



2017

Annual Report to Members



**Your impact on
polar bear conservation**



**Our mission is to
conserve polar
bears and the sea
ice they depend
on. We also work
to inspire people
to care about
the Arctic and its
connection to our
global climate.**

Across the Circumpolar North

Together, we're having an impact

The tiny cub popped its head out of the den and scampered onto the snowy slope of a remote mountain in Svalbard, its first moments in the wide world captured by our remote cameras.

Working with partners at the Norwegian Polar Institute and the San Diego Institute for Conservation Research, our Svalbard polar bear den study is adding to our understanding of polar bear denning behavior—critical information in a changing Arctic.

Polar Bears International's strong scientific credentials have earned us a unique place in the polar bear world. For example, we are the only nonprofit with two employees invited to serve as members of the IUCN Polar Bear Specialist Group. We also regularly participate in Polar Bear Range States meetings and working groups, contributing to circumpolar management plans and conservation efforts.

This work is possible because of you. Thanks to your generosity, PBI's support of research related to polar bear conservation includes projects as diverse as a Traditional Ecological Study with elders in Alaskan communities to field work on Canada's Hudson Bay.

Your support also enables our staff to work on the front lines to prevent people and polar bears from being killed in conflict with one another, a tragic situation as more bears are driven ashore by melting ice.

PBI's educational outreach spans the globe as well, with programs like our Tundra Connections® webcasts airing from Kiev to Vancouver and many places in between. Our polar bear cams, media interviews, website, and social media carry our message further—as do the more than 50 zoos, aquariums, and museums in our Arctic Ambassador Center network.

As we look ahead, we're excited to announce the construction of a new PBI House in Churchill, the polar bear capital of the world, by the end of 2018. This will allow us to engage visitors from around the world in polar bear conservation while also providing a base camp for our staff.

Together, we're working to secure the polar bear's future across the circumpolar North, from snow dens in Svalbard to the shores of Hudson Bay. And for that we thank you, every single day.

Gratefully,



Krista Wright

Krista Wright
Executive Director



Krista Wright

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2017

Conservation Highlights



Snug in the Den: Keeping a Polar Bear Mom and Cub Safe

When a pregnant polar bear decided to dig her snow den under a bridge leading to a busy industrial area on Alaska's North Slope, a remote den-study camera system developed by Polar Bears International and Brigham Young University turned out to be just the tool to keep the family safe.

"The U.S. Fish and Wildlife Service asked if we could help monitor activity at the den site to minimize disturbances," said PBI's BJ Kirschhoffer. "And, of course, we were happy to help."

During the three-month-long denning period, the FWS set guidelines that greatly reduced traffic on the bridge. Industry staff members monitored the live footage from the camera 24/7 to watch for the moment when the family emerged.

On March 18th, all traffic was halted when a polar bear mom and cub popped out of the den. The road didn't reopen until two weeks later, after the family departed for the sea ice to hunt seals.

"Despite the strange location, it was a denning success story," Kirschhoffer said. "It was wonderful to see our camera system put to good use— not only to help this family, but also to gain knowledge that will help in better protecting denning polar bears across the Arctic."



© Hannah Voorhees/polarbearsinternational.org

Learning from Alaskan Elders

As part of a Traditional Ecological Knowledge study, Dr. Hannah Voorhees began interviewing experts and elders from villages along the Southern Beaufort Sea, collecting life histories related to polar bear encounters and memories, and also gathering perspectives on changes over time. Such studies can improve scientific understanding, strengthen ties, and directly engage communities in conservation efforts.

Helping to Protect Maternal Dens

PBI continues to refine potential den detection methods to pinpoint the locations of polar bear moms and cubs hidden under the snow. With the Arctic National Wildlife Refuge now green-lighted for exploration, and human activity increasing across the Far North, the ability to map den locations will help minimize industrial disturbances to denning families.



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Laying the Groundwork in Russia

Thanks to an invitation from Quark Expeditions, PBI traveled to Russia's Franz Josef Land in 2017. Two PBI staff members gave talks to passengers on polar bears, sea ice, climate change, and conservation efforts. They also spoke at length with staff from the Russian Arctic National Park, exploring ways to collaborate for the benefit of polar bears. These discussions paved the way for projects beginning in 2018 and 2019.



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Sea Ice Ecology Study

Studying polar bears on the sea ice has always been challenging, but new tech tools—including ear tags and detailed sea ice images from remote sensing devices—are helping scientists better understand how polar bears are responding to melting ice. By helping to fund this University of Alberta project, we're also gaining insights on two poorly understood groups: young polar bears and adult males.



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On the Frontlines with Polar Bears

In 2017, the most widely read paper in the *Wildlife Society Bulletin* was a comprehensive look at polar bear attacks co-authored by Geoff York, our senior director of conservation.

The study, led by Dr. James Wilder of the U.S. Fish and Wildlife Service, took a deep dive into polar bear attacks, both current and historical, tallying how many were reported each year across the circumpolar Arctic. It also analyzed the age, sex, and condition of the polar bears in question; the causes and outcomes; and the success of deterrence measures.

"Gathering such historical data is critically important in a warming Arctic," York said. "Wildlife managers and scientists have long predicted that polar bear encounters will increase as more polar bears are driven ashore by melting sea ice. By understanding the reasons behind attacks, we can work proactively to help prevent them."

Polar Bears International continues to focus on conflict reduction efforts across the Arctic, with work currently centered around sharing best practices for avoiding negative encounters, combined with researching non-lethal methods of fending off attacks.



2017

Conservation Highlights

Global Effort to Reduce Conflict

PBI scientist Geoff York continued his two-year term as chair of the Polar Bear Range States task force on reducing conflict between polar bears and people. Representatives from the five polar bear nations—Canada, Greenland, Norway, the U.S., and Russia—joined York in working to address the issue, with a goal of reducing bear deaths and keeping people safe.



Svalbard Den Study

A PBI team headed to Svalbard for the second year of a polar bear maternal den study in partnership with the Norwegian Polar Institute and the San Diego Zoo Institute for Conservation Research. The project uses remote cameras to study polar bear behavior at den sites, helping scientists learn more about this sensitive period in the polar bear's life cycle as snow and ice conditions change.



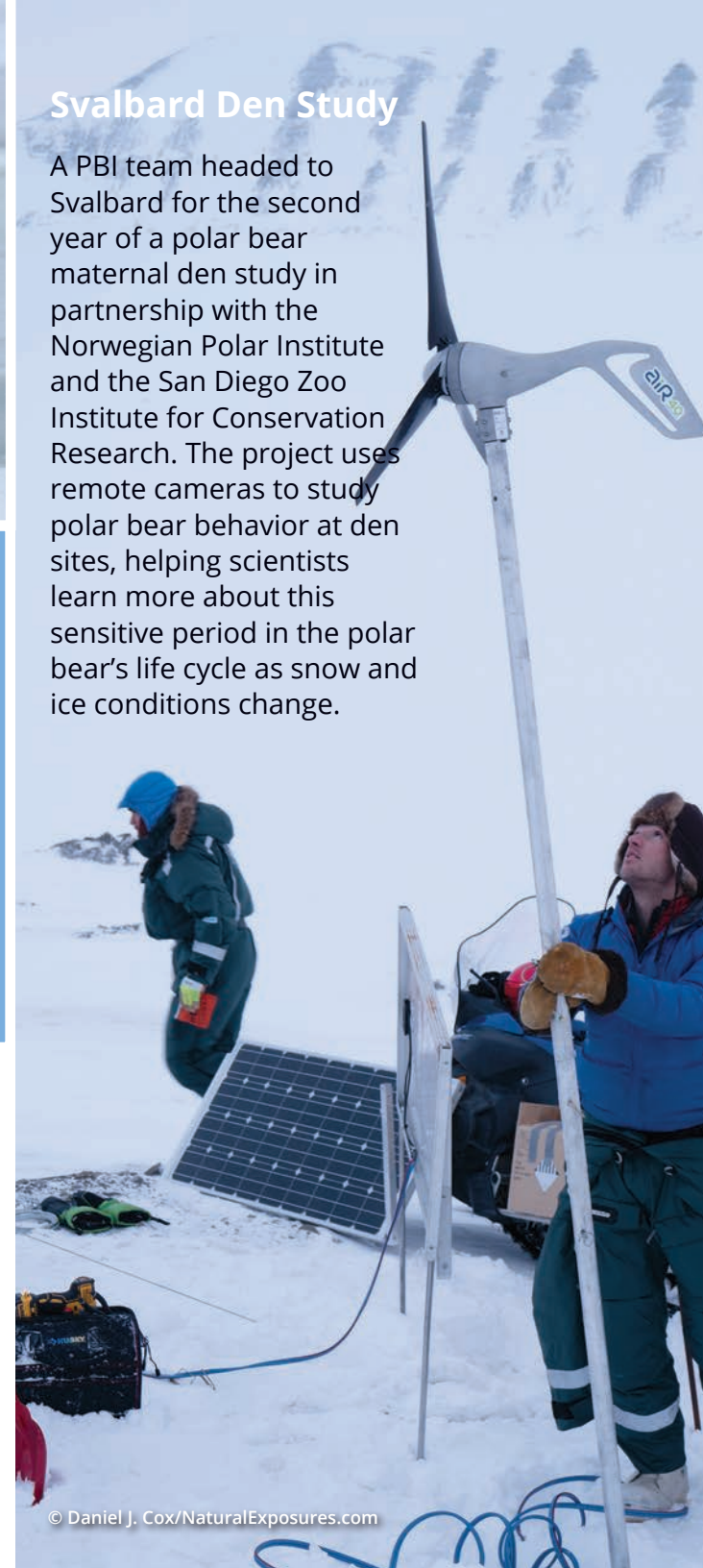
World Ranger Day Award

Every year, PBI recognizes the courage and commitment of rangers who work on the front lines of their communities to prevent harmful encounters between polar bears and people. In 2017, we honored the dedicated men and women of the Polar Bear Alert Program. Run by Manitoba Sustainable Development, the team helps the town of Churchill, Canada live safely with its bears.

Safety Coloring Book for Kids

As more polar bears enter villages in search of food, safety is a growing concern. To help kids in Arctic communities learn how to avoid encounters with polar bears—and what to do if they see a bear—PBI worked with partners to produce a coloring book that includes bear facts and safety information. It has proved extremely popular across the North, with requests for versions in additional languages.

Avoid Smelly Areas: Don't Play Near Garbage Dumps or Carcasses



2017

Conservation Highlights

Motivating Action to Save Our Sea Ice

The day was hot. The crowds were huge. And the commitment to climate action was nothing short of amazing.

At last spring's People's Climate March in Washington, D.C., hundreds of thousands of people poured into the U.S. capital—and more than 375 sister marches took place around the globe.

Polar Bears International staff, members, and graduates of our Climate Alliance program joined the throngs in D.C., arriving a day early for training on effective civic engagement.

Throughout the year, we work to promote action on climate change to save the sea ice that polar bears depend on for their survival—through our educational programs, our strong social media and website outreach, and like-minded partners.

Graduates of our Climate Alliance training expand our reach as part of their work with the nearly 50 zoos, aquariums, and museums in our Arctic Ambassador Center network. And we spread the message further through media interviews and our results-oriented Save Our Sea Ice Campaign, including International Polar Bear Day, Arctic Sea Ice Day, and Polar Bear Week.

All with a goal of inspiring action on climate to help polar bears—and people too.

Arctic Cams

Our polar bear, northern lights, and beluga whale cams, in partnership with explore.org, once again provided a window into the Arctic, inspiring millions of people to care. Combined with live chats, blog posts, and message boards that encouraged questions and dialogue, we helped bring a face to climate change and shared information on how to take action.



Media Outreach

Every year, we work with media on stories focused on polar bears, highlighting the threat of climate change and its impacts on the Arctic. Wild Kingdom TV, Al Jazeera, and French public television filmed with us in 2017, with programs scheduled to air in 2018. Other coverage included NPR, the Weather Channel, the BBC, National Geographic, and the Associated Press.



COP23 in Bonn

For the fourth year in a row, PBI sent a representative to the UN Climate Change Conference, speaking up for polar bears and Arctic issues. At the summit, the majority of nations reaffirmed their commitment to the Paris Climate Agreement, with the U.S. the only exception. However, a strong coalition of U.S. cities, regions, businesses, and universities pledged their support.



Tundra Connections Webcasts

Launched by PBI more than 10 years ago, our live broadcasts from the tundra by polar bear scientists and other experts are popular with classes of all ages. Students love the chance to take a virtual trip to the Arctic, and they come with questions—including how to help. Along with our Project Polar Bear Contest, the program involves students around the globe in polar bear conservation.



Early Warning System for Polar Bears



People who live and work in the Arctic tend to have polar bears on their personal radar, especially during seasons when the bears are forced ashore by melting ice, away from their seal prey. As the ice-free periods become longer and polar bears spend more time on shore, wildlife managers and scientists expect conflicts with people to increase.

That's why Polar Bears International is actively exploring ways to help communities avoid dangerous conflicts—including researching whether surveillance technology can be used to detect a polar bear as it approaches a town.

"We're testing an interesting compact radar surveillance tool called the SpotterRF®," said BJ Kirschhoffer, PBI's director of field operations. "Devices like these were designed to help the military spot threats like drones, people, and vehicles, but they're starting to be used for wildlife, too."

The SpotterRF® has several advantages. First, it can withstand the Arctic's extreme weather. Also, because it's a radar system, it can detect an object in heavy fog, whiteout conditions, or complete darkness—situations that can be challenging for human patrols.

"We're exploring whether it could work as an early warning system for Arctic communities," Kirschhoffer said. "If wildlife managers can spot a polar bear as it approaches a town or work station, they'll be able to use non-lethal deterrents to drive the bear away."

PBI received permission from the town of Churchill, Manitoba—the polar bear capital of the world—to test the system. Because the community reliably attracts polar bears every year, it's an ideal location for such purposes.

With help from NMS Security, a Native corporation from Alaska, and Utah's Hogle Zoo, which is helping to fund the project, PBI mounted the device on Churchill's community center, which looks out to a known movement corridor for polar bears.

Installing the equipment in late fall—after Hudson Bay had frozen and the area's polar bears had fanned out across the ice to hunt seals—is giving PBI plenty of time to fine-tune the system before the ice melts in summer and the area's polar bears arrive back onshore.

"We're monitoring the stream from our U.S. office," BJ said. "We're training it to tell the difference between a vehicle, dog, or person—teaching it to make decisions based on the size, speed, and location of the target. And if an object never moves, the system learns that it's an inanimate object, like a big rock."

"The work we're doing now should have us well prepared for this summer. Our goal is to train the system to correctly identify polar bears, triggering an alert before they cross the first road or the edge of town."

Ultimately, the SpotterRF® could be a useful tool for work stations and communities across polar bear country. It could complement the work of wildlife officers and help northern communities without the resources for human patrols.



2017 at a Glance

7.45 million views of our polar bear content—from live chats to cams

9 polar bear research projects conducted and/or funded

3 conflict reduction projects conducted and/or funded

546,000 participants in Tundra Connections and other educational programs

421,080 social media followers

4,266 media articles, with a combined potential reach of 1.9 billion

6 lectures and public talks

51 zoos and aquariums in our Arctic Ambassador Center network, from 24 U.S. states, 4 Canadian provinces, and 6 European countries

281 community leaders trained since the beginning of our Climate Alliance program

3 research papers in peer-reviewed journals

2 book chapters

478 Project Polar Bear contestants, representing 16 teams from 7 countries

12 full-time staff—a small, highly focused team

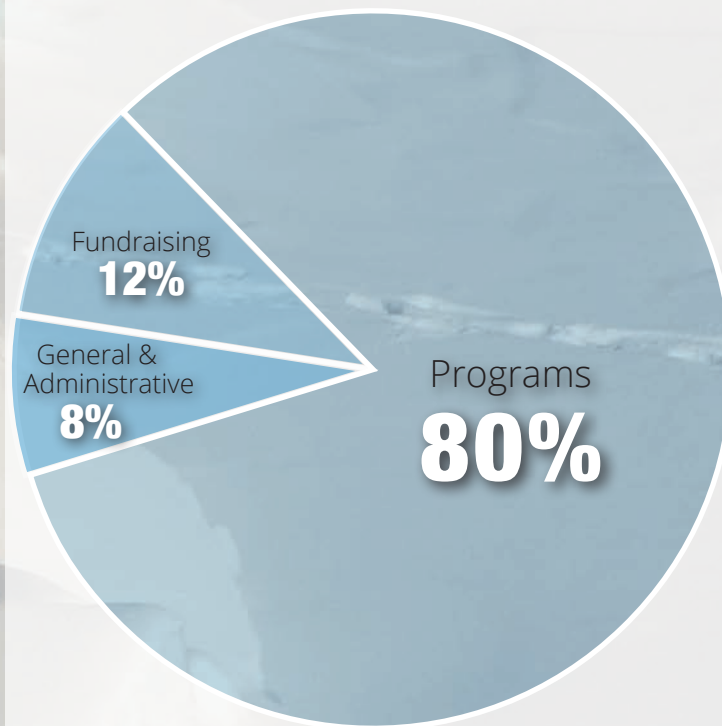
2017 by the Numbers

2017 source of funds

Contributions	\$	1,690,207
In-kind		594,583
Restricted contributions		408,327
Sales		0
TOTAL SUPPORT	\$	2,693,117

2017 use of funds

Research and Programs	\$	1,809,132
General and Administrative		172,494
Fundraising		270,717
TOTAL EXPENSES	\$	2,252,343
END OF THE YEAR NET ASSETS	\$	1,050,424
CHANGES IN NET ASSETS	\$	448,079





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POLAR BEARS INTERNATIONAL
PO BOX 3008
BOZEMAN, MT 59772
polarbearsinternational.org

*Sustaining a future for polar
bears across the Arctic.*

