

# Oceanites 2018 Annual Report



## To all Oceanites supporters and friends,

I report to you a very successful year championing science-based conservation and increased awareness of climate change and its potential impacts through the lens of penguins and Antarctica.

Our work continues to influence Antarctic Treaty decision-making, we've expanded our public outreach about climate change and adaptation, and taken strong steps to ensure Oceanites' long-term success via an expanded board of directors and advisory board.

Along with such positive outcomes, however, I'm also chastened — as we all must be — by the latest reports of the UN's Intergovernmental Panel on Climate Change (IPCC) and the US National Climate Assessment, both of which certify that climate change impacts have moved firmly into the present and are increasing. We're proud to be your penguin, Antarctic, and climate change 'eyes and ears' and, now, more than ever, I ask for your continued, generous support so we may keep our unique scientific work and penguin-oriented public outreach going.

On a very positive note, we celebrate the 25th anniversary field season of our Antarctic Site Inventory and the increased visibility and use of our Antarctic continent-wide penguin database known as MAPPPD (Mapping Application for Penguin Populations and Projected Dynamics).

Indeed, Oceanites and the Antarctic Site Inventory remain *the only* non-governmental science project working in Antarctica and the *only* project monitoring and analyzing change across the vastly warmed Antarctic Peninsula.

On the penguin conservation front, we published our second *State of Antarctic Penguins* report and continue to assist the krill fishers' voluntary effort to establish a no-fishing buffer zone around penguin colonies. As well, our MAPPPD database has moved 'center stage' as plans for a possible Antarctic Peninsula marine protected area are being discussed.

In terms of outreach, we had a successful World Penguin Day event on April 25, 2018 at the US Library of Congress and we'll have a US Public Broadcast System (PBS) film crew with us for part of the Inventory's field season, leading to a series of nationally televised segments in 2019.



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We are making a difference and we want you to help us sustain our momentum, ensuring Oceanites' work into the future. On behalf of all of us furthering the message and cause of climate change, penguins, and Antarctica — we are grateful for your support. Keep dreaming penguins and Antarctica!

As always, onward, upward!

A handwritten signature in black ink, appearing to read "Ron".

Ron Naveen  
President, Oceanites, Inc.  
December 2, 2018

**The 2018-18 Antarctic Site Inventory  
Field Season — Counting Penguins:  
Season 25**

The 25th field season of Oceanites' Antarctic Site Inventory (ASI) has begun. We are once again working closely with One Ocean Expeditions and two of its two vessels, *Akademik Sergei Vavilov* and *RCGS Resolute*, expecting 100 or more visits at core sites we census regularly from season to season.

This season's roster of researchers includes: Ron Naveen, Steve Forrest, Grant Humphries, Catie Foley, Maureen Lynch, Michael Schrimpf, Alex Borowicz, Rachael Herman, and Helen Eifert.

Over 24 seasons, the ASI has completed 1,957 census visits at 235 sites. Oceanites remains the *only* non-governmental organization with its own science program, the ASI, which has operated continually since 1994. We also are the *only* organization monitoring, detecting, and analyzing change across the entire, vastly warmed Antarctic Peninsula. Here, gentoo penguin populations have increased significantly; Adélie penguin populations in parts of this region have declined significantly; and chinstrap penguin populations have declined and, at some locations, significantly.



**Outreach**

- **State of Antarctic Penguins Report**
- **Library of Congress Children's Program**
- **PBS in The Ice with Oceanites, Inc.**
- **Updated Website**

On World Penguin Day, April 25, 2018, utilizing the MAPPPD database developed for Oceanites, we published the second *State Of Antarctic Penguins* report (<https://bit.ly/2weARYw>), once again summarizing the status — population size and population trends — of Antarctica's five penguin species, continent-wide and in key regions — the Antarctic Peninsula (CCAMLR Areas 48.1, 48.2 and 48.5), the Ross Sea

(CCAMLR Areas 88.1 and 88.2), and East Antarctica (CCAMLR Areas 58.4.1 and 58.4.2). These species total at least 6.1 million breeding pairs nesting at 661 or more sites across the entire Antarctic continent.

Also on World Penguin Day, Oceanites was the centerpiece of a children's educational program at the Library of Congress, under the auspices of its "Young Readers Center" and through its office of Educational Outreach. We partnered with the Maryland Zoo, which brought an African penguin to the event. The program was covered by both ABC News and The Washington Post. Plans are underway for another such program on the next World Penguin Day, April 25, 2019.

We will also have a US Public Broadcast System (PBS) film crew with us for part of the Inventory's field season, leading to a series of nationally televised segments in 2019.

Oceanites' climate change, penguin, and Antarctic outreach was assisted by a major enhancement of and revision to the Oceanites website — <https://oceanites.org>. Please take a look!



**Oceanites, Internationally**

- **CCAMLR**
- **No-Fishing Buffer Zones**
- **Climate Analyses**

**CCAMLR**

This past October, in Hobart, Australia, Ron Naveen and Grant Humphries, who oversees the MAPPPD database, attended the 37th meeting of the Commission for the Conservation of Marine Living Resources (CCAMLR), with Oceanites once again sitting as an invited and independent expert observer to these sessions.

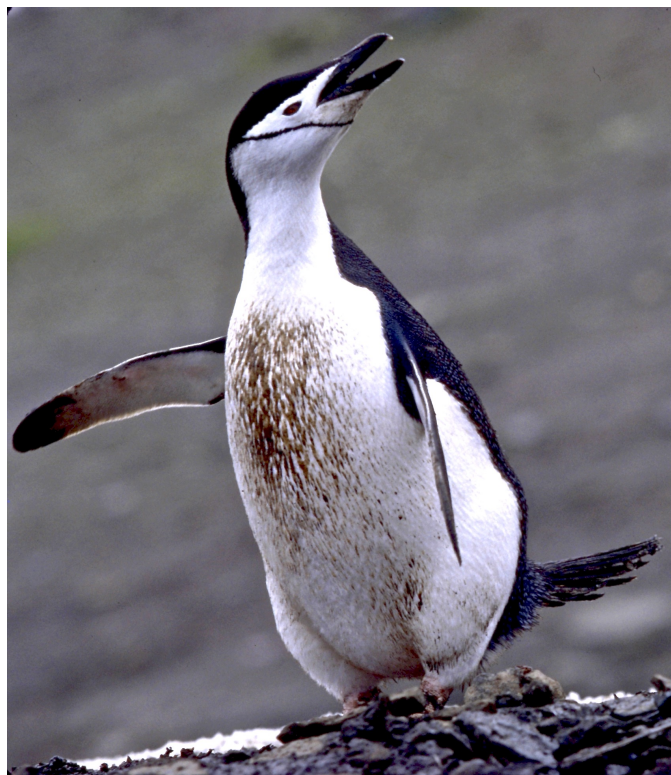
From the vantage of Oceanites' championing science-based conservation, we had multiple discussions with fellow penguin scientists, statistical experts, and diplomats from Argentina, Belgium, Norway, the UK, the US, Australia, New Zealand, and Chile, all aimed at increasing the flow of penguin population data into our continent-wide MAPPPD database. It is gratifying that MAPPPD is increasingly being used by other Antarctic researchers and, over the past year, was cited in 13 peer-reviewed scientific publications.

On larger matters before countries that are members of this Commission, three proposed marine protected areas (MPAs) — East Antarctica, Weddell Sea, Antarctic Peninsula — were not adopted, despite vigorous support around the table, except from China and Russia. The depressing irony is that all of this played out simultaneously with news of further collapse of the Pine Island glacier in West Antarctica, producing an iceberg five times the size of Manhattan.

**No-Fishing Buffer Zones**

In addition, we continued fruitful discussions with members of the Association of Responsible Krill Harvesting companies (ARK), both in regard to their fishing data assisting Oceanites' analysis of climate change impacts and Oceanites assisting ARK in its voluntary efforts to implement fishing buffer zones in the vicinity of penguin breeding colonies.

Because of the concern about potential fishing impacts on penguins, it is excellent to be using our data to encourage ongoing, voluntary efforts by this particular stakeholder, absent other officially adopted measures. Again, what drives this forward is Oceanites putting data and scientific analyses on the table that truly force the system forward.



## Climate Analyses

In 2016, Oceanites accepted the challenge of establishing an international interdisciplinary effort to bring together available scientific, tourism and fisheries data for the Antarctic Peninsula region in an attempt to *distinguish the direct and interactive effects of climate change, fishing, tourism, and national operations on the Antarctic Peninsula ecosystem.*

Oceanites has taken this forward, working cooperatively with members of the Association of Responsible Krill fishing companies (ARK) so Oceanites may independently analyze historic and recent krill fishing catch/effort data vis-a-vis data on penguin breeding/foraging locations and climate change impacts in the Antarctic Peninsula. The analytical work is expected to involve a minimum of 3-5 years to complete.

## MAPPPD

MAPPPD is an open access decision support tool that The Lynch Lab for Quantitative Ecology (Stony Brook University), and Black Bawks Data Science Ltd. (UK) developed for Oceanites. Funded by a grant from the US National Aeronautics and Space Administration (NASA), MAPPPD was designed as a comprehensive database and search tool for community-contributed and published data on the population status and population trends of Antarctic penguins. We encourage everyone to take a look at: <http://www.penguinmap.com>.



MAPPPD's mission is to integrate expert biological field surveys, satellite and drone imagery analyses, and citizen science to provide the most comprehensive, publicly available database regarding the distribution and abundance of Antarctic penguin populations. The MAPPPD tool went 'live' in October 2016 and presently comprises data from 661 sites across the entire Antarctic continent, including 3,630 records from 110 sources of on-the-ground colony counts and satellite photo analyses.

MAPPPD keeps Oceanites and the Antarctic Site Inventory on the front lines of Antarctic science. While the Inventory is the *only* project effectively monitoring penguins and flying bird population changes across the entirety of the vastly warmed Antarctic Peninsula, MAPPPD takes things even further, assembling all known penguin population data across the whole of the Antarctic continent.

MAPPPD is the cornerstone of our *State of Antarctic Penguins* reports. It also will be used in our climate change analyses over the next 3-5 years and assist our effort to distinguish the direct and interactive effects of climate change, fishing, tourism, and national operations on the Antarctic Peninsula ecosystem.



All photographs by Ron Naveen, ©2018 Oceanites, Inc.

- p.1: Adélie penguins, Penola Strait
- p.2: Chinstrap penguins, Baily Head
- p.3, top: Gentoo penguin chicks, Petermann Is.
- p.3, bottom: Chinstrap penguin, Barrientos Is.
- p.4: Adélie penguin and chicks, Petermann Is.