This comparison section will show interesting insights into ecological challenges of both national parks. *Size* will be evaluated as the major source of differentiation and it will be shown that size causes different management situations. Furthermore, *zoning* of the national parks’ areas will be introduced as a meaningful management measure in order to create enough space for nature conservation. The huge variety of ecological challenges both national parks have to deal with will be supported by some current facts which have caused a lot of public awareness during the last few months.
8.1 NATIONALPARK GESÄUSE – FACTS AND FIGURES

Figure 6 – Nationalpark Gessäuse

Table 6 – Nationalpark Gesäuse Facts

| Total Area of Nationalpark Gesäuse | 110.54 Square Kilometres |
| Date of Foundation | 26th October 2002 |
| Sea Level | 490 m to 2,370 m |
| Difference in Altitude | 1,880 m |
| Highest Elevation | Hochtorn 2,370 m |

(Source: http://www.nationalpark.co.at/nationalpark/de/ueber-uns-ueberblick.php?navid=3; date of retrieval: 17 August 2005)
8.2 BANFF NATIONAL PARK – FACTS AND FIGURES

Figure 7 – Banff National Park

Table 7 – Banff National Park Facts

| Total Area of Banff National Park | 26 Square Kilometres in 1885  
6,641 Square Kilometres in 2005 |
| Date of Foundation | 1885 |
| Sea Level | 1,350 m to 3,612 m  
Difference in Altitude 2,262 m |
| Highest Elevation | Mt. Forbes 3,612 m |

(Source: Parks Canada Mountain Guide 2005)
Considering what already has been mentioned about national parks in Canada, Banff is the perfect example that represents the Canadian system. As can be discovered from the previous chapters, a change of thinking among Canadian national park planners is more than necessary. As I have learned from my research, many concerns of Parks Canada Agency about the lack of ecological integrity are raised in the park management of Banff National Park. In other words, Banff National Park is not only the hotspot for Canadian national park tourism, but also represents the negative side.

8.3 RECREATIONAL EXPERIENCE

Banff National Park, which is the oldest of Canada’s National Parks and therefore forms the cornerstone of the whole system, originally was entirely used for tourism and recreational purpose. As a result, the park contains centres for mass tourism, which grew tremendously in importance over the years, and are still being promoted internationally. As a matter of fact, Banff National Park comprises two city centres, namely Banff with 8,000 inhabitants and Lake Louise with 2,000 inhabitants, which attract more tourists every year than all the backcountry areas of the park taken together.

The picture below shows mass tourism development on Banff Avenue. Every year during the winter months the city of Banff is packed with international tourists who walk around the city centre, relax in Banff Springs Hotel, or do ski trips to the world famous Lake Louise Ski Hill. Figure 8 shows mass tourism development on Banff Avenue in the city of Banff:
In Canada, there has been a very long tradition of National Park Service, which was founded under different circumstances than today. In the late nineteenth century, when Parks Canada started to set up its first National Parks, they were entirely devoted to recreational purposes and dedicated to the Canadian population. Little attention was paid to environmental problems and ecological commitment in the early years of Parks Canada National Park Service (Dearden and Rollins 1993: 20).

8.4 CHANGE OF VIEW

Extreme development like in the nineteenth century would never be conceivable in the modern world of environmentally conscious ecotourism. In view of strong efforts towards a sustainable ecosystem and the implementation of ecological integrity in Banff National Park, the evolution of mass tourism city centres would never be possible nowadays. In addition, national park purposes have changed over
the last hundred years, and will continue to change because national parks are artificial creations and reflect societies' choice of raising certain forms of land use.

Over a hundred years ago, when Banff National Park was created, all western Canada was wilderness without any form of commercial usage. With the encroachment of the Central Pacific Railway, its high costs of construction and high costs of operation, the need of generating revenue arose. As the landscape was attractive and accessible through the newly developed railway system, Canadians decided to bring tourists into this area, instead of taking timber and minerals out of it. Therefore the city of Banff was developed as a tourist resort and not as a wilderness area, which reflects the strong emphasis on the tourism purpose at that time (Butler and Boyd 2000: 189 - 192).

Moreover, it is evident that a hundred years ago the focus was entirely on development rather than wilderness protection and ecological integrity. Nowadays parks situated next to large cities act as wilderness destinations for tourists; however, they are of growing importance in terms of ecological integrity. It can be discovered from historic park regulations and acts that management attempts towards a sustainable ecosystem did not occur before the mid-sixties; ecological integrity as the leading park management goal is of very recent nature.\textsuperscript{15}

Because of the rising awareness of environmental protection, none of the recently founded national parks in Canada include city centres, reservoirs or major highways. All of the newly created national parks are designated strictly as wilderness areas, reflecting the changing psyche of Canadian society; reasons for park creation have changed over time, but must still reflect societies' needs and desires (Dearden and Rollins 1993: 22-27).

As the counterpart of Banff National Park, \textit{Nationalpark Gesäuse} shows a totally different situation in terms of historical development and utilization. Referring to the relatively young national park development in Austria, \textit{Gesäuse} as its youngest park can still be seen as being in the fledgling stages. This is especially important in the field of tourism development, which has tremendous potential in \textit{Gesäuse} and

\textsuperscript{15} Murther Mike (Senior Park Planner, Banff National Park). Personal interview, 7 February 2005
which differentiates it the most from Banff. Gesäuse is making efforts in promoting the park to national and international tourists and is investing in tourism infrastructure, whereas Banff definitely does not have to attract more people to the national park\textsuperscript{16}. Its international popularity has reached a top ranking in terms of tourism figures and inversely has caused the necessity of visitor and tourist restrictions in peak seasons. Based on the report by the Panel on the Ecological Integrity of Canada’s National Parks, a change of view is aspired:

“Parks Canada develops a policy and implements a program for assessing allowable and appropriate activities in national parks, with ecological integrity as the determining factor”. Therefore “Parks Canada reduces the human footprint on national parks so that parks become models and showcases of environmental design and management” (Parks Canada Agency 2000a: 21).

Even if a change of view among the Canadian population is being fostered, deterring threats in mass tourism development will remain, and more than ever, will have to be managed next to environmental protection. The long tradition of massive tourism development and the growing negative impacts on ecological integrity in Banff National Park are the reasons for the comparison to Nationalpark Gesäuse.

\section*{8.5 HOW TO COMPARE?}

In Banff National Park, many serious efforts towards sustainable development, alongside tremendous management changes directly focused on ecological integrity have already been made. How then can it be sustained if tourist centres, highway construction projects, and visitor numbers are still growing? Regarding current visitor surveys, numbers have grown to four million people that seek Banff National Park as tourist destination every year. In addition to those who stay in the park and use it for recreation, there is another four million people just passing through it on the Trans Canada Highway (Butler and Boyd 2000: 189).

\footnote{Murther Mike (Senior Park Planner, Banff National Park). Personal interview, 7 February 2005}
This highway, which runs through Banff National Park, connects the major cities Vancouver and Calgary, and is the country’s only persistent linkage from the East to the West. Apart from tourist traffic, the Trans Canada Highway acts as the main thoroughfare for all road transportation concerning imports and exports from and to the West. In order to reach the port of Vancouver, which is the most important hub to the East, an immense wave of trucks and trains keeps on rolling straight through an extremely sensitive and endangered ecosystem.

The question arises how a region which contains such negative influence of man-made infrastructure and causes enormous harm on the ecosystem can still focus on ecological integrity and still be ranked as one of the world’s most famous National Parks? There is one potential advantage of Banff National Park, which considerably distinguishes it from Austrian National Parks: the size.

8.6 THE INFLUENCE OF SIZE

With its extension of 6,641 square kilometres, Banff National Park is approximately 53 times the size of Nationalpark Gesäuse. This size makes current management decisions comprehensible, especially if you compare it to much smaller parks. Apart from the fact that there are city centres, highways and a railway system running through it, the park is still in a situation of having 95% of its territory zoned and managed as wilderness area. All infrastructures for tourism purposes and for transportation of goods are concentrated in the remaining 5% of the park; therefore, this area is dedicated to sustainable development. It is very important to note that nowadays, due to the growing environmental consciousness and strong efforts towards ecological integrity, park management sets strict restrictions against further growth of infrastructure development. Further expansion of the city centres of Banff and Lake Louise is prohibited and maximum population is capped at 8,000 and 2,000, respectively (Butler and Boyd 2000: 191).
Based on the extension of Banff National Park and on the diversity of landscapes, there is a high number of species that has to be managed. In order to incorporate adequate conservation policies for ecosystems Parks Canada has developed the special approach of ecosystem-based management.

### 8.7 ECOSYSTEM-BASED MANAGEMENT

The need for special management policies for ecosystems is big in Banff National Park. As a result of the huge diversity of species, ecosystem-based management focuses on the understanding of the whole ecosystem rather than on the individual species or communities. Sources of Information and knowledge are twofold. Current ecological information from science serves as basis for ecosystem-based management, as well as traditional development and long-established knowledge.

“Philosophically, ecosystem-based management lies between the utilitarian view of land use for economic benefit and the romantic view that parks should be left as pristine wilderness, with no human presence.”

Especially compared to the very young Nationalpark Gesäuse, ecosystems in Banff National Park have faced human interference for a very long period of time. “Its ecosystems were modified and influenced by native peoples 10,000 years before the arrival of Europeans.” Nowadays, in modern ecosystem-based management, humans are supposed to become an integral part of these systems.

#### 8.7.1 Ecosystem Models

A prevailing measure in modern ecosystem-based management is the usage of ecosystem models. Therefore, models are used to predict how changes in one part of the ecosystem may affect the rest of the ecosystem. Logically, models cannot perfectly duplicate biological realities of a real ecosystem, but nevertheless they are of high value in management decisions and facilitate ecosystem-based management.

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8.7.2 **Ecoregions of Banff National Park**

In Banff National Park, models that are used for ecosystem-based management are based on the entire ecosystem of the park. Therefore the landscape is divided into three ecoregions, which are based on vegetation, landforms and soil. The purpose of this classification is simply to identify similar regions within the park’s surface and to help to better manage ecosystems. Figure 9 gives a picture of how ecoregions stretch along the park and which regions are predominating. Table 8 describes ecoregions in terms of size and elevation level.

![Figure 9 – Ecoregions Banff National Park](http://www.pc.gc.ca/pn-np/ab/banff/plan/plan8a_E.asp; date of retrieval: 17 August 2005)
### Table 8 – Ecoregions Banff National Park Facts

<table>
<thead>
<tr>
<th>Montane Ecoregion</th>
<th>Subalpine Ecoregion</th>
<th>Alpine Ecoregion</th>
</tr>
</thead>
<tbody>
<tr>
<td>The montane zone is the smallest ecoregion in Banff National Park making up only 3% of the total area of the park. It occurs at lower elevations between 1,350 meters and 1,500 meters on north-facing slopes, rising to 1,650 meters on steep south-facing slopes. Vegetation is actively managed in the montane eco-region.</td>
<td>The subalpine ecoregion lies between the montane and the treeless alpine eco-regions. It is commonly subdivided into upper and lower subalpine regions. The lower subalpine region covers about 27% of the park and the upper subalpine region makes up 26% of the park area. The boundary between upper and lower subalpine regions is at about 2,000 meters.</td>
<td>The alpine ecoregion occurs above the tree line and covers 44% of the park. Of this area, about 6% is covered by alpine meadows and shrubs. The remaining thirty-eight percent of the park is unvegetated rock, talus, moraines, snow, ice and water. There is no active management of vegetation in the alpine ecoregion.</td>
</tr>
</tbody>
</table>

(Source: http://www.pc.gc.ca/pn-np/ab/banff/plan/plan8a_E.asp; date of retrieval: 17 August 2005)

### 8.7.3 Ecoregions in Nationalpark Gesäuse

In *Nationalpark Gesäuse*, ecoregion management is not seen as an active part of the management plan as is the case of Banff National Park. Nevertheless, the park consists of different regions which contribute to the rich diversity of the landscape that Gesäuse is famous for. Future opportunities for tourism-related, environmental experience, which arise from the richness and diversity, have been recognized and are actively supported by promotion. Therefore, the dominating natural areas of *Nationalpark Gesäuses* ecosystem, “water”, “woodland” and “rock” habitats are incorporated in the three stripes of the park's logo, which can be seen in figure 10. These three nature areas definitely show similarities to the ecoregions in Banff National Park even if their management is not specifically determined as eco-region management.
For tourism development in park management Gesäuse is very keen to get visitors in touch with natural beauty and to provide valuable experience. Located in the middle, between the woodland area and the line of rocks and stone, alpine pastures create the perfect surroundings for nature-based tourism. In Austria, pastures have always been considered valuable contributions to the cultural landscape. Apart from their necessity for agriculture, in Nationalpark Gesäuse, pastures have an important meaning for culture and enrich natural habitats for animal species and vegetation. Embedded in the concept of a national park, alpine pastures do definitely not counteract nature conservation and should thus be maintained.

Concerning alpine pastures in particular, which provide perfect settings for sustainable tourism development, a lot of opportunity exists in the natural resources of Nationalpark Gesäuse. Three years of existence implies that park management still is in the fledgling stages and much can be developed. This provides opportunities to manage tourism development in a modern, appropriate and sustainable way. On the one hand, time is right to raise visitor interest by the creation of attractive tourism packages, whereas opportunities for tourism still can be guided by visitor management and zoning. Especially the IUCN category II of a national park gives Nationalpark Gesäuse the right popularity for rising tourism numbers, and at the same time implies that the park is an intact ecosystem that has to be protected.

Nationalpark Gesäuse sets a great example of creating perfect surroundings for sustainable tourism in areas where this development is requested, while sensitive
areas are well managed away from growing visitor numbers and their impacts. Zoning, as a management measure which can be defined as “pursuing various management objectives in different parts of the area and reconciling potential conflicts through the use of zones” (Synge 2004: 2), can be observed in national park management plans in Canada as well as in Austria.

8.8 ZONING AS A MEASURE OF VISITOR MANAGEMENT

According to the comparison of Banff National Park and Nationalpark Gesäuse, preconditions for zoning are tremendously different. Also in terms of zoning, size is the leading measure which differentiates the Canadian park system from the Austrian one. As already mentioned, 6,641 square kilometres in Banff compared to 110 square kilometres in Gesäuse imply management conditions which can hardly be compared at all. Still, the usage of management zones is incorporated in both systems, although the structure differs significantly. The negative impacts of tourism development on Banff National Park still focus on a comparably small percentage of the national park area, literally five percent, whereas the predominating percentage of the park is zoned as wilderness area. This favourable situation, which saves the overall appearance of Banff National Park would not be feasible in Nationalpark Gesäuse, as the Austrian park is simply not big enough. If tourism development is fostered in the future - even if it is extensively sustainable - it will capture almost the entire national park area and not as much space will be kept back untouched as in Banff National Park. The huge extension of Banff National Park is the reason why many remote backcountry areas never see visitors and tourists at all, neither in winter nor in summer. Apart from the fact that in many backcountry areas, entrance is restricted from April to November, the main part of the backcountry is characterized by glaciers and rocks, which naturally restricts access.20

20 Mutther Mike (Senior Park Planner, Banff National Park). Personal interview, 7 February 2005
Compared to this, the small area of Nationalpark Gesäuse can easily be captured by visitors and tourists, as the backcountry does not contain natural borderlines like glaciers. The existence of natural limitations is absent in Gesäuse, which enables hiking trails and rock climbing routes to cover the entire ecosystem, valleys, pastures and summits. Different conditions in the two countries do not imply that zoning is more or less important in one of the two systems. Zoning definitely is an active part in both management plans, but the structures are different and emphases are not placed simultaneously.

Zoning shows different pictures in Austria than in Canada. While in Nationalpark Gesäuse two zones are classified, the landscape of Banff National Park is classified into five different designations for management purposes. Therefore five landscape categories are implemented in the management plan and are used comprehensively for every Canadian National Park.

8.8.1 Zoning in Banff National Park

8.8.1.1 Zone 1: Special Preservation

This highly protected zone is partly developed and remains partially untouched. The zone contains both unique natural and cultural features and also represents the extremely sensitive areas where species and vegetation are at risk.

8.8.1.2 Zone 2: Wilderness Area

Wilderness area forms the majority of the park’s surface, specifically 95% of the landscape. The second zone is considered backcountry or remote area, where nature is left undisturbed and motorized access is prohibited.

8.8.1.3 Zone 3: Natural Environment

Zone 3 is an area which is more developed for recreational purposes and therefore can be found around the city of Banff. Minimal tourist services are provided.
8.8.1.4 Zone 4: Outdoor Recreation

This zone is extensively devoted to tourism and recreational purposes and forms an area of high attention in Banff National Park, namely the ski hills. Banff National Park, with its world famous ski destinations, is an exception all over Canada, as there are not many parks with such highly developed skiing facilities.

8.8.1.5 Zone 5: Park Services

This category contains the most highly developed areas of the parks, which are formed by urban city centres, such as the city of Banff or Lake Louise. These communities contain a concentration of visitor services, support and administration facilities (Fennel 2003: 48).

8.8.2 Zoning in Nationalpark Gesäuse

Zoning in Nationalpark Gesäuse is less complex. It is not only the size of the entire park that makes zoning easier. The ecosystem in Nationalpark Gesäuse is less diversified and does not show as many extreme settings as Banff National Park does. In Gesäuse, peaks are lower without glaciers, valleys are narrower, forests are less spread out and specifically, wildlife is less wild.

8.8.2.1 Zone 1: Natural Zone

With special reference to the dominating wildlife species and endangered vegetation, this park management zone puts special emphasis on the protection of natural habitats. In the natural zone, the long-term aim is to allow the processes of nature to function without any human interference. The Canadian equivalent to the natural zone in Gesäuse is Zone 1: special preservation and Zone 2: wilderness area, respectively.
8.8.2.2  Zone 2: Conservation Zone

The so-called conservation zone is meant to preserve the man-made landscape. The conservation zone is the area where alpine pastures, which have already been mentioned above, can be found and offer excellent environmental experience for visitors. In Nationalpark Gesäuse, the alpine pastures are good places for the interaction between nature and farming, mankind and nature. For visitors and tourists, pastures are well-established surroundings to get in touch with the environment and, therefore, contribute to a diversified landscape.  

As to the considerably bigger Banff National Park, the classification in five zones and the appropriate management of those is definitely a great step towards sustainable development. Considering the immense negative impacts which are caused by the cities of Banff and Lake Louise and the strongly frequented Trans Canada Highway, the predominance of wilderness area is a big advantage. On the other hand, facing the alarming ecological condition of the entire ecosystem of Banff National Park, there are several ecological problems which cannot be compensated by the huge extension.

The big size of Banff and the zoning of the landscape are not definite sustainable answers to ecological problems. As the park is a mountainous environment and the biggest portion of the landscape is alpine, this area contains limited habitat for wildlife. Hence, the wildlife uses the same 5% for habitat and movement as humans do for development. All the valley bottom areas, which are preferred destinations for cities, roads and railways, are important wildlife corridors (Parks Canada Agency 2000a: 6).

Due to the fact that movement in valleys is more convenient than moving across mountain alpine, this 5% of the park, which is of high ecological significance, definitely has the most infrastructure development. Some of the most important wildlife movement areas, which are called wildlife corridors, are situated right around the city of Banff. Therefore, much attention is paid to controlling the amount of use, the type of use and the time of use of the Banff city centre. The remote areas of the
park look after themselves, as they do not have the immediate pressure of mass tourism (Butler and Boyd 2000: 191).

### 8.9 VARIETY OF ECOLOGICAL PROBLEMS IN BANFF NATIONAL PARK AND NATIONALPARK GESÄUSE

Mass interaction of natural habitat and human development is a big source of trouble and complexity. One major problem is the impact on wildlife. Wildlife is seriously interrupted by humans on their migration back and forth over different times of the year. The section of the Trans Canada Highway around Lake Louise, which has not yet been reconstructed and broadened, runs through an area preferred for Grizzly Bear movement. A number of accidents occur due to ever growing traffic and wildlife movement, especially along this particular stretch of highway.

#### 8.9.1 Trans Canada Highway

Construction projects along the highway nowadays include fences on each side and the development of wildlife overpasses. But, as the highway has not yet been finished around Lake Louise, fences and overpasses are still absent. These investments do a good job in the prevention of accidents and therefore, protect both wildlife and humans. The biggest concern of the park management is the death of Grizzly bears that try to cross the highway on their movements. Normally, Parks Canada loses one or two Grizzly bears every year due to accidents with cars, trucks or tour busses. As the park only has approximately sixty Grizzlies, the loss of one single breeding female bear could have a tremendous adverse impact on the park's ecosystem. Road construction projects also come with discrepancy, and can create a vicious circle, the trade-off being that large-scale road construction projects raise safety levels along the highway; however, these projects also increase traffic running through the park – as it provides better accessibility (Parks Canada Agency 2000a: 6).

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8.9.2 Traffic in the Gesäuse

Compared to the impacts that Trans Canada Highway has on the ecosystem of Banff National Park, the problems caused by the major road running through Nationalpark Gesäuse are considerably smaller. Still there is an influence of human infrastructure which does not go perfectly along with the protective idea of a national park. Currently, the region of Nationalpark Gesäuse is not extensively frequented by bulk traffic as the road does not present a special linkage in the sense of interstate traffic.

Still, there is traffic that has to be managed in order to decrease negative impacts on the ecosystem. Nationalpark Gesäuse management does a great job in creating complex parking space constructions and information boards which provide tourists and visitors with enough space and at the same time contribute actively to visitor management. If tourists find attractive and informative islands for parking which directly guide them to beautiful hiking trails and outstanding attractions of the park they will as a rule remain on specified tracks and the guidance of visitors will work.

Especially in the area of the Nationalpark Gesäuse, the valley of the Enns river is very narrow and clifffy. This geographic particularity causes some challenging facets of traffic management for the park. In order to separate normal traffic that runs through the park and tourism-related traffic which has to be managed actively, reconstruction projects are crucial. Tunnel constructions along the road through Nationalpark Gesäuse increase the accessibility of the area and guide running traffic away from places specially dedicated to tourism purposes. Traffic conditions in the past have caused some risk as interference between running traffic and the slow stop and go traffic of tourists and visitors can be problematic.\(^{22}\) This is especially true in the case of the very small and winding Gesäuse road, which used to be the only connection through the valley for years. Nowadays, modern tunnels create perfect conditions for every-day traffic and simultaneously leave enough space for tourists to slow down and enjoy stunning views along the old, sparsely frequented Gesäuse road.

\(^{22}\) Hollinger Andreas Ing. (Nationalparkpräsentation, Nationalpark Gesäuse). Personal interview, 4 August 2005.
Even if traffic construction projects in Nationalpark Gesäuse show a much smaller scale than comparable projects in Banff National Park, the background is the same. As nowadays motorized accessibility is part of our modern lifestyle, traffic cannot be abolished. Road construction projects try to increase safety for human visitors and predominating animals and therefore are valuable investments for a national park management. Unfortunately, the vicious circle tends to be the same in Nationalpark Gesäuse as it is in Banff National Park. Better accessibility of the park region and higher safety standards cause higher volumes of traffic and furthermore, create more negative impacts on the natural ecosystem of the national park. Irrespective of the much smaller dimensions of Nationalpark Gesäuse, negative aspects of growing traffic have to be taken into consideration in both Nationalpark Gesäuse and Banff National Park.

8.10 DIFFERENTIATIONS IN WILDLIFE-RELATED MANAGEMENT PROBLEMS BETWEEN BANFF NATIONAL PARK AND NATIONALPARK GESÄUSE

Wildlife species and park management policies concerning wildlife show major discrepancies between Banff National Park and Nationalpark Gesäuse. The ecosystem in Canada contains species which do not exist in Central Europe or became extinct during the last century. Although some of them are on their way of being resettled in Central Europe, the majority of Canadian wildlife species do not exist in Austria. In terms of ecotourism development in the two underlying national park systems, the biggest difference between Canada and Austria is the danger for human beings. While in Banff National Park, interference with several wildlife species can cause dangerous situations for tourists and visitors, in Austrian national parks visitors and tourists do not have anything to fear from wildlife.

Resulting from research in that field, it can be assumed that in Nationalpark Gesäuse it is the opposite. Existing species get tremendously interrupted in their normal habits by visitors and tourists. Nevertheless, for the relationship between wildlife and humans, the establishment of a national park in the region of the Gesäuse brought a major enhancement. While for the last century commercial
hunting in Gesäuse was a popular attraction, nowadays based on the national park law, hunting is restricted to wildlife management.

Therefore, hunting is used for fitting wildlife into its surroundings and for influencing wildlife habits. For an accurate correlation between wildlife management and national park policies, wildlife habits should be suitable for a park’s philosophies. The restriction of commercial hunting in Nationalpark Gesäuse was one major condition in order to get classified as an IUCN category II. A national park according to IUCN does not allow any form of commercial hunting. Based on the zoning system of Nationalpark Gesäuse, wildlife management should be focused on the conservation zone, while human interference in the natural zone is abandoned.

Another important point of different conditions between the two countries is managerial measures which handle the relationship between wildlife and humans. In Banff it is not only the size of the park that forces management to implement special regulations. Especially in view of the threatening discrepancies between bears and humans, park management is obliged to regulate and control human access thoroughly.

8.11 REGULATIONS IN THE BACKCOUNTRY

Measured in terms of definite impacts on the ecosystem, the mass tourism development seems to be the greatest adverse influence over the last few decades. Apart from its ambitious efforts to reduce harmful impacts from flocking visitors, Banff National Park has set suitable guidelines for backcountry tourists. As 95% of the parks surface is managed as backcountry area, there are certain regions where access is restricted or even prohibited. The largest backcountry area of Banff National Park, which shows restrictions, is situated spaciously around the city of Banff, and stretches almost sixty kilometres to the city of Lake Louise. From the beginning of April until early November, that area is totally closed for all tourists.

23 Furthermore, this is the reason why certain parts of the Nationalpark Hohe Tauern are not rated as an IUCN category II. Some areas there are still characterized by commercial hunting and therefore, cannot be rated as category II, according to the IUCN. With regard to table 5, it can be shown that areas of the Nationalpark Hohe Tauern in Salzburg and Tyrol are rated as IUCN category V.

24 Hollinger Andreas Ing. (Nationalparkpräsentation, Nationalpark Gesäuse). Personal interview, 4 August 2005.
order to leave the Grizzlies with an undisturbed environment, this special area offers limited access for visitors during the summer months.

Every visitor who wants to enter the backcountry and wants to stay there overnight must receive a backcountry permit from Parks Canada Management. This measure can be considered advantageous in two ways; first, it creates another source for revenue, and second, it provides a certain level of control. As a result of this sophisticated recording system, park management can register how many visitors enter the backcountry, where they go and how long they will stay. Although it is very complex to implement accurate backcountry regulations, countless dangerous incidents between Grizzlies and humans have already been avoided.

Mr. John Conley, Captain Public Information Officer in the Calgary Fire Department and a frequent visitor of Banff National Park has witnessed a protective action of Banff park management:

“Some years ago, I was on a hiking trip in Banff National Park. Park management knew exactly were my group was, because we had to get one of these backcountry permits before we started our trip. According to this reliable system of visitor management and the thorough wildlife management, the wardens realized that our route would have interfered with the route of a female, breeding Grizzly Bear. As Grizzlies are extremely dangerous during their breeding time, a conjunction between our group and them could have resulted in a catastrophe. So the park wardens flew into the backcountry and took us out. We had to stop our trip, but the Grizzly family was not interrupted in their natural habits. Thanks to the wardens and their reliable work this threatening situation was avoided!”

Like it was proven in the past, a system of backcountry control enables park management to prevent dangerous incidents between visitors and wildlife. As the routes of backcountry tourists and the wildlife habitat converge, dangerous situations can be influenced and anticipated. Unfortunately, actions like these cannot always be that successful, as proved by the current example from article 1:

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25 Conley, John (Captain Public Information Officer, Calgary Fire Department). Personal interview, 13 February 2005
26 Conley, John (Captain Public Information Officer, Calgary Fire Department). Personal interview, 13 February 2005
Isabelle Dubé, a well-known competitive mountain biker, was killed by a grizzly bear Sunday afternoon on a popular hiking trail while jogging with two friends, shocking residents in this mountain community 90 kilometres west of Calgary. Fish and wildlife officers later shot and killed the grizzly, the same bear they had relocated from the area just eight days before.


It is important to note that this awful incident did not happen within the border of Banff National Park. Nevertheless, as wildlife does not recognize park’s borders, danger of incidents is omnipresent within and around Canada’s national parks, and the management does everything possible not to lack in preventing them.

All necessary measures in order to manage the relationship between wildlife and humans in Banff National Park definitely create very special circumstances. In other words, wildlife on the North American continent is only one category that causes an extraordinary status in the international context. Facing an international comparison, there are also a lot of other factors that distinguish Banff National Park from its Austrian counterpart. Therefore I would like to point out some ecological challenges, Banff National Park is facing and which tremendously differentiates it from Nationalpark Gesäuse.

8.12 OVERALL ECOLOGICAL CHALLENGES FOR BANFF NATIONAL PARK

Apart from the fact that 95% of the park is backcountry area, which is relatively untouched, there are still many ecological challenges to be managed. Taking into account that there are high levels of impact on the ecosystem, parks management plans have to incorporate their influences and consequences. In addition to
restrictions of human usage and minimizations of development, a number of initiatives are undertaken to evaluate the impacts of global conditions.

### 8.12.1 Altering the Composition of the Forest

Due to the worldwide problem of climate change, Banff National Park faces some shifting of the entire forest system. The tree line continues to move further up the mountains towards a higher elevation level, which impacts the balance of the park’s ecological regions. Such drastic changes in the overall conditions can neither be measured nor controlled as easily as direct impacts, such as human infrastructure. Processes connected to a change in climate can only be evaluated over long time periods and, therefore, are especially challenging for park management.

### 8.12.2 Decrease of Glaciers

In addition to the movement of the tree line, receding glaciers result from the global climate change that affects our ecosystem. As it is a global phenomenon, it cannot be immediately influenced by Parks Canada Management. However, it is of very high importance for Parks Canada because glaciers form the water reservoirs of the park. Glaciers directly feed the rivers which flow out of the mountains into the prairies and provide irrigation water for Alberta’s farms and the city of Calgary. If the trend of receding glaciers continues at its current pace, Western Canada could be faced with severe water shortages in the future.

### 8.13 ECOLOGICAL CHALLENGES IN AUSTRIA

The climate change as a global phenomenon does not differentiate between continents and countries and therefore has tremendous impacts on ecosystems worldwide. In Canada as well as in Austria, global warming creates a variety of ecological challenges, although the circumstances are different. Especially for Nationalpark Gesäuse, the decrease of glaciers is not problematic in the first place, as Gesäuse’s summits are not higher than 2,400 metres and so the park does not contain glaciers. For transferring the glacier problems from Banff National Park to
Austria, the best practice is to look at an Austrian national park which has experience with the decrease of glaciers.

8.13.1 The Decrease of Glaciers in Austria

Nationalpark Hohe Tauern, the biggest national park in Central Europe, consists of a huge area of alpine regions and is well known for its beautiful glaciers. The park earns a lot of attention and popularity from its ice fields, which because of its accessibility for visitors play a central role for tourism development. The glacier of the Großglockner, the highest peak of the Austrian Alps, is the most famous and most extensively visited glacier area of the Austrian Alps. The area around the glacier has been made extremely accessible for mass tourism over the last few decades. Especially the world famous Großglockner High Alpine Road, which was built in 1930 and enables tourists to drive directly to the tongue of the Großglockner glacier, stands for modern tourism infrastructure (Synge 2004). Basically, it is the man-made infrastructure that shows directly to what extent the decrease of glaciers has changed the alpine ecosystem. Visitors of the Großglockner glacier, who fifty years ago were able to reach the ice field within a few metres from the parking spots, nowadays have to take a twenty-minute walk down a canyon. The ice has disappeared and has left a landscape of rock and sand which seems unfriendly to any form of living species.

8.13.2 A Threatening Realization

Based on reliable research done by experts and environmentalists, the decrease of glaciers can be viewed as the major reason for severe nature catastrophes which attacked Austria over the last few months – heavy and devastating flood waters. Due to ongoing, heavy rainfall many densely populated areas of Austria faced horrifying flood waters in July and August. In the affected areas of Vorarlberg, Tyrol and Salzburg, many families and landowners lost their properties or were seriously injured by the pouring water masses. Article 2 shows an example of the devastating floods in Austria during the summer months of 2005:
VIENNA (AFP) - Two women died when heavy rains triggered river flooding that swept away their home in southern Austria over the weekend.

One victim, a 50-year-old woman, was buried overnight under the rubble of her house which was destroyed by a mass of mud brought by the swollen river from Mur Mountain at Gasen in Styria province, the Austrian radio ORF and news agency APA reported Monday, quoting rescue workers.

Her mother-in-law, 77, died later in hospital, where she was taken after being found by fire fighters.

In Graz, the provincial capital in the flooded region, fire fighters, police and military personnel have been mobilized for rescue operations if necessary as more rainfall has been forecast.

Irrespective of ambitious efforts to get the situation under control and to prevent similar scenarios in the near future, there are some experts from leading environmental organizations who warn of the alarming ecosystem conditions and call attention to the real reason for catastrophes like that. Due to the ongoing decrease of glaciers, the dead land which is left behind misses snow and ice as an important storage of water which appears in the form of heavy rain. In addition to this, it will take many years for vegetation to settle in the infertile soils which are uncovered by disappearing glaciers. Insufficient vegetation also means lack of important storage for water, which will take its way down the valleys and will supply rivers with too much water within too short a time (Offen Gesagt – Natur gegen Mensch).

Affected by this unfortunate development in the Alpine areas, the danger of flood waters seems to be a man-made; an omnipresent threat to our civilization that is likely to occur in regular intervals. The recent situation in Austria has shown that environmentalists are right in the search of holistic sustainable concepts in order to reduce the ongoing climatic change. Technically complex and extensive river and
dam construction projects can do a great job in order to control increasing water levels, but in order to prevent catastrophic situations in the future the climate change has to be decelerated. Natural catastrophes which threaten a large number of Austrians and which have such direct impacts on our daily life should be reason enough to think about our future and to change the course towards a much more sustainable development.

8.13.3 Danger for Nationalpark Gesäuse

This year, the negatively affected areas are situated in the Western and Southern part of Austria. In the year 2003, the area of Nationalpark Gesäuse was faced with severe flood waters due to ongoing hard rain. Although in the Gesäuse the direct danger of decreasing glaciers does not occur, the river Enns could be nurtured with flood waters in its catchment areas in the Western part of the country. The Gesäuse valley has been shaped by the river Enns over a couple of hundred years and nowadays appears as a narrow and clffy canyon with white water as a major attraction. Affected by heavy rainfalls in the Western part of Austria where the river Enns has its catchment areas, national park infrastructure and water sports facilities could easily be jeopardized by flood waters.

Although the threats are different for Banff National Park and Nationalpark Gesäuse, climate change does have extreme effects on our ecosystems. In Canada, the shrinking supply of drinking water could cause problems in the near future, whereas in Austria the growing incidents of heavy flood waters threaten people all over the country. The effects of global climate change are alarming and the time has come to rethink our daily life towards a more sustainable development worldwide.
9 SUSTAINABLE ACCOMMODATION FOR ECOTOURISM

Ecological challenges are manifold in Canadian national parks as well as in Austrian national parks. Especially in the definition of the IUCN Category II of a national park, strong emphasis is put on conservation and protection of natural ecosystems. According to the concept of ecotourism and its impacts on modern, sustainable national park management, in the last section of this thesis I would like to focus on accommodation in national parks.

In this last section, attention is drawn to a very sustainable means of accommodation which can already be found in many parts of the world. I will define ecolodges in general and give certain conditions and prerequisites for their existence. After having discussed ecolodges in general, I would like to introduce a case study from Canada which encompasses perfectly all sustainable ideas of ecotourism - the “Aurum-Lodge” in the region of Alberta.

9.1 ACCOMMODATION IN BANFF NATIONAL PARK AND NATIONALPARK GESÄUSE

Banff National Park is partly popular for its huge hotel complexes, which according to the history of the park, were the cornerstones of any tourism development in Western Canada. I would like to point out two figureheads of the early tourism development in Banff National Park, which originally were meant to attract the first tourists in the early twentieth century. The “Banff Springs Hotel” in the city centre of Banff and the “Chateau Lake Louise” are world famous for luxurious holiday accommodation and nowadays are not any more conceivable with sustainable tourism development.

In order to indicate the extremely different preconditions for accommodation in Banff and Gesäuse, it should be considered that huge hotel complexes will never be found in Nationalpark Gesäuse. Whereas, around 1900, the beginning of park management in Banff was entirely oriented towards the development of luxurious
tourism centres which tried to attract the upper class of the Canadian population, park management in Gesäuse prohibits the construction of any form of hotel buildings within the nature zone of the national park. In other words, the national park law of Gesäuse arranges that no single construction project will be placed inside the national park’s nature zone.\textsuperscript{27} Hotels and tourism centres in Banff National Park had been constructed before the zoning system of the national park was introduced. The five different management zones of Banff National Park were incorporated much later. The first tourism centres had been created and therefore were incorporated around existing tourism centres in disguise. In the year 2002, Nationalpark Gesäuse started to manage a predominantly untouched ecosystem which shows a high standard of ecological integrity. As a result, park management is able to leave the Gesäuse as untouched as necessary, and develop it as extensively as required.

In Banff National Park, where centres for mass tourism have been fostered over too long a period of time, nowadays more adequate forms of accommodation are needed. Especially with regard to ecotourism development and Parks Canada’s efforts towards a higher standard of ecological integrity, it is crucial to create forms of accommodation which attract ecotourists to Canada’s national parks. Ecotourists generally search for housing facilities which create perfect surroundings for being economically sustainable.

\section*{9.2 ECOLODGES: THE ACCOMMODATION FOR ECO-TOURISTS}

As the names imply, the roots of the word ecology can be found in many important phrases of this thesis. It is the ecological consciousness which drives people to have interest in protecting and conserving our natural environment. Therefore, modern tourism development is oriented towards ecotourism. Ecolodges create the perfect surroundings for ecotourists as they create sustainable accommodation for sustainable tourism. Due to the growing demand for ecotourism destinations, the increase in numbers of lodging facilities seems inevitable. Lodges

\textsuperscript{27} Hollinger Andreas Ing. (Nationalparkpräsentation, Nationalpark Gesäuse). Personal interview, 4 August 2005.
therefore bring ecotourists in contact with nature, as in lodges, ecotourists live in nature and with nature.

**9.2.1 Characteristics of an Ecolodge**

As ecolodges have to be designed in strict accordance with the ideas of ecotourism, a framework of principles and rules help people to design, plan and construct them. Therefore, The International Ecotourism Society (TIES) developed ten criteria which are essential for the construction of an ecolodge:

“An ecolodge is an accommodation facility that satisfies at least five of the criteria listed below, three of which must embody the main principles of ecotourism: that of conservation of neighbouring lands, benefits to local communities and interpretation to both local populations and guests:

1. Helps in the conservation of the surrounding flora and fauna.
2. Endeavours to work together with the local community.
3. Offers interpretive programs to educate both its employees and tourists about the surrounding natural and cultural environments.
4. Uses alternative, sustainable means of water acquisition and reduces water consumption.
5. Provides for careful handling and disposal of solid waste and sewage.
6. Meets it energy needs through passive design and renewable energy sources.
7. Uses traditional building technology and materials wherever possible and combines these with their modern counterparts for greater sustainability.
8. Has minimal impact on the natural surroundings during construction.
9. Fits into its specific physical and cultural contexts through careful attention to form, landscaping and color, as well as the use of vernacular architecture.
10. Contributes to sustainable local community development through education programs and research” (Mehta 2002: 5).

**9.2.2 Difference between Ecolodges and Mainstream Lodges**

It is crucial to note that ecolodges are significantly different from mainstream mass tourism lodges. Especially in Canada, ecolodges are supposed to differ significantly to ski resorts and luxury retreats. With its city centres and its luxury hotel complexes, Banff National Park has reached a status of questionable ecological integrity. Therefore, ecolodges created perfect opportunities to offset negative impacts of these mass tourism centres by developing sustainable means of accommodation. Ecolodges differ from mainstream accommodation by providing specialized forms of experiences. Promoted to the right target groups, ecolodges can be successful in two ways. First, they are appreciated by ecotourists, who already
have made their decision to protect the natural environment; second, ecolodges can raise environmental consciousness in the minds of tourists who have not thought about environmental protection before.

In order to provide nature-based experiences, it is very important to note that the attractions of an ecolodge are not artificial ones.

“The principal attraction of an ecolodge to the tourist is that it provides the opportunity to be close to nature (in some cases, supplemented by interesting cultural elements). An ecolodge is always part of the support attraction of an ecotourism destination, and should never be intended as a focal or complementary attraction” (Commission for Environmental Co-operation 1999: 65).

Artificial facilities like golf, tennis, jet-skiing, snow-mobiling, or gymnasiums, should never be found in and around ecolodges. “The main attractions of an ecolodge are its natural setting and nature-based activities which allow for a better appreciation and enjoyment of the ecological environment” (Commission for Environmental Co-operation 1999: 65). Resulting from this definition, remote areas with a maximum amount of natural beauty create the perfect surroundings for ecolodges. This is one reason why the Canadian backcountry contains perfect natural attractions in order to meet the requirements for ecolodges. Another reason for that assumption, and a more logical one, is the fact that Canada, as a birthplace of ecotourism development, has to foster alternative means of accommodation. This is especially true in view of certain precarious trends which do not meet the characteristics of sustainable development and cannot be easily abolished nowadays. In other words, the mass tourism centres in Banff National Park will not disappear, but alternative means of accommodation which meet the modern requirements of ecotourism can do a good job in contributing to an increasing ecological integrity.

For Austrian national parks, on the other hand, the concept of ecolodges could provide good opportunities for future sustainable development. Especially, in Nationalpark Gesäuse, where currently a unique centre for accommodation is missing, an accurately developed ecolodge project could significantly advance the public appearance and the attractiveness of the park. Therefore, as the last section of this underlying thesis, the concept of ecolodges will be evaluated for both parks,
Banff National Park and Nationalpark Gesäuse. In the Western part of Canada, especially in the region of the Rocky Mountains, a small number of ecolodges have already been built. In the following, I would like to introduce one case of excellent Canadian ecolodge management, and will try to evaluate its feasibility for the region of Nationalpark Gesäuse in Austria.

9.3 AURUM LODGE, PROVINCE OF ALBERTA, CANADA

Embedded into the breathtaking surrounding of the Canadian Rocky Mountains, Aurum Lodge is located forty kilometres east of Banff National Park. In order to guarantee good access to the lodge, it is situated right between Banff National Park and Jasper National Park, which are connected by a major tourist attraction – the Icefields Parkway. Although every year thousands of tourists make their way from Banff to Jasper on the major road, Aurum Lodge lies in the middle of remote backcountry and creates terrific surroundings for ecotourism experiences. Based on their mission statement, the owners of Aurum Lodge are proud of having created a place with respectable objectives. Aurum Lodge should be kept as a facility which maintains a high level of comfort, quality of service and recreational opportunity, but at the same time ensures minimal impact to the surroundings and the entire ecosystem. Therefore, the goal of Aurum Lodge is to foster sustainable development and to include environmental responsibility as key criteria for the process of decision making.  

9.3.1 Policies of Aurum Lodge

Based on the requirements and characteristics of an ecotourism business, the Aurum Lodge Team sees the future of ecotourism in the conscious effort of both hosts and guests to reduce the negative impacts of traveling. Therefore, the existence and the business of Aurum Lodge are based on a list of Policies, which can be found below:

• “We have attempted to minimize our environmental footprint, starting with the design and construction of our buildings.

• We continue to reduce environmental impact of our operation and guest activities by subjecting all operational and business decisions to environmental criteria as well as business criteria such as cost, marketing advantages, etc.

• We encourage our guest to engage in low-impact activities only and to consider a more sustainable life-style upon their return home.

• We decline business and partnerships which we consider detrimental to the area and ecology (e.g. motorized recreational activities such as off-roading and heli-touring, mass-tourism development, trophy hunting, etc.)

• We continuously review our actions and systems and implement improvements to operating practices, energy conservation and pollution reduction.

• We support conservation efforts and encourage our guests to get involved. In 2002 and 2003, about 5% of our gross revenue was re-directed to conservation groups, in addition to a significant time involvement.”

9.3.2 Building, Design and Operation of Aurum Lodge

For an ecolodge project, sustainable development is the preliminary paradigm. In every minute of its existence, the project is oriented towards sustainability and will always appear environmentally conscious. Therefore, the list of crucial issues which have to be addressed in lodge design and operation is long and has to be planned and incorporated reliably. It is not enough to build a lodge with the right natural materials, if later on the waste management lacks in efficiency. On the other hand, climate control and energy consumption may be as efficient as possible, but if the lodge has not been constructed and isolated with right materials, too much energy will be lost. In terms of Building, design and operation, Aurum Lodge is an exhibit of best practice. Its technical equipment, its incorporated know how of sustainable energy usage and its clever solutions in waste management are some examples of how ecolodge management can function at its best. Therefore some examples of building, design and operation of Aurum Lodge are outlined in the following section.

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9.3.2.1 Material Choice

In the phase of planning and constructing, the first important decisions have to be taken. Any material has to be preferred which is able to create nature-based surroundings in and around the lodge. Therefore, natural materials were used for the building and for furniture, instead of synthetics which could contain formaldehydes. The materials used should be from renewable resources and should be re-usable or recyclable to a maximum extent. In order to reach a holistic character and in order to maintain a high degree of sustainability, attention was paid to high-quality materials for a long life period and less maintenance. During the construction of Aurum Lodge, thorough planning for the full use of standard material sizes, enabled a maximum extend of waste reduction. A good planning strategy for material sizes can guarantee a maximum chance material re-usage. On the other hand, a good recycling plan for the remaining material can furthermore reduce the negative impact on the environmental ecosystem (Aurum Lodge Guest Info 2005).

9.3.2.2 Heat Retention and Distribution

Heat retention in Aurum Lodge is substantially effected by its passive solar design. The specialty of passive solar design simply tries to keep produced heat inside the building and hinders it to disappear unused. A maximum window exposure to the South, high quality windows with a good heat retention value and high insulation of exterior walls and ceiling are the preliminary actions to be taken in order to guarantee maximum heat retention. Especially in the blistering cold winters of the Canadian Rocky Mountains, heat retention is of very high importance. By passive solar design, the ratio between the loss of heat through the building and the amount of heat which has to be produced can be kept very favourable. The better the isolation of walls and windows, the less heat has to be re-produced and the lower the energy consumption rate can be.

Aurum Lodge contains special “sunrooms”, which capture the heat coming in through large windows on the South side of the building. With sixty percent of windows facing the South, enough heat is produced for the entire building, even if outside temperatures are below zero. On the other hand, in summer the need for air-conditioning is avoided by an overhanging roof which stops the sun from penetrating
the interior. Apart from windows, a double wall system covers the building in order to increase insulation values in general. The North side of the building contains an extra isolation in the basement and ground floor, which furthermore reduces heat loss on the coldest side, especially in the very cold Canadian winter. As it cannot be guaranteed that the heating of the building can always work without energy consumption, a certain amount of energy has to be produced.

Especially for the heating of the water supply inside the lodge and for the heating system in winter, twenty three square meters of flat plate solar collectors capture the heat of the sun and store it in a special hot water tank. In Aurum Lodge, heat retention is optimized by clever isolation and geographic adjustment of the building, even the considerably little amount of energy which has to be produced, enables a maximum contribution to sustainable development. As a result of the modern and sustainable design measures outlined above, Aurum Lodge contributes extensively to sustainable development. Drawing attention to the favourable situation of Aurum Lodge, I would like to point out some current facts.

- “Aurum Lodge requires no supplemental heating on a sunny winter day, as long as average outside temperature stays at or above freezing (more heat is produced by the sun during the day than what is lost through the walls at night).
- Aurum Lodge loses only 2-2.5 C of heat over a 24 hour period on a cloudy winter day, when all heat sources are turned off and passive or active solar heating is not available (with an average temperature differential of 33 C between inside and outside).
- Aurum Lodge can be operated with lower overall room temperatures (17-19 C) in winter, since space heating is evenly distributed and walls are highly insulated” (Aurum Lodge Guest Info 2005: 8).

9.3.2.3 Electricity Production

As already mentioned above, a certain percentage of energy for the operation of the lodge needs to be produced. In Aurum Lodge, the production of electric energy is enabled by a system of flat plate solar collectors and a relatively small wind generator. In the first year of operation, the solar-power system provided about 44% of the electricity generated. As the system generated excellent results due to long sunshine hours in the year 2000, solar collectors were extended in June 2001. Currently, Aurum Lodge is able to produce 75% of electricity by means of solar
energy (95% in summer months and an estimated 50% during the shorter winter days).

In order to reduce the operation hours of the lodge’s generator, which assists the whole system in times of poor sunshine, a small wind generator is being tested right now. If the wind power in the area of Aurum Lodge turns out to be favourable, more investments in wind generators will be made (Aurum Lodge Guest Info 2005). Figure 11 shows a picture of Aurum Lodge and its system of solar collectors:

![Solar Collectors of Aurum Lodge, Alberta, Canada](Source: Aurum Lodge Guest Info 2005)

9.3.2.4 **Electricity Use**

The team of Aurum Lodge has realized what not everybody does in the first place: “Electric power efficiency has more to do with attitude than technical wizardry” (Aurum Lodge Guest Info 2005: 10). Unnecessary energy uses have to be cut and attitudes should be changed towards conservation of electricity. In this field as well, Aurum Lodge is a very favourable example of implementing electricity conservation policies perfectly. More than 75% of electricity used in Aurum Lodge comes from renewable sources, like solar and wind power. In terms of reducing the overall electricity demand in an accommodation building like Aurum Lodge, a variety of measures have to be taken into consideration:
• “We avoided the need for any air-conditioning.
• All appliances were chosen with energy efficiency as the top criteria (freezer, fridge, washing machine, office equipment, etc.).
• Energy efficient lighting is installed throughout the development with lighting requirements further reduced by design measures such as internal windows, bright interior walls, etc.
• Refrigeration demand is reduced through structural measures such as cold storage area in the root cellar and a cold-pantry in the kitchen (direct vented to the outside – this replaces the fridge during winter months).
• High energy use activities are co-coordinated with high energy production times e.g. bulk laundry and thorough vacuuming are reserved for sunny days when ample power is available.
• We use alternatives where available e.g. dry laundry outside, manual drill vs. power drill, sweep floors as an alternative to vacuuming etc.” (Aurum Lodge Guest Info 2005: 10).

9.3.2.5 Waste Management

In the case of Aurum Lodge, waste management is a big challenge. Obviously, for an ecolodge, composting waste is a very suitable way in terms of recycling. In the area of Aurum Lodge, outside composting is not suitable, because of the risk of attracting wildlife, especially bears. Attracted bears and other wildlife would result in unnecessary risk for both guests and wildlife species, which should strictly be avoided. Therefore, Aurum Lodge has an in-door composting application which collects 50% of human waste for recycling and is also used to dispose of compostable kitchen scraps.

Compared to a building similar in size and similar in purpose, Aurum Lodge uses 90% less fossil fuels. This is a result of energy conservation and the application of renewable sources and results in significantly lower air pollution. As already mentioned, only non-toxic building materials and substances were used in the construction process of the lodge. In daily operations, the use of chemicals is preferably avoided (Aurum Lodge Guest Info 2005).

9.3.2.6 Water Supply and Management

Basically, the water quality of the area around Aurum Lodge is excellent. The safety of drinking water is safeguarded by annual bacterial tests. In order not to waste high-quality drinking water for periods of high demand in the lodge, showers, toilets and washing machines are special, water saving appliances. For the future, in
view of growing water demand, a system of rain water collection is planned for Aurum Lodge. Up to now, practices like that have never been considered as current water demand can be met and the area around Aurum Lodge is very dry. Due to a climate which does not often see heavy rainfalls, rain water collection would not show high relevance (Aurum Lodge Guest Info 2005).

9.3.2.7 Transportation

Transportation is a topic which requires a lot of attention during the planning process. “Remote location, absence of public transport and lack of environmentally friendly vehicles on the market today, make transportation one of our most difficult challenges” (Aurum Lodge Guest Info 2005: 12). Facing the lack of environmentally friendly vehicles of the market, the team of Aurum Lodge still tries to reduce air pollution by using fuel-efficient vehicles for transportation. Furthermore, unnecessary trips are avoided by thorough planning ahead and by combining as many actions into one trip as possible. Especially challenging for transportation management is the transportation of guest. Therefore, guests are encouraged by special offers to stay longer in the area. Resulting from actions like that, impact from transportation with motorized vehicles can be reduced to a minimum. For daily activities of guest and with a special respect to ecotourism programmes, low-impact, non-mechanized activities and trips are promoted to the guests of Aurum Lodge (Aurum Lodge Guest Info 2005).

9.3.3 Activities in and around Aurum Lodge

For ecotourists who come to Aurum Lodge for the purpose of receiving ecotourism experiences, activities are relatively clear. Everything that has to do with low impact outdoor activities is desired by guests of Aurum Lodge. For guests who want to make their individual arrangements for outdoor activities, a variety of local operators or guides can be booked. All operators in the region promote low-impact, conservation oriented activities in order to fit perfectly the idea of ecotourism experience.
9.4 AURUM LODGE AND BANFF NATIONAL PARK

Aurum Lodge is not situated in the area of Banff National Park. Indeed, the region around the lodge can be considered to be very similar to the backcountry region of Banff National Park. Although the lodge is not inside Banff National Park and its operation has nothing to do with park management, its value for park policies is bigger than expected. A sustainable concept like Aurum Lodge substantially embodies the ideas of ecotourism and therefore fits perfectly into the holistic approach of a national park. As outlined above, the design, construction and operation policies of Aurum Lodge indicate in which way sustainable development in tourism can be fostered. Indeed, it is a small-scale example and cannot be compared directly to the large-scale mass tourism centres in Banff National Park. Yet especially facing their negative impacts on the natural environment, Aurum Lodge is considered an important approach which shows that a sustainable and environmentally conscious way is possible in tourism development.

The ecological integrity of Canadian National parks has a low standard and certainly has to be increased. Therefore, quantity-oriented, large scale, mass tourism development should be replaced by sustainable, quality-oriented, small scale ecotourism development in the near future. I included Aurum Lodge into this thesis, because in my point of view it is the perfect example for the desired future development. A strong orientation towards sustainable development, which is demonstrated by Aurum Lodge, could increase Canada’s ecological integrity tremendously.

9.5 ECOLODGES AND NATIONALPARK GESÄUSE

Does the concept of ecolodges fit into Nationalparks Austria, and especially into the framework of Nationalpark Gesäuse? This is the last significant question I would like to investigate. Nationalpark Gesäuse is young, dynamic and still a lot has to be developed. Especially in the sector of tourism centres and accommodation, a small scale tourism development can be discovered in the area of Gesäuse. This is definitely one reason why the ecological integrity of the area is a very favourable one, especially if it is compared to certain areas of Banff National Park. For Nationalpark
Gesäuse, this standard is a desired one and the small-scale path will definitely be kept in the near future. The park area is small, mass tourism development is not desired in the near future, sustainable development is being promoted in a reliable way, and currently there is no accommodation facility in the park which is able to contain such a holistic approach of sustainable development like an ecolodge could do. However, there is a project running in Nationalpark Gesäuse since April 2004, I would like to introduce briefly.

9.5.1 The Nationalpark Gesäuse Partnerships

The predominating goal of the Nationalpark Gesäuse Partnerships was to create a network of businesses in and around the national park region. These businesses should co-operate closely with each other and with the park management. The reason for the high quality standard reached by these partnerships can be seen in the common goals which are shared by the partners: “Strengthening the regional economy, safeguarding the jewel that is the Gesäuse, and using it to give a new impetus to tourism.”

The project has gained high attention among business in and around the park, as every partner is included in a holistic marketing strategy which will be fostered by Nationalpark Gesäuse Management. Advertisements on the park’s web page, promotion material in the park’s information centres, and a corporate public relations strategy are only a few advantages which convince many businesses in the park’s region. The logo of the partnership project, a sign for the corporate character of the project, is shown in figure 12:

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Business sectors which are combined in the project’s network range from tourism organizations and tour operators to small guest houses and local farmers which offer local high quality products. The future opportunities for a network like this are very favourable. Guests stay in local guest houses, use the services of tour operators and guided education tours in the national park, and get in touch with local products and traditions through farmers. Especially the aspect of the local traditions and the high quality products of the region testify to the high standard of the tourism development around Nationalpark Gesäuse. The desired tourism in the region of the Gesäuse is a sustainable one and it shows good preconditions for an increasing ecotourism market in and around Nationalpark Gesäuse.

9.5.2 Austria and Passive Solar Design Architecture

Referring to the design and construction policies of Aurum Lodge in Canada, recent development shows that there is tremendous expertise in Passive Solar Design in Austria. Passive-energy houses simply are buildings which are built in order to reduce energy consumption. Passive Solar Design, the strategy which is used for the construction of passive-energy houses, can be compared to the design structure used at Aurum Lodge in Canada.\(^\text{31}\) In Austria, a recent example of a

\(^{31}\) For any details about Passive Solar Design, I would like to refer to section 9.3.2 where the design, construction and operation policies of Aurum Lodge are explained. The goals of Passive-energy houses in Austria and their technical applications can be considered as being similar to constructions in Aurum Lodge.
modern Passive Energy House is the new *Schiestlhaus* in the *Styrian* region of *Hochschwab*. This building, which was opened on the 2\textsuperscript{nd} of September 2005, is a unique example of Austrian passive solar design in an Alpine area. Like Aurum Lodge in Canada, its energy supply is mostly provided by solar collectors. The Southern surface of the building is equipped with large-scale windows, which significantly contribute the heat management inside the building.\textsuperscript{32} Figure 13 shows a picture of the *Styrian Schiestlhaus* on its opening day:

![Figure 13 – The New Schiestlhaus in the Austrian Hochschwab](http://www.landderberge.at/news/schiestlhaus%20neu/schiestlhaus-neu-text.htm; date of retrieval: 14 September 2005)

The *Schiestlhaus* as an example for Passive Solar Design proves that knowledge and expertise towards modern, sustainable architecture in Austria exists. This is another reason to believe that the concept of ecolodges in Austria would have good chances in the near future. The new *Schiestlhaus* shows that the demand for sustainable accommodation and architecture does exist and that it will increase over the next few years. If such a concept can be realized in the area of *Hochschwab*, it could meet acceptance in the area of *Gesäuse* as well.

*Nationalpark Gesäuse* has an obligation to maintain ecological integrity and sustainable development. Therefore, it is in a unique position, unlike Banff National Park, to develop and market itself as an ecotourist destination. An ecolodge is consistent with these principals and those of *Nationalpark Gesäuse*. An ecolodge project could increase the appearance of the *Gesäuse* region of being ecologically sustainable.

\textsuperscript{32} http://www.landderberge.at/news/schiestlhaus%20neu/schiestlhaus-neu-text.htm (date of retrieval: 14 September 2005)
sustainable and could be another cornerstone towards the development of ecotourism in the alpine areas of Austria. Ecotourists as a group with international character will be triggered by a form of accommodation which is unique in the Austrian Alps. They would find an opportunity to live their desired form of sustainable holiday in beautiful surroundings, with a large programme of nature-based activities and would learn to appreciate the cultural value of local traditions.
Tourism is the biggest service industry worldwide. Apart from mass tourism development, which has characterized tourism development for years, environmental consciousness among tourism planners is growing. Due to its high international significance, tourism is the perfect industry to advance sustainable development. At the bottom line, it is ecotourism that is able to create environmental consciousness in the minds of the tourists. The growing relevance of ecotourism can be confirmed by tourism figures and by the steadily increasing numbers of ecotourists.

Although ecotourism arose from tourism development in the USA, Canada and Australia, it also influences LDCs in a very positive way. Nowadays, favoured by highly affordable means of international travel, ecotourists are able to reach even the remotest areas of this planet. Some countries which are less developed because of poor economies and low per-capita income have already realized the incredible opportunities of ecotourism. Costa Rica is a perfect example of an LDC that promotes its outstanding natural beauty via ecotourism. Sustainable development in terms of ecotourism enables countries to focus on the tourism industry instead of investing in industrial production. This is especially true for LDCs, as currently most of them are highly dependent on heavy industrialized production.

Being extensively promoted in Canada, ecotourism attracts many international tourists to national parks and protected areas. Therefore, Canadian national parks create perfect surroundings for ecotourists and their preferred nature-based experiences. In Canada, it can be considered a symbiosis between national parks and ecotourism development as requirements, conditions and regulations coincide positively.

In Europe, ecotourism as a concept is not as frequently applied as on the North American continent. For the alpine area of the European continent, it is often assumed that tourism development has always been a certain form of ecotourism. In some respects this may be true, but it is still a controversial assumption. Although nature-based experiences that tourists may acquire in the Alps show a strong correlation to ecotourism, tourism development in the Alps does not perfectly match
Ecotourism in the first place. Ecotourism originally sets strict standards against mass tourism infrastructure and exploitation of natural resources. Especially winter tourism in the Austrian Alps is substantially characterized by mass tourism infrastructure and therefore, at the current pace, does not go along perfectly with the ideas of ecotourism.

Tourism in Austria is of very high significance for the country’s economy. It is mainly the winter tourism development which contributes to Austria’s position of being a hotspot for winter holidays in snowy mountains. But due to the mass tourism orientation in European alpine areas, Austria currently lacks behind in meeting the requirements for being a definite ecotourism destination. This condition can be changed – especially by Austria’s ongoing efforts towards the foundation of national parks. Austria is very proud of having six national parks with outstanding natural heritage and beauty, which is where ecotourism has big potential.

In the direct comparison to Banff National Park, Nationalpark Gesäuse is in a very favourable situation. Whereas Banff has to win back the ecological integrity of its ecosystems, Gesäuse faces a unique landscape which is ecologically more pristine than many other parks that are similar in size and shape. It is this distinctive situation of Nationalpark Gesäuse which should to be elaborated on. Any tourism development concentrating in the area of Gesäuse definitely needs to be ecotourism-oriented as ecotourism development meets the requirements of a Category II protected area.

As a best-practice scenario, the construction of an ecolodge would mean a significant advancement for Nationalpark Gesäuse. Considering the positive effects an ecolodge has on the natural surroundings of its location, it certainly stands for the lowest-impact means of accommodation and therefore, perfectly meets the high requirements of ecotourism. Furthermore, it attracts ecotourists with the right attitudes and visions in order to protect and conserve the natural environment.

For a protected area like Nationalpark Gesäuse, ecotourists that reside in an ecolodge, learn about the ecosystem of the Gesäuse and spread the ideas of ecologically conscious behaviour would substantially contribute to its sustainable
appearance in terms of ecotourism. With regard to Gesäuse’s obligation to maintain ecological integrity and sustainable development, it is in a unique position, unlike Banff National Park, to develop and market itself as an ecotourist destination. An ecolodge is consistent with both the principles of the ecotourism market and those of Nationalpark Gesäuse.
GLOSSARY

Adaptive Management (p. 52)

“Adaptive Management is done whenever the dual goals of achieving management objectives and gaining reliable knowledge are accomplished simultaneously; it is a scientifically defensible means of learning while doing” (Parks Canada Agency 2000b: Appendix B: 8).

Adaptives Management

„Das Konzept des adaptiven Managements ist hierfür geeignet, weil Eingriffe dabei möglichst in Form wissenschaftlicher Experimente durchgeführt werden, so dass sie nicht nur direkten Nutzen bringen, sondern auch die Ungewissheit verringern. Die Erkenntnisse werden dann genutzt, um die Managementstrategien zu verbessern. Diese Rückkopplung, eine Abneigung gegen irreversible Eingriffe und eine Vorliebe für hohe biologische und kulturelle Vielfalt sollen die Anpassungsfähigkeit der betreuten Ökosysteme gegenüber Veränderungen verbessern“ (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen, Jahresgutachten 1999).

Adventure Tourism (p. 19)

“Under rather tenuous conditions, the individual must harbour doubt as to the adequacy of his or her ability. The further one attempts to go beyond one’s perceived personal talents, the more intense the adventurous situation becomes. The adventure experience

Abenteuertourismus

„Laut Köck definiert sich der Abenteurer über die Charaktereigenschaften Mut, Durchhaltevermögen, Risikobereitschaft, Mobilität, Aktivität und Initiative. Das Phänomen Abenteuer, definiert als zeitlich
therefore is one that is not discrete but rather one that varies in intensity. The result is that in today’s marketplace tourists are able to select from a broad range of hard and soft adventure experiences, offering associated degrees of risk and uncertainty” (Fennel 2003: 30).

Alpine Pasture (p. 79)

“Land used for livestock grazing that is managed to provide feed value and maintain or improve soil, water, and vegetative resources.”

Alm

„Almen sind ein wesentlicher Teil der bergbäuerlichen Kulturlandschaft, sie sind aber nicht nur notwendige Produktionsstätten für die Landwirtschaft, sondern haben auch eine landeskulturelle Bedeutung. Sie bringen Vielfalt in die Landschaft, werden gerne durchwandert und bringen eine ökologische Bereicherung als Lebensraum für Tiere und Pflanzen.“

Alternative Tourism (p. 13)

“AT is a generic term that encompasses a whole range of tourism strategies (e.g. ‘appropriate’, ‘eco-’, ‘soft’, ‘responsible’, ‘people to people’, ‘controlled’, ‘small scale’, ‘cottage’, and ‘green’ tourism) all of which purport to offer a more benign..."
alternative to conventional mass tourism in certain types of destinations” (Weaver 2001: 25).


**Attraction (p. 26)**

“Attractions can be categorized as either natural or manufactured. Natural environmental assets are usually the most successful in attracting tourists, but they must attract tourists in a way that allows the asset to be preserved. Tourism can be destroyed if those assets are exploited. Natural attractions can be subdivided into climate, scenery, and wildlife” (Coltman 1989: 57).


**Backcountry Permit (p. 88)**

“Everybody who wants to stay over night in Banff National Park has to receive a backcountry permit from

Im Banff National Park stellen Backcountry Permits einen sehr guten Kontrollmechanismus dar. Jeder
Banff National Park Management. By this measure, parks management can register how many visitors enter the backcountry, where they go and how long they will stay.”


**Biodiversity (p. 45)**

“The variety of life, from genes and species to communities, ecosystems, functions and processes” (Parks Canada Agency 2000b: Appendix B: 1).

**Artenvielfalt (Biodiversität)**


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35 Conley, John (Captain Public Information Officer, Calgary Fire Department). Personal interview, 13 February 2005
ihre Funktion als Stabilisator der Biosphäre (insbesondere des Weltklimas) und als direkte und produktionsunterstützende Ressource“ (Bundesamt für Naturschutz 1997: 2-3).

**Brundtland Report (p. 16)**

“The World Commission on Environment and Development (WCED) published a report entitled *Our Common Future*, generally referred to as ‘The Brundtland Report’ after its chairperson, Gro Harlem Brundtland, the Prime Minister of Norway. The report examined the world’s critical environmental and developmental problems and concluded that only through the sustainable use of environmental resources will long-term economic growth be achieved” (Fennel and Dowling 2003: 3).

**Brundtland-Bericht**

“CPAWS describes itself as ‘Canada’s grassroots voice for wilderness’, and today has 13,000 members. CPAWS’ mission statement includes ‘protecting Canada’s wild ecosystems in parks, wilderness and similar natural areas, preserving the full diversity of habitats and their species’” (CPAWS 1999: 4).

“The organisation has four major programmes: ‘New Parks’, a campaign to establish new protected areas; ‘Park Solutions’, a campaign to preserve the ecological integrity of parks; ‘Natural Connections’, a campaign to establish migratory corridors of protected areas, e.g. Yellowstone to Yukon; and ‘Law and Policy’ which focuses on improving conservation laws and policies” (Lovelock 2002: 11).

**Carrying Capacity (p. 18)**

“Ecosystems threatened by overharvesting and/or overwhelmed by more waste than can be absorbed lose resilience (ie. the ability to absorb shocks and disturbance) and may

**Tragfähigkeit von Ökosystemen**

Im Hinblick auf Schädigung von Ökosystemen wird hier auf die ökologische Tragfähigkeit hingewiesen. Die Ökologische Tragfähigkeit von Ökosystemen ist ein Wert, der
suddenly break down and/or settle into a different system with less resilience. This implies there are thresholds at which the levels of stress will lead to the disruption of the system. One concept used to understand these critical limits and thresholds is carrying capacity which assumes that there are a finite number of people who can be supported without degrading the natural environment.”36

“An indirect measure of the maximum level of stress that the ecosystem can maintain” (Barbier 1994: 205).

Conservation (p. 20)

“The implementation of measures for the rational use, maintenance and rehabilitation or restoration of natural resources” (Parks Canada Agency 2000b: Appendix B: 2).

Naturschutz


36 http://www.iisd.org/ic/info/ss9506.htm (date of retrieval: 2 October 2005)
Conservation Zone (p. 83)

“The conservation zone, on the other hand, serves to preserve the man-made landscape. As, for example, the National Park’s alpine pastures show, this contributes greatly not only to a diversified landscape but also to biodiversity. The positive interaction between nature and farming, and between mankind and environment, should be highlighted here. In this zone people looking for recreational opportunities should be assisted towards the twin goals of gaining experience of nature and getting to know nature.”

Bewahrungszone


Danube Floodplains – The Nationalpark Donau-Auen (p. 58)

“The Donau-Auen National Park is protecting one of the last large unbuilt floodplain areas (Au) in Europe. Here the dynamics of the flowing stream are still active. The rise and fall of the

Nationalpark Donau-Auen

„Die Dynamik der Donau macht die Donau-Auen zu den vielfältigsten Landschaften Österreichs. Die Hochwässer prägen den Lebensrhythmus des Wasserwaldes und

37 http://www.naturschutz.at/ (date of retrieval: 6 July 2005)
water levels define life rhythms in the floodplain. The river shaped this landscape with its floods and still nurtures today a large diversity of plants and animals. In the National Park nature can develop free from economic restrictions.\textsuperscript{40}

**Destination (p. 18)**

“Destination refers to the place where tourists intend to spend their time away from home. This geographical unit visited by tourists may be a self-contained centre, a village or a town or city, a region or an island or a country. Furthermore, a destination may be a single location, a set of multi-destinations as part of a tour, or even a moving destination such as a cruise” (Jafari 2000: 144).

**Tourismus Destination**


\textsuperscript{40} http://www.donauauen.at/html/english/ (date of retrieval: 30 July 2005)
Ecolodge (p. 94)

An ecolodge should “uphold the social and ecological integrity of their given environments, and thereby allow for sustained benefits from ecotourism without damaging or destroying the very natural resources on which they depend” (Mehta 2002: 5).

Ökolodge


Ecological Integrity (p. 34)

“Ecological integrity” - is a term used to describe ecosystems that are self-sustaining and self-regulating. For example, they have complete food webs, a full complement of native species that can maintain their populations, and naturally functioning ecological processes (energy flow, production, decomposition).

Ökologische Integrität


nutrient and water cycles, etc). ‘Ecological Integrity’ can best be explained by breaking apart the words and exploring the roots and derivations of these words from Latin and Greek.

ECO = Home or Habitat
LOGICAL = Ordered or in an orderly fashion
INTEGRITY = Whole or Complete


Ecology (p. 20)

“Ecology is the study of the relationships between living organisms, including humans, and their physical environment; it seeks to understand the vital connections between plants and animals and the world around them. Ecology also provides information about the benefits of ecosystems and how we can use Earth’s resources in ways that leave the environment healthy for future generations.”

Ökologie

„Der Begriff Ökologie trat erst Ende der 60er Jahre mit einer generellen Bewusstseinsbildung in Fragen der Umweltverschmutzung, Bevölkerungsexplosion und Ressourcenvorknappung ins Licht der breiten Öffentlichkeit. Ökologie beschäftigt sich dabei als Teildisziplin der Biologie mit den lebenden Organismen in ihren Wechselbeziehungen und –wirkungen. Mit der zunehmenden Bedeutung der Ökologie ist dabei auch das Bedeutungsspektrum des Begriffs der Ökologie gewachsen. Somit steht Ökologie neben ihrer Aufgabe als Wissenschaft für die Erfassung der Phänomene der realen Lebenswelt für

42 http://www.esa.org/education/LME/ecologyANDme.php (Date of retrieval: 26 July 2005)
Ecoregions (p. 77)

“Banff National Park is divided into units based on vegetation, landforms and soil. This system of land classification is used to identify and inventory similar regions within the park in order to better manage park ecosystems. The park is classified into ecoregions, which are further divided into ecossections and ecosites. There are three ecoregions in the park: montane, subalpine, and alpine.”

Ökoregionen

Die Ökoregionen im Banff National Park können definitiv nicht analog auf den Nationalpark Gesäuse angewendet werden. Trotzdem lässt sich im Management des Nationalpark Gesäuse eine ähnliche Unterteilung des Naturraums erkennen. Dieser Naturraum gestaltet sich wie folgt:

„Die Lebensräume Wasser, Wald, Alm und Fels sind die prägenden Elemente im Nationalpark Gesäuse. Beginnend im Tal bei der ’blauen’ Enns gelangt der Wanderer, die Höhenzonen durchschreitend, durch die Zone der grünen Wälder und Almen hinauf in die Region der alpinen Matten. Diese werden vom ’grauen’ Kranz der hoch aufragenden Felsen aus Dachsteinkalk überragt.”

Ecosystem (p. 17)

“An ecosystem consists of a dynamic set of living organisms (plants, animals and micro organisms) all interacting among themselves and with the environment in which they live (soil, climate, water and light). An ecosystem does not have precise boundaries – it can be as small as a pond or a dead tree, or as large as the Earth itself. An ecosystem can also be defined in terms of its vegetation, animal species or type of relief, for example.”

Ökosystem


Ecosystem-Based Management (p. 75)

“Ecosystem management provides a conceptual approach for the protection of park ecosystems. It involves taking a more global view of the natural environment and ensuring that land use decisions take into consideration the complex nature of ecosystems. It is also important to keep in mind that park management will have effects on surrounding lands and their management.”

Ökosystemgerechtes Management

So wie in Kanada das Ecosystem Based Management vorschreibt, wie Park-Ökosysteme geschützt werden sollen, lassen sich in Österreich vergleichbare Prinzipien unter dem Oberbegriff „Naturschutz im Nationalpark“ finden. Dieser Naturschutz definiert sich wie folgt:

„Oberste Maxime beim Naturschutz in Nationalparks ist das Zulassen einer natürlichen Entwicklung. Dies führt manchmal zu überraschenden

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Ecosystem Model (p. 76)  

“A model is a representation of reality. Models take many forms including diagrams, pictures, small replicas of objects and computer simulations. Managers and scientists in national parks have created models that represent the structure, function and interaction of many living and non-living components of park ecosystems.”  

Ökosystem-Modell  

Im österreichischen Nationalpark Management haben Ökosystem-Modelle nicht so einen hohen Stellenwert, wie in Kanada. Im Nationalpark Gesäuse lassen sich keine Hinweise darauf finden, dass das Ökosystem Management grundlegend auf Ökosystem-Modellen basiert. Grundsätzlich handelt es sich bei Ökosystem-Modellen um Simulationen eines Ökosystems und dessen zukünftige Entwicklung. Da

47 http://www.nationalparksaustria.at/article/articleview/31700/1/8517 (date of retrieval: 18 September 2005)  

**Ecotourism (p. 18)**

“Ecotourism is a form of tourism that fosters learning experiences and appreciation of the natural environment, or some component thereof, within its associated cultural context. It has the appearance (in concert with best practice) of being environmentally and socio-culturally sustainable, preferably in a way that enhances the natural and cultural resource base of the destination and promotes the viability of the operation” (Fennel and Dowling 2003: 3).

“Ecotourism is responsible travel to natural areas which conserves the environment and improves the welfare of local people” (Patterson 2002: 1).
“The often-asked question, ‘Who are ecotourists’? has no definite answer for many reasons, including the limited studies of markets, poor definitional understanding, and the fact that ecotourist markets are not homogeneous. Studies tend to discuss general growth in interest, or markets to particular destinations, rather than identifying characteristics, preferences and motivations of broad ‘origin’ populations” (Weaver 2001: 37).


“In summary, the environmental costs of tourism can be any or all of the following:

• Increased levels of general congestion and pollution and the costs of controlling them.
• Changes in the natural

environment and ecological balance.

- Lessening of the environment’s natural attraction and even the loss of wilderness area.
- Resulting costs of creating new conservation or wilderness areas or other environmental enhancement areas.
- Resulting costs of taking retroactive measures, if it is not too late, to preserve historic and cultural sites” (Coltman 1989: 242).

Environmental Degradation (p. 13)

“The essential theme underlying these alternative approaches is that environmental degradation arising from economic activity imposes costs on the economic system” (Barbier 1989: 9).
Environmental Deterioration (p. 14)

“When the number or intensity of tourists exceeds an area’s physical ability to cope with them, there is bound to be deterioration in basic natural resources such as land and water. Frequently this deterioration can be forecast by earlier events that are indicative of strain. For example, when conflicts or hostilities arise between locals and tourists over the use of local facilities, then the overcapacity of tourism is beginning to show” (Coltman 1989: 236-237).

Ökologische Schädigung, Ökologischer Verfall

Eine mögliche Definition des ökologischen Verfalls kann durchaus mit der Definition der ökologischen Zerlegung gleichgesetzt werden. Aus diesem Grund wird hierbei auf die Definition der ökologischen Zerlegung verwiesen (A).

Environmental Education (p. 35)

“Environmental education is concerned with developing people who are knowledgeable about the physical, social and economic environment of which they are a part, so that they become concerned about environmental problems and motivated to act responsibly in enhancing the quality of their environment as well as their lives” (Jafari 2000: 173).

Naturbezogene Bildung

„Ebenso soll der Besucher durch ein ansprechendes und abwechslungsreiches Bildungsangebot für die Nationalpark-Idee sensibilisiert werden. Nicht durch Aussperren oder Verbote, sondern aufgrund faszinierender Erlebnisse und Erfahrungen soll Verständnis und Begeisterung für die Naturschutzarbeit gefördert und die Freude an natürlicher Vielfalt und Schönheit geweckt werden“ (Nationalpark Gesäuse Sommererlebnis ´05)
Global Code of Ethics for tourism
(p. 11)

“The Global Code of Ethics for Tourism (GCET) is a comprehensive set of principles whose purpose is to guide stakeholders in tourism development: central and local governments, local communities, the tourism industry and its professionals, as well as visitors, both international and domestic.”51

Globaler Ethikkodex für Tourismus


Großglockner High Alpine Road
(p. 91)

“An extraordinary feat of engineering, the Großglockner High Alpine Road is one of the main visitor hotspots of the Park. It runs north-south over the Alps, with stunning views of Großglockner and other peaks. Built in the 1930s to

Großglockner Hochalpenstraße

„Eine der sehenswertesten Bergstrassen der Welt führt von Bruck im Salzachtal (Salzburg) über das Hochtort nach Heiligenblut (Kärnten). Die Strasse wurde zwischen 1930 und 1935 unter der Leitung von DI Franz Wallack erbaut und ist heute nach

52http://www.bmwa.gv.at/BMWA/Themen/Tourismus/InternationaleTourismusbeziehungen/Multilaterale/tourismusethik.htm (date of retrieval: 19 September 2005)
provide jobs and open only from May to October, it is even today one of the most scenic routes in Europe, reaching 2,576m at its highest point. The road is operated by a company that is 70% owned by the State, the rest by the government of Carinthia and Salzburg. Users pay a toll of € 26 per car, which goes to the Finance Ministry, not the Park. Around 900,000 visitors take the road each year, down from a peak of 1.3 million in the early 1990s” (Synge 2004: 28).

Schönbrunn die meistbesuchte Sehenswürdigkeit Österreichs (mehr als eine Million Besucher pro Jahr).

- Befahrbarkeit meist von Mai bis November
- Streckenlänge: 35 Kilometer
- Höhenunterschied: 1748 Meter
- Durchschnittliche Steigung: 9 Prozent

Entlang der Glocknerstraße gibt es:

- Zahlreiche Schaupunkte
- Sechs Lehrwege
- Zwei Informationszentren (mit Sehschule der Natur).”

Guided Adventure Tour (p. 34)

“Explore the parks with a local guide. Whether your interpretive guide works for Parks Canada or for a private company licensed to operate within the mountain national parks, we share a common commitment to providing you with excellent customer service, knowledgeable guides and stimulating, safe adventures” (Parks Canada Mountain Guide 2005).

Geführte Abenteuertouren


53 http://www.50plus.at/austria/grossglockner-hochalpenstrasse.htm (date of retrieval: 4 September 2005)
Habitat (p. 33)

“The particular environment or place where an organism or species tends to live” (Parks Canada Agency 2000b: Appendix B: 4).

Icefields Parkway (p. 98)

“This 230km road (Hwy 93) linking Lake Louise with Jasper opened in 1940 and is one of Canada’s most spectacular stretches of asphalt. The highway follows a lake-lined valley between two chains of the Eastern Main Ranges, which make up the Continental Divide. The mountains here are the highest, most rugged and maybe the most scenic in all the Rockies. To best appreciate this if you’re on the bus, sit on the left side going from Lake Louise to Jasper. The highway is good but slow, as animals such as goats, bighorn sheep and elk are often beside or even on it. Cycling the Icefields Parkway is popular. Because of the terrain it’s easier to go from Lake Louise to Jasper than vice versa” (Lightbody et al. 2002: 699).

Lebensraum

„Ein Lebensraum ist eine spezifische Ansammlung von Lebewesen and einem bestimmten Standort – in der Ökologie als Biom oder Ökosystem bezeichnet. Lebensräume enthalten stets lebende und nichtlebende Körper.“

Icefields Parkway


54 http://www.tierreich.de/lebensraeume/allgemein/definition/d_default.asp (date of retrieval: 1 September 2005)
The International Ecotourism Society (TIES) (p. 96)

“The International Ecotourism Society (formerly The Ecotourism Society) is an international, non-profit membership organization founded in 1990 to make ecotourism a tool for conservation and sustainable development. The Society provides professionals with the information and educational materials they need to plan and manage ecotourism in destinations worldwide. TIES publishes a quarterly newsletter, books, information packages, guidelines and fact sheets; develops standards and monitoring programs for the ecotourism industry; performs research; and offers workshops, seminars, training programs and international forums on key topics within the field” (Mehta 2002: 1).

IUCN – World Conservation Union (p. 17)

“IUCN has defined 6 management categories, according to management objectives. These categories provide...

The International Ecotourism Society (TIES) (Die Internationale Gesellschaft für Ökotourismus)


IUCN – Welt Naturschutz Vereinigung

„Die IUCN ist eine internationale Naturschutzorganisation, die sich die Koordination des weltweiten...
the basis for incorporating conservation into development. Each category should in principle relate to one or several of the major components of a nation’s development plan: nutrition, education, housing, water, science, technology, tourism, defence, and national identity. Viewed in this way, protected area categories become means for sustainable development” (Ceballos-Lascuráin 1996: 31-32).


Less developed countries (LDCs) show certain characteristics:

- “Low living standards (ie low real income per capita) associated with high income inequality, poor health and inadequate education and limited life expectancy;
- Low levels of productivity possibly because of limited resources; unskilled labour; weak complementary factors and management practices and backward technology;
- High population growth rate due to falling death rate resulting in significant dependency burdens;
- Large-scale unemployment and underemployment;
- A small industrial sector with outdated technology unable to employ large numbers of poorly educated workers.
- Large but neglected agricultural sector and outward migration from rural to urban areas
- Market imperfections. In many developing economies markets may not exist eg financial market
- Developing countries generally have a colonial past
- Limited technology, infrastructure, and social and political institutions.
- Low social capital and social cohesion.”

Entwicklungsland

„Für den Begriff ‘Entwicklungsländer’, der in Deutschland seit den 1950er Jahren verwendet wird, gibt es keine einheitliche Definition. Die Mehrzahl dieser Staaten weist jedoch gemeinsame Merkmale auf:

1. eine schlechte Versorgung großer Gruppen der Bevölkerung mit Nahrungsmitteln, dadurch Unterernährung und Hunger
2. ein niedriges Pro-Kopf-Einkommen, Armut
3. keine oder nur eine mangelhafte Gesundheitsversorgung, eine große Kindersterblichkeit und eine geringe Lebenserwartung
4. mangelhafte Bildungsmöglichkeiten, eine hohe Analphabetenquote
5. hohe Arbeitslosigkeit, ein insgesamt niedriger Lebensstandard, eine oft extrem ungleiche Verteilung der vorhandenen Güter


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55 http://www.tutor2u.net/economics/content/topics/development/development_ldcs.htm (date of retrieval: 2 October 2005)
Management Plan (p. 42)

“The National Parks Act requires each national park to have a management plan. These plans reflect the policies and legislation of the Department and are prepared in consultation with Canadians. They are reviewed every five years. This management plan will guide the overall direction of Banff National Park for the next 10 to 15 years and will serve as a framework for all planning within the park.”

Management Plan


Market Segmentation (p. 30)

“The purpose for segmenting a market is to allow your marketing/sales program to focus on the subset of prospects that are most likely to purchase your offering. If done properly this will help to insure the highest return for your marketing/sales expenditures. Depending on whether you are selling your offering to individual consumers or a business, there are definite differences in what you will consider when defining market segments.”

Marktsegmentierung

“These days we are more prone to vilify or characterise conventional mass tourism as a beast, a monstrosity which has few redeeming qualities for the destination region, their people and their natural resource base. Consequently, mass tourism has been criticised for the fact that it dominates tourism within a region owing to its non-local orientation, and the fact that very little money spent within the destination actually stays and generates more income. Development exists as a means by which to concentrate people in very high densities, displacing local people from traditional subsistence-style livelihoods to ones that are subservience based” (Fennel 1999: 4).

Inlandsreisen unternehmen“

**National Historic Site (p. 47)**

“The national historic component of Parks Canada is responsible for Canada’s program of historical commemoration, which recognizes nationally significant places, persons and events. All such designations are made by the Minister of the Environment on the advice of the Historic Sites and Monuments Board of Canada.”

**National Historic Site**
(Nationaler Historischer Schauplatz)

*Parks Canada* ist nicht nur bekannt für seine Nationalparks, sondern ist im weiteren auch verantwortlich für ein Netzwerk an kanadischen historischen Schauplätzen, Personen und Veranstaltungen (A).

**National Marine Conservation Area**
(p. 47)

“National Marine Conservation Areas, or NMCA for short, are marine areas managed for sustainable use and containing smaller zones of high protection. They include the seabed, the water above it and any species which occur there. They may also take in wetlands, estuaries, islands and other coastal lands.”

**National Marine Conservation Area**
(Nationale Meeres-Naturschutzzone)

Im Falle der kanadischen Meeres-Naturschutzzonen werden kleine Küstengebiete zu großen Schutzzonen zusammengefasst und gemeinsam verwaltet. Beinhaltet werden Meeresgebiete, Küstenabstriche, Inseln und alle dort vorkommenden Spezies (A).

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“Natural area of land and/or sea, designated to (a) protect the ecological integrity of one of more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purpose of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible” (IUCN 1994).

**Nationalparks Austria (p. 57)**

Although the establishment of national parks is a central focus of the Austrian environmental policy, there is no federal agency, like Parks Canada Agency is for Canada. **Nationalparks Austria** is not an agency, but can be considered a trademark which promotes the existing six national parks in Austria (A).

Nationalparks Austria unterscheidet sich ganz deutlich von **Parks Canada Agency**. Bei **Nationalparks Austria** handelt es sich nicht um eine Verwaltungsbehörde, ähnlich wie **Parks Canada Agency**, sondern vielmehr um eine Dachmarke, unter der die sechs existierenden österreichischen Nationalparks vermarktet werden (A).

„Die Einrichtung von Nationalparks ist ein wichtiger Schwerpunkt der österreichischen Umweltpolitik. Österreich ist in der glücklichen Lage,

**Nationalpark Gesäuse Partnerships**
(p. 106)

On the 13th April 2004 the Nationalpark Gesäuse launched a project named ‘Nationalpark Gesäuse Partnerships’. The purpose of this project was the co-operation of businesses in the national park region with each other, as well as with the national park management. Therefore, the Partners share their goals in order to co-operate as thoroughly as possible (A).

**Nationalpark Gesäuse Partner**


Nationalpark Hohe Tauern (p. 60)

“Hohe Tauern is the largest park in the Alps. Based on initiatives starting in 1971 and with its last extension in 2001, it covers 1,815km², stretching some 100km east-west along the spine of the highest part of the eastern Alps. It is divided over three länder, the decentralized provinces of Austria – Salzburg (805km²), Tyrol (610km²) and Carinthia (400km²) – each of which is responsible for its section of the park” (Synge 2004: 27).

Nationalpark Hohe Tauern


Natural Resources (p. 12)

“Materials that occur in nature and are essential or useful to humans, such as water, air, land, forest, fish and wildlife, topsoil, and minerals.”

Natürliche Ressourcen


64 http://www.inwent.org/themen_reg/themen/umwelt/index.de.shtml (Date of retrieval: 1 September 2005)
Natural Zone (p. 82)

“Special emphasis is placed on the protection of natural habitats. The long-term aim is to allow the processes of nature to run their course without any human interference.”

Naturzone

„In der Naturzone steht der Schutz der natürlichen Lebensräume im Vordergrund. Das langfristige Ziel ist es die natürlichen Prozesse ohne menschlichen Eingriff ablaufen zu lassen. Dabei können anfangs noch teilweise regulative Eingriffe notwendig sein. Dies ist notwendig um größere Schäden durch Massenauf treten von so genannten Schädlingen zu verhindern und die Entwicklung hin zu natürlichen und stabilen Beständen zu sichern.”

Nature-based Tourism (p. 19)

“Refers to a market segment whose distinguishing feature is that it engages in nature-related activities in attractive natural settings, preferably in protected areas. The spectrum ranges from science tourism to wildlife-watching and nature photography, to consumptive activities (fishing and hunting) as well as sports and adventure tourism” (Ritchie and Crouch 2003: 41).

Naturtourismus


Naturtourismus wäre ‚Ökotourismus‘
die praktische Umsetzung des
ökologischen Leitbildes."

Non-Governmental Organization
(NGO) (p. 31)

„Private organizations that pursue
activities to relieve suffering, promote
the interests of the poor, protect the
environment, provide basic social
services, or undertake community
development. In wider usage, the term
NGO can be applied to any non-profit
organization which is independent
from government. NGOs are typically
value-based organizations which
depend, in whole or in part, on
charitable donations and voluntary
service. Although the NGO sector has
become increasingly professionalized
over the last two decades, principles of
altruism and voluntarism remain key
defining characteristics."68

Nichtstaatliche Organisation (NGO)

„Eine nichtstaatliche Organisation
(Non-governmental Organisation, im
weiteren Text: NGO) ist eine nicht-
gewinn-orientierte und auf freiwilliger
Arbeit basierende Organisation von
Bürgern, die sowohl lokal als auch
national oder international organisiert
und tätig sein kann. Auf ein
bestimmtes Ziel ausgerichtet und von
Leuten mit einem gemeinsamen
Interesse gegründet, versuchen
NGOs, eine Vielfalt von Leistungen
und humanitären Funktionen
wahrzunehmen, Bürgeranliegen bei
Regierungen vorzubringen, die
politische Landschaft zu beobachten
und das politische Engagement in der
Bevölkerung zu erwecken. Sie stellen
Analysen und Sachverhalte zur
Verfügung, dienen als
Frühwarnmechanismen und helfen,
internationale Übereinkünfte zu
beobachten und umzusetzen. Manche
NGOs sind für ganz bestimmte
Aufgaben gegründet, so zum Beispiel

67 http://www.bfn.de/03/031402_iyeoeko.htm (date of retrieval: 26 July 2005)
68 http://docs.lib.duke.edu/igo/guides/ngo/define.htm (date of retrieval: 2 September 2005)
Menschenrechte, Umwelt oder Gesundheit. Ihre Verbindungen zu Abteilungen und Einrichtungen der Vereinten Nationen hängt ganz von ihren Zielen, Standorten und Möglichkeiten ab."


Parks Canada Agency (p. 46)  

"The Parks Canada Agency is a public agency created by an Act of Parliament dated February 1998. The Agency has the mandate to conserve, protect and present nationally significant natural and cultural heritage. The Agency reports directly to the Minister of Canadian Heritage" (Parks Canada Agency 2000b: Appendix B: 6).

Parks Canada Panel on the Ecological Integrity of Canada’s National Parks (p. 48)  

"The panel (launched in 1998, report on March 23, 2000) reviewed Parks Canada Program with a mandate to

Parks Canada Panel on the Ecological Integrity of Canada’s National Parks  

Dieser Ausschuss der Parks Canada Agency wurde im Jahre 1998 ins Leben gerufen. Seine Aufgabe ist die

Parks Canada Panel on the Ecological Integrity of Canada’s National Parks (Verwaltungsbehörde der kanadischen Nationalparks)
focus the national parks program on conserving and restoring ecological integrity as a first priority.”

**Passive Solar Design (p. 100)**

“This is very easy to incorporate into any new structure at the planning stage. In the case of Aurum Lodge, it includes the following features:

- Orientation of wider surface due South.
- High quality windows.
- Maximum window exposure to South.
- Optmise window to wall ratio (13 – 15 % provides a good ratio between daytime heat gain and night time heat loss).
- Ensure windows are shaded in summer and fully exposed to the sun in winter.
- Sunrooms are a great way to capture heat during the day while reducing heat loss at night.
- Double envelope will reduce heat loss on the North side in particular” (Aurum Lodge Guest Info 2005: 5).


**Passive Solar Design**

*(Designmerkmale eines Passivhauses)*


- "Vom Grundriss sollte das Passivhaus kompakt sein, also ohne Erker oder Loggien. Ein sonniger Standort und die Ausrichtung der Fenster nach Süden wäre optimal.
- Die Dämmstoffstärken betragen 30 bis 40 Zentimeter, sind also doppelt so dick wie bei üblicher Bauweise. Massiv- oder Holzbau, Flach- oder Ziegeldach sind möglich.
- Im Haus wird es also nie ziehen, weil die genormte Luftdichtheit im so genannten *Blower-Door-Test* einen Wert von unter 0,6 aufweist.
- Die Fensterlüftung wird ersetzt durch Wohnraumlüftung. Der Luftaustausch
erfolgt mechanisch, wodurch das Haus nie auskühlt. Die verbrauchte, warme Luft wird über einen Wärmeaustauscher abgezogen, die Frischluft wird dabei angezogen und praktischerweise gleich aufgewärmt” (Das Haus ohne Heizung 2004: 24).

** Protected Area (p. 28) **

“IUCN (The World Conservation Union) defines a protected area as an area dedicated primarily to the protection and enjoyment of natural or cultural heritage, to maintenance of biodiversity, and/or to maintenance of ecological life-support services. The creation of such an area is now the most universally adopted means of conserving a natural ecosystem and/or relevant cultural heritage for a broad range of human values” (Ceballos-Lascuráin 1996: 29).

“An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means”

** Naturschutzgebiet **


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Protection (p. 20)

“With respect to ecosystems, protection means regulatory, resource management and public education programs aimed at ensuring ecosystems are maintained in as natural a state as possible. In the context of this report, protection refers to activities within a national park or other protected area, while sustainability refers to broader landscape activities that extend beyond park boundaries” (Parks Canada Agency 2000b: Appendix B:7).

Bewahrung


Recreation (p. 22)

“A wide range of human activities that are undertaken for the pleasure of the persons involved. Recreational activities range from relatively structured games to individualized actions which are informal, spontaneous, and variable in location” (Parks Canada Agency 2000b: Appendix B: 7).

Erholung

Zur Erholung von Menschen zählen vor allem Aktivitäten, die zur Freude und zum Vergnügen beitragen. Ob es sich nun um individuelle Aktivitäten oder Gruppenreisen handelt, Erholung ist fast immer spontan und örtlich variabel (A).
Science Capacity (p. 54)

“We define science capacity as the capability of Parks Canada to acquire and use scientific information relevant to managing and educating for ecological integrity” (Parks Canada Agency 2000b: 4-6).

Science Capacity
(Wissenschaftliche Kapazität)


Species (p. 33)

“What are biological species? At first glance, this seems like an easy question to answer. Homo sapiens is a species, and so is Canis familiaris (dog). Many species can be easily distinguished. When we turn to the technical literature on species, the nature of species becomes much less clear. The concept of species plays an important role both in and outside of

Spezies

Im Deutschen kann man eine Spezies am besten dadurch beschreiben, dass es sich um einzelne Individuen handelt, die eine Fortpflanzungsgemeinschaft bilden. Grundsätzlich lässt sich sagen, dass jede Spezies für sich ein ganz bestimmtes Gebiet bewohnt und sich dadurch von anderen Spezies isoliert. Alle Lebewesen lassen sich in Spezies,
biology. Within biology, species are the fundamental units of biological classification. Species are also units of evolution – groups of organisms that evolve in a unified way. Outside of biology, the concept of species plays a role in debates over environmental law and ecological preservation. Our conception of species even affects our understanding of human nature. From a biological perspective, humans are the species Homo sapiens.  

State of the Parks Report (p. 50)

“Following the 1988 amendment to the federal National Parks Act, the State of the Parks Report is intended to be a historical record of the parks’ and historic sites’ state. Produced by Parks Canada, this report is to be presented to Parliament every two years” (Parks Canada Agency 2000b).

State of the Parks Report
(Bericht über den Zustand der kanadischen Nationalparks)


Sunroom (p. 100)

“Sunrooms are a great way to capture heat during the day while reducing heat loss at night. Warm air rising to the top of the sunroom is channelled to the back of the building where it sinks to the basement down the stairwell as it cools. With the dry exhaust air from common areas it flows under the basement slab, which stores the excess heat and slowly radiates it back into the building. It is exhausted as combustion air for the wood burning appliances, increasing their efficiency” (Aurum Lodge Guest Info 2005: 7).

Sustainability (p. 14)

“The Brundtland Report examined the world’s critical environmental and developmental problems and concluded that only through the sustainable use of environmental resources will long-term economic growth be achieved” (Fennel and Dowling 2003: 3).

Sunroom (Sonnenraum)


Nachhaltigkeit


**Sustainable Development (p. 14)**

“A process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs” (Wight 2002: 222).

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Jayawardena Chandana 2003: 410).

“Fundamental principle for managing global development” (Richie and Crouch 2003: 33).

**Nachhaltige Entwicklung**

„Nachhaltige Entwicklung ist eine Entwicklung, welche weltweit die heutigen Bedürfnisse zu decken vermag, ohne für künftige Generationen die Möglichkeit zu schmälern, ihre eigenen Bedürfnisse zu decken.“

„Sie erfordert natürliche Ressourcen möglichst nur im Umfang ihrer Regenerationsfähigkeit zu nutzen, Stoffe nur in dem Umfang zu emittieren, wie sie in der Umwelt assimiliert werden können, und nichterneuerbare Ressourcen nur in dem Umfang zu nutzen, wie funktioneller Ersatz geschaffen werden kann.“

74 http://www.bve.be.ch/site/index/kus/bve_kus_ent_definition.htm (date of retrieval: 21 February 2005)
Sustainable Tourism (p. 15)

“Sustainable Tourism is tourism that is economically viable, but does not destroy the resources on which the future of tourism will depend, notably the physical environment, and the social fabric of the host community” (Richie and Crouch 2003: 36).

“The current paradigm of sustainable tourism development is based on the principles that this kind of development should:

- meet the needs and wants of the local host community in terms of improved living standards and quality of life;
- satisfy the demands of tourists and the tourism industry and continue to attract them in order to meet the first aim; and
- safeguard the environmental resource base for tourism, encompassing natural, built and cultural components, in order to achieve both of the preceding aims” (Richie and Crouch 2003: 34).

“The task at hand is to define an appropriate tourism development model or strategy to plan the use of tourism resources, avoid the costs and risks of spontaneous, uncontrolled development and help promote more authentic and profound economic and socio-cultural exchanges between the populations of generating and receiving areas” (Ceballos-Lascuráin

Sanfter Tourismus

Der Begriff des Sustainable Tourism kann nicht einfach als Nachhaltiger Tourismus in die deutsche Sprache übernommen werden. Grund dafür besteht in einer begrifflichen Diskrepanz bei der Bezeichnung „Nachhaltiger Tourismus“: „Wir sind der Meinung, dass es Nachhaltigen Tourismus per se nicht geben kann. Tourismus funktioniert nur innerhalb bestehender gesellschaftlicher Rahmenbedingungen. Im Tourismus geht es in Zukunft darum, das Handeln am Gesamtkonzept der nachhaltigen Entwicklung in all seinen Dimensionen auszurichten“ (Baumgartner und Röhrer 1998: 26).

Aus diesem Grund wird im deutschen Sprachraum der Begriff des sanften Tourismus verwendet, um eine Tourismusform zu beschreiben, die sich Nachhaltigkeit zum Prinzip gemacht hat:

„Für die inhaltliche Umschreibung des Begriffs sanfter Tourismus liegen vielfältige Definitionen vor:

- Akzeptanz der natürlichen Leistungsfähigkeit des Landschaftshaushaltes als planerische Rahmenbedingungen (Entwicklungskonzepte, Grenzen der Nutzung)

- Aufstellung und kontinuierliche Verbesserung von Ressourcen-Sparkonzepten
- Ansätze zur Reduktion des PKW-Verkehrs
- Förderung der regionalen bzw. örtlichen Wirtschaft und Strukturen" (Hopfenbeck und Zimmer 1993: 84).

Trans Canada Highway (TCH) (p. 74)

The major highway which connects the East Coast with the West Coast of Canada currently faces a variety of reconstruction projects:

"Traffic volumes are high and continue to rise annually on the Trans Canada Highway (TCH) through Canada’s first national park. This situation impacts human safety, the flow of goods, and safe, unimpeded wildlife movement. Upgrading to a four-lane highway has been chosen as the best means to improve conditions for both people and wildlife. Twinning has occurred in stages since 1981. The most recent 10-km stage is underway east of Lake Louise. By late 2007, this additional twinning will contribute to safer travel for people and the smoother flow of goods. Highway fencing will help reduce road kill. Wildlife crossing structures and other design features

will help maintain or restore vital ecological flows – be they waterways or the movement of fish and other wildlife.”

**Tourism (p. 9)**

“Tourism may be loosely defined as travel outside one’s normal home and workplace, the activities undertaken during the stay and the facilities created to cater for tourist needs” (Fennell and Dowling 2003: 1).

“Tourism can also be viewed as a global activity providing service sector employment, revenue and general economic impacts” (Fennell and Dowling 2003: 2).

“Tourism is defined as the interrelated system that includes tourists and the associated services that are provided and utilised (facilities, attractions, transportation, and accommodation) to aid in their movement, while a tourist, as established by the World Tourism Organization, is defined as a person travelling for pleasure for a period of at least one night, but not more than one year for international tourists and six months for persons travelling in their own countries, with the main purpose of the visit being other than to engage in business or to do work abroad” (OECD 1997: 2).
in activities for remuneration in the place(s) visited” (Fennel 1999: 2).

**Tourist (p. 14)**

“The tourists embark on their travels by choice – or so, at least, they think. They set off because they find home boring or not attractive enough, too familiar and holding too few surprises; or because they hope to find elsewhere more exciting adventure and deeper sensations than the homely routine is ever likely to deliver. In the tourist life, the length of stay in any place is hardly ever planned in advance, neither is the next destination. The point of tourist life is to be on the move, not to arrive; unlike in the case of their predecessors, the pilgrims, the tourists’ successive stopovers are not stations on the road, since there is no goal beckoning at the end of life travels which could make them into station” (Baumann 1996: 6-7).

**Tourist**

"At the 1992 Earth Summit in Rio de Janeiro, world leaders agreed on a comprehensive strategy for sustainable development – meeting our needs while ensuring that we leave a healthy and viable world for future generations. One of the key agreements adopted at Rio was the Convention on Biological Diversity. This pact among the vast majority of the world’s governments sets out commitments for maintaining the world’s ecological underspinnings as we go about the business of economic development. The Convention establishes three main goals: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of generic resources."77


Visitor (p. 29)

"A visitor is someone who has left their residence to spend time in a destination. Distance travelled, length of stay or other criteria may be used to define the term operationally. The

Konvention über die Biologische Vielfalt der Vereinten Nationen


78 http://www.biodiv.de/de/lexikon/biodiv.html (date of retrieval: 12 September 2005)
World Tourism Organization considers visitor to be the basic unit for collecting tourism statistics. Visitors consist of tourists (overnight visitors) and excursionists (same-day visitors). Some researchers use the visitor and tourist terms interchangeably” (Jafari 2000: 622).

Visitor Management (p. 64)

“Protected areas are important visitor attractions. The challenge for management is to ensure that the natural and cultural qualities of the area are safeguarded and that the enjoyment of visitors is achieved. The Hohe Tauern National Park in the Austrian Alps is an excellent example of how the balance has been achieved and as a result many difficult issues resolved” (Synge 2004: 2).

“Visitor management starts not with the visitor arriving in the Park but with how the Park and the local tourism agencies promote the Park to the public. The Park may well have ideas on the sort of tourists it wants to encourage and those it wants to discourage” (Synge 2004: 31).

Besucherlenkung


Wilderness Area (p. 32)

“An enduring natural area of sufficient size to protect pristine ecosystems which may serve physical and spiritual well being. It is an area where little or no evidence of human intrusion is permitted so that ecosystems may continue to evolve” (Parks Canada Agency 2000b: Appendix B: 8).

Wildnisgebiet

„Großes Areal von nicht oder nur geringfügig verändertem Land und/oder Meer, das seine natürlichen Charakteristika und Einflüsse beibehalten hat, ohne permanente oder erhebliche Besiedlung ist und das geschützt und bewirtschaftet wird, um seine natürlichen Gegebenheiten zu erhalten” (WWF Deutschland 2004: 2).

World Tourism Organization (WTO) (p. 10)

“The World Tourism Organization (WTO/OMT), a specialized agency of the United Nations, is the leading international organization in the field of tourism. It serves as a global forum for tourism policy issues and practical source of tourism know-how.”  

Welttourismusorganisation (WTO)


80 http://un.geotoday.de/welttourismusorganisation (date of retrieval: 19 September 2005)
"Within larger protected areas it is possible to pursue various management objectives in different parts of the area and reconcile potential conflicts through the use of zones. Ensuring that the management of individual zones is compatible with the aims of the protected area as a whole is crucial" (Synge 2004: 2).


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81 http://www.nationalparks.or.at/article/articleview/31560/1/8615 (date of retrieval: 15 September 2005)
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