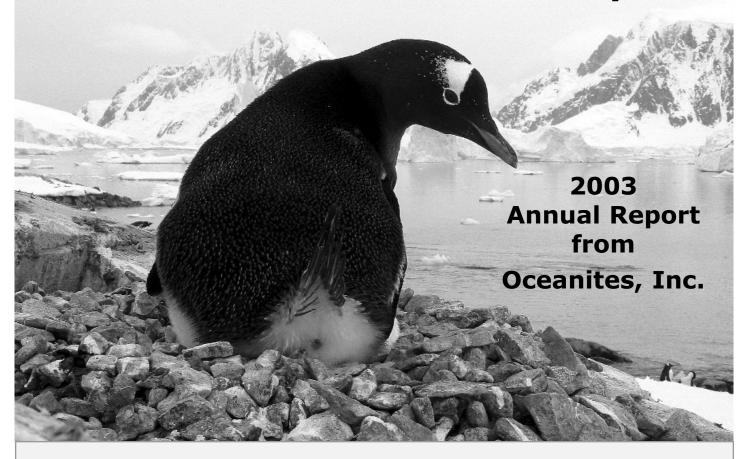
The Antarctic Site Inventory



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TO HIGHER GROUND

Science and education to conserve Antarctica for future generations — that's the goal that drives Oceanites and the Antarctic Site Inventory.

I'm pleased to report much success in the last year — the Inventory now has made 503 visits to 82 sites in the Antarctic Peninsula, the second edition of Oceanites' Compendium of Antarctic Peninsula Visitor Sites is being published by the U.S. EPA, and Antarctic Treaty countries have begun using our comprehensive database to fashion guidelines that will assist visitors in avoiding potentially environmental disruptions.

Most importantly, Oceanites has been honored with a five-year grant award from the U. S. National Science Foundation's Office of Polar Programs, to begin long-term monitoring at a key site, Petermann Island. This is wonderful validation for the project and for those of you who've taken Antarctica, penguins, and our work to heart. The Petermann effort is another step onward and upward, taking the Inventory to even higher levels of achievement.

We intend a close examination of all factors that may be affecting Petermann's population of Adélie and gentoo penguins, blue-eyed shags, and south polar skuas. Ultimately, we intend to examine why the Peninsula's blue-eyed shag population, as a whole, is declining. Are climatalogical factors like temperature rise and snow deposition adversely affecting the size or distribution of fish stocks that comprise the shags' diet? Perhaps circumstances have changed and the shags, as yet, haven't adjusted.

I'm grateful for the support you've given. The 10th anniversary field season of the Inventory begins in November 2003. The project remains on the cutting edge of Antarctic science and Oceanites remains the only wildlife or environmental non-governmental organization — US-based or international — that directly supports field studies adding to our collective knowledge of Antarctica, and to the successful, long-term implementation of the Antarctic Environmental Protocol.

No doubt, these are difficult times for conservation efforts everywhere. We, too, have felt the pinch, in particular, a collapse of funding that would have brought an Oceanites website and a new edition of *The Oceanites Site Guide to the Antarctic Peninsula* to fruition.

But I intend to persevere, continuing our track record of securing Antarctica's future — and I trust that you'll work with me to keep our good work flowing.

Ron Naveen

President, Oceanites, Inc.
Principal Investigator, Antarctic Site Inventory

November 1, 2003

Research Update

During the 2002-03 field season, Antarctic Site Inventory made 77 site visits and added six new sites to the Inventory database. All tolled, in nine seasons from November 1994 through March 2003, Antarctic Site Inventory researchers now have made 503 visits to 82 different locations in the Antarctic Peninsula.

There have been repetitive visits to all of the visitor sites that are most heavily visited by expedition tourists, and to all sites which exhibit the most species diversity and which are most prone to potential environmental disturbance from human visitors.

As you're aware from previous annual reports, the major impetus for the Antarctic Site Inventory is the 1991 Environmental Protocol to the Antarctic Treaty, which entered into force in 1994. There had been no previous effort to catalogue the biological and physical resources of Antarctic Peninsula zodiac landing sites, so the Inventory has sought to establish baselines of site-descriptive information and biological data, which will enable environmental changes to be detected and potential causes for such changes to be examined.

The Inventory's tenth anniversary field season begins in November 2003, and a full season of shipboard site visits is planned. Primary field research will be conducted from the *Endeavour*, the expedition ship operated by Lindblad Expeditions. Additional, aerial photodocumentation by the UK ice patrol vessel, *HMS Endurance*, involving key Inventory study sites, has been requested.

Experienced Inventory researchers working in the forthcoming, 2003-04 season include: Ron Naveen, Steven Forrest, Rosemary Dagit, Megan McOsker, Wayne Trivelpiece, Susan Trivelpiece, and Chris Edelin. Also, Iris Saxer, who's previously worked on other long-term penguin studies in the Peninsula, will join the Inventory this season.

Regular data collection is expected to continue at many sites that are heavily visited and which, previously, have been identified as species diverse or, potentially, most sensitive to environmental disruptions.

Long-term Monitoring at Petermann Island

Oceanites, Inc. is the proud recipient of a fiveyear grant award from the U. S. National Science Foundation's Office of Polar Programs, which enables the Inventory to initiate long-term monitoring and assessment at a key tourism site, Petermann Island.

Key data sets will involve two important biologi-

cal parameters for penguins and blue-eyed shags — breeding population size (number of occupied nests) and breeding success (number of chicks per occupied nests) — and will be collected over five field seasons, 2002-07.

Importantly, these data sets will be collected precisely during the respective peaks of egg-laying and chick-créching, ensuring their utility in detecting direct and cumulative impacts on these populations.

If impacts are detected, this leads to examining whether the changes are naturally occurring, caused by tourism or other human activities, or result from other direct, consequential, synergistic, and cumulative effects.

With respect to penguins, data will be collected in full accordance with Standard Methods established by the CCAMLR Ecosystem Monitoring Program (CEMP), and will be fully comparable with similar data sets being collected throughout the Peninsula. Data collection with respect to blue-eyed shags will follow similar methodologies.

Petermann Island was selected because, over the fourteen-year period 1994-2003, it ranks 6th in terms of numbers of visitors and zodiac landings, is diverse in species composition, and sensitive to potential environmental disruptions from visitors. The long-term data sets from Petermann Island will add considerably to the base of Antarctic Peninsula scientific knowledge, and contribute to a better understanding of biological processes in the entire region.

The Antarctic Site Inventory camp at Petermann Island will be established in early November 2003. During the first round of data collection, which concludes in early December 2003, the on site, Oceanites team will be: Ron Naveen, Steve Forrest, and Toby Koffman.

The second round of data collection begins in early January 2004 and concludes a month later, and the on site, Oceanites team will be: Ron Naveen, Rosi Dagit, and Toby Koffman.

The Inventory routinely publishes data and information it collects. The long-term data sets from Petermann Island will be disseminated similarly. These data enable the detection of environmental impacts, assist management decisions by the Antarctic Treaty Parties, and add to our collective, scientific knowledge of the Peninsula.

The 26th Antarctic Treaty Consultative Meeting

The Antarctic Site Inventory database played a significant role at the recently concluded, 26th Consultative Meeting of Antarctic Treaty countries, at which tourism and potential environmental effects were discussed at length.

The United Kingdom submitted a Working Paper based on the Antarctic Site Inventory database, which proposed site guidelines for four sites — Penguin Island, the Aitcho Islands visitor site, Cuverville Island, and Jougla Point.

Key discussion topics included: a uniform database on non-government activities and the capacity of existing data sources and databases to provide needed information; how the site-specific guidelines proposed by the UK might provide an effective means of providing guidance for tour operators and environmental protection for localities that are already used by tourists; and high risk "adventure tourism," particularly, safety and environmental impact aspects of such activities.

The proposed site guidelines will be re-examined at the 27th Consultative meeting to be held in Capetown, South Africa, in 2004. At that time, the Treaty's Committee On Environmental Protection will examine: the format and scope of such guidelines, using the models presented by the U.K. as a starting point; a system for prioritization of sites for which guidelines are developed; and a timescale for the development and finalization of such guidelines.

In addition, it was agreed that there will be an intersessional meeting of experts on tourism, which will be held in March 2004 in Norway.

On another front, after many years of discussion, the Treaty Parties agreed to establish an Antarctic Treaty Secretariat in Buenos Aires, Argentina.

Oceanites Site Compendium, 2d Edition

The fully revised, second edition of Oceanites' Compendium of Antarctic Peninsula Visitor Sites will be published and distributed by the U.S. Environmental Protection Agency.

This revision covers all 82 sites visited and censused by the Antarctic Site Inventory in nine field seasons, November 1994 through March 2003, revises subarea maps and orientation maps, adds a large number of site-specific photodocumentation, updates analyses of visitor frequency and distribution, and adds analyses and discussion of each site's species diversity and sensitivity to potential environmental disruptions.

Previous site descriptions have been updated and all site descriptions have been reformatted.

Unfunded Needs — Website, Site Guide, Peninsula GIS Analysis

Shipboard fieldwork in the forthcoming, 2003-04 season is supported by generous donations and contributions from the public at large.

In particular, Oceanites thanks Lindblad

Expeditions for its persistent, unending efforts to generate a new and large generation of "Antarcticists" among its Antarctic guests, all of whom are committed to the Great Seventh Continent.

And, as noted above, we are enormously grateful to the U.S. National Science Foundation's office of Polar Programs, for its support of Oceanites' new, long-term monitoring effort at Petermann Island.

We continue to seek support for other initiatives that are consistent with Oceanites' goal of science and education to conserve Antarctica for future generations. Our three, primary, unfunded needs are:

- 1. Website. In terms of disseminating biological data and conservation information to the international Antarctic community, Oceanites intends to produce the most comprehensive, possible website regarding the Antarctic Peninsula and its resident fauna and flora.
- 2. Site Guide to the Antarctic Peninsula. This handy, pocket-sized guide is out of print. The book contains descriptions, maps, and photographs of key Peninsula visitor locations. A second edition is planned, with revised maps and site descriptions, and broadening the book's contents to appeal to a wider range of people interested in Antarctic.a
- 3. Peninsula-wide global information system (GIS) analysis. The new work at Petermann Island ultimately will spawn our effort to examine various biological, climatological, and physical processes that may be affecting life in the Antarctic Peninsula. This data analysis will be expensive, but potentially yields a more compelling understanding the Peninsula's web of life.

Contact Numbers

If you or your family's foundation would like to adopt one of these initiatives — and make a definitive, long-term contribution to the long-term conservation of Antarctica, please contact Ron Naveen and Oceanites directly at:

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<u>Cover photo</u>: Gentoo penguin at Petermann Island, by Ron Naveen (© 2003 Oceanites)