



# The Antarctic Society

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“BY AND FOR ALL ANTARCTICANS”

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## PRESIDENT

Liesl Schernthanner  
P.O. Box 3307  
Ketchum, ID 83340  
[antarctican.org.president@protonmail.com](mailto:antarctican.org.president@protonmail.com)

## VICE PRESIDENT

Mark Leinmiller  
5849 Riverstone Circle  
Atlanta, GA 30339  
[leinmiller@bellsouth.net](mailto:leinmiller@bellsouth.net)

## TREASURER

Thomas Henderson  
35 Cherry Street #701  
Burlington, VT 05401  
[webmaster@antarctican.org](mailto:webmaster@antarctican.org)

## SECRETARY

Joan Boothe  
2435 Divisadero Street  
San Francisco, CA 94115  
[hoodooskr@aol.com](mailto:hoodooskr@aol.com)

## DIRECTORS

Dale Andersen  
Guy Guthridge  
Matthew Jordan  
Valmar Kuroi  
Michele Raney  
Ron Thoreson  
Stephen Wilson

## WEBMASTER

Thomas Henderson  
(address above)

## ARCHIVIST

Charles Lagerbom  
[clagerbom@gmail.com](mailto:clagerbom@gmail.com)

## SOCIAL MEDIA DIR.

Lesley Urasky  
[yamcam@gmail.com](mailto:yamcam@gmail.com)

## NEWSLETTER

CO-EDITORS  
Jeff Rubin  
[rubinwiles@gmail.com](mailto:rubinwiles@gmail.com)  
Dick Wolak  
[wolak66@gmail.com](mailto:wolak66@gmail.com)

## MEMBERSHIP

New members welcome!  
\$13/yr, plus more for mailed newsletter. See ‘About Us’ on website to join.

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## MESSAGE FROM THE PRESIDENT

Welcome to the summer newsletter. We're proud of our newsletters and cannot say enough about our current editors, Jeff Rubin and Richard Wolak, who have been at the job for a year now. We appreciate their efforts and are also grateful to those of you who have contributed articles and reviews. Most importantly, thank you for reading! You help us continue to be “by and for all Antarcticans.”

Our members have varied interests in Antarctica, and we strive to share compelling information, stories, and comradery. You'll be reading about our upcoming Gathering in Vermont – and we hope to see you there. Along with our newsletter and our great [website](#) of resources, Gatherings are a highlight of the Society. You may be surprised by the Antarcticans you'll bump into.

Recent years have sadly taken some members and friends. At our Gathering, we'll be sharing memories of them. We've also gained new members whom we happily welcome. Your Board of Directors and ad-hoc committee members have accomplished a great deal in the recent past to carry us through these transitional times. In addition to planning our Gathering, we've updated society documents and policies, organized more outreach, increased our social media presence, assisted with fundraising and orchestrating efforts to bring *Hero* artifacts home to Maine, scheduled on-line socials, held virtual lectures, shared recordings and podcasts on our website, coordinated with young historians, honored members who've passed, received and cataloged archival items, maintained healthy financials, and published excellent newsletters. We do all this with our members in mind, sharing an appreciation of Antarctica's global importance.

Steve Dibbern recently retired from the Board of Directors, and we thank him for his years of commitment and contribution. Please let us know if you know someone who may be interested in serving on the board. This is a wonderful organization to be part of. Tell your friends or better yet — invite them to Burlington in August!

Thank you for your membership and interest in Antarctica. It makes this difficult world a better place.

Liesl Schernthanner, President

## 2022 Gathering Home Stretch

by Tom Henderson



**Burlington Fireworks, July 3, 2022**

The Aug. 12-14, 2022 Gathering in Burlington, Vermont is only a few weeks away and the momentum continues. 90 people are now registered, a clear indication that our first Gathering in four years will be a success! If you've been “on the fence” about attending, please join your Antarctic friends and colleagues for a great time of reconnecting and sharing in a vibrant and beautiful New England setting. See more about the venue, events, and scheduled speakers by going to [www.antarctican.org/2022-gathering](http://www.antarctican.org/2022-gathering).

Heading the list of Antarctic-related items to be auctioned on Sat. Aug. 13 is a week-long stay at Paul Dalrymple's former house at Port Clyde, Maine during 2023. The house is the site of memorable past Gatherings. Located on mid-coastal Maine, it is on the water near the historic Marshall Point lighthouse and the fishing village of Port Clyde. Other items include Antarctic paintings by environmental artist and Society member Alan Campbell, a bottle of recreated Scotch originally made for the 1907 Shackleton expedition, a limited-edition print of *Que Sera Sera* (the first aircraft to land at the geographic South Pole), an Antarctic-themed collection of music by member Valmar Kurok, films, books, medallions and more. To see a partial list of items, go to the website page above.

If you're looking for Gathering housing, the Russell Compound, a 30-minute scenic drive south of Burlington, still has openings. See <https://fancyroamervacations.com/>. The more people who sign up, the less the cost for each. Do not sign up on the website above; if interested, please contact Tom Henderson at [webmaster@antarctican.org](mailto:webmaster@antarctican.org) or 518-888-0387.

A complete Gathering Planning Guide is on our website. A link to it is on the Gathering web page. It has everything you need to know about the Gathering and its events.

Sign up soon. See you there!

### Virtual Lecture on Zoom, July 26: The Genesis of *Elephant Island*, a Historical Fiction



The Antarctic Society is hosting a Virtual Lecture via Zoom, July 26, 2022, at **6:00 pm ET.**: The genesis of *Elephant Island* — evolving plot, motivation, and research of an Antarctic novel by Todd Gipstein ([www.gipstein.com](http://www.gipstein.com)). Todd, a photographer, writer, and producer, lectures on National Geographic expeditions. Find out more about this event on our website. To join the Zoom lecture:

<https://us02web.zoom.us/j/83305618652?pwd=YlZ0Q2pNb0tqMFFlV1JBeGt5djdNZz09>

Meeting ID: 833 0561 8652, Passcode: 677289

## Bringing Pieces of *Hero* Home

By Charles Lagerbom

There is exciting news about the Antarctic Society's effort to help save something of the *R/V Hero*, the National Science Foundation's floating wooden science platform which did yeoman-like service in South American, Cape Horn, Drake Passage and Antarctic Peninsula waters for 16 years. As many know, it sank in a 2017 winter storm at its dock in the Palix River at Bay Center, Washington. Since then, the derelict vessel has been rapidly deteriorating and become an environmental concern. The state of Washington's Department of Natural Resources (DNR) has taken control of the situation and appropriated monies to salvage and remove it this summer. They have contracted with a salvage company and at last report were waiting for seasonal water levels to recede to begin work.

The Antarctic Society expressed interest to the DNR about the possibility of obtaining pieces of the historic ship during these salvage operations to return to Maine, where *Hero* was built in 1968 at the Harvey Gamage Shipyard in South Bristol. DNR has agreed for the Society to take responsibility for some salvaged items, provided they are removed from the area. RB Browns Transportation was approached and has agreed to provide the service to potentially ship up to six tons of salvaged material back to Maine.

Staff and board members of the Penobscot Marine Museum in Searsport, Maine have been approached about receiving, preserving and exhibiting any *Hero* items we might be able to bring back. They are interested in the story of this vessel and its contributions to Antarctic science and Maine maritime history. Antarctic Society members are also working on a manuscript for publication on the history and life of the ship.

As of July 1<sup>st</sup>, we have successfully raised funds dedicated to transporting *Hero* remnants back to Maine from Bay Center, Washington. It is very

gratifying to have heard from several Society members as well as many others who donated and conveyed interest in this effort. The Society also hopes to have some members on hand at Bay Center for the salvage effort as well as to coordinate with RB Browns Transportation. Stay tuned!

## Historic Artefacts Discovered

New Zealand Antarctic Heritage Trust (NZAHHT)

Historic artefacts around Captain Scott's Terra Nova hut at Cape Evans, left behind by expeditions of the Heroic Age, were made visible to the NZAHHT conservation team due to the lack of winter snow accumulation and high snowmelt. Items included a dog hospital, mutton carcasses, *Aurora*'s second anchor (with shackles still attached) and a pickaxe.



***Aurora*'s second anchor with Scott's 'Terra Nova' hut in the background. © Antarctica New Zealand/Anthony Powell**

Program Manager Al Fastier says the objects either weren't recorded or hadn't been seen for decades. He found the mutton carcasses, still wrapped in muslin, after taking a routine walk to inspect the site at the start of the season.

The mutton would have been picked up in New Zealand on the way to Antarctica by either Scott's British Antarctic Expedition (1910-1913) or Shackleton's Ross Sea party of the Imperial Trans-Antarctic Expedition (1914-1917) and then stored in the snow cave.

While Al has been visiting the site since 1987, he was fascinated to see the mutton carcasses for the first time. The carcasses were recorded in the Cape Evans conservation and archaeological plans of the site and known to be in an ice cave. "I love my job and am always amazed that I keep on learning and seeing more after visiting the sites so many times," says Al.

A second ice cave revealed a hardwood bench that was used for gravity measurements. This had been partly exposed in previous seasons, but this was the first time the Trust's teams had seen it fully exposed.

Al says the dog hospital is a particularly interesting find, with the remains of small stretchers made out of Venesta cases and bamboo. He believes the stretchers were used to transport injured dogs around the site. Archaeologists mapped the area in the 1980s and 90s. While they identified many items, mapping did not reveal the full extent of these finds.

The *Aurora's* second anchor, one of two (the other is exposed most seasons) is typically buried under snow and ice and it is rare to sight part of it, let alone the whole anchor. Al says the position of the anchor on the beach shows the enormous determination and strength of those who dragged it ashore to anchor the ship. The pickaxe revealed on the southern axis of the site would have belonged to one of the expeditions, says Al.

AHT have formally recorded the location of these artefacts and will follow professional best practice in dealing with them in the future. Artefacts in the environs are individually assessed for any emergency stabilization needs, but typically are left in situ as part of the historical context.

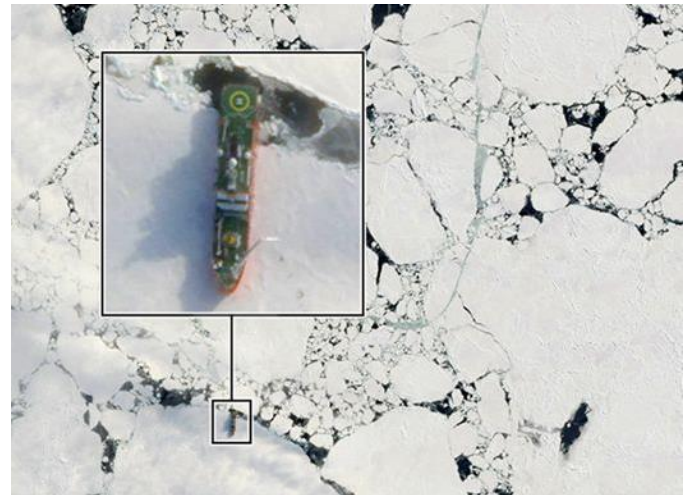
Scott's *Terra Nova* hut houses over 11,000 historic artefacts, all conserved by the Trust as part of the Ross Sea Heritage Restoration Project.

## Nations Seek to Protect *Endurance* Wreck

by Jonathan Amos, BBC Science correspondent

A 500m perimeter is being implemented to aid the protection of Shackleton's ship *Endurance*. The vessel's position on the Weddell Sea floor was identified on March 5th, 107 years after its sinking.

Member states of the Antarctic Treaty have already declared the wreck, which lies in 3,000m of water, a Historic Site and Monument (HSM).



**Icebreaker Agulhaus II near the site of the *Endurance* wreck in the ice-choked Weddell Sea. Source: Planet Labs Inc.**

Now they have asked for a management plan to guide its ongoing conservation. This will be drawn up by the UK Antarctic Heritage Trust (UKAHT). It will determine the kinds of restrictions and responsibilities that will be placed on anyone who goes near *Endurance* in the future. Even now a permit is required to visit the ship.

It's noteworthy that the Treaty parties have agreed to publish the exact coordinates of the wreck, at 68°44'21" South, 52°19'47" West. A little vagueness might have been regarded as more appropriate given the way some marine archaeological sites have been looted in the past. "At present, its best protection is its location 3,000m below an ice-covered Weddell Sea," said Amanda Milling, the minister responsible for polar regions at the Foreign, Commonwealth & Development Office (FCDO). "That may not be forever, not least due to climate change and shrinking sea ice...we have commissioned the UKAHT to work with experts to prepare a conservation management plan, and to consider whether additional protection measures are needed. We have already declared it a historic site and Antarctic Treaty members have agreed to increase the protection zone around it from 150m to 500m.

The UKAHT expects to have a management plan ready for consideration by Antarctic Treaty members at a meeting next year.

## Royal Navy Icebreaker Provides Support to Ukrainian Antarctic Scientists

By Ben Mitchell, PA, 5 March 2022



**HMS Protector crew and Vernadsky Station staff show their joint solidarity. © Royal Navy**

The crew of the Royal Navy's icebreaker ship have provided "support and solidarity" to Ukrainian scientists based in Antarctica. Plymouth-based *HMS Protector* called in Vernadsky research station, staffed by 21 scientists from the war-torn country.

The navy crew, who delivered food and supplies, described hearing how the Ukrainians had families trapped by the Russian invasion.

HMS *Protector* Captain Michael Wood said: "During time spent ashore, the team confirmed the welfare of the 21 scientists who had spent the winter at Vernadsky. Welcome supplies of fresh food were passed to the station leader. Many of the station staff reported families stranded under attacks in Kharkiv and Kyiv."

The Ukrainian research base is located on Galindez Island off the west coast of the Antarctic Peninsula. It was originally established as the British Antarctic Survey's Faraday Station but was transferred to Ukraine in early 1996.

## Antarctica's Magnetic Link to Ancient Neighbors

British Antarctic Survey (BAS)

For the first time, an international team of scientists has used satellite magnetic data from ESA's Swarm mission, together with aeromagnetic data, to help reveal the mysteries of the geology hidden beneath Antarctica's thick ice sheets and link Antarctica better to its former neighbors.

Not only is Antarctic sub-ice geology important to understand global supercontinent cycles over billions of years that have shaped Earth's evolution, but it is also pivotal to comprehend how the solid Earth itself influences the Antarctic ice sheet above.

The research team from Germany's Kiel University, BAS and National Institute of Oceanography and Applied Geophysics, and Witwatersrand University in South Africa has recently published their findings in the Nature journal *Scientific Reports*.

Their new study shows that satellite and aeromagnetic data combined together provide a key missing link to connect Antarctica's hidden geology with formerly adjacent continents, namely Australia, India and South Africa that formed keystones of a continent called Gondwana.

Thanks to magnetic data from the Swarm mission, along with airborne measurements, scientists are able to link Antarctica to its ancient neighbors with which it has shared a tectonic history that needs piecing together like a puzzle.

The team processed aeromagnetic data from aircraft from over Southern Africa, Australia and Antarctica in a consistent manner with the help of Swarm satellite magnetic data.

Aeromagnetic data do not cover everywhere on Earth, so magnetic models compiled from Swarm data help to fill the blanks, especially over India where aeromagnetic data are still not widely available. Furthermore, satellite data help to homogenize the airborne data, which were acquired over a period of more than 60 years and with varying accuracy and resolution.

Lead author Jörg Ebbing, from Kiel University, explains: "With the available data, we only had pieces of the puzzle. Only when we put them

together with satellite magnetic data, we can see the full picture.” The combined datasets provide a new tool for the international scientific community to study the cryptic sub-ice geology of Antarctica, including its influence on the overlying ice sheets.”

Gondwana was an amalgam of continents that incorporated South America, Africa, Arabia, Madagascar, India, Australia, New Zealand and Antarctica. As the tectonic plates collided in the Precambrian and early Cambrian times (600-500 million years ago), they built mountain ranges comparable to the modern Himalayas and Alps. This supercontinent started to breakup in the Early Jurassic, 180 million years ago, ultimately leaving Antarctica stranded and isolated at the South Pole and covered in ice for around 34 million years.

Using the new magnetic data, the animation illustrates how the tectonic plates have moved over millions of years after the breakup of Gondwana.

Fausto Ferraccioli, Director of Geophysics at the National Institute of Oceanography and Applied Geophysics in Italy, and also affiliated with the British Antarctic Survey says: “We have been trying to piece together the connections between Antarctica and other continents for decades. We knew that magnetic data play a pivotal role, because one can peer beneath the thick Antarctic ice sheets to help extrapolate the geology exposed along the coast into the continent interior.

“But now we can do much better. With the satellite and aeromagnetic data combined, we can look down deeper into the crust. Together with plate reconstructions, we can start building tantalizing new magnetic views of the crust to help connect geological and geophysical studies in widely separated continents. Ancient cratons and orogens in Africa, India, Australia and East Antarctica are now better connected magnetically than ever before.”

### **Antarctic Glaciers Losing Ice at Fastest Rate in 5,500 Years**

by Caroline Brogan, Imperial College London

At the current rate of retreat the vast glaciers, which extend deep into the heart of the ice sheet,

could contribute as much as 3.4 meters to global sea level rise over the next several centuries.

Antarctica is covered by two huge ice masses: the East and West Antarctic Ice Sheets, which feed many individual glaciers. Because of the warming climate, the WAIS has been thinning at accelerated rates over the past few decades. Within the ice sheet, the Thwaites and Pine Island glaciers are particularly vulnerable to [global warming](#) and are already contributing to rises in sea level.



**Thwaites glacier, which is nearly the size of Great Britain. Credit: NASA**

Now, a new study led by the University of Maine and the British Antarctic Survey, including academics from Imperial College London, has measured the rate of local sea level change—an indirect way to measure ice loss—around these particularly vulnerable glaciers.

They found that the glaciers have begun retreating at a rate not seen in the last 5,500 years. With areas of 192,000 km<sup>2</sup> (nearly the size of the island of Great Britain) and 162,300 km<sup>2</sup> respectively, the Thwaites and Pine Island glaciers could cause large rises in global sea level.

Co-author Dr. Dylan Rood of Imperial's Department of Earth Science and Engineering says that they "reveal that although these vulnerable glaciers were relatively stable during the past few millennia, their current rate of retreat is accelerating and already raising global sea level."

"These currently elevated rates of ice melting may signal that those vital arteries from the heart of the West Antarctic Ice Sheet have been ruptured,

leading to accelerating flow into the ocean that is potentially disastrous for future [global sea level](#) in a warming world. Is it too late to stop the bleeding?"

The paper is published in *Nature Geoscience*.

During the mid-Holocene period, over 5,000 years ago, the climate was warmer than today and thus sea levels were higher and glaciers smaller. The researchers wanted to study fluctuations in sea level since the mid-Holocene, so studied the remnants of old Antarctic beaches, which are today elevated above modern sea level.

They examined seashells and penguin bones on these beaches using radiocarbon dating. When heavy glaciers sit on the land, they push down the Earth's surface. After the glaciers' ice melts, the land rebounds so that what once was a beach is now higher than sea level. This explains why the local sea level for this land fell, while globally the water from the melting ice caused global sea levels to rise.

By pinpointing the precise age of these beaches, they could tell when each beach appeared and therefore reconstruct changes in local, or 'relative,' sea level over time. The results showed a steady fall in relative sea level over the last 5,500 years, which the researchers interpret as a result of ice loss just prior to that time. This pattern is consistent with relatively stable glacier behavior with no evidence of large-scale glacier loss or advance.

They also showed that the rate of relative sea-level fall since the mid-Holocene was almost five times smaller than that measured today. The scientists found that the most likely reason for such a large difference is recent rapid ice mass loss.

The researchers also compared their results to existing global models of the dynamics between ice and the Earth's crust. Their data showed that the models did not accurately represent the sea-level rise history of the area during mid- to late-Holocene based on their data.

Although their data do not exclude the possibility of minor fluctuations of the Thwaites and Pine Island glaciers over the past 5,500 years, the researchers concluded that the simplest interpretation of their data is that these glaciers have been relatively stable since the mid-Holocene until recent times—and that the present rate of glacier

retreat that has doubled over the past 30 years is, indeed, unprecedented over the last 5,500 years.

Lead author Professor Brenda Hall of the University of Maine says that "relative sea-level change allows you to see large-scale crustal loading and unloading by ice...glacier readvance, which would result in crustal loading, would slow the rate of relative sea-level fall or potentially even cause submergence of the land below sea level."

## **Thanks a Krillion: Antarctic Voyage Delivers Breakthrough Science**

Australian Antarctic Division

Minister for the Environment Susan Ley said the Australian Antarctic Program research on CSIRO Research Vessel *Investigator* will help protect krill from over-harvesting and would be used directly by international bodies such as the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) in addressing long term impacts on the ecosystem.

"I congratulate the teams, who over eight weeks, have achieved some extraordinary breakthroughs with the deployment of new camera technologies providing insights to the life of krill that we've never had before," Minister Ley said.

"The importance of understanding and protecting krill populations cannot be overstated and at a time when commercial krill fishing is looking to expand into new areas, this research will play a critical role in ensuring sustainable catch limits."

Dr. So Kawaguchi, the voyage's Chief Scientist, said the use of novel technologies enabled pioneering projects to be undertaken: "We anchored three special cameras and echo sounders on a range of different sea beds, where they'll record krill at depths of up to 1500 meters over the next year or so, including when covered by ice during winter. This will give us completely new information."

"For the first time ever, scientists on board were also able to deploy our new camera system designed to provide a 3-dimensional krill's-eye view of their swarms in the Southern Ocean. We found a krill super-swarm that was 3,200 meters long, 300 meters wide, and 100 meters thick, the size of

which I've never encountered before in my career," he added.

More than 80 fin and humpback whales feeding on krill converged on this super-swarm alone. Throughout the voyage, scientists sighted more than 1400 whales and hundreds of seals and penguins.

"Now our challenge is to turn all this data into a reliable estimate of krill biomass in this region," said Dr Kawaguchi.

Dr Tara Martin, Facilities Program Director of the CSIRO Marine National Facility, said it was a record-breaking voyage.

"The voyage took RV *Investigator* further south and further west than ever before.... These research voyages are crucial to help us better understand Australia's vast marine environment and ensure the prosperity of our growing blue economy."

The voyage was supported by the Australian Antarctic Division, Pew, Australian Antarctic Program Partnership and the Antarctic Science Foundation, and by a grant of sea time and science support on RV *Investigator* from the CSIRO Marine National Facility.

## **Polar Star's 25th Voyage to Antarctica**

Posted by Seapower Staff



**U.S. Coast Guard Cutter Polar Star  
U.S. COAST GUARD / Petty Officer 3rd Class  
Diolanda Caballero**

The 157 crewmembers of the U.S. Coast Guard Cutter *Polar Star* (WAGB 10) arrived at McMurdo Station Feb. 7 following an 86-day transit from its Seattle homeport on Nov. 13. This deployment

marks *Polar Star's* 25th journey to Antarctica supporting Operation Deep Freeze.

*Polar Star* reached the Ross Sea on Jan. 3 and commenced breaking the 37 miles of ice that extended from the ice pier in Winter Quarters Bay at McMurdo out to open water. *Polar Star* spent four weeks breaking ice and grooming the shipping channel. The crew's efforts were aided by favorable winds and currents and by month's end they had created an open approach for supply vessels *Maersk Peary* and *Ocean Giant* to offload over eight million gallons of fuel and 1,000 cargo containers. Together the ships carry enough fuel, food, and supplies to sustain USAP operations until the next sealift opportunity in the austral summer of 2023.

*Polar Star* will also partner with the Royal New Zealand Navy's largest ship, *Aotearoa*, in support of resupplying Scott Base.

This year also marks the *Polar Star's* return to Antarctica following the COVID-19 pandemic. In the 2020-2021 season, *Polar Star* conducted a winter Arctic deployment, during which the cutter trekked to the Arctic Circle to project constructive presence in the northern high latitudes under winter conditions and train the next generation of polar sailors.

## **Research Links Warming to Fish Decline**

National Science Foundation, Feb. 23, 2022

A long-term study in the Southern Ocean reveals a correlation among warming waters, decreased sea ice and reduced abundance of Antarctic silverfish. These small fish are important prey for penguins, seals and other marine life.

The study was published in the journal *Communications Biology*. Lead author Andrew Corso of the Virginia Institute of Marine Science says, "This is the first statistically significant relationship reported between sea ice and the long-term abundance of any Antarctic fish species. With continued regional warming, these fish could disappear from the region entirely, triggering major changes in the marine ecosystem."

Co-authors on the study are Deborah Steinberg and Eric Hilton of VIMS, along with Sharon



Stammerjohn at the University of Colorado Boulder.

The study is based on an analysis of more than 7,000 larval fish specimens collected over 25 years (1993–2017) as part of the [NSF-funded Palmer Long-Term Ecological Research program](#). The Palmer LTER is an ongoing investigation of the effects of climate change on the ocean food web along the west coast of the Antarctic Peninsula.

"The West Antarctic Peninsula is one of the fastest-warming areas on Earth, so studies there are important to helping us understand the ecosystem's response to change," says Karla Heidelberg, a program director in NSF's Office of Polar Programs.

Steinberg adds that "the study area is one of the most rapidly warming regions on Earth, with increases in air and water temperatures leading to substantial reductions in sea-ice coverage over the last half century." From 1945 to 2009, the mean winter air temperature in the region rose by 10.8° F (6° C), while the annual duration of sea ice decreased by almost two months.

## **Antarctic Fishing Conservation Feud Divides US and UK**

by Joshua Goodman, Associated Press, June 2022

A diplomatic row is dividing the normally allied U.S. and U.K. governments in response to provocations from Russia over catch limits of the meaty Patagonian toothfish, commonly known as Chilean sea bass, one of the world's highest-fetching wild-caught fish, sold for \$32 a pound at Whole Foods and served up as meaty fillets on the menus of upscale eateries across the U.S. The feud could lead to an import ban on the fish, which U.S. officials insist is being caught unlawfully in violation of rules governed by the Antarctic Treaty.

Russia's obstruction of longstanding conservation efforts, resulting in a unilateral rejection of catch limits for the Patagonian toothfish in a protected region near Antarctica, has triggered a fish fight at the bottom of the world, dividing longtime allies, the U.S. and U.K. governments.

The feud, which has not been previously reported, intensified after the U.K. quietly issued

licenses this spring to fish for the sea bass off the coast of South Georgia, a remote, uninhabited U.K.-controlled Island some 1,400 kilometers east of the Falkland Islands.

As a result, for the first time since governments banded together 40 years ago to protect marine life near the South Pole, deep-sea fishing for the pointy-toothed fish is proceeding this season without any catch limit from the 26-member Commission on the Conservation of Antarctic Marine Living Resources (CCAMLR).

The move essentially transformed overnight one of the world's best-managed fisheries into a France-sized stretch of outlaw ocean — at least in the eyes of U.S. officials threatening to bar U.K. imports from the area.

"In a world beset by conflict, the U.K. is playing a risky game," said Will McCallum, head of oceans at Greenpeace U.K. "The history of Antarctic protection is one of peaceful cooperation for the common good of humanity. Russia's consistent willingness to abuse the process cannot excuse unilateral action by other Members. We trust that countries who have previously imported South Georgia toothfish will not accept the catch of what is now an unregulated fishery."

For decades, the fishery near South Georgia was a poster child for international fisheries cooperation, one that brought together sometimes adversarial powers like Russia, China and the U.S. to protect the Southern Ocean from the sort of fishing free-for-all seen on the high seas.

Last year, as tensions with the West were rising over Ukraine, Russia took the unprecedented step of rejecting the toothfish catch limits proposed by the Antarctic commission's scientists. The move was tantamount to a unilateral veto because of rules, common to many international fisheries pacts, that require all decisions to be made by unanimous agreement.

But critics say the U.K.'s response — issuing licenses without a CCAMLR-approved catch limit — is unlawful under the commission's rules and weakens the Antarctica Treaty established during the Cold War that set aside the continent as a scientific preserve. U.S. officials have also privately told their U.K. counterparts that they would likely

bar imports of any toothfish caught near South Georgia, according to correspondence between U.S. fisheries managers and members of Congress seen by The Associated Press.

The fight underscores how Russia's attempts to undermine the West have extended to even obscure forums normally removed from geopolitical tussles. It also risks reviving Britain's tensions with Argentina, which invaded South Georgia in 1982 during the Falkland Islands war.

But the outcome couldn't be more consequential: With fish stocks across the globe declining due to overfishing, consumers are demanding greater transparency about where the filets on their plates are sourced. Central to that effort is rules-based international fisheries management on the open ocean and environmentally sensitive areas like the polar regions.

"It sets a dangerous precedent," said Evan Bloom, who for 15 years, until his retirement from the State Department in 2020, led the U.S. delegation to the CCAMLR. "What the Russians did clearly violates the spirit of science-based fisheries management," added Bloom, who is now an expert on polar issues at the Wilson Center in Washington. "But that doesn't necessarily mean that the U.K. can act unilaterally."

Three of the four vessels authorized by the U.K. to fish near South Georgia starting May 1 belong to Argos Froyanes, a British-Norwegian company that pioneered techniques credited with dramatically reducing seabird mortality in the south Atlantic.

One of its customers is New York-based Mark Foods, the largest U.S. supplier of sea bass certified by the Marine Stewardship Council, the industry's gold standard for sustainability. CEO Barry Markman declined an interview request but said his company would not import any product deemed illegal by U.S. authorities.

An official from the government of South Georgia and the South Sandwich Islands, which issued the licenses in coordination with the U.K. foreign office, said it took action so as not to give in to obstructionist tactics by Russia that it doesn't expect will end anytime soon.

The fishery is one of the best managed in the world, with catch limits set by South Georgia below even the quota recommended by the Antarctic commission. In addition, all vessels authorized to fish near the island have observers and tamper-proof electronic monitoring equipment on board.

Officials say that closing the fishery would've taken valuable resources away from research and monitoring because about 70% of the island chain's budget comes from the sale of licenses.

But U.S. officials have taken a dim view of the U.K.'s actions. Janet Coit, a senior official at the National Oceanic and Atmospheric Administration, wrote in an April 25 letter obtained by the AP that in the absence of approved protections, any fishing near South Georgia would be of "questionable legality" and have "serious implications" for the Antarctic commission.

She also stated that any shipments of fish harvested in what's known as subarea 48.3 would likely be barred from entering the U.S., a preliminary view she said was shared with the U.K. government and U.S. importers to guide their decision-making.

"We recognize that fish from this subarea has represented a substantial percentage of toothfish imports," according to the letter, which was sent to a bipartisan group of seven House members concerned about the impact of a ban on the seafood industry. "However, we are bound by our obligations under the CCAMLR Convention, applicable conservation measures in force, and relevant U.S. law."

Under U.S. law, fishing conducted in a way that disregards conservation measures, such as catch limits, adopted by international fishery organizations to which the U.S. is a party, is considered illegal. Vessels that engage in such activity can be denied access to U.S. ports and blacklisted within the Antarctic commission framework.

Meanwhile, the U.K. has shown no sign of backing down. Even with no conservation measure in place, it insists it will continue to operate the fishery in the conservative way it always has, basing its decisions on the quota and other guidelines proposed by commission scientists.

“Russia egregiously blocked the agreed catch limits citing spurious scientific concerns not recognized by any other member of the CCAMLR,” the U.K.’s foreign office said in a statement. “The UK will continue to operate the toothfish fishery within the framework agreed by all CCAMLR Members.”

## Fifty Years Ago at McMurdo Station

R 020757 DEC 72

FOUR RESCUED FROM ICE FLOE

BEGIN PRESREL, MCMURDO STATION,  
ANTARCTICA...2 DEC 1972

Three nations combined in a search operation today which climaxed in the rescue of four men from an ice floe in the Ross Sea, near the U.S. Navy’s logistic support base at McMurdo Station, Antarctica.

The three New Zealanders and one American are scientists on a project of the New Zealand Antarctic Research Program working at a remote field camp nearly fifty miles from their main New Zealand scientific station, Scott Base.

The search was mounted Friday evening when Major Peter Fraser, Scott Base Leader, flew to the field camp after the men failed to make radio contact with their headquarters for several days. When he found no trace of the missing men, he immediately alerted the U.S. Navy at McMurdo where Captain Alfred N. Fowler, Commander U.S. Naval Support Force Antarctica ordered a search instituted. Nearly twenty-four hours later the four Canterbury University (Christchurch, New Zealand) research students were spotted by Chief Aerographer’s Mate Alvin C. Boeger, a trained ice observer from the Fleet Weather Facility, Suitland, Maryland, on a small ice floe.

Chief Boeger spotted the men while returning to Christchurch, New Zealand aboard a Royal Air Force C-130 Hercules piloted by Squadron Leader Peter Forrester. They were soon picked up by an Antarctic Development Squadron Six (VXE-6) helicopter piloted by Lieutenant Al Costlow of Sidman, Pa. and LTJG Jeff McComas of Warren,

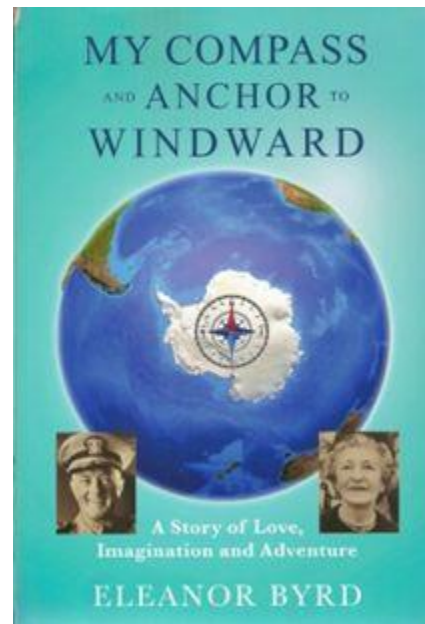
Pa., who sat their craft down on the small piece of floating ice to effect the rescue.

Hercules aircraft of Great Britain and the U.S. Navy as well as a C-141 USAF Starlifter and Navy helicopters combined to total more than 30 hours in the search and rescue mission.

The four men were suffering from exposure and hunger from their five day ordeal, but appeared to be in good condition otherwise. It was not immediately forthcoming what caused them to become separated from their land base at Cape Bird or what had happened to their trimaran from which they collected biological samples, as they were taken by ambulance to McMurdo’s medical ward for treatment and rest.

## Book Review: *My Compass and Anchor to Windward* by Eleanor Byrd

Review by Guy G. Guthridge



Eleanor Byrd says her new book *My Compass and Anchor to Windward* (583 pp, 2021, \$25) is “a historical novel as I want the reader to really know my grandparents.” The book is a valuable complement to the biographies by Edwin P. Hoyt (*The Last Explorer*, 1968) and Lisle A. Rose (*Explorer: The Life of Richard E. Byrd*, 2008). In addition to providing perspective on Byrd’s life between expeditions, it explains in detail Marie

Byrd's necessary and critical role throughout Dick's personal and professional life.

The book is more than a reminiscence. Byrd died when Eleanor was 4. Marie lived another 17 years, and the author of course gained insight as well from her mother Bolling Byrd Clarke and other members of the Byrd family. The volume also is a result of archival research and access to the large number of detailed and expressive personal letters between Richard and Marie. Their correspondence is a substantial and useful part of the book.

The letters began early and continued throughout their lives. They met in Winchester, Virginia, where Richard grew up, when both were 8. That first summer, after a month together, they agreed to write each other when Marie went home to Boston. She returned summer after summer. Dick's letters to Marie have been saved, and quotes in the book are his, word for word. Only half of Marie's letters were available; "the rest I took the liberty of writing for her," Eleanor writes.

The details of their backgrounds and personal lives – their at-home lives – that are provided help to explain the base for success in planning and raising money for Byrd's expeditions. The couple were both from prominent families, with prestigious educations and the learned ability to participate in the upper-class formalities of the era. "As for being a gentleman," Dick wrote to Marie when a teenager, "I like knowing how. It opens up people, as there is no off-putting behavior coming at one and therefore can allow doors to open in friendship between countries and so on." Marie, replying from the Sacred Heart Finishing School, wrote, "Our manners have to be perfect in all ways because manners are helpful to the training of character; they correct self-control and attention and consideration of others."

Dickie Byrd growing up was adventurous, and later while he was away Marie proved formidable managing expedition budgets and holding off unscrupulous reporters. Dick's brothers were more conventional than he. As kids, the boys were united when fighting off rival gangs around Winchester, but Tom and Harry walked the path through the woods while Dick was standing on his head up a tree. (Harry became Governor of Virginia and later

a U.S. Senator; Tom, successful in business.) Eleanor Byrd's book is rich with anecdotes that fill in our understanding of who Dick Byrd was when he was not on a pioneering flight or a polar expedition.

Throughout his life, Byrd at home played elaborate tricks with and for his kids and grandkids. This book helps with understanding that Byrd, while meticulous with planning, had a wild or even self-indulgent streak. His biggest mistake, wintering alone at Advance Base during the second Byrd Antarctic Expedition, is more understandable knowing the background Eleanor Byrd lays out for us. His decision to feature that adventure in what many think of as his best book, *Alone*, also is consistent with what's presented in *My Compass*.

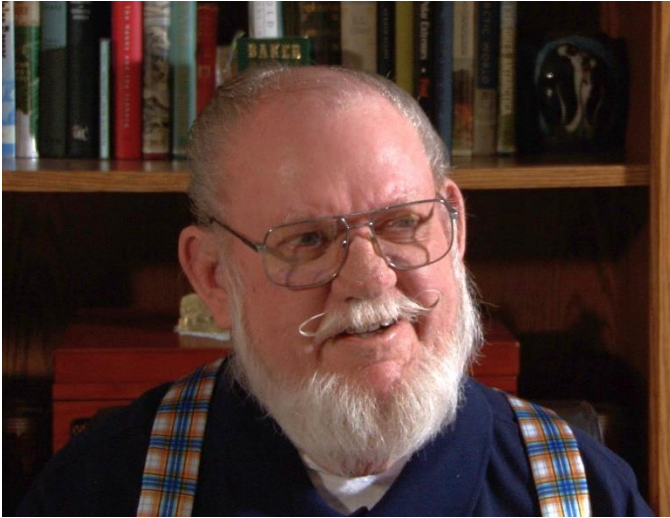
Byrd is a towering figure for Antarcticans. Historian Kenneth Bertrand, noting the huge popularity of BAE 1 and 2, writes that, "As a result, Marie Byrd Land became, in the popular mind, peculiarly American." A roadside historical sign in Winchester states that Byrd is the "father of the Antarctic Peace (sic) Treaty." For Byrd scholar and neophyte alike, *My Compass and Anchor to Windward* is an important and enjoyable volume, with fresh insights into how the U.S. became prominent in Antarctic science and diplomacy.

### **RMC Billy-Ace Baker USN (Ret.), 1936-2022**

by Tom Henderson

Billy-Ace Baker passed away at home from esophageal cancer on July 3, 2022. He was born in Oklahoma City, Oklahoma in 1936 and lived there until he joined the U.S. Navy at age 18. He was trained as a communications technician and started in submarine service before being assigned to winterover with the Seabees at McMurdo Station, Antarctica in 1962. He liked the winterover duty so much, he volunteered to go back in 1966, 1970, and 1974. He subsequently returned to serve in Antarctic summer seasons from 1975-80. His primary duties involved handling message traffic, including official Navy traffic, communications with remote science camps and relaying weather information from U.S. and foreign Antarctic

stations. He also managed the amateur radio phone patches for people at McMurdo.



**Billy-Ace Penguin Baker**

Billy-Ace was a contributor to the *McMurdo SomeTimes*, a locally produced newsletter for McMurdo personnel. He wrote a regular column of Antarctic news and history, as well as gossip and stories of interest to the McMurdo contingent.

He handled radio communications during the response and recovery after Air New Zealand Flight 901 crashed into Mt. Erebus in 1979, for which he received a Navy Commendation Medal.

In retirement, Billy-Ace was a founding member of the Old Antarctic Explorers Association (OAEA). His dedication to that group is legendary. He edited the group's *Explorers Gazette* newsletter and participated in the Board of Directors until his passing. His newsletters – which often ran 40 pages or more - were chock full of articles, mail from members, OAEA chapters news, obituaries and biennial coverage of the OAEA Reunions.

He was a bit eccentric in charming ways. He legally changed his name to “Billy-Ace Penguin Baker” and appeared at the courthouse for the ceremony in an outfit that closely resembled a penguin. He loved to tell stories, but it was seldom clear how much truth there was in them. It didn't really matter because they were such good stories. His home was virtually an Antarctic museum, filled with an extensive library of Antarctic books, various Antarctic memorabilia, and thousands of toy penguins of every conceivable size and variety.

Billy-Ace was close to his family and doted on his grandchildren. His daughter Kerry and other family and friends were with him in his final hours.

The Antarctic community has suffered a great loss. He will be long remembered.

### **CDR Maurice "Mo" Gibbs, USN (Ret.), 1934-2022**

by Tom Henderson

Longtime Antarctic Society member Maurice Gibbs, of Nantucket, passed away peacefully at home on March 2, 2022 after a brief illness, surrounded by loved ones. He was 88. Much of his 34-year Navy career was spent in Antarctica.

Gibbs was a 12th generation Nantucketer, a direct descendant of one of the island's settlers, Tristram Coffin, and the great-great-grandson of Elisha Bunker, who was killed while whaling off the coast of Peru.



**Maurice Gibbs in 2019 after winning the first ever Maurice E. Gibbs Commendation Award from Egan Maritime Institute for his work training individuals through the Auxiliary Coast Guard Boating Safety Classes.**

**Courtesy of the Egan Maritime Institute**

As a youth, Gibbs developed into a talented pitcher, good enough to draw the eye of the Washington Senators at Joe Stripp's Baseball School in Orlando in 1951. But the Korean War draft had placed him number three on the Nantucket list, so he enlisted in the Navy.

Gibbs had no intention of making the Navy a career. “I was only going to do my four years, but

things sort of fell into place," he told Joshua Balling of *Nantucket Today* in 2011. In all, he participated in six expeditions to the bottom of the world, the first in 1955-56 to aid in the establishment of Little America V on the Ross Ice Shelf during Adm. Richard Byrd's last expedition.

"A lot of people don't understand about the conditions. Twice when I was the duty officer, we had major fires. You don't have water, you have to put it out with a powder, Fire is a great danger. If you spilled fuel on clothing, it was like cryogenics. It was so cold it would burn you instantly," Gibbs told *Nantucket Today*. "We had a whole set of rules you had to abide by. If it was below a certain temperature, you couldn't go outside. It didn't happen on my tours, but people were lost down there. It's a different life. The beauty is devastating, but the dangers are too. It can get you."

Gibbs found plenty to keep himself occupied, even, while wintering-over for 13 months in 1966-67. His official assignments varied from expedition to expedition and changed in scope as he rose through the ranks, but largely involved collecting meteorological data to ensure the safety of the Navy and scientific personnel in the area, and also collecting data for scientific analysis.

"My days were very busy. I took a lot of reading material with me. I was studying Russian, reading *War and Peace* and *Dr. Zhivago* in Russian. I spent a lot of my time reading and studying. I also studied English, Churchill's *History of the English-*

*Speaking People*. That was the only place I'd ever been that I made work for the crew. You need to keep busy down there. It's a mental health thing," he told Joshua Balling.

Gibbs recounted some of his funnier moments to Paul Dalrymple in 1995. "So many things happened that are comical now but were somewhat trying then. One was the Christmas service at Little America V. Since I was the organist for Chaplain Peter Bol, Admiral Byrd came up with the idea that I move the little pump organ outside and we all sing Christmas carols. I borrowed an officer's grey gloves, but after about 2 1/2 carols, I seized up. The fingers simply wouldn't function. Of course, I was in agony, but that was little appreciated at the time. The entry about this in my personal journal isn't printable, even today!

"As a postscript, years later ('66-'67) when wintering, I discovered a mercurial barometer among the piles in McMurdo's hillside of junk that I had packed for shipment to the ice while in Davisville in '56. It made it to the ice, yet 11 years later had not been unpacked. Miraculously, the writing on the shipping document was still legible, and I recognized my own handwriting on the slip. Such is the waste of Uncle Sam. I backloaded it to the States in January '68 when I came back to the ice briefly after wintering."

— (With additional information from Joshua Balling's article on Maurice Gibbs in *Nantucket Today*, July 22, 2011)



# The Antarctic Society

[www.antarctican.org](http://www.antarctican.org)

## August 12-14, 2022 Burlington, VT Gathering Registration

Name (s) \_\_\_\_\_

\_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Email \_\_\_\_\_ Phone \_\_\_\_\_

Qty.

\_\_\_\_\_ Full Registration(s) - includes day programs, Reception on Friday evening, *Spirit of Ethan Allen* sunset dinner cruise on Lake Champlain on Saturday evening and the picnic on Sunday (\$225.00 per person).

\_\_\_\_\_ Guest ticket(s) for Friday Reception, Saturday *Spirit of Ethan Allen* and picnic (\$90.00).

Guest(s): \_\_\_\_\_

\_\_\_\_\_

Total amount enclosed: \$ \_\_\_\_\_

Mail your check and registration form to:

The Antarctic Society  
35 Cherry Street Unit 701  
Burlington, VT 05401

Would you like to tour the Shelburne Museum at 2:00 p.m. on Thursday, Aug. 11? \_\_\_ Yes \_\_\_ No

Would you like to attend no-host dinner on Thursday evening in Burlington? \_\_\_ Yes \_\_\_ No

Do you or another of your registrants require handicapped access? \_\_\_ Yes \_\_\_ No

Do you or another of your registrants have a special dietary need? \_\_\_ Yes \_\_\_ No