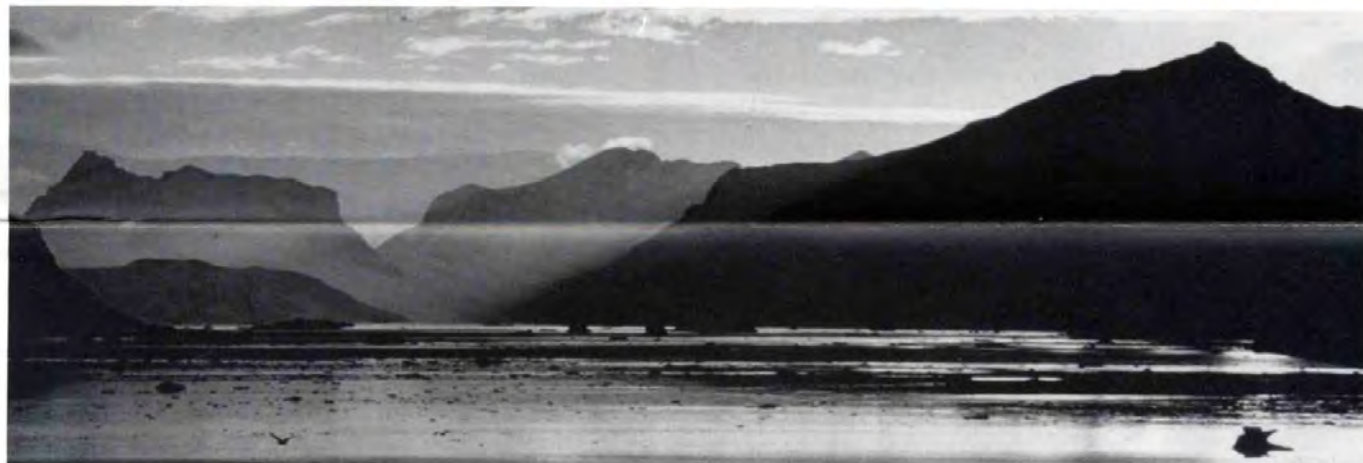


The Antarctic Century

NUMBER 1

OCTOBER 1988



© Ron Naveen

The Antarctic Treaty System

Let's start with a little trivia.

Can you name the peace treaty that's been signed by 38 countries representing more than three-fourths of the world's population? No, not the Treaty of Versailles.

Here's a hint. The same historical document was the world's first nuclear test ban treaty, and demilitarized and denuclearized 10% of the Earth's surface. No, not the SALT Agreement, and not the ABM Treaty, either!

More clues. The same agreement turned one of our continents into a veritable nature and environmental preserve, where animals roam much as they did millenia ago. This agreement also suspended discussion about the ownership of territory by any country, and allowed nationals from many countries to meet and work without the restraints of passports and visas.

A Modern-Day Magna Carta

The answer, believe it or not, is the Antarctic Treaty, an incredibly sparse document of about six pages that has only twelve operative provisions. This little gem of an agreement was signed on December 1, 1959, became effective on June 23, 1961, and nears its 30th anniversary in 1991, when it might be reviewed or, possibly, changed. It is a modern-day Magna Carta—a bellwether in the course of human history, an inspiration and testament to the success that can be achieved through human cooperation and foresight. Whether by luck or by its own notable lack of complexity, it has produced the kind of world imagined in one of John Lennon's best, post-Beatle songs—a world built on hope and mutual trust—comprising a brotherhood of people, living in peace. Hard to believe, but these romantic dreams actually

exist, in the very special place that surrounds the South Pole—Antarctica, the last pristine ecosystem on Earth.

What exactly is this Treaty? How does it work? How do countries join? What resources are there, crying out for preservation and protection? What are the concerns for Antarctica's future? These questions, and more, are our focus here.

(continued on page 2)

Special Thanks to:

The Tinker Foundation, whose generous support has made publication of this Newsletter possible, and to a very special Antarcticist, Martha T. Muse, for her dedication, inspiration, and enthusiasm.

An International Agreement

The genesis of the Treaty was an international scientific effort in the late 1950s called the International Geophysical Year (IGY), when scientists converged on Antarctica to explore its almost unknown and unexplored scientific riches, including studies of the atmosphere, glaciers, magnetism, biology, and meteorology. To insure the fullest cooperation during this period, there was free access between and among the visiting scientists and their bases. Following IGY's conclusion, the twelve countries that spearheaded this unprecedented effort sought to preserve the peaceful, scientific cooperation that had emerged. The Antarctic Treaty was rather enthusiastically conceived and born.

A "treaty" is an international agreement that produces various legal and political realities: a group of countries gets together, decides on a course of action, officially signs a flurry of documents, then proceeds to carry out the agreement's terms. These agreements ultimately rise to the level of prevailing international law, and may become the major impetus for protecting a certain group of animals, preserving sensitive regions, or limiting the spread of weapons. Given the ramifications, there usually is a lot of bickering between and among negotiating countries about various positions. Not surprisingly, the Antarctic Treaty had to deal with a substantial, political "hot potato": the territorial claims of seven countries, three of which—the Chilean, British, and Argentinian sectors—overlapped in the Antarctic Peninsula area. This particular dispute was resolved by a significant compromise: the countries agreed to disagree and, essentially, stopped discussing the issue! The Antarctic was to be for everyone, with free passage and access guaranteed to all.

The Treaty's Essential Principles: Dedicated to Science

The Treaty is stark in its simplicity, and details are few, especially in contrast to, say, the recent nuclear arms agreements, with many details about throw-weights, warheads, and ranges. Its beauty is the cooperative respect that nations have afforded the Treaty's essential principles for preserving the Antarctic environment and heritage: that Antarctica—defined as the area south of 60° S. Latitude—shall be used for peaceful purposes only; that there shall be freedom of scientific investigation and a free exchange of scientific information; that there shall be no military measures nor weapons testing, no nuclear explosions, and no nuclear waste disposal; that there shall be free movement and inspection among the various nationals working in the Antarctic; that the countries shall take measures to further the Treaty's objectives, including the preservation and conservation of living resources; and that the countries shall discourage activities that are contrary to the Treaty's principles. Any United Nations member is eligible to join.

Science is the ticket because to join the Antarctic "club," a country has to set up a research station and scientific program, and commit lots of valuable resources to pursue this effort. These countries become



© Ron Naveen

"consultative" parties—the voting members with the right to make decisions at the biennial meetings of the Treaty countries. (Today, there are more than 65 research stations on the continent, about two-thirds of which maintain overwintering personnel.) Countries that don't mount a research effort still can join the system as nonvoting participants called "acceding" parties, and are bound to uphold the Treaty's general principles.

The "Club"

The twelve original countries signing the Treaty were: Britain, Norway, France, New Zealand, Argentina, Australia, and Chile—all of whom had made earlier claims to parts of the Antarctic, as well as South Africa, Belgium, Japan, the United States, and the Soviet Union—none of whom had ever made a claim to Antarctic territory. In addition to these twelve, and as of this writing, ten other countries have become voting members of the Antarctic Treaty system: Poland, Brazil, West

(continued on page 5)

The newsletter and its contents are solely the property of OCEANITES and may not be used without its permission. OCEANITES, Inc. is a non-profit foundation incorporated under the laws of the State of Maryland, and a Section 501 (c) (3) tax-exempt organization under the provisions of the U.S. Internal Revenue Code. Contributions and bequests are fully deductible as provided by the Code.

The Antarctic Century Newsletter is edited by Ron Naveen. Additional copies are available on request. Please address all correspondence to OCEANITES, 2378 Rt. 97, Cooksville, MD 21723. (301) 854-6262. ©1988 Oceanites, Inc.

A Letter From Pekoe



August 24, 1988

SOMEWHERE AT THE EDGE OF THE PACK ICE

Dear Ron:

Well, pal, it's just about over, the ice is starting to move, and we've managed to fend off another Antarctic winter here at the edge. So, it goes!

Fortunately, there's been a lot of food, and we've gotten real fat and chubby.

When you were here last February, I had little time to tell you about the crazy things that've been happening. I particularly hated this talk about the big ozone "hole" in the sky. Lots of you "Redhoppers" were saying that it was big and dangerous, but if you covered up, there'd be nothing to fear. (I like calling you people "Redhoppers" because of the funny colored clothes you wear down here.) Hey, what about us guys? We don't have parkas or sunglasses, and that radiation might hurt those krill we like to eat. We Chinnies are worried, too!

The days are getting longer, which means that we'll soon be starting south for Point Thomas, near the Polish Arctowski Station on King George Island, to set up house again. As you know, last year was pretty tough. Krill was a lot harder to find, and I hope that all of those trawlers and fishing boats aren't the reason. We had trouble finding food for the chicks, and it was touch-and-go getting them to fledge.

I'll try sending a few more letters before we get too busy defending territory. I'm hoping that the pack breaks early, and that the spouse gets back quickly to our little rock pile.

We're real excited you'll be spreading the word about the Antarctic and us Chinstraps. Pretty nifty! We really need to reach out and touch more Redhoppers. They need to know that we're anxious about too much fishing, and oil and gas exploration. We'll keep you informed about these activities.

By the by, I know this is kinda frivolous, but can you send a little music down here, I mean, something to break up our Chinnie cacophony? My King Penguin buddies at South Georgia liked that symphony with the visiting Maestro a few years ago, and we wouldn't mind some relief from our noisy neighbors!

That's about it, for now. Keep the faith, and keep us posted on what's happening. We'll keep a watch down here. And think kind thoughts about us Chinnies!

Love and kisses,

Pekoe

Ed. Note: *Pekoe is our feisty Chinstrap Penguin friend who lately has been breeding at King George Island in the Antarctic Peninsula. Through these letters, we hope to keep up-to-date on Antarctic events from Pekoe's point of view.*

The Antarctic Century BOARD

• Shipboard Tourism, 1988-1989.

Another round of shipboard Antarctic tourism is about to begin, potentially carrying at least 3090 passengers to The Ice.... Typically, the expedition companies conduct these tours between November and February, often visiting South Georgia and the Falkland Islands in addition to the Antarctic Peninsula. Society Expeditions, based in Seattle, WA, will be operating 15 trips, total, on its two ships, the **World Discoverer** (120-130 passengers) and the **Society Explorer** (90-100 passengers). Lindblad Travel, based in Westport, CT, will be operating seven trips aboard the Russian vessel **Antonina Nezhdanova** (90 passengers, maximum). Travel Dynamics, based in New York, will be operating six trips aboard the **Illyria** (125 passengers, maximum). In previous seasons, there has been an increase in shipboard tours operated aboard both Argentine and Chilean vessels, but upcoming schedules on these vessels are uncertain.... Apparently, last season's restricted visitation rules at the U.S. Palmer Station will be relaxed to allow more tourist visits, assuming operators follow the Treaty Recommendation requiring 72 hours advance notice.

• Ad Hoc Tourist Guidelines.

A group of experienced Antarctic expedition leaders and lecturers, all of whom have worked aboard various tourist ships in The Ice, have begun an effort to generate some easily applied guidelines for Antarctic tourist visits. These suggestions would amplify presently existing recommendations requiring visitors to avoid interfering with Antarctic wildlife and disturbing the Antarctic ecosystem. Under consideration are: a satisfactory **passengers-to-guides** ratio, to insure that all visitors are adequately super-

vised; a **shipboard anti-dumping pledge** by all shipboard crew, staff, and passengers (because of the insidious nature of plastics, and in respect of the soon-to-be-effective anti-plastics provisions of the international ocean dumping treaty); **suggested, minimum distances** from, and around the periphery of, Antarctic animals—perhaps, 15 feet (5 meters) with respect to penguins, seabirds, and crawling seals — to avoid disturbance and, in the case of penguins, to avoid assisting skuas and sheathbills from seizing a few extra penguin eggs or chicks — and 60 feet (18 meters) from Kerguelen (Southern) Fur Seals, which, at certain times during the austral summer, can be particularly aggressive; and **"a leave no footprints"** policy, to avoid disturbance to Antarctica's fragile lichens, mosses, and grasses that may not regenerate for upwards of a hundred years.

• **Mineral Negotiations.** The Antarctic Treaty "voting parties" recently concluded some long negotiations about potential minerals development in the Antarctic. As noted in this issue's lead focus, the Treaty parties often have supplemented the basic Treaty with additional agreements, and the minerals text is the latest. It will be open for signature in November. The emerging debate is whether or not the parties have successfully balanced the need for environmental protection against potential prospecting and extraction activities. At present, there is no minerals prospecting or exploitation occurring in Antarctica. Heavy hydrocarbon residues and many valuable minerals have been speculated, but their viable extraction is not at all certain.

• **Ocean Dumping Annex V.** On December 31, 1988, Annex V of the MARPOL Convention becomes effective, internationally. This treaty concerns the intentional disposal and loss of wastes generated by vessels at sea, and Annex V specifically attempts to prohibit the disposal of ship-generated garbage and plastics at sea. To date, nine Antarctic Treaty countries have ratified this treaty: West Germany, France, Japan, Norway, Poland, the United States, the Soviet Union, Britain, and Uruguay. The Commission established under the Antarctic Living Marine Resources Treaty has recommended that member fishing ves-

sels use posters advising crew members not to dump plastics overboard and to retain non-biodegradable items for later, safe disposal.

• **Postage Stamps.** Australia recently issued a series of postage stamps that feature native Antarctic animals and which celebrate Australian activity in The Ice. In addition, the U.S. Postal Service has issued a series of postage stamps honoring Admiral Byrd and three other Antarctic explorers. Byrd was first depicted on a U.S. postage stamp in 1933. The other explorers to be honored with this new issue are: Nathaniel Palmer, likely the first American to see the Antarctic, and often credited with being the **discoverer of the Antarctic Peninsula in 1920**; Charles Wilkes, who discovered large parts of the Antarctic continent during his 1838-42 expedition; and Lincoln Ellsworth, who led four Antarctic expeditions and flew over both Poles.

• **Meetings.** The annual meeting of the Commission governing the Antarctic Living Marine Resources Convention takes place in October, in Hobart, Tasmania, Australia.... A special meeting, in Paris, of the Antarctic Treaty "voting" countries has approved "voting" status for Spain and Sweden, with Peru and Ecuador asking to be considered at the next opportunity.... In July, the U.S. National Science Foundation (NSF) held a hearing in Washington about the need for further enforcement regulations under the Antarctic Conservation Act.... In July, the U.S. Congressional Research Service held a one-day workshop about U.S. participation in the Antarctic Treaty System, and ways and means that such participation can be improved.... The September meeting under the Antarctic Seals Treaty approved a new scientific reporting procedure, prohibited the taking of Weddell Seal pups, took steps to prohibit the introduction of canine distemper, and noted that near-term commercial sealing was unlikely.

AT A GLANCE

Admiral Richard Byrd.

October 25 is the 100th birthday anniversary of Admiral Richard Byrd, the great American Antarctic explorer. The chief highlights of Byrd's first expedition to Antarctica, in 1928-30, were the first flight over the South Pole and Chief Scientist Dr. Laurence McKinley Gould's discovery of the Beacon Sandstone, which linked Antarctica's geological past to that of the other continents. Byrd returned in 1933-34, during which expedition he almost died while solely operating the Bolling weather station, 120 miles from his base camp of Little America. Byrd's aerial exploration activities in the Antarctic are a substantial legacy. He amassed five expeditions to Antarctica, the last visit coinciding with the activities of the International Geophysical Year.

Byrd also contributed much to the romance and lore of The Ice. In his classic *Alone*, describing his trials and tribulations at the Bolling station, Byrd said: "We are caught in the winds that blow every which way. And in the hullabaloo the thinking man is driven to ponder where he is being blown and to long desperately for some quiet place where he can reason undisturbed and take inventory." Reflecting on his accomplishments, Byrd added: "It's not getting to the Pole that counts. It's what you learn of scientific value on the way. Plus the fact that you get there and back without being killed."

On October 25, The Antarctic Society will sponsor its 1988 Paul C. Daniels Memorial Lecture, about Admiral Byrd, to be presented at the Byrd Polar Research Center, Ohio State University, by historian Peter Anderson.

Let's Hear From You.

The Antarctic Century Newsletter is being distributed to members of Congress, interested Congressional staffers, zoos, parks, and aquaria, scientists, educators, scientific institutions, and contributors to Oceanites. Please let us know if there are any other present or future Antarcticists whom we might have missed. Help us grow! Also, please keep us up-to-date on any news and information about Antarctica, and feel free to comment on the Newsletter and its contents. WE NEED TO HEAR FROM YOU!

Germany, Uruguay, China, India, Italy, East Germany, Spain, and Sweden. There are presently 16 nonvoting members: Czechoslovakia, Denmark, Netherlands, Rumania, Bulgaria, Papua New Guinea, Peru, Hungary, Finland, Cuba, South Korea, Greece, North Korea, Austria, Ecuador, and Canada. Of these, Peru and Ecuador are candidates to join the voting ranks.

The prime vehicle for conducting Treaty business is the biennial meeting of the parties, at which policy "Recommendations" are adopted by consensus vote (meaning that all must agree), then, theoretically, implemented by laws and regulations in the various participating countries. To date, more than 160 recommendations have been adopted.

The Keystone: Protecting Flora and Fauna

One of the most important recommendations is officially called the Agreed Measures of Flora and Fauna, adopted in 1964. The Agreed Measures provide the environmental outline for protecting Antarctica's staggering resources: 33 million seals; 500,000 whales; more than 60 million seabirds and penguins; tons of fish and krill. Krill is the small, shrimp-like crustacean that is the mainstay of the Antarctic ecosystem, unquestionably the "power lunch" of countless numbers of Antarctic marine mammals and seabirds.

The Agreed Measures prohibit the killing, wounding, and capturing of native mammals and birds, require participating countries to take appropriate measures to minimize harmful interference with these animals, and require the countries to alleviate pollution and prohibit the introduction of non-native species. In addition, the Agreed

Measures set aside special areas—Specially Protected Areas (SPAs)—that are completely off-limits to visitors and scientists. These were supplemented in 1972 by a recommendation approving Sites of Special Scientific Interest (SSSIs), which are designed to protect scientific investigations at certain locations, and which can be visited only if proper permits are obtained. At the moment, 17 SPAs and 29 SSSIs have been recommended, although not all of them have been thoroughly implemented by corresponding laws and regulations in the respective Treaty countries.

The Treaty's Success: Filling the Gaps

A widely held view is that the Treaty has succeeded because member countries have anticipated environmental challenges, and dealt with these matters fairly quickly and constructively. Presently, the Treaty countries are exploring the use of environmental impact statements for all Antarctic science and logistical activities, considering the need to update earlier recommendations about waste disposal at scientific bases, and looking at possibilities for Antarctic land-use planning.

Where recommendations alone could not close certain, major gaps, the Treaty countries added new agreements to the framework. The first of these was the Convention for the Conservation of Antarctic Seals (into effect in 1978), followed by the Convention on the Conservation of Antarctic Living Marine Resources (into effect in 1980), and the recently concluded Antarctic Minerals Convention (open for signature in late 1989, but not yet in effect). (The International Whaling

(continued on page 6)



© Ron Naveen

Convention was already in force when the Antarctic Treaty became effective in 1961, and is recognized by the Treaty countries.)

The Living Marine Resources Treaty, also called the "krill treaty," focuses on the Antarctic's ocean ecosystem, its fish, krill, and other marine populations, and the possible protection of these resources. Last season, the Commission established under this Treaty banned the catch of two species of Antarctic fish thought to be depleted. Efforts are still underway to determine how much krill exists, and whether it can be harvested without detriment either to the krill population as a whole, or to krill's non-human consumers. The minerals regime attempts to balance the need for environmental protection against the possible exploration for, and exploitation of, valuable minerals, oil, and gas. (These concerns will be discussed in future issues of the Newsletter.)

The Treaty's Success: Mutual Cooperation

That there has been some success is all the more curious because the Treaty provides for no police force, nor have the voting countries recommended one, although there is the right to freely inspect other countries' operations. Carrying out the Treaty's principles and recommendations requires the countries to cooperate, and to adopt appropriate laws and regulations at home.

Will the Delicate Balance Continue?

Some issues — both short-term and long — have not yet been resolved: the establishment of a Treaty Secretariat (essentially, a clearinghouse) to improve the exchange of scientific and other information; greater participation by nonvoting Treaty members, as well as nongovernmental organizations, in discussions and deliberations about Treaty business; the crowding of too many

scientific bases on King George Island in the Antarctic Peninsula area; pollution and waste disposal at all Antarctic bases, and the control of ocean dumping by support ships and tourist vessels. The time has probably come for revised rules and regulations to monitor and control the increasing Antarctic tourist trade.

Respecting the new Treaties that have been added, there are serious concerns about the overfishing of marine resources and the potential environmental degradation of the continent from minerals activities. Then, there are Third World fears that the Antarctic's resources won't be shared, the possibility of the United Nations attempting to assert greater authority in the Antarctic region, and the potential for a review of the Treaty in 1991. Mistakenly, there is an impression that the basic Treaty automatically expires 30 years after its effective date. That's not correct, but the Treaty does allow for a review conference to be called by a member country on this anniversary date.

Will there be such a review of the Treaty's workings and operations? The answer probably lies in the ability of the Treaty countries—again, representing more than three-fourths of the world's population—to continue evolving positively as an organization. One view is that if the parties continue—as they have done—to address Antarctica's constantly changing ecosystem in a timely fashion, and to determine ways and means of preserving the Treaty's delicate balance, then Antarctica will be preserved for future generations. The responsibility is a weighty one, because the risk is that of losing Earth's last pristine haven.

