



The Antarctic Society

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NOTE FROM THE PRESIDENT

Given that the world has recently experienced its hottest week on record, with historically-low Antarctic sea ice and unprecedented sea surface temperatures (see p.4), I'm hesitant to offer a "warm welcome" to the July newsletter, but I am glad you are here! I continue to be honored and humbled to be in the role of President of this Society, following in the footsteps of extraordinary individuals, communicating with our diverse membership, and working with our dedicated Board to remain functional and stimulating.

I am greatly encouraged that many new members have joined us in the last year — welcome to you all. I joined the Antarctic Society because, like many of you perhaps, I was told that for a very small investment, I could gain access to a great newsletter, website full of history and information, network of remarkable individuals, and fun biennial gatherings of kindred souls. Happily, that is all still true. Additionally, we now have periodic on-line lectures and socials, efforts to cultivate closer relationships with other polar organizations, interesting and growing archives, more artifact acquisitions, better outreach, updated policy documents, and exciting plans for future endeavors.

We had a terrific turnout for our '22 Gathering in Vermont and are looking forward to meeting up in Boulder in '24. We even have some ideas in the works for 2026! For now, however, I'd like to thank our Board of Directors and Ex-Officio Officers for their dedication and service, as well as all of our members, new and old, for your support and interest. If you are potentially interested in being even more involved in the Society, September marks the first election of Officers under the Bylaws amended in 2020. We are calling for additional candidates for President, Vice-President, Treasurer, and Secretary. Please notify me or Secretary Joan Boothe if you would like to be on the ballot. Eventually, we'd like to lighten our fabulous Webmaster-Treasurer's workload and are particularly eager to find someone interested in helping out in those areas. Dive into this issue and learn about our upcoming Gathering, Society Archivist Charles Lagerbom's successful effort to get *Hero's* anchors to a suitable museum, and other member-focused Antarctic news. As always, we welcome your input as we continue to move the Society forward. Stay cool!

Liesl Scherthanner, President

2024 Gathering Update

by 2024 Gathering Working Group



NCAR Tree Plaza

The 2024 Gathering in Boulder, Colorado continues to take shape. We now have **61** registrants and **36** of the Colorado Chautauqua lodging units have been reserved. Chautauqua has generously offered four additional lodging units in the Columbine Lodge at our contract rates, which we have accepted. All of the remaining lower-cost units available at Chautauqua are now under our contract. These additional units are now included on our website and registration form.

We are also making good progress on lining up presenters for the Gathering. A preliminary list of the invited speakers, along with their biographies, is linked on our 2024 Gathering website page: <https://www.antarctican.org/2024-gathering>

Following the great success of the 2022 Gathering Auction, we are organizing a similar event for 2024. **Might you have something you can donate to the Auction?** We invite you to take a ramble through your Antarctica memorabilia and consider donating to benefit your Society. Or, perhaps, you would prefer to offer a service to fellow members. Possibilities include creating a picture book of digital images or creating a catalog of souvenir patches or making a digital recording of selected text. You get the idea. How might you share your expertise with your fellow Antarctic Society members for the benefit of the Society?

Send information on what you may like to donate as well as ideas, questions, and comments to the 2024 Gathering Auction Committee Chair, Diana Logan, at antarctican.auction@gmail.com.

We have changed our tour destination for the final day, Wednesday. The National Ice Core Facility could not accommodate our group, but we have arranged for a guided tour at the National Center for Atmospheric Research (NCAR) in Boulder. NCAR scientists have been involved in Antarctic research analyzing the effects of climate change on Antarctica. We are also renting the Tree Plaza on the east side of NCAR for our catered picnic. The views from Table Mesa where NCAR is located are spectacular!

We urge members planning to attend the 2024 Gathering to register and reserve a lodging unit early. This promises to be an outstanding Gathering that you won't want to miss!

Would You Like to be a Society Officer?

September marks the first election of President, Vice-President, Treasurer and Secretary under the Bylaws amended in 2020. If you are interested in serving in any of those roles, please consider self-nominating for one or more positions. To do so, send your preferences for position(s), a brief biography and a picture to Secretary Joan Boothe at hoodooskr@aol.com.

Society's Privacy Policy Adopted

by Tom Henderson

At its June 25 meeting, the Society's Executive Board passed the first formal privacy policy ever adopted by the Society. The policy is now posted on our website at: <https://www.antarctican.org/privacy>.

The policy addresses the use of members' personal information and states that members must "opt-in" to allow disclosure of their personal information to other members. To this end, we have created an online Privacy Preferences page on the website where members may quickly check boxes to identify which of their information they wish to disclose to other members.

Please go to:

<https://www.antarctican.org/privacy-policy-member-preferences>. You may also request additional information or a hard copy of the form to fill in and mail by contacting the webmaster at webmaster@antarctican.org or Antarctic Society Webmaster, 35 Cherry Street, Unit 701, Burlington, VT 05401.

Note that per the policy none of the members' personal information will ever be disclosed to the public. The secure members-only, password-protected area of the website is the only place opted-in data is shared with other members. Sharing is through a link to the member's name on the Members List web page.

We encourage members to share as much of their contact information as they wish. One of the purposes of our Society is to allow members to network and this is an excellent way for us to get to know each other! The personal biographical sketches, for example, are a great resource.

SCAR-HASS 2023

by Kirsten Carlson

I didn't know my Ice connection could get any stronger than my first Antarctic Society gathering last year. I was blown away by the shared knowledge of the group and the open-armed welcome. It was as close as I'd felt to being on the Ice since being in Antarctica in 2017. Well, attending my first Scientific Committee on Antarctic Research conference in Portugal was identical to that experience but with a global representation of Antarcticans from South America, Australia, New Zealand and South Africa. It seemed the entire Southern Hemisphere of Antarctic-focused Humanities and Social Science (HASS) scholars were in attendance, along with strong UK and US cohorts. I met people I only knew from emails, books and research papers. There was no way to attend every presentation but each one I went to enriched and expanded my understanding of how humanity is shaping Antarctica, and how vital it is to navigate our future presence there. Many of the talks helped reaffirm my belief that the 7th continent

belongs to everyone, and no one country. The presenters and attendees at SCAR-HASS stressed the importance of the Antarctic Treaty, geopolitics and the approaching 5th International Polar Year in 2032. The next SCAR Open Science conference is in 2024, Chile is the proposed host.

View conference abstracts and photos at: <https://zenodo.org/record/3831004> and <https://photos.google.com/share/AF1QipMJR8R9BgLc2Eum6Mw8kBCDGrx9OXJU3rp8Z1cw4qrn31NHZ81DtNoAuMJk21AKjQ?pli=1&key=VWtzcHRiQ3c2TGdpc0VmWjRTVXpqTlctVzhRRmJ3>

Hero's Anchors go to Maine Museum

by Charles Lagerbom



Plaque to accompany *Hero* anchors at Sail Power and Steam Museum of Rockland, Maine

On Saturday, July 29 (which also happened to be World Anchor Day), representatives of the Antarctic Society presented two 814-lb Baldt anchors used as bower anchors aboard the NSF Foundation research vessel *Hero* to the Sail Power and Steam Museum of Rockland, Maine. An accompanying plaque and photo of the anchors were presented to Capt. Jim Sharp, the museum's founder. Capt. Sharp knew and worked with Arctic veteran John T. "Jack" Crowell who was instrumental in bringing *Hero* to life. Launched in March 1968 at the Harvey F. Gamage shipyard in South Bristol, Maine, the wooden trawler science platform *Hero* worked for 16 years as the face of U.S. science and research in the Tierra del Fuego, Cape Horn, Drake Passage and Antarctic Peninsula regions. Upon retirement in 1984, *Hero* went through a series of owners and eventually sank in 2017 at its mooring in Bay Center, WA

Ballard Marine Construction of Washougal, WA salvaged these anchors and made them available to the Antarctic Society for conservation and preservation. The Antarctic Society is proud that these pieces of Maine maritime history will reside at the Sail Power and Steam Museum.

Climate Records Tumble, Leaving Earth in Uncharted Territory

by Georgina Rannard, Erwan Rivault, Jana Tauschinski, BBC, July 22, 2023

The breaking of a series of climate records has alarmed some scientists, who say their speed and timing is unprecedented, while dangerous heatwaves in Europe could break more records.

"I'm not aware of a similar period when all parts of the climate system were in record-breaking or abnormal territory," says Thomas Smith, an environmental geographer at London School of Economics. "The Earth is in uncharted territory" now due to global warming from burning fossil fuels, as well as heat from the first El Niño - a warming natural weather system - since 2018, adds Dr Paulo Ceppi of Imperial College London.

Here are four records broken this year:

hottest day ever recorded : Average global temperature topped 17°C for the first time, reaching 17.08°C on July 6, according to EU climate monitoring service Copernicus, breaking the global average temperature record set in 2016.

hottest June recorded: The average global temperature in June this year was 1.47°C above the typical June in the pre-industrial period. Humans started pumping greenhouse gases into the atmosphere when the Industrial Revolution started around 1800.

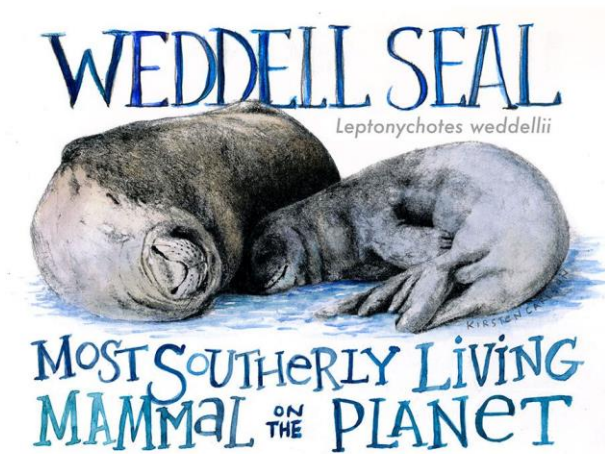
extreme marine heatwaves: The average global ocean temperature has smashed records for May, June and July and is approaching the highest sea surface temperature ever recorded, which was in 2016. In June, temperatures off the west coast of Ireland were between 4°C and 5°C above average, which the National Oceanic and Atmospheric Administration classified as a category 5 heatwave, or "beyond extreme."

record low Antarctic sea-ice: The area covered by sea-ice in the Antarctic is at record lows for July. There is an area around 10 times the size of the UK missing, compared with the 1981-2010 average. The current dramatic reduction could also be due to local weather conditions or ocean currents, explains Dr Caroline Holmes at the British Antarctic Survey. She emphasizes it is not just a record being broken - it is being smashed by a long way. "This is nothing like anything we've seen before in July. It's 10% lower than the previous low, which is huge." She calls it "another sign that we don't really understand the pace of change." She adds, "You can say that we've fallen off a cliff, but we don't know what's at the bottom of the cliff here. I think this has taken us by surprise in terms of the speed of which has happened. It's definitely not the best case scenario that we were looking at - it's closer to the worst case."

Antarctic Artists & Writers Back On

by Kirsten Carlson

The Antarctic Artists and Writers Program is back after being on hold a few years. Applications for the 2024/25 Antarctic field season are now being accepted through August 31, 2023. The program has been restarted as part of Polar STEAM, an NSF-funded project run by an interdisciplinary team at Oregon State University. OSU was awarded the grant in September 2022 and is facilitating virtual and field deployments over the next five years. Their vision is to create the conditions for curiosity to thrive by facilitating integrated Polar STEAM programs that embody inclusivity and authentic collaboration. The Antarctic Artists & Writers program facilitates deployments to the Antarctic for creatives. Applications are open for artists, writers, and creative practitioners in a variety of genres including traditional to experimental formats. US Citizens and permanent residents, 21 years of age or older, can learn more and apply here: <https://polarsteam.info/application/>



SIZE
2.5-3.5 m | 8-11 ft
400-600 kg | 900-1300 lbs

HABITAT
Circumpolar Fast Ice

DIET
Antarctic Cod, Antarctic Silverfish, Squid, Octopus, Krill

PREDATORS
Orca, Leopard Seal

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Weddell Seal & Underwater Artist, Kirsten Carlson
Location: Little Razorback, Ross Sea, Antarctica
November 3, 2017 | Photo by Rob Robbins

Example of AAWP art work by Kirsten Carlson

Penguins Struggle with Record-low Sea Ice, But One Species is Adapting

by Bill Weir, CNN, March 27, 2023

One hundred years ago, colorful canaries warned humans of the hidden hazards of digging for coal by riding shotgun down the mine and dropping dead.

Now, penguin experts say these birds that move like tuxedoed toddlers are showing us the hidden hazards of burning coal and other fossil fuels by the way they march. And as global warming changes the survival-of-the-fittest game at the bottom of the world, one particular species of Antarctic penguin is modeling a poignant lesson for humanity: Adapt or die...and make it quick.

With numbers in the millions, Antarctica’s six species of waddling aquabats are far from extinction and as I stepped foot on the Antarctic peninsula in early March, and drank in the wildest place I’ve ever seen, there were hundreds there to make an adorable first impression. Colonies were brimming with life.

But then I learned how the Southern Ocean warmed by the climate crisis is turning my little boy’s favorite bird into a sentinel species of the Anthropocene. While some are abandoning nesting sites where chicks have been hatching for thousands of years to find better ground, colonies of those that refuse to move have collapsed.

“It is incredible,” Heather Lynch, the Endowed Chair for Ecology and Evolution at Stony Brook University told CNN. “As ecologists, we know that animals shift their range over geologic times, they disappear in one area and colonize new areas. But it’s rare to see those dynamics happening over the course of one’s career.”

Along with seals, seabirds and baleen whales, penguins gorge mainly on Antarctic krill, a shrimp-like crustacean that thrives on the kind of phytoplankton found under sea ice.

Unlike the Arctic, where sea ice has declined consistently, Antarctic sea ice has swung up and down – although recently scientists have seen a steep downwards trend.

At the end of the Southern Hemisphere winter in September 2014, there were more than 7.7M sq miles of sea ice around Antarctica – a record high. Early this year, sea ice reached a record-shattering low of less than 700,000 square miles, breaking the previous low set just last year.

“If we have a 1°C change in the UK or the US, who cares?” Tom Hart, biology lecturer at Oxford Brookes University explained. “But down there, 1 degree makes a huge difference – whether you can stand on water or sink into it. Or whether there’s snow cover on a breeding site or not. It’s a completely different habitat.”

Using satellites, camera traps, citizen science and AI computing to keep tabs on millions of penguins around Antarctica, Hart and Lynch say they are watching a real-time lesson in adaptation.

While Adélie and chinstrap penguins remain stuck in their ancient ways, the much more flexible gentoo penguins are ranging further and further south. As they show willingness to chase new prey or abandon a nest to increase the odds of long-term survival, their numbers are exploding.

“Gentoo penguins are big climate change winners in the Antarctic,” Lynch said, confirming reports that some colonies have grown by 30,000%. “They are perfectly happy to take advantage of a warming Antarctic. They don’t mind that it’s getting wetter. The flip side of that is that the Adélie and chinstrap populations have cratered in many areas and particularly chinstrap penguins. Their populations have declined in some areas by as much as 80%.”

“Adaptation means several things,” Hart said. “It means being really tough in a hard environment, but it also means reading the room on seasonality. It means averaging, so if you don’t do well one year, you’ve got to do better. And then you really only have to do well one year in three.”

“I think there’s a lesson in here for us as well,” Lynch said. “If we just stick to what we’ve always done, it’s not going to turn out well for us. Just because Manhattan has always been where it is, does it make sense that it will be there in 200 or 300 years? I don’t know. But I think we would benefit from being plastic and flexible and

adaptive. And I think that’s kind of what the gentoos are telling us.”

Along with the worry that a crash in krill could follow the crash in ice, avian flu is now present in Chile and Argentina and Hart predicts it could migrate with seabirds to the Antarctic Peninsula next spring and devastate penguin colonies. “I think we’re in for a horrible year next year,” he told me. “But we won’t know until it happens.”

U.S. Introduced to ROALD AMUNDSEN

by Dick Wolak

Following is the original March 8, 1912 *New York Times* story that first informed America of Roald Amundsen’s triumph at the South Pole (and, perhaps, “stirred the whole world”). I found some of the period formatting and wording to be interesting. A current article in the *Times* would refer to the “South Pole,” while in 1912, it was no more than the “south pole.” And lots of commas.

THE SOUTH POLE DISCOVERED.

The dispatch sent by Capt. ROALD AMUNDSEN from Hobart, Tasmania, to THE NEW YORK TIMES and The London Chronicle, which is printed this morning, contains a message the burden of which will stir the whole world as it has not been stirred since ROBERT E. PEARY announced discovery of the north pole. AMUNDSEN announces that he has reached the most southerly point on the surface of the earth Dec. 14, 1911, and remained there, taking observations, for three days. The first report of his arrival on the borders of civilization was printed in THE TIMES yesterday morning, in a dispatch announcing the arrival of his ship at Hobart. Nothing has yet been heard of AMUNDSEN’s English competitor in the quest of the south pole, Capt. R. E. SCOTT, who started from Port Chalmers, New Zealand, in November 1910.

AMUNDSEN has been heard of twice since he left Buenos Aires in his ship the *Fram*, late in 1910. Lieut. PENNELL, of SCOTT’s expedition, reported March 27, 1911, that his party had seen the *Fram* in the Bay of Whales, where AMUNDSEN had landed and established Winter

quarters. A letter dated Feb. 9, 1911, at Framheim, latitude 78.40, longitude 164 west, told how he had suddenly laid before his expedition his plan of a dash for the south pole, and it had been received with enthusiasm.

The *Fram*, a 400-ton gasoline auxiliary, was built for polar exploration, and was the ship that carried NANSEN on his famous expedition northward. With AMUNDSEN and eighteen other men, and 115 Eskimo dogs, it reached the southern ice barrier ahead of schedule time. AMUNDSEN formed his first camp Jan. 14, 1911. He had already traveled 16,000 miles. The hardships and perils he and his associates have since encountered can well be imagined. It is thrilling news that the Norwegian explorer has overcome all obstacles and accomplished his purpose.

The whole world has now been discovered. Much remains, however, to be done by the explorers. We know from the story of SHACKLETON, whose "farthest south," in 1909, was latitude 88.23, something of the experiences AMUNDSEN must have encountered. Before many hours have passed AMUNDSEN's own account of his discovery of the south pole, contributed exclusively to THE NEW YORK TIMES, will be set before our readers.

It should be borne in mind that this courageous explorer has risked his life and all the fortune he possessed in this great achievement. No large pecuniary reward awaits him. The only compensation he can obtain is payment for the publication of his narrative of his successful expedition. THE NEW YORK TIMES has contracted for the exclusive right to publish that account, has made all due arrangements to copyright it and protect it, and will prosecute all infringements of its rights.

Beyond EPICA Reaches Depth of 808 meters in Antarctic Ice Sheet

by Università Ca' Foscari Venezia, Feb. 1, 2023

Beyond EPICA-Oldest Ice, a successor to the EPICA (European Project for Ice Coring in Antarctica) project of 1996-2005, a multinational

effort, has successfully completed its second drilling season at Little Dome C. This project is an unprecedented challenge for paleoclimatology and its goal is to go back 1.5 million years in time to reconstruct past temperatures and greenhouse gas concentrations.

Funded by the European Commission with 11M euros and significant financial contributions from participating nations, the project will last seven years (starting in 2019) and is coordinated by Carlo Barbante, director of Italy's Institute of Polar Sciences of the National Research Council and a professor at Ca' Foscari University of Venice. There are 12 research centers as partners, from 10 European and non-European countries.

From the end of November 2022 to the end of January 2023, in almost seven weeks of work, the team reached a depth of 808.47 meters. At this depth the ice preserves information about the climate and the atmosphere of the last 49,300 years. Facing unforeseen setbacks and repairs to the drilling system and delays due to Antarctic weather, the team worked for two months to achieve this important intermediate result.

At first, weather conditions at Little Dome C made field reopening operations difficult and delayed the team's arrival but organizing the work in two shifts proved successful to continue drilling operations for 16 hours a day without stopping. The project's final goal is to reach a depth of about 2,700 meters, which represents the thickness of the ice sheet underneath Little Dome C, a 10-sq km area located 3,233 meters above sea level, 34 km from the French-Italian station Concordia.

As soon as the site was reached, the team's first goal was to complete the installation of the deep ice drilling system and fine-tune it to continue the drilling operations started in the previous campaign. The Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI) drilling system was adapted to the ice conditions to achieve the best configuration for deep coring, using 3.5 m long drill barrels. The Danish drilling system has been used as a backup to continue ice core extraction operations, while engineers ironed out problems with the AWI drill.

In the last days of work, 4.5-m-long drill barrels were tested, and the result was unexpectedly successful: a single 4.52-m ice core was retrieved, the longest ever drilled as part of a European project. "This is a significant achievement for the AWI drill system: this is the longest core ever drilled by a European project. Its significance lies in the fact that at greater depths, where the time to winch down and up the borehole increases incrementally, being able to recover longer cores in each run means that we progress faster with the drilling, and should cut the time needed to reach bedrock, and the Oldest Ice" explained Rob Mulvaney, Chief Scientist for this Beyond EPICA drilling season and Professor at the British Antarctic Survey (BAS), and Frank Wilhelms, Chief Driller for this Beyond EPICA season and Professor at AWI.

This year, the first 217 meters from the Beyond EPICA ice core were also processed at the Cold Lab at Concordia Station, making observations on the cores and measuring its conductivity parameters as well as performing the first cuts. A part of these ice cores will be transferred to Europe for analysis in European laboratories.

The climate and the environmental history of our planet is archived in the ice, which can therefore reveal information from centuries and even hundreds of millennia ago on the evolution of temperature and on the composition of the atmosphere. Researchers will thus be able to assess the content of greenhouse gases, such as methane and carbon dioxide, in the atmosphere of the past. Then, they will be able to link these findings with the evolution of temperature. "We believe this ice core will give us information on the past's climate and the greenhouse gases in the atmosphere during the Mid-Pleistocene Transition (MPT), which happened between 900,000 and 1.2 million years ago," says Carlo Barbante. "During this transition, climate periodicity between ice ages changed from 41,000 to 100,000 years: the reason why this happened is the mystery we hope to solve."

West Antarctic Ice Sheet Retreated Far Inland, Then Re-Advanced

by American Geophysical Union, May 1, 2023

The melting of the West Antarctic Ice Sheet (WAIS) is causing worry that it may reach a tipping point of irreversible retreat within a few decades if the global temperature increases by 1.5 to 2.0 degrees C from preindustrial levels. Recent studies reveal that around 6,000 years ago, the ice sheet's grounded edge could have been up to 250 km inland from its current position. This suggests that after the last ice age, the ice sheet retreated deeply into the continent and then re-advanced before its modern retreat began.

Ryan Venturelli, the lead author of the recent research and a paleoglaciologist at Colorado School of Mines, stated that "Before we began observing, the ice in certain areas of Antarctica withdrew and progressed over a significantly broader region than what we previously acknowledged." She added, "While the ongoing retreat of the Thwaites Glacier is quicker than any observed in the past, the geological record shows that ice can recuperate."

The research published in *AGU Advances* provides the initial geological confirmation of the ice sheet's position and displacement since the end of the last ice age.

The point where a glacier or ice sheet departs from solid land and starts to float on water as an ice shelf is referred to as the grounding line. At present, the WAIS' grounding line is located at the Ross Ice Shelf, stretching for hundreds of miles over the ocean. Due to the influence of ocean water washing up against the front of the ice, the grounding line can experience rapid melting.

According to Venturelli, "The reason why grounded ice loss is alarming is that it leads to an increase in sea level. As the grounding lines retreat towards the interior of the ice sheet, the thicker ice becomes increasingly exposed to the warming ocean, making the ice sheet more vulnerable."

Approximately 20,000 years ago, during the Last Glacial Maximum, the WAIS was so extensive that it grounded on the ocean floor,

beyond the continent's edge. Prior findings generally suggest that there has been a gradual retreat since that time, which has been expedited in the last century due to human-induced climate change.

The inquiry for Venturelli was to determine the extent of the ice sheet's retreat inland after the last ice age. Without this knowledge, it is difficult to estimate how vulnerable the Antarctic Ice Sheet is and how it will react to additional climate change.

To discover the answer, Venturelli and her team examined a lake, which was concealed under a kilometer of ice and almost twice the size of Manhattan. This lake was cut off from the contemporary atmosphere and provided valuable evidence. The team used a hot water "drill" to cautiously melt their way into the lake. After gaining access, they extracted samples of lake water and carbon-rich sediments from the bed of the lake. Through radiocarbon dating, they determined that the carbon in the sediments was approximately 6,000 years old.

Since radiocarbon (carbon-14) in these sediments must have originated from seawater, this discovery implies that the current lake, which is now 150 km from the current ice edge, was once the ocean floor. When the ice sheet advanced, it covered the lake, preserving the carbon as part of the sediments at the bottom of the lake. Additionally, based on the radiocarbon levels found in water samples taken from the same lake, the grounding line might have been positioned an additional 100 km further inland at that time.

"When we embarked on the mission to collect samples from this lake, we were uncertain about what we would discover about the ice's history," Venturelli remarked. "However, the fact that deglaciation continued so far inland was not that surprising. The West Antarctic region is exceedingly flat, and there are no major topographical features that can slow the retreat of the grounding line."

The new evidence of Antarctic ice's ability to make a comeback was welcome news for Venturelli, who explained, "Studying ice loss in

Antarctica can be disheartening at times. However, the re-advance discovered in the geologic record, even if it happened over a span of several thousand years, gives me a glimmer of hope to consider studying the reversibility of this process."

The primary question for Venturelli and her fellow researchers is to determine the factors that facilitated the ice's re-advance. One possible explanation is that the rebound effect, caused by the release of the ice sheet's immense weight, elevated the land enough to hold back the ocean and permit the ice to regrow. Alternatively, minor alterations in climate conditions could have caused the ice sheet to transition from a state of retreat to one of advancement. It's possible a combination of these factors played a role.

Antarctic Science

Reviewed by Guy Guthridge

The full title of this 2022 pamphlet is *Antarctic Science: Why U.S. Leadership and Investments Matter*. Published by the National Academies Press, its 50 pages give an illustrated summary of recent research, its operational support, and the international setting. The authors, Anne Johnson and Laurie Geller, are staff members of the Academies' Polar Research Board, established in 1958 to promote polar science and guide Federal agencies and the Nation. A note on the back says the booklet "provides a brief overview of why the U.S. government has stood for decades as the global leader in Antarctic research—and why that investment remains vital to U.S. interests today." This is a good rundown and worth a pleasant hour getting updated on the important research coming out of the U.S. Antarctic Program. Free download at: nap.nationalacademies.org/download/26617.

Antarctica: A History in 100 Objects

Reviewed by Jeff Rubin

Inspired by the 2010 radio series and best-selling book *A History of the World in 100 Objects* by Neil MacGregor (director of the British Museum), this volume succeeds admirably. Its

authors, Jean de Pomereu and Daniella McCahey, were selected to curate a planned exhibition at Connecticut's Mystic Seaport Museum in recognition of the bicentennial of the continent's discovery, but the show was cancelled by the pandemic.

Here they've gathered an eclectic "century" of things associated with The Ice including a Primus stove, a sledging harness, fuel drums, skis and a pyramid tent. Others are more exotic: a wood block showing a tabular iceberg, used for printing Charles Wilkes' book *Narrative of the U.S. Exploring Expedition* (1844), and a sealing club made from the baculum (penis bone) of a seal or walrus. Others still, like Capt. Scott's diary, almost surely would never have been loaned to an exhibition.

Unfortunately, a few mistakes mar this text. Pioneering scientist James Eights was American, not British, and Charles Passel was a geologist, not a paleontologist. Antarctica's first book, *Aurora Australis*, was produced not on the 1901-04 Discovery expedition, but on the Nimrod expedition of 1907-09. "Canoeing" is not an Antarctic tourist activity, but kayaking is. Despite these errors and a few others, this handsome book is well worth adding to your library. Price: \$30.

Capt. Eugene Van Reeth, USN, 1927 – 2022

by Dick Wolak

I was saddened last year when I heard of the death on Aug. 2, 2022 of Gene Van Reeth, a real stalwart of the U.S. program in Antarctica from 1965 to 1976. During that period, Gene played many significant roles in the program. He was a VXE-6 pilot and Squadron Commander. He was later the C.O. of the Navy's Antarctic Support Activities. He was a Manager in the NSF Division of Polar Programs whence he did stints as the NSF Representative at McMurdo, moving on to become the Commander, Naval Support Force Antarctica (CNSFA). It could even be said that he was a program grantee, as he was listed as "Principal Investigator" on NSF award documents for logistic support. Upon retirement in 1979, he

went to work for Holmes & Narver, Inc., the longstanding civilian Antarctic support contractor.

In 1973, I worked briefly at NSF Polar Programs, and was delighted to become friends with such an incredibly competent and affable a person as Gene Van Reeth. There could be no better, more experienced, source to learn about current field operations in Antarctica. Two years later, when I was at South Pole Station, it was a pleasure to coordinate our new station support with Gene as CNSFA.



**Capt. Van Reeth (left) greeting Elgen Long at McMurdo Station during Long's Pole-to-Pole Around the World Flight, 1971
Photo Credit: Ralph Lewis**

His personal history as recounted in his published obituary (Flintoft's Funeral Home, Issaquah, WA) is fascinating. He entered the Navy as a 17-year-old in the waning days of World War II, serving from December 1944 to June 1947. His specialties while enlisted included Aviation Ordnanceman and Aerial Gunner. At age 20, using the G.I. Bill, he began studies at Loras College in Dubuque, Iowa, where he would meet his future wife, LaVonne Morse, formerly of Mount Hope, WI and a graduate of the University of Dubuque.

In 1951, at the onset of the Korean War, he was recalled to active duty as an Ensign. He later attended basic flight training at Pensacola, Florida and completed advanced multi-engine training in Hutchinson, Kansas, receiving his aviator's wings in 1954. Subsequent assignments included deployment to the Far East as Aircraft Commander of the P2V flying reconnaissance and anti-submarine patrols, and duty aboard two

aircraft carriers. In April of 1965, after serving as Aircraft Commander of C-121 Super Constellations in the Pacific, he was ordered to Antarctic Development Squadron Six (VXE-6) at Quonset Point, RI. There he flew the C-121 and the ski-equipped LC-130 Hercules. He assumed command of the squadron in June of 1968. Under his command, VXE-6 set new records for hours flown and personnel and cargo carried in Antarctica and completed the first accident/fatality free Antarctic deployment in its history.

During his tenure with VXE-6, in 1968, Capt. Van Reeth conducted the longest flight yet recorded in Antarctica, into the interior of the continent to establish a joint U.S.-British-Norwegian scientific field camp in the unexplored Kraul Mountains area, an area more remote on the continent than ever before attempted. The Secretary of the Navy, The Honorable Paul R. Ignatius, stated that this 23+ hour flight, over a distance of more than 4,000 miles of hazardous and unexplored terrain, with no ground navigational aids in marginal, unpredictable weather, and executing two landings in unprepared open snowfields, was comparable to RADM Richard E. Byrd's first flight over the South Pole in 1929. For his outstanding squadron service and this historic flight, President Nixon awarded Capt. Van Reeth the Distinguished Flying Cross (presented to him by General of the Army, Omar N. Bradley, USA, Ret.).

Following a year at the Naval War College, Capt. Van Reeth returned to Antarctica as Commander, Antarctic Support Activities. He was next ordered to serve as the Secretary of the Navy's representative at the Division of Polar Programs, NSF.

In 1974, he again returned to Antarctica as CNSFA, where he directed and coordinated all USN support activities in Antarctica from 1974 through 1976. Van Reeth Glacier in the Mount Blackburn area has been named in his honor.

Following his Antarctic service, Capt. Van Reeth served as Defense and Naval Attaché at the U.S. Embassy, The Hague, Netherlands. While there, he was knighted by Queen Juliana in the Order of Oranje-Nassau, for his very successful undertakings involving U.S./Dutch military and political endeavors.

In addition to attending Loras College, Capt. Van Reeth received his Bachelor of Science degree in Engineering/Industrial Management from the University of Michigan, his master's in international affairs from George Washington University and is a graduate of the Naval Post-Graduate School, Monterey, CA and the Naval War College, Newport, RI.



Capt. Van Reeth and wife LaVonne
Photo Credit: Ralph Lewis

After retiring from the Navy in 1979, Capt. Van Reeth was employed by Holmes and Narver, Inc. of Orange CA. He returned to RI residing there until 1994, and then spent the next 20 years in Hendersonville, NC, enjoying retirement with travel, woodworking and writing. In 2015, he and LaVonne moved to Issaquah, WA, coming full circle, as they had married on Whidbey Island in 1952. He leaves his wife, LaVonne, daughter Dana M. Van Reeth (Sammamish, WA), sons, Douglas E. Van Reeth (Ajijic, Mexico), Mark M. Van Reeth (Palm Coast, FL), five grandsons and one great-grandson. He inspired his family in leading lives of travel and adventure.



The Antarctic Society

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August 11-14, 2024 Boulder, CO Gathering Registration

Name (s) _____

Address _____

Email _____ Phone _____

Registration

_____ \$250.00 Full Registration per person. Increases to \$275.00 on January 1, 2024. 100% refund until April 1, 2024.

Full Registration includes the day programs, 2 lunches, Reception on Monday evening, Auction on Tuesday, and the Tour and Picnic on Wednesday.

_____ \$125.00 Guest Registration(s) per person

Guest Registration includes the Reception, 2 lunches, Auction, Tour and Picnic **only**. The day programs are **not** included.

Guest(s): _____

\$ _____ Donation

Donations toward the Gathering are very much appreciated and are tax deductible.

Do you or another of your registrants have ADA accessibility needs? ___ Yes ___ No

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Proceed to page 2 if you wish to reserve a lodging unit on the Chautauqua campus.

August 11-14, 2024 Boulder, CO Gathering Lodging

Lodging Reservation and Deposit

The Antarctic Society has reserved and paid for 45 lodging units on the Chautauqua campus. Registrants may select and hold the lodging unit of their choice by indicating the type of unit and paying a deposit of one day's lodging cost for the selected unit. The balance of the lodging cost will be due by June 1, 2024. Deposits may be refunded only if another registrant agrees to assume the reservation for that unit.

There are **two options** for reserving a lodging unit:

Option 1: Deposit one day's lodging cost for holding **3 days of lodging** (Aug. 11-13)

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_____ \$172.00 Columbine Lodge Studio (no kitchenettes)

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\$ _____ Total Registration and Donation (from page 1)

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