

The Antarctic Century

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Antarctic Treaty Parties Adopt Expansive Visitors' Guidance

At the 18th Antarctic Treaty Consultative Meeting in Kyoto, Japan, held April 11-22, 1994, the Treaty Parties broke a long deadlock and agreed on guidance for all Antarctic visitors and tour operators. The extensive, new guidance replaces the long outdated and sparse 1975 suggestions regarding visitors' conduct in Antarctica, and sets the stage for a more coordinated, Treaty-wide approach to tracking potential impacts from the increasing numbers of Antarctic visitors. A copy of the official Recommendation adopted in Kyoto may be found in this Newsletter.

The other major news coming from Kyoto was the Parties' agreement to re-fashion the structure of future, two-week-long Consultative Meetings. Beginning in May 1995 in Seoul, Korea, the first week will be focused on science and technical issues, the second week on operational aspects of the Treaty system. In that first week, the Parties also agreed to establish a Transitional Environmental Working Group to consider issues that, ultimately, will be relevant to the Committee on Environmental Protection established under the new Antarctic Environmental Protocol.

While the Parties continued discussion on the operation of a Treaty Secretariat, the deadlock over a choice of a site continued. Buenos Aires has been offered as a site for the new office, but this choice is not supported by the United Kingdom. Some believe that a new candidate will emerge before the Seoul meeting in 1995.

Ratification of the new Antarctic Protocol proceeds at a very slow pace, despite the 1994 deposits of ratifications by three

additional countries. Until all 26 Antarctic Treaty Consultative Parties deposit ratifications, the Protocol does not officially enter into force as a matter of international law. The nine countries already on board include: Argentina, Australia, Ecuador, France, the Netherlands, Norway, Peru, Spain, and Sweden. The 17 Consultative Parties that have not yet deposited ratifications include: the U.S., the United Kingdom, and New Zealand, although in all of these cases, legislation is proceeding in the respective, national legislatures. By contrast, the Antarctic Living Marine Resources Convention, otherwise known as CCAMLR, was signed in May 1980 and entered into force two years later.

In terms of an international focus on conserving an entire ecosystem, the Protocol is a rather significant achievement. In particular, it imposes a system of environmental assessment procedures on an entire international treaty regime, which includes many countries that are not used to such *a priori* evaluations. The assessment procedures would apply to the conduct of all human activities in Antarctica, as conducted by nationals of any signatory country. In addition, the Protocol substantially revises the Treaty System's protections for native fauna and flora, establishes a Committee For Environmental Protection, and strengthens the management of Antarctic protected areas that are off-limits to visitors.

At the Kyoto Meeting, a number of the "holdouts" announced progress on depositing ratifications, though hopes for the Protocol entering into force before the end of the year are slim. While the Parties have

agreed to informally abide by the spirit of the new Protocol — and, indeed, the new visitors' and tour operators' guidance is an example of this intention — the slow pace of ratification, now three years down the line, has discouraged many Antarctic observers.

In the U.S., the Clinton Administration bill to implement the Protocol (H.R. 3532) is now being considered in Congress. A number of House (Merchant Marine & Fisheries; Foreign Affairs; Science, Space & Technology) and Senate (Commerce, Science & Transportation; Foreign Relations) Committees are examining various proposals for implementing the Protocol, but no consensus has yet emerged — around the Administration's proposed legislation or any other proposal.

One Congressional staffer indicated that there has been a lack of citizen input on ratifying the Protocol: "There's absolutely nothing coming in on this," the staffer said, "and without any kind of push — from the public or the administration — this isn't going to fly anytime soon." And with the fate of the Protocol floundering in the political wind, there is renewed concern in some quarters about the closing of the Treaty System's so-called "minerals gap." As readers of the Newsletter will recall, the Antarctic Environmental Protocol evolved from the tortured and often fractious debate in the 1980s over a proposed minerals controls regime for the Antarctic. The Protocol contains a 50-year ban on all mineral resource activities, but that, too, remains in limbo.

Tourism Level Remains High

The 1993-94 austral summer was marked by a continued high rate of tourism and visitation. At least ten expedition ships regularly worked in the Antarctic Peninsula (Explorer, World Discoverer, Ioffe, Vavilov, Bremen, Hanseatic, Kapitan Khlebnikov, Molchanov, Marco Polo, and the Columbus Caravelle), with the Khlebnikov and Marco Polo also venturing to the New Zealand/Australian side of the continent. Preliminary estimates suggest that more than 7,000 people visited the Antarctic this season. This comes at a time when interest in the potential effects of Antarctic tourism remains high. Both OUTSIDE and TIME magazines recently pub-

lished articles about the stream of Antarctic tourists.

The operator with the fastest growing slice of the market appears to be Blyth & Company Travel of Toronto, Canada, which offers relatively low cost tours to The Ice. Despite spending less time per trip in Antarctica than the other operators, Blyth reported full loads for this past season and a high number of reservations for next season, when the company intends to operating two ships in Antarctica. As to the rest of the market, the Marco Polo carried up to 540 passengers on its trips this past season, which, apparently, created more than the

usual number of difficulties in getting so many people ashore. Reports are that the ship's consultant, Lars-Eric Lindblad, while still endorsing the concept of large-capacity ships for Antarctic tours, will drop back to a vessel with a somewhat smaller capacity next season.

Under the Clinton Administration's proposed legislation to implement the Antarctic Environmental Protocol (H.R. 3532), tour operators would be required to file environmental impact assessments about their operations and the State Department would be required to undertake a two-year study to determine whether or not additional measures should be taken with respect to Antarctic tourist activities.

Revised SCAR Penguin "Bible"

The Scientific Committee on Antarctic Research has recently published a updated "directory" of Antarctic penguin colonies (The Distribution and Abundance of Antarctic and Subantarctic Penguins; E.J. Woehler, compiler). This excellent publication is a follow-up to the Croxall & Kirkwood "penguin Bible" that served so many field researchers and Antarctic visitors over the past decade. The Woehler compilation is highly recommended and may be ordered directly from SCAR, The Distribution Centre, Blackhorse Road, Letchworth, Herts SG6 1HN, ENGLAND. The cost is US\$16.

Other Book News

Limited numbers of Wild Ice are still available from Oceanites at \$40 per copy (including postage and handling). Wild Ice has become an international best-seller, with U.S., U.K., Italian, French, German, Austrian, and Dutch editions now in print. There have been sales of more than 22,000 copies in the U.S., supplies are dwindling quickly. Purchases through Oceanites assist the publication of this Newsletter.

Also, Frank Todd's long-awaited book, Antarctic Splendor, will shortly be available in a U.S. trade edition. Frank is a long-standing friend of Oceanites, has made more than 100 trips to Antarctica, and has an unparalleled collection of Antarctic pictures. His photos of chinstraps on blue ice and "flying" emperor penguins erupting from ice holes are masterworks. For information about obtaining this superb book, contact David Hancock, Hancock House Publishers, 1431 Harrison Avenue, Box 959, Blaine, WA (USA) 98231-0959 (206-354-6953).

SCAR/IUCN Education Workshop

In April 1993, the Scientific Committee on Antarctic Research (SCAR) and the World Conservation Union (IUCN) convened a session in Gorizia, Italy to consider Environmental Education and Training in the Antarctic Region. The results will be published in an official SCAR volume at a future date. Among the conclusions reached by participants was that Treaty Parties should produce a lay person's guide describing the environmental aspects of the Antarctic environmental Protocol, and elaborate a comprehensive training program to assist national managers in implementing the Protocol.

Oceanites News

Antarctic Site Inventory and Monitoring Program

Oceanites has begun a research program to assist the implementation of the Antarctic Environmental Protocol, in particular, the preparation and evaluation of environmental assessments with respect to human activities at various visitor locations. The Antarctic Site Inventory and Monitoring Program intends to collect baseline information in the Antarctic Peninsula about the physical features and resident/transient fauna and flora at a representative number of locations, which, to date, have not been inventoried, even though many of these sites are heavily visited — mostly by tourists, but, also, by scientific personnel — during each austral summer. The project will generate substantial information that, presently, is unavailable.

The Antarctic Site Inventory and Monitoring Program will insure the availability of sufficient information for those who must prepare environmental assessments, as well as for U.S. government agencies, which, when the Protocol enters into force, need to make informed judgments about the likely affects of any proposed human activity, and whether or not such activity may proceed as proposed. The Protocol mandates that all human activities, before they are conducted in Ant-

arctica, must be evaluated in terms of their environmental impacts, be they direct and immediate, indirect and cumulative, actual or predicted. More importantly, the project will establish baselines for detecting and monitoring future changes in particular variables being measured at these locations. The Inventory will insure that collected data are readily accessible and available to all interested users, including all signatories to the Protocol and their nationals.

During the 1993-94 austral summer field season, Oceanites personnel examined and evaluated data formats that may be used over the longer term of the project. Actual data collection is projected to begin in late October/early November 1994.

Field Work & Meetings

Ron Naveen worked during the 1993-94 austral summer field season on the site inventory and monitoring project described above. Last April, on behalf of Oceanites, Ron participated in the SCAR/IUCN conference on Antarctic environmental education, and served on the U.S. delegation at the Treaty Meeting in Kyoto.

Ozone Layer Update

This year, The U.S. National Aeronautics and Space Administration intends to launch a long, seven-month mission to study the depletion of the ozone layer over populated areas in the Southern Hemisphere. The goal is to understand better the chemistry of ozone depletion at low and middle latitudes, compared to the chemistry of depletion over Antarctica, which is

better known. The so-called Antarctic ozone "hole" continues to widen and advance, at present covering an area larger than the United States. Despite international agreement to eliminate CFCs, this widening will continue until the mid-21st Century, when effects from CFCs will finally wane. The concern about low- and mid-latitude ozone depletion heightened in late February when the New York Times reported a study that links diminished ozone levels with the long-noted, worldwide decline of frogs and amphibians.

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In addition, we are very grateful to the many of you who made contributions and donations in the past year to assist the Newsletter. Your gracious assistance is most appreciated. We continue our efforts to distribute the Newsletter to any and all Antarcticists who may be interested — and irrespective of their ability to pay a subscription fee.

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Recommendation XVIII-1 Tourism and Non-governmental Activities

The Representatives,

Reaffirming the exceptional character of the Antarctic environment given in particular the fragility of its fauna and flora and of the setting which the Antarctic offers for the conduct of scientific activities;

Acknowledging the increase in the development of tourist activities in the Antarctic;

Noting that those who visit the Antarctic and organise or conduct tourism and non-governmental activities in the Antarctic are currently subject to legally binding obligations pursuant to national legislation implementing the Antarctic Treaty and associated legal instruments;

Noting further that such visitors or organisers will be subject to additional legally binding obligations upon entry into force of the Protocol on Environmental Protection to the Antarctic Treaty;

Recognizing the need for visitors and organisers to have practical guidance on how best to plan and carry out any visits to the Antarctic;

Recalling the Final Act of the eleventh Special Antarctic Treaty Consultative Meeting, at which the Protocol was adopted, in which the signatories of the Final Act decided that the Annexes of the Protocol should be applied in accordance with their legal systems and to the extent practicable;

Desiring to ensure that those who visit the Antarctic carry out their visits or tours strictly in accordance with existing obligations and in so far as is consistent with existing national law, in accordance with the Protocol, pending its entry into force;

Desiring further to facilitate the early entry into force of the Protocol and of the implementation of its provisions in relation to those who visit or organise tours to the Antarctic.

Recommend to their Governments that:

1. They circulate widely and as quickly as possible the Guidance for Visitors to the Antarctic and the Guidance for Those Organising and Conducting Tourism and Non-governmental Activities in the Antarctic annexed to this Recommendation.

2. They urge those intending to visit or organise and conduct tourism and non-governmental activities in the Antarctic to act in accordance with the attached guidance consistent with the relevant provisions of their applicable national law.

Guidance for Visitors to the Antarctic

Activities in the Antarctic are governed by the Antarctic Treaty of 1959 and associated agreements, referred to collectively as the Antarctic Treaty System. The Treaty established Antarctica as a zone of peace and science.

In 1991, the Antarctic Treaty Consultative Parties adopted the Protocol on Environmental Protection to the Antarctic Treaty, which designates Antarctica as a natural reserve. The Protocol sets out environmental principles, procedures and obligations for the comprehensive protection of the Antarctic environment, and its dependent and associated ecosystems. The Consultative Parties have agreed that, before its entry into force, as far as possible and in accordance with their legal system, the provisions of the Protocol should be applied as appropriate.

The Environmental Protocol applies to tourism and non-governmental activities as well as governmental activities in the Antarctic Treaty Area. It is intended to ensure that these activities do not have adverse impacts on the Antarctic environment, or on its scientific and aesthetic values.

This **Guidance for Visitors to the Antarctic** is intended to ensure that all visitors are aware of, and are therefore able to comply with, the Treaty and the Protocol. Visitors are, of course, bound by national laws and regulations applicable to activities in the Antarctic.

PROTECT ANTARCTIC WILD- LIFE

Taking or harmful interference with Antarctic wildlife is prohibited except in accordance with a permit issued by a national authority.

- Do not use aircraft, vessels, small boats, or other means of transport in ways that disturb wildlife, either at sea or on land.
- Do not feed, touch, or handle birds or seals, or approach or photograph them in ways that cause them to alter their behavior. Special care is needed when animals are breeding or moulting.
- Do not damage plants, for example by walking, driving, or landing on extensive moss beds or lichen-covered scree slopes.
- Do not use guns or explosives. Keep noise to the minimum to avoid frightening wildlife.
- Do not bring non-native plants or animals into the Antarctic (e.g. live poultry, pet dogs and cats, house plants).

RESPECT PROTECTED AREAS

A variety of areas in the Antarctic have been afforded special protection because of their particular ecological, scientific, historic or other values. Entry into certain areas may be prohibited except in accordance with a permit issued by an appropriate national authority. Activities in and near designated Historic Sites and Monuments and certain other areas may be subject to special restrictions.

- Know the locations of areas that have been afforded special protection and any restrictions regarding entry and activities that can be carried out in and near them.
- Observe applicable restrictions.
- Do not damage, remove or destroy Historic Sites or Monuments, or any artifacts associated with them.

RESPECT SCIENTIFIC RE- SEARCH

Do not interfere with scientific research, facilities or equipment.

- Obtain permission before visiting Antarctic science and logistic support facilities; reconfirm arrangements 24-72 hours before arriving; and comply strictly with the rules regarding such visits.
- Do not interfere with, or remove, scientific equipment or marker posts, and do not disturb experimental study sites, field camps, or supplies.

BE SAFE

Be prepared for severe and changeable weather. Ensure that your equipment and clothing meet Antarctic standards. Remember that the Antarctic environment is inhospitable, unpredictable and potentially dangerous.

- Know your capabilities, the dangers posed by the Antarctic environment, and act accordingly. Plan activities with safety in mind at all times.
- Keep a safe distance from all wildlife, both on land and at sea.
- Take note of, and act on, the advice and instructions from your leaders; do not stray from your group.
- Do not walk onto glaciers or large snow fields without proper equipment and experience; there is a real danger of falling into hidden crevasses.
- Do not expect a rescue service; self-sufficiency is increased and risks reduced by sound planning, quality equipment, and trained personnel.
- Do not enter emergency refuges (except in emergencies). If you use equipment or food from a refuge, inform the nearest research station or national authority afterwards.
- Respect any smoking restrictions, particularly around buildings, and take great care to safeguard against the danger of fire. This is a real hazard in the dry environment of Antarctica.

KEEP ANTARCTICA PRISTINE

Antarctica remains relatively pristine, and has not yet been subjected to large scale human perturbations. It is the largest wilderness area on earth. Please keep it that way.

- Do not dispose of litter or garbage on land. Open burning is prohibited.
- Do not disturb or pollute lakes or streams. Any materials discarded at sea must be disposed of properly.
- Do not paint or engrave names or graffiti on rocks or buildings.
- Do not collect or take away biological or geological specimens or man-made artifacts as a souvenir, including rocks, bones, eggs, fossils, and parts or contents of buildings.
- Do not deface or vandalize buildings, whether occupied, abandoned, or unoccupied, or emergency refuges.

Guidance for Those Organising and Conducting Tourism and Non-govern- mental Activities in the Antarctic

Antarctica is the largest wilderness area on earth, unaffected by large scale human activities. Accordingly, this unique and pristine environment has been afforded special protection. Furthermore, it is physically remote, inhospitable, unpredictable and potentially dangerous. All activities in the Antarctic Treaty Area, therefore, should be planned and conducted with both environmental protection and safety in mind.

Activities in the Antarctic are subject to the Antarctic Treaty of 1959 and associated legal instruments, referred to collectively as the Antarctic Treaty system. These include the Convention for the Conservation of Antarctic Seals (CCAS) (1972), the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) (1980) and the Recommendations and other measures adopted by the Antarctic Treaty Consultative Parties under the Antarctic Treaty.

In 1991, the Antarctic Treaty Consultative Parties to the Antarctic Treaty adopted the Protocol on Environmental Protection to the Antarctic Treaty. This Protocol sets out environmental principles, procedures and obligations for the comprehensive protection of the Antarctic environment, and its dependent and associated ecosystems. The Consultative Parties have agreed that, pending its entry into force, as far as possible and in accordance with their legal systems, that the provisions of the Protocol should be applied as appropriate.

The Environmental Protocol designates Antarctica as a natural reserve devoted to peace and science, and applies to both governmental and non-governmental activities in the Antarctic Treaty Area. The Protocol seeks to ensure that human activities, including tourism, do not have adverse impacts on the Antarctic environment, nor on its scientific and aesthetic values.

It states, as a matter of principle, that all activities are to be planned and conducted on the basis of information sufficient to evaluate their possible impact on the Antarctic environment and its associated ecosystems, and on the value of Antarctica for the conduct of scientific research. Organisers should be aware that the Environmental Protocol requires that "activities shall be modified, suspended or cancelled if they result in or threaten to result in impacts upon the Antarctic environment or dependent or associated ecosystems."

Those responsible for organising and conducting tourism and non-governmental activities must comply fully with national laws and regulations which implement the Antarctic Treaty system, as well as other national laws and regulations implementing international agreements on environmental protection, pollution and safety that relate to the Antarctic Treaty Area. They should also abide by the requirements imposed on organisers and operators under the Protocol on Environmental Protection and its Annexes, in so far as they have not yet been implemented

KEY OBLIGATIONS ON ORGANISERS AND OPERATORS

- Provide prior notification of, and reports on, their activities to the competent authorities of the appropriate Party or Parties.
- Conduct an assessment of the potential environmental impacts of their planned activities.
- Provide for effective response to environmental emergencies, especially with regard to marine pollution.
- Ensure self-sufficiency and safe operations.
- Respect scientific research and the Antarctic environment, including protected areas, and flora and fauna.
- Prevent the disposal and discharge of prohibited waste.

PROCEDURES TO BE FOLLOWED BY ORGANISERS AND OPERATORS

When planning to go to the Antarctic

Organisers and Operators should:

- Notify the competent national authorities of the appropriate Party or Parties of details of their planned activities with sufficient time to enable the Party(ies) to comply with their information exchange obligations under Article VII(5) of the Antarctic Treaty. The information to be provided is listed in Attachment A.
- Conduct an environmental assessment in accordance with such procedures as may have been established in national law to give effect to Annex I of the Protocol, including, if appropriate, how potential impacts will be monitored.
- Obtain timely permission from the national authorities responsible for any stations they propose to visit.
- Provide information to assist in the preparation of: contingency response plans in accordance with Article 15 of the Protocol; waste management plans in accordance with Annex III of the Protocol; and marine pollution contingency plans in accordance with Annex IV of the Protocol.
- Ensure that expedition leaders and passengers are aware of the location and special regimes which apply to Specially Protected Areas and Sites of Special Scientific Interest (and on entry into force of the Protocol, Antarctic Specially Protected Areas and Antarctic Specially Managed Areas) and Historic Sites and Monuments and, in particular, relevant management plans.
- Obtain a permit, where required by national law, from the competent national authority of the appropriate Party or Parties, should they have a reason to enter such areas, or a monitoring site (CEMP Site) designated under CCAMLR.
- Ensure that activities are fully self-sufficient and do not require assistance from Parties unless arrange-

ments for it have been agreed in advance.

- Ensure that they employ experienced and trained personnel, including a sufficient number of guides.
- Arrange to use equipment, vehicles, vessels, and aircraft appropriate to Antarctic operations.
- Be fully conversant with applicable communications, navigation, air traffic control and emergency procedures.
- Obtain the best available maps and hydrographic charts, recognizing that many areas are not fully or accurately surveyed.
- Consider the question of insurance (subject to any requirements of national law).
- Design and conduct information and education programmes to ensure that all personnel and visitors are aware of relevant provisions of the Antarctic Treaty system.
- Provide visitors with a copy of the **Guidance for Visitors to the Antarctic**.

When in the Antarctic Treaty Area

Organisers and Operators should:

- Comply with all requirements of the Antarctic Treaty system, and relevant national laws, and ensure that visitors are aware of requirements that are relevant to them.
- Reconfirm arrangements to visit stations 24-72 hours before their arrival and ensure that visitors are aware of any conditions or restrictions established by the station.
- Ensure that visitors are supervised by a sufficient number of guides who have adequate experience and training in Antarctic conditions and knowledge of the Antarctic Treaty system requirements.
- Monitor environmental impacts of their activities, if appropriate, and advise the competent national authorities of the appropriate Party or Parties of any adverse or cumulative impacts resulting from an activity, but which were not foreseen by their environmental impact assessment.
- Operate ships, yachts, small boats, aircraft, hovercraft, and all other means of transport safely and according to appropriate procedures, including those set out in the Antarctic Flight Information Manual (AFIM).
- Dispose of waste materials in accordance with Annexes III and IV of the Protocol. These annexes prohibit, among other things, the discharge of plastics, oil and noxious substances into the Antarctic Treaty Area; regulate the discharge of sewage and food waste; and require the removal of most waste from the area.
- Co-operate fully with observers designated by Consultative Parties to conduct inspections of stations, ships, aircraft and equipment under Article VII of the Antarctic Treaty, and to be designated under Article 14 of the Environmental Protocol.
- Co-operate in monitoring programs undertaken in accordance with Article 3(2)(d) of the Protocol.
- Maintain a careful and complete record of their

activities conducted.

On completion of the activities

Within three months of the end of the activity, organisers and operators should report on the conduct of it to the appropriate national authority in accordance with national laws and procedures. Reports should include the name, details and state of registration of each vessel or aircraft used and the name of their captain or commander; actual itinerary; the number of visitors engaged in the activity; places, dates and purposes of landings and the number of visitors landed on each occasion; any meteorological observations made, including those made as part of the World Meteorological Organization (WMO) Voluntary Observing Ships Scheme; any significant changes in activities and their impacts from those predicted before the visit was conducted; and action taken in case of emergency.

ANTARCTIC TREATY SYSTEM DOCUMENTS AND INFORMATION

Most Antarctic Treaty Parties can provide through their national contact points copies of relevant provisions of the Antarctic Treaty system and national laws and procedures and other information, including:

- The Antarctic Treaty (1959)
- Convention for the Conservation of Antarctic Seals (1972)
- Convention on the Conservation of Antarctic Marine Living Resources (1980)
- Protocol on Environmental Protection to the Antarctic Treaty (1991)
- Recommendations and other measures adopted under the Antarctic Treaty
- Final Reports of Consultative Meetings
- Handbook of the Antarctic Treaty System (1994)
- Handbook of the Antarctic Treaty System (in Spanish, 1991)

ATTACHMENT A INFORMATION TO BE PROVIDED IN ADVANCE NOTICE

Organisers should provide the following information to the appropriate national authorities in the format requested.

1. name, nationality, and contact details of the organiser;
2. where relevant, registered name and national registration and type of any vessel or aircraft to be used (including name of the captain or commander, call-sign, radio frequency, INMARSAT number);
3. intended itinerary including the date of departure and places to be visited in the Antarctic Treaty Area;
4. activities to be undertaken and purpose;
5. number and qualifications of crew and accompanying guides and expedition staff;
6. estimated number of visitors to be carried;
7. carrying capacity of vessel;
8. intended use of vessel;
9. intended use and type of aircraft;
10. number and type of other vessels, including small boats, to be used in the Antarctic Treaty Area;
11. information about insurance coverage;
12. details of equipment to be used, including for safety purposes, and arrangements for self-sufficiency;
13. and other matters required by national laws.

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