

The Antarctic Sun

www.polar.org/antsun

January 7, 2001



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HAT's off



The TOPHAT experiment reaches its pre-launch stage at Williams Field on Thursday. The smaller balloon lifted the instrument while the larger one was inflated. TOPHAT is now more than 120,000 feet high and circling Antarctica on a seasonal weather pattern. It is expected to spend about three weeks recording radiation emanating from the deepest reaches of space before returning to the Ross Island area. Photo by Irma Hale.

Quote of the week

"The floor is my canvas. The mop is my brush."

- Janitor cleaning Building 155

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Ice of ages

By Josh Landis
Sun staff

Where geometry meets geology

Ron Sletten shows a piece of what appears to be an ancient glacier to his assistant, Dan Mann. One study estimated the ice to be eight million years old. The verdict in the scientific community is still out.



"You're looking at a sea of ice," said geologist Ron Sletten, sweeping his arm toward an expanse of brown, jumbled rocks. It looked more like the surface of Mars or a lifeless desert than any ocean on Earth. But the dry and barren landscape of Beacon Valley concealed a sleeping giant, one Sletten and his team have come here to explore.

Stretched out under tens of thou-

see Ice on page 4

Researchers seeking extended season

■ NSF is considering more time in the field

By Kristan Hutchison Sabbatini
Sun staff

After two winflights and 17 summers in Antarctica, John Priscu wants to see what happens after the season ends.

The microbes he studies growing in frozen lakes in the Dry Valleys stop photosynthesizing sometime after his research group leaves each February, but to find out exactly when, the researchers would have to miss the last plane of the year - unless the last plane left later.

"We've reached a boundary," Priscu said. "We've reached a point where we must have a change in the modus operandi of the McMurdo area to accommodate new scientific questions we've come up with."

Priscu and 28 other scientists met in 1999 at the National Science Foundation's Arlington headquarters to discuss the possibility of extending the research season into the Antarctic fall, and even through the winter. A fall season would require a "fallfly," with planes and helicopters flying during late April to pick up researchers. Priscu envisions flights going until the sun sets for good April 24.

He's not the only one.

"For those of us who have been sitting around here a long time, we've asked ourselves the same question. We come in when the sun rises. Why don't we stay until the sun sets," said Bill Haals, station operations manager. "It's definitely doable."

Either Pegasus or Williams Field runways could be used, Haals said. Emergency medical flights have landed near McMurdo in June, the middle of the dark Antarctic winter. Burning barrels of oil were used to light the runway.

"We can put aircraft in here at any time of year," Haals said.

Whether or not they will is up to the National Science Foundation.

"We've had some internal discussion of how we'd support that," said Brian Stone, the NSF representative on the Ice. "The main concern is really the safety of the operation and then there's

the expense."

Late fall flights would require opening the airfield several times more than normal, adding fuel and personnel costs. Raytheon station manager Jim Scott estimates lengthening the research season would cost a couple million dollars. As soon as the money's there, Scott said, Raytheon will be too.

"From a business aspect, the station's here, so if you can utilize the assets you might as well," Scott said. "You kind of get more for your research dollar."

Weather is another issue. March is often stormy, with heavy winds as the seasons change. "You have no idea what the weather's going to do to you

"They're literally trying to push the boundaries of knowledge."

- Scott Borg
NSF science representative

that time of year. That's the biggest concern," Haals said.

In April the weather calms down, making it a good time to pull people out, Haals said. Scott anticipates that at least 60 percent of whatever flights are scheduled in April could be completed.

Flying in a fallfly shouldn't be any harder than winfly, said Operation Deep Freeze Commander Rich Saburro. But the NSF would need to request additional C-141 flights through the U.S. Transportation Command. LC-130s would be harder to get, since they switch to supporting NSF projects in Greenland in March.

Being in McMurdo does little for most scientists unless they can get to and from their field research sites. Helicopters could fly to the Dry Valleys until late April, when the sun dips to six degrees below the horizon, said Jack Hawkins, project manager for Petroleum Helicopters Inc.

"Flights would depend on conditions, the sky conditions and the light conditions and the moon conditions," Hawkins said. "There would be days or

possibly nights that we could fly, but they would certainly be limited."

Besides safety and cost, there's a certain amount of inertia to overcome.

"We're kind of seasonal and this is just a little bit of a paradigm shift for us," Stone said. "People are in a routine. If you change the routine you've got to think through what you're doing."

About six people would need to stay on to keep the helicopters flying, which would mean more rooms and more mouths to feed, Hawkins said.

How far the effect would ripple isn't known yet.

First the scope of the work needs to be determined - how many scientists, what kind of research, what sort of support. Scientists studying the ozone and sea ice would also like to see what happens in the dark. There's some interest in diving in New Harbor later in the season. Many more scientists, particularly biologists, are sure to step forward if fall and winter research seasons are offered, said Scott Borg, the NSF science representative on the Ice.

"The rationale is there's a lot of stuff going on and we just don't know what it's like the rest of the year, so they're literally trying to push the boundaries of knowledge," Borg said. "They're trying to understand the limits of life and what does life do to support itself."

Though extending the season is only a proposal, many people expect it to happen. Scott gives 80 percent odds to the season being extended. Haals is even more certain.

"I firmly believe in two years we'll see an extended season," Haals said.

Priscu wants it to happen sooner, as early as next year, but Borg said if an extended season is approved it won't be until the 2003 to 2004 season. Before making a decision the NSF will review a final report from scientists who met in 1999, Stone said.

April is only the beginning, in Priscu's mind. The next step will be to make McMurdo accessible to researchers in the winter, with an icebreaker coming into the sound to exchange personnel and researchers in June, he said. Breaking winter ice presents many more environmental and technical questions, including the

see Season on page 6

LETTERS to the editor

The DC-3 contract has finished and the crew of the Basler is moving on. We have been here 6 weeks and enjoyed the flying and work with both U.S. and New Zealand science groups. Everyone we have met, in the work scene and socially, has been really friendly; it has been great to be here.

Thanks to everyone for the help and fun. We are headed now to Dronning Maud Land, where we'll be based out of a camp called Blue One.

All the best to everyone for the balance of your season.

*John Douglas
Dave Russell
Max Wenden*

the week in weather

around Antarctica

McMurdo Station

High: 32F/0C
Low: 14F/-10C
Windchill: -11F/-24C
Wind: 31 mph/50 kph

Palmer Station (Saturday)

High: 49F/10C
Low: 28F/-2C
Avg. temp: 37F/3C
Wind: 39 mph/63 kph

South Pole Station

High: -12F/-25C
Low: -26F/-32C
Avg. temp: -20F/-29C
Wind: 20 mph/32 kph

around the world

Saturday's numbers

Amundsen Gulf, Canada

High: -9F/-23C
Low: -18F/-28C
Palmerville, Australia
High: 87F/26C
Low: 69F/21C

Ross, N.D.

High: 35F/3C
Low: 17F/-8C
Scott, La.
High: 71F/27C
Low: 41F/5C

Corrections

Last week the *Sun* stated that the MARISAT/GOES satellite dish will allow the South Pole to be in constant communication with the outside world. The new connection will increase the amount of bandwidth available to the station, but there will still be a blackout period of 8 hours, 20 minutes each day. Also, the middle musician in a photo on page 14 of last week's *Sun* was misidentified. Paul Zahradka was rehearsing with Mark Eisinger and Andy Woods.

Ob Hill Uphill race results

1. Hiram Henry 4:15
2. Thai Verzone 4:43
3. Steffan Freeman 4:54

Blind trekker calls it quits

A man attempting to be the first blind person to walk to the South Pole turned back because he was suffering from frostbite. Briton Miles Hilton-Barber started his trek on Nov. 20, as part of an expedition to raise funds for the Royal National Institute for the Blind.

Frostbite was a major concern for Hilton-Barber, who uses his fingers to read Braille and sense objects he can't see.

"Although I am really disappointed that I had to withdraw from the expedition, I had to make a sensible and responsible decision about my hand," said Hilton-Barber.

He didn't reach the South Pole, but Hilton-Barber set a record by becoming the first blind man to journey as far as he did. He covered 260 miles (418 kilometers) in extreme weather conditions, with temperatures averaging minus 22 F (minus 30 C).

Hilton-Barber returned to his team's base camp at Patriot Hills for treatment of his frostbite before returning to England. The remaining three members of his expedition continued without him. He's expected to make a full recovery.

"Without my hands I would have a very difficult future," he said.

The 52 year-old plans to make another attempt to reach the Pole next year.

- Josh Landis

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Submit via e-mail to AntSun@polar.org or the *Sun* office in Bldg. 155.

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Ice



Ron Sletten chainsaws a chunk out of the subsurface ice. Its outer edge has become ice-cemented soil, which looks and feels like cold cement. The saw's chain lasted only a few minutes before snapping.

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sands of years' worth of deposited rocks and soil is a body of ice that may be a glacier nearly 10 kilometers (6 miles) long and hundreds of meters deep. It would be completely hidden except for some tell-tale signs: Massive polygons that dominate the appearance of the surface. From the air, the pattern looks like dried, cracked mud.

On the ground, however, the cracks are mini-valleys between uplifted sections of earth 10 to 30 meters (30 to 100 feet) wide. Up to three meters (10 feet) deep, they hold some of the secrets to how the valley formed, and could provide information on the mysterious underground ice.

That ice, in turn, could help scientists understand how water could exist on other planets, particularly Mars.

Sletten, who's here working on a research project conducted by a University of Washington scientific team, is a soil expert with vast experience in the Arctic. His lilting accent belies his Canadian and Norwegian roots, and he is as comfortable philosophizing over politics or travel as he is geology. Here his focus becomes, in a way, geometric.

The polygons in the valley are defined by cracks that can be several meters wide. When the underground glacier cools, the cracks between the polygons open slightly and sand falls into the gaps. When the polygons later warm they try to close the

space, however, they cannot squeeze all the way shut again. As a result, the pressurized ice mixes with the sand and a zone of ice-cemented soil forms. It's this ratchet-like action that causes these "cracks" to grow and deform the surface over time.

Nobody knows exactly how long this

One study dates the glacier at 8 million years old. That would by far be the oldest ice on Earth.

mechanism has been taking place, or how old the glacier is. One study dated it at 8 million years old, based upon volcanic ash found on top of it. That would make it by far the oldest ice on Earth. But that theory is under close scrutiny; there is no sound model that can explain how ice could survive that long.

Sletten is among the skeptics, but he remains open-minded to the scientific claim and says he would love to be able to prove the age. The biggest source of his disbelief is the fact that the glacier isn't covered by very much soil – a meter or less in some places. With that little cover-

age, the ice should have been sublimed by air in fewer than 8 million years.

"It's hard to believe it lasted so long because it's so close to the surface," Sletten said. "But I'm not going to say bah humbug, either."

His team, which includes researchers Dan Mann and Margaret Smith, is canvassing the valley, trying to divine the history, age and personality of the ancient ice.

They're using GPS units to track movements of the glacier, gravity meters to determine its depth, and have placed several monitoring instruments deep into the ice to measure temperature, humidity, movement and other variables.

The team is also taking samples of the glacier at certain locations, but keeping activity to a minimum to avoid impacting the pristine landscape. All holes that are dug get filled in again, and the researchers take care not to disturb too many stones while walking. Sletten uses an alcohol-lubricated chainsaw to extract small samples, which he will take back to the States and examine.

The biggest questions are how old the ice is, and how it came to be where it is.

"We're trying to find out if there's a record, and if it's readable, said Mann.

"If you had 8 million year-old ice, it would provide information about a period

see next page

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With its rugged, reddish-brown complexion, it wouldn't take a great stretch of the imagination to place Beacon Valley on Mars.

of the Earth's existence that there's no data on," he said.

It could extend the length of environmental records frozen in ice by nearly 20-fold. Currently, the oldest glacial ice is estimated to be 450,000 years old but is much less accessible than Beacon Valley; it is more than two miles beneath the East Antarctic ice sheet over Lake Vostok.

The setting of Beacon Valley may seem otherworldly at times, and the findings of the research there could have truly far-out implications. Polygons that look similar to the ones in the Dry Valleys have been sighted on Mars. If scientists are able to judge ice forms and movement under the surface here, they could apply that knowledge to the red planet. A research associate of Sletten's has already written papers on Martian polygons, and there are two planetary scientists that will assist with the finding of the research in Antarctica.

With its rugged, reddish-brown complexion, it wouldn't take a great stretch of the imagination to place Beacon Valley on Mars.

"Try to step where I step," Sletten said



A helicopter departs over the Beacon Valley camp. Three researchers there are trying to learn more about a huge body of ice under the valley floor. Photos by Josh Landis.

as he made his way across an intricate mosaic of flat, wind-polished stones that stretched in all directions. "This surface would take a long time to heal if it gets disturbed."

The natural, interlocking phenomenon is called "desert pavement," and it's very pronounced in parts of Beacon Valley.

"This surface is probably tens of thousands of years old," Sletten said. "It's like artwork."

Footsteps leave tiny sand divots in the ground, exposing the fine soil underneath to the relentless winds above. A trail made

several years ago was still plainly visible, showing no signs of going away anytime soon.

When it comes to the ground, Sletten is an enlightened man. He knows soil is more than irrelevant matter we build on top of, or walk over. It is a dynamic relationship between rocks and sand and other particles, wind and water. The ground changes, it evolves, and if we look closely enough, it tells us a detailed story about the past. If anywhere, Beacon Valley is a place where ancient secrets lie undisturbed. ■

Highway ¹ _{one}

How do you express your creativity in Antarctica?



"We attached a whole lot of solar panels to a rock. I thought we did that pretty nicely."

John Ritchie
surveyor with the
U.S. Geological Survey



"I've been working 16 hours a day for the last month. Pretty much the most creative thing I do is write home."

Tom Crawford
TOPHAT
graduate student



"I have a bulletin board in my room that I put stuff up on, different quotes from books and stuff that I draw or find in my travels."

Alison Gaudiano
cadet on Polar Sea

the Polarmail man

Old link standing by: any takers?

By Josh Landis
Sun staff

In the days before e-mail, internet access and direct phone lines were available here, one man helped put Antarctica in touch with the world. Rick Johnson spent decades at his ham radio keeping thousands of people on the Ice connected with friends and loved ones at home. With the help of his wife, Louise, he did it during his spare time, and he did it for free.

"I didn't drink or smoke, so I figured I might as well do something," Johnson said.

Today he still stands by, ready to help anyone in the U.S. Antarctic Program reach out and touch someone, now through the internet. But lately he hasn't been getting much business.

Rick and Louise started the messaging service that would eventually be called "Polarmail" more than 16 years ago. Rick was an amateur ham radio operator with high-frequency wanderlust. Antarctic radio operators were looking for a way to get more messages off the Ice. When Johnson made contact and announced he was a member of the Military Affiliate Radio System, which is more powerful than regular ham radio, and willing to put in the hours, the pieces clicked.

"There are quite a few folks out there that used my services extensively over the years," said the 73 year-old Johnson, who's never been to Antarctica. "They would remember it well."

From his home in eastern Pennsylvania, Johnson would work into the night, acting as a human relay in the transcontinental communique. He would patch phone calls through his high-frequency (HF) radio and flip the

"I didn't drink or smoke, so I figured I might as well do something,"

*- Rick Johnson
on his ham radio hobby*

transmission switch each time someone said, "over."

Johnson also transcribed short letters read to him by operators on the Ice. He said many of the messages he passed on weren't very enthusiastic.

"Most of them didn't like it down there and wanted to come home," he said. "They would say what a big mistake it was to go there."

One night, Johnson said two FBI agents knocked on the front door and started asking questions about his contact with Antarctica. At first, he and Louise didn't know what they were after.

"They were investigating a drug ring in McMurdo and had traced some phone calls to my location," Johnson remembered. "Much to my disbelief I was making phone patches for (the suspects). After they investigated us they went away."

Over the years, Rick and Louise used many different systems to pass messages along. The phone patches were popular, but the Johnsons also typed and mailed messages by hand. In a busy week they would relay up to 300 messages.

In later years, Louise introduced a service called "Polargifts." She would order flowers and other gifts to send on

special occasions, before internet shopping or phone orders were available to people on the Ice. Now Rick scans photos and prints out e-mails, operating almost exclusively via the internet.



*Rick Johnson and
his late wife,
Louise.*

Ultimately, the evolution of Polarmail reflected the changing face of technology. The increasing popularity of the internet and e-mail means Polarmail may soon go the way of the Pony Express. Raytheon is currently evaluating whether it will continue to spend \$32 each month to reimburse the cost of Johnson's phone line. He receives no payment for his services.

Either way, Johnson says he'll stay in business.

"It won't end Polarmail. I'll pay for it myself," he said.

Still, he says, times are changing. "I think it's going to be the end of an era here."

Louise Johnson died in December, 1999, but Rick is still ready to make the intercontinental connection. Polarmail is free and Johnson can be reached at polar@epix.net. ■

Season from page 2

impact the area where the sea ice runway usually goes.

But researchers would jump at the chance to come in for a few months during the austral winter, a time when their universities are on summer break anyway, said Randall Davis of Texas A & M University. He is eager to use new technology to follow

up on research he did in 1981, when he wintered-over to study Weddell seal behavior. In the 20 years since, he has become a professor and father, making it difficult to winter in Antarctica.

"A great number of PIs (principle investigators) have the same problem," Davis said. "They have commitments

which just don't allow them to leave for practically a year."

If an icebreaker were able to divide the winter in half, Davis and other researchers could commit three months instead of six.

"Really it opens up McMurdo to a whole range of activities," Davis said, "as occurs in the summer." ■

Time's up for t-site

transmitter site due for change

By Beth Minneci
Sun staff

Just ten years ago, if you called home on Christmas the whole world listened in on ham radio. For privacy, you walked to Scott Base and paid \$10 a minute to use a telephone. Now, calls from a dorm room to the United States cost less than \$1 each hour.

More changes in how people in Antarctica can communicate are on the horizon. At what's commonly called the t-site on Crater Hill, the United States Antarctic Program is switching from manual to automated operations. Though the new system will be unnoticeable to most of its users, the change marks the end of an era on the hill.

This year a new transmitter site station will be built and stocked with some of the current equipment and new state-of-the-art machines. The manual transmitters that have done the job since 1967 will be tossed out. By next summer, the three-bedroom building in which three technicians have lived part-time and worked for decades will be razed.

"The personality will be gone from this place," said communications technician Bevin Lynch, who has worked at the site for three years.

The changes on the hill are part of a three-pronged project the program dubbed the McMurdo High Frequency Modernization Project. In addition to the transmitters at the t-site, the receivers on Black Island and control systems on station will be replaced.

The t-site, or transmitter site, lies between McMurdo Station and Scott Base, where a road leading to the top of a hill ends at a field of antennas. A gray, boarded building there shelters the technicians and several rooms full of blinking transmitters and computers. Under its roof they swap shifts to keep a 24-hour watch over a cold, gray wall of the 1960s-era machines. These high-frequency transmitters are each taller than the operators, and are used for radio communication between McMurdo Station, flights, the South Pole and deep field camps. Next to the old transmitters are two new models that will eventually replace the vintage machines. They are much more compact, about the size of a stereo.

A trip through the buildings is a tour of a range of microwave radios, high- and very high-frequency transmitters and receivers. In the eyes of the technically untrained, some look old, but they all look similar, box-like with lights, dials and knobs.

NASA keeps transmitters here. One of them is like many on the planet, working as a gauge for satellites seeking locations on Earth. Another of NASA's transmitters interacts with a satellite dish outside.

"It's kind of overwhelming at first, looking at all this equipment," said communications technician Lonnie Ely.

Over time, though, the stark surroundings have become home. Each of the quirky, old transmitters requires a technician's intimate knowledge to run smoothly. Ironically, the technicians have grown to like the fussy equipment on



Above: The home office at the t-site and some of its 17 antennas.

Right: Technician Bevin Lynch points to two of five transmitters that will be replaced with models one-fifth the size. The transmitters handle high frequency signals.



"They've been just barely able to hang on and maintain them."

*- Alan Schoenwald,
communications supervisor
on technicians working with old equipment*

which they work. "You learn the personalities of them," Ely said.

But the machines are done, said communications supervisor Alan Schoenwald. On contact, fingers can turn the dry wire insulation into dust. The Navy doesn't use these 33-year-old transmitters anymore, so replacement parts are impossible to find. When something breaks, a crisis arises.

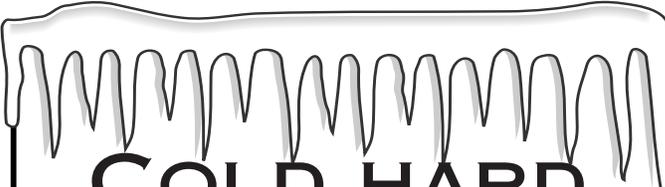
"They've been just barely able to hang on and maintain them," Schoenwald said.

Compared to the current ones, which tune to one channel at a time, the new ones can be programmed with 250 channels. On the current machines, the technicians must manually change frequencies. When the new site is built, the transmitters will be controlled remotely from town. "So there won't be any need for a staffing here," Ely said. ■

our Antarctic week

7 Science lecture, "The historic huts of Ross Island," by Nigel Watson, 8:15 p.m., galley	8 Slide show on Africa by Dave Carpenter, 8 p.m., galley	9 Tie-dye party, 8 p.m., crafts room
9 Trivia night, 8 p.m., Scott Base	9 Salsa night, 8 p.m., Gallagher's	11 Karaoke, 8:30 p.m., Gallagher's
11 Movie "Arctic Dance" about the life of Mardy Murie, 8 p.m., Coffee House	12 Acoustic night with performers Mike Rodriguez, Mistie Smith and Bill Ames, 8 p.m., Coffee House	13 Movie "Scott of the Antarctic," 8:30 p.m., chapel

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COLD, HARD FACTS

- Average age of people working on the Ice: **37 years**
- Number of workers too young to legally drink in the U.S.: **16**
- Age of the youngest person on the Ice: **18 years**
- Number of workers who qualify for senior citizen discounts: **6**
- Age of the oldest person on the Ice: **72 years**
- Percent of South Pole employees on the Ice for the first time: **56**
- Number of first year employees at McMurdo Station: **234**
- Longest someone currently on the Ice has been here: **22 seasons**

Ross Island Chronicles

By Chico



I have some urgent news to report. The scientists are back, and grabbing any youngster they see.

What? First our women and now our kids!!!

This means war!!! Get the men together... we're confronting the enemy.

We're here to tell you kidnapping is a serious crime and will not be tolerated.

GOULD GOES SOUTH AGAIN

“Pack ice is like a living thing, it goes where it wants.”

- Steve Ager,
marine projects manager,
Gould research vessel

By Josh Landis
Sun staff

Engine trouble kept the research vessel *Laurence M. Gould* in port at Punta Arenas, Chile longer than expected. The ship arrived the day after Christmas and took on new science passengers for its next cruise of the season.

The *Gould* will start the new year in the Southern Ocean. On its way to Palmer Station, it will support various Long-Term Ecological Research projects including a look at seabird communities and examination of plankton in the area.

Recently, the ship supported a paleontological expedition to Seymour Island, where a research group camped out for several days. The team was collecting fossils and studying the La Meseta Formation on the island. It dates to the Eocene Epoch, 35-40 million years ago.

The climate in Antarctica at that time began to cool, eventually leading to what is now known as polar conditions. The goal of the research is to reconstruct how climatic changes in the Eocene affected marine life in Antarctica, leading to the peculiar bottom communities that live in shallow waters around the continent today. The team gathered almost six hundred pounds of fossils.

The expedition also served as a scouting trip to set the groundwork for an extended field season at Seymour next year, according to Steve Ager, marine projects coordinator on the *Gould*. Next season, a small field camp will be set up there for about four weeks.



Above: The *Gould* spent three days struggling through pack ice off the Antarctic Peninsula. At times the ship was stuck fast. Photo by Steve Ager.

Right: Daniel Blake, Richard Aronson and Alex Glass collect fossils on Seymour Island. The team is researching past climates by examining samples that are more than 30 million years old. Photo by Linda Ivany.



The *Gould* departed for Palmer Station after that, but promptly became stuck among floes of heavy, multi-year sea ice. The ship is ice-strengthened, but not a full-fledged icebreaker, like the *Polar Sea*.

"It took us three full days to make thirty miles to the ice edge, backing and ramming almost continuously and getting stuck fast on two occasions," Ager said.

"Pack ice is like a living thing, it goes where it wants, when it wants, and there is a unique character to each piece," he said. "Like snowflakes, no two are alike."

The pack is also home to wildlife in large numbers that drift with the ice.

Seals, penguins, and sea birds of all descriptions passed by the *Gould* as it waited for a break in the ice.

"It was by far the heaviest ice the *Gould* has ever been in," said Ager. "Fortunately, the weather cooperated and allowed us to find our way out before we had to call for icebreaker assistance."

After a brief stop at Palmer Station to drop off people, fuel and supplies and to pick up other cargo, the crew headed out to sea again.

The *Gould* spent Christmas Day in the Drake Passage, where researchers took current and temperature readings before pulling in for supplies and new passengers. ■

Slugs, bugs and other pets

By Kristan Hutchison Sabbatini
Sun staff

Finding a slug in the salad at home would be disgusting, but on the Ice it's a cause for delight. "We're all amazed. It's something different in the work day," said Jason Davis, a dining attendant.

Imported animals haven't been in Antarctica legally since the British removed their dog teams in 1993. The Antarctic Treaty forbids bringing in animals, but they come anyway, stowaways between the leaves of lettuce or in boxes of fruit. At the South Pole the kitchen staff find two or three slugs a year.

"They come with freshies, and are much heralded – receiving names and lots of love," Tracy Sheeley wrote from the pole. "Sadly, the altitude seems to get them."

In McMurdo, salad chef Cary Marger has found spiders, inch-worms, caterpillars, aphids and flies as he sorts through the vegetables, usually hidden in the outer leaves of romaine lettuce.



Salad chef Cary Marger examines a slug that arrived in McMurdo hidden in a head of lettuce. The critters that come in with fresh fruits and vegetables sometimes end up as pets. Photo by Kristan Hutchison Sabbatini.

People come back to check as he sorts, asking "Any bugs today?" Some are hoping to adopt a pet.

"We tried to start a fly-spider farm in one of those spice bins," Marger said. "Actually the spider built a web and we watched a fly almost walk into it. It was the most excitement we've had back here in a while."

The most popular stowaway so far was a ladybug.

"It was pretty cool," Marger said. "My roommate found him and then we showed him around to everybody."

Earlier this season Ginger Alferos had a slug ranch in an Italian dressing container. Arriving on an orange, the brown slug was barely the size of a pinky tip, with a nearly translucent head and a mark Alferos guessed was freezer burn. She named it Giovanni, after the dressing brand, and fed it pansies and lettuce leaves from the greenhouse.

"It's fun to watch the way they stick out their antennas and feel around," Alferos said.

Alferos had cared for the slug for six weeks when she discovered about 25 translucent eggs on the bottom of the container. She offered them up for adoption. Two people were interested in a pet slug, but the eggs never hatched and Giovanni died.

Freshie pets usually do die after a few weeks, but that doesn't discourage Alferos.

"They might as well enjoy their life while they're here," she said. "It's kind of tradition. A lot of the cooks and DA's (dining attendants) from last year said they did it because you get so starved for pets."

Alferos misses animals so much she's begun to dream about them. First she dreamed of grass and insects, then small dogs and monkeys. She's not the only one. Brian Strain was walking up to the heavy shop when he thought he saw a dog from the corner of his eye. He had to stop and take another look.

"It was just a rock in the snow and it looked like a dog," Strain said. "I even thought I saw a rat."

Of course, there are no rats in Antarctica and even bugs are rare, which is why the critters hiding in the freshies get so much attention.

"The first time I saw a flying one I didn't even look because we don't have flies down here, but then I noticed it was a fruit fly," said dining attendant Della Anderson.

Philosophies differ on how to save the stowaways. Spiders have been carefully handed over to pilots to carry back to Christchurch, Elaine Parker said. Attempts to keep bugs as pets are usually short-lived.

"It's kind of like that experiment in high school when you have to carry an egg around and if it breaks you're a bad parent," said Pete Hobbs, helping sort the lettuce. "Well if that's the case, there's a lot of people back here who shouldn't procreate."

Now Marger just slips the slugs and bugs he finds into the food waste with the leaf they rode in on, figuring if it got here that way it might make it back.

It won't get far though. All food waste is frozen, then incinerated. ■