

# The Antarctican Society

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#### A NEW ERA FOR THE ANTARCTICAN SOCIETY

The reason the Antarctican Society exists today is Paul Dalrymple. A member almost since its beginning, he was voted a director in 1976 and president in 1978. He immediately became editor of this newsletter, revealing himself as such only after a reader wrote wanting to know who the 'I' was. "'I' is Paul Dalrymple," he wrote in Bergy Bits, "and I am your current outspoken, candid president who is trying to get you all to read the newsletters and to support your Antarctican Society."

After he completed his 2 years as President, his successor – Meredith F. Burrill – told members that under the Society's constitution "Paul could not have been reelected, else he surely would have been." Paul became treasurer (a post he still holds) and continued as the newsletter's editor.

He became more: the Society's voice and guiding light, sustaining a robust lecture series in Washington, D.C., doubling membership, and securing a financial base that lasts today. Retiring in 1985 from over 30 years of Federal service, Paul continued as editor because, he wrote, "someone has to tell it as it is and I'm afraid my replacement might be a cop out." The cop out turned out to be me. Paul bestowed this honor and responsibility in 2014.

In 1988 the Society's center of activity moved to Port Clyde, Maine, when Paul relocated there. An unforgettable feature for many became Antarctic Gatherings, held every other year at Paul's house because of his untiring commitment to keeping the ties alive. The most recent was in July, and Paul provides his own assessment of it and others below.

Read also below Paul's decision to pass along the privilege and pleasure of hosting the next Antarctic Gathering. A following article discusses an opportunity in 2020 in Orono, Maine, and another in 2021 at Mystic Seaport Museum, Connecticut, during its coming major Antarctica exhibition, planning for which is described in this issue.

Guy Guthridge

### The 2018 Antarctic Gathering

Some 130 Antarctican Society members, their families, and friends gathered, per invitations published in recent quarterly newsletters of the Society, at Paul Dalrymple's home in Port Clyde, Maine, 20-22 July 2018 for a weekend of conversation, exchange of ideas and information, and coastal Maine seafood.

The middle day of the gathering, Saturday, was devoted to talks in Paul's Garage Theater as listed below.

Articles describing these talks are appearing in issues of the newsletter. Art Ford's was the first – in the July 2018 issue. This issue contains a summary of the presentation by Steve White about Mystic Seaport's planned Antarctica exhibition.

Photographs by some attendees – especially Mark Leinmiller and Millie Eidson – were made available for us to share, and some of them appear on the Antarctican Society web site <u>HERE</u>.

Society members, whether or not they attended the Gathering, may be interested in resources brought to bear to make the weekend happen.

Spending by the Society for the tents, chairs, tables, portable toilets, food, drink, and paper plates and the like totaled \$6,418. Financial donations by participants – including more than a thousand dollars spent for donated items auctioned on Sunday morning – totaled \$6,471. The surplus \$53 was put in the Society's bank account.

In addition, several Society members arrived early and/or stayed after the gathering to help prepare for the meeting and to clean up. They and others brought consumables or provided services during the meeting on their own to supplement the items acquired by the Society.

Paul Dalrymple, as he did for prior gatherings, generously made his house and grounds available for this special event.

Neighbors Nadine and Greg Mort allowed the parking of cars on their field. The

Tenants Harbor American Legion lent its sound system for speakers to use, and the Saint George School lent projection equipment. The weather cooperated, giving us mostly dry days and mild temperatures.

### Morning talks, Saturday 21 July

Introductions – Society Treasurer
Paul Dalrymple <a href="mailto:pcdal@roadrunner.com">pcdal@roadrunner.com</a>
Welcome – Society President Tony
Gow <a href="mailto:petprotector@comcast.net">petprotector@comcast.net</a>

Mystic Seaport and Antarctica 2020 – Steve White, CEO, Mystic Seaport steve.white@mysticseaport.org

Charles Bentley (1929-2017) commemoration – Richard Cameron polar57dick@cs.com

The Antarctic Eye: Landscape Photography on the Ice – Lynn Teo Simarski chesapeakewinter@yahoo.com

Fifty years of ice drilling in Antarctica and Greenland – Tony Gow <a href="mailto:petprotector@comcast.net">petprotector@comcast.net</a>

Where Glaciers Meet: The Ross Ice Shelf – John Clough <u>cluffermon@gmail.com</u>

#### Afternoon talks, Saturday 21 July

The Road to Gondwana: Cape Town SCAR meeting 1963 – Art Ford <a href="mailto:abford@aol.com">abford@aol.com</a>. See Art's article in the July 2018 newsletter

Deception Island, Antarctica's industrial center – Steve Dibbern victoriadibbern@aol.com

Ten thousand phone patches from Antarctica – Julius Madey <a href="https://hillfox.org/hillfox.org/">hillfox.org/</a> fairpoint.net

A memorable Drake Passage crossing by R/V Hero – Dick Wolak wolak66@gmail.com

My Grandfather Richard E. Byrd – Eleanor Byrd <u>ebyrd246@gmail.com</u>

Swimming to Antarctica – Lynne Cox <u>lynnecox@aol.com</u>. See a book review in the April 2018 newsletter.

Repowering South Pole Station: alternatives – Steve Theno stevetheno@pdceng.com

The above news item, with photographs, was posted on the Society's web site in August and remains there now.

# Thoughts about the Antarctic Gatherings

by Dr. Paul Dalrymple

On reaching 62 years of age, I retired from a position in the Corps of Engineers at Fort Belvoir in Alexandria, Virginia. I remained in Virginia until my mother's health began to fail in the late 1980s; I decided to move to coastal Maine (Port Clyde) to more or less monitor her wellbeing.

I found many Antarcticans in the immediate vicinity. At the turn of the century, with help from Charles Lagerbom and John Splettstoesser, we started holding Antarctic gatherings every other year at my house in Port Clyde. They became popular, growing from about 25 to well over 100. The last one, this past July, attracted 127. The largest we ever had (2014) was 177, when we included Antarctic artists and writers.

Now I am 94 years of age, soon to be 95, and even though I have enjoyed all the gatherings, the last one was somehow different. For the past decade I have said, "No more," but somehow I always seem to go "One more time," mainly because of the fine support from Lagerbom, Dick Cameron, Tony Gow, and other friends.

Now we have Mystic Seaport Museum, in Connecticut, on the horizon as a possible venue for the next gathering, and a couple of our other members standing by willing to continue what Bert Crary once called me for "creating a monster." It is time for me to hand lead responsibility for future gatherings to other Society members.

In retrospect I would like to recall some of our highlights. Certainly having Charles Swithinbank become a faithful attendee for many gatherings was a blessing. He was our greatest, most beloved member. Oh how I enjoyed him. He occupied a bedroom in my house which will forever be called "The Swithinbank Room."

What became our biggest achievement was when Dr. Ed Williams videotaped 30 of our most prominent Antarcticans in attendance, creating, "Antarctica Calling," a three-DVD set you still can buy on the Antarctican Society website by clicking <u>HERE</u>. What a joy, what a success!

Another great joy was having Lou Lanzerotti as an active member. He was the brain of our outfit. Once upon a time, one of our Presidents appointed Lou as a member of the U.S. National Science Board, and he still kept coming to our theater in the garage as if we were important.

We had many other Antarctican greats. A darling was one of Bernt Balchen's widows, Bess. Another was the daughter of the architect of the Antarctic Treaty, Jean Portel. Another female of note was the widow of Bert Crary, Mildred, who loved every moment of our gatherings, especially the oysters!

Among my many favorites was Dr. Will Silva, a medical doctor who served with distinction at several Antarctic stations. He was nonpareil in my book. One who graced many of our gatherings was Ed Robinson, a geophysicist, who came with bagpipes and entertained us at several gatherings. Thank you, Ed.

Nearly half our original attendees have passed along. One of the last was geophysicist Charles Bentley, who departed the scene in the last year. Last but not least, the parker of our cars, Stephen "Denny" DenHartog, died in a recent month.

# The 2020/2021 Antarctic Gatherings: U. Maine/Orono; Mystic Seaport

The Society has begun looking into where to hold its next one, or two, Antarctic Gatherings. Leading candidates are (a) a three-day weekend in 2020 (ideally Friday-Sunday, 17-19 July) at the University of Maine in Orono and (b) a long weekend at Mystic Seaport Museum in Connecticut during its planned Antarctica exhibition in the summer of 2021.

Both places offer advantages and new experiences. The obvious negatives are that neither is Paul Dalrymple's house.

First, Orono. Society member Hal Borns, an emeritus professor at Maine, obtained proposals from the university's conference services group for hosting and catering us. That was in August 2016, when the Society also was looking at alternative locations. Because the facilities are underused in summer, we would be able to both meet and sleep at the university.



The University of Maine at Orono

What about cost? If you attended any of the gatherings at Paul Dalrymple's house – staying in a local hotel and dining out – the overall cost to you (and to the Society) if we were to meet at Orono possibly could be less. We would have to pay for meeting facilities, whereas Paul's was low cost (the big tents, portapotties, etc.), but we could stay in the dorms, which cost less than a hotel room on the coast, and the university would supply all meals from Friday evening through Sunday lunch.

Here is a big change from past gatherings. The Society would have to require financial commitments in advance from members who decide they will attend. This is because we'd have to sign on to money obligations that the Society on its own is not in a position to meet.

Another significant change is that we will have an implied obligation to invite the university and Orono community to attend the Saturday lectures. This condition seems a positive in that it is likely to increase the size of the audience. Also, the university's Climate Change Institute, headed by Society member Paul Mayewski, is heavily involved in Antarctic research.

Now for 2021 at Mystic Seaport Museum on the Mystic River in Connecticut. Many of you know that the museum is planning a major Antarctica exhibition that will start in November 2020 (see the following article). The exhibit is to continue into the 2021 summer. If that works out, the Museum has expressed interest in hosting a Society gathering at Mystic.

Comments from Society members we have heard from to date are that meeting at Mystic during the exhibition is the priority. Some like the idea of a 2020 gathering as well, some not so much.

Whatever is to happen, member comments now, and commitments later, will be critical. We solicit your answers – before 1 December 2018 and preferably earlier – to these questions.

- 1. Given the possibility of a gathering in summer 2021 at Mystic Seaport while its Antarctica exhibition is open, do you also want to meet in 2020?
- 2. If yes, are you happy to gather at the University of Maine in summer 2020?
- 3. Tentatively (at this stage), would you plan to attend the Orono gathering, and how many would be in your party?

If you plan to attend the 2020 gathering, are you willing to make a firm financial commitment by – say – July 2019?
 (This date could change depending on negotiations with the university.)

Contact me: <a href="mailto:gguthrid@yahoo.com">gguthrid@yahoo.com</a> or 703-258-4320 (mobile phone).

Expressions of interest from members will be critical in determining the Antarctican Society decision to move forward, or not, with planning for an Antarctic Gathering the weekend of 17-19 July 2020 at the University of Maine, Orono. We also are keen to get going on the 2021 gathering at Mystic, but first things first.

# Mystic Seaport Museum and Antarctica



Thompson Exhibition Building

As shown on page 2, the first presentation of the Garage Theater in Port Clyde on 21 July 2018 was made by Stephen C. White, President, Mystic Seaport Museum.

The museum, founded in 1929, covers 19 acres along the Mystic River in Connecticut and is home to 500 watercraft, including four National Historic Landmark vessels, most notably the 1841 whaleship *Charles W. Morgan*, America's oldest commercial ship still in existence.

Of special significance to the Antarctican Society, and the reason Steve came to Port Clyde to give his talk, is the museum's Thompson Exhibition Building, a new 14,000-square-foot facility that was

opened in 2016. The building includes 5,000 square feet of exhibition area and an adjacent conference room that can seat 200.

This facility is to be the location of a major exhibition about Antarctica to open in November 2020, the 200<sup>th</sup> anniversary of the first sightings of Antarctica, and to continue at least through the summer of 2021.

Nathaniel B. Palmer in particular was in the Antarctic in 1820 aboard *Hero* and recorded his sighting of what we know now is the Antarctic continent.

Here is where coincidence comes into play. Palmer's historic voyage started from Stonington, Connecticut, just 3 miles from Mystic. There, the <u>Captain Nathaniel B. Palmer House</u>, which Nathaniel and his brother Alexander built in 1852-1854, is now a museum owned by the Stonington Historical Society. It contains information and artefacts relating to Nathaniel's Antarctic voyages and the two brothers' lives as ship captains and builders.

Steve told the Antarctic Gathering in Port Clyde about planning for the Mystic exhibition as it now stands. To be titled *Discovering Antarctica 1820-2020*, it indeed will include Palmer's sighting of the Antarctic Peninsula, but the overall intent is to mark Palmer's achievement as well as to demonstrate and celebrate the 200 years since of America's relationship with Antarctica.

The Antarctican Society already is involved in the planning. In June 2017 the museum invited two dozen specialists to meet in Mystic in order to discuss the scope of the exhibition. Two participants were the Society's secretary, Joan Boothe, and newsletter editor Guy Guthridge.

To attendees at the Garage Theater, Steve described six sections of the exhibition as now envisioned:

1 Antarctica as imagination (before 1820 and now): Antarctica as a subject of imagination of the ancient and contemporary culture.

- 2 Moment of discovery (in 1820): the story of Nathaniel B. Palmer as a beginning of local to national and international history.
- 3 Voyages for profit; sealing and whaling in Antarctica: importance of economic factors in the early expeditions to the Antarctic.
- 4 Life in Antarctica: Lives of early explorers during the Heroic Age and now.
- 5 Politics of science; geopolitics and international cooperation in the Twentieth Century: claims, then the change of mood after the International Geophysical Year along with the rise in the importance of scientific research.
- 6 Remote but connected; Antarctica and climate change: Antarctica as a dynamic continent where the impact of climate change is obvious.

In addition to the exhibition in Connecticut, Mystic Seaport is considering activities in the field, including potentially a joint expedition with the Cambridge University Archaeological Unit to South Georgia in 2019 and a collaboration with Abercrombie & Kent to conduct a 15-day voyage from Ushuaia, Argentina, as far south as Marguerite Bay along the Antarctic Peninsula.

After his visit to Port Clyde, Steve White sent the following communication:

Dear Antarctican Society Gathering participants,

First of all, many thanks for so warmly welcoming me to your Port Clyde gathering. I learned a great deal in a short period of time, and I am still trying to make sense of all the notes I took from conversations with so many of you. I very much appreciated your interest in our plans for the *Discovering Antarctica 2020* exhibition. Attached is a short version of my slide presentation, as some of you had asked for a copy of the exhibition plan and its themes.

As I said at the end of the presentation, we are looking to extend our reach to

partners, both national and international. We need help and guidance with respect to:

- 1. Curatorial support: knowledge of the 6 themes...perhaps one guest curator per theme,
- 2. Content: objects that support the themes, and
- 3. Funding: contacts with individuals and foundations that might support the initiative.

We look forward to following up with many of you, especially those who shared their information with us regarding our needs. If you didn't have a card to give me but want to share ideas and/or interest with us, please be in touch with us.

It was good to be home and in a place so important to my family, as well as to meet so many wonderful and interesting people. Thank you.

Regards, Stephen C. White President, Mystic Seaport Museum 75 Greenmanville Avenue P.O. Box 6000 Mystic, Connecticut 06355 860-572-5330 w steve.white@mysticseaport.org

# SCAR held its 35<sup>th</sup> meeting in June



SCAR delegates at Davos

The international Scientific Committee on Antarctic Research, which turned 60 years old this year, held Open Science Meeting Number XXXV in June in Davos, Switzerland. The event was done in collaboration with the International Arctic Science Committee.

The scope was research progress in those two regions and in what the combined event (named "Polar 2018") termed the Third Pole, meaning the mountains of the Himalayas and Hindu Kush. Except for the Arctic and the Antarctic, those two places hold more permanent snow and ice than anywhere else on Earth.

The assembled 2,500 people presented 1,600 posters and a thousand oral papers.

As is normal for such large events, which tend to focus more on process than on breakthroughs, no one seems to have tried to identify to the public the most important outcomes of Polar 2018. But the four scientific plenary sessions – on ice cores, Southern Ocean circulation, the West Antarctic Ice Sheet, and the Southern Ocean's global importance – may indicate topics of higher than average interest.

While SCAR is nongovernmental, it identifies its adhering organizations (for the United States it's the National Academy of Sciences Polar Research Board) by nation, and it ranks the 44 as being at one of four levels. Russia and the United States are the only "special contributors." Sixteen others fall in the "well-developed programs" category. Fourteen are at the level of "initial-stage programs." The remaining dozen are associate members. SCAR has nine honorary members – individuals, not countries – and two are Americans: Chuck Kennicut II and our Society's Honorary President, Robert Rutford.

It seems important to heed the fact that SCAR held this big meeting. International organizations like SCAR are important for scientific progress, and the Antarctic is well endowed with them. Besides SCAR and the Antarctic Treaty, the national governments' program managers have a group that meets every year.

A result, maybe because of these groups or maybe because polar science is

hard to do, or maybe both, is that international collaboration in Antarctica (the Arctic, too) is at twice the level as occurs with research conducted elsewhere in the world.

This assertion is backed by specialists who analyze the characteristics of published research papers. If the authors of a paper are from more than one nation, it's international science. And citation rates — how often later papers cite earlier ones, a measure of their impact on research progress — are higher for international science papers than for papers produced by scientists of just one country.

So international science is a good thing, and not just for the science. Consider the history of the USA and the USSR, throughout the Cold War, exchanging scientists every winter in the Antarctic.

D.W.H. Walton, in a recent issue of *Antarctic Science*, says it this way: "Inclusive community meetings like Davos are hard to organize, yet they provide the basis on which we can build our future efforts in science, advice, and outreach. These efforts really matter." To sense the direction of Antarctic science today, you might spend an hour or two prowling the abstracts at <a href="https://www.polar2018.org">https://www.polar2018.org</a>.

### William Nordhaus gets Nobel award

When, in 2000, the National Academies of Science assembled an 11-person panel to evaluate the likelihood and impact of abrupt climate change, it recruited mainly geophysicists. Richard Alley of Penn State, who analyzes the detailed climate record contained in ice cores from Greenland and Antarctica, chaired the group. Nine of the other ten also were physical scientists.

William Nordhaus was the standout participant from another discipline. A professor of economics at Yale, his research focuses on economic growth and natural resources, the extent to which resources constrain economic growth, and the economics of global warming. His book *The Economic Impacts of Abrupt Climatic Change* had just been published when the Academy's panel was formed.



Dr. William D. Nordhaus Credit: Yale University

The result of the group's work was Abrupt Climate Change: Inevitable Surprises, which the National Academies Press published in 2002. Before the 1990s, the report states, the dominant view of past climate emphasized slow, gradual swings of the ice ages tied to features of the earth's orbit or occurring with continental drift. But "unequivocal geologic evidence" shows that climate can change abruptly, Changes of up to 16°C and a factor of 2 in precipitation have occurred in some places in periods as short as decades to years.

Chapter 5 of the six-chapter, 238-page, book is "economic and ecological impacts of abrupt climate change." A footnote states, unsurprisingly, "This section draws heavily on Nordhaus (2000)." The chapter points out that ecosystems are vulnerable to abrupt climate change: they tend to be long-lived and unmanaged (e.g., coral reefs), unable to anticipate future events, and slow to migrate or adapt.

People can be smarter. The report quantifies instances how being smart or dumb can save money or cost you. For example, under perfect foresight a property owner optimizes the depreciation schedule in light of the need to abandon when sealevel rise makes the structure uninhabitable. The myopic owner operates the dwelling assuming no sea-level rise until forced to abandon. Without adaptation – that is, if every property owner is myopic – a sea-level rise of 1 meter could add 50 percent to the cost of coastal structures damaged by sea-level rise. "Adaptive capacity is diminished by myopia," is the dry conclusion. While climate change inevitably has impacts, "Abruptness increases those impacts."

The strength of the chapter is its quantitative evaluations of empirical data.

On 8 October 2018 the *Washington Post* and other sources announced that Nordhaus and another American, Paul Romer (New York University), received the Nobel Memorial Prize in Economic Science for their work (done independently) on the relationship of climate change and technological innovation to economics, which has profoundly shaped policy around the world. The prize is a million dollars.

The Royal Swedish Academy of Sciences, which administers the prize, said, "William D. Nordhaus and Paul M. Romer have designed methods for addressing some of our time's most basic and pressing questions about how we create long-term sustained and sustainable growth."

A lot of that 2002 National Academy report to which Nordhaus contributed is based on research done in the Antarctic. It is worth noting that a talent with the insight and stature of William Nordhaus has been acknowledged for paying attention to polar regions.

## Ozone hole update

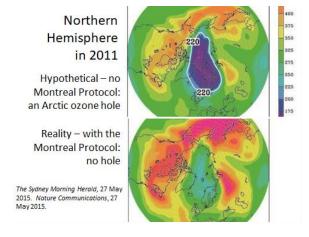
During four seasons lecturing on an Antarctic cruise ship, a talk your editor gave about the ozone hole was popular even though the hole and its cause were discovered more than 30 years ago. These findings, many say, are Antarctica's most important scientific accomplishment.

Actions and research taken since the discovery have been significant, too.

The 1987 Montreal Protocol (with later, even more stringent, agreements) limiting production of ozone destroying chemicals is "perhaps the single most successful international agreement," stated Kofi Annan, former UN secretary general.

Here is a rundown on some other advances since the 1980s.

The Antarctic ozone hole is getting smaller. The process is uneven because factors such as volcanic eruptions and varying temperatures of the Antarctic stratosphere influence the size, but NASA figures that by 2070 stratospheric chlorine (the main destroyer of ozone) will be back to 1970s levels, when the ozone hole started to form each austral spring.



If the Montreal Protocol had not been implemented, an ozone hole would have formed over the Arctic by 2011, according to a 27 May 2015 paper in *Nature Communications*. By 2064, the stratosphere over the United States and other mid-latitude regions would have been as ozone-depleted as the Antarctic ozone hole (NASA, 13 May 2009).

Environment Canada calculated that in the period 1987-2060 we will have \$224-billion in reduced damage to fisheries, agriculture, and materials, 129-million fewer cataracts, 21-million fewer cases of skin cancer, and 333,500 fewer skin cancer

fatalities. The U.S. EPA figures the Protocol from 1990 to 2065 will save 6.3-million human lives and, by 2075, avoid a 7.5-percent decrease in American crop harvests.

Susan Solomon, the scientist who in 1986 and 1987 had led the U.S. research teams at McMurdo that showed chlorine from CFCs causes the ozone hole, published (with others) a paper in the 15 July 2016 *Science* confirming the emergence of healing in the Antarctic ozone layer.

Not all the news is good. The 9 February 2018 *Science* says at midlatitudes, where most people live, "the ozone layer in the lower stratosphere is growing more tenuous – for reasons that scientists are struggling to fathom." William Ball, the study leader, says very short lived substances may be the culprit.