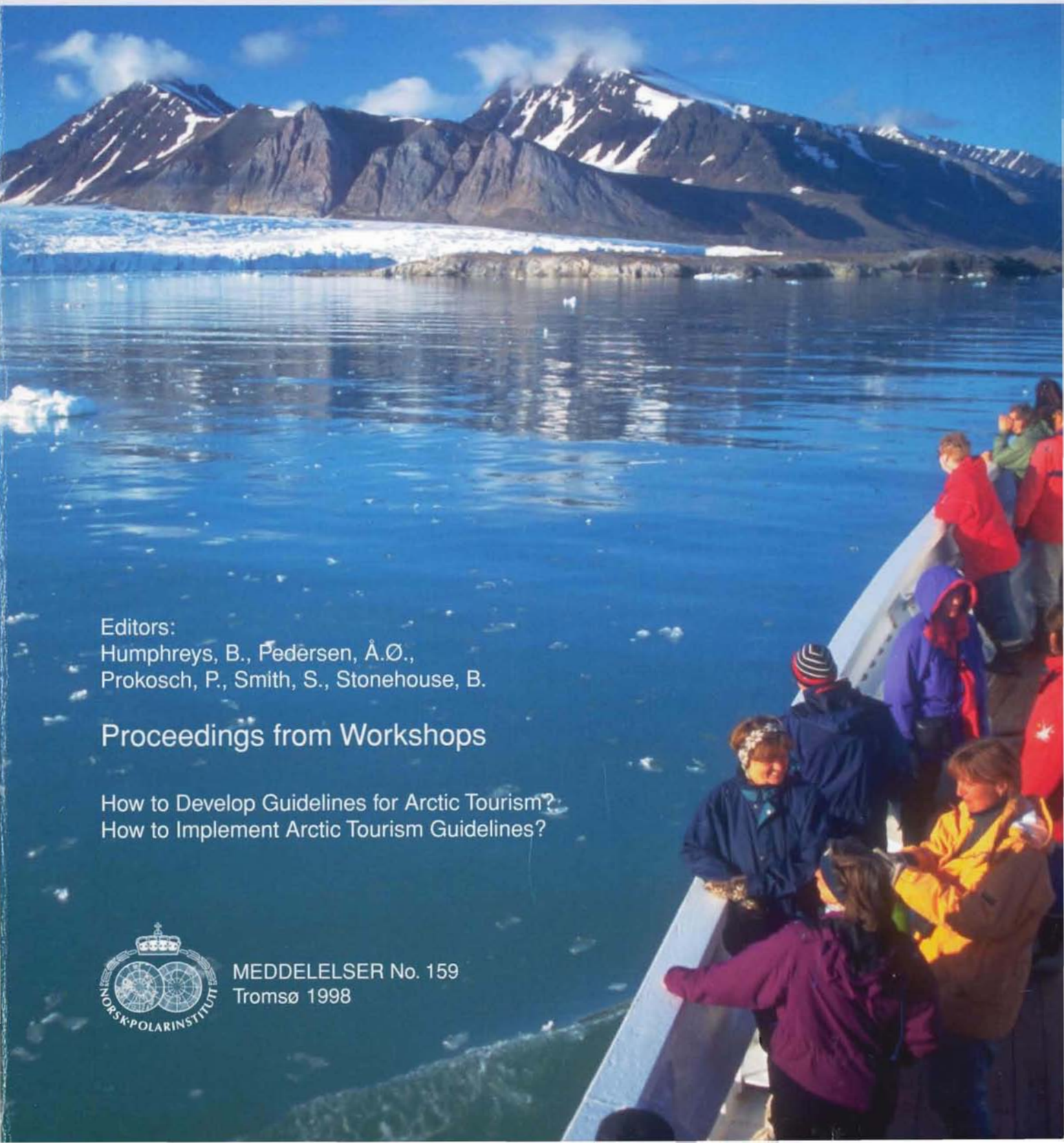
Linking Tourism and Conservation in the Arctic



Editors:
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Proceedings from Workshops

How to Develop Guidelines for Arctic Tourism?
How to Implement Arctic Tourism Guidelines?

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Preface

Said to be the world's largest and fastest-growing industry, tourism is a response to the spread of prosperity. More people have spare money and time to enjoy it, and travel is a popular way of investing both. Ecotourism (non-destructive travel to areas of natural beauty) is probably the fastest-growing sector of the industry, and polar regions provide two of its most popular venues. Those of us who work in the Arctic and Antarctic cannot really be surprised. We know the beauty and fascination of polar regions; in fairness we can only welcome others who may want to share them.

Tourism generally has a bad name for environmental destruction. People *en masse* relax into leisure in different ways, not all of them elegant or thoughtful. Catering for crowds of holiday-makers is at one end of the industry, but providing quieter pleasures for smaller numbers is another business altogether. Against cheap mass tours, the polar regions have three built-in safeguards: they are expensive to reach, restricted in interest, and too cold for comfort. Those who visit them are likely to be seeking wilderness, open air, splendid scenery, unique wildlife, and possibly isolation – leaving mankind and conviviality behind and enjoying the unadorned world.

Polar tourism is not without problems. Northern governments tend to over-sell their polar resources, reluctant to limit permits that bring in tourist revenues. Tour operators working with narrow profit margins suffer constant temptation to over-cram their ships, aircraft, coaches and itineraries. In the far South, under the Antarctic Treaty, a consortium of diplomats from 26 nations, meeting for two weeks each year, seeks to manage the environmental problems of a continent, including an ebullient tourism industry. At either end of the world, tourists themselves may be less than sensitive, in environments where even small numbers of people can easily destroy, for themselves and for others, the qualities they have traveled far to enjoy.

Successful polar tourism represents a point of balance, in which industrial pressures approach but do not exceed environmental constraints, tourists gain pleasure and education but not at the expense of ecosystems, and tour operators make legitimate livings but not by over-exploiting their resource base.

This collection of papers illustrates some of the points of view expressed throughout a series of workshops, which led ultimately to the codes and guidelines for Arctic tourism. That the operation was successful is a tribute to the common sense and dedication of all concerned, but above all to the vision, inspiration and hard work of Dr. Peter Prokosch and the staff of the WWF Arctic Programme.

Bernard Stonehouse
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Introduction

"Linking Tourism and Conservation in the Arctic:" After a three year period of work, this is how we titled the process by which a group of partners from Arctic and related countries found common ground representing nature conservation, research, the tourism business, governments, local peoples, and tour destinations. The World Wide Fund For Nature (WWF) and its Arctic Programme took the lead in this initiative on a mandate from the 1994 "Second International Symposium on Polar Tourism"[1] in St. Petersburg, Russia. The conclusions from this conference noted the absence of codes of conduct for tour operators and tourists in the Arctic and suggested that WWF be invited to draw up appropriate codes.

This recommendation from the St. Petersburg symposium was based on the finding that tour companies operating in Antarctica and cooperating through the International Association of Antarctic Tour Operators (IAATO)[2] had developed such codes for the polar region in the South. Making Antarctic tourists ambassadors for Antarctic nature conservation is one of the objectives of IAATO's codes for tourists, aspects of which are relevant for the circumpolar Arctic as well.

The fact that there are some parallels between tourism in both polar regions (e.g. that the majority of the tourists visiting these areas do so because they want to experience wild, pristine nature) gave good reason to consider "How to Develop Guidelines for Arctic Tourism". This became the subject of the first workshop held in Longyearbyen, Svalbard, January 20-22, 1996, which was hosted jointly by the WWF Arctic Programme and the Norwegian Polar Institute. The 45 delegates participating at the workshop came from Canada, Denmark, Germany, the Netherlands, Norway, the Russian Federation, Sweden, the United Kingdom, and the United States (appendix 7). The conclusions of the workshop, outlining the cornerstones of future work, were compiled in the following 13-point memorandum.

For the development of such guidelines the participants:

1. Suggested that the guidelines aim at minimising negative impacts on the environment, optimising benefits to local communities and promoting the conservation of nature;

2. Recommended that these guidelines include a code of conduct for Arctic visitors and a code of conduct for Arctic tour operators, as well as principles for management of Arctic tourism destinations;

3. Recognised that co-operation as well as competition between tour operators at all levels can yield positive effects for conservation. To act as an incentive, a system should be developed in which tour operators are encouraged to enter into contracts with a suitable international body where the tour operators guarantee they will follow the agreed upon guidelines and codes of conduct. In return, they would be allowed to use an official logo for marketing purposes;

4. Advocated that all Arctic communities require that any tour company intending to operate in their area sign such a contract and maintain at least these minimum standards. Arctic communities could also enter into contracts with a suitable international body in order to be labelled environmentally-sound tourist destinations which can be marketed accordingly;

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1 *WWF Arctic Bulletin* 3/95:12.

2 International Association of Antarctic Tour Operators (IAATO). 1993: *Guidelines of Conduct for Antarctica Tour Operators/visitors*, Kent.

5. Recognised that local participation should be a major component of Arctic tourism;

6. Considered that responsible tourism can assist in the development of the Circumpolar Protected Area Network as well as promote local nature conservation;

7. Recommended that tour operators co-operate with conservation NGOs to advocate keeping Arctic nature unfragmented and unaltered;

8. Recommended that experience gained from ship-borne tourism in Antarctica be applied to the Arctic;

9. Recommended further consideration of the use of terminology such as "Arctic ecotourism" to apply to this type of tourism;

10. Recommend that tour operators minimise the use of fuel and the amount of environmental damage caused by various means of transport;

11. Recognised that tour guides need local knowledge and related skills necessary to provide safe and high quality services and recommended relevant training programmes;

12. Recommended that the guidelines be promoted using a wide variety of media, tour operator information and also visitor/interpretation centres; and

13. Recommended that financing for the development of guidelines be sought from Arctic tour operators, local and national governments, polar research institutes, the EU, and Arctic universities.

The results of the workshop were based on presentations ranging from general evaluations of existing guidelines, monitoring tourism impacts on the environment, case studies from Antarctica, experience from whale-watching and other forms of ecotourism, and experiences from tourism on Svalbard. This publication represents a selection of the most essential contributions from the workshop and will make the basic material available for a wider group of interests.

A core group met in August of 1996 at the Scott Polar Research Institute of the University of Cambridge, UK, and a second workshop on "How to Implement Arctic Tourism Guidelines" was planned for March 7-10, 1997 in Longyearbyen. There the group refined the project's principles, began work on the guidelines and related codes of conduct, and created a draft document outlining ten principles for environmentally-friendly tourism in the Arctic. These principles and codes were based on a list of Potential Benefits and Potential Problems of Arctic Tourism and the wish to create an optimisation process that would aid nature conservation in the Arctic.

The 1997 workshop was jointly sponsored and organised by the Norwegian Polar Institute, Svalbard Tourism Board, and WWF. Again a group of about 50 delegates gathered in Longyearbyen from all eight Arctic countries as well as Germany, the Netherlands, the UK, and New Zealand; more than half of these delegates had participated in the process since 1996 (appendix 8). The goals of the workshop were to refine the guidelines and codes of conduct for both visitors and tour operators that had been drafted in Cambridge, and to describe ways to implement them. The contribution of Margaret Johnston and David Twynam from Lakehead University in Canada are updated versions of two key presentations given at the second workshop.

The 1997 workshop participants decided to implement the guidelines by establishing a voluntary organisation of those interested in and affected by Arctic tourism. After publicising the guidelines and codes, this organisation would develop a certification and evaluation system so those tour operators who complied with the guidelines and codes would receive some type of public recognition that they could use for marketing purposes. To get the new organisation off the ground, the workshop participants resolved to establish both a secretariat and an interim steering committee for the project and devised a number of initial activities including further work on developing a code of conduct for Arctic communities. During the initial phase it was recommended that the secretariat be supervised and sponsored by the WWF Arctic Programme office in Oslo, Norway.

The Ten Principles for Arctic Tourism, Codes of Conduct for Tour Operators in the Arctic, and Codes for Arctic Tourists' have been published and are annexed to these proceedings. They should serve in the future as a key to encouraging a type of tourism that protects the circumpolar environment as much as possible, educates tourists about the Arctic environment and peoples, respects the rights of Arctic residents, and increases the share of tourism revenues that go to northern communities. The project, now called "Linking Tourism and Conservation in the Arctic", continued with a third workshop held from February 4-6, 1998, in Iceland and organised by WWF. A series of pilot projects were launched for testing the principles and codes and guiding their implementation under practical conditions.

It is important to note that the written tourism guidelines are not intended to be fixed standards for Arctic tourism. The principles should instead serve as guideposts for a process to improve the practice of tourism permanently for the benefit of Arctic nature and Arctic residents. Fantasy and creativity, both of which play a role in tourism and conservation, should be inspired and further incentives identified.

If in some years we find that this process really has achieved positive results, one may look back to this document as a description of how it started. It should also give credit to those who contributed to the opening phase of the project. In place of many others who played an important role, I would like to thank a few of them: Bjørn Frantzen and the Norwegian Polar Institute for cooperating with us and supporting the first two workshops in 1996 and 1997 on Svalbard, as well as Ulf Prytz/Svalbard Polar Travel and the Svalbard Tourism Board, who joined us at the second workshop and later in the interim steering committee. Michele Hege, Hilde Johansen, and Samantha Smith/WWF did an excellent job organising the two workshops, and editing many of the workshop documents. At the University on Svalbard, Sigmund Spjelkavik/UNIS provided a lecture hall and other facilities ideal for the workshops in Longyearbyen. Bernard Stonehouse/Cambridge University with his long scientific and tourism experience in both polar regions served us with valuable advice, helped us edit workshop papers, and hosted our core group meeting at the Scott Polar Research Institute in Cambridge. Margaret Johnston and Dave Twynam/Lakehead University as well as Peter Mason/Massey University were the core tourism researchers who provided us with their expertise, as well as Staffan Widstrand, a Swedish (polar) ecotourism expert, who provided us with pilot studies. Åshild Pedersen/WWF served us with organisational support at the second workshop and since autumn 1997 invested great enthusiasm

[1] *WWF Arctic Bulletin* 4/97, insert

as the first tourism project coordinator. Brenin Humphreys/WWF provided technical support at the 1997 workshop, and later edited the final proceedings. Cheri Kemp-Kinnear/Nunavut Tourism, Canada gave us valuable advice on the guideline text and took the lead for a consultation process to develop codes for communities as well. In addition to those already mentioned, some were in particular active with the final guideline text: Jeanne Pagnan, Canada, Denise Landau/Quark Expeditions, Andreas Umbreit/Spitzbergen Tours, Kathleen Cartwright/Arcturus Expeditions, Jeppe Mordhorst/Danish Polar Center and Bärbel Krämer/Hanseatic Tours-Hapag Lloyd. The latter two provided us also with Danish and German translations, and Marianne Lodgaard/WWF created a Swedish version. A Russian version was translated by Svanhovd Environment Center. For the final production of this report I would like to thank Dag Vongraven and the Norwegian Polar Institute for further editing work and the Norwegian Ministry of Justice for financing the printing costs.

May the reading of these contributions stimulate many more to play an active role in the continued process of Linking Tourism and Conservation in the Arctic.

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Guidelines and codes of conduct for Arctic tourism: Implementation and evaluation of an operator program

Margaret E. Johnston and David G. Twynam

Abstract

This paper describes a process for evaluating operator achievement of the 10 principles and the operator code of conduct outlined in "Linking Tourism and Conservation" in the Arctic program. It discusses operational indicators that can be used to assess achievement. It recommends that achievement be measured through a variety of means, including operator checklists, site visits, client surveys and evaluation of community-level data. An important component of assessing achievement is providing feedback to operators so that they may improve their practice. The paper discusses the need for publicity campaigns, and awards and recognition system and pilot projects. It also recommends supporting actions required of the implementing body.

Process of Evaluating Operator Adherence

Criteria for Evaluation

A variety of principles and codes for sustainable tourism exist world-wide. Many of these are described in three documents: *Codes of Conduct in Tourism* by Peter Mason and Martin Mowforth (1995), *Environmental Codes of Conduct for Tourism* by the United Nations Environment Programme (1995), and *A Collection of Ecotourism Guidelines* by The Ecotourism Society (nd). The report *Beyond the Green Horizon: A Discussion Paper on the Principles for Sustainable Tourism* by Tourism Concern (Eber, nd.) provides a foundation for understanding the principles that are seen as important in developing tourism that is sustainable.

Linking Tourism and Conservation in the Arctic is a program designed to support and encourage Arctic tourism that is compatible with nature conservation, that respects local people's rights and that contributes positively to the local environment and local people. The program outlines 10 principles of environmentally and culturally responsible tourism and it is these principles that serve as the basic criteria for the evaluation of operator adherence to the program.

In order to assess operator adherence it is necessary to develop a system of evaluation. This should measure the degree of acceptance of the *Linking Tourism and Conservation in the Arctic* program. It should also measure the level of implementation and identify the initiatives taken in response to participation. Further, it must contain a mechanism for providing feedback to operators in order to help them improve their practice and to recognize achievement.

Achievement Indicators

The 10 *Linking Tourism and Conservation in the Arctic* principles are elaborated further as sub-categories. The sub-categories are key expectations about the attributes of sustainable Arctic tourism operations, and these can be considered as the indicators of achievement. These indicators can be measured on the basis of required actions (appendix 2). A discussion of the

use of managerial indicators for planning and managing sustainable tourism is available in a report by Consulting and Audit Canada, titled *What Tourism Managers Need to Know: A Practical Guide to the Development and Use of Indicators of Sustainable Tourism (1995).*

The *Linking Tourism and Conservation in the Arctic* program is directed at operational indicators, i.e. those attributes of the experience that can be controlled individually by operators. These indicators can be evaluated using specific measures outlined as actions to be taken during tourism operations or as components of an operator's *Linking Tourism and Conservation in the Arctic* environmental plan. This plan would be completed by all operators associated with the program, and would identify the ways in which the operation will meet particular indicators that require formal planning.

Method of Measuring Adherence

Two evaluation programs for ecotourism suggest methods of assessing operators' achievement of guidelines. One of these is the National Ecotourism Accreditation Program in Australia created by a government agency and a tourism association. This program combines operator self assessment and external review, and includes feedback from clients. The other program is the Green Evaluation of the Ecotourism Society. This evaluation is based upon a client survey and independent evaluation by a neutral party. During testing of the program in Ecuador in 1995-96 the following problems were noted regarding the client survey: some operators did not fulfil their obligations to the program, there was inconsistency in the administration of the survey by operators, and finally there was some question on the ability of clients to assess adherence.

Several approaches may be needed to assess operator adherence to guidelines. Experience from existing evaluation programs suggests that neither operator self assessment or client assessment alone is sufficient. Rather, using a number of approaches could address evaluation from various perspectives, enabling a more comprehensive picture of operations and their success. We propose that the following methods be employed to measure achievement.

Operator checklist

The primary method of measurement suggested is a formal operator checklist founded upon the above indicators (appendix 3). Each year operators would be asked to respond to the checklist in order to indicate their achievement of the indicators over the previous 12 months. The checklist evaluates the specific actions outlined as measures in Appendix 1. It lists the specific actions that are necessary for achievement of the indicators of the *Linking Tourism and Conservation in the Arctic.*

The potential for site visits

There are at least two possibilities for evaluating operations through site visits. One option is to employ an independent evaluator to assess the operations in terms of the *Linking Tourism and Conservation in the Arctic* program. This would provide an unbiased, consistent and confidential evaluation.

Another option is that the operators annually select a panel of assessors from among those operators involved in the program. The advantage of this approach is that it would encourage operator cooperation, learning from each other and the formation of partnerships in order to improve practices.

Survey of clients

A general sample of clients should be surveyed in order to gain an understanding of how Arctic tourists experience the *Linking Tourism and Conservation in the Arctic* program. This would be aimed at the general client population and there would be no need to identify the individual operators of the surveyed tourists unless operators requested specific feedback.

The survey would ask tourists whether they remembered their *Linking Tourism and Conservation in the Arctic* briefing and the code of conduct for tourists, and the specific components that they recalled. They would be asked about their own behaviour as a tourist and that of their fellow party members. This survey would include questions about adherence to the Code of Conduct and the perceived benefits of the *Linking Tourism and Conservation in the Arctic* program.

This aspect of evaluation would be used to provide information about actual visitor behaviour and experiences. In addition to being important for the evaluation of the program as a whole, it should also provide detailed feedback that could be useful to operators in their efforts to improve client education and adherence to the code. Feedback of this nature would be incorporated into the evaluation program. Methods of distributing the surveys and reporting results need to be addressed in conjunction with the operators.

Evaluation of community-level or broad-level indicators

In order to develop a picture of the general impacts of tourism in the Arctic, and on specific destinations, the evaluation team should create and maintain an Arctic tourism database. The kinds of information that should be collected include the percentage of local people employed in tourism, the extent of economic leakage and the extent of foreign ownership. These data could be used to track changes and improvements and provide information to operators regarding the tourism industry that is of direct relevance to the *Linking Tourism and Conservation in the Arctic* principles. This information would be particularly helpful to small companies who could not otherwise access this type of data easily and to companies operating in areas with many other operators.

Method of Documenting Adherence

Operator checklist

The checklist (appendix 3) would be completed annually by each operator. A variety of potential formats exist. Appendix 2 is a sample of a simple checklist. This checklist requires operators to indicate whether the operation has accomplished particular actions.

Site evaluation

The site evaluators provide a report to the *Linking Tourism and Conservation in the Arctic* program evaluation team.

Client evaluation

A survey for distribution to a sample of clients should be prepared by the program evaluation team with operator input. This should address the clients' experience in relation to the applicable measures of indicator achievement. The applicable measures are those that outline operator responsibilities to client education and activities.

Feedback and follow-up to operators

The program evaluation team should provide an annual report to operators based on operator documentation, site evaluation reports, and the survey to a general sample of clients. The feedback should include highlights of operator adherence and recommendations for improvement. Information obtained from the general sample of clients will be forwarded to all operators and the implementing body.

Process for Implementing the Operator Program

Recruitment and Retention of Operators

A publicity campaign should be developed to encourage participation by operators and bring the program to the attention of communities. The campaign should emphasize the environmental, social, cultural and economic benefits of participation in the program particularly for the long-term sustainability of Arctic tourism. Materials for the operators should emphasize the marketing advantages of company participation. Expert assistance provided by the implementing body will aid in the retention of operators and program awareness for the communities.

Expert Services

The implementing body should function as a source of technical assistance for operators and communities involved in the program. Of primary importance is the creation of a model Linking Tourism and Conservation in the Arctic environmental plan. This model would assist operators in preparing a company plan for integrating the *Linking Tourism and Conservation in the Arctic* principles with their operations. For example the model should include a discussion of procedures for cooperating with other operators, supporting conservation efforts, and supporting monitoring of and research on Arctic tourism.

The implementing body also should assist operators involved in the pilot project by providing technical advice and administrative support, and perhaps ongoing assistance and networking through the organisation of seminars for operators and communities.

Publicity and Public Awareness

An important aspect of implementation is the promotion of the program to the general public and particular interest groups. Both communities and potential tourists need to be aware that *Linking Tourism and Conservation in the Arctic* exists. The community information campaign should be directed specifically to all those communities located in the Arctic through local councils and tourism offices. The information could contain a description of the program, a suggested procedure for dealing with companies, and an invitation to join a community mailing list for *Linking Tourism and Conservation in the Arctic.* Communities should be encouraged to require operators to be *Linking Tourism and Conservation in the Arctic* members in order to operate within the community.

Tourists should be encouraged to seek out and patronize members of *Linking Tourism and Conservation in the Arctic where* possible, and to visit communities that have *Linking Tourism and Conservation in the Arctic* agreements with operators. This campaign necessarily would be broader in focus, perhaps channelled through destination and origin travel agents, package tour operators, NGO publications and specialty magazines.

Awards and Recognition

Annual awards should be developed to recognize good practice and implementation. This would reward operators and also act as an incentive for improvement. All member operators of the *Linking Tourism and Conservation in the Arctic* program should be recognised through a logo and label that they are entitled to affix to all promotional material and corporate identification. Communities could also be recognised through the award program. The implementing body should develop the details of the award system in conjunction with the operators and communities.

Pilot Project

It is recommended that prior to Arctic wide implementation of the program the implementing body should undertake pilot projects. The pilot projects should include operations in several regions in the Arctic. Using the Codes of Conduct for operators and tourists for a given time period, participants would assess and demonstrate the viability of the *Linking Tourism and Conservation in the Arctic program.* This would enable the implementing body to evaluate and refine the documentation and process. Pilot projects with communities could address community involvement in and support for *Linking Tourism and Conservation in the Arctic* principles.

Practical Challenges

Suitability of indicators for situation.

Given that the indicators were developed by a specific group of individuals, it should be apparent that the philosophical framework of the program itself may limit its applicability. This suggests the need for flexibility and a process for review, particularly in relation to the pilot projects.

The indicators may need to be adapted to the various situations within the Arctic regions. Economic, social and political aims of the various regions may influence the acceptance of the *Linking Tourism and Conservation in the Arctic* program. An example of this would be the regional differences in values and appropriate uses of the natural environment.

Acceptance of program by operators, communities and tourists.

In order for Arctic tourism to be sustainable, it is imperative that operators and communities become involved in the program. Through education and marketing of the program that highlight the foundational principles of *Linking Tourism and Conservation in the Arctic*, involvement among the target groups can be initiated. The practical challenge is the institution of a market strategy that is not only appropriate but also accessible.

Within region differences

There are a number of regional differences that may influence the initial implementation and on-going operation of the program. These include language, culture, economic resources, government regulation, and access to technology and communication. In particular language differences could pose a major barrier to communication during evaluation.

Application to different kinds of operations

The indicators and measures are provided in generic form with the expectation that they can be applied to operations. It may be necessary to adapt indicators and measures or add new ones to accommodate unusual circumstances of practice.

Cost Implications

We foresee costs in the following areas:

- Publicity: Materials (brochures, posters, signage, layout and content, translation), advertising and distribution.
- File management: Administrative support, supplies, storage and computer data base.
- Program evaluation team consulting: Per diem, administrative overhead, supplies and communication costs.
- Site visits: Travel, accommodation, per diem, administrative overhead and communications.
- Client surveys: Developing client file, reproduction and distribution, data analysis, storage, and communications.
- Awards and recognition: Materials, design and development, distribution, formal event and communications.

Recommendations

1. We recommend that the implementing body support the development of planning and monitoring protocols for use by operators in the Linking Tourism and Conservation in the Arctic program.
2. We recommend that the implementing body evaluate new technology applicable to Arctic tourism and identify those that reduce impacts.
3. We recommend that the implementing body examine the use of EIAs in Antarctic tourism and their applicability or usefulness for Arctic tourism, and that the implementing body also examine SIAs for the same purpose.
4. We recommend that the implementing body provide information to assist member operators in identifying conservation and protection issues in their areas of operation.
5. We recommend that the implementing body provide information to assist member operators in identifying education and training needs of local populations.
6. We recommend that the implementing body assist operators in the development of Arctic interpretation programs, printed material and internationally recognized signage to support the Linking Tourism and Conservation in the Arctic program.
7. We recommend that the implementing body support the organization of conferences and seminars for member operators and communities for the purposes of exchanging ideas.
8. We recommend that the implementing body sponsor a workshop on research priorities in Arctic tourism.
9. We recommend that the implementing body support the extension of research that uses scientific and technical methods to monitor the impacts of Arctic tourism.
10. We recommend that the implementing body initiate a process to encourage community involvement in the program.

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Drafting tourism codes for the Arctic

Peter Mason

Abstract

This paper discusses the processes and issues in relation to the creation and use of tourism codes in the Arctic. It is divided into three sections. It initially provides a rationale for codes of conduct in the Arctic through an investigation of the nature of the Arctic environment, the scale of tourism and the impacts of tourism. The second section considers the nature of tourism codes of conduct, with particular reference to those relating to the Arctic. The final section discusses issues in relation to writing and implementing codes.

Introduction

To a great extent it is still possible to view the Arctic as a resource frontier (Hall and Johnston 1995, Mason 1994, Hall 1987). As yet most development has been limited in areal extent and tends to be concentrated in relatively few locations although here activity is often intensive (Sugden 1982, Macklin 1991). Although tourism development is relatively recent, Snowman (1993: 182) indicates its growing importance in relation to other Arctic activities when he argues: *the older preoccupations of the region, sovereignty, defence and mineral exploitation are giving way to other issues such as conserving fish stocks, climatic monitoring, environmental pollution or how best to develop Arctic tourism.*

The Arctic region: attractions for tourists

The Arctic region has been variously defined, but there is no single universally accepted definition (Sage 1986). A commonly accepted approach is to use the tree line to distinguish the Arctic from the sub-Arctic (Bone 1992). This distinction is a visible boundary, which is based on climate and soil, with a fairly close link between the 10°C July isotherm and the treeline. North of the tree line is the treeless or semi-treeless tundra. The existence of permafrost, which is a product of the climate, is important in definitions in Siberia and Canada (Sage 1986). In Alaska and Europe the Arctic Circle tends to be used as the boundary (Johnston 1995, Snepenger and Moore 1989).

Recently, in an attempt to classify areas at risk and in need of protection, definitions have used a combination of climatic and biogeographical data (CAFF 1994). As Johnston (1995) points out, however, definitions of the Arctic are culturally and historically based constructs. One important construct, which relates to climatic factors and is used in tourism marketing, is the idea of the Arctic region being the 'land of the midnight sun' (Jacobsen, 1994).

A major appeal of the Arctic region for tourists is its perception as a polar wilderness (Johnston 1995). Sugden (1982) indicates that this perception of the region is based predominantly on a 'temperate' view. This view sees the region as both hostile and also fragile (Sugden 1989). Johnston (1995) indicates that the fragile environment is one of the attractions but the fact that it is perceived as clean and unsullied by human activity — a pristine environment — is another attraction. Bronsted (1994) also claims that it is this notion of a vast wilderness, relatively unvisited by tourists and almost free of a human population, that leads to the perception that the region provides great scope for recreation, adventure and enjoyment.

Viken (1993) indicates another attraction when claiming the Arctic is perceived as being at the end of the world both geographically and culturally and is viewed by tourists as a place to escape from their hectic urban existence to reflect on life. Lopez (1986) supports this view that the Arctic is a place to retreat from alienated western life styles and believes responding to Arctic nature offers visitors a way to be more in contact with their inner selves. Johnston (1995: 29) argues the Arctic carries mystic symbolism and it encourages contemplation about the links between humans, the earth and the universe. As she states, "It can be an awe-inspiring reminder of the connectedness of the global environment."

Unlike the similar physical environment the Antarctic, there are aboriginal peoples in the Arctic and these peoples are part of the regions tourist appeal. The people themselves are attractions for visitors, as are their artefacts and the manifestations of their activity, such as the reindeer herding of the Sami. The indigenous people are usually viewed by visitors as part of the Arctic environment and living in harmony with it (Mason 1994). A British visitor (Hay Jones 1989:209) who subsequently became a resident in the Norwegian area of Finnmark sums this view up well. *What fascinates me.... is the Samis' bond with the wilds. Nature has been strong enough to determine their lives. It has shaped their characters, their language, their work.*

The scale of Arctic tourism

Although tourism in the Arctic is not on the scale of the mass tourism of the Mediterranean region, hundreds of thousands of tourists visit northern circumpolar destinations each year (Johnston 1995). Table 1 provides an indication of tourist numbers for selected locations in the Arctic in the early 1990s.

Table 1. Tourist numbers (to the nearest thousand) in the Arctic and sub-Arctic.

Country / region	*Numbers*
Northern Scandinavia	500,000
Yukon (Canada)	177,000
North West Territories Canada	48,000
Iceland	129,000
Greenland	6,000
Arctic Alaska	25,000

Source: Johnston, M. 1995: In Hall and Johnston, 1995.

Tourist numbers are likely to increase in both the short and long-term (Colin 1994, Butler 1994). Reasons for the increase are partly linked to greater disposable income and more leisure time (Mason 1994). Also recent years have seen improvements in transport allowing greater accessibility (Butler 1994, Johnston 1995). A very recent and important spur to increased tourism in the Arctic is the political change in what was the USSR (Hall and Johnston 1995). These combined effects will mean more international and domestic tourism in the Arctic. There is likely to be an increase in international air tourism to, for example, Greenland, Iceland, Alaska and Russia, cross border land-based and air borne tourism in Scandinavia and between Scandinavia and Russia, and also increasing amounts of domestic tourism in Russia itself.

Environmental impacts

The fragility of the Arctic and its sensitivity to tourism impacts is still a matter for debate. Colin (1994) provides a reason for this when he argues that insufficient monitoring of impacts of tourism has been conducted and there is a need for more data. Walker et al (1987) in their study of the recovery rate of Alaskan Arctic tundra, although not focusing specifically on tourism impacts, concluded that most single-event disturbances result in recovery, but multiple-event or cumulative disturbances are far more damaging to ecosystems. Much tourism activity would seem to fit into this cumulative disturbance category. Sugden (1982) claims that the Arctic's sensitivity to environmental change has been overstated and is partly based on a 'temperate' perception. Johnston (1995: 28), however, argues, that despite the 'temperate' bias towards Arctic issues: ... *there can be no doubt that polar ecosystems are susceptible to change and/or degradation from excessive or inappropriate tourism.*

Colin (1994) claims that Arctic vegetation is particularly fragile and recovery from damage is very slow and argues that the destruction to ecosystems usually occurs rapidly but may take decades rather than years to redress. This view is supported by Macklin (1991) where she indicates that the imprint of a school's expedition camp made in 1970 in Norway was still visible more than twenty years after, as bare patches on the Arctic heath, and by Viken (1995a) when he claims, in relation to Svalbard, that it will take hundreds of years for vehicle tracks to disappear. Colin (1994) claims that because of the sensitivity of ecosystems, even the smallest change in some Arctic habitats could cause major long-term effects in plant and animal populations.

Tourist litter and waste are becoming a significant problem in the Arctic, partly due to the lack of a system for litter removal and/or the unwillingness of visitors to remove their rubbish (Umbreit 1991, Mason 1994). As Valentine (1992) points out, improper litter disposal can create health hazards for wildlife and people, cause behaviour changes in animals and reduce the quality of the tourist experience. One of the major tourism management concerns in Canada's Yukon Territory is the disposal of waste (Johnston and Madunic 1995). In a relatively large scale study of over 500 visitors to the Yukon in the early 1990s as many as 28 % reported negative impacts of tourism on the environment with litter referred to specifically as a negative impact by 14 % (Johnston and Madunic 1995). This survey also reported awareness by some tourists of the incompatibility between the pristine polar environment and litter, and recognition by them that they as tourists were contributing to the damage to the environment. Johnston and Madunic indicate, however, that the presence of litter and other negative effects has not yet reduced the demand for tourist experiences in the Yukon.

Vehicles crossing the sensitive Arctic land surface can also cause damage. There is growing concern on Svalbard about the unregulated use of the snow scooter (Umbreit 1991, Abbot, 1991). There is only a small resident population of 3,300 on the archipelago that makes up Svalbard, but visitors during the short summer season can increase the population by more than ten fold (Abbot 1991). Tourists make use of snow scooters to travel around and these can have a damaging effect on spring and summer plant growth, particularly where snow cover is thin. This largely unregulated use of snow scooters has led the Norwegian environmental organisation, *Naturvernforbundet*, to argue against any increase in tourist numbers (Abbot 1991).

Viken (1995a) reports on a survey of over two hundred visitors to Svalbard, in the early 1990s, in which 30% indicated that pollution and evidence of human damage to the environment were problems that affected tourism, although visitors believed these problems were not predominantly caused by tourist activities. Viken also claims that as yet the damage caused by tourism is small, but supports the view of Kaltenborn (1991) that there is a widespread consensus that, in relation to future tourism development on Svalbard, ecological and cultural sustainability must be guiding principles.

Socio-cultural impacts

It is often the claim of governments and tour operators that tourism will bring economic gain to destination regions. This argument can be particularly significant in areas where older industries are dying — Svalbard with a declining mining industry would be an Arctic example — or in locations that are relatively new to tourism and where few alternative economic activities are seen to have potential (Johnston 1995). Greenland is an example of an Arctic location with a young tourist industry and it is attempting to expand this activity greatly in the next ten years, from about 5,000 to 35,000 visitors annually by 2005. The chief benefits for Greenland, it is argued, will be increased jobs and income (Bronsted 1994). Smith (1989) however claims that there is a good deal of evidence to support the idea of economic leakage of tourism revenue from the Arctic and indicates that much money paid for an Arctic visit goes to tour operators, carriers and package holiday providers outside the region itself.

The problem of the commoditisation of indigenous cultures, in which tourists view members of host populations in the same way that they view wildlife and scenery, as a commodity to be consumed, has been discussed widely in relation to other parts of the world (see for example Urry 1990, Smith 1989, Krippendorf 1987). Hall (1987: 217) suggests this process is happening in the Arctic and sees particular problems with the way indigenous people are viewed and then marketed by the tourist industry. As he states: "The danger is that the peoples of the north will become human animals in a cultural zoo, mere objects of curiosity for adventurous southerners wealthy enough to enjoy the temptations of glossy travel magazines, luxury cruises through the icebergs, reindeer round-ups or photographic safaris amongst the walrus and polar bears."

Another potential problem concerns the relationship between tourists and hosts. Evidence from other parts of the world suggests that after a short period from the first arrival of tourists, when locals are very happy to meet and greet the visitors, there can be a fairly rapid change to apathy, possible annoyance at and even antagonism towards the tourists. This process has been discussed by Doxey (1975) and is shown diagrammatically in Table 2.

Table 2. Doxey's index

EUPHORIA	Visitors are welcome and there is little planning.
APATHY	Visitors are taken for granted and contact becomes more formal.
ANNOYANCE	Saturation is approached and the local people have misgivings. Planners attempt to control via increasing infrastructure rather than limiting growth.
ANTAGONISM	Open irritation and planning is remedial, yet promotion is increased to offset the deteriorating reputation of the resort.

Smith (1989) sees it as important that the dangers Hall (1987) and Doxey (1975) refer to be avoided and is concerned about the need for local communities to maximise economic benefit from tourism and yet also be able to represent their culture accurately. Smith discusses the use of non-native guides in a location in Alaska, during the 1970s, when traditional activities were being demonstrated. This, however, was when tourism was under non-local control, but when a local indigenous group took control of tourism in the late 1970s there was then far more encouragement for the use of local owned business and workers. This, Smith argues, enables not only more economic benefit to accrue to the community but allows them to demonstrate their own culture, in the way that they wish, which should minimise cultural damage.

In relation to Finland Viken (1995b) argues that over the last twenty years much of the presentation of Sami culture has been by those who have lost their Sami roots or by non-Samis. He claims this has led to more commercialisation, the presentation of fake culture and economic benefits accruing to these rather than more 'traditional' Sami groups. Hall and Johnston (1995) also discuss the annoyance caused to the Sami community, when on a rare and unusual occasion, non-Sami guides were used to interpret Sami lifestyles to tourists in Finland. Hall and Johnston use this example to indicate the need for local control of tourism in the Arctic.

These examples indicate that any discussion about the future direction of tourism in the Arctic has to include not just reference to environmental concerns but must consider socio-cultural impacts and the role of indigenous people.

Codes of conduct

A variety of codes of conduct in tourism have been existence for at least the last twenty years and this section of the paper investigates the nature and use of such codes of conduct.

There are a number of discrete target groups for codes of conduct (UNEP, 1995, Mason and Mowforth 1995) and these groups are as follows: visitors, the tourism industry and members of host communities. The most significant target audience in terms of sheer number of codes is the visitor; the WTTERC (1995) for example lists almost 80 visitor codes in use around the world in 1994. A number of codes have also been prepared for use by those directly involved in the tourist industry and more recently codes have been prepared for the use of host populations.

In addition to a variety of target audiences for codes of conduct there is a range of different authors. A significant number of codes have been written by concerned individuals and non-governmental organisations, while government bodies and the tourism industry itself have not been until recently very active in producing codes (Mason and Mowforth 1995).

Codes of conduct frequently fail to specify either their broad aims or more specific objectives (Mason 1994). UNEP, however, having conducted a survey of voluntary environmental tourism codes in 1992 and received information on thirty codes used by countries and international associations, was able to deduce a number of specific objectives (UNEP 1995). UNEP (p. 8) produced, in summary form, four objectives of such codes, which are as follows:

1. To serve as a catalyst for dialogue between government and other bodies involved in tourism;

2. To create an awareness in government and the industry of the need for sound environmental management;

3. To heighten awareness amongst tourists of the need for appropriate behaviour; to make host populations aware of the need for environmental protection, and

4. To encourage co-operation between governments agencies, host communities, industry and NGOs.

The message of tourism codes is not just concerned with environmental issues, however. A number of visitor codes, for example, make reference to socio-cultural matters, such as respect for local religious beliefs, and codes with industry as the audience frequently refer to the need for appropriate training and honest marketing of tourism products (Mason and Mowforth 1995). Table 3 provides a summary of the main types of tourism code, their authorship, audience and message.

Table 3. Key elements of codes of conduct in tourism

Types of codes	*Authorship*	*Audience*	*Message*
VISITOR CODES	Predominantly NGOs and concerned individuals, but also some government bodies such as Ministry of the Environment	Domestic visitors and international visitors, especially visitors to developing countries.	Minimise environmental and socio-cultural damage to area visited. Maximise economic benefit to host community. Encourage more equality in relationship between visitors and hosts. Promote more responsible and sustainable forms of tourism.
INDUSTRY CODES	Predominantly coordinating bodies such as UTO and IATA; also governments and to a lesser extent NGOs and concerned individuals; and exceptional tourist companies, e.g. Chateau Whistler Hotel Group	Tourism industry in general, and some codes for specific sectors such as the hotel industry	Appropriate training/education for staff. Honest marketing of product. Develop awareness of environmental and socio-cultural impacts of tourism. Promote more responsible and sustainable forms of tourism. Promote recycling.
HOST CODES	Predominantly NGOs and concerned individuals; some host communities in both developed and developing countries; and a small number of host governments.	Mainly host communities, especially in developing countries.	Information and advice about visitors. Minimise environmental and socio-cultural damage. Maximise economic benefits to host communities. Encourage more equality in relationship between hosts and advisors. Advocate more democratic and participatory forms of tourism development

Tourism Codes of Conduct in the Arctic

A small number of tourism codes currently exist and are in use in the Arctic and sub-Arctic regions. Those that exist tend to be aimed at visitors, although some exist with tour operators and governments as the target audiences. These codes have been produced by a number of different authors. A selection of codes is discussed below.

A number of separate regions within the Arctic have codes of conduct. Probably the location with the strictest regulations is the Norwegian archipelago of Svalbard (Johnston 1995, Viken 1995a). Regulations produced by the Norwegian Ministries of the Environment and Justice have visitors as their target audience and were first developed in 1983. The regulations aim to protect the natural environment and historical remains of the islands, as well as provide safety for visitors. Umbreit (1991) details the specific instructions contained in the Svalbard regulations. He indicates they relate to the conditions under which vehicles can and cannot be used, the need to remove all litter, advice on how not to damage vegetation, and instructions not to disturb birds and other wildlife.

The Norwegian sub-Arctic region of Trondheim has a code that was also developed by the Norwegian Ministry of the Environment. This code appears on posters and in guide books to the area. The code is much less admonitory than that for Svalbard and suggests visitors should feel welcome in the environment of the region and make use of much of what it has to offer, before giving instructions on what visitors should not do there (Mason and Mowforth 1995).

Regulations affecting tourism have been developed in the Northwest Territories and Yukon of Canada. These regulations relate to activities such as hunting and access to and protection of designated sites of special environmental or heritage value, but they are aimed at residents as well as visitors. More specific regulations aimed at visitors are in use in national parks within the Northwest Territories. Visitors there are required to register and take part in a visitor orientation programme, while outside the park areas a voluntary system of travel registration is administered by the Canadian Mounted Police (Johnston and Hall 1995).

There is particular concern within some parts of Arctic Canada about the impacts of expeditions. The Canadian Department of Indian Affairs and Northern Development publishes a 'Guide for expeditions to Northern and Arctic Canada' which acts as a visitor code in that it not only gives visitors information and practical advice, but brings together all legislation relating to hunting, wildlife and environmental protection (Johnston 1993).

The Canadian government has also demonstrated that it intends to take the environmental effects of expeditions seriously enough to back up regulations with fines. Ellesmere Island is a popular starting point for expeditions to the North Pole, but as a result of mounting concern about waste being left behind, the Canadian government has proposed a $ 25,000 charge on all who use the Ellesmere Land Park as the starting point for expeditions. The size of this charge is also related to the cost of rescuing stranded or injured expeditioners, but as Macklin (1991) states the charge will only be refundable if expeditioners bring out what they have taken in.

Tourism codes of conduct developed for use *on Svalbard*, Trondheim and the Canadian Arctic have been aimed predominantly at visitors. In Finland, however, the Finnish Tourist Board has produced a set of guidelines aimed at the tourist industry (UNEP 1995). These guidelines are not aimed specifically at tour operators in the Arctic but certainly have relevance to the region. The guidelines, it is claimed, are an attempt to promote sustainable tourism. They focus on a number of environmental, economic and social concerns and can be summarised as follows:

1. The need to build environmental viewpoints into planning for new tourism development;
2. The need to recognise the importance of local culture and traditions;
3. The need to make use of local products and services where possible;
4. The need to reduce traffic noise and related problems;
5. The need to give attention to landscape management;
6. The need to provide staff with appropriate training;
7. The encouragement for the use of public transport where possible;
8. The encouragement of 'human power' rather than mechanical power where possible;
9. Advice and instructions on following paths and avoiding sensitive environments; and
10. The need for honest marketing of tourist products.

As well as these key principles the guidelines suggest a number of practical measures to achieve sustainable tourism. These measures relate to resource use, the need for conservation and recycling and disposal of litter, and refer specifically to water, energy and waste (UNEP 1995).

In 1993 WWF Sweden, in collaboration with the Swedish Environmental Protection Agency, established a working group within the Swedish Tourist Industry to investigate ecotourism and sustainability and this group produced 'Ten Principles on Ecotourism' (Sharp 1995). These principles do not just apply to the Arctic but include recommendations on the need for tour operators to employ an environmental officer, the need to educate visitors, and statements on the need to ensure that tourism benefits the local economy and the need to promote socially and ecologically sustainable tourism. Widstrand (1995) claims that these ten principles should be applicable not just to the Swedish Arctic but to the Arctic region as a whole.

A number of parallels have been drawn between the Arctic and the Antarctic in relation to tourism issues (Hall & Johnston 1995, Stonehouse 1990, Mason 1994). There are clearly environmental similarities, and despite the Arctic having indigenous peoples, whilst Antarctica does not, the nature of tourism activities and impacts in each area leads to parallels in relation to management strategies (Hall & Johnston 1995).

An important difference between the two regions relates to sovereignty. In the Arctic a number of countries have sovereignty over land, coastal waters and open oceans, whilst sovereignty is disputed in Antarctica. The disputed sovereignty in the Antarctic has led to the creation of the Antarctic Treaty System (ATS) which has enabled management strategies in relation to a number of environmental issues to be developed. Hence unlike the Arctic, under the ATS, Antarctica has very detailed regulations and recommendations on tourism (Enzenbacher 1993 and 1995).

The Antarctic has codes of conduct for both visitors and tour operators. The code of conduct for tour operators has been adopted by the International Association of Antarctic Tour Operators (IATTO) and provides detailed tourism management guidelines on the continent (Stonehouse 1994, Enzenbacher 1995). Instructions and advice are aimed at guides and those operators bringing ship-borne tourists to the Antarctic. They are in the form of an eighteen-point checklist, which gives guidance on ways operators can appropriately manage visits to minimise environmental damage. IATTO has also produced guidelines for visitors in an attempt to ensure tourists do not disturb wildlife, do not damage plants, remove litter, do not to interfere with scientific work, pay respect to heritage sites, do not smoke and that shore parties stay with their guides (Enzenbacher 1995). A simplified code aimed at both visitors and operators, *The Antarctic Travellers' Code*, has also been produced (Stonehouse 1994). This code is a useful summary of the main concerns in relation to tourism management in Antarctica and is shown in appendix 4.

The Arctic currently lacks tourism codes covering the whole region, although a draft visitor code has been produced (Mason 1994) and is shown in appendix 5. This code has some similarities with codes for the Antarctic. The message of the code focuses on a number of environmental and cultural issues, including instructions on the use of vehicles, prevention of disturbance and damage to wildlife and habitats, the control of fishing and hunting, the proper disposal of waste and the need to respect indigenous cultures. The code has the following aims:

1. To raise awareness amongst visitors of environmental issues in the Arctic;

2. To provide general information to educate visitors;

3. To make visitors aware of environmental and cultural issues; and

4. To be included as part of an overall tourism management strategy for the Arctic region (Mason, 1994).

Use of tourism codes of conduct

This section is subdivided into issues concerned with writing codes and those relating to the implementation and use of codes.

1. Issues about writing codes

This sub-section provides a number of important questions, in italics, and suggestions under each on possible responses.

Who should be consulted prior to writing?

Representatives of governments; tour operators; environmental groups; indigenous people from Arctic countries.

Who should write the code?

After consultation a small group of those aware and concerned about the issues and able to write for the appropriate audience. Drafts should be sent to stakeholders for comment.

What overall aims could a code have?

Raising awareness; environmental education; personal education; develop informed concern amongst audience; part of overall management strategy for tourism.

What specific objectives or message could a code have?

For a visitor code: Conservation of resources; avoiding environmental damage; prevent pollution; respect indigenous cultures; be a true guest.

For an industry code: Honest marketing of tourist product; education and training; conservation of resources; avoiding environmental damage; prevent pollution; respect indigenous cultures.

For a host code: Maximise economic benefits; minimise environmental and cultural damage; advocate more democratic and participatory form of tourism development.

Who could support codes?

National, regional and local governments; NGOs/environmental groups; indigenous peoples; tour operators; airlines; cruise lines; guide book publishers.

Who could provide financial support?

Some of those immediately above and based on experience of other codes particularly: NGOs/environmental groups; guide book publishers and other media publishers; national, regional and local governments.

2) Issues related to use of codes

A number of problems in relation to the use of tourism codes of conduct have been noted. Mason and Mowforth (1995) discuss four main areas of concern and these are as follows: monitoring take up and effectiveness; the use of codes as a marketing tool; the need for co-ordination; and whether there should be self-regulation or external regulation

The UNEP report on Environmental Codes of Conduct in Tourism (UNEP, 1995) argues that codes must be implemented to be effective, but also indicates that most tourism codes tend to be poorly implemented. The UNEP report also claims that it is essential to measure the effects of codes and that those who develop codes should follow up the implementation with an assessment of effects and make sure findings are reported.

Enzenbacher (1995), in arguing that as yet little is known of the effects of tourism or tourism management regimes in the Antarctic, claims that a tourism observer programme as part of the ATS programme could be an effective method to monitor the implementation of tourism regulations. Perhaps there are also lessons here for the Arctic region, with the need to monitor take up and effectiveness of the few codes that exist. Mason (1994) for example suggests in relation to his 'Draft Visitor Code for the Arctic' that the monitoring of its implementation could be achieved by observation of tourist behaviour, interviews and postal questionnaires.

Colin (1994) indicates that many separate organisations, groups and individuals are attempting to protect the Arctic from tourism impacts, but argues the need for greater co-ordination. Colin claims despite the fact that different communities have different concerns there is a real need for co-ordination as this would at least lead to the discovery of common ground. Johnston and Hall (1995) refer specifically to codes of conduct when calling for co-ordination of tourism regulation efforts and indicate that there will need to be some form of international agreement in the Arctic on regulating tourism development.

There seems little evidence at present, mainly because so few codes exist in the Arctic, that they are being used for marketing holidays in the region. As so few codes currently exist the issue of self-regulation or external regulation is not yet of great significance. Johnston and Madunic (1995), however, report that the regional tourism industry in Canada's Yukon has undertaken self-regulation by adopting an operator code of ethics. Mason and Mowforth (1995) argue that the motivation behind self regulation is either the tourist industry wishing to appear to be acting responsibly in advance of imposed regulation, or alternatively as an attempt to stave off external regulation. Evidence from locations outside the Arctic (McKercher 1993, Forsyth 1993, Porritt 1995) suggests that external regulation is likely to be far more effective than self-regulation.

Valentine (1992) suggests another very important factor when he argues that it will be necessary to employ a number of codes of conduct with different audiences, simultaneously. He believes a code for example aimed at visitors should be used in conjunction with another aimed at operators and that a code for one group on its own would not be effective. Valentine also suggests codes should be employed as a part of a wider tourism management strategy. Johnston and Hall (1995) support this view of code production and use in relation to the development of Arctic tourism.

Conclusions

The Arctic has important natural and cultural attractions for visitors. Tourism is already a significant activity in the Arctic region and is set to increase. There is evidence of damage to the environment and disruption to indigenous cultures as result of tourism in the region, but this is not as yet at the level to discourage visitors. Strategies for sustaining tourism, at the same time as sustaining the Arctic environment as well as indigenous cultures, will need to be developed. Codes of conduct in tourism can assist in this process and Hall and Johnston (1995: 310) argue the need for continued development and implementation of codes of conduct for the Arctic. As they state, "Visitor and operator codes of conduct are and will continue to be an integral component of any polar tourism management regime."

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The importance of an overall visitor education program - experiences with tour operators in the Antarctic

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Abstract

This paper, based on doctoral field work findings from a study of Antarctic tourism management, considers the importance of an overall visitor education program. It is argued that tourism guidelines or codes of conduct are an important part of visitor education programs, but should not be seen as a panacea in addressing the environmental and other issues that arise when tour visits are made. In addition to visitor and tour operator guidelines, the components of visitor education programs are compared and discussed in terms of their respective contributions to education, implementation, and overall effectiveness. It is concluded that a comprehensive and well-planned approach to visitor education needs to be taken by tour operators in order to provide visitors with adequate information so that safe and environmentally sound operations result. Such an approach is enabled by the employment of experienced staff and crew who are familiar with the region being visited and aware of its particular features and any special safety and environmental considerations that need to be taken into account during operations.

Introduction

Visitor-management planners agree that guidelines are but one part of management strategy; they are not complete in and of themselves (Davis 1995).

Tourism guidelines or codes of conduct provide useful tools for promoting visitor awareness and encouraging particular forms of behavior during visits, but only form part of an overall visitor education program. Such programs play a vital role in increasing passenger awareness and in minimizing the environmental and other effects of tour visits. This paper draws on the author's experience during doctoral field work conducted on the management of Antarctic tourism during the 1991/92 and 1992/93 seasons (Enzenbacher 1995).

Four different cruise ships and operators were studied in the Antarctic Peninsula. The trips were representative of such cruises currently offered by tour operators. Ship passenger capacities ranged from 140 to 480. The role that each of the other components of an overall visitor education program played was examined. These included pre-cruise information packets, daily programs, shipboard briefings held before landings, recap sessions held after landings were made, lectures and slide presentations, videos, films, handout materials, shipboard announcements and other educational materials made available aboard ship, such as wall-sized maps and library materials.[4]

Visitor education programs are compared and their components are discussed in terms of their contribution to visitor education, planning requirements, implementation and overall effectiveness. The importance of tour personnel having previous Antarctic experience is also emphasized. The interface between visitor education programs and shore activities was of

[4] Equally important is the dissemination of relevant information to all ship staff and crew, however, this paper focuses on information provided to passengers aboard Antarctic cruises

particular interest. Passenger safety programs (including shipboard emergency drills, safety briefings, passenger accountability systems and life jacket and boat policies) have an educational component and were also studied, but detailed discussion of these falls outside the scope of this paper.

A comparison of visitor education programs

Many passengers had considerable knowledge of Antarctica before the start of their trip. All operators offered a wide range of Antarctic information to passengers before and during the cruise. The four operators under study will be referred to as A, B, C and D. All were members of the International Association of Antarctica Tour Operators (IAATO). Pre-cruise information varied between operators, but each packet provided to English speaking passengers[5] contained an extensive amount of material covering such topics as Antarctic exploration, science, natural history, conservation, practical information on travel matters, weather, clothing, ship services, boat trips, photography hints, reading lists or maps of the area to be visited. Three of the four companies distributed visitor guidelines[6] in their pre-cruise materials. Although it was not possible to determine the extent to which the material was read or how it affected passenger behavior, several operators expressed the view that basic messages regarding safety and conservation could not be over-emphasized and provided them in different forms to passengers.

All four vessels were equipped with intercom systems that were used to make general announcements covering schedule changes, landings, entertainment or lecture programs and provide commentary on surrounding features such as scenery or wildlife sightings. Some parts of ships were not wired to receive these announcements. Speakers could be turned off in individual cabins so passengers may not have heard all announcements.

Daily programs were delivered to cabins aboard each ship each evening to provide general ship information and inform passengers of events taking place the following day. Each operator's daily program followed a similar format but differed in presentational style. Two companies (using ships with capacities of 140 and 164 respectively) followed a single-page program format while the two larger ships (capacities 250 and 480) used a four-page daily program. This was due primarily to the need to relay information on the extensive entertainment programs offered.

Each cruise offered a welcoming reception and/or cocktail party in which the ship's captain and senior officers, department heads, cruise director and expedition staff (including the expedition leader, lecturers, guide/naturalists or boat drivers) were introduced. Once aboard, some operators offered tours of the bridge, engine room and/or galley.

Shipboard education programs varied in terms of quality, content, accessibility and popularity. Each operator offered a planned program of briefings, recaps and lectures and employed naturalists or other experts to impart specific information to passengers throughout each cruise. Personnel ranged from those having no previous Antarctic experience to experienced scientists having worked with national Antarctic programs or as lecturers on previous Antarctic cruises.

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[5] Only English materials were considered in this study.

[6] Various sets of guidelines were employed by the operators under study. The most commonly distributed guidelines were the IAATO *Guidelines of conduct for Antarctica tour operators* and *Guidelines of conduct for Antarctica visitors* and the Council of Managers of National Antarctic Programs (COMNAP) *Visitors' guide to the Antarctic/visits to scientific stations in Antarctica.*

Operator A held all English briefings, recaps and lectures in the main lounge of the ship. Company B held lectures in the ship's lecture theatre at various times and recaps and briefings in the main ship lounge before dinner. Operator C held all lectures, briefings and recaps in the main lounge and Company D held all lectures, recaps and briefings in the lecture theatre with the exception of the safety briefing, which was conducted in the main ship lounge.

The standard and content of shipboard education programs also varied between cruises offered by the same operator in a given season depending on staff changeover, which was often considerable. Multiple cruises made with two operators yielded insight into more specific management issues arising within those companies. For example, passenger language groups differed between cruises made with one of the operators. The languages used for shipboard announcements, lectures, recaps and briefings varied according to the proportion of passenger nationalities aboard each cruise. Materials had to be prepared, translated, copied and distributed each day for each language group represented on board. Different language groups had to compete for limited space, facilities and equipment with which to conduct briefings, recaps and lectures.

Numbers and times of lectures on offer varied according to the length of the cruise; sea, ice and weather conditions; expertise represented by lecturing staffs; numbers of landings made; and the number of passenger language groups aboard. See Table 1 for a list of lectures, by subject, offered during the cruises under study.

Table 1: List of lectures, by subject, offered to English speaking passengers aboard the four ships under study. Lectures offered in other languages are not listed. Some cruises offered more than one lecture on the same subject. Each X represents one lecture. Some lectures covered more than one subject. Only those cruises aboard which the author completed the itinerary are listed. Lectures relating to destinations outside the Antarctic Treaty Area (south of 60 degrees S) are not listed. *Denotes lectures given after all Antarctic landings were made.

Lecture / Ship	*A*	*B*	*C*	*D1*	*D2*
Introduction to Antarctica	x			x	x
Guidelines					x
History/Exploration of Antarctica	x	xx		xx*	x*x*x*
Antarctic politics	x	x*	x*	x	x
Glaciology	x		x*	x	
Geology				x*	
Vulcanology					x
Oceanography			x	x	
Natural history				x*	
Conservation	x			x*	x
Environment/Ecosystems	x				
Marine biology (general)	x	x			
Penguins	x	xx*	x	x	x
Whales		x	xx*	x*	x*
Seals		xx*	x	x*	
Krill			x*	x	
Seabirds	x	x	x		
Antarctic science programs		x	x		x
Personal accounts (*e.g.* wintering)	x	x*x*	x	x*	x*x*
Scenic slide show		x*			
Other	x				x*

Some lectures relevant to the Antarctic were scheduled after all landings had been made in the Treaty Area as showed in Table 2. Attendance at briefings, recaps and lectures was influenced by such factors as time of day, popularity of the speaker, sea and weather conditions, the pace of activity on a given day, passenger age and physical condition and the nature of other shipboard activities offered during the same time frame. In rough seas, talks were often poorly attended since passengers were advised to remain horizontal to prevent the onset of seasickness.

Table 2. List of English lectures offered during two Antarctic cruises with cruise day in which they were given. Lectures offered in other languages are not listed. ***Denotes all landings in the Treaty Area were completed by this point.

Cruise A		*Cruise B*	
Day	*Title*	*Day*	*Title*
3	Seabirds of the Southern Ocean	2	Antarctic boat operations and the fine art of observing wildlife
	A year at the South Pole		The natural history of the penguins: a discussion of the Antarctic penguin species
4	Environmental guidelines, boat operations and safety	3	Whales of Antarctica
	The marine environment		Natural history and behavior of fur seals
	Introduction to the Falkland Islands		
7	Ice	4	Seabirds of Antarctica
	Stones, soils and springtails		Shackleton the explorer and his epic sea survival story
	Introduction to the Antarctic Peninsula region and		
	The love life of the Adélie penguin		
13	The Antarctic Treaty System	7	Antarctic science programs
	The economics of Antarctica ***		
14	Discussion on conservation	8	The Swedish expeditions of Nordenskjold
	Tierra del Fuego and Patagonia		***
16	Adventure in travel	9	Adaptive strategies for feeding, diving and breeding cetaceans and pinnipeds in the Southern Ocean
		10	Icebreaking in the Ross Sea and McMurdo Sound
			Antarctic scenery and sunsets
			Antarctica: where do we go from here: an overview of the Antarctic Treaty followed by group comments and discussion by expedition staff
			A year at the South Pole
		11	Summary of the behavior of Adélie, chinstrap and gentoo penguins

Among the educational materials used during cruises were slides, photographs, videos, films, overhead projections, handouts, library materials, maps and reprints. Some operators were better equipped than others. One ship carried only one slide projector and no spare lamp. Another offered single or multiple showings of its videos on one television in a room with a seating capacity of 20. Occasionally, additional materials such as maps, Antarctic reading lists, guidelines, wildlife identification sheets and checklists and information on staff members were also delivered along with the daily programs. This occurred most often aboard the larger ships. Some passengers travelled in small groups led by private tour leaders who prepared and

distributed additional information packets to their passengers. All ships posted large maps in public areas; some were more detailed than others. One operator updated a large map regularly to show the ship's location and path to date. This proved popular with passengers. Some ships posted the visitor guidelines in a prominent place aboard ship, usually near the gangway. The quality and quantity of Antarctic materials available in each ship's library varied considerably. Some had extensive collections. Others did not, but stocked many popular paperbacks. In general, there was a dearth of material printed in the foreign languages represented aboard each ship.

The following brief profile of each operator's education program reveals further differences. Operator A distributed copies of visitor guidelines to each passenger with pre-cruise materials and aboard ship. The initial talk covering tourism guidelines and conservation was optional, well attended and covered a broad range of environmental issues and guidance on behavior ashore. Briefings and recaps for all landings were presented in English and French during the same sessions. Lectures were given separately at different locations. Eight naturalists and lecturers were employed for the cruise. The ship library housed a small collection of Antarctic material. Different Antarctic films and videos, in either English or French, were also shown intermittently in the ship's cinema or cocktail lounge.

Operator B included a copy of visitor guidelines and guidelines on boat operations in its pre-cruise materials, but did not distribute them or post them in a prominent place aboard ship. The initial conservation briefing was well attended and provided thorough coverage of environmental issues. The Japanese passengers were led by two tour leaders from Tokyo and had a lecturer from Japan's national Antarctic program. Six other naturalists and lecturers presented educational material in English during the cruise. Briefings were not provided before all Antarctic landings. The ship library contained a small collection of Antarctic material. Antarctic and other videos were shown over the cabin television service and after some lectures.

Operator C distributed visitor guidelines to each passenger with pre-cruise materials and reinforced them during some briefings and recaps. All passengers spoke English. All presentations and announcements were made in English. Six lecturers and naturalists accompanied the cruise. Two guest lecturers from an Antarctic research station joined the ship for the return journey. The library contained the most extensive collection of Antarctic material of the four ships under study. Antarctic and other videos were shown in the ship library periodically.

Operator D provided an extensive packet of pre-cruise materials, but it did not contain a copy of the visitor guidelines. However, guidelines were distributed to each passenger aboard ship, in different languages, as needed. Pre-landing briefings and recaps were not always held in all languages represented aboard, resulting in unequal access to information and resentment among some passengers. The lecture program was also weighted heavily toward the dominant language group aboard (containing 45% of the passengers). The safety and boat briefing for one cruise was conducted in three languages during the same session. The operator hired a total of seven lecturers and naturalists for each cruise studied. The ship library contained very little Antarctic material, although a few such books were made available through the ship excursion office. Antarctic and other videos were run continuously on the cabin television service during most days of the cruise.

Although the components of visitor education programs were similar among all four cruise operators under study, significant differences were noted with respect to planning, the quality of materials made available, access to and delivery of information, implementation and overall effectiveness. These issues are discussed below.

Planning requirements

Knowledge concerning site features such as wildlife; terrain; beach access; snow, ice and vegetative cover; research stations; historic huts or monuments; and weather conditions needs to be continually relayed to visitors and updated as needed if they are to be properly briefed during their trip. This entails detailed planning on behalf of tour staff.

Another important aspect of planning involves allocating venues aboard ship for briefings and other informational sessions. Coupled with this is the need to requisition adequate amounts of special equipment such as slide and overhead projectors, spare bulbs and photocopier supplies and equipment. Successful visitor education programs cannot be implemented without proper access to passengers and tools to impart information.

Particular attention was paid to language issues, especially aboard ships carrying two or more passenger language groups. These included passenger access to expedition staff (especially shore guides and boat drivers), lectures, briefings and safety and other information. For example, some guides did not speak the language of some passengers in the group. Not all boat drivers were able to communicate with their passengers. This raised the question of whether tourists had equal access to information during their trip.

Aboard one ship, of the large group of Japanese passengers on this cruise, few understood English. None of the boat drivers spoke Japanese. Aboard another, boat drivers spoke Russian, but only some of them spoke English or German, the main passenger languages. Simple commands, such as warning passengers to remain seated while the boat is moving, may go unsaid. In emergencies, it would be difficult to convey instructions to boat passengers who speak different languages. Furthermore, passengers are not always able to communicate with each other. The remote and harsh Antarctic environment gives urgency to this issue. The potential for communication problems between boat drivers and passengers underscores the importance of holding comprehensive safety and informational briefings in all passenger and crew languages throughout the trip.

Aboard another ship, briefings made before landings were conducted alternately in French and English during the same sessions. When briefings were conducted in two or three languages during the same session, passengers often complained at having to sit through material presented in foreign languages. The noise level increased as passengers grew restless waiting for their language to be spoken again. As a result some information was inaudible.

Passengers were not briefed about what should be done in the event a boat overturned or a passenger went overboard. Furthermore, briefings on boat operations, safety and conservation were not always provided before the first landing was made. Data suggest that with proper planning it is possible to provide timely and informative briefings and recaps to different language groups aboard the same ship. Management efforts directed at these issues would improve tour safety policies and procedures.

Current visitor and operator guidelines provide a practical approach to minimizing environmental and other effects, but given the proliferation of tourism guidelines, it may not be clear to visitors or operators which set is to be followed. Nor are they available in all suitable languages. These potential problems can be avoided with proper planning on behalf of tour operators. Even when a particular set of guidelines is preferred, Davis points out that "one set of guidelines is inadequate to guide or control the behaviour of all visitors in Antarctica[7], especially since they are not site specific, are inflexible to changing conditions, do not provide guidance concerning what experiences are to be had and there are diverse groups of visitors. In

[7] *Op cit*, Ref 1:333.

short, visitor management is more than telling visitors how to behave", a comprehensive management plan needs to be designed and implemented.[8]

Personnel and tour operator experience

Tour operator and personnel experience is important to the conduct of safe and environmentally sound tours. Many tour operators hire personnel with previous Antarctic experience, but this is not always possible, especially given recent increases in Antarctic tourism. Personnel include captains, officers, expedition leaders, cruise directors, naturalists/ lecturers, boat drivers and other crew members. Ship personnel working in Antarctica are not required to meet special standards, although ship captains and officers may have experience in Antarctic waters. Growth in the tour industry may make it increasingly difficult for companies to find personnel with suitable experience.

The staff representing the four operators differed with respect to their levels of Antarctic experience. Three of the four expedition leaders had previous Antarctic experience and were familiar with the landing sites visited. One expedition leader with no previous Antarctic experience was hired to lead six trips during the season. A number of problems resulted. Factual errors were made during announcements throughout the cruise in question. Briefings and recaps also contained misinformation. Passengers were not warned that one landing would be made near a Site of Special Scientific Interest (SSSI). Ship staff learned of the SSSI after landing and announced the fact to the remaining passengers as they arrived.

The study revealed that ship and expedition staff with previous Antarctic experience were better equipped to answer passenger questions during briefings and recap sessions and provided accurate and relevant information on sites being visited including the types of wildlife, vegetation, terrain, research stations or historic sites to be encountered. Shipboard announcements made by experienced personnel were less likely to contain inaccurate information.

Ashore, personnel with previous Antarctic experience were aware of environmental conditions to be expected in the Treaty Area and the time frame involved for a typical landing. Experienced shore guides were familiar with popular landing sites, including their wildlife, terrain, other features, locations of SSSIs and Specially Protected Areas (SPAs) and special safety and environmental considerations that needed to be taken into account during visits.

Three of the four operators hired one or more lecturers or shore guides who had no previous Antarctic experience. The remainder had previous experience in the Peninsula region or another part of Antarctica. Two operators hired naturalists with extensive Antarctic experience. During shore visits these naturalists interpreted the features at each site and provided thorough and accurate answers to questions posed by tourists. The majority of lecturers and naturalists on each ship were dedicated professionals, respectful of the environment, with a commitment to Antarctic conservation. However, one lecturer who also served as a shore guide provided passengers with inaccurate or misleading information. When questioned why this was done, the guide remarked that it did not matter what answers were given to tourists since they would not remember what was said.

[8] *Ibid.*

Implementation

There is a need for tour operators to reinforce sound tourism principles among passengers, staff and crew during every phase of Antarctic operations. Equal access to information is essential if all visitors are to be well informed. Operators need to implement plans that provide equal access to information over public address systems, in lectures, briefings, recaps, handouts, guidelines, videos, daily programs, library materials and on maps.

Passenger safety and education programs were highly complementary. Visitor guidelines and safety and environmental issues and policies were often reinforced throughout cruises during lectures, pre-landing briefings, recap sessions and in the daily programs. The study also found that guide policies that reinforced the principles set forth in visitor education programs were important to effective tourism management.

The quality of information and materials made available also needs to be considered by operators, since the dissemination of inaccurate information can cause problems for tour managers, confuse passengers and result in negative consequences concerning safety and the environment.

Overall effectiveness

Field work revealed that many of the environmental effects of Antarctic tourism could have been prevented through education and increased awareness among passengers and ship personnel. Furthermore, the more serious management problems observed in the study occurred when passengers were not provided with adequate information concerning the site to be visited.

The tour operator management practices seen to have the greatest effect on limiting guideline infractions were the provision of a thorough briefing on the visitor guidelines before landings were made; reinforcement of these points during pre-landing briefings, recap sessions and shore visits; maintaining a firm and commanding presence when delivering information regarding visitor guidelines and procedures for shore visits, especially during shore duty; the placement of conscientious shore guides to lead small groups of tourists and interpret surroundings; and positioning shore guides near the periphery of penguin rookeries or seal colonies to prevent wildlife disturbance.

Other factors influencing guideline compliance included the general health, attitude and behavior of individual passengers and crew members. For example, the passenger groups that were observed to breach the most guidelines travelled with the two operators that employed the least stringent shore guide policies. The visitor group that was observed to breach the fewest guidelines was led by experienced guides who actively interpreted the surroundings for passengers and closely supervised visitor behavior. Shore guides made more conspicuous by wearing special clothing have a higher profile, may serve to deter inappropriate visitor behavior ashore and can be approached easily by tourists with questions.

Many of the dissatisfied passengers cited problems with tourism management as their cause for complaint. This included inadequate shore guide to passenger ratios, insufficient shipboard education programs and too little time allowed ashore due to group size. Tour industry efforts to address these causes of dissatisfaction would result in more effective tourism management and improved compliance with Antarctic tourism guidelines.

Historic sites were popular with tourists. Of the more than 50 designated historic sites in Antarctica[9], four were visited during the cruises under study. Most operators did not mention that historic sites were being visited. Often such sites were poorly marked. These factors called into question the ability of such sites to be preserved.

Some expedition leaders were not aware of SSSIs and SPAs. Prominent markers at SSSIs and historic sites with text in popular tourist languages (such as English, French, German, Japanese and Spanish) would assist shore management of tourists.

Two of the landing sites visited during the cruises had huts that served as survival shelters. Tourists were briefed not to enter huts without permission, but on one occasion several passengers entered a hut without authorization. Shore guides soon directed them to leave the building. In one case, visitors entered a research station without permission.

The study identified a number of ways in which Antarctic tourism management can be improved aboard ship and ashore. These improvements need not be expensive. Thorough pre-landing briefings and recap sessions could be achieved simply by consulting reference books and maps. The use of different colored clothing for shore guides by one operator was found to heighten awareness of authority figures and serve as a gentle reminder that guidelines were in place during visits. Since operators typically provide both staff and passengers with parkas this practice could easily be emulated. Shore guides with radios were better placed to relay and receive important information.

Guidelines and other safety and informational material translated into appropriate languages would also promote safe and environmentally sound tours. When posted in prominent places aboard ship, such as near the gangway, for the duration of a cruise, guidelines remind tourists that rules are in place to govern their behavior. Violations of waste regulations were observed aboard three of the four ships studied. Many could have been avoided. Regular staff and crew briefings would raise awareness of environmental issues while in the Treaty Area. Stiff penalties or sanctions imposed by the ship's captain would also promote compliance with current regulations.

Pre-landing briefings that contained information appropriate to the sites being visited (taking into account special features such as terrain, wildlife, vegetation and historic sites) prepared passengers for their visits and were important in minimizing the effects visits had on the environment. One company displayed large maps for each landing with information on wildlife and terrain to be encountered. This practice reinforced information relayed during pre-landing briefings and could readily be adopted by other operators. Recap sessions provided an opportunity for tour leaders to discuss problems encountered during shore visits and suggest means by which to avoid them. Antarctic films, videos and library materials also provided an important means by which to reinforce messages about conservation and the need to minimize the environmental effects of tours.

Other management practices appeared to be less effective. For example, language issues were not addressed adequately aboard some ships carrying international groups. Far fewer briefings, recaps and lectures were offered to the non-dominant language groups aboard some ships. Operators with limited facilities carrying several language groups were not always able to relay important information promptly and effectively. Visitor guidelines were not always made available in suitable languages. Persons designated to make announcements for each language group were not always available when needed. Passengers grew increasingly frustrated at having to listen to prolonged announcements in one or two additional languages. Further animosity arose when announcements made in different languages lasted longer than others did and passengers perceived another group was getting more or better information. Access to ship

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[9] National Science Foundation. 1993: Historic sites and Antarctic tourism. Supplementary meeting material from the NSF/Antarctic Tour Operators Meeting. Washington, DC, US National Science Foundation, 6 July 1993.

facilities such as the lecture theatre, slide and overhead projector and photocopier were often limited during cruises with several language groups aboard.

Furthermore, inadequate seating was provided for passengers at briefings and recaps aboard the largest ship. One operator never provided maps during pre-landing briefings. This made it more difficult to understand information on areas to be avoided during visits. Intercom announcements made aboard one ship were often inaccurate. Numerous factual errors were made during some lectures. Passenger access to important and relevant information was limited accordingly. Some expedition leaders presented the guidelines in an apologetic way. This sent a mixed message to passengers. Two operators landed passengers at some sites without providing pre-landing briefings. Each of these issues points to the need for improvement in current practice.

Of the different components of shipboard education programs, pre-landing briefings and recap sessions provided the most important means of disseminating information relevant to shore visits. Lectures often provided interesting background information and enhanced tourists' experience, but were not always relevant to what occurred during shore visits. Therefore, emphasis on pre-landing briefings and recap sessions would be well placed during tours, especially when ship schedules, facilities and personnel are limited. Tour operator efforts to provide well planned and coordinated visitor education programs for all language groups promoted safety, guided visitor behavior and improved awareness of the Antarctic environment.

The future

IAATO plays an important role in providing relevant information to tour operators organizing visits to the Treaty Area, but more could be done by this organization and non-members to develop visitor education materials. Possibilities include the development of such materials as overhead projection maps of popular landing sites labelled with clearly marked zones for protected areas, SSSIs, wildlife nesting areas, mosses, grasses and other features. The priority must be to ensure that guidelines and other educational materials are made available in all appropriate tourist languages.

Conclusions

Visitor education programs play an important role in increasing awareness of safety and the environment while in Antarctica. Tour operators need to take a comprehensive and well-planned approach in order to provide equal access to visitor education materials in suitable languages for all tour staff, crew members and tourists. Host communities (in the Antarctic, these consist of national research stations) can play an important role by applying pressure on appropriate authorities to ensure that minimum standards are met by visitors and operators and by providing input and advice as appropriate.

Effective management practices need not entail further costs on behalf of tour operators. Most operators hired adequate numbers of personnel. The question is therefore one of resolve to make better use of current staff and resources. A willingness to consider successful management practices of other operators and emphasis placed on further training, briefings, awareness of guidelines and a serious commitment to close shore supervision and compliance with current regulations would result in more effective tourism management in Antarctica.

In developing guidelines, there is a need to consider the ability to promote, measure and ensure compliance. For even if agreed-upon codes of conduct are carefully designed and widely distributed, there is no guarantee that they will be read by every visitor or that they will meet with compliance. Furthermore, the ability to monitor guideline compliance is constrained by the increasing number of tour operators, cruises, and cruise ships in the Antarctic; limited resources for current observer programs; and the vast area involved, to name but a few factors.

For the above reasons, tourism guidelines should be viewed as one tool among many that can be used to promote visitor and operator awareness and guide visitor and operator behavior.

Antarctic field work revealed that reinforcement of the principles contained in tourism guidelines through other components of visitor education programs was helpful in limiting the negative effects of tour visits and enabled tour operators to manage tourists more effectively ashore. In particular, pre-landing briefings and recap sessions held after landings were made were seen to be crucial in minimizing the effects visits had on the environment. Therefore, priority should be placed on delivering high quality pre-landing briefings and holding recap sessions after landings have been made, especially when time or access to shipboard facilities is limited.

Overall, the fact that the current regulatory framework for Antarctic tourism relies heavily upon voluntary operator and visitor compliance [10]underscores the importance of well-planned and executed visitor education programs aimed at minimizing the adverse effects of tour visits. What remains clear, is that more research is needed to determine the extent to which visitor education programs affect levels of compliance with current guidelines and the extent of tourism impacts made on the Antarctic environment.

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[10] Ibid.

Mechanisms for promoting and monitoring compliance with Arctic tourism guidelines

Debra J. Enzenbacher

Abstract

Tourism guidelines and codes of conduct for the Arctic are in the process of being agreed upon along with the means by which to implement them. It is important that a mechanism for monitoring compliance with the guidelines be introduced at the outset in order that these instruments have widespread support and carry the necessary weight to be taken seriously and influence behaviour. Monitoring compliance with Arctic tourism guidelines will provide important feedback concerning their appropriateness and effectiveness and will facilitate communication between all parties concerned. Appropriate incentives are needed to encourage compliance on behalf of tourists and tour operators visiting the Arctic. This paper proposes an additional mechanism through which compliance with Arctic tourism guidelines might be monitored drawing on research conducted on compliance with Antarctic tour operator and visitor guidelines. In particular, suggestions are made concerning how a monitoring programme for Arctic cruise ship tourism might be funded including governmental, industry and private sources. Cooperation and creative partnerships between local communities, tour operators, visitors, indigenous peoples, governments and other interested parties are needed to limit the negative effects of tourism in the Arctic and bring about lasting benefits to the areas and parties concerned.

Introduction

Tourism guidelines and codes of conduct for the Arctic are in the process of being agreed along with the means by which to implement them. These efforts build on the work undertaken by participants in the January 1996 workshop, "How To Develop Guidelines For Arctic Tourism", held in Longyearbyen, Svalbard and sponsored by the WWF Arctic Programme and the Norwegian Polar Institute. Mason (1996) provides a discussion of the workshop, its participants and its outcome. Hereafter, reference to the Arctic tourism guidelines should be taken to include the codes of conduct as well. Such instruments attempt to influence attitudes and behaviour although such changes may be difficult to measure (Mason and Mowforth 1995:18).

The importance of tourism guidelines as a tool to manage visitors and reduce visitor impacts is widely recognised. These instruments "can be particularly useful before enforceable regulations governing visitor behavior are established" (Blangy and Wood 1993:32) and their use needs to be promoted, especially since each region of the Arctic has different needs, customs, concerns and varying levels and forms of tourism occurring within it. Although different national and regional strategies exist for regulating visits to the Arctic, it has been suggested "that a comprehensive Arctic-wide strategy should be layered over the national or regional strategies in order to respond to growing concerns about the impacts of tourists in polar regions" (Johnston 1997:19). Toward this end, the participants in the above-mentioned workshop suggested that the recommendations arising from the deliberations "be implemented by the eight Arctic countries within the framework of the *Arctic Environmental Protection Strategy* (Mason 1996:465). Furthermore, it has been recommended that a monitoring programme be established for the whole Arctic region (Kaltenborn and Hindrum 1995:37). As yet, the collective lack of

political will and financial resources of the parties concerned have precluded a timely implementation of the latter recommendation.

This paper explores the need to develop mechanisms for promoting and monitoring compliance with Arctic tourism guidelines once they are agreed and implemented. The agreement and implementation of Arctic tourism guidelines represent important steps aimed at developing awareness of relevant issues that need to be considered by visitors, host communities and tour operators alike. However, unless further steps are taken and means are developed by which all parties concerned with Arctic tourism can be held accountable for their actions (e.g. as through a monitoring programme), there will be no system in place through which to establish the appropriateness or effectiveness of the guidelines. Such a system is crucial to the overall viability of both hortatory and mandatory forms of regulation. Adequate incentives for complying with these measures need to be devised in order that tourism use of the Arctic is responsible and sustainable.

The need to monitor compliance with Arctic tourism guidelines

It is important that a mechanism for monitoring compliance with Arctic tourism guidelines be introduced at the outset of their implementation in order that these instruments are seen to have widespread support and carry the necessary weight to be taken seriously and influence behaviour. "The formulation of well-designed guidelines must take the many types of visitors into account" and "be carefully targeted to the audience intended to benefit from them" (Blangy and Wood 1993:33). Therefore, it may prove necessary to develop sets of guidelines for different types of visitors to the Arctic *e.g.* unescorted overnight campers and backpackers, photographers, boaters, divers, bird watchers, cross country skiers, snowmobilers and film makers (*ibid.*) and the different parts of the Arctic region in order to take account of any special issues relevant to those particular areas. Equally important to developing appropriate guidelines for Arctic tourism is that the industry "puts in place the necessary controls and coordinating systems" for their use (Mason and Mowforth 1995:55) in an effort to self-regulate and that a separate mechanism which is not overseen by the industry be employed to monitor compliance. Although industry can be encouraged to monitor its progress with respect to implementing the guidelines, there is a need for a separate form of authorised regulation that works alongside of voluntary self-regulation (*ibid.*:59) if bias and subjectivity are to be avoided and these instruments are to be fully credible and effective. Further details concerning such a mechanism are outlined in subsequent sections of this paper.

The benefits of monitoring compliance with Arctic tourism guidelines

Monitoring compliance with Arctic tourism guidelines will yield a number of benefits. Proper monitoring of the use of guidelines will help to ensure that they are targeted accurately (*ibid.*). In this way it will provide important feedback concerning their appropriateness and effectiveness. Equally important, monitoring compliance will provide valuable insight into how these measures are being interpreted by different operators and visitors. This is crucial since many nationalities are involved in Arctic tourism activity and individual perspectives will have a bearing on how the guidelines are interpreted and the conduct that ensues. Such a system will bring transgressors to light so that suitable measures may be taken to avoid repeat transgressions whether intentional or not. Such measures need to be agreed upon. It is recommended that decisions conceming the nature of these measures be taken after consultation with industry representatives so as to ensure their practicality and feasibility.

Monitoring also provides "a useful tool for evaluation of necessary actions to be taken by managers" (Kaltenborn and Hindrum 1995:31) in industry and government as well as local communities. It will therefore be possible to identify, through monitoring, issues in need of further consideration and possible regulatory control. In addition, monitoring will facilitate communication between all parties concerned. Furthermore, an Arctic tourism monitoring

programme can be used to gather data and other relevant information on tourism operations. Such information can then be used to inform the Arctic tourism policy-making process *e.g.* to improve the guidelines as necessary. This points to the need for an Arctic tourism database, which will be considered further in the section outlining the proposed monitoring programme. Among the primary benefits of monitoring compliance with Arctic tourism guidelines is the fact that such a mechanism underscores the importance of the region and the need to preserve it. This in turn has the potential to reinforce public perceptions concerning the value of the region and the notion that special rules are appropriate for such areas.

The need for an organisation dedicated to the purpose of monitoring Arctic tourism practices

At the 1996 Svalbard workshop on developing Arctic tourism guidelines the outcome document, the Memorandum of Understanding, suggested that "a system should be developed in which tour operators are encouraged to enter into contracts with a suitable international body where the tour operators guarantee they will follow the agreed guidelines and codes of conduct. In return, they would be allowed to use an official logo for marketing purposes" (Mason 1996:465). Membership would be restricted to those companies that endorse and comply with the guidelines.

A proposed mechanism for monitoring compliance with Arctic tourism guidelines

Building on the aforementioned ideas, this paper outlines possibilities for the development of the mechanism through which the official monitoring of compliance with Arctic tourism guidelines would take place. These ideas draw upon research conducted on compliance with Antarctic tour operator and visitor guidelines (Davis 1995, Enzenbacher 1995a) and other Antarctic tourism research (Stonehouse 1992, Enzenbacher 1995b).

The question of what form the "suitable international body" should take arises. It is suggested that this should be the Arctic Council and that an Arctic Council Tourism Commission be created to implement such a scheme. The organisation to which Arctic tour operators would subscribe would be called the Arctic Tourism Monitoring Programme (ATMP), the Arctic Tour Operators Monitoring Scheme (ATOMS) or a similar name. For ease of discussion, the proposed organisation will hereafter be referred to as the ATMP. Such an organisation would prove useful in promoting compliance with Arctic tourism guidelines and members of the ATMP could spread awareness of the goals and objectives of the scheme. Membership in the organisation would signify operators' intent to self-regulate their activities in the Arctic. In addition, as the name suggests, membership in the organisation would entail operators' being officially monitored in order to confirm they are fulfilling their obligations. Without some form of official monitoring, there would be no means by which to assess membership worthiness. Continued membership in the organisation would signify that an operator remained in good standing by endorsing and complying in full with Arctic tourism guidelines and other relevant regulations. Likewise, should monitoring efforts reveal guideline transgressions, disciplinary action would need to be taken and a financial or other form of penalty system would need to be imposed. For example, a warning system could be implemented and repeat transgressions could result in suspension or loss of use of the logo for marketing purposes and/or loss of privilege to visit certain sites. Some combination of penalties could be imposed in certain situations, which could be agreed upon in the charter of the organisation.

The ATMP would report to and derive its authority from the Arctic Council Tourism Commission and comprise members from each Arctic country. The main question arises as to who will conduct the monitoring. Many options exist. Under the Arctic Tourism Monitoring Programme each Arctic country would develop a national tourism monitoring scheme. These schemes would form the basis of the ATMP. The central aims of the ATMP would be to monitor tour operator compliance with guidelines and other regulations via national tourism observer programmes and co-ordinate data and information collected through its observers and

tour operator reporting procedures. In addition, the ATMP would provide guidance, information and advice to its members concerning implementation and observer training issues. It is not likely that all Arctic tour operators would either be aware of, choose to join or remain in the ATMP. For this reason, the organisation would monitor activities of Arctic tour operators regardless of their membership in the scheme. Incentives would be needed to encourage operator membership in the organisation, which will be discussed in a subsequent section. Hereafter, the Arctic Council Tourism Commission will be referred to as the body responsible for overseeing the ATMP, but it is recognised that the official body could take a different form.

The Memorandum of Understanding represents an important step in achieving broad-based consensus among representatives of the tourism industry, governments, conservation organisations, research institutions and the Sami community concerning how the process of agreeing upon guidelines for Arctic tourism should proceed. However, were the decision taken to proceed with plans for monitoring tourism, the question arises as to whether regional, national or local criteria are to be applied under the scheme (Troumbis 1991:172). If regional criteria are set, they need to be realistic so as to be attainable, yet not so easily met that the use of the logo conveys little meaning. National and local criteria should be set at the discretion of the nations and localities involved and relayed to the Arctic Council Tourism Commission accordingly. It is suggested that regional criteria should be applied after close consultation with relevant experts to ensure that each Arctic country is satisfied with the criteria set and goals of the monitoring programme.

The advantage of this structure is that it allows members autonomy in overseeing their individual monitoring schemes, while having regional criteria set as a minimum standard on which member states could build as needed. For example, in cases where additional criteria are considered necessary, national governments would apply these under their national monitoring programmes. One option involves the appointment of national representatives from each Arctic country, with skills and qualifications suitable for the monitoring task, to be approved nationally for placement as a tourism observer for a specified period (*e.g.* three years). The observers would report to an appropriate national body and directly to the Arctic Council Tourism Commission or ATMP in order that policy could be assessed in the light of current practices and developments within the Arctic tourism industry on an ongoing basis so that policies could be reviewed (Enzenbacher 1995a:239). Careful consideration needs to be given to how observers might be empowered to have the greatest effect in the Arctic Tourism Monitoring Programme.

The question of access is also of prime importance in the Arctic (Johnston 1995:32) and has special significance for the proposed monitoring programme given the geography and environment of the region and the costs involved in operating there. As such, it may prove difficult and expensive to monitor all parts (Kaltenborn and Hindrum 1995:31) of the Arctic with equal effect. For example, it may not be possible to devise a mechanism for monitoring compliance with Arctic tourism guidelines that is systematic for every country, season and type of tourism conducted. The difficulties and challenges inherent in operating in the Arctic extend to the planning and carrying out of monitoring activities and may be significant. However, it is possible to develop a monitoring programme that seeks to cover as wide a range of tourist activities as financial, political, geographical, meteorological and other constraints allow.

The goals and remit of the monitoring programme would be agreed upon by consensus within the Arctic Council with the size and scope of the monitoring programme in each country determined at national level by each member based on the nature and scale of tourist activity and budgetary constraints. Clear and well-defined objectives are essential to the success of the monitoring programme. The tourism industry and non-governmental organisations could be consulted to advise the Tourism Commission on the types of data to be collected by observers and the most appropriate information gathering methods to be employed (Enzenbacher 1995a:239). Overall, a conservative policy approach is advised and could be reviewed when results from the monitoring programme identify a need for change (Sanson 1992:10).

There is a need to centralise the collection of data conceming visits to the Arctic. One means of achieving this is by establishing an Arctic tourism database through the auspices of an official body such as the Arctic Council, which could oversee the collection of Arctic tourism data through the Arctic Council Tourism Commission. This can form part of the monitoring programme (Kaltenborn and Hindrum 1995:38).

By implementing a voluntary reporting system among Arctic tour operators it will be possible to establish a tourism database that would allow trends in Arctic tourism to be more readily identified. This in turn would allow for a prompt policy response to specific issues arising from developments and foster further communication and a spirit of co-operation between all parties concerned.

Questions to be included on a voluntary reporting form might include:

- Date(s) of trip
- Numbers of visitors/staff
- Duration of trip
- Form(s) of transport used
- Name of vessel (where appropriate)
- Registration of vessel (where appropriate)
- Name of captain (where appropriate)
- Name of tour operator
- Name of expedition leader
- Name of person completing this form
- Contact address
- Daily itinerary (including a list of all landings/visits made in the Arctic and numbers landed on each occasion)
- Nature of activities engaged in during the trip
- Special issues/incidents arising
- Requests for further information that might improve the operators' ability to offer a similar trip in future.

If tour operators were required to report their plans in advance, a monitoring schedule could be established that was equitable given issues of access and the nature and scale of Arctic tourism conducted in each country. Whether tour operator reporting was voluntary or mandatory, the benefits derived from data being deposited in an Arctic tourism database would be considerable.

A monitoring programme for Arctic cruise ship tourism

The monitoring programme would need to cover different forms of tourism on an equitable basis. One such form of tourism that is increasing in popularity is Arctic cruising. This is especially so in the Canadian Arctic (Marsh and Staple 1995:68). This section explores some of the issues that warrant consideration when planning an observer scheme for Arctic cruise ship tourism.

Ship-borne observers would be charged with accompanying full or part itineraries of Arctic cruise vessels and reporting their findings to the Arctic Council Tourism Commission. Having established the criteria that form the basis of the monitoring task, trained observers would be in a position to determine possible causes of guideline transgressions or problems operators and tourists may have interpreting the guidelines and other regulations. It is this dynamic interface between the observer, tour operators and tourists to which so much value attaches. For it is by

between the observer, tour operators and tourists to which so much value attaches. For it is by this process that vital information can be gleaned to inform the policy-making process which has as its goal the long-term preservation of the Arctic.

Once the observer programme is operational it is important that an informational leaflet describing its aims and objectives be designed in suitable languages for distribution to tourists being observed. Observers should be encouraged to keep communication lines open. Such efforts would be assisted were observers to make brief presentations at the start of any tour they were observing which described their role and duties and invited questions arising from the material presented. Alternatively, a video could be prepared to convey the same message that is introduced by the observer and followed by a question and answer session once it has been shown. Observers could also be charged with administering a questionnaire that was developed to solicit feedback on issues relevant to the Arctic tourism policy-making process (Enzenbacher 1995a:239). Likewise, the informational needs of visitors that are identified by or relayed to tour operators and observers should be fed back to national programmes and the Tourism Commission to inform national and regional policy-making.

In addition, innovations in tourism monitoring and observer programmes in other geographical areas could be studied to draw upon ideas that may prove useful in the Arctic. For example, recent assessments of enforcement issues and the US observer scheme aboard cruise ships in Antarctica concluded that observers were under-utilised and in need of equipment (Berkowitz 1994a,b). Although that scheme has since ceased, the observer reports contain a considerable amount of valuable information.

Tourism observers need a clearly defined role, proper training, suitable gear and clothing, field checklists and good communications with operators and each other in the field. A handbook for observers containing maps of sites, protected areas, lists of site features and summaries of regulatory documents may also need to be compiled (NSF 1992, 1993). "Careful consideration should also be given to the issuance of appropriate field equipment to tourism observers that would allow them to collect the most useful data to inform the policy decision-making process. For example, field glasses, calculators, cameras and camcorders may each be employed to broaden the scope of data collected by observers" (Enzenbacher 1995a:239).

A ship-borne observer scheme would comprise perhaps only a small part of the overall monitoring programme since it addresses only one form of Arctic tourism. However, some of the principles involved can be applied to land-based tourism. For example, observers can be based at sites that will be visited by tourists and their equipment needs would be similar to those of ship-borne observers. There is also some overlap in the nature of activities that ship-borne tourists engage in while ashore in the Arctic and those of land-based tourists having arrived by air or other forms of transport. Therefore, the training of observers could prepare them for covering various forms of tourist activity. This in turn would limit running costs.

Funding for the proposed monitoring programme

Effective monitoring programmes rely on adequate funding and support. It is suggested that the above-mentioned schemes be funded through a variety of means. This would have the advantage of encouraging broad-based support while limiting the funds expected from any given party concerned. Possible funding sources include governmental, industry and private sources. These are outlined below.

One option would be to require cruise operators to reserve one berthing space during each visit to the Arctic for use by an authorised observer who would be able to board a vessel unannounced at the final port of call before entering the Arctic or any landing point on the cruise itinerary situated in the Arctic and remain aboard, at the latest, until the first port of call reached after leaving the Arctic. Tour operators could bear the cost of accommodation and meals for observers and national governments could provide remuneration. Alternatively or additionally, the setting of fees is an option that is widely practised in many natural areas

throughout the world (Lindberg and Huber 1993:83) and the principle can be extended to apply to visitors to the Arctic in order that the funds offset costs in running the monitoring programme. In fact, a tourist tax has been suggested for Svalbard to support the costs of tourism field inspection (Kaltenborn and Hindrum 1995:31). Fees could be levied on individual passengers or tour operators visiting the Arctic, for payment into a central fund from which observer salaries and travel expenses could be drawn (Enzenbacher 1995a:240). A higher fee could be levied on operators who are not members of the ATMP.

Differential pricing, which is common within the traditional tourism industry (*e.g.* airlines and hotels), can be introduced whereby foreign nationals pay higher fees than national residents do. "Lower fees for domestic residents can be justified on the grounds of both economic efficiency and equity" (Lindberg and Huber 1993:83). Likewise, fees could be kept low or lowered to encourage higher levels of visitation (*ibid.*:85) or raised to discourage visits.

Tourist surveys and tourist behaviour suggest that price is a relatively unimportant factor when choosing a tour to a natural area, "and that even when price is a concern tourists are willing to pay high fees if they know that these fees are being used to enhance their experience or to conserve the special area they have come to see" (*ibid.*). Given that the cost of many of the tours in the Arctic is relatively expensive as compared with mass tourism offerings, it could be argued that higher prices could create an image of exclusivity for the product which in turn could generate sales that may offset any loss of custom from tourists priced out of the market. However, it is important to note that in order to achieve these objectives there must be a sufficient number of tourists prepared to pay fees high enough (*ibid.*:86) to generate the revenue needed to support the monitoring programme.

A number of Antarctic cruises also visit the Falkland Islands, some of which levy a fee per person that is calculated by the tour operator and paid to the island owner. The tourists are not aware of the fee and need not be told about it since the price of the cruise reflects such overhead costs borne by the operator. A similar arrangement could be reached in the Arctic wherein operators paid a fee into a central fund that supports the monitoring programme according to the number of passengers brought to the Arctic each trip or season. Fees could be levied on an individual or group basis or according to the number of trips made regardless of the numbers carried. In the latter case, fees could be collected through a permit system. The above discussion demonstrates that there exists ample flexibility in funding options available to address the needs of supporting a tourism monitoring programme for the Arctic. A panel or committee charged with exploring fully these options which was drawn from a wide spectrum of interested parties, including industry, would be in a position to make recommendations that take feasibility and practical matters into account.

National governments of Arctic countries could provide funding centrally through the Arctic Council and/or individually to support their respective observer programmes at a national level. Private sources could be approached including individual and corporate subscription and a charity could be established called the Arctic Tourism Management Fund to which tourists, industry, non-governmental organisations and local communities could contribute in support of the aims and objectives of the monitoring programme. The proportion of funding that comes from each of these sources would likely differ for each Arctic country and would be influenced by such factors as levels of visitation, political will, public interest, economic prosperity and media coverage. Countries experiencing more tourism may be able to generate higher levels of funding from the visitors themselves, which in turn might support a greater number of observers.

Providing incentives for good practice among tour operators and tourists

Once the monitoring programme is developed and funding issues are addressed, another crucial issue to address concerns how good practice in tourism can be fostered on an ongoing basis. Appropriate incentives are needed to encourage compliance with guidelines on behalf of tourists, tour operators and local communities in the Arctic. In order to provide incentives, careful consideration needs to be given to developing a set of criteria on which practices will be judged. Suggestions for criteria that may be used to gauge and reward good practice include:

- Tour operators who promote widespread distribution of the Arctic tourism guidelines and maintain membership in the ATMP.

- Tour operators who develop pre-visit information packs containing relevant information concerning the specific areas being visited and any special considerations that need to be taken into account to ensure visitor safety and well being.

- Tour operators who provide Arctic tourism guidelines and pre-visit information in suitable languages so as to ensure that all visitors have equal access to relevant information and remain aware of the special issues relevant to their Arctic visit.

- Tour operators who hire experienced personnel familiar with the specific cultural, environmental, safety and other issues relevant to the areas being visited and who convey such information effectively to visitors.

- Tour operators who provide relevant and updated visitor information in a variety of formats *e.g.* printed guidelines, posters, briefings, videos, panel debates, lectures.

Incentives for good practice include allowing access to specific sites, cultural performances or other activities only to those operators who comply with agreed guidelines. Another example involves developing partnerships between tour operators and local communities such as sponsorship of special demonstrations, displays or exhibits of historical and cultural artefacts, costumes, handicrafts or documents with operators considered to be in good standing in terms of complying with agreed guidelines.

Incentives for responsible tour operators who voluntarily report information include the offering of briefings and/or lectures by local people on Arctic history, wildlife, folklore, daily living or other aspects of life in the Arctic to their tour groups. Additionally, these incentives could also be provided only to those operators who joined the ATMP.

Incentives for visitors might include providing an "Outstanding Arctic Tourist Award" to be designated on an annual basis. Names could be put forward by local communities and tour operators of visitors who have done something exemplary *e.g.* by way of promoting cultural exchange, assisting a local community member or protecting the environment. Tour operators could announce the scheme to their clients to raise awareness of the guidelines and encourage appropriate behaviour and good effort. Submissions would be judged by a panel drawn from the ATMP and/or Arctic Council Tourism Commission, industry and local community representatives. It is important that the annual competition be developed under government auspices so as to convey a full partnership with industry, government and local communities given their vested interests in how tourism activity is conducted in the Arctic. Media attention focused on the competition and annual winners would raise awareness of the issues and provide ongoing incentives for industry members desiring to gain positive media coverage.

It is recognised that some visitors drawn to the Arctic for its wilderness and lack of development may well resist formalised procedures and rules governing their activities. Efforts

to raise awareness concerning the issues involved when they visit such areas may ward off potential problems. Special incentives may need to be devised for specific groups as new information comes to light.

Public recognition and rewards for good practice

Public recognition and rewards provide important means by which to encourage good practice among Arctic tour operators and should be employed to full effect in order to promote widespread compliance with Arctic tourism guidelines and other relevant regulatory measures. The incentives outlined above are closely linked to possibilities for offering public recognition and rewards for good practice.

Findings from the monitoring programme may also be used to identify operators found to comply in full with the guidelines so that they can be acknowledged publicly for their efforts. This will help further to foster a sense of appreciation for the Arctic and a spirit of co-operation between operators and the peoples and areas they visit. In addition, the offering of recognition or rewards may prompt other operators to consider adopting management strategies and practices that are seen to work for their competitors.

Conclusions

Given the vastness of the Arctic, the increasing amount and forms of tourist activity, lack of information on the nature of all tour operator practices occurring in the region and problems of access, limited human and financial resources and enforcement, national tourism observer programmes overseen by the ATMP which grants tour operators permission to use a special logo for marketing purposes offers perhaps the most effective means of monitoring operator and visitor compliance with tourism guidelines and other regulations. Of primary concern are the structure of the organisation and training of suitable observers for each part of the region. The Arctic Council Tourism Commission could provide advice and support as each member country put in place an observer training programme drawing on principles agreed in plenary sessions of the Arctic Council or meetings of the proposed Tourism Commission or a sub-committee appointed to the task. The monitoring programme should comprise representatives from all member states of the Arctic Council so as to ensure regular communication and feedback between all parties concerned. It is equally important that the monitoring programme remains fair and equitable and is adequately financed. Although over-regulation is to be avoided since it can work against the aims of the monitoring programme, in time it may be possible to make the submission of tour operator reporting forms and membership in the ATMP a pre-condition for gaining permission to visit all Arctic areas. Strong leadership will be needed to carry out these ideas.

Voluntary self-regulation on behalf of the Arctic tourism industry is to be encouraged, however, the need for and benefits of an official tourism monitoring programme are clear. The challenge lies in getting the balance right by regulating adequately while avoiding under or over-regulation. A well-designed Arctic-wide tourism monitoring programme would provide important feedback to policy-makers that revealed how guidelines are interpreted by different groups of people, the nature and scale of guideline infractions and why they occur as well as a means of assessing their appropriateness and overall effectiveness. Yet, it is also important that governments of Arctic countries anticipate how the tourism industry might respond to proposed regulatory measures. Given the high levels of co-operation and communication apparent between Arctic governments and tour operators it appears hopeful that a well conceived Arctic Tourism Monitoring Programme can be implemented. Efforts to provide incentives for good practice among Arctic tour operators and tourists will assist toward this end. Public recognition and rewards for good practice are important means by which to reinforce the notion that the Arctic provides a unique travel experience and needs to be preserved and protected.

Each region of the Arctic has different needs, customs and concerns along with varying levels and forms of tourism occurring within it. Therefore, ongoing co-operation and creative

partnerships between local communities, tour operators, visitors, indigenous peoples, governments and other interested parties are needed to limit the negative effects of tourism in the Arctic and bring about lasting benefits to the areas and parties concerned. A monitoring programme for Arctic tourism provides a number of opportunities to foster such partnerships and will ultimately serve the best interests of the Arctic region and its peoples.

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Polar ship-borne tourism: do guidelines and codes of conduct work?

Bernard Stonehouse

Abstract

Guidelines and codes of conduct for tour operators and tourists have been employed for several decades in the Antarctic region. The guidelines and codes that proved most effective in environmental protection have been those drawn up within the industry itself. In the absence of appropriate legislation, they have been of critical importance in protecting the landing sites where the main visitor impacts are felt. Though the Arctic is nominally better protected than Antarctica by environmental legislation, Arctic ship-borne tourism would benefit from similar guidelines. It is recommended that tour operators be encouraged to draw up guidelines and codes of conduct reflecting the best practices in their industry, and regulatory bodies provide monitoring and inspection to see that they are properly observed.

Introduction

This paper introduces some of the guidelines and codes of conduct that have been issued for tourism in Antarctica, and discusses possibilities and limitations of similar instruments for the Arctic. In our discussions we have used the terms 'guidelines' and 'codes of conduct' almost as synonyms, and both interchangeably with 'regulations'. By dictionary definition, guidelines indicate a course that should be followed or what future policy will be, and a code of conduct is an established method or set of rules for dealing with or behaving in a particular situation. In practice, guidelines tend to be discursive and explanatory with the function of guiding opinion toward an acceptable policy. Codes of conduct tend to be brief and imperative, prescribing recommended action. Neither is inherently regulatory, though both imply underlying authority in either regulation based on law, or practices accepted by a majority.

Antarctica ship-borne tourism has attracted several sets of guidelines and codes of conduct, of varying relevance. Those that proved most effective within the industry were written specifically for tours operators and tourists, and by naturalists and guides working within the industry. Those least effective were written for a wider range of 'visitors', by official bodies with little knowledge of tourism and minimal contacts with the industry. This principle is likely to be true for guidelines and codes of conduct covering all aspects of the tourist industry.

Antarctic management and the growth of tourism

The geographical areas south of 60°S are governed by the Antarctic Treaty System — the Antarctic Treaty of 1959 and instruments arising from it. The Treaty was negotiated between twelve states (Consultative Parties) whose expeditions had cooperated in scientific programmes in Antarctica during the International Geophysical Year 1957-58. Recommendations and instruments subsequently negotiated between Consultative Parties (now 26), form the basis of continuing international cooperation over all aspects of human usage of the continent (Stonehouse 1994a).

Commercial ship-borne tourism to Antarctica began with two cruises to the peninsula area in early 1958 (Boswall 1986, Codling 1982 and 1995, Reich 1980, Stonehouse 1994). Regular

cruises began in January 1966. The earliest deliberations of the Consultative Parties on conservation, promulgated after the third Antarctic Treaty Consultative Meeting (ATCM) of 1964, included Agreed Measures for the Conservation of Antarctic Fauna and Flora (Recommendation III-8). Drafted in general terms, these were concerned mainly with securing the continent and the area south of 60°S as a basis for continuing scientific research. They made no specific mention of tourism or the behaviour of tourists.

The Consultative Parties' recognition of tourism, and subsequent responses to the growing industry, are discussed in Stonehouse (1994b) and Enzenbacher (1995). Recommendation IV-7 of the fourth ATCM in 1966 recognised that "the effects of tourist activities might prejudice the conduct of scientific research, conservation of flora and fauna and the operation of Antarctic stations", and provided guidelines covering the conditions under which tourist or other non-scientific expeditions might be permitted to visit stations. Neither guidelines nor a code of conduct were prescribed for visits elsewhere.

Antarctic ship-borne tourism

From its earliest days, Antarctic ship-borne tourism adopted an environmentally sensitive pattern devised by Lars Eric Lindblad, its first entrepreneur. The 'Lindblad pattern' of adventure cruising emphasised shipboard education coupled with simple guidelines for good behaviour ashore, attractive to the kinds of tourist who at the time made up the majority in Antarctica (Stonehouse 1994b, Stonehouse and Crosby 1995).

Most cruises plied between Tierra del Fuego and the South American sector of Antarctica. Smaller numbers of cruises each year started from New Zealand or Australia, visiting the Ross Sea sector and neighbouring coasts of Antarctica, or circumnavigating the continent from one sector to the other. Cruises spent between four and 20 days (a few longer) in Antarctic waters. Weather permitting, parties were landed from inflatable boats once to three times daily, usually at sites where there was interesting wildlife or historical material. Thus from earliest times the main, and virtually the only impact of the new industry arose from passengers being landed in groups at sites selected by tours operators.

No formal statement of guidelines was published, but none was needed. Almost every cruise leader responsible for landings during the industry's early decades had trained with Lindblad as a guide or zodiac driver, and adopted his methods. This was fortunate both for the industry and for Antarctica. Lacking effective management from outside, ship-borne tourism managed itself effectively from within.

Early guidelines and code of conduct

The industry expanded slowly through the late 1960s, provoking cautious and restrictive comments from the sixth ATCM in 1970 and the seventh in 1972. From the eighth ATCM of 1974, Recommendation VIII-9 recognised that tourists and other persons not sponsored by Consultative Parties were visiting the Treaty area in increasing numbers, and recognised "the necessity to restrict the number of places where large numbers of tourists may land so that the ecological effects could be monitored". Governments were recommended that organisers of tourist groups, except in emergency, be requested "to visit only those Antarctic stations for which permission has been sought and granted", and to land "only within the Areas of Special Tourist Interest listed or defined in Annex B to this Recommendation".

In fact, no 'Areas of Special Tourist Interest' appeared under Annex B. None was subsequently designated, and characteristically for Treaty proceedings no reason was given. The Consultative Parties lost what might have been a significant means of monitoring the industry in its early stages. However, Annex A of the same recommendation was intended "for the guidance of all those who visit the Antarctic" and embodied some of the characteristics of guidelines for visitors. Under a sub-heading 'Special measures relating to tourism and non-governmental expeditions' the annex reiterated recommended conditions under which parties

might visit scientific stations but again said nothing of visits elsewhere. There followed five annexes covering Specially Protected Areas (SPAs), waste disposal, historic monuments, Sites of Special Scientific Interest (SSSIs), and a format for exchanges of information. Annex A, (Table 1), concluded with brief 'Guidance for visitors to the Antarctic'

Table 1. Guidance for visitors to the Antarctic. (Part of Annex A, Recommendation VIII-9, Ninth Antarctic Treaty Consultative Meeting)

Antarctica and its surrounding islands are one of the few places in the world which are still relatively unchanged by man's activities. Scientists still know very little about the ecological situation in the Antarctic. At the present early stage in research on these matters, some restrictions and precautions may seem unnecessarily harsh, but preliminary studies indicate the need for great caution. By following a few very simple requests, you can help preserve the unique environment of this region.

1. Avoid disturbing wildlife, in particular do not:

- walk on vegetation;
- touch or handle birds or seals;
- startle or chase any bird from its nest;
- wander indiscriminately through penguin or other bird colonies.

2. Litter of all types must be kept to a minimum. Retain all litter (film wrappers, tissue, food scraps, tins, lotion bottles, etc.) in a bag or pocket to be disposed of on board your ship. Avoid throwing tin cans and other trash off the ship near land.

3. Do not use sporting guns.

4. Do not introduce plants or animals into the Antarctic.

5. Do not collect eggs or fossils.

6. Do not enter any of the Specially Protected Areas and avoid Sites of Special Scientific Interest.

7. In the vicinity of scientific stations avoid interference with scientific work and do not enter unoccupied buildings or refuges except in an emergency.

8. Do not paint names or graffiti on rocks or buildings.

9. Take care of Antarctic historic monuments.

10. When ashore, keep together with your party.

Though essentially a statement of the position adopted by the Treaty Parties in relation to increasing numbers of non-official visitors, Annex A could be interpreted as the Treaty's first approximation to visitor guidelines. The 'Guidance for visitors', though little more than a list of prohibitions, was similarly a first attempt at a code of conduct. Neither gave any indication of an element that is generally considered important in the formulation of guidelines and codes of conduct: consultation with those for whom the guidance is intended.

In terms of effectiveness, lack of communication with the industry was strongly counter-productive. Neither guidelines nor a code received publicity that took them beyond the notice of the diplomatic and scientific communities in which they were generated. It is doubtful if either became effective in guiding, still less controlling, the activities of tourists on the beaches of Antarctica.

SCAR guidance

By 1980 approximately 1000 tourists were visiting Antarctica each summer. In that year, the Conservation Subcommittee of the Working Group in Biology of the Scientific Committee on Antarctic Research (SCAR) published on its own initiative a 28-page booklet entitled 'A visitor's introduction to the Antarctic and its environment' (ICSU 1980). The term 'visitor', though not defined, was clearly intended to include scientists and their logistic supporters on national government expeditions, as well as members of non-governmental parties.

To make it more generally available, the booklet was reprinted by several of the countries concerned with Antarctic research, in Britain by the Natural Environment Research Council, the parent body of British Antarctic Survey, the national expedition (NERC 1984). The text included a brief outline of Antarctic geography, geological history and science, summarised the Antarctic Treaty, and discussed Antarctic marine, terrestrial, and freshwater ecosystems with emphasis on conservation. The final section embodied eight points (Table 2) that the authors considered might be helpful to visitors in avoiding damage to the environment, its wildlife, and vegetation.

The 'Visitor's introduction' provides an interesting overview of Antarctica's wildlife and in many ways comes closer than any Treaty pronouncement to a definitive guideline for Antarctic visitors. The 'eight points', reiterating some of Annex A's 'ten points' with slightly different emphases, amount to a different but workable code of conduct. However, like Annex A, the 'Visitor's introduction' was a statement of position rather than an exercise in cooperation. Again it gave no evidence of consultation with those outside government circles for whose guidance it might have been intended. Dual publication may have allowed it a wider influence within government expeditions, but its influence on the growing tourist industry can only have been slight.

Table 2. Eight points from 'A visitor's introduction to the Antarctic and its environment' (IUCN 1980).

1. Remember that the vegetation is fragile and very slow growing. Avoid walking over moss-banks or lichen-covered scree slopes.
2. Do not collect conspicuous lichens or moss-tufts. The best souvenirs to bring back from the Antarctic are memories and photographs.
3. Do not collect fossils, other interesting mineral specimens, or disturb patterned ground. Remember these features are irreplaceable on a human time-scale.
4. Do not disturb nesting bird colonies. Stay outside the margins of a colony and observe from a distance.
5. Do not disturb sleeping seals and never attempt to handle seal pups. The bonds between mother and pup can easily be disrupted and the survival of the pup is jeopardised.
6. Avoid marked sites where scientific experiments are going on. A close examination of a microclimate recorder for example, could result in some very misleading data. Remember that these experiments represent somebody's professional work — and have cost some government (perhaps yours) a great deal of money. Respect the scientists' interests and careers.
7. Take all litter back to the ship with you. It takes decades for it to break down in the Antarctic environment.
8. Encourage your associates and comrades to follow your efforts at keeping Antarctica's wilderness conserved and unspoiled for future generations.

A code from the industry

By the mid-1980s annual tourist visitor numbers had doubled to over 2000, and by 1989 they had doubled again. In that year appeared the first code of conduct designed specifically for tours operators and tourists — the 'Antarctic traveller's code' (Naveen and others 1989), developed by four naturalists with tours ship experience (appendix 4).

Concerned that the Antarctic Treaty Parties had not fashioned sufficiently specific guidelines to govern tourism and other Antarctic visits, the authors commented on a disparity they had perceived in visitation procedures among the various Antarctic tour companies and national scientific programmes. They described their code as based on "basic conservation principles, the ethics underlying the Antarctic Treaty's Agreed Measures for the Conservation of Antarctic Fauna and Flora, prevailing international conservation treaties, and the authors' collective experience as expedition leaders and naturalists in the field". A short article accompanying the code explained points about its origins and emphases. Drawing attention to this code, Stonehouse (1992) underlined its relevance to tourist landings on Antarctic beaches, contrasting it favourably with the irrelevance to tourism of official pronouncements, but found its approach somewhat peremptory and negative.

IAATO guidelines

The code of Naveen and others (1989) was a timely publication for ship-borne tourism, then in its fourth decade, was continuing to increase rapidly. In 1991 the industry carried over 4000 passengers, increasing to over 8000 in 1994. The original Lindblad pattern of individual scheduled cruises continued in a widening variety of passenger ships. The smallest accommodated 35-40 passengers, the largest up to 500. A few larger cruise ships (of up to 900 passengers) sailed Antarctic waters but made few or no landings. The industry involved also smaller ships, mostly sailboats and privately owned motor yachts carrying a few passengers. However, shore-landings by parties of up to a few hundred passengers continued to form the major impact of the industry on Antarctica. The need for more authoritative and acceptable guidelines to cover both the industry itself and the conduct of tourists ashore was never more pressing.

The deficiency was met by guidelines and codes of conduct originating from the newly formed (1991) International Association of Antarctica Tour Operators (IAATO). These were produced by a group of highly experienced expedition leaders and operators including Lars Eric Lindblad, Darrel Schoeling, Nigel Sitwell, Victoria Underwood, and Werner Zehnder, from material that they had been using individually for several years (Schoeling, personal communication). Taking the form of two documents directed respectively to tour operators and visitors, they became known generally as the 'IAATO Guidelines' (IAATO 1991). Copies are reproduced in Enzenbacher (1995).

The Guidelines for Operators consisted of 18 recommendations covering a wide range of law and field practice. Operators were recommended to read the Antarctic Conservation Act of 1978 (US Public Law 95–541) under which American citizens operate in Antarctica and adhere to comparable legislation for non-US countries — a formidable undertaking. They were reminded of responsibilities toward SPAs and SSSIs and the IAATO Guidelines of Conduct for Antarctic Visitors. They were enjoined to seek professionalism and experience in their teams of leaders, cruise directors, officers, crews, lecturers, naturalists, and zodiac drivers; educate and brief crews on IAATO guidelines and instruments of the Antarctic Treaty; support a ratio of not more than 20–25 passengers per qualified naturalist-lecturer guide ashore; and limit the number of passengers ashore at one time to 100.

All passengers had to be briefed on the IAATO guidelines and Antarctic Treaty instruments, making sure that they understood both the ethical and the legal responsibilities outlined in these documents. At sea, whales and seals needed to be protected from distress. Voyage itineraries were to be communicated to other passenger vessels to avoid over-visitation of sites. Proper

notice had to be given to research stations, local instructions observed, and scientific work respected. Littering must be avoided ashore, and Marpol Agreement regulations over disposal of wastes at sea must be observed. Historic huts, scientific markers, and monitoring devices must be respected.

The Guidelines for Visitors, summarised in appendix 6, took the form of a brief preamble followed by seven definitive points of behaviour. Each had sub-points, a brief explanatory paragraph, or both, and a final note under the heading 'Conservation of Wildlife' spelling out the visitor's responsibilities under the Antarctic Treaty Agreed Measures, the US Marine Mammals Protection Act, the Antarctic Conservation Act, and other conservation issues. For brevity the explanatory paragraphs and conservation note are here omitted.

Unlike the guidelines previously discussed, these were created by representatives and practitioners of the industry and industrial policy ensured that they were made readily available to those for whom they were intended. As most Antarctic cruise ships are operated by accredited IAATO members, operators were made fully aware of the guidelines intended for them.

Visitors' guidelines were issued to all passengers on IAATO cruise ships, usually in the form of a small illustrated folder that presented the seven points simply as an easily remembered code of conduct. Copies were usually sent to passengers along with their tickets, ideally though not invariably in the appropriate language. Their substance was discussed and explained during pre-landing briefings, and passengers were reminded constantly to keep their responsibilities in mind.

Though passengers who could recite all the points and sub-points involved were probably rare, every passenger without fail became aware of the guidelines – in particular those concerning optimal distances from wildlife, keeping off vegetation, and collecting souvenirs. The need for such guidelines was generally appreciated and the guidelines themselves were generally, respected and observed, by most passengers.

Joint IAATO/Treaty guidelines

In availability, relevance, and applicability the IAATO guidelines were far superior to their predecessors, and served the industry well. However, as one of the original objectives of IAATO was to promote international acceptance of the guidelines through the Antarctic Treaty System, the guidelines were in 1994 incorporated by a combined IAATO/Treaty group (Schoeling, personal communication) into a formal recommendation of the eighteenth ATCM.

Recommendation XVIII-1 is reproduced in Enzenbacher (1995), and copies are obtainable from IAATO, 111 East 14th St., No. 110, New York, N.Y., 10003 USA. Consisting of a preamble and the two documents *Guidelines for visitors to the Antarctic* and *Guidelines for those organising and conducting tourism or non-governmental activities in the Antarctic*, these are longer and more discursive than the IAATO originals, which they now supersede.

Perhaps the strongest point in their favour is that they represent dialogue between two organisations where dialogue had conspicuously been lacking. As practical guidelines they are longer than the originals and less directed toward tourism. Concepts that have had to be approved unanimously by 26 nations lack some of the original precision and direct relevance. For this reason experienced cruise leaders tend to prefer the original IAATO version. Many continue, for example, to recommend that clients stay a demonstrable five metres from wildlife, rather than an undemonstrable 'safe distance'. There is no corresponding code of conduct: IAATO is currently considering ways of making the joint guidelines more directly effective for clients.

Are Antarctic guidelines still needed?

Ship-borne tourism in Antarctica continues to expand dramatically. Numbers of passengers have again more than doubled since 1991, when the IAATO guidelines were first issued. Over 100 scheduled cruises were estimated to have occurred in 1994-95, carrying a total of 8000-9000 passengers. About 133 such cruises are predicted for the 1995-96 season (National Science Foundation 1995), in which passenger numbers are likely for the first time to exceed 10,000.

Landings continue to constitute the industry's main impact. A database held at the Scott Polar Research Institute details some 180 sites at which landings are known to have occurred. The most popular landings (for example Whaler's Bay, Deception Island) currently receive over 4000 visitors annually. Several less popular sites are visited every second or third day throughout the season.

Both the Treaty and the Protocol lay emphasis on controlling activities in Antarctica. Neither provides protection specifically for sites, other than those required for scientific work or occupied by stations. There is no special protective status for landing sites, and no way of distinguishing sites that are rich in wildlife or historical artefacts from those that have neither. There are no provisions for site management, for example restricting access in those that show evidence of over-use, providing trails or walkways, or posting information – all commonplace measures for site conservation elsewhere in the world.

Though several Treaty nations now provide conservation law and regulations covering Antarctica, providing for penalties in case of infringement, there are no rangers or inspectors empowered to supervise sites and see that regulations are observed and no guides other than the ship-borne guides provided by the tour companies. It is very unlikely that legal charges against passengers who infringe regulations, even seriously, could be carried effectively through the courts of their native countries. In these circumstance good guidelines, and the goodwill on which they rely, remain Antarctica's only practical, on-the-spot defence against despoliation.

Are guidelines effective?

The question 'Do guidelines and codes of conduct work' must be assessed against two criteria: (a) do they serve an immediate purpose of controlling the activities of tourists, and (b) do they serve an underlying purpose of protecting Antarctica from environmental damage? In relation to Antarctic ship-borne tourism the answers are clearly yes. Guidelines and codes originating from non-industry sources failed to penetrate the industry and did not work – perhaps because of irrelevance, and certainly through the lack of dialogue between originators and industry. Those generated by the industry itself have worked very well. They were clearly relevant, accepted without question by the tourists themselves, and highly protective of the environment.

Are guidelines and codes of conduct all that are needed? Though the IAATO guidelines have served Antarctic ship-borne tourism well, their success has depended on an underlying philosophy pervading a small industry, with little dispute or dissension in the field that they covered. As ship-borne tourism continues to grow, bringing in new operators and cruise leaders, some dilution of philosophy and loss of conviction may be expected. There is a strong case for testing the effectiveness of the guidelines from time to time, and if necessary reinforcing them by the presence on board of inspectors empowered at least to report back to the Treaty organisation, at most to provide on-the-spot penalties for individuals who infringe the guidelines and operators who permit infringements.

Both the Treaty and the Protocol make provision for inspection of activities ashore, but Treaty mills grind slowly. The Protocol, signed in 1991, has not yet been ratified by a number of key states. Though tourist numbers have doubled since that year, the promised Committee for Environmental Protection has not materialised. There seems little likelihood of these powers being brought into effective use in the near future.

Are guidelines needed in the Arctic?

Ship-borne tourism has a longer history in the North than in the South. However, the industry is currently expanding in the North, and many of the ships and companies involved in Arctic summer cruises work Antarctic waters during the austral summer. The Arctic, under the sovereignty of eight environmentally aware and well-intentioned governments, should theoretically at least be better protected than Antarctica, where sovereignty has been discounted in favour of an international regime. Landing sites *on Svalbard*, for example, under Norwegian protective legislation, should be better served than those of the Antarctic Peninsula under Treaty legislation. In practice they do not seem to be. Svalbard is well endowed with parks for recreation and reserves for environmental protection, which tour operators on the whole respect. There are rangers and police with boats and helicopters to enforce the law, yet many landing sites in unscheduled areas of Svalbard are littered, worn, and disturbed to degrees that are so far unknown in Antarctica.This must in part be due to sheer numbers: over twice as many ship-borne tourists visit Svalbard, incidentally presaging an almost inevitable future for Antarctica. However, tourists ashore *on Svalbard* often lack the interest and discipline seen in Antarctic passengers. Going ashore is for them a diversion rather than an educational experience, and the environment suffers accordingly.

My own observations suggest that cruise operators who spend their alternative seasons in the far South are conspicuously better at conserving the North, bringing to Svalbard the guidelines and code of conduct that they apply in Antarctica. Passengers and crews from their ships come ashore well informed and conservation-minded. Ships that come to Svalbard from Caribbean and Mediterranean cruises seem to have no similar codes, ethics, or discipline. I have seen passengers coming ashore from a cruise liner for a barbecue in Magdalena Fjord, to the agreeable strains of a Mexican band, with no knowledge that they were visiting an historic site or strolling destructively through a colony of nesting Arctic terns. The government rangers happened to be elsewhere and the guides, if there were any, seemed otherwise engaged. The passengers gained little, and the environment lost more of its already-tattered integrity.

This example illustrates a problem for polar development in general, and for polar tourism in particular. Polar countries, relatively undeveloped and thinly populated and policed, are open to entrepreneurs who are market-driven and inevitably likely to force the pace on regulating authorities. There will always be more entrepreneurs than policemen. Developers and regulators need to find roles that are complementary and divide responsibilities even-handedly between them (Stonehouse 1996). The less adversarial and more cooperative these roles, the more successful and sustainable will be the resulting activity, with least impact on the environment.

Conclusions

For Arctic ship-borne tourism, indeed for most forms of Arctic tourism, this analysis indicates complementary roles for operators and regulators, the two major parties concerned.

The role for tour operators is to draw up sensible, binding guidelines and codes of conduct for themselves and their clients that reflect their best and most effective practices. Like the Antarctic tour operators, they would do well to consider combining forces: the IAATO guidelines provide a well-tested model. It is best that the operators draw up their own codes, perhaps helped by interested third parties, for they alone have the experience of what is needed. If they do not, governments and other regulating groups will do it for them, often tardily and with little insight into the workings of their industry.

The role for regulating bodies is to identify existing and possible future impacts, and provide for them. Specifically for ship-borne tourism, it is to examine critically the operators' self-regulating codes, assess their relevance, endorse or amend and then approve them, and provide inspection to see that they are properly observed. Their role is emphatically not to elaborate generalised law that covers all possible situations. That will land them in difficulties and

ultimately in disrepute. Ship-borne tourism has established for itself a good record in the Antarctic. Arctic ship-borne tourism should be given a similar opportunity.

Fears that this policy gives too much control to the industry are unfounded. As guidelines and codes of conduct must of course conform to existing law and regulations, the regulators will always have the last word.

Can regulating bodies afford to monitor? Yes, by taxing the tourism on a *per capita* basis, at whatever level is required to bring in appropriate revenue.

There are roles too for intermediaries. Conservation groups may set high standards of environmental protection, perhaps endorse or give seals of approval to cruises and other activities that meet specific standards of excellence. They and other independent observers, for example scientists and university research groups, have important roles as independent monitors and observers watching closely to see that guidelines remain relevant, and regulatory bodies vigilant.

Tourism is a substantial force with strong powers for good and evil. Good tourism brings many advantages, including revenue for research, monitoring and conservation. Polar authorities need to take it very seriously and harness its powers – in particular its self-regulating powers – for the good it can bring.

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The conservation perspective on Antarctic tourism

Cassandra Phillips

Abstract

The paper describes the legal regime (Antarctic Treaty and Environmental Protocol), which provides a high level of protection. Antarctic tourism, almost all ship-based, is expanding rapidly (9000 in 1995-96). Conservationists are ambivalent, seeing advantages in the spread of awareness but reasons to keep Antarctic tourism under limits. Antarctica's main values are as the largest wilderness on earth, the largest wildlife sanctuary, a crucial region for scientific research, and as an internationally governed continent. All these values have repercussions for tourism regulation. There are limited lessons for Arctic tourism, with the lack of native inhabitants and the political situation making the Antarctic distinct.

The political background

Unlike the Arctic, the Antarctic belongs to nobody and everybody, or at least to the 80% or so of the world's population in the 42 member countries of the Antarctic Treaty, in two categories of 26 Consultative (or voting) Parties and 16 Non-consultative Parties. These Consultative Parties include most of the world's largest countries, including China, India, Russia, USA, Brazil, South Africa, and most of Europe. Seven Parties (including Norway) do claim sovereignty over parts of Antarctica, and the competing claims threatened to spill over into military action after the Second World War. However, Antarctica has successfully been maintained as a place for explorers and scientists, not tanks and weapons, and the International Geophysical Year of 1957–58 led to the remarkable agreement to preserve the whole continent for peaceful and scientific purposes only. The potential antagonists agreed in the 1959 Antarctic Treaty to ban all military activity and not to press their territorial claims, but in effect to leave them frozen 'on ice'.

The Antarctic Treaty covers all land and ice shelves south of 60°S. In contrast to the Arctic, only 2% of the Antarctic land is seasonally free of snow and ice. As well as the mosses and lichens, there are only two species of vascular plants on the whole continent. Over the Treaty's 37-year history, it has been reinforced by a number of other measures and conventions, including measures to protect fauna and flora on land and conserve the living marine resources south of the Antarctic convergence.

One form of commercial exploitation, the exploitation of minerals including oil and gas, was not mentioned in the Antarctic Treaty. Throughout the 1980s there was heated debate on whether mining should be allowed in this virtually pristine and very vulnerable wilderness. In 1988 a convention to regulate mining was agreed by the Treaty Parties, but the resulting international outcry and the efforts of the World Wide Fund for Nature (WWF) and many other environmental groups led instead to the signing in Madrid in 1991 of the Environmental Protocol which banned all mining in the Antarctic for at least 50 years. In fact, it was the catastrophic wreck of the oil tanker *Exxon Valdez* in March 1989 in Alaska that gave the world only too clear an example of the reality of the threats of oil exploitation in vulnerable polar regions. I believe that if it had not been for the *Exxon Valdez,* the Antarctic mining convention probably would not have been overturned and replaced by the Madrid Environmental Protocol.

1991 Environmental Protocol

The Madrid Protocol will enter into force when all of the 26 Antarctic Treaty Consultative Parties have ratified[11] it. So far they have all done so except for Finland, Russia, Japan, India, and USA. All have agreed to respect its terms while formal ratification is being completed. The Protocol represents a crucial step towards comprehensive environmental protection in Antarctica. Before its agreement, environmental measures were not much better than an ad hoc and patchy set of recommendations that were difficult to enforce. It affects all aspects of human activities in the Antarctic, including tourism, and further provisions on financial liability for environmental damage are still being negotiated. The main points include:

- The formal designation of Antarctica as a 'natural reserve, devoted to peace and science' and establishing principles for environmental protection in the whole region
- The prohibition of all mining activities, except for scientific research
- Establishing a Committee on Environmental Protection with wide advisory functions
- Instituting legally binding measures governing waste management and disposal, the prevention of marine pollution, the conservation of native fauna and flora, a comprehensive protected area system, and most importantly very strict environmental impact assessment (EIA) procedures for all activities whether governmental or non-governmental (such as tourism)

In summary, the Antarctic Treaty, together with the Madrid Protocol, nominally gives the whole Antarctic area strict protected area status. Human activities are not totally banned except in a few very small areas, but they are very strictly regulated everywhere. The Arctic only has this level of protection in some areas. However, the extent to which this protection can be administered and enforced is still something of a grey area, since sovereignty claims are not recognised and there is no regulatory authority except a system of consensus-building at the annual Treaty Meetings. Enforcement has to be left to each Treaty Party controlling their own nationals. The Antarctic Treaty still does not even have any permanent Secretariat, although this is urgently needed. Another difference between the Arctic and the Antarctic is also crucial in considering the management of tourism – the fact that the Antarctic, 10% of the globe's land surface, has no native human inhabitants, only some 3,000 scientists spending periods of weeks or months working there.

The development of tourism in the Antarctic

The first tourists to visit Antarctica travelled by air from Chile in 1956. Air travel, especially over-flights, were popular in the late 1970s, but ceased abruptly in 1979 when an Air New Zealand DC-10 crashed into Mount Erebus killing all 257 people aboard. Since that tragedy, air-based tourism has been mostly limited to small, high priced flights from Chile often using 'blue ice' airstrips. Qantas has also begun over-flights from Australia again.

The first cruise ship visited Antarctica in 1958 carrying 100 passengers. The ship-based tourist industry has expanded very rapidly over the past few years, and in 1994-95 the total reached just over 8,000 tourists with over 100 trips on 15 ships. The industry forecasts an increase to 9,000 tourists in 1995-96. These numbers would be minute if they were evenly spread around the Antarctic coast, but in fact most of the tours visit just a few sites on the islands and coast of the Antarctic Peninsula, and are concentrated during the short two month summer season when the penguins and other birds are breeding. In addition, an ever-increasing number of private

[11] The Environmental Protocol entered into force in January 1998 following ratification by all the Antarctic Treaty Parties.

yachts now visit the Antarctic, especially the Peninsula area, some even over-wintering there. So far there is almost no land-based tourism, apart from one campsite for adventure tours.

The conservation perspective

Most conservationists feel somewhat ambivalent about the growth of tourism in remote parts of the world, of which the Antarctic is a considerably more extreme example even than the Arctic. We welcome the idea of people being able to see for themselves what a beautiful, awe-inspiring place it is, and to experience at first hand the variety and sheer numbers of birds and seals, the amazing ice formations, and the clarity of the unpolluted atmosphere. We welcome tourists returning home as enthusiasts, and as ambassadors for continued and strengthened environmental protection of this unique continent. Tourists can see for themselves some of the scientific stations, both the "green" and the "not-so-green" ones. When they return home they will tell their friends and write to newspapers or their governments about what they have seen. Their reports often provide a useful supplement to the frequently confidential and far too diplomatic reports of the official Antarctic inspections.

On the other hand, we do not welcome ship-loads of tourists treating Antarctica as just another cruise destination, some of whom are not even interested in going ashore at all in spite of the high price of the tours. In nearly all other parts of the world, there can be considerable advantages from eco-tourism, especially when local inhabitants of areas important for biodiversity are given an economic incentive for conserving that biodiversity. This consideration is irrelevant in the case of the Antarctic, there being no local inhabitants. All the profits to be made from Antarctic tourism go back to operators based north of 60°S. There will therefore be no adverse conservation implications if Antarctic tourism is not allowed to grow indefinitely, and there almost certainly are sound conservation reasons for putting a ceiling on its expansion.

For WWF, and I think all environmental organisations, there are at least four main features of the Antarctic that are of unique and supreme value, and which must be the basic principles against which proposed activities there, including all forms of tourism, are judged. The Arctic does indeed share in some of these values, but with several important differences.

First, there is the Antarctic's value as the largest and least contaminated wilderness area in the world. A whole continent that has never had permanent human inhabitants and which remains very little affected by human activity gives it a priceless value on our polluted planet. Wilderness is by definition vulnerable and easily lost. You do not feel you are in a wilderness if you find airstrips, wharves, and buildings. Nor do you feel in a wilderness if you go ashore and find cigarette ends, soft drink cans, or even footsteps in the moss. The implication for tourism is that the Antarctic should have no land-based tourist facilities, and that everyone's behaviour must be subject to firm, strictly enforced guidelines. The current fast increase in ship-borne tourism has increased the pressure, on the small coastal ice-free areas and the inland areas in range of the helicopters some ships carry, but has also created a competitive pressure for diversification of tourist choices. In practice, much of Antarctica is now within reach of small groups of rich people.

Second, there is the Antarctic's value as the largest wildlife sanctuary on earth, with its vast coastal colonies of seals, penguins and many other seabirds, as well as its relict populations of whales. All the wildlife is dependent on the rich marine ecosystem. In contrast to the Arctic, there is very little evidence of any air-borne or water-borne contamination affecting the fauna or flora of the Antarctic, so in that sense it is a true sanctuary. The question of just what impact people, especially if they are in groups, have on penguin colonies or on hauled-out seals at various stages in the breeding cycle is still an open one. Cumulative impact is almost certainly much greater that the sum of individual impacts. Again, extremely cautious guidelines for visitor behaviour are clearly needed, and ways must be found to enforce them.

Third, there is the immense value of Antarctica to many branches of scientific research, resulting from its geographical position, isolation, ice accumulations dating back hundreds of thousands of years, and its unique low temperature ecosystems. The Antarctic region plays a key role in regulating global atmospheric circulation and ocean currents, and is vital to the study of global warming. The essential qualification for a nation to become a member of the Antarctic Treaty is that it should be conducting scientific research there. In some ways, tourism can benefit Antarctic science, particularly when influential people are able to see for themselves the research at the government-funded scientific stations and there is more chance they will support public money being spent in this way. However, it does not benefit science if too much time has to be spent on guiding groups of tourists, conducting search and rescue, or if study sites are contaminated in any way such as interference with wildlife or by pollution from ships. One of the worst examples was the wreck of the Bahia Paraiso (a mixed scientific support and tourism ship) just off the American Palmer Station, when the resulting oil pollution may have ruined a long-term investigation of phytoplankton and ozone depletion.

Fourth, there is the fact that Antarctica is an international de-militarised continent that has been regulated for well over thirty years by a growing number of nations who have managed to keep this one part of the world clear of all the armed conflicts taking place in the rest of the world. As explained, this legal situation makes the enforcement of tourism regulations and guidelines very complex. For example, the nationals of countries not party to the Antarctic Treaty remain beyond the scope of its jurisdiction.

Conclusion

Although the Antarctic does not have the relatively wide variety of habitat types found in the Arctic, the Antarctic and Arctic clearly have some similarities as far as tourism is concerned, such as the short summer season, the large colonies of birds and mammals, and ice sheets. On the political level, however, the fundamental differences between the two polar regions, especially the lack of human inhabitants in the Antarctic and the very complex legal and political situation over the enforcement of regulations, make the lessons learned from Antarctic tourism of only limited use for developing guidelines for Arctic tourism.[1]

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Tourism regulation - cultural norms or legislation? Outdoor life and tourism regulation in Finnmark and on Svalbard

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Abstract

This article describes outdoor recreation activities in Finnmark and on Svalbard, with emphasis on recent behaviour changes and a growing need for regulation. There are reasons to believe that the traditional way of "learning nature by living and doing" is about to vanish, also in Norway. The article discusses alternative means of regulation, recommending education and constitution of norms as the most viable strategies. To succeed with different types of regulation, a bottom-up strategy that takes into consideration local traditions, and that copes with the free access principle to natural resources, should be chosen.

Introduction

Tourism is a growing industry all over the world. The Arctic and Sub-arctic areas are no exception. People go to the Arctic to experience a particular kind of nature (Hall and Johnston 1995), and for the prestige it may give to have been to the end or the top of the world (Viken 1995a). The challenges for the tourism industry and nature resource management that follow an increase in tourism are many. The natural environment is fragile, vulnerable, and unique. The residents of the Norwegian Arctic are Norwegians and Sami who believe that they know how to use nature, and at the same time preserve it. It is part of their national heritage. Not all Norwegians, however, and particularly not people from other countries and cultures, know how to behave under the circumstances that exist in Arctic parts of the country.

The foci of this paper, Svalbard and Finnmark, are the two northernmost areas of Norway. The paper discusses the emergence, volume, and types of tourism, followed by a description of the Norwegians' relationship with nature. The paper emphasises the changes that may be about to occur in this culture, the antagonisms that exist between different nature user groups, and the problems that may occur when new user groups turn up. Different regulation mechanisms used in nature resource management will be presented as an outline for the discussion of tourism guidelines or codes. The conclusion will focus on some paradoxes connected to the roles of environmental organisations in tourism and nature preservation questions.

To include Finnmark and Svalbard in the same analysis poses some problems. On the one hand the challenges of the two regions are more or less the same. Nevertheless, there are some significant differences: Both regions are within the Arctic as defined by biologists (see Hall and Johnston 1995, Mason 1995), but only a small part of Finnmark. Both regions have unique nature, but on Svalbard nature is much more vulnerable. Both regions are scarcely populated, but the differences are big (less than 2,000 inhabitants on Svalbard, about 75,000 in Finnmark). Both are parts of Norway, but for Svalbard there is an international treaty that limits the Norwegian sovereignty. Finnmark has an indigenous population, Svalbard does not. Both have tourism, but Finnmark has many times as many visitors as Svalbard. In both regions tourism is an industry with priorities, and regulation of tourism has been discussed from the perspective of environmental concern.

The emergence of adventure tourism in the Arctic

People have travelled to the sub-Arctic and Arctic areas of Europe since the medieval period. First, there was a commercial traffic based on fishery, whaling, and fur trade. Later the search for a sea route to China brought people to the area (Skavhaug 1990, Arlov 1989). One of them was Willem Barents, who was the first known European to find Svalbard in 1596. The name Svalbard has its origin from the Viking period (Kaltenbom and Emmelin 1993). In the footsteps of Barents a significant whaling industry emerged on Svalbard, and whaling was the main purpose of expeditions to Svalbard in the 17th and 18th centuries. For centuries there has also been significant exploration activity. As the Arctic was one of the last areas to be conquered by man, there were still areas to explore in the 19th century. The research expeditions were well known and the explorers were treated as heroes and got a lot of publicity (Riffenburgh 1993). The high Arctic became politically and publicly interesting during this period, and soon became a destination for leisure travellers. There were people going on private cruises to Svalbard in the 1850s. Since the 1870s cruise liners have visited the North Cape and Svalbard. Modern car and bus tourism to the North Cape emerged after the appearance of a new road connecting the place to the national highway system in 1956. The starting point for modern tourism on Svalbard was the construction of an airport in 1975. In recent years there have been around 200-250,000 tourists visiting North Cape (Nordkapp Reiseliv 1995) and 30-40,000 to Svalbard (Info-Svalbard 1995). The main tourist groups to Svalbard and Finnmark are shown in the Table 1 below.

Table 1: Tourism on Svalbard and in Finnmark 1991-95

	1991	*1992*	*1993*	*1994*	*1995*
Cruise/Hurtigruten					
Svalbard *)	20,000	18,400	22,000	24,000	25,000
North Cape		34,925	38,465	55,990	40,930
Hotel overnights					
Svalbard	19,212	19,146	24,583	31,311	34,713
Finnmark	331,000	359,000	355,000	370,000	344,000

Sources: Info-Svalbard, Nordkapp Reiseliv AS, Statistics Norway.
*) The numbers are probably too high, partly based on the total capacity of the cruise liners, not on passenger numbers.

The tendency of the numbers is clear: tourism in the northernmost areas of Norway and on Svalbard is increasing. On Svalbard the overnights almost doubled in a five years period. Most of the increase in Finnmark is in traditional tourism, while business and conference, as well as leisure tourism have increased on Svalbard. The table shows that both seaborne and land-based tourism are increasing. Adventure travel is one of the types of tourism in these regions. For Svalbard the volume of "adventure tourism" is also known (Table 2). The numbers are probably too high, partly based on the total capacity of the cruise liners, not on passenger numbers.

Table 2: Field tourism on Svalbard.

	1991	*1992*	*1993*	*1994*	*1995*
Individual expeditions	811	1002	1030	940	
Coastal cruises and tour operated travelling		940	1120	1200	
Snowmobile touring days		1300	1800	2700	3500

Sources: Info-Svarlbard, Kaltenborn and Hindrum (1995).

There are no comparable statistics for Finnmark, but one knows that the winter hotel overnights in the holiday segment increased 23 percent from 1990 to 1994 in the Sami parts of the region (Viken and Krogh 1995). Thus, as a general trend, adventure tourism on Svalbard and in Finnmark is increasing. These tourists, on Svalbard called field tourists (SNU 1994, Kaltenborn and Hindrum 1995), are those with the most intimate contact with nature, probably putting the most pressure on the natural environment per tourist, and the problems with this type of tourism are much more significant than the volume indicates. The other nature-based tourist categories are cruise passengers, in Finnmark most often going ashore in Hammerfest and/or North Cape. On Svalbard the cruise passengers made altogether 46,000 individual landings in 1994 (Kaltenborn and Hindrum 1995), making an average of between two and three per tourist. One landing is normally in one of the towns, the other in Magdalena Fjord. The coastal cruises have normally one landing per day, but the volume for this group is less than 1,000 tourists. The business and conference tourists also constitute a significant nature activity category. Most of them tend to have one or more outdoor experiences as part of their stay on the island: in winter on snowmobiles, in summer with boats. This type of activity is increasing much more than real adventure tourism. It is reflected in the increase of snowmobile touring days in the table above, almost tripled in four years.

There are reasons to split the outdoor recreationists and tourists in two groups according to the way they treat nature: "hard" and "soft" nature users (Sandell 1994). People who utilise motorised transport constitute the first group, those who rely on manpower the other. However, the split in hard and soft user categories can be misleading. The hard users do not necessarily put more pressure on nature than the soft users. The soft users normally have more intimate contact and spend more time in nature. The hard user category consist mainly of snowmobilers in the winter and of cruise passengers and some private boat owners in summer. The volume of tourism based on snowmobiles and small boats is only a minor portion of the total volume. There are said to be more than 1,000 private snowmobiles on Svalbard. There are also about 1,000 adult Norwegians on Svalbard. The exact frequency of snowmobile use is unknown. If the adults on average have 10 day trips a year (see Kaltenborn 1991), this accounts for 10,000 snowmobile tour days, which is almost a threefold of that of the tourists (3,500 tour days). In Finnmark the volume of local use is many times that of the tourists, and many times that of Svalbard due to a greater population.

That tourism does pose a significant environmental problem at all in the Norwegian Arctic is not obvious. As foreigners, the tourists do not have local knowledge and are probably more likely than the residents to do silly things. On the other hand, the litter found in the environment most probably stems from local residents. The environmental problems that can turn up in Finnmark and on Svalbard have to do with vulnerability and tourist numbers. The nature in question has a limited carrying capacity. The only problems referred to so far are on the North Cape and in Magdalena Fjord on Svalbard (SNU 1994, Miljøverndepartementet 1994-95), and in both places the problems are connected to erosion and preservation of cultural heritage. Recreation and tourism take place on an individual level, thus bringing much more people into nature than other activity spheres.

The remoteness of these areas means long travel distances for most tourists going to Finnmark and Svalbard. Therefore, compared to many other destinations, tourism to Finnmark and Svalbard has a significant air pollution effect. However, compared to most other nature usage of the area like mining, fishery and animal herding, recreation and tourism still represent "soft" nature usage.

Norwegian outdoor recreation traditions

Most Norwegians think that Norwegian nature is the most beautiful in the world. This conviction is partly a result of strong nationalistic movements in the 18th and even more in the 19th century, a period when Norway still was a colony and a been so for more than 400 years (Nedrelid 1991). Romanticism and national romanticism were part of the ideological foundation for Norwegian separatists, and nature, countryside and farmers were central symbols in the emancipation process. Thus nature became a national symbol, mediated by authors, painters, and composers, and leaving deep traces in the Norwegian identity.

Another reason for strong feelings about nature among Norwegians has to do with the late industrialisation and urbanisation of the Nordic countries during late 19th and 20th centuries (Nedrelid 1991, Sandell 1991). This means that most Norwegians have roots in the pre-industrial and rural communities, and are aware of them. Ancestral, spatial, and cultural relationships to the countryside and natural environments are reflected in leisure practices (Nedrelid 1991, Kaltenborn and Vorkinn 1993). There are some main categories. First, people have second homes in the countryside: 350,000 for a population of 4.2 million (Aderhold *et al.* 1993). They go as often they can, and many in fact live most of their lives in these second homes. Second, people participate in activities that are closely connected to the pre-industrial harvesting traditions: fishing, hunting, picking of berries, nuts, mushrooms and herbs. The Norwegian culture is rather rationalist, in that people must have a reason to be in nature (Nedrelid 1991) and harvesting is therefore often used as an argument to be out in nature. Third, people go for walks in nature, both short trips and longer hiking tours. These nature tours have a multitude of motives like recreation, fitness and sport, to experience the beauty or other aspects of nature, or just to be in the open and fresh air. Therefore, what has been called outdoor life (Sandell 1991) or wilderness life (Pedersen 1993), is more a lifestyle than a leisure or recreation activity. According to Nedrelid (1991), the English mountaineers who travelled around and climbed in the Norwegian mountains in the second half of the 19th century also stimulated the Norwegians to began participate in outdoor life, as did the Norwegian Arctic explorers Nansen, Amundsen, and others (Nedrelid 1991). Nansen (1922) was also a spokesman for outdoor life. Ever since, Norway has had brave men copying the tours of these national heroes. These people constitute an outdoor life elite, but there is also a mass movement. The mass movement is organised and keeps up a certain infrastructure, prepare new areas, and preserves the Norwegian wilderness. Fourth, during the recent decades new holiday patterns have emerged. People travel all over the world visiting nature attractions and taking part in naturebased activities in new environments.

Some of the historical roots, living traditions, and heroes of the outdoor life culture have been mentioned. However, there are some more better known cultural signs. For many people, there are rituals connected to nature: no weekend without at least one tour in the open air, or no summer without climbing to the nearest or highest peak. There are myths, tales, and stories that are told about nature and old Norwegian mythology and historical events are reflected in place names like Trollheimen (Home of Trolls), Rishaug (Giant's Top), and Gygrastolen (Chair of a Norse Goddess). When Norwegians tell you about themselves, they talk about the nature of the area from which they come. Thus, nature is a large part of Norwegian culture. The main ingredient of this culture today is recreation, but nature is also a symbol of freedom, of Norway as a free and democratic country, and of "freedom" from many of the problems of modernity and urbanised cultures. The Norwegian outdoor life is more than a myth (Nedrelid 1991), as it has the strong traits of a vital culture.

These traditions and all the outdoor activities in which people take part from birth, lead to a strong and positive feeling and interest in nature. This can be seen in the way people treat the environment and in the political protests every time a new river or waterfall is going to be transformed to a power station. It is also reflected in the law: Legally, nature is a common good and for public use, even if the land in question is private property. This is called the all-men's-right (Hammit *et al.* 1992) or every man's right (Fitje 1995) to nature, and is a parallel to the right of commons principle (Hardin 1968). The difference is that the all-men's right transcends the question of who owns the land, while the right of commons refers to common property. You may well own a forest or a beach, but you have no right to decide who should use it. This public access to nature is embodied by the Norwegian Outdoor Life Act.

The Norwegian outdoor life culture is today challenged by modernity and new nature user cultures. As a general trend leisure increasingly are based on technology and influences of the market economy (Kelly 1990, Lash and Urry 1994). Alpine skis, mountain bikes, private motor boats and snowmobiles are examples of new technologies constituting significant nature user groups in Norway today (Kaltenborn and Vorkinn 1993). Due to topography, climate, and practicality, almost everybody uses snowmobiles on Svalbard, while use is more limited in Finnmark. According to scholars, technology-based activities do not give the same intimacy with nature as the traditional forms of outdoor life (Axelrod and Suedfeld 1995, Tordsson 1993). There is a risk, particularly in Finnmark and on Svalbard, that future generations will not learn to behave in nature as their predecessors did. The Norwegian outdoor life culture may be vanishing.

However, not all Norwegians share the traditional outdoor life culture. It has not been as much the lifestyle of farmers, fishermen, and working class people as it has the middle class, intellectuals, white-collar workers, and self-employed people (Fitje 1996). Thus, nature preservation concerns are not as strong for some social categories as for others. As leisure has been democratised, people not so familiar with outdoor life culture have entered the nature scene. The major part of leisure snowmobilers, particularly in Finnmark, are fishermen, miners, and industrial workers, and most are from families that have lived in the region for generations. Their need for physical activity is satisfied through their jobs, their culture is centred around manual work and technology, and they look upon nature as a playground (Pedersen and Viken 1996). Functionalism and not aestheticism is the core of this culture. For these people the snowmobile has opened a new world. In nature they represent modernity, though they often argue that they are the bearers of tradition. As most snowmobilers in Finnmark see it, they do what their ancestors did before: harvest nature. The consequences of their activities are, however, not the same as for their ancestors. Their tools are rougher on nature, their action radius is much greater, and they have more time to spend on such activities.

Another new group of nature practitioners are tourists. Norway receives around two million foreign tourists each year, most of them attracted by the nature. There are few restrictions that discriminate against foreigners. The all-men's right is for everyone, independent of citizenship, so that, regardless of where people come from, they can walk around in nature protected by Norwegian legislation (Nedrelid 1991, Fitje 1995). Foreign tour operators may use Norwegian roads for tourism and thus make money out of Norwegian natural resources without any need for permits and without paying taxes. A licence is not necessary to bring visitors into the Norwegian natural environment. The all-men's access to natural resources is more or less an all-men's right to conduct business based on natural resources. On Svalbard this right is even protected by the international Treaty of Svalbard. With the amount of international arrivals today, and the interest in nature experiences among most tourists, this liberal practice is questionable. The principle was established long before tourism became an activity for almost everyone. This is also true of the Norwegian Outdoor Life Act (1957). The accessibility of the modern world has become a serious threat both to the all-men's right and outdoor life traditions. It is a paradox that principles that secure freedom for the individual probably only can survive with a stricter regulation in the future.

Conflicts between traditional and new use of nature

Norway is a scarcely populated country, relatively rich in nature resources. There have been some conflict between industrial and recreational interests about the management of these resources, but generally the level of antagonism is low (Sandell 1991). There seems to be a political agreement about the need to preserve the natural resources. During the years there have been some conflicts connected to hydropower projects, where the authorities were accused of being too liberal. The one that really engaged the whole country and shook the political system was the so-called "Alta Case" in Finnmark. The conflict was about the construction of a power plant in the middle of a reindeer grazing area. There was a potential for a similar conflict on Svalbard connected to a planned road between Longyearbyen and Svea that would support the mining industry, but plans for the road were ultimately dropped. In both cases recreational arguments were used to oppose the implementation of the projects. However, in the Svalbard case the consequences for tourism might have been positive from a commercial point of view (SNU1994).

Finnmark and Svalbard both cover huge territories. In spite of no lack of space, there is some antagonism between different recreational groups. The most significant, often reflected in the newspapers, is between modern and traditional outdoor life practitioners. Today one may go snowmobiling wherever one wants on Svalbard outside the protected areas, whereas in Finnmark snowmobiling only can take place along marked trails. When snowmobile-free zones were proposed for Svalbard, most of the local residents protested. In Finnmark the conflict is not only about what is the most dignified pattern of outdoor life or a question of nature preservation. There is also another dimension: those in favour of the liberal rules are mostly people who have lived in Finnmark for generations, while those against are often migrants from other parts of the country (Pedersen 1993).

Finnmark has long traditions with tourism, and the North Cape is an internationally famous tourist destination. Tourism development there has been either very controversial or without discussion. The most discussed subject has been the "industrialisation"of tourism and the move towards mass tourism. There have been few discussions on the use of natural resources in tourism, but this may be due to the fact that most tourists only are gazers, not real nature users. In the Svalbard case, until recently the authorities looked upon tourism as a threat to the natural environment of the archipelago. Problems with the coal market and the need for a new industrial base sustaining a certain population have changed these attitudes. Thus, tourism is one of the industrial priorities today, and so far there have been few conflicts connected to tourism development. Both in Finnmark and on Svalbard there only have been minor incidents that have provoked the public and nature resource managers. Nevertheless, there is some antagonism, as local people tend to feel that they have the rights to the nature resources in their neighbourhood. Local tour operators have been criticised for letting their visitors fish on the ice, local salmon anglers experience the taking over of their angling spot foreigners, and somebody who has waited for a patch of cloudberries to ripen finds it emptied by others. Local tour operators, who feel that their commercial activities are disliked by local people, seem to be in favour of tourist guidelines for their activities.

How can tourist behaviour be regulated?

There is a whole set of mechanisms and policies that can be used to direct human behaviour in the natural environments as in other life spheres. According to Larsen (1985), there are several main methods of regulation. There are two categories of regulation techniques. In the first category, the techniques directly address human behaviour. The second type of technique functions indirectly by manipulating the frames within which human actions take place. Both groups of techniques are used for steering or conducting behaviour while in nature (Hammit *et al.* 1992).

The most profound means of behaviour regulation takes place through cultural norms and values. As social individuals we learn what is good behaviour and what is bad. This is why the

Norwegian outdoor life tradition may be seen as regulation, one that even functions for city dwellers. Norway is not alone with such traditions. They are said to be as strong in Sweden (Sandell 1991), and it is argued that the principle is of German origin (Hammit *et al.* 1992). People from other countries may have another cultural background, and not the same knowledge of appropriate behaviour in nature. In the Arctic, there is a need for regulation by other means, such as education or codes of conduct.

When people do not know how to behave, someone should tell them. There are guidelines for how to behave at royal events, a royal etiquette. Very often one sees the need for a guideline for how to behave as a tourist in another culture. There are many examples of such guidelines, both in the cultural and natural field. Such guidelines exist in the Himalayas, on the Galapagos, and on Svalbard (see Mason 1994). Guidelines or codes of conduct can be based on reason, moral, or other cultural values. Religion, ethnicity, environmentalism, and nature ethics are the most common bases for tourism regulation. Legislation is very often a formalising of norms and values, and thus becomes a part of the culture. Legislation may, however, also substitute for such cultural guidance. When values are not incorporated into the culture (Connerton 1989), formal rules may function as guidelines and direct action. Besides the Outdoor Life Act, Norway has laws regulating the behaviour of recreationists and tourists including rules for inland angling, berry picking, hunting, and activities within and close to national parks and nature reserves. The rules, however, often seem to have limited regulation value for tourists as they normally are not mediated to them. On Svalbard the information system supporting the laws and rules is much better, involving separate codes of conduct for tourists.

Another form of behaviour regulation is to use market mechanisms. In reality this means that one has to pay for a certain use or activity, and that those who cannot afford it do not have access to an area. The principle may be implemented through pricing of services or through taxation. In some areas, as on Jersey, the ability to pay for oneself is controlled on arrival. Occasionally, the Governor of Svalbard has refused to allow tourists to stay on the islands due to the tourist's lack of money. It is normally only the government that can demand taxes and make such decisions. There is an ongoing discussion about introducing a visitor tax for Svalbard, which for years has been practised in many countries in America, Africa, and Asia. There are also international traditions of charging for the use of national parks. To visit the Galapagos one has to pay around 100 U.S. dollars. For private expeditions, the Governor of Svalbard demands insurance or a bank guarantee to cover the costs of a potential rescue operation. These costs are high, and probably exclude a lot of potential adventurers. Prices have probably in general been regulating the volume of tourism in Finnmark and on Svalbard, as travel expenses are particularly high for almost everyone going there. In addition it seems to be the policy to keep the prices up, at least on Svalbard (SNU 1994). Thus the costs of travel will prevent the Arctic areas from becoming real mass tourism destinations. However, there is no guarantee that these mechanisms will prevent a volume problem in the future. Therefore there may be a need for volume regulations.

To use market principles to regulate volume is problematic. The most significant is a clash with democratic principles. There are some alternatives, such as a queuing system. This means that one has to apply for admission, and wait for one's turn. This is the principle used for expeditions to Mount Everest, and for tourism to Bhutan. Another principle is a kind of lottery. This is used in the distribution of licences to hunt and for salmon angling in several rivers in Finnmark. You buy a kind of ticket, and if you win, you may go angling. If you lose, there is another chance next year. A system that evaluates the applicant's propensity to behave appropriately in the area at issue could also be an alternative. This could be a system for evaluation of nature competence, a principle recommended by Hardin (1968). In the situation he calls "the tragedy of commons" all have the same rights, but together the users are too many.

To organise people's activities is usual in all spheres of society, and a more indirect way of influencing tourist behaviour. In tourism this is done in different ways. Information systems and territorial regulations are examples of organisational efforts to direct people's actions. Another type of organisational regulation is to make arrangements and facilities for specific activities (Fitje 1995), constructing trails, installing information signs, and having nature

guides available. A traditional way to direct and in reality control behaviour is to take care of all sides of the tourist's journey arrangements. This is the package tour, where the tour operator takes responsibility for the tourist, provides him or her with transport and accommodation, information, security, and problem solving (Cohen 1985). In some places, such as the Galapagos, there is an obligation to participate in packaged tours in order to enter certain areas. From the point of view of the tourism industry, such surveillance of tourists is seen as a part of a self-regulation strategy. On Svalbard an increase in the proportion of guided tours has been a goal for years.

A special form of regulation, and an indirect one, is territorial planning. For this type of regulation the focus is not on the users, but on the territory used. What is done here is to decide what kind of activities can be performed in specific areas. The designation of national parks is this kind of regulation. On Svalbard 56 percent of the territory is national parks, and in Finnmark around 5 percent. A recent proposal for Svalbard is a plan for tourism and recreation management that introduces four management zones (Miljøverndepartementet 1994), one for the nature reserves, one for national parks, one recreational zone, and one tourism zone. The recreational zone is divided into one set of areas permitting motorised vehicles and another set declared to be snowmobile-free. These are areas designated primarily for skiers. The tourism zone is designated for commercial activities and represents an effort to concentrate tourism. To concentrate an activity is a general motive for zoning (Fitje 1995), and on Svalbard this is consistent with the policies of the tourism industry (SNU 1994). However, concentration has been a strategy for some Antarctic areas, and not without problems (Johnston and Hall 1995). The main environmental problems tourism has posed to the environment have been a result of concentration.

Volume regulation is a difficult matter. There are lots of preparations that are necessary and lots of decisions to be made. The first problem is to decide what the upper limit should be, and what the criteria for such limits should be. Should they be based on pressure on nature, heritage, local communities, or tourism as such, and what indicators should be used to measure each dimension? How should the information be gathered, and who should decide? Who should be allowed to come, and who should be excluded, and what principles should govern such decisions? The best example of a country that practices this type of regulation is Bhutan. Another example is the Ecuadorian Galapagos archipelago. However, the last example should not be followed. Every time the limit has been reached, it has been raised (Machlis and Costa 1991). It started with 12,000 a year in 1969, some years later it was 25,000, and in 1994 it was 50,000. More recently this type of regulation has been substituted with a concession policy for the tourist boats. Both the administration and the critics of this policy admit that one of the reasons for the lack of strictness was that the decisions were not strictly based on scientific evidence. It is a difficult strategy, but probably a good one when the problem is not the behaviour of the tourists, but their numbers.

As a general characteristic, the level of regulation concerning outdoor life and natural environments is low both in Finnmark and on Svalbard, as it is over all the Nordic countries (Hammit *et al.* 1992, Fitje 1995). However, if one looks upon the Norwegian outdoor life culture as self-regulation, the picture is quite another.

Tourist codes and guidelines - are they the solution?

The preservation of nature and culture should take place within a holistic frame. This means that tourists should be directed and the tourism industry governed by a variety of regulating mechanisms, of which codes or guidelines are only one. There are lots of problems connected to such regulation. Who has the authority to propose such guidelines, who should make the decision to implement them, and how should compliance with the guidelines be monitored and controlled?

One of the problems with regulation of areas with vulnerable nature is that those most concerned with the issues are often people from outside the area in question. Proposals about

preservation and regulation introduced from outside normally provoke local residents because they conflict with the principles of local autonomy and democracy. In Finnmark this is more relevant than on Svalbard, where there never has been any local democracy. As the situation is today, even on Svalbard, the process aspect of an effort to introduce codes of conduct has to be handled with care.

Another problem is that guidelines for behaviour in nature may be seen as a threat to local and traditional activities. It may be difficult to make rules and codes that apply only to one user group, when that group is doing the same things as others. If regulation applies to everyone, it may reduce people's free access to and recreational use of the natural environments, as well as limit industrial opportunities in the future. On the Galapagos the preservationist regulation and the activities of environmental organisations have resulted in significant antagonism. As mentioned, the feeling of freedom in nature is a core element of the Norwegian outdoor life culture. Normally, Norwegians react negatively if they feel that this freedom is threatened. There are several examples of proposed regulations that have been met by strong resistance from local residents both in Finnmark and on Svalbard, primarily related to the snowmobile question. Another cultural trait is that most Norwegians believe that their country is over-regulated. Nature is the only prevailing free zone. There is a risk that rules and even guidelines as substitutes for cultural norms will reduce the responsibility Norwegians on average feel for nature today. If freedom is abolished, why be responsible?

From an ethical point of view, all life should have the same right to be protected and treated with dignity. This is the idea of movements working for animal rights, a parallel to human rights (Baker 1993), and in the deep ecology movement (Naess 1974). Therefore, many people mean that a more appropriate way to go is to make way for a general and global pro-active attitude towards nature preservation and environmental concern. If people learn to take care of nature where they live, they should be more inclined to do so wherever they are. Today there are strong political, ideological, and social movements working for a better natural environment all over the world. This means that environmental concern is about to become a common world cultural norm or masterframe (Eder 1996) like some aesthetic values and the ideas of democracy and human rights (Gullestrup 1993). This is probably the most important outcome, that concern for nature becomes part of the most basic values for all people. If so, then environmental values will be part of the education of children, and rules and guidelines may in fact be of less importance.

The arguments for more general rules do not imply that there is no need for codes for specific areas. The nature conditions vary from place to place, as does the degree of vulnerability. There are many places that, due to specific circumstances, have introduced such rules and codes. Among these are the Grand Canyon, the Himalayas, the Galapagos, and most of the national parks throughout the world. There is probably also a need for such codes in the Arctic and nearby areas. To include codes on how to communicate with native people or local residents as has been suggested (Mason 1994) is problematic. It may be seen as stigmatising. This does not imply that there is no need. It would, however, be more convenient if such guidelines were part of a global ethical code for tourists, rather than of regionally deliberated ones.

Conclusion

There are several paradoxes connected to the efforts made to regulate tourism in the areas in question. The first one is that regulation, as long as people are not excluded from an area, implies arrangements for tourists, and thereby stimulates a higher level of use. As the Arctic is today, with unique nature and culture and a low level of regulation, many visitors do not think of the activities that they could have done. They don't know about the free access, or they are afraid of wild animals and sudden storms. There is a scenic canyon in Alta that can be seen from three angles with a splendid view, but only a few take the two-hour tour to these places. Tourists do not know about the area, the information available is poor, and tours are only organised on request. In addition, on Svalbard, very few go to a valley 20 minutes by boat from Longyearbyen where one may find marvellous fossils on the ground. Informing,

organising, making arrangements, or establishing facilities obviously will increase the pressure on nature, even if it is done in the name of preservation.

The second paradox has to do with the role of the environmental movements and organisations. Many of today's associations (Urry 1995) are recruiting among people who like to be in nature, who are used to conducting themselves outdoors, and who care for the world's ecological situation. The activities of these people are problematic. Their caring activities may in fact result in a greater pressure on nature. There are several examples of preservationists being tourist pioneers, and the ones who start the tourist flow to a destination. To focus on a specific place is to give the place publicity. The interest that the World Wide Fund for Nature (WWF) has in the Arctic is perceived as promising among marketing people. The best example of how this can function is in the Galapagos, where WWF was strongly involved in the introduction of tourism. It started with visitors especially interested in nature and its preservation. Today there is more or less a kind of mass tourism, with 50-100,000 visitors a year. Originally tourism was both looked upon as a means of nature education and as a way of funding the preservation efforts. Today the nature conservation problems are bigger than ever on the islands, some of them directly as a result of tourism. How the problem would have been today, without their activities, no one knows.

The third paradox concerns the perspectives of the environmentalists. There is no need to contest the idealistic attitudes of many of the organisations and people working for the conservation of nature and sustainable development. However, people in scarcely populated and peripheral areas like Finnmark and Svalbard often have some reservations about modem urban peoples' concern for the environment in remote areas. Is their concern a result of resigning themselves to the problems of urban and populated areas, or is it perhaps motivated by a belief in a better chance to succeed where the problems are less complex? Or is it that the problems of urban environments seem to be unsolvable without a general change in lifestyle. Is the concern for remote areas only a ritual action to clear the conscience, thereby legitimating this lifestyle? And what about the concem for Arctic mammals? Does it reflect a socially constructed hierarchy for animals (Baker 1993), where those creatures on which urban people depend for their food supply are given a low rank, and those without such significance, like the seal, walrus, whale and polar bear, are given a high one? Perhaps the concern about remote natural areas is only a result of private travelling interest? People want to have some unspoiled places to visit, and environmental concern give a reason to go there. Consistent with theories about travelling motives (Viken 1995b), the concern may be seen as a result of the frustration about the world's ecological situation, where nature is a place to escape, feel free, and contemplate (Tonboe 1993, Johnston and Hall 1995). This may well be combined with an involvement in environmental concern for places where there is unspoilt nature left. These are some of the questions being posed by residents of Finnmark and Svalbard.

On average, concern about the environment is probably much higher in the Arctic areas than in places from which preservationists come. For many people nature interest in and concern for nature are their main motives to live in the harsh climate of the Arctic. For the Sami it has been an obligation to preserve nature in order to survive, it is said. This may be about to change with the invasion of modernity. On Svalbard, which has no indigenous people and where almost everyone is an immigrant, the level of education is about the highest in all of Norway, as is the level of reflection. Therefore local residents may be important partners for environmental organisations if their local standpoints and traditions are taken into account. Not only a dialogue, but a common development policy, is probably necessary to succeed. If not, it may go as Ris (1995) recently admonished in a paper on Arctic tourism: "If concepts such as conservation, management, research, or even environmental education are not handled properly and in accordance with local communities and traditions, they may instead create conflicts of interest and more problems than they set out to solve".

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Opportunities and problems associated with the development of Arctic tourism: a case study from Svalbard

Reidar Hindrum

Introduction

The Rovaniemi Declaration of the Arctic Environmental Protection Strategy (AEPS) has developed four programmes and two task forces, of which the Task Force on Sustainable Development and Utilisation (TFSDU) is one. This Task Force is responsible for proposing initiatives to governments to secure sustainable development and utilisation for Arctic communities.

At the last meeting of TFSDU in March 1995 in Canada, Norway introduced the topic of Arctic tourism. Rapid growth in the tourism industry implies increased environmental pressure as well as opportunities. Norway suggested that Svalbard might be a useful model for the development of controlled tourism regimes in other areas, and proposed a case study on the topic. Norway was asked to complete the case study with conclusions and recommendations for the next ministerial meeting of the AEPS in March 1996.

Case study of Arctic tourism on Svalbard

Svalbard has a hundred year history of tourism, and is today a part of the international web of nature-based tourism. The number of people visiting Svalbard is increasing and the economic importance of tourism is growing. Nature-based tourism represents an economic opportunity for the local community at a critical moment when the coal mining industry is decreasing.

Increased tourism creates a number of issues for the tourism industry as well as the public management sector. Protection of the wilderness qualities of the environment and creation of tourism related jobs and income are all stated goals of the present policy. Future actions must be capable of protecting the fragile natural environment as well as creating increased revenue from tourism. Paramount questions include: on which kinds of activities should Svalbard build its future, to what extent are tourism and the hydrocarbon industry compatible, and how can one find a balance between resource use and protection which promotes a suitable development?

A report from the case study (Kalterborn and Hindrum) written for the Arctic Environmental Protection Strategy was prepared based on other ongoing or finished studies, interviews, statistical data and some raw data available from the Governor of Svalbard, the tourist operators in Longyearbyen and the information office at INFO-Svalbard. The case study describes recreational patterns, the tourism industry with its products, plans and strategies, as well as management efforts to deal with changes in tourism activities. The study discusses the management plan and its underlying framework. Experience so far indicates that an overall management framework is necessary in order to achieve long-term strategies and policies. A management plan can also function as a tool and framework for implementing management actions in a systematic fashion, and it can create an arena for cooperation between the public management sector and private tourism industry.

Study area

The human utilisation of Svalbard and the Barents Sea surrounding the archipelago has extended over at least 400 years. Even after periods of intensive human utilisation, the natural environment on Svalbard is still relatively intact and characterised by large continuous wilderness areas. Today Svalbard is an essential part of the wilderness areas left in Europe. Except at the very few small settlements in the central part of Spitsbergen, there is no extensive environmental damage or change. However, from the start of human use of Svalbard to World War II, some populations of sea mammals and seabirds were over-utilised and became threatened. Total protection has, except for the big baleen whales, restored the threatened populations.

Present status of tourism

Though the total number of tourists visiting Svalbard cannot be estimated precisely, approximately 30,000 visited in 1994 (Svalbard INFO 1994). This makes Svalbard the most visited high Arctic area, due its the relatively mild climate and easy accessibility. Most of the data indicate increasing numbers of tourists. There is a slightly increasing trend from year to year, but over a period of a few years this trend is more evident. Most tourism occurs in summer, but winter tourism and springtime snowmobiling are becoming increasingly popular.

In 1994 about 24,000 tourists participated in overseas cruises to Svalbard. These have been, and still are, the major group among all tourists visiting Svalbard. Currently they account for about 80% of the total, and in earlier years an even larger proportion. All overseas cruise activity is carried out in summertime. The volume has increased more than four-fold during the last 20 years.

In addition to the large overseas cruise tours, smaller coastal cruise tours are also organised, mainly by companies established on Svalbard. The data from this activity are not quite complete, but a raw calculation based on a mix of raw estimates and exact figures from the companies indicates a volume of about 3-4,000 tourists participating on such trips during summer. About 60% of this volume are one-day cruising in Isfjorden, and nearly 1/3 is travelling far off on 3-day voyages or longer. The small coastal cruises visit many spots around the archipelago, in particular the West coast of Spitsbergen. Approximately 45 voyages were made in 1994, and of these about 35% were made to the East Side of Spitsbergen or to points in Northeast and Southeast Svalbard.

Approximately 1,000 people have been registered individually as unorganised tourists, organised tourists, scientists, or others by the Governor each year since the tourist regulations were put into force in 1992. In addition, a couple of companies make group notifications of 2-3,000 persons, of these roughly 3-400 field tourists. There is also some limited field tourism in connection with conferences and meetings, but very few of these are likely registered by the Governor. This permits only an inaccurate calculation of approximately 1,200 to 2,000 field tourists to Svalbard annually during recent years.

Actual and potential impacts of tourism

Tourism development on Svalbard is still a relatively controlled activity, with few and limited environmental impacts. The main impacts are:

- wear and tear on the tundra and historical monuments;
- dispersion of litter;
- animal disturbance;

- interruption of the wilderness experience.

Potential impacts are probably also in these same categories. There have been no investigations of disturbance effects and impacts on the wilderness experience, and only casual references to wear, tear, and rubbish.

Wear and tear from traffic is found at a few of the most popular tourist destinations in Spitsbergen, especially at locations with historical monuments, indicating that explicit limitations on transport and traffic regulations are needed.

For several years the Governor of Svalbard and the Norwegian Polar Institute have inspected rubbish along the shores of Spitsbergen. In some locations relatively large quantities of sea-borne rubbish have been found, much of it stemming from ship traffic, especially fishing boats around Svalbard and the Barents Sea but some from further away across the Arctic and Atlantic oceans. These inspections give reason to suggest that tourist cruise ships process their rubbish properly onboard.

Effects of tourist management

The protection regulations on Svalbard restrict against certain human activities to achieve the intention of the protection measures. These regulations do not, with few exceptions, limit normal tourist activities. Traffic is prohibited just in the small bird sanctuaries and in two special localities in the nature reserves. There is however some fear about possible impacts of increasing tourism to remote areas of Svalbard. Reduced access to the nature reserves and fragile localities will be evaluated as measures to secure sustainable use.

Reduced access to remote parts of Svalbard could increase the pressure of tourism in the more central parts of Spitsbergen and lead to environmental impacts. According to the management plan the central part of Spitsbergen shall be managed as an 'excursion area' for tourism. A concrete management plan for this area will be developed to achieve the goals of sustainable use. This will obviously set some future limits for certain categories of tourism and develop special control mechanisms.

Increasing tourism has to be controlled by different management measures. Tourism far away from the villages makes it necessary to establish inspection routines that control and secure the activity. The Governor's experience so far shows a growing need for inspections, especially for security reasons. Voyages and other kind of travels to the more remote areas of Svalbard are not without risk, as rescue activities by the Governor over many years testify. Rescue facilities in Longyearbyen today are of the best quality and the tourist regulations have established an obligatory demand for insurance for remote tourist activities. In addition, the tourists must be better prepared to handle the expected risks and the frequency and quantity of tourism to the remote areas must not exceed certain limits.

Inspection activities could also represent impact to the environment itself. Heavy use of helicopters and landing of inspectors or others from the Governor's office in fragile localities is of course a potential impact. However, the Governor is responsible for the management of the environment and has always planned his activity so as to decrease the impact potential of the control activity. A significant part of the inspections by helicopter has been replaced by the field inspector service in summertime. If an obligatory arrangement for authorised guides is established, this will also reduce the quantity of inspections needed for control reasons. Still, the security of the tourists calls for a certain level of inspection activity by the Governor.

Tourism and management plans

In 1994 a tourism plan was developed for Svalbard by the industry itself. It is to serve as a tool for commercial tourism development on Svalbard within the opportunities and constraints set by national legislation.

The Ministry of Environment established in 1995 a draft macro-level tourism management plan for Svalbard which is currently in the process of being implemented. It central purpose is to contribute to the development of tourism within limits set by nature and cultural/historical resources and in such a way that the wilderness character of the environment is unaltered. The plan shall function as a tool to realise the political goals of protecting nature and managing tourism. Furthermore, the plan is a framework that outlines the main guidelines for the future control of tourism.

Recommendations for sustainable development of Arctic tourism

Principles proceeding from the case study that should be followed in future work to manage tourism in the circumpolar Arctic are synonymous with our following recommendations:

1. ***Arctic environments and wilderness should be managed as composite resource, not as separate parts.*** It is important to recognise the complexity of large areas with a mixture of resources and types of use. Comprehensive and long-term management depends on a holistic framework integrating natural and social science.

2. ***Environmental protection is best achieved through the management of human influences.*** Human activity is by far the most important factor in terms of impact to the environment. Successful management and protection is not achieved solely by designating protected areas, but also by directing visitors to the types of destinations where they have the greatest probability of satisfying their needs. A happy visitor is much more likely to comply with regulations than a dissatisfied one.

3. ***Environmental management should both protect nature and produce human benefits.*** Public management agencies have an obligation to produce human benefits from recreational activities like nature experiences and increased well being by providing recreational opportunities, as well as protect nature from unacceptable use.

4. ***Management should be guided with written plans that state objectives for specific areas.*** This is to avoid policy becoming inconsistent and person-dependent. If managers and the private sector are expected to function as partners, everyone needs clear and objective playing rules.

5. ***Limits to use or carrying capacities should be defined so that unacceptable changes do not take place.*** Acceptable levels of use and impacts must be defined and monitored.

6. ***Only the minimum of rules, regulations and management actions necessary to achieve goals and objectives should be applied.*** The policy of managers should be to regulate and control as little as possible, but enough to promote a sustainable development.

7. ***All who are affected by management should be involved in planning processes and decision making.*** Public involvement is a key condition for achieving support and success for plans and management actions.

8. ***Environmental conditions and recreation opportunities should be monitored as part of*** long-term ***management.*** A dynamic management framework depends on data input over time.

In future work with tourism management *on Svalbard*, one must try to incorporate these principles into policies and management actions. The study recommends several actions to be considered in the future work with sustainable development of tourism in the Arctic, which also apply to some degree to other regions with tourism throughout the circumpolar Arctic.

Some initiatives that will support the recommendations

Despite a good start, considerable work remains on Svalbard in order to define limits that need to be established for tourism in the Arctic, protect the wilderness, and secure sustainable use. A project that defines limits in the different management areas and individual sites that are considered particularly vulnerable should be a part of the management program. This type of effort is needed in a number of Arctic regions where tourism takes place.

A monitoring program for the whole Arctic region should be established. Such a program must monitor impact parameters in representative sites in different regions regularly visited by tourists. In 1996 the Norwegian Polar Institute and the Governor of Svalbard will begin work with a program to monitor the effects of tourism on Svalbard.

The registration systems and databases on tourism activities must be improved and standardised. This can be fashioned as part of monitoring programs or as separate data-gathering routines. We recommend that the programs are made as simple and inexpensive as possible so that managers can carry out data collection more or less as part of other field routines, yet hold sufficient scientific standards to give the necessary data. An advisory forum should be established *on Svalbard* or other Arctic regions to improve cooperation between the authorities and the tourist operators.

A guide authorisation system has to be developed and established as a mandatory part of the tourism management activity. However, I believe there could not be any international standard sufficient to educate tourist guides throughout the Arctic. Of course there are many common principles throughout the circumpolar Arctic that could be a basis for common standards, but the guides also need to be educated about the specialities of the region where he or she is going to operate. The special regulations, environmental cautions and conditions, climate, topographic and oceanographic conditions, environmental knowledge, administration, history, sociology, etc. of the region are knowledge a responsible guide must handle. This is a very important part of a tourist management based on sustainable use.

Conclusions

Recommendations from the case studies will be addressed by the ministers at their next meeting in March 1996, and will be the basis for their decisions on further initiatives. Svalbard will continue its own program according to the management plan, which has already incorporated many of the recommended principles. The meeting will show whether the other Arctic countries will follow up the recommendations or need to work out additional research. The Department of Indian and Northern Affairs in Canada has already commented that the eight principles recommended by the paper would certainly appear to have general application for all the circumpolar nations. However, it is likely that Canada, Alaska, and Greenland see a need to conduct additional research because of tourism's consequences for their populations of indigenous peoples.

Mechanisms and organisational structures for implementing Arctic tourism guidelines

Tutta-May Endresen

Abstract

Mechanisms and organisational structures for implementing Arctic tourism guidelines may be able to use other certification bodies as models. The challenge is to find a model that can be accepted by the different parties involved and is strong enough to become an important signal in the market. The time is right for a new and innovative approach to the implementation of environmentally minded guidelines for tourism in the Arctic. This paper will bring up one question in particular: can we learn from certification models like the Forest Stewardship Council (FSC) or the Marine Stewardship Council (MSC) initiatives?

Forest Stewardship Council (FSC)

The Forest Stewardship Council is an independent foundation with a secretariat in Mexico. It started as environmental labeling of tropical timber, and is today the only known certification standard setting environmental requirements for forestry. The FSC symbol gives environmental information about the origin of the timber and how it has been extracted, sending important signals to the end user of the products. It is the only symbol for environmentally managed forestry that is accepted and credible on the international market.

The FSC was established with completed articles of association in 1994, but the work to achieve this was started around three years earlier on the initiative of around 40-50 organisations. With regard to the process of adapting FSC´s standards, there are two factors, which are of particular importance: FSC standards are flexible and shall be adapted to national standards. The strength of the FSC process is that it is easy to adapt to local conditions.

Certification organisations must be approved in accordance with special criteria. Certification is a confirmation from an independant third party that the product or service is what it claims to be. For FSC it has been important to have the necessary neutrality. This gives credibility, as avoiding self-certification is an important principle.

What we can learn from the FSC is that it is a locally adapted process developed in each country on the basis of FSC´s main criteria. Even if there is inequality in the groups the process has proved to be strong and promote competition. The composition of the parties must provide the correct balance, and together these three interests shall constitute a local consensus group:

- Economy: commercial interests;
- Environment: environmental organisations (NGOs);
- Social: local communities.

One example of market signals is the German association of magazine publishers that decided that members should only purchase paper products that are made from FSC-marked timber as a

raw material. The large supermarket group Sainsbury's (UK and USA) has also introduced a requirement for FSC-labeling of timber raw materials in products which are sold in their stores.

Work on the environmental certification of forestry and timber is taking place in several countries. The development has picked up speed in recent years and both forestry and the forest industry in several countries see an important competitive advantage in being quick to introduce schemes. There is still a great need for information in the industry. Understandably, many foresters are skeptical or uncertain about what is meant by the concept of certification, asking what certification will mean in practice and what consequences it will have for them.

Introduction of FSC in Norway

In Norway it is possible to say that the 'Living Forests' project was the forerunner to FSC. The project is an initiative from the sector itself, and so it does not have the correct democratic composition that must exist in order to obtain FSC certification. Work is now being done on setting up a certification group called 'Miljøsertifiseringsutvalget for Skog i Norge' (MSN) to complete the process. MSN will have representatives from business, environmental protection groups and social interests.

Marine Stewardship Council (MSC)

An initiative towards the development of sustainable fisheries on a global basis, the Marine Stewardship Council is a series of ongoing international workshops co-sponsored by WWF and Unilever. The objective is to develop a draft set of principles and criteria for sustainable fishing that can be used to evaluate fisheries around the world for possible certification and labeling of fishery products.

The Marine Stewardship Council (MSC) will be established in 1997 as an independent, non-profit, non-governmental body. The organization will establish a broad set of principles for sustainable fishing and set standards for individual fisheries. The principles are designed to give each fishery the opportunity to demonstrate a commitment to sustainable fishing and ultimately benefit from this commitment in the marketplace. Labeling of fish products only from certified sources will allow customers to select fish products coming from sustainable and well-managed sources.

Notes about the Travel Industry

The Norwegian travel industry often misleadingly describes unspoiled nature, clean air, pure water, and indigenous cultures as its 'products'. These are not products but must be regarded as the industry's non-renewable base capital, of which consumption in the form of damage, wear and tear, and pollution is unacceptable management. In truth it is natural that the travel industry is the self-proclaimed ally of nature conservation.

The travel industry is the largest group of players and includes everything from the large tour operators and travel companies to one-person operators. There is little homogeneity in the sector, and so a particular problem is the lack of internal control and discipline in the sector. There is little recording of the environmental consequences, so the environmental responsibility is not clarified and is to some extent fragmented. We might say it is a lack of will to manage and a lack of effective means of control. At the same time we know that there are many less serious players and a great lack of expertise resulting in activities which are in direct conflict with concerns for nature conservation and environmental protection.

Is it possible for Arctic tourism to establish an international independent body that will work out a broad set of principles for Arctic tourism and implement them by using certification standards setting concrete requirements for Arctic tourism? Is it possible that we can use market forces to allow tour operators who meet these standards to demonstrate their commitment to

'sustainable Arctic tourism' and benefit from this commitment in the marketplace? If so, we need to start looking more closely at the FSC and MSC processes.

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Report on the IUCN and tourism-related activities in the Arctic

Jeanne Pagnan

Abstract

The International Union for Conservation of Nature (IUCN), or World Conservation Union, has both government and NGO members that include all eight Arctic countries and the World Wide Fund for Nature (WWF). Pursuant to resolutions adopted in 1996, the IUCN is developing an Arctic strategy and focusing more effort on nature-based tourism. It is also promoting the use of the bioregional approach already practiced in the circumpolar Arctic. The IUCN's World Commission on Protected Areas has established a Global Task Force on Tourism and Protected Areas responsible for formulating a comprehensive strategy to ensure that tourism activities support conservation of national parks and protected areas while sharing benefits locally and minimising harm to local cultures and the environment. One Task Force project is to draft Tourism Data Measurement Standards to capture the size and characteristics of global protected area tourism. A second, circumpolar project is to investigate sustainable Arctic tourism and the role of protected areas.

Overview of the IUCN (World Conservation Union)

The IUCN is the world's foremost conservation union with a membership of over 800 government and non-government organisations. All eight Arctic countries hold State-membership in the IUCN and its non-government membership counts several organisations with Arctic affiliations including the World Wide Fund For Nature (WWF), the Inuit Circumpolar Conference, and the Arctic Network.

The IUCN was founded in 1948 and has a unique three-pillar structure consisting of its members, IUCN central and regional offices, and six Commissions described below. The IUCN is organised into eight regions and is overseen by a Council comprised of three elected representatives (Councillors) for each region. Three of the IUCN regions have an Arctic component. They are: 1) North America and the Caribbean, 2) West Europe, and 3) East Europe, North and Central Asia. IUCN Councillors hailing from Arctic countries for the 1997-2000 triennium include Dr. Pierre Marc Johnson (Canada), Dr. Amirkhan M. Amirkhanov (Russian Federation) and Dr. Thor S. Larsen (Norway).

IUCN and the Arctic

The IUCN has no "Arctic" region per se. This is primarily because regions associated with major international agreements and conventions have traditionally been structured on geopolitical rather than bioregional or ecosystem grounds. This makes trans-national initiatives such as those of the Arctic Council or the WWF Arctic Programme unique and innovative. Nevertheless, taking this type of bioregional approach to issues is now being fully embraced by the IUCN.

The IUCN meets triennially in general assembly where the membership approves an IUCN program of work, elects a new slate of Regional Councillors and officials, and deliberates and approves policy and direction-setting IUCN Resolutions. The IUCN Resolutions reflect the

will of the Union majority on a host of conservation and sustainable development issues ranging from protected areas to shifting consumption and production patterns.

The IUCN's most recent general assembly, termed the first World Conservation Congress, was held in Montreal in 1996 where the IUCN adopted two resolutions of particular relevance to the Arctic and to tourism:

1. An IUCN Strategy for the Arctic (Resolution CG1.12)

This resolution calls on IUCN Arctic States and specialists to develop an Arctic strategy and to develop and implement an action plan for Arctic conservation and sustainable development that takes into account the particular requirements and concerns of indigenous Arctic people. The resolution also calls for work with the Arctic Council and its programs to be defined and for the IUCN to address threats and conservation concerns in the Arctic including the marine environment, Arctic flora and fauna, and protected areas. Pursuant to the resolution, an IUCN Arctic strategy is in preparation.

2. Ecotourism and Protected Area Conservation (Resolution CGR1.67)

In this resolution, the membership agreed to promote ecotourism, defined as "environmentally responsible travel and visitation to natural areas in order to enjoy and appreciate nature and any accompanying cultural features both past and present that promote conservation, have a low visitor impact, and provide for beneficial social and economic involvement of local populations". The members further called on the IUCN countries to support the work of its WCPA Global Task Force on Tourism and Protected Areas.

WCPA Global Task Force on Tourism and Protected Areas

The Global Task Force was set up in 1996 in recognition of the fact that nature-based tourism is growing and its use of protected areas has been developing and increasing for over a century. Since 1945, this increase has accelerated due to expanding populations, more affluence, higher availability of parks and protected areas, and improved access. Another reason for the focus on the relationship of nature-based tourism to protected areas is that in parts of the world little remains of the relatively undisturbed "natural" world outside protected areas. Consequently, they have become the major destinations and suppliers of nature-based tourism.

Other reasons for establishing the Global Task Force are a recognised need to develop a broader understanding of the complex relationships between tourism and protected areas; a lack of baseline inventory data on the scale of protected area tourism globally that needs to be rectified; and, over time, the development of successful approaches, both theoretical and applied, for tourism management in protected areas that need to be documented, analysed, and made available to the growing community of interest. It was decided that the Global Task Force could be a useful catalyst in addressing these as well as many other issues related to the tourism/protected area interaction.

Some specific Objectives and Terms of Reference assigned to the Task Force are to: provide guidance on the relationships between tourism and protected areas; identify the size and characteristics of protected area tourism globally; develop international standards on park and protected area tourism and data collection and management; develop case studies on tourism; develop guidelines for tourism in protected areas; communicate tourism management theory and practice to planners, managers and others; and provide opportunities for parks and tourism people to work together.

The IUCN highlighted the importance of the Global Task Force when it specified that the Task Force would be instrumental in: "formulating a comprehensive strategy to ensure that tourism activities support conservation of national parks and protected areas while sharing benefits locally and minimising harm to local cultures and the environment". They further encouraged

the Task Force to "explore and evaluate the great volume of experience on the use of standards and independent certification to promote the concept of ecotourism in a consistent manner."

Task Force Makeup and Activities

The Task Force has membership from over 20 countries covering all IUCN regions. Members are recruited from the WCPA by the Task Force Chair (Paul Eagles of the Department of Recreation and Leisure Studies, the University of Waterloo, Canada) on the basis of skills and experience appropriate to the duties at hand. The Task Force has both Arctic and Antarctic representatives. Some of the Task Force activities and projects underway include preparing a set of guidelines for concessionaires in parks, developing an annotated bibliography on ecotourism, constructing a database of survey questions for tourism researchers, designing international standards on park and protected area tourism, and data collection and management. This latter task is considered a global priority and is described below.

Global Standards on Tourism Data Collection and Management

This work is underway in response to the acknowledged lack of a standard tourism data collection and reporting system and of baseline inventory on the scale of protected area tourism. With no uniform or compatible system in place to measure and report on protected area visitor use, this means that reliably assessing the growth and target areas for tourism globally and the impact on biodiversity is complicated if not impossible. From an economic perspective it is also extremely difficult to calculate gross tourism expenditures of protected area-based tourism or to obtain an estimate of economic impact. It was felt that a globally compatible protected area visitor data management system would provide reliable data which could then be analysed and made available to assist in informed decision-making around the world. It would also allow for regional and global analyses and provide important indicators on the role and importance of protected areas for the tourism industry and local economies.

The project has drafted Guidelines for Public Use Measurement and Reporting at Parks and Protected Areas to be tested in various parts of the world including the Arctic (see below). The draft Guidelines offer, *inter alia*, standardised definitions of terms and concepts such as 'Person-entry' (whenever a person enters a protected area for any purpose) and 'Person-visit' (when a person visits a protected area for the first time on any given day or on the first day of the stay for the purpose of participating in protected area-related activities). Some of the recommendations that have been generated during the initial phases of the data project include:

- individualise guidelines for different systems;
- standardise visitor collection/management systems;
- apply standard definitions for terminology such as person-entry, person-visit, and person-visit day;
- standardise analysis and reporting;
- use data to demonstrate, for example, the economic contribution of protected areas to community wealth.

Ultimately, the guidelines are intended to define and explain an array of tools and how they may be used to improve public use measurement and contribute to resource protection, public safety, and basic logistical and operational needs of protected area managers. They will serve as a statistical governor that yields data which are reliable foundations for management and planning. When applied, they will also provide guidance on questions such as which the visitors are, where they go, and what they do, as well as providing the basic statistics on size

and frequency of protected area visitor use. Together, these types of data are critical indicators of the natural, social, and economic functions performed by parks and their caretakers.

Sustainable tourism and the role of protected areas in the Arctic

The circumpolar Arctic still has vast tracts of its marine and terrestrial environment in a relatively pristine and undisturbed state. It is this rich natural heritage that attracts people to the Arctic and that ultimately is the basis for supporting a sustainable tourism industry. Some of these highly valuable sites and attractions are also granted some form of protection. It should be pointed out, however, that the IUCN concept of 'Protected Area' is very broad and that protected areas can be classified into six different categories of which five can accommodate tourism and many other ecologically compatible uses. Like other regions, the Arctic has no standardised data collection and management system to track tourism related to its protected areas and is beginning to share some of the global experiences associated with increased tourism. Consequently, the Task Force is undertaking a special project to study the growing phenomenon of nature-based tourism in the Arctic and the role protected areas play.

Arctic tourism is a small but rapidly growing specialised market on the verge of burgeoning into a major pillar of the economies of the North. The eight Arctic countries and their communities are promoting tourism to increase income, generate employment, and offset the declines from reduction in other industry sectors such as fisheries. In parallel, the tourism industry has significantly increased its marketing of Arctic tourism and is accelerating its efforts to meet the growing demand.

Protected areas are increasingly attractive to the tourism industry and its clientele. Protected areas generally show off the Arctic in its most magnificent pristine glory, offer the tourist high ecological values in a relatively undisturbed setting, frequently have some form of infrastructure support, and are increasingly accessible. This makes them prime targets for visitors. However, at the same time as there is growth in this type of tourism, government funding for protected areas and conservation in general is falling behind. Consequently, tourism is being looked upon as having the potential to generate the income needed to support protected areas and the conservation roles they are intended to serve. Unfortunately, this, combined with the increase in tourist numbers, can lead to excessive pressure on the very resource that is needed to sustain the tourism industry and the benefits that accrue to the North.

In response, the Global Task Force is undertaking a circumpolar project on the growing phenomenon of Arctic tourism and the pivotal role protected areas are expected to play. The project will be carried out in four phases over a two-year period. It will pay particular attention to the policies and regulatory processes in place to accommodate the increased tourism, the economic parameters and challenges, the various methods and mechanisms countries are using to gather and assess tourism and visitor data, and the important role that local communities and indigenous peoples play. A major component of the project will be in-depth studies of tourism at selected sites in each country chosen primarily from the Circumpolar Protected Area Network (CPAN) that is under development by the Conservation of Arctic Flora and Fauna (CAFF) program of the Arctic Council. During the project, a workshop to be sponsored by the tourism industry, the IUCN, and the Arctic countries is planned. The project is being carried out in four phases over a two-year period, beginning in 1998.

Planning for ecotourism in Kangerlussuaq - Søndre Strømfjord, Greenland

Jeppe Mordhorst

Abstract

A resource base description and proposed management framework were developed in Kangerlussuaq, West Greenland in 1996. Phrases such as 'the local population' are discussed, highlighting problems in targeting and actively involving the various interests in the community of 300. A minimum impact approach is illustrated by the use of peregrine falcons, which are a potential tourist attraction as well as a very vulnerable species. Based on a specific set of criteria, a limited number of eyries are selected for tourist development. Recognising the potential danger, this type of development is considered to have a negligible environmental impact potential. This is compared to alternative types of development illustrated by the rapidly expanding mining potential in the so-far undeveloped areas.

Introduction

A case study conducted in summer and fall of 1996 constitutes the base for the presentation given. This project was conducted under the somewhat misleading title "Nature Park Kangerlussuaq". Originally, in 1994, the concept of a park-like arrangement was proposed by Greenland Tourism, Inc. (the public tourism development body) following a set of workshops where the tourism development possibilities in Kangerlussuaq were discussed. After the foundation of Kangerlussuaq Tourism, Inc. in 1995, the Airport Service in Kangerlussuaq (Mittarfeqarfiit) formally requested and financed the project. The Danish Polar Centre conducted the study within a time frame of 6 months and a budget of about US $40,000. Two main products (in Danish) were the outcome of the study:

1. Tourism resource description (8500 km^2, 133 pp. + maps)

2. Plan Proposal (882 km^2, 99 pp. + maps)

The resource description is an extensive review, description, and mapping of natural and cultural resources. Its focus is on muskox, caribou, birds of prey, char, vegetation, geology and minerals, glaciology, history, and archaeology.

The plan proposal is a management plan with proposed regulations for hunting, transportation, development, and other resource uses. The emphasis is on ecotourism development. The proposal with text and maps is meant as a starting point for discussion, to be followed by debate and a political process resulting in some kind of management tool.

The local population

"The local population" in Kangerlussuaq consists of about 300 persons. It must be stressed that Kangerlussuaq is not a typical Greenlandic community, as Kangerlussuaq is a former U.S. airbase. Today the community of Kangerlussuaq is basically a civilian airport, where the Airport Service has a high degree of economical and political influence. The vast majority of the inhabitants in Kangerlussuaq work directly or indirectly (often for a limited time) for the Airport Service. The inhabitants are accommodated by the Airport Service, which also provides other services normally handled by a municipal body. In comparison to most other Greenlandic communities, the proportion of Danish workers is high. A Community Council is elected, but has at present limited economic and political authority. Kangerlussuaq Tourism Inc., hotels, and restaurants are also heavily influenced by the Airport Service.

In the guidelines and codes of conduct it is often stressed that cooperation, involvement, and communication with "the local population" are very important. So how can one involve "the local population" of Kangerlussuaq in a tourism development process? Is it done by contacting or dealing with the Airport Service, or, in tourism matters, Kangerlussuaq Tourism or the Community Council? The airport worker wearing overalls, who we may see re-fuelling the airplane, is not necessarily interested in tourism development. If increased ecotourism development implies that his possibilities of recreation such as snowmobile driving, hunting, and fishing will be restricted or limited he may even be very much against tourism development (though without articulating this). This despite a pro-tourism policy consensus within the Airport Service, Kangerlussuaq Tourism, The Greenland Home-rule Government and maybe even to some degree within the Community Council.

The plan proposal includes a proposition for restricting snowmobile driving to certain areas and trails. The purpose is to allow development of dog-sledging and skiing, which are more in accordance with the concepts of 'ecotourism' and 'park'. Although the proposal is a *de facto* restriction in comparison to the former almost unmanaged situation, it does represent a compromise leaving space for recreational snowmobiling. For instance, the traditionally recreational Lake Ferguson-Tasersiatsiaq area nearby is proposed as a motorised area (for snowmobiles in winter and motorised vessels in summer) in spite of the importance of the area to actual and potential tourism and as the drinking water reservoir for the community. The maps and the restrictions anticipated are supposed to initiate a public debate and are likely to be changed in order to gain public support for the proposal. Depending on the process itself and the subsequent support, only the future will show whether a statement such as "the local population has been involved" can be justified in the process of developing management in Kangerlussuaq.

Finding a space between conservation and utilisation

Conservation as such is inconsistent with development, a dilemma any practical development - and even ecotourism - must face. Compromises must be found within the concept of minimum impact. Practical implications of this are demonstrated by an example from the development of bird-watching in Kangerlussuaq.

The peregrine falcon is a world-wide species, and as such by no means special for Kangerlussuaq or even for Greenland. Special for Kangerlussuaq are however two facts:

1. A long-term American research programme studying the biology of peregrine falcons provides a rich source of information which allows for development of education and interpretation and also provides guidelines for responsible and sustainable bird-watching practices.

2. There is a high density and a relatively good accessibility of regularly used and well-monitored breeding cliffs (about 30 eyries within 882 km^2).

Peregrine falcons are known to be the target of illegal collection of chicks, eggs, and occasionally even adult birds. Publishing information such as a map with locations of nests on one hand is thus potentially exposing the local population to danger, but may also be vital to develop marketable tourism experiences. In this case, a resulting minimum impact solution was reached in cooperation with the American researchers and the Greenlandic Institute of Natural Resources. From a conservation point of view, the following criteria were developed: Breeding cliffs should be steep and inaccessible, but not used by gyrfalcons nor have any special scientific interest. From a touristic point of view the nesting ledge should have suitable observation points, the location should be on 'the touristic route', and the cliff in question should be regularly used by breeding falcons. On the basis of these criteria, each eyrie was evaluated on a cliff-by-cliff basis. As a result, a map was published giving the exact locations of 12 'touristic falcon cliffs' selected from the 30 eyries in the area.

This approach is anticipated to minimise the risk, even though publishing such information may result in disturbance or disappearance of some falcons. One could also argue that the falcon population, and in a wider sense the 'wilderness quality', in the long-term could benefit from this kind of ecotourism development - particularly if efforts to create a park come to fruition. One alternative is less environmental types of tourism development, such as driving with super-jeeps. Another very realistic alternative is development of mining activity. Recent research has shown that the probability of finding minerals, especially diamonds, in the area is very high. Geological investigations and issuing of concessions are increasing dramatically. Mining activities, for the environment including falcons, are likely to impact in a far more detrimental way than ecotourism. If ecotourism can prevent this alternative, I believe it may be justified to sacrifice a few falcons.

Conclusions

When we use the phrase "the local population/people/community" in our guidelines, we must have in mind that the underlying reality is human beings of flesh and blood, passions, variable political power, and often opposing interests. Although it can be hard to find space for minimum-impact development in tourism, ecotourism appears to constitute a less damaging economic basis than alternative possibilities in the case of Kangerlussuaq.

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Whale watching guidelines: a special case

Cassandra Phillips

Abstract

The rapid expansion of whale watching, from its start in California in the 1950s to over 65 countries with 5.4 million watchers in 1994, is growing at 10% per year. 15% of this is dolphin watching, and 75% is from boats. The special case of Iceland is described, growing rapidly from 1991. This is welcomed by the Iceland tourism industry, which is opposing any resumption of whaling. The benefits of Arctic whale watching include development for coastal communities, but controls are needed. Cruise ships in Glacier Bay, Alaska may have affected humpbacks. Advisory guidelines and mandatory regulations are compared and shore-based and cruise ship whale watching also considered.

The growth of whale watching around the world

Along with the rapid expansion of all forms of ecotourism in many parts of the world in recent years, the whale and dolphin watching business has also been growing by leaps and bounds, with new countries joining every year.

Whale watching began in the 1950s when people started taking an interest in the gray whales migrating along the Californian coast, and remained a largely North American business until the early 1980s. At the International Whaling Commission (IWC) *Whales Alive* conference on the non-consumptive uses of cetaceans held in Boston in 1983, the global value of whale watching was estimated at about US $4 million in direct revenues (the cost of the tours) and US $14 million in total revenues (including travel, accommodation, food and souvenirs). By 1992, whale watching had spread to 30 countries plus Antarctica. There were an estimated 4 million whale and dolphin watchers per year world-wide, spending more than $300 million in total revenues. Then just two years later in 1994 the numbers of countries and territories having whale watching had more than doubled to 65, the number of whale-watchers had increased to 5.4 million, and total estimated revenue to $504 million. This means that the whale watching industry is currently growing at the remarkable rate of 10.3% a year in numbers of tourists, and 16.6% a year in terms of revenue. These figures include estimates of the cetacean component in general nature tours and cruises, as well as tours that are strictly whale or dolphin oriented. These facts and figures are drawn from research done by Erich Hoyt, a Canadian whale scientist now based in Scotland, who is a member of the IWC Scientific Committee.

Most of the 80 or so species of cetaceans are watched somewhere. Although in practice dolphin and small whale watching only accounts for about 15% of the total, the large whales are the biggest attractions. This includes the acrobatic humpback whales, followed by grey whales, northern and southern right whales, blue whales, minke, sperm, short-finned pilot whales, and killer whales. About three-quarters of the whale watching is by boat, and the rest is land-based from lookouts. As for the geographical spread, about two thirds of all whale watching is still in the United States (including Hawaii and Alaska), although the industry has reached a mature phase there and is not increasing so rapidly as before. Other countries in different parts of the world had very high rates of increase between 1991 and 1994, including Canada, Brazil, Argentina, Canary Islands, Japan, and New Zealand. Among the Arctic countries, whale watching in Norway and Iceland are both growing very fast.

Whale watching in Iceland

Iceland provides an interesting case study for the value of whale watching, with one of the fastest growing whale watching industries in the world. Ten years ago the idea was ridiculed by Icelanders as absurd. It began in a very small way only six years ago, with one operator taking about 100 foreign tourists a year out of Hofn, on the southeast coast. Then in 1995 and 1996 there was a virtual explosion in whale watching operations all around the coast, mostly on a small scale and often part of ad hoc sightseeing tours. In 1995 there were 2,200 whale-watchers, and in 1996 there were 9,500. Husavik on the north-east coast was the largest center, generating a total revenue of about US $0.3 million.

Husavik seems set to join the 300 or so communities around the world where whale watching has become a key part of the economic and social development. In this fishing town of about 2,500 inhabitants, the whale watching company is run by two brothers who earn their living as an engineer and a teacher outside the four month summer whale watching season. Cetaceans are seen on 98.3% of the trips and include minkes, humpbacks, fin whales, white beaked dolphins, harbor porpoises and orcas. A Whale watching and Natural History Center is also planned. There may well be several other communities in Iceland which could reach similar numbers of whale watching visitors, and the industry is expected to maintain its rapid growth rate for some years to come. Most whale watchers are foreign tourists, but the media now acknowledges that whale watching is interesting and should be enjoyed by Icelanders as well.

The national airline Iceland Air and the Icelandic Tourist Council are, understandably, very pleased with this development. The number of visitors to Iceland from the UK, for example, increased by 34% in January-September 1996 over the previous year, many attracted by the whale watching possibilities. As a result, Iceland Air, the Icelandic Tourist Council, and the Trade Council of Iceland have all come out publicly against the resumption of whaling by Iceland, which last took place in 1989. They see the benefits of selling Iceland as a whale watching country, having the potential to generate considerably higher earnings than through the export of whale products.

Advantages and disadvantages of whale watching in the Arctic

From WWF's point of view as a conservation organisation, this rapid expansion of whale watching is generally warmly welcomed, in the Arctic as much as everywhere else. That is not to say that whale watching would be an appropriate activity absolutely anywhere in the Arctic. For example, in areas that are preserved as strict wilderness areas it might not be considered desirable to encourage even this minimal-impact type of tourism. With this proviso, well-managed whale watching has the potential to provide all of these benefits:

- sustainable development opportunities for coastal communities by the non-consumptive utilisation of cetacean resources, and added value for tour operators running Arctic cruises;
- enormous interest and enjoyment for the tourists;
- education on many aspects of marine conservation for tourists and local people; and
- valuable opportunities for scientific research on live cetaceans and the marine environment.

If the principles and codes for environmentally and culturally responsible tourism in the Arctic are carefully implemented, then whale watching operations in the Arctic should in fact result in all these benefits being realised. For example, the conservation of natural resources will be assisted by whale watching that also educates local populations on the marine environment and that provides opportunities for scientific research on cetaceans. Local communities will be given an additional incentive to make sure that any hunting is sustainable if they also benefit from tourists paying to see live cetaceans, such as belugas or narwhals. The tourists themselves

should be given enough background information about what they are seeing, preferably by trained guides, to ensure that they understand more about the Arctic marine environment and then can act as ambassadors for its protection.

The other side of the coin, possible adverse impacts on the whales from whale watching, includes interruption of whales' activities (especially feeding or breeding) and imposing undue stress on individuals or populations. Shore-based watching cannot harm whales or dolphins, but too many boats approaching too closely, moving too quickly, or operating too noisily may do so. This is why guidelines and codes of conduct for whale watching operations are essential.

Several recent studies have begun to measure many of the short-term impacts or reactions of whales to whale watching, but it is difficult to interpret whether there are any long-term impacts. The balance of available information from existing whale watching operations shows little or no adverse effects on the whale populations concerned. This is one of the many cases where more research is needed. As an example, in Glacier Bay, Alaska, significant changes were reported in the behavior of humpback whales in response to vessel proximity, speed, and the presence of large ships. Indeed, there was a long-term change in distribution of the whales with fewer animals reported in the fjords after the 1970s. However, no clear connection could be drawn between the cruise ships using the whale watching area and the degree of use by the humpbacks, because there is also evidence that the whales moved to an area of higher prey density.

The management of whale watching

An NGO-sponsored workshop was held in Italy in April 1995 on the Scientific Aspects of Managing Whale watching which resulted in a very useful report that was presented to the IWC Scientific Committee. One of the recommendations of the workshop was that since evidence of adverse impacts on whales is difficult to obtain, a precautionary approach to the management of whale watching should be used. The IWC committee concluded that decisions on whether or not to encourage whale watching will have to be case specific and take into account not only scientific but also other considerations such as logistics and the ease of enforcement of guidelines or regulations.

There is no clear pattern whether whale watching codes of conduct in different parts of the world are just advisory guidelines or are mandatory regulations. Whichever they are, all include items such as:

- general vessel behavior such as avoiding sudden changes in speed or direction;
- do not chase whales;
- minimum approach distances, most often 100 meters;
- how to approach whales and how to operate if a whale approaches the vessel;
- advice on human behavior such as no feeding of whales and no loud noises near whales; and
- possible seasonal restrictions from a specific area.

In considering the question as to whether whale watching should be managed through mandatory regulations or advisory guidelines, lessons may be drawn from the country with the longest experience of whale watching : the United States. The responsible federal agency, the National Marine Fisheries Service (NMFS), provides whale watching guidelines to the vessel

operators that are specific to each region, taking account of regional differences in cetacean species present and whether they are feeding, migrating, or breeding. The guidelines are mostly self-regulated by the operators and by pressure from the general public. Two exceptions are Hawaii, where regulations are in force, and Alaska where Glacier Bay National Park and Preserve has "whale water restrictions" limiting vessel activity from June to August. In the US, any *harassment* of marine mammals is illegal under the Marine Mammal Protection Act, so that a basic protection by law is in fact in place even without whale watching guidelines being mandatory. For national jurisdictions where this is not the case, it may be necessary for whale watching regulations to be mandatory.

In answering the questions facing this workshop, on how to ensure that tourism guidelines in the Arctic are effective, practical, supported, and complied with (in relation to whale watching), the two cases of shore-based operations, such as those developing in Iceland, and large cruise ships are rather different. For shore-based operations the most important factors will be local knowledge and local consultation and participation, backed up by plenty of expert help with scientific information and educational materials for both tourists and local operators. In cases where the shore-based operations expand over a certain scale, such as when several operators are in competition in one area, national regulation may become necessary. But in general, the most effective guidelines for the Arctic will be those that are compiled and agreed upon by the local communities and operators themselves. As for the large cruise ships and their inflatable zodiacs, they should certainly be subject to these same local guidelines where they exist. If there are no local guidelines, the tour operators should keep to the most precautionary of the generally accepted guidelines for comparable areas elsewhere. Their passengers should be told just what these guidelines involve, and then self-regulation should be sufficient to ensure compliance.

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Guidelines for whale watching in Norway

Tiu Similä

Abstract

Whale watching is one of the most rapidly expanding forms of nature tourism and several tour operators have started in arranging whale watching trips in the Arctic areas during the past ten years. Guidelines for whale watching should always be adjusted to the operation in question, since they vary substantially from each other. In general, the existing whale watching guidelines focus on minimising disturbance to cetaceans by boats and their introduction has often been unproblematic, since a cautious approach with the boat also ensures a good encounter with the whales. However, in most countries no specific license is required for starting up whale watching operations and therefore many tour operators start up with a crew with no previous experience from whale watching or knowledge about how to approach whales. The challenge lies in reaching all tour operators. In certain areas other problems, for example too large numbers of boats, have arisen. This paper describes experiences from two whale watching operations in northern Norway.

Introduction

Whale watching is one of the most rapidly expanding forms of nature tourism. The number of operators arranging whale watching trips has increased dramatically during the past ten years. There is a large variation in the whale watching operations; the species observed vary from large whales to dolphins and they can be watched from a variety of different platforms. From the guidelines point of view (concerning minimising disturbance of the whales) the operations can be divided into four different types: land-based whale watching ; boat-based whale watching with long cruises (several days) through areas where cetaceans can be encountered; short duration boat-based whale watching focusing on areas with predictable presence of whales; and diving and swimming with the whales. The third type is by far the most common type of whale watching, and day trips are usually arranged in areas where the whales are abundant, either in good feeding grounds or in breeding or calving areas. The third and fourth types of whale watching are those in greatest need of guidelines.

The guidelines created for whale watching have focused on minimising disturbance to the whales. Since the disturbance to whales is in most cases caused by engine noise, the guidelines are focused on maneuvering boats in the presence of whales. The guidelines usually address several of the following issues:

1. Direction and speed of approach of the whale watching boat;

2. Minimum distance from the whale;

3. Duration of time spent in presence of the whales;

4. Maneuvering the boat when in the presence of whales; and

5. Diving and swimming regulations.

There are some general rules about maneuvering whale watching boats, such as that whales should never be approached directly from behind or from the front and the speed of the boat should be kept slow and constant. Other aspects of the guidelines should always be adjusted to the operation in question, since there are large differences in how different whale species react to the presence of boats and in the numbers as well as types of boats operating in different areas. In some countries whale watching operators need to apply for a permit and there are penalties for not following the regulations. In most countries, however, the guidelines are recommendations rather than regulations.

There is great controversy about the possible disturbance to cetaceans by whale watching. It is obvious that boats speeding up close to the whales disturb their natural behavior, but it is not known if even such clear incidences of disturbance affect the behavior or habitat use of whales in the long-term. The lack of evidence for significant long-term negative impacts on cetacean populations could be a result of the difficulties in conducting scientific studies showing such impacts. It is difficult to study and interpret the behavior of cetaceans and even harder to define and measure relevant aspects of their behavior that could demonstrate changes in their natural behavior in relation to the presence of boats. In an ideal situation, a whale watching operation should be linked with a long-term research effort to monitor possible changes in the natural behavior of whales in the presence of boats.

Despite the debate about the effects of whale watching on cetacean behavior, there exists a widely accepted consensus that guidelines are needed to ensure responsible whale watching. A good argument for acceptance of the guidelines is that they often act also as a guarantee for a "tourist friendly" encounter with the whales - disturbed whales avoiding the boat decrease the quality of the whale watching trip for the tourists.

Another aspect of the need for guidelines is the enormous expansion in the number of boats operating in some of the whale watching areas. This is not only a problem for the cetaceans but can also have a negative effect on the quality of the experience for the tourists. In the absence of permit requirements, this problem is difficult to solve.

This paper describes experiences from two different whale watching operations in northern Norway.

Whale watching on Sperm Whales off Andøya, Vesterålen Islands

Sperm whales are usually encountered far from land in continental slope waters. Off the island of Andøya in the Vesterålen islands, the continental slope is close to the land and the productive waters make the area ideal for sperm whales and hence whale watching . Male sperm whales can be encountered in the area daily from May to September.

In 1987, the non-profit organisation Centre for Studies of Whales and Dolphins came up with the initial idea of establishing whale watching in this area and established contacts with people in Andøya interested in the concept. The idea was supported both by Norwegian authorities and the World Wide Fund for Nature (WWF). Since then the whale watching trips arranged from the village of Andenes have become not only the first but also one of the most successful whale watching operations in Europe. The number of passengers has increased from 339 in 1988 to 11,232 in 1997. The whale watching is run by a local shareholding company, Hvalsafari A/S. The company also owns the Whale Center which contains an exhibition about whale biology and is the center for research on sperm whales in northern Norway. The research activities include studies on the effects of whale watching on the behavior of sperm whales.

The policy of how to approach sperm whales with minimal disturbance has been established in cooperation between the crew of the boats and the biologists working at the Whale Center. Sperm whales are very sensitive to engine noise and fast approaches close to the whales invariably result in avoidance reactions (either shallow dives or deep dives away from the boat) and therefore it has been unproblematic to adopt a practice of cautious approach. No formal

guidelines have been established, since this has been unnecessary due to the possibilities for internal control of the issue. Since the presence or absence of disturbance to sperm whales is in practice dependent on the person maneuvering the whale watching vessel, good communication and working atmosphere is of crucial importance for ensuring responsible boating around sperm whales. At present the crew working on the whale safari boats off Andenes all have years of experience with whale watching and potential problems could only arise with unexpected changes in the crew, with inexperienced persons operating a boat.

During the past three years two other companies have started operating in the same area, which has created problems on certain occasions: too fast approach to the whales, more than one boat approaching a whale, etc. However, these problems have usually been avoided by radio contact between the boats at sea. On many occasions the boats have also cooperated in searching for the whales and even taken turns to have a closer look at the same individuals. This informal way of proceeding has worked well so far, although it requires extra effort from the crew. The Whale Center in Andenes is currently planning to take initiative for establishing formal guidelines for watching sperm whales in the area.

Although the area off Andøya is ideal for whale watching, with daily encounters of cetaceans, the tourism activity in this area is not likely to expand beyond the present level. One of the most effective factors limiting activity is that the area where sperm whales are encountered is in offshore waters, which necessitates strict requirements for vessels used for tourism activities. Therefore the initial cost of such operations is relatively high.

Whale watching of killer whales

Several hundred killer whales follow the wintering stock of Norwegian spring-spawning herring into the Tysfjord-Ofotfjord-Vestfjord area south of the Lofoten islands each October and stay in the herring wintering grounds until January-February. A very different whale watching operation from the sperm whale watching off the islands of Vesterålen occurs each fall in the fjords, where killer whales can be encountered on a daily basis in protected coastal waters. The rapidly diminishing daylight limits the whale watching tours to October and November. The crystal clear waters in fall make the area attractive for diving and to date this is the only area in the world where trips including diving with killer whales are arranged. The first whale watching operation was started in 1992, taking out 25 tourists. Since then several tour operations have been established and in 1996 a minimum estimate of 2000 tourists participated in watching killer whales.

A variety of tours are arranged in the area, mostly through Norwegian companies but also two Swedish companies are involved. The arranged trips include:

1. Day trips on large boats taking up to 80 passengers;

2. Trips on smaller, faster boats taking up to 10 passengers;

3. Trips combining whale watching and diving (combination of a large vessel and inflatable boats);

4. 3-5 day trips on board a sailing boat (1 boat); and

5. In addition to the arranged trips, the area is easily accessible for people wanting to watch whales on their own (on either rented or private boats). On many days in 1994-96 these boats dominated the whale watching in the area. To this category can also be added film crews (minimum 2 per season since 1992). In addition to the tourist traffic, there are each season 2-3 research boats studying killer whales in the same area.

The yearly arrival of boat operators with little or no experience of driving around killer whales, as well as the large number of boats, has created problems in the area. In 1995 the situation was particularly bad, on many days with more than 10 boats following after a group of whales; in such a situation it is enough that one of the boats drives irresponsibly to obviously stress the whales and spoil the trip for all the operators.

Since 1996, as a combined effort of the local government, a biology student supported by WWF and the Whale and Dolphin Conservation Society, the following guidelines for whale watching have been introduced to the area:

1. Always approach the whales from the side and never closer than 50m. If the whales want to approach your boat once it has stopped, that is fine. If the whales appear stationary, wait at a distance to see if they come to your boat.

2. Boat engines can cause a high level of noise disturbance to killer whales so it is important to maintain a constant and slow speed. Avoid sudden changes of speed and course as this can startle and stress the whales. If the whales are travelling in a steady direction, it is OK to follow them at a distance but spend no longer than 30 minutes with any one group of whales.

3. Be especially careful when you see that the whales are resting or feeding. They are particularly susceptible to disturbance during these behaviors. Do not approach resting whales as you may startle them; pay attention not to drive off the school of fish when the whales are feeding. Mothers are very protective over their calves so it is important to avoid stressing mother-calf pairs.

4. Possible indications that you could be stressing the whales are: repeated changes in swimming speed and direction to avoid the boat, or repeated long dives as the boat approaches. If you think you may be disturbing a group of killer whales, leave them alone and try to find another group nearby.

5. The research boats will carry a white flag with letter "F". The researchers working in the area are gathering important information on killer whales in the area. In the past years the intense tourist traffic has hindered the progress of some of this work. Give the research boats working space.

The guidelines were initially introduced to the tour operators in 1996 in an informal meeting and have been distributed in both English and Norwegian to tourism offices, whale watching boats, and local shops. The introduction of the guidelines and the general discussion sessions about codes of conduct have improved the situation dramatically. Instead of situations where several boats were speeding toward the whales to "be there first", boats have been communicating with each other and cooperating in locating the whales. However, in some cases certain aspects of the guidelines were not followed due to practical problems. Especially the recommendation of following a group of travelling whales for a maximum of 30 minutes is often not possible to follow. For example, a group of killer whales sighted in rough conditions relatively far from the boat will often be approached for a long period of time (many surfacings can be missed in bad weather making the whales difficult to locate) and it is often impossible to determine the behavior of the whales in such conditions. Another impractical aspect of these guidelines is that it often takes years of experience to be able to correctly identify resting and feeding behavior of killer whales. For this reason all operators should be strongly advised to have experienced guides or biologists on board.

Although the situation has improved, there are still problems to be solved:

1. The number of both tour operators and private tourists seems to be increasing, and at the same time the limit for an acceptable number of boats in the area seems to have been reached.

2. Diving tours often disturb the whales.

The situation is made more difficult by the fact that the herring stock has been building up during the past years and the wintering grounds have expanded. Consequently, the killer whales use a much larger area, and are not as numerous in the fjord system as before. Since 1993 there have been days with no killer whales encountered, despite the increased searching effort. A situation where only one killer whale group can be located makes cooperation between several boats difficult. In 1997 killer whales were sighted mainly in areas with rough sea conditions, which caused a significant decrease in the number of inexperienced people approaching the whales on their own. If this trend continues, it might act as a natural control on the number and type of boats approaching killer whales.

Improvement of the situation could be obtained by encouraging people to join organised tours, which would reduce the number of boats in the area. This would work best if the tourists could be reached before they arrive, but would require a considerable investment in informative material. The establishment of a permit system limiting the number of whale watching boats seems unrealistic at the moment. Another way to limit the tourist traffic would be that the local government together with researchers would create an accreditation system where a certain number of boats all committed to the guidelines would receive a "recommended" status, encouraging tourists to join these trips. Such an accreditation scheme would also be a good way of encouraging new tour operators to commit themselves to the guidelines.

Diving with whales necessitates close approaches to ensure that the tourists can see the whales underwater. Killer whales can approach the boats themselves, but it is more common to observe boats with divers "chasing" killer whales. In addition, these trips are often more custom made, expensive, and with more demanding tourists pushing the drivers to get closer (also for photography above water). Fast approaches close to the whales are also the common tactic of those coming with private boats with no previous experience of whale watching. During the fieldwork done by researchers in the area in 1990-96 it has been clear that fast approaches close to the whales have interrupted feeding behavior, especially if the whales are in the process of herding herring. It is not known if this disturbance has any long-term effect on killer whale feeding behavior, energy intake, or habitat use. This problem could partly be avoided if there was a change in the way diving trips are marketed. Close underwater encounters with killer whales should be marketed as an extra bonus-taking place only when the killer whales approach the boats. Although the principle of mutual benefit also applies for these trips (it is seldom a successful tactic to see whales underwater or get good pictures by chasing them), it is not easy to influence the marketing of these trips.

Broad-based support for the guidelines exist among the operators. Here the key element has been getting all parties involved in the process instead of introducing "ready-made" guidelines to the operators. An additional aspect that makes the acceptance of guidelines easy is that following the guidelines also ensures the best quality for the tours and even enhances the chances of good encounters with the killer whales.

Systematic monitoring of adherence to the guidelines is difficult in practice. In some whale watching areas special patrolling boats are used, but this is not recommended in the fjord area for two reasons: It would be one more boat in the already crowded area; and a patrolling boat could easily be experienced as a signal of distrust and create a bad working atmosphere. There have been incidents where clear deviations from the guidelines have been observed by tour operators or researchers. The driver in question has been contacted, and the situation discussed. In most cases the reason for not following the guidelines has been misjudgement of the situation. Sometimes it is difficult to observe the behavior of the whales correctly, the distance to the whales can be misjudged, etc.

The local government in Tysfjord, the main center for the whale watching activity, has so far paid the printing costs and distribution of the guidelines. The local government has seen whale watching tourism as a welcome addition to the local economy and therefore been to participate in responsible development of the tourism. However, the information containing the guidelines

should be expanded to a more educational brochure that includes general information about the whales and how to see them, and encourages people to join arranged tours or at least follow the guidelines. The local government is unable to take on such a task and it is therefore unclear where resources could be obtained for such work. Perhaps the most likely candidates for financing the spread of such information are NGOs interested in nature protection, animal welfare, or ecotourism. The numerous journalists visiting the area each year have played a central role in attracting tourists and in 1996 an effort was made to try to affect the contents of the articles so that they would encourage tourists to join organised trips. However, this tactic proved little successful.

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The frame conditions for ecologically acceptable tourism and its guidelines on Svalbard

Andreas Umbreit

Introduction

With my company Spitsbergen Tours, I have run outdoor summer tours on Svalbard continuously since 1987. This makes my company the oldest in this business on Svalbard. With this experience, which also informs my guidebooks about the archipelago, I feel qualified to speak about tourism on Svalbard but not in other Arctic regions. I therefore will largely concentrate on Svalbard.

We are here on Arctic Svalbard and I want to look back over the dynamic development of tourism here over the last 10 years. When I prepared for my first visit to Svalbard in 1986, a private paddling and trekking tour, it was still hard to get any information about the archipelago at all. One of the first tips I got at the Norwegian Consulate was; Spitsbergen is no travel destination. Indeed, at that time, just 10 years ago, Longyearbyen was still an almost pure coal mining company town. For tourists, there was neither any accommodation nor any food available except candy from the kiosk in Huset and some fruit and salami from the general store. Both the kiosk and the general store are at the far end of the settlement. Residents received all of their supplies directly from the coal company, a system to which visitors had no access. There was a camping site already, but many said that this was primarily installed to keep campers out of Longyearbyen. Its position 5 km away from the village may have symbolized a general desire to ignore tourists if possible, and if not to get them as far away from Longyearbyen as possible. The local paper from that time documents the wish to keep tourism as small as possible, an attitude that the governor's administration shared.

It was thus hardly surprising that tourism reached Longyearbyen almost exclusively in the form of short invasions by the big cruise ships and their passengers, and a few adventurous backpackers. These could explore a definitely very authentic but not necessarily inviting polar settlement, particularly if they arrived after, but not too soon after, some rainfall and on a day without fog. The roads were still without tarmac and accordingly either muddy after rain or frequently invisible in dense clouds of dust whirled up by the traffic after some dry days. There were no signposts, so visitors on one of the frequent foggy days may well have missed half the place. There were just a few attractions easily accessible for a quick visitor: the relatively new local museum, the church, and the post office. Not surprisingly, it was hard to eradicate rumors about Longyearbyen being a penal colony, particularly as some of the staff on the cruise ships believed them. A landing at that desolate place Longyearbyen must therefore have been quite an exciting adventure for some of the cruise passengers.

Longyearbyen has come a long way within just 10 years. It is now a tourism destination with the needed infrastructure. It offers more than 400 tourist beds, mostly of upper standard, four restaurants, a range of shops, several places to get information, and a variety of activities (and also tarmac on most roads). Above all, tourism is seen today not as an inevitable evil but as a promising future sector of the local economy, replacing at least partly the jobs lost in the declining coal mining industry.

With the development of tourism on Svalbard and its expected growing importance, this is the right time to think about the steering of this development. Our workshop can be seen as one

brick in this attempt here on Svalbard and in other Arctic areas to direct the economically desirable activity of tourism into ecologically acceptable forms.

Before one sets up guidelines, one should look at the frame conditions that influence tourism and under which tourism takes place. To do so, I compare first the ecological impacts of tourism with those of other types of human activity. I then examine the regulatory framework for tourism that the Norwegian authorities have established. In conclusion, I make some direct suggestions, derived from my experience here on Svalbard that may enter future tourism guidelines.

Comparison of tourism with other types of nature utilization on Svalbard

Arctic tourism has become a media topic, and is often presented in a misleading and emotional way as the main threat to vulnerable arctic nature. Tourism definitely has a destructive potential that needs careful steering. Tourism, however, has to be seen in its regional context. The Arctic is a populated region and people in the Arctic have to have some means of making a living. Looking at possible economic activities in the Arctic, a limited tourism seems ecologically favorable compared to many other types of nature utilization. We heard examples in this workshop already, for instance from the Russian Arctic, of certain types of tourism that are ecologically favorable alternative sources of income for parts of the local population when compared to the destructive exploitation of other resources such as oil, minerals, fish, and wood.

The same applies to Svalbard. I daresay that the ecological damage caused by tourism is less here than that caused by any of the other main economic activities on and around the islands. A crude but objective yardstick is the long-lasting destruction of natural surfaces. This yardstick could be refined to compare the ecological impacts of different types of human activity by calculating the destruction of surface area per job and year. Possibly terrain destruction alone is insufficient as a single measure of ecological impact, but it can serve as a first step for comparing objectively different types of human activities. Just some examples - and this time not the obvious, which is coal mining:

1) ***Fishing as the primary disturber of the ecosystems of national parks and nature reserves.***

Norway boasts that more than half of Svalbard is protected as national parks or nature reserves. These areas are intended to protect largely untouched Arctic nature, both as important ecologically intact areas and as reference areas representing maximally undisturbed original nature. Seen from an ecological point of view, the main value of these areas is their marine component. Marine biological productivity is partly the precondition for the limited life on land there, through fertilizing plant life that is also food for reindeer and geese, seabird colonies that are hunting grounds for foxes, etc. By contrast, the inland areas are mostly almost lifeless ice fields and barren rocks and scree.

The protection measures for these national parks and nature reserves do not reflect the differing ecological values of marine and land areas. Although tourism has influenced the remote land regions only to a very limited extent, there is a long list of strict rules to minimize tourist activities there (and to a lesser extent, scientific work). These rules, however, minimize mainly the utilization of land areas. Recently, the administration has even stopped allowing to locals to use snowscooters in these areas in winter. In the past, only 10-20 locals did this each year and tourists from outside Svalbard were completely prohibited from doing so. While a very high level of protection applies to the ecologically less important land areas, this is by no means true of the biologically important marine areas. There Norway accepts the continuous degradation of square kilometers of sea bottom by the fishing industry, which scrapes the bottom to catch shrimp even in the most strictly protected areas, the nature reserves.

The argument that the sea bottom recovers considerably more quickly from such scraping than land surfaces is of limited value, as this damaging impact by fishery reoccurs regularly in the same area, thus influencing the ecosystems there on an ongoing basis.

This is no general attack on the fishing industry. But what sense does it make to design nature reserves as undisturbed reference areas, putting many restrictions on marginal users of these hard-to-reach regions, while tolerating the large-scale exploitation by fishing of the ecologically most important parts of these areas? Recent suggestions by the governor to restrict fishing in some parts of the protected areas are still far from applying the same standards to the fishing industry, the most damaging user, that are applied to other potential users.

Local jobs are a popular argument, but an ineffective one. The waters around Svalbard are exploited by fishing fleets coming from everywhere else except Svalbard. Not a single fishing vessel is based on Svalbard, not a single commercial fisherman lives here, and services for the fishing fleets around the islands contribute only marginally to the local economy. Rather, additional costs are created for the Norwegian taxpayer, for instance by the expansion of the costly helicopter rescue service on Svalbard. The authorities have justified this expansion by pointing specifically to the needs of fishing vessels operating in the remote and hazardous parts of the archipelago, but this expansion tends to encourage more vessels to operate in those waters than some years ago.

These rules, or their lack, abandon the vulnerable ecology of the protected areas of Svalbard to commercial fishing interests from outside the archipelago, while effectively restricting a far less destructive utilization of those remote areas by tourism - a use that also benefits the Svalbard economy. I do not complain about these restrictions on tourism - but why not the same rules for all users? If minimal commercial tourism in those remote regions is seen as an ecological problem that needs to be restricted, why not reduce commercial fishery to the same minimal level of ecological interference?

2) *Destruction of surface in plant reserves for scientific purposes.*

The area around Longyearbyen is protected as a plant reserve. Tourists and others are therefore forbidden to pick a single flower. In the same plant reserve, a huge scientific radar complex, EISCAT, has been erected on a mountain plateau above Adventdalen. The complex includes about 1 km of new access road, the building of which destroyed about one hectare of previously nearly undamaged land. The authorities plan to build a new scientific complex (satellite ground station) in 1996 on another mountain plateau above the entrance of Adventfjorden. It will include 2-3 kilometers of access road, again destroying about 2 hectares of the plant reserve. For both projects, there has been hardly any public discussion about reducing the projects' amount of surface destruction. Questions about why for instance no cable car will be built instead of new roads are answered with mainly cost arguments that would hardly be accepted if this were a hotel project with the same number of jobs.

I would be surprised if the total natural surface area outside the settlements that is permanently destroyed by tourism, including the frequently mentioned landing site in Magdalenefjorden, exceeds one hectare after 100 years of almost continuous tourism on Svalbard. Moreover, tourism has created more than 50 of today's jobs in Longyearbyen. Nevertheless, terrain damage by tourism is a constant topic for authorities, nature conservationists, and the media. Certainly, the risk of terrain damage by tourism has to be monitored and minimized. However, the discussion becomes absurd when minimal terrain damage attributable to tourism is regarded as a severe problem, while the destruction of 2-3 hectares by just two scientific projects (employing together about 30 people) is hardly worth mentioning. Equal scales ?

These examples show that tourism on Svalbard is, as in other Arctic regions, a minor player when it comes to ecological problems. I want to address a plea to the responsible state institutions to apply equal ecological standards to all kinds of human activity. Tourism today can do better and I will deal with this later. However, if we accept that there are people living in

the Arctic and that these people must support themselves, tourism is less harmful than the alternatives of mining, fishing/hunting, and even science.

Effective frame conditions may be a more efficient way to achieve ecologically acceptable tourism than guidelines

This workshop focuses on guidelines for tourism. These guidelines apparently are addressed mainly to tour operators and tourists. In my opinion, however, tourism guidelines may be more necessary for the authorities in charge of the Arctic areas because their decisions, if enforced, have far more impact than guidelines only for tour operators and tourists. I want to illustrate this with two examples from Svalbard: the new Management Plan, which includes a proposal to create a permanent infrastructure for hikers with cabins and marked routes in the central inland area; and planned use of the area around Longyearbyen. These official plans may be more threatening to the development of ecologically acceptable tourism than anything individual tourists might do.

There were plans to build the first overland road on Svalbard from Longyearbyen to Sveagruva. It was intended mainly for the mining industry, but at the same time opened inland areas for comfortable, easy and therefore probably dramatically increased tourism. A number of ecologically interested tour operators joined the protests against these road plans. Nonetheless, it is clear that if such a road ever is built and opened to the public, it will be used for tourism and those who will use it will include those operators who rejected it before. Guidelines for tourists and tour operators will be merely cosmetic if the state permits such a road. The tourism industry cannot afford to ignore or boycott this kind of infrastructure once the state creates it and this in turn steers tourism in a destructive direction.

Based on my Svalbard experience, effective basic guidelines for authorities interested in developing economically viable and at the same time ecologically acceptable tourism could be very simple:

1) *No infrastructure that opens inland areas to increased or more comfortable tourism*

As long as there is no permanent infrastructure on Svalbard for hikers (marked routes, cabins for overnight stays, etc.), hiking tourism is unlikely to become a serious ecological problem. The lack of comfort, having to carry a lot of equipment through pathless wild terrain, sleeping in tents, etc. reduces the number of hikers to the very few and very dedicated. 40,000 tourists may visit Svalbard in 1996, but no more than 200 of them will go hiking for more than a day before returning to a base. All the other 39,800 prefer more comfortable accommodations, and sleep mostly on ships or in the settlements. Finnmark has had similar experiences, as we have heard here.

Regions that do not have a suitable infrastructure for hikers are visited by so few that they cause no ecological problems. On the other hand, there are enough places in Norway, the Alps and elsewhere where the creation of cabins, trails, etc. for hikers has triggered ecological problems. Places as remote as Svalbard will never be mass destinations where trails and other infrastructure measures are needed to reduce damage by an already existing destructive mass tourism. Rather, Arctic regions run the risk of creating problems by enticing masses of comfort-loving hikers with the promise of an infrastructure for them. Even with such an infrastructure, hiking tourism is unlikely to create many jobs in such remote and expensive travel destinies. For that, the number of hikers is likely to remain too low. But their numbers may very well be increased by such an infrastructure to a level that is harmful for Arctic nature, e.g. leaving behind beaten tracks, starting lasting erosion, etc.

Today's few hikers on Svalbard are far from being an ecological problem, even if their number should grow a little over the years. But if Norway erects tourist cabins and marked routes through the central parts Svalbard, it will probably be justified to speak of terrain damage

caused by tourism. Ironically, the money from the proposed tourist tax will be needed to pay the then necessary measures to restrict damage and increase control.

Final authorization for the proposed tourist use of cabins has not yet been given. Nonetheless, three tour operators have started already openly using cabins out in the terrain for their programs and they can point to the new Management Plan as a justification.

Cabins are not always an ecological problem. For the development of skiing tours, one of the most ecologically acceptable forms of Arctic tourism, cabins can be both useful and ecologically acceptable. The summer use of a small cabin by a few people over a longer period also may not be harmful, depending on the site. One only has to be sure that such cabins also will not trigger unwanted development. As enforcement is difficult and expensive on Svalbard, concepts must be found that function with minimal oversight. If cabins are a desirable part of Svalbard tourism (and they may be, in light of their importance for the development of ecologically acceptable types of winter tourism), then I would suggest two very simple rules:

Tourist cabin sites have to be at least 25 km apart from each other and settlements. With this distance it is possible to ski from cabin to cabin in winter, but in summer this is too long for most hikers. Accordingly, no comfortable hiking from cabin to cabin in bigger and more damaging numbers can develop, but a less damaging winter usage, with no creation of erosive tracks from cabin to cabin and longer stays of a few tourists at one place, will still be possible.

Tourists may not come or go to cabins using motorized land vehicles. The use of snowscooters is a fact on Svalbard today, also in tourism. There is no need to give it another boost by developing noisy snowscooter-cabin tourism. Occasional random controls by the authorities on Svalbard would be fully sufficient as the cabins used by tourists would be known and snowscooters parking near these cabins for longer periods would be a telltale sign.

2) ***Maintain and increase the attractiveness of the immediate surroundings of the settlements to keep as many visitors as possible in these limited areas - including those who expect pristine nature.***

Happily, ecology and economy fit better on Svalbard than in many other places. As there is no native population spread over wide areas, it is sufficient to concentrate on the stimulation of tourism in the few tiny and isolated settlements. Economically, types of tourism based in the settlements are highly attractive, as it is here that most services are offered and bought by tourists: accommodation, restaurants, shopping, museum, courses, excursions, transports, etc. Ecologically, a concentration of the majority of the tourists in the settlements and their immediate surroundings plus on boats is also preferable, leaving most of the land almost untouched.

To attract a growing number of tourists to Svalbard and then keep them in the settlement areas, pristine nature must be seen as an important limited resource. This is particularly true in a place like Svalbard where visitors usually come primarily to experience untamed nature. Official planning has irreversibly used up much of this central tourism resource around Longyearbyen during the last few years. Not long ago, only a few kilometers from Longyearbyen one could have the impression of being far away from civilization. Unfortunately, the need of the tourism industry for pristine nature is either not sufficiently understood or has been intentionally ignored in several important cases around Longyearbyen. Growing scientific installations around the old airport in Adventdalen; unpleasant white crosses left all over the terrain from an aerial photography project in 1989; lots of oil cans and detergent bottles washed down from mine 7 into Adventdalen; lots of caterpillar tracks in the moraines of Longyearbreen and Rieperbreen (Bolterdalen) from the collection of boulders for building the new harbor; and most recently the two big scientific projects EISCAT and the satellite ground station, both planned on two different prominent positions on the edges of plateaus high above the valleys – all of these things make it almost impossible to go on day excursions from Longyearbyen and still get the impression of untouched nature.

Nature-orientated tourism and conservationists have a common problem. A mining company or proponents of a proposed port or some special scientific installations can often argue that if they cannot build at a specific point, the project is likely to fail or be impossible. With nature, it is not so simple. Tourism and conservation usually do not end in total failure, if a certain bit of nature is used for other purposes. But if one piece after the other of the surrounding nature is used, both conservation and nature-orientated tourism get into problems.

As for Longyearbyen, the gradual loss of the pristine character of the town's surroundings does not necessarily harm the tourism industry because many of these new installations can be seen as attractions, too: take a bus group up onto the plateau on the new road to EISCAT. Crawl with a group through the mines. Install an information center and a multimedia show about advanced satellite technology and space research on Svalbard. There are many possibilities to create new artificial attractions and sell them to visitors.

What we are talking about in this workshop, however, is ecologically acceptable tourism. In addition, many tourists come to Svalbard mainly to experience pristine nature. As mentioned above, it would be best if these visitors can get these experiences as close as possible to the settlements so as to leave most of the terrain undisturbed. But if the day excursion area around Longyearbyen is increasingly used for other purposes, those seeking pristine nature have to move farther out into the terrain. This both extends the more intensively used area and increases motorized traffic. If pure nature is not within reach for day excursions any more, tourists must be driven out and picked up again instead of starting their nature experiences immediately behind the last houses.

If ecologically acceptable tourism is the aim, the possibility of experiencing unspoiled Arctic nature in the immediate surroundings of the settlements has to be regarded as a valuable and limited resource in area planning. This does not exclude other activities, from mining to science. Nonetheless, there is a resource conflict. If the authorities do not respect the interests of tourism in area planning, guidelines for tour operators and tourists will not prevent an increase of pressure on more remote areas.

Regarding the relation between terrain damage and the number of jobs created, tourism has on Svalbard quite certainly a better balance than most other activities. This should also be an economic argument for prioritizing nature as a limited and valuable resource in area planning, because tourism on Svalbard depends mainly on the beauty of pure nature.

The official area planning around Longyearbyen and the idea of creating a net of tourist cabins over central Svalbard are local examples that illustrate that the frame set for tourism by the authorities has far more consequences for nature than can be mended afterwards by guidelines for visitors. Certainly, similar examples can also be found in other areas, and not only the Arctic.

Some practical points from Svalbard that may enter future guidelines

It may be appropriate here to make some suggestions as to what the tourism industry could do itself to reduce its negative effects on Arctic nature. From my Svalbard experience, I have three points that may perhaps also enter future guidelines:

The feeding of wild animals should be banned

It is still a common practice among some tour operators on Svalbard to feed polar bears from ships. One can guess this already when looking at postcards and other polar bear pictures with close-ups of standing bears looking and sniffing upwards. Several TV films about Svalbard also document the feeding of bears on tourist ships. Feeding not only interferes with nature in an ecosystem that is still fairly intact, it is also a way of making polar bears more dangerous by creating in them a clear association between food and man. It should be unpleasant enough that

there are a few accidents with polar bears every year even without feeding. That some tour operators and ship crews try their best to increase this risk for both people and bears should be unacceptable. The accident last summer where a polar bear killed a crew member of a tourist ship who went ashore insufficiently armed will serve, one hopes, as an incentive to take this topic more seriously, even though there was no known connection between feeding and that casualty. This ban should not be restricted to tourism: I heard stories about feeding a polar bear just for fun by the crew of the governor's duty vessel. It should include all animals out in the wilderness, such as for example polar foxes, not only because they may have rabies but also because it is an interference with nature.

Construction measures to reduce ecological damage

Although the general aim is to keep the landscape as natural as possible, I would prefer exceptions in some cases. For instance, it is unrealistic to believe that one can keep all amateur photographers and bird watchers away from the bird cliffs. Tour operators therefore should seek cooperation with the administration to find solutions that are favorable for both sides. A seasonal small screen with a hole for the lens at a bird-cliff is certainly no big aesthetic disturbance. Nonetheless it can save the lives of some young birds that otherwise would be kicked down the cliffs by panicking old birds when just one visitor is too eager to get close-ups. Visitors would certainly accept such a shelter, since they can get much better views from it than by approaching the birds openly.

Around seasonal camps, removable plank bridges may protect vegetation in some places. A mobile toilet can have advantages compared to just using the spade in a growing toilet area in the vicinity of a seasonal camp.

On Svalbard, I have experienced some reluctance by the authorities when discussing such ideas, but perhaps it will be possible to implement such solutions in the future in the interest of wildlife.

Reduction of litter

This is more of an ethical point. Most tour operators today collect their litter and transfer it back to the settlements. Nonetheless, there is often a strange contradiction between the desire to experience wilderness and the ecological awareness claimed by most visitors on the one hand, and the enormous production of litter on such wilderness trips on the other. It should be a goal, especially for programs that want to have an eco-image, to reduce litter by using bigger packages and recyclable containers, not using ready-made meals, collecting used toilet paper in a paper bag to be burned, etc.. We have managed on our own tours to come some way ahead with that goal, but more remains to be done. Often, locally available supplies hinder good intentions. For instance, methylated spirit for our stoves is on sale in Longyearbyen only in one-way one-liter plastic bottles. "Buy local" - a popular phrase in the soft tourism discussion - is an ecologically bad solution in such cases. For our own purposes, we use therefore methylated spirit we bring to Svalbard ourselves in 20-liter metal cans. The garbage volume of such a can is far less than 20 plastic bottles and there are well-established routines for the recycling of metal scrap.

Reduction of especially energy-consuming types of travel (e.g. Russian ice-breakers, motorized traffic on non-frozen vegetation).

A common problem of polar travel is long distance transport. It must be done unpleasantly often by air, with the connected risks for the higher atmosphere, the consumption of fossil hydrocarbons and CO2 emissions. A single tour operator cannot do much about this problem, but in some cases the state could try to promote or support alternative means of transport. Summer tourism on Svalbard, for instance, could be less dependent on planes if there were a regular boat connection to the mainland - with sale of single passages, not only complete cruise programs. Many tourists will still fly. I suspect, however, that the fraction of tourists willing to use a boat as means of transport is higher than in other segments of today's air traffic to

Svalbard, such as government commissions visiting the islands or the locals on their trips to the mainland.

Aside from air traffic emissions (which are, by the way, far more concentrated in more southern tourism destinies), I find one type of tourist transport even more worrying: the Russian nuclear ice-breakers. Setting aside fundamental objections to nuclear energy, it is generally known that Russia has no serious plan at all for the treatment of its radioactive wastes. I find it absurd that nature-loving tourists travel aboard a Russian nuclear ice-breaker over precisely the same Arctic Ocean where Russia has dumped masses of nuclear waste, and that is threatened by more such waste from ships and ineffective depots along the coasts of Kola. The shipping companies do not use the money they earn for such tourist trips on cleaning up the nuclear mess, nor would these sums by any means be sufficient. A Russian scientist we met at a conference in Yakutsk said that just transporting today's nuclear waste away from Kola to a processing factory would take more than 200 years with the few existing special transporters in Russia. Using these nuclear ice-breakers in tourism encourages the continuation and even expansion of this careless use of nuclear energy. Energy awareness is a problem of Arctic tourism and definitely a point for eventual guidelines.

Conclusion

From more general thoughts, I have come to these fairly precise suggestions for coming guidelines. I hope that this workshop will be a step towards ecological improvements in tourism. At the same time, I hope that tourism can serve as an example for other types of utilization of the Arctic and that these other types of utilization come soon to the same ecological standards that tourism already has reached.

Appendices

Appendix 1

Linking Tourism and Conservation in the Arctic: Ten Principles for Arctic Tourism; Code of Conduct for Tour Operators in the Arctic; Code of Conduct for Arctic Tourists.

Appendix 2

Guidelines and Codes of Conduct for Arctic Tourism: Implementation and Evaluation of an Operator Program, Margaret E. Johnston and David G. Twynam.

Appendix 3

Guidelines and Codes of Conduct for Arctic Tourism: Implementation and Evaluation of an Operator Program, Margaret E. Johnston and David G. Twynam.

Appendix 4:

Antarctic traveller's code.

Appendix 5

Drafting Tourism Codes for the Arctic, Peter Mason.

Appendix 6

IAATO Guidelines for Visitors (abbreviated). IAATO (1993).

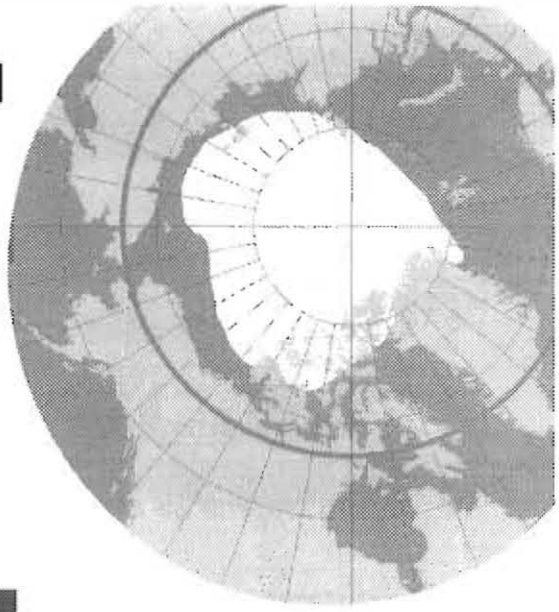
Appendix 7

Participant list: How to Develop Arctic Tourism Guidelines? Svalbard, January 20-22. 1996.

Appendix 8

Participant list: How to Implement Arctic Tourism Guidelines? Svalbard March 7-10. 1997.

LINKING TOURISM AND CONSERVATION IN THE ARCTIC



WWF®

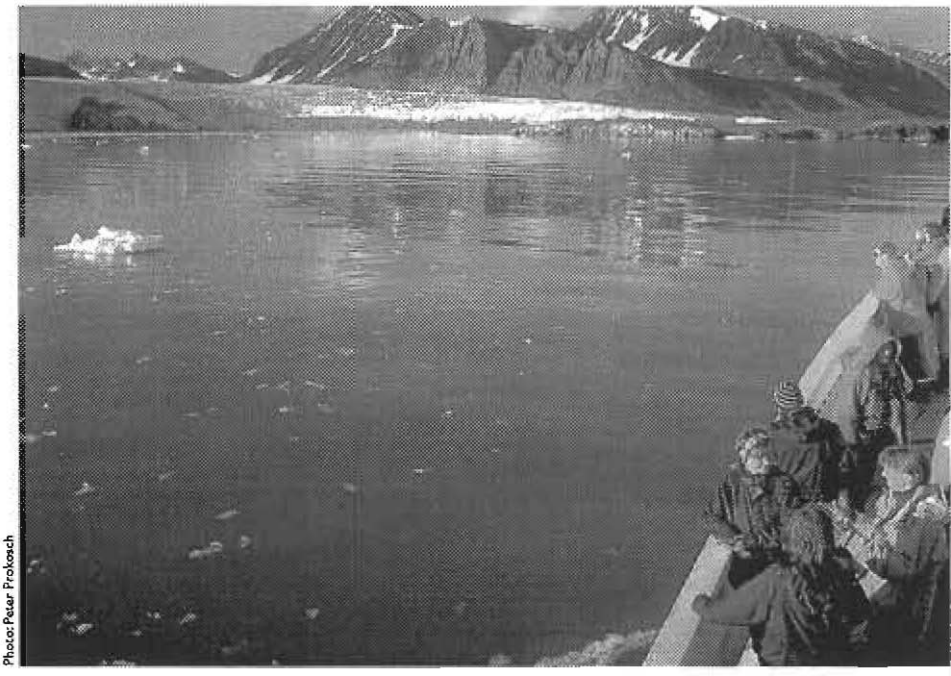
Ten Principles for Arctic Tourism

Code of Conduct for Tour Operators in the Arctic

Code of Conduct for Arctic Tourists

Photo: Max Forsberg

TEN PRINCIPLES FOR ARCTIC TOURISM



Photos: Petur Prokosch

1. Make Tourism and Conservation Compatible

Like any other use of the environment, tourism should be compatible with and a part of international, national, regional, and local conservation plans.

- Encourage tourism planning that supports conservation efforts and incorporates conservation plans.
- Cooperate with environmental organisations and other groups working to protect the environment.
- Support monitoring of and research on the effects of tourism.

2. Support the Preservation of Wilderness and Biodiversity

Vast areas of wilderness without roads or other traces of development are a unique characteristic of the Arctic. These areas are both environmentally valuable and one of the main reasons why tourists come to the Arctic.

- Support nature conservation throughout the Arctic, including the protection of wildlife, habitat and ecosystems, both marine and terrestrial.
- Support efforts to stop and, where possible, reverse the physical fragmentation of the Arctic landscape since fragmentation both reduces the quality of the tourism experience and degrades the environment.
- Support the further development of the Circumpolar Protected Area Network (cpan).*

3. Use Natural Resources in a Sustainable Way

Conservation and the use of natural resources in a sustainable way are essential to the long-term health of the environment. Undeveloped areas in the Arctic are a non-renewable resource – once developed, it is impossible to return them to their original state.

- Encourage uses of natural resources that are sustainable, including undeveloped areas.
- For areas that are already developed, encourage uses that are sustainable and environmentally friendly.

4. Minimise Consumption, Waste and Pollution

Reducing pollution and consumption also reduces environmental damage. This improves the tourism experience, and reduces the high cost of cleaning up the environment.

- Encourage the use of waste disposal technologies with the least impact on the environment , such as recycling and waste management systems. Where communities have recycling systems, use them; where they do not, help develop them.
- Dispose of waste in a safe and appropriate way, for example by compacting your garbage and taking it with you.

Knowledge and a positive experience enable tourists to act as ambassadors for Arctic environmental protection.

* For further information see: http://www.grida.no/caff

- Use biodegradable or recyclable product packaging.
- Minimise the consumption of fossil fuels, avoid motorised transport where possible, and do not use motorised transport (snowmobiles, etc.) for purposes other than getting from one place to another.
- Support the development and use of lodgings that conserve energy, recycle, and dispose of waste and garbage in appropriate ways.
- Support efforts to clean up and restore areas where the environment has been damaged.

5. Respect Local Cultures

Tourism should not change the lifestyles of peoples and communities unless they want it to do so.

- Respect the rights and wishes of local and indigenous peoples.
- Ask for permission before visiting sites that communities currently use, such as churches and other holy places, graveyards, camps, and fishing sites.

6. Respect Historic and Scientific Sites

Archaeological, historic, prehistoric and scientific sites and remains are important to local heritage and to science. Disturbing them diminishes their value and is often illegal.

- Respect the value of these sites and remains and promote their protection.

7. Communities Should Benefit from Tourism

Local involvement in the planning of tourism helps to ensure that tourism addresses environmental and cultural concerns. This should maximise benefits and minimise damage to communities. It should also enhance the quality of the tourism experience.

- Seek and support local community involvement and partnership in tourism.
- Promote the recruitment, training, and employment in tourism of local people.

8. Trained Staff Are the Key to Responsible Tourism

Staff education and training should integrate environmental, cultural, social, and legal issues. This type of training increases the quality of tourism. Staff should be role models for tourists.

- Encourage staff to behave responsibly and encourage tourists to do so as well.
- Familiarise staff with applicable laws and regulations.

9. Make Your Trip an Opportunity to Learn About the Arctic

When tourists learn about communities and the environment, tourism provides the most benefits for all concerned and does the least damage. Knowledge and a positive experience enable tourists to act as ambassadors for Arctic environmental protection.

- Provide information about environmental, cultural, and social issues as an essential part of responsible tourism.
- Apply the codes of conduct as a way to promote responsible tourism attitudes and actions.

10. Follow Safety Rules

The Arctic can be a treacherous environment and everyone involved in Arctic tourism needs to exercise caution and follow safety rules and practices. Failure to do can result in serious injury and costly rescue or medical intervention that burdens communities.

- Ensure that your actions follow accepted safe practices and comply with regulations.
- Ensure that everyone involved in Arctic tourism receive information and training about safety procedures.

Vast areas of wilderness are both environmentally valuable and one of the main reasons why tourists come to the Arctic.

© Elin Pierce

CODE OF CONDUCT FOR TOUR OPERATORS IN THE ARCTIC

Photo: Peter Prokosch

There are several concrete ways to support nature conservation. Choose one!

1. Make Tourism and Conservation Compatible

- Support conservation. Ways you can support conservation include:
  - Develop a positive relationship with organisations and people that play a role in conservation, particularly in the areas that you will visit with your clients.
  - Encourage your clients to become members in conservation organisations.
  - Use personal contacts and letters to educate others and encourage governments and businesses to support projects such as new nature reserves.
  - Contribute time and money to conservation organisations and projects.

- Plan tourism so that it does not conflict with conservation efforts. Obtain permission before visiting nature reserves or other areas where access is restricted. When visiting these areas, be sure that your activities comply with the rules of the park or reserve.

- Know the laws and regulations that apply to the import and export of products made from wildlife, and make sure that your clients understand and follow these laws. Encourage your clients to buy products made from wildlife by local people, so long as these products are not made from endangered species and their purchase does not violate the law.

- Develop an environmental plan for your daily operations. If you are an operator employing more than 20 people, have a written environmental plan that states your company's commitment to conservation, to using resources sustainably and to the principles in this Code of Conduct. Include specific procedures that your company uses in its daily operations to prevent and minimise detrimental environmental impacts. Make the plan available to your clients.

- Use post-trip evaluations to confirm that your tour was environmentally sound. Use feedback from clients as a good way to find out if your tour met client environmental expectations. In your post-trip evaluations ask whether in your clients view, the tour avoided unnecessary negative environmental impacts, and whether the tour operator demonstrated consideration of the natural and cultural environments. As a rule, use written post-trip evaluation forms although oral evaluations are acceptable, especially for smaller operations.

2. Support the Preservation of Wilderness and Biodiversity

- Promote maintenance of large, undeveloped areas of the Arctic. The undeveloped regions of the Arctic have a unique value, and are one of the primary reasons why tourists come to the Arctic. This will be undermined by roads, pipelines and other kinds of unsightly large-scale development that fragments the environment.

- Support wildlife conservation programmes and projects. Make your clients aware of them and ensure that they do not hunt or fish protected or threatened species, go into sensitive wildlife habitat, or buy products made from protected species.

3. Use Natural Resources in a Sustainable Way

- Where laws permit hunting and fishing, follow all rules and take only what you require. Ensure that your clients obey the laws and regulations and fish and hunt in a way that does not deplete local stocks of wildlife. Cooperate with community and indigenous hunters' associations.

- Make sure that your clients use only appropriate and well-maintained hunting equipment, and that they know how to operate the equipment they will use.

- Consider the nature and any special vulnerability of the site you will visit when determining how many clients will go with you. In wilderness areas take the nature of the site (wildlife, nesting birds, fragile vegetation, etc.) into account when determining how many clients will be in the area at any given time. Inform other operators in the region of your plans in order to avoid over visitation of a site. If you are a ship-based tour operator, as a general rule, limit the number of passengers ashore in wilderness areas to 100.

- Use established trails and campsites where they exist and avoid creating new ones.

- Avoid disturbing wildlife. Instruct your clients about local wildlife and its behaviour, especially polar bears, and make sure that they view it from an appropriate distance.

4. Minimise Consumption, Waste and Pollution.

- Your choice of products and how much you and your clients consume makes a difference.
  - Whether you bring supplies with you or buy them in the Arctic, choose biodegradable or recyclable products with minimal packaging.
  - Compress garbage and take it with you.
  - Recycle where possible and encourage the communities that you visit to develop recycling programmes if they do not have them already. If feasible, provide financial support to encourage the development of these programmes, and show your commitment to the communities you and your clients visit.
  - Limit energy use, including your use of heat and warm water. Keep records of your water and energy consumption, recycling efforts, and efforts to reduce waste.
  - The transportation you choose for your clients makes a difference –

Support wildlife conservation programmes and projects. Make your clients aware of them and ensure that they do not hunt or fish protected or threatened species.

Photo: Tom Schandy

choose the means of transport that has the least environmental impact. Minimise the use of fossil fuels and try to use non-motorised transport whenever possible. Where motorised transport is necessary, choose the technology that causes the least. environmental damage and minimal noise (four stroke instead of two stroke engines, for example). Do not use motorised transport such as snowmobiles and helicopters unnecessarily; these should only be ways of getting from one area to another or seeing specific sites.

- Choose accommodations compatible with local traditions and that minimise negative environmental impacts. Choose lodging that has effective waste treatment systems, recycles, and disposes non-recyclable garbage appropriately.

- Support efforts to clean up waste and polluted areas. Find out about these efforts and support them by, for example, providing money, lobbying governments and businesses, contributing your time and that of your staff, and by encouraging tour clients to support them.

- Ensure that no evidence of your visit remains behind.
  - Follow responsible practices for camping and tours, including those that concern waste disposal.
  - If you are a shipborne tour operator, follow Annex 5 of the marpol Agreement. Retain all plastic for proper disposal on the mainland and compact all wood products, glass, and metal for return to a mainland disposal facility. Ensure that any incinerators you use function properly.

- Dispose of bilge and treated sewage properly. If you are a shipborne tour operator, do not dump bilge or treated sewage within 12 nautical miles from land or ice shelves or in the vicinity of communities or scientific stations.

5. Respect Local Cultures

- Coordinate with the communities that you will visit so that your visit is welcome, expected, and not disruptive.
  - Arrange visits to communities well in advance, and avoid visits or landings that are not pre-arranged.
  - Reconfirm your visit, preferably 24 hours in advance, and be prepared to pay the community for costs associated with cancelled visits.
  - Arrange with the community what you and your clients will do while there.
  - Find out what size of group the community prefers for the planned activities. Be sure you have permission to visit or land and to undertake the activities you have planned.
  - Keep away from sites where people are working, including hunting and fishing sites, unless you have specific agreements with locals.

- Be aware of the laws and regulations in the area or waters in which you are operating, and obtain the necessary permits.

Coordinate with the communities that you will visit so that your visit is welcome, expected, and not disruptive.

Photo: Peter Prokosch

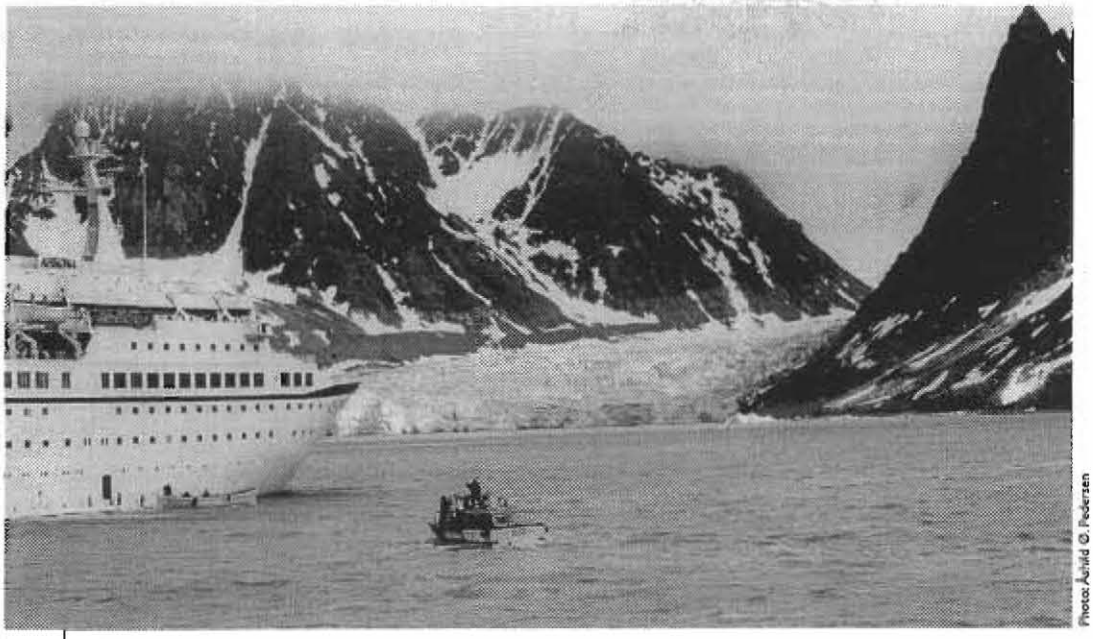


Photo: Arild © Pedersen

- Respect the culture and customs of the people whose communities you visit, and make sure that your clients do so as well.
  - Give all visitors a thorough cultural briefing before visiting local communities. Where possible, hire local lecturers to conduct these briefings. Include information on local customs and traditions, and on appropriate behaviour for tourists in the area. Use local "Codes for Visitors" if available.
  - Ask permission to photograph or videotape.
  - Ensure that your clients respect religious grounds, churches, cemeteries, and other sites with religious or cultural significance, and that they do not remove any artifacts.

6. Respect Historic and Scientific Sites

- Respect historic sites and markers, and make sure that your clients do not remove any artifacts. If access to historic or archaeological sites is restricted, get permission before visiting. Ensure that your clients behave respectfully particularly if a site has religious significance.

- Respect the work of scientists. Do not go to scientific installations or work sites without arranging your visit beforehand. Do not disturb scientists while they are working, and do not disturb their work sites.

7. Arctic Communities Should Benefit from Tourism

- Whenever possible, hire local staff and contract with local businesses. Train and hire local people for your operations whenever possible. Where local people lack the training you require, provide it. Use locally-owned businesses as subcontractors. Develop long-term partnerships with local operators, businesses, and suppliers. A local connection most often means a better tourism experience.

- Operate in ways that benefit the communities you visit, particularly with respect to supplies. If feasible buy supplies and services locally. Ask communities what supplies you should bring with you so that your visit and use of supplies does not cause hardship to local people. Encourage your clients to buy locally-made handicrafts and products.

- Where possible, choose accommodations owned, built, and staffed by local people.

8. Educate Staff

- Hire a professional team.
  - Hire only knowledgeable, environmentally and culturally aware staff, or train your existing staff in these areas. Provide training in how to avoid negative environmental impacts, in safety, and in

Hire only knowledgeable, environmentally and culturally aware staff, or train your existing staff in these areas. Provide training in how to avoid negative environmental impacts, in safety, and in providing service. Evaluate the performance of your staff, including their compliance with this Code, at least annually.

providing service. Evaluate the performance of your staff, including their compliance with this Code, at least annually.

- If you are a ship-based tour operator, hire lecturers and conservation-oriented naturalists who will not only talk about wildlife, environmental protection, history, geology, and local cultures, but who can guide passengers ashore and are familiar with safety and local conservation requirements.

- Hire staff that are familiar with the Arctic. In the high Arctic, at least one member of the staff must hold a current remote location first aid and survival qualification. A majority of the staff should have previous experience in the Arctic and should be familiar with Arctic conditions.

- Educate and brief the staff on this Code and the Code of Conduct for Arctic Tourists. Provide all staff with copies of the Principles, this Code, and the Code of Conduct for Arctic Tourists, and be sure that they are familiar with the contents. Include information about specific local requirements. Do not allow unsupervised crew to go ashore.

- Have a proper staff-client ratio. For land-based tourism, the recommended ratio is 8–15 clients to one staff member; for ship-based tourism the recommended ratio is one staff member to 15–20 passengers.

- Make sure that your subcontractors also comply with this Code of Conduct. Provide a copy of the Principles, this Code, and the Code of Conduct for Arctic Visitors to all of your subcontractors. Include a clause in all subcontracts that requires your subcontractors to comply with this Code of Conduct and explain this requirement verbally.

9. Make Your Trip an Opportunity to Learn About the Arctic

- Provide your clients with information about the Arctic environment and Arctic conservation. Provide lectures and written materials about the Arctic environment, its special characteristics, and its global significance. Include information about Arctic conservation in general, specific conservation efforts in the areas that you will visit, and specific ways – financial and otherwise – that your clients can support these conservation efforts.

- Provide your clients with specific information about the regions you will visit. Include information about climate, species, and habitats, as well as appropriate behaviour for these areas.

- Ensure that your clients follow the Code of Conduct for Arctic Tourists. Enforce the Code in a consistent way. Make sure that clients understand the responsibilities outlined in the Code. Be prepared to use stricter rules when necessary (e.g. when safety is an issue).

10. Follow Safety Rules

- Provide local authorities with your itinerary. This is both for safety reasons and to be sure you are complying with local regulations.

- Brief all clients and staff on the dangers of wildlife encounters, particularly encounters with bears.

- Have at least one staff member who is responsible for coordinating safety and avoiding dangerous encounters with wildlife.

Brief all clients and staff on the dangers of wildlife encounters, particularly encounters with bears.

Photo: Barbara Ganter

CODE OF CONDUCT FOR ARCTIC TOURISTS

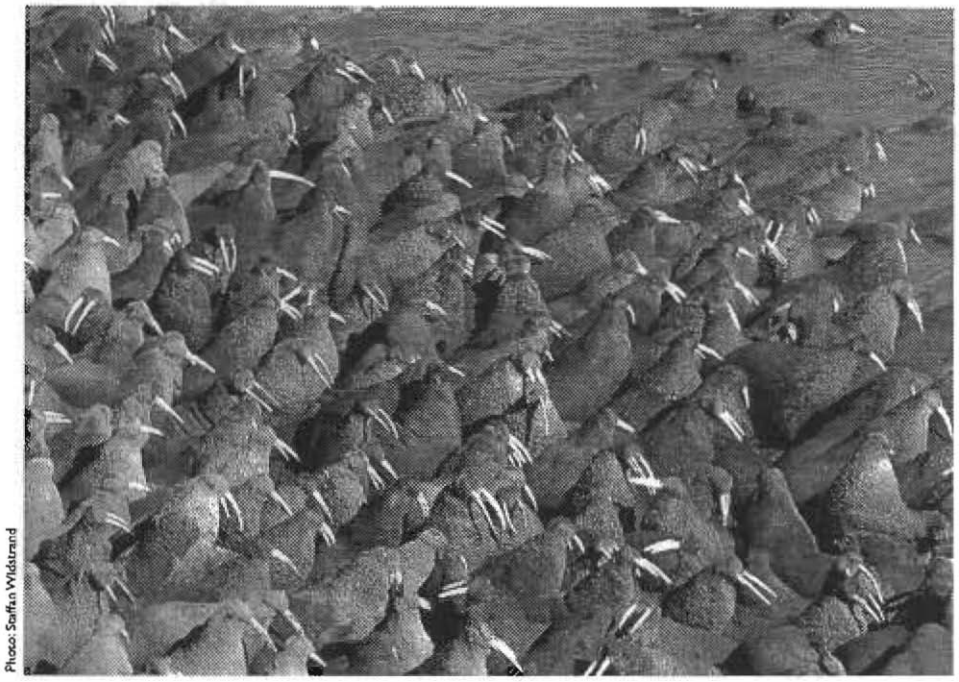


Photo: Staffan Widstrand

1. Make Tourism and Conservation Compatible

- The money you spend on your trip helps determine the development and direction of Arctic tourism. Use your money to support reputable, conservation-minded tour operators and suppliers.
- Get any necessary permits before visiting nature reserves or other protected areas. Leave these areas as you found them and do not disturb the wildlife there.
- Find out about and follow the laws and regulations that protect wildlife in the areas you will visit. Learn about the endangered species in these areas, and avoid hunting and fishing of these species, or buying products made from them.
- Your feedback makes a difference. If a tour, tourist service, or supplier was environmentally sensitive and informative, or if it could have been better, tell the owner or operator.
- Join Arctic conservation organisations, and support Arctic conservation projects.

2. Support the Preservation of Wilderness and Biodiversity

- Learn about efforts to conserve Arctic wildlife and habitat, and support them by contributing money, doing volunteer work, educating others on conservation, or lobbying governments and businesses.
- The large undisturbed wilderness areas of the Arctic are a unique environmental resource. Oppose development that fragments these areas or that may disrupt wildlife populations and ecosystems.
- Visit parks and nature reserves. Visitor demand and tourist expenditures support existing protected areas and can lead to the protection of additional nature areas.

3. Use Natural Resources in a Sustainable Way

- Walk or use skis, kayaks, boats, dog-sleds or other non-motorised means of transportation as much as possible to avoid noise pollution and minimise terrain damage. In particular, minimise use of snow scooters, especially where the snow cover is thin.
- View and photograph wildlife from a distance and remember that in the optimal wildlife viewing experience the animal never knows you are there. Suppress the natural temptation to move too close and respect signs of distress such as alarm calls, distraction displays, laid-back ears, and raised hair.
- Where laws permit hunting and

View and photograph wildlife from a distance and remember that in the optimal wildlife viewing experience the animal never knows you are there. Suppress the natural temptation to move too close and respect signs of distress

fishing, obtain the necessary permits, follow all rules, and take only what you require. Fish and hunt only where it is biologically sustainable, and in a manner that does not disrupt local communities.

- Undeveloped natural areas are a resource too – leave them the way that you found them so that others can enjoy them. Don't collect specimens unless it is allowed or you have a permit to do so. Use minimum impact camping techniques, and use existing campsites and trails rather than creating new ones.

- If you travel with a tour, ensure that your tour operator briefs you properly beforehand on the area to be visited, and on what you should do to minimise damage to the site.

4. Minimise Consumption, Waste and Pollution

- Your choice of lodging and products and how much you consume makes a difference. Choose biodegradable or recyclable products and products with minimal packaging.

  Use recycling facilities where available. If you travel with a tour, choose a tour operator who recycles.

- Limit energy use, including your use of heat and warm water.

- Leave as little trace as possible of your visit and take your garbage with you.

- Choose transportation with the least environmental impact – avoid the use of fossil fuels and motorised transport.

- Choose lodgings that have effective waste treatment systems, that recycle, that are energy efficient, and, where possible, that use environmentally friendly energy sources such as solar energy or hydroelectric power.

5. Respect Local Cultures

- Learn about the culture and customs of the areas you will visit before you go.

- Respect the rights of Arctic residents. You are most likely to be accepted and welcomed if you travel with an open mind, learn about local culture and traditions, and respect local customs and etiquette.

- If you are not travelling with a tour, let the community you will visit know that you are coming. Supplies are sometimes scarce in the Arctic, so be prepared to bring your own.

- Ask permission before you photograph people or enter their property or living spaces.

6. Respect Historic and Scientific Sites

- Respect historic sites and markers, and do not take any souvenirs. Even structures and sites that look abandoned may be protected by law or valued by local people.

- Keep out of abandoned military installations.

- Respect the work of scientists by arranging your visits to scientific installations beforehand, and by leaving work sites undisturbed.

7. Arctic Communities Should Benefit from Tourism

- The money you spend as a tourist can contribute to the economic survival of the communities you visit. Buy local, and choose tour companies, excursions, and suppliers that are locally-owned and that employ local people.

- Buy locally-made products and handicrafts.

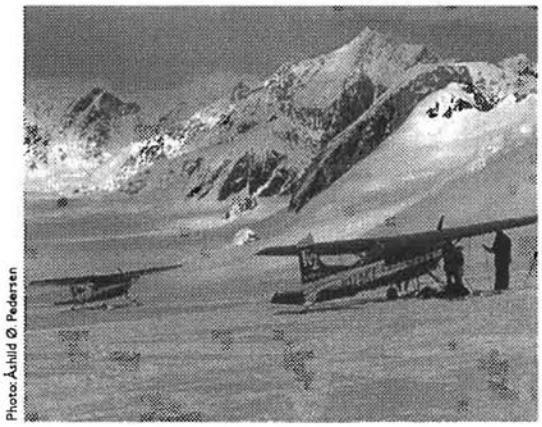


Photo: Áshild Ø Pedersen

Choose transportation with the least environmental impact. Avoid the use of fossil fuels and motorised transport.

- Choose accommodations owned, built, and staffed by local people whenever available.

8. Choose Tours With Trained, Professional Staff

- Select a reputable tour operator who employs trained staff, preferably with Arctic experience.
- Choose a tour operator with staff-client ratio of 15 clients or less per staff member for land-based tours, and 20 passengers or less per staff member for cruises.

9. Make Your Trip an Opportunity to Learn About the Arctic

- Learn about the Arctic environment, particularly in the areas you will visit, before you go. Make your trip an opportunity to learn about conservation in the Arctic.
- If you travel with a tour, choose one that provides information about the Arctic environment, Arctic conservation, and ways to support Arctic conservation efforts.
- Choose tours and excursions that provide specific information about the climate, species, habitats, local peoples and cultures, and appropriate behaviour in the area you will visit.

10. Follow Safety Rules

- Polar bears, walrus, muskox and other wildlife are all potentially dangerous and must always be treated with respect. Ensure that you or your group carries a gun and other scaring devices in polar bear areas.
- Sled dogs are working animals. Don't feed or caress them. Dogs and arctic foxes may also carry rabies.
- Hiking over ice and glaciers demands specific skills in the use of ropes, crampons, ice axes, and other safety equipment. Trained guides should be employed.
- If you go on a trip alone or with others, be sure that local authorities know about your itinerary.
- Be aware of weather conditions, and be prepared for weather that changes suddenly from pleasant to dangerous. Avoid becoming too cold, tired, or wet.
- Basic equipment, even for short excursions, includes warm clothes, sturdy footwear, gloves, a hat, and windproof outer garments. A map, emergency rations like chocolate, and a basic first aid kit are also essential.

Make your trip an opportunity to learn about the Arctic. Choose tours and excursions that provide specific information about the climate, species, habitats, local peoples and cultures, and appropriate behaviour in the area you will visit.

Photo: Bryan and Cherry Alexander

ARCTIC TOURISM PROJECT

■ Arctic tourism has grown substantially in recent years and will probably continue to do so. This presents both opportunities and challenges: opportunities to increase awareness of Arctic environmental issues and support for conservation, while providing a sustainable income source for northern communities; and environmental and cultural problems if tourism does not take these issues into account.

■ Recognising both the positive and negative potential of this development, in 1995 the World Wide Fund For Nature (WWF) Arctic Programme began to develop principles and codes of conduct for Arctic tourism, and a mechanism for imple-menting them. The goal was to encourage the development of a type of tourism that protected the environment as much as possible, educated tourists about the Arctic's environment and peoples, respected the rights and cultures of Arctic residents, and increased the share of tourism revenues that go to northern communities. WWF believes that the development of this type of tourism is in the interest not only of conservation, but of residents, business, and government.

■ The Principles and Codes for Arctic Tourism were developed in cooperation between WWF Arctic Programme, tour operators, conservation organisations, managers, researchers, and repre-sentatives from indigenous communities during workshops held on Svalbard in 1996 and 1997. The participants developed a list of Potential Benefits and Potential Problems of Arctic Tourism, Ten Principles for Arctic Tourism, a Code of Conduct for Tour Operators, and a Code of Conduct for Arctic Tourists.

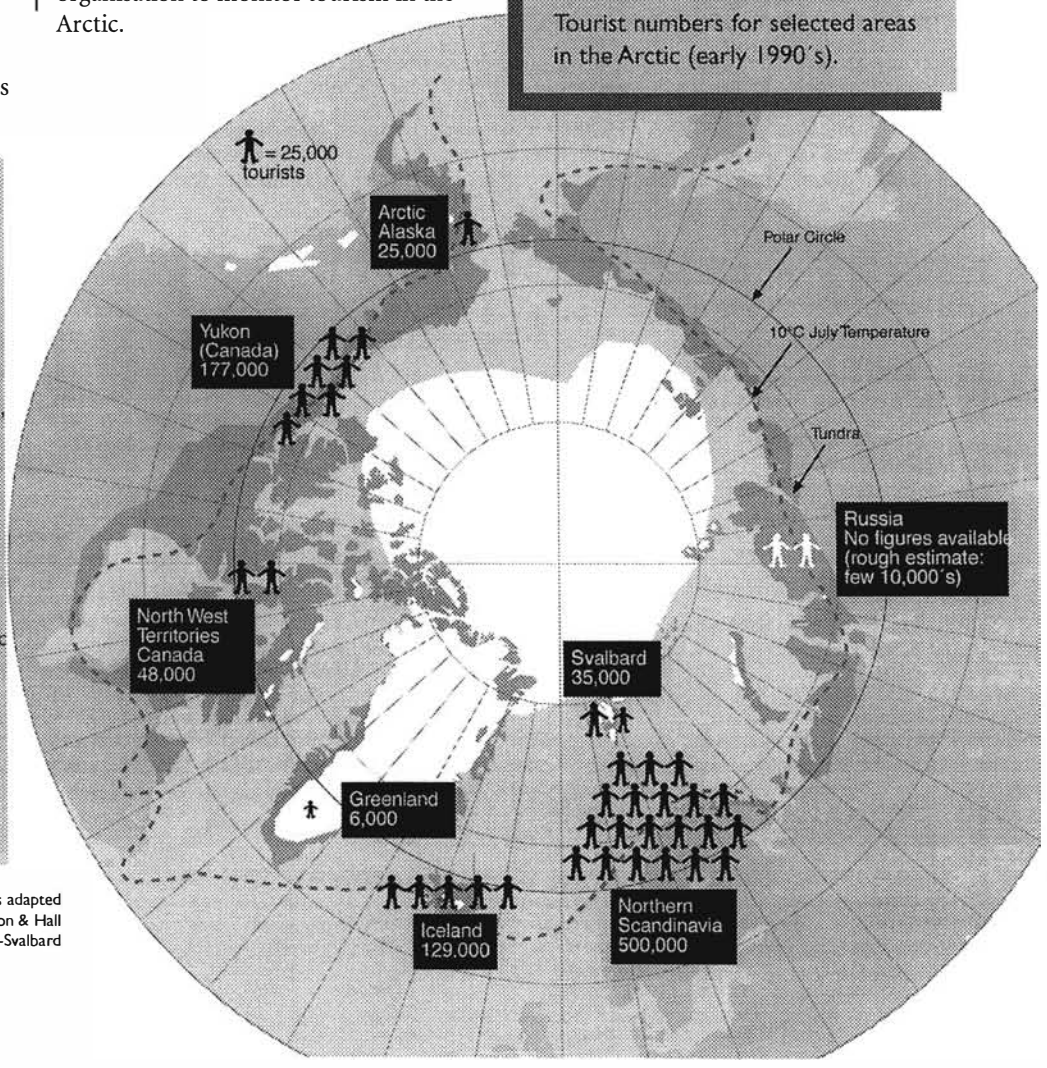
■ The next stage of the project will be to implement the Principles and Codes. An important aspect of this process will be to establish pilot projects for implementing the Principles and Codes and evaluating compliance. This may lead to the establishment of an independent organisation to monitor tourism in the Arctic.

WWF Arctic Programme

The World Wide Fund For Nature Arctic Programme was established in 1992 by WWF International to coordinate activities of the different WWF national organisations in the Arctic nations. From its headquarters in Oslo, Norway, the Arctic Programme promotes circumpolar environmental protection and projects in Russia, USA, Canada, Finland, Sweden, Iceland, Norway, and Greenland/Denmark. Since its beginnings, the Arctic Programme has worked hard to raise public awareness and government consciousness of the importance of the Arctic and its need for protection through a variety of mechanisms. A quarterly publication, *WWF Arctic Bulletin* has been instrumental in achieving this end.

Where are they going?

Tourist numbers for selected areas in the Arctic (early 1990´s).



Tourist numbers adapted from Johnson & Hall and Info-Svalbard

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Appendix 2

Guidelines and Codes of Conduct for Arctic Tourism: Implementation and Evaluation of an Operator Program, *Margaret E. Johnston and David G. Twynam*

PRINCIPLE1: Make tourism and conservation compatible	
INDICATOR	**MEASURE**
Tourism development is planned to support conservation efforts. Cooperation exists with partners working for conservation. Supports monitoring of and research on tourism effects.	Activities comply with applicable conservation laws, regulations and rules (e.g. nature reserves, wildlife product purchases). Environmental plan outlines procedures for daily operations to minimise negative environmental impacts. To support conservation efforts, the operation contributes time or money, educates clients, creates links, or support other conservation activities. Process exists for post-trip evaluation of success in meeting natural and cultural requirements. Operation has developed partners for meeting tourism and conservation aims. The operation provides financial or logistical support for monitoring and research.

PRINCIPLE 2: Support the preservation of wilderness and biodiversity	
INDICATOR	**MEASURE**
Supports nature conservation throughout the Arctic, including both marine and terrestrial ecosystems. Supports efforts to stop physical fragmentation of the Arctic landscape. Supports the further development of the Circumpolar Protected Area Network (CPAN).	The operation supports wildlife conservation programmes. The operation educates clients about wildlife conservation and protection. The operation discourages the purchase of products made from protected species. The operation promotes the maintenance of large, undeveloped regions of the Arctic. The operation supports the further development of CPAN.

PRINCIPLE 3: Use natural resources in a sustainable way	
INDICATOR	**MEASURE**
Encourages the use of natural resources that are sustainable in undeveloped areas, and the use of sustainable and environmentally friendly resources in developed areas	Tourism activities observe restrictions for habitats of endangered species or for natural areas. Activities such as hunting and fishing take place within rules and regulations of the area and according to principles of sustainable use. Hunting and fishing equipment is well maintained, appropriate and operator is familiar with use.

PRINCIPLE 4: Minimise consumption, waste and pollution	
INDICATOR	**MEASURE**
Uses waste disposal technologies with the least impact. Ensures safe and appropriate disposal of waste produced from tourism, including the use of community facilities if available. Uses biodegradable and recyclable product packaging. Minimises the consumption of fossil fuels. Supports the development and use of lodgings that conserve energy and recycle, and dispose of waste and garbage in appropriate ways. Supports efforts to restore areas where the environment has been damaged.	Operator seeks ways to reduce energy consumption, use of water, waste and pollution. Operator documents water and energy consumption, waste minimisation and recycling. Operations compress garbage and transport it out of the region. Operations encourage communities visited to develop recycling programmes. Operations use biodegradable or recyclable product packaging. Operator limits snowmobile and helicopter use, uses the most fuel-efficient technologies, the least environmentally damaging methods, and uses alternatives to fossil fuel. Accommodation is selected to minimise environmental and cultural impacts. Operator contributes money or time to support restoration of damaged areas, and encourages clients to support this. Ship borne operators follow Annex 5 of the Marpol Agreement. Ship borne operators dispose of bilge and treated sewage properly. Operator practises minimum impact camping and touring.

PRINCIPLE 5: Respect Local Cultures	
INDICATOR	**MEASURE**
Respects the rights and wishes of local and indigenous peoples. Asks for permission before visiting sites that communities currently use, such as churches and other holy places, graveyards, camps and fishing sites.	Operator gives all clients a thorough cultural briefing. Operator encourages clients to use the Codes for Visitors. Operator and clients obtain permission to take photographs and videotape. Operator arranges visits in advance, reconfirms visits and pays for cancelled visits. Operator follows group size requested by community and obtains permission to visit, land or undertake planned activities. Tourism activities take place away from sites of current use such as hunting and fishing sites (except with permission). Operator and clients obtain permission to take photographs and videotape. Operator follows laws and rules of area and obtains necessary permits

PRINCIPLE 6: Respect historic and scientific sites	
INDICATOR	**MEASURE**
Respects the value of these sites and remains and promotes their protection.	Operator obtains permission before visiting historic and scientific sites. Operator ensures clients behave respectfully during visits. Operator ensures that clients do not remove artefacts. Operator ensures that clients do not disturb scientists at work or their work sites.

PRINCIPLE 7: Communities should benefit from tourism	
INDICATOR	**MEASURE**
Seeks and supports local community involvement and partnership. Promotes the recruitment, training and employment in tourism of local people.	Operator has long-term partnerships with local operators, businesses and suppliers. Operator consults with community regarding supplies which can be purchased locally and which should be brought in. Operator chooses accommodations owned, built and staffed by local people. Operator encourages clients to buy locally made handicrafts and products. Operator hires local staff and trains local people where possible.

PRINCIPLE 8: Trained staff are the key to responsible tourism	
INDICATOR	**MEASURE**
Encourages staff to behave responsibly and encourages tourists to behave responsibly. Familiarises staffs with applicable laws and regulations.	Operator hires a professional, knowledgeable, environmentally and culturally aware team that is familiar with the Arctic and evaluates their performance. Operator provides training in avoiding negative environmental impacts, in safety, and in providing service. Operator educates staff on the principles and codes of conduct. For land based tourism operator provides one staff member to a maximum of 15 clients. For ship based the ratio is 1:20 Operator ensures that sub-contractors comply with the principles and codes.

PRINCIPLE 9: Tourism should be educational	
INDICATOR	**MEASURE**
Provides information about environmental, cultural and social issues as an essential part of responsible tourism. Applies the codes of conduct as a way to promote responsible tourism attitudes and actions.	Operator provides lectures and written material about the Arctic environment and conservation. Operator provides specific information about the regions visited and appropriate behaviour for these areas. Operator ensures clients follow the Code of Conduct for Arctic Tourists through monitoring and enforcement.

PRINCIPLE 10: Follow safety rules	
INDICATOR	**MEASURE**
Actions follow accepted safe practices and comply with regulations. Information and training about safety procedures are provided to everyone involved in Arctic tourism.	Operator provides local authorities with itinerary. One staff member is responsible for coordinating safety and avoiding dangerous encounters with wildlife. Operator briefs all clients and staff on the dangers of wildlife encounters, particularly encounters with bears

Appendix 3

Guidelines and Codes of Conduct for Arctic Tourism: Implementation and Evaluation of an Operator Program, *Margaret E. Johnston and David G. Twynam.*

Example operator checklist.

PRINCIPLE 8: Trained Staff are the Key to Responsible Tourism

You have hired a professional, knowledgeable staff that is familiar with the Arctic.	YES	NO
You have hired an environmentally and culturally aware staff.	YES	NO
You evaluate their performance.	YES	NO
You provide training in avoiding negative environmental impacts.	YES	NO
You provide training in safety in the Arctic environment.	YES	NO
You provide training in customer service.	YES	NO
You educate your staff on the principles and codes of conduct.	YES	NO
Land based: You provide a ratio of one staff member to a maximum of 15 clients.	YES	NO
Ship based: You provide a ratio of one staff member to a maximum of 20 clients.	YES	NO
You ensure that sub-contractors comply with the principles and codes.	YES	NO

PRINCIPLE 9: Tourism Should Be Educational

You provide lectures and written material about the Arctic environment.	YES	NO
You provide lectures and written material about Arctic conservation.	YES	NO
You provide information the regions visited and appropriate behaviour for these areas.	YES	NO
You monitor and enforce your client's adherence to the Code of Conduct for Arctic Tourists.	YES	NO

Appendix 4:

Antarctic traveller's code

Antarctic visitors

MUST NOT leave footprints in fragile mosses, lichens or grasses.

MUST NOT dump plastic or other, non-biodegradable garbage overboard or onto the Continent.

MUST NOT violate the seals', penguins, or seabirds' personal space.

- Start with a 'baseline' distance of 15-ft (5 m) from penguins, seabirds and true seals and 60-ft (16 m) from fur seals.
- Give animals right of way.
- Stay on the edge of, and don't walk through, animal groups.
- Back off if necessary.
- Never touch the animals.

MUST NOT interfere with protected areas or scientific research.

MUST NOT take souvenirs.

Antarctic tour companies

SHOULD apply the Antarctic Traveller's Code to all officers, crew, staff and passengers.

SHOULD utilise one (1) guide or leader for every twenty (20) passengers.

SHOULD employ experienced and sensitive on-board leadership.

SHOULD use vessels that are safe for Antarctic ice conditions.

SHOULD adopt a ship-wide anti-dumping pledge.

Appendix 5

Drafting Tourism Codes for the Arctic, *Peter Mason*

A draft visitor code for the Arctic

Conserve resources

- Please leave wildlife alone: where this is not possible, keep disturbance to a minimum.
- Please do not take plants, animals and other samples from nature — these must be left where found.
- Please limit damage by vehicles such as snowscooters.
- Hunting and fishing are under the strict control of national and regional authorities. Permits can be obtained from.....
- Accessibility to nature reserves and National Parks is strictly restricted through the use of permits. These are obtainable from....

Stop pollution

- Please do not leave behind any equipment or litter — this will decay only slowly and injure wildlife and could cost you a fine.
- All materials that have been brought in, and not consumed during your visit, should be taken out.

Respect indigenous cultures

- Almost all indigenous cultures in the Arctic have developed in harmony with nature, without over exploiting resources or creating unnecessary waste. Pay respect to these cultures.

Be a guest

- Please do not expect to come to a wilderness and find all home comforts supplied.
- Be a true guest — one who is welcome in the landscape and among the local people.

Enjoy yourself and remember:

- Take nothing but photographs.
- Kill nothing but time.
- Leave nothing but footprints.

Appendix 6

IAATO Guidelines for Visitors (abbreviated), IAATO (1993).

Antarctica, the world's last pristine wilderness, is particularly vulnerable to human presence. Life in Antarctica must contend with one of the harshest environments on earth, and we must take care that our presence does not add more stress to this fragile and unique ecosystem.

The following Guidelines of Conduct have been adopted by all members of the International Association of Antarctica Tour Operators (IAATO) and will be made available to all visitors travelling with them to Antarctica. With your cooperation we will be able to operate environmentally conscious expeditions that protect and preserve Antarctica, leaving the continent unimpaired for future generations.

Please thoroughly study and follow these guidelines. By doing so, you will make an important contribution toward the conservation of the Antarctic ecosystem and minimise visitor impact. It will also help to ensure that you will have a safe and fulfilling experience in visiting one of the most exciting and fascinating places on earth.

1. Do not disturb, harass, or interfere with the wildlife

- Never touch the animals.
- Maintain a distance of at least 15 feet (4.5 metres) from penguins, all nesting birds and true seals ("crawling" seals), and 50 feet (15 metres) from fur seals.
- Give animals the right of way.
- Do not position yourself between a marine animal and its path to the water, nor between a parent and its young.
- Always be aware of your surroundings; stay outside the periphery of bird rookeries and seal colonies.
- Keep noise to a minimum.
- Do not feed the animals, either ashore or from the ship.

2. Do not walk on or otherwise damage the fragile plants, i.e. lichens, mosses, and grasses.

3. Leave nothing behind, and take only memories and photographs.

- Leave no litter ashore (and remove) any litter you may find while ashore); dispose of all litter properly.
- Do not take souvenirs, including whale and seal bones, live or dead animals, rocks, fossils, plants, other organic material, or anything which may be of historical or scientific value.

4. Do not interfere with protected areas or scientific research.

- Do not enter buildings at the research stations unless advised to do so.
- Avoid entering all officially protected areas, and do not disturb any ongoing scientific studies.

5. Historic huts may only be entered when accompanied by a properly authorised escort

- Nothing may be removed from or disturbed within historic huts.

6. Do not smoke during shore excursions.

7. Stay with your group or with one of the ship's leaders when ashore

- Follow the directions of the expedition staff.
- Never wander off alone or out of sight of others.
- Do not hike onto glaciers or large snowfields, as there is a real danger of falling into hidden crevasses.

Appendix 7

Participant list: How to Develop Arctic Tourism Guidelines? Svalbard, January 20-22, 1996 (Updated March 1998 according to reported address changes.)

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