Oceanites 2017 Annual Report



To all Oceanites supporters and friends,

As I write this, we are celebrating our 30th anniversary and the start of the 24th Antarctic Site Inventory field season. With climate change upon us, this is a time for action and securing our future.

We're proud to be your penguin, Antarctic, and climate change 'eyes and ears.' We trust, in this holiday season, you'll continue to generously support our unique scientific work and public outreach.

Oceanites and the Antarctic Site Inventory remain *the only* nongovernmental science project working in Antarctica and the *only* project monitoring and analyzing change across the vastly warmed Antarctic Peninsula. We are making a difference, and we need your help to sustain our momentum.

I report to you a successful year of penguin conservation:

- Assisting the non-fishing buffer zone adopted by 80% of the krill fishers in the Antarctic Peninsula;
- Increased visibility and use of our Antarctic continent-wide MAPPPD database; and,
- Kicking off climate change analyses examining the interplay of climate and other stressors on the fragile Antarctic environment.

We also had a successful year of climate change outreach — a national NBC broadcast about our work, the release of *The Penguin Counters* documentary, and the first annual *State of Antarctic Penguins* report.

You can help ensure Oceanites' work into the future. As always, we are grateful for your support. Keep dreaming penguins and Antarctica! As always, onward, upward! With all best wishes,

in

Ron Naveen President, Oceanites, Inc. November 28, 2017



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The 2017-18 Antarctic Site Inventory Field Season – Counting Penguins: Season 24

The 24th field season of Oceanites' Antarctic Site Inventory (ASI) has begun. We are once again working closely with One Ocean Expeditions and its two vessels, *Akademik loffe*



and *Akademik Sergey Vavilov*, to achieve up to 150 visits at core sites we census regularly from season to season. This season's roster of researchers for our twelve departures includes: Ron Naveen, Steve Forrest, Melissa Rider, Catie Foley, Maureen Lynch, Grant Humphries, Michelle LaRue, and Sam Urmy.

Over 23 seasons, the ASI has completed 1,819 census visits at 226 sites. Oceanites remains the *only* nongovernmental organization with its own science program, the ASI, which has operated continually since 1994. We are the only organization monitoring, detecting, and analyzing change across the entire, vastly warmed Antarctic Peninsula. Here, gentoo penguins are increasing their numbers and extending their range southward, while Adélie and chinstrap numbers are in decline across the region.

Outreach

- The Penguin Counters & NBC
- State of Antarctic Penguins Report
- Library of Congress Children's Program

The Penguin Counters documentary about climate change and our chinstrap penguin work at Deception Island is now available via Amazon and iTunes. In June, Ron Naveen and Heather Lynch, Oceanites' science adviser, were featured in an NBC News story about climate change, penguins, and the Antarctic, narrated by veteran journalist Harry Smith (watch on YouTube: https://tinyurl.com/hspenguin).



On World Penguin Day, June 25, 2017, utilizing the MAPPPD database developed for Oceanites by Dr. Lynch and NASA, Oceanites published the *State of Antarctic Penguins* 2017 report (SOAP 2017). This report, for the first time in 24 years, comprehensively summarized the status, population size and population trends of Antarctica's five penguin species (download SOAP 2017 PDF: <u>https://tinyurl.com/soap2017</u>). SOAP 2017 received worldwide online and print coverage including: USA Today, CBS, PBS, Scientific American, Time, and U.S. News & World Report. Oceanites will be updating these *State of Antarctic Penguins* reports annually.

The Library of Congress, under the auspices of its "Young Readers Center" and through its office of Educational Outreach is working with Oceanites to develop and hold an educational program focused around World Penguin Day on April 25, 2018. Oceanites will be the centerpiece when the Library of Congress hosts the event with Ron Naveen reading excerpts from one of the books he has authored. The educational outreach will tie into the Library's World Digital Library project.

Oceanites, Internationally

Oceanites' paper about recent results, findings, and research was submitted to the 2017 Antarctic Treaty Consultative Meeting in Beijing by the Scientific Committee on Antarctic Research (SCAR).

This past October, in Hobart, Australia, Ron Naveen and Grant Humphries, who oversees the MAPPPD database, attended the 36th 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 Oceanites' perspective, the meeting successfully advanced our mission of championing science-based conservation. The Mapping Application for Penguin Populations and Projected Dynamics (MAPPPD) achieved considerable notice and attention. This included multiple discussions with fellow penguin scientists and statistical experts from Argentina, Belgium, the US, the UK, France, Australia, Chile, and China about contributing data to MAPPPD and utilizing the MAPPPD database and population projection models in their forthcoming analyses.

We've already used MAPPPD during the last fishing season to prepare penguin buffer zone maps that were utilized by all members of the Association of Responsible Krill Fishers (ARK), whose member companies represent 80% of the krill fishery in the Antarctic Peninsula. We'll be analyzing the effectiveness of such implementation once we have the data from this last season.

If a major concern regarding penguin conservation is the potential impact from fishing, it's a positive result and enormously effective if our data assist these voluntary efforts in the absence of other officially adopted measures,. The tourism industry, for example, already does a considerable amount of self-regulation, so, similarly proactive measures by the krill fishing industry should be encouraging. Again, what drives this forward is making our data and scientific analyses available.



MAPPPD

MAPPPD (Mapping Application for Penguin Populations and Projected Dynamics) went live in October 2016. MAPPPD was developed for Oceanites by The Lynch Lab at Stony Brook University and the US National Aeronautics and Space Administration (NASA). We encourage everyone to take a look at <u>PenguinMap.com</u>.



MAPPPD keeps Oceanites and the Antarctic Site Inventory on the front lines of Antarctic science. No question, 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.

The MAPPPD database is managed by Drs. Heather Lynch and Christian Che-Castaldo, Stony Brook University, and Dr. Grant Humphries, Black Bawks Data Science Ltd. UK. It presently comprises data from 660 sites across the entire Antarctic continent, including 3,478 records from 106 sources of on-the-ground colony counts and satellite photo analyses.

MAPPD is the cornerstone of our *State of Antarctic Penguins* reports. It will used in our climate challenge analyses over the next 3-5 years. This will aid our effort to distinguish the direct and interactive effects of climate change, fishing, tourism, and national operations on ecosystems in the Antarctic Peninsula region for improved environmental management.



All photographs by Ron Naveen, ©2017 Oceanites, Inc.

p. 1: Chinstrap penguins, Baily Head p. 2, bottom: Chinstrap penguin at Barrientos Is. pp. 2, top; 3-4: Adélie penguins, Paulet Island.