NOVEMBER 15, 1997
Every Two Weeks

The Antarctic Sun

Published during the austral summer for the United States Antarctic Program at McMurdo Station, Antarctica.

Abducted in McMurdo Sound:
Sea Butterflies Provide Chemical Defense

by Terri McLain

In the first kidnapping documented outside human society, amphipods have been photographed abducting sea butterflies in McMurdo Sound. In this unprecedented maneuver, opportunistic amphipods pursue their victims at high speeds, grasp them to their upper abdominal segments, and ruthlessly use them for their own defense.

These kidnappings were discovered by Jim McClintock and Bill Baker who are probing the world of marine chemical

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INSIDE

Fortnight of Frustration
Struggling to Reach the Pole

story and photos by Alexander Colhoun

Lt. Mike Boyle, a three year veteran of Antarctic flying, was unable to gather the visual cues he needed on the ground to make a safe landing at the South Pole last week. "We could see the Pole below us, but forward visibility wasn't good enough for landing," said Boyle. "It's frustrating flying all that way and not being able to land and complete the mission."

Twenty-six Antarctic veterans scanned the stormy skies with anticipation. It was the moment of truth. Eight months of isolation would draw to a close with the landing of a Navy LC-130 Hercules.

"We were thinking: Come on, you can do it this time," said Glen McConville, one of the 28 South Pole winter staff. "But deep inside I had doubts, it was too windy and overcast."

McConville was right –after four passes the plane turned away, and likewise, McConville turned his thoughts elsewhere, a mental tool he developed through the long winter. "I knew that sooner or later a plane would come," said McConville. "So I just went back to work."

For other winter-overs, the delays had consequences. Several had plans to meet relatives in Christchurch. Each setback further jeopardized these long-awaited reunions. "Feelings varied from person to person," said McConville. "But mostly people went on."

The wait would last another four days.

Meanwhile, back in McMurdo, Dave Fischer, the South Pole area manager, pondered how he could make up for lost time. With a 111 work day season, seven lost days equals almost 10 percent of the season.

"You've got to understand this is the busiest season ever planned," said Fischer. "In addition to a growing science program, it is the first year of our new station effort."

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_NTA_C_ICA: what's missing is ART

by Alexander Colhoun

Forty feet below Antarctica's frozen sea, Norbert Wu rests quietly, looking up at thousands of glittering ice chandeliers hanging from the ice shelf. As seconds slip by, Wu basks in this ultimate isolation.

Fifty miles away, on the remote shores of Lake Hoare, Gretchen Legler soaks in the sweeping, sandy moonscape before kneeling to collect a water sample for Emily Roberts, a researcher studying protozoa of the lake.

Neither Wu nor Legler are scientists. They are artists, and they've come to Antarctica to bring its ephemeral beauty, hollow silences and dynamic landscapes back to the people who helped them get here, the American taxpayers.

Wu, an underwater photographer, and Legler, a writer, have joined an elite coterie of writers and artists selected by the National Science Foundation each year to work in Antarctica. It is called the Artists and Writers Program, and its goal, according to Guy Guthridge, director of Antarctic Information for the National Science Foundation, is to bring back the nation's Antarctic heritage.

photo by Norbert Wu

Norbert Wu, an Artists and Writers grantee made this image of Dr. Dale stokes peering through frigid Antarctic waters while diving off of Arrival Heights. "As a photographer in Antarctica, I hope to make a work of lasting value," said Wu. "I want to show what life under ice here is all about."

Since the program's inception in 1957, thirty-seven artists, writers, photographers, poets and painters have come to the ice to capture its intangible beauties. Yet there are few visitors to the Antarctic who leave without trying to capture this rugged expanse in their own words and pictures. The artists tradition in Antarctica began centuries ago with the continents earliest explorers.

From Sir Ernest Shackleton's poems to the paintings of Edward Wilson, the arts have long been a staple of the Antarctic experience. Robert Falcon Scott's expeditionary photographer, Herbert Ponting, brought the Antarctic world home to England and helped make Scott a hero in the process. Ponting's dynamic landscapes and gripping human interest images made compelling arguments for continued support of Scott's activities.

The task falls to Wu and Legler to continue this auspicious tradition. That's no small endeavor. Past program participants include esteemed natural history photographer Eliot Porter, author Barry Lopez and most recently, Sara Wheeler, whose book *Terra Incognita* remained on the British best seller list for months.

But what do poetry, painting, and writing have to do with the National Science Foundations scientific mission here? "Everything," argues Guy Guthridge. "The arts and sciences are the two great fields of study, and the United States Antarctic Program has both because it is the country's national program here."

"It's a brilliant program," said Legler, the daughter of a scientist. "I keep thinking to myself: what forward-thinking person invented this? I can't think of a better way to bring the vision of a place to fruition –through science and art."

For Legler, the picture of Antarctica is incomplete without the metaphorical reach that artists provide. Her perspective comes from years of journalistic and teaching experience, most recently as an assistant professor of creative writing at the University of Alaska, Anchorage. While much of her prior work focused on womens roles in sporting life, her Antarctic work is headed in a different direction.

"We look at this literal landscape and paint over it with our own hopes, dreams and fears," said Legler of her dynamic and growing Antarctic vision. "Unlike any other place it evokes emotion. I want to understand what is so powerful about this place."

It is a question science projects are unlikely to answer, and therefore we turn to artists to help us come to grips with a world that is somehow beyond our grasp.

But in a land where science defines human interaction, the task of artistic interpretation appears doubly challenging. Many artists fear the world of science, seeing it as cold and calculating. In Antarctica the artists are forced to find common ground with the scientist in order to do their job.

For Legler, the integration of science and art comes naturally. "Very few people understand how much scientists and writers have in common," said Legler. "Our methods are different but we are both looking for a deeper understanding of the world around us."

Dr. Leighton Taylor, a fellow researcher on Wu's team, spoke in parallel to Legler.

"It is the task of the artist, the scientist, and the child to discover the world and to tell others about it," said Taylor. "We all celebrate the joy and thrill of discovery –while our tasks are the same; only our methods differ."

Even so, not just any writer or photographer is up to the task. Indeed, the Artists and Writers program is anything but a free ticket for the amateur explorer. "Applicants must

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Web address: http://www.asa.org

Wiring Antarctica's Dry Valleys

story and photo by Tom Rebold

The chopper swings wide over the frozen lake, headed for a wooden platform on the shoreline. Skimming low, the helo hovers before touching down, scattering pebbles and ice crystals in all directions. Immediately Bob Zook and Rocklynn Phillips hop out and begin to unload. Within minutes the helo is airborne again, headed to a ridge 4,000 feet above.

Zook and Phillips are privileged to carry out their trade amidst some of the most spectacular and remote scenery in the world. Delivered to work over crevassed ice sheets, twisted glacier tongues and rocky peaks scoured by Antarctic winds, they are among a handful of people dedicated to installing and maintaining radio telephones in the Taylor Dry Valley.

These phones provide a crucial link to the outside world for scientists in deep field camps. Using radio waves, they send voice signals to and from the McMurdo Station phone system 50 miles to the southeast.

To the caller it's just like picking up a phone in the lounge on base, but to Zook and Phillips, who have been installing phone units at Lakes Bonney, Hoare, and Fryxell, and repeater units atop ridge 1882 and Mt. Voslips, it's a chance to spend time in this stark wilderness.

"It was the most beautiful sight I have ever seen," said Zook after returning from a trip to the top of Mt. Voslips. "It was more beautiful than the Grand Canyon." In his own Southern laconic way, Phillips was similarly awed. "Downright heaaavy," he said, grinning.

Along with their supervisor Bill Nesbit and veterans Steve Forguson and Dave McDonald, the team recently headed out to the top of Mt.Voslips to install repeater units for the summer researchers doing field work there. Repeaters are designed to retransmit the two watt signals from the lakes below to a base receiving unit on top of Crater Hill at McMurdo.

The technology is simple but effective. Getting the equipment installed is anything but simple. "The winds were a little strong at the summit," said Zook of his first trip to the valley. "The pilot bailed at the last second and circled back to a spot farther down on the saddle."

Once situated on the ridge, half the crew set to work positioning a pair of Yagi antennas on heavily weighted tripods, cabling them to the repeater units, and hooking all of this to a solar charged battery for power. Meanwhile the rest of the crew flew down to lakes Hoare and Fryxell to install subscriber telephone units. A few test phone calls later and the lakes were officially 'wired.'

Though Zook and Phillips are rookies to Antarctica, they are no strangers to the world of mountain adventure. At home in Aspen, Colorado, Zook runs a paging and mobile phone company, spending his free time on the Mountain Rescue Team tracking down lost skiers and crashed airplanes. "I've spent the night with victims at the top of three 14,000 ft peaks in Colorado," said Zook, who sees his Antarctic experience as a culmination of his passion for the extreme environments and a chance to explore some of the last unknown places on earth.

A native Virginian, Phillips spent the last five years working for Mountain Electronics, providing communications support for Westvaco Pulp and Paper Corporation. At heart, however, he is a self-described hound dog junky.

Robert Zook takes a break from working on a solar panel used to power the rural telephone system at Lake Hoare. The Yagi antenna above him transmits the signal to a repeater mounted on a ridge in the distance.

Most of Phillips' income goes to raising and breeding a pack of Blue Tick hounds. Stump, Pollyann, Spunk, Daisy Mae, Knucklehead, and Big Blue Sky join Phillips as he tramps through the Shenandoah Mountains in hot pursuit of the bears that still roam the hillsides.

"I've worn out a lot of boots following hounds," said Phillips, who finds the thrill of the chase more than enough satisfaction –he seldom brings a rifle with him, preferring to tree his quarry rather than take a trophy. He left his beloved purple-ribbon bred dogs with his father and brother for a solo foray to the most remote continent in the world.

Not all of Zook and Phillips' work is so exciting. The Dry Valleys represent only a small fraction of their tasks this summer.

Theirs is a job that includes making bench repairs and debugging communications problems caused by interference or storm damage. But when a call comes in from the dry valleys, Zook and Phillips are out the door without hesitation, to taste the air on rocky peaks and to bring communications to remote field camps. ✹

Fire Expo '97

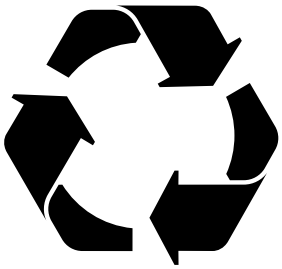
Don't miss the Anatarctic Fire Department's annual fire exposition and open house. The entire McMurdo community is invited to attend and participate.

- Food, beverages, prizes and exhibits.
- Win fire-fighter T-shirts.
- Demonstrations and displays on: extringuishers, automobile extrications tools, rescue systems, and all sorts of fire-fighting apparatus.

Sunday, November 23rd

at the Firehouse from 12 to 5 pm
Contact: Robert S. Guidi x2555

Retro VIVA!



by Suzanne Tegen

The landscape of Winter Quarters Bay conceals the truth with perfect Antarctic splendor. Deep below the surface the secret is revealed: before 1977 McMurdo's solid waste was staged out on the sea ice, to be swallowed by the Ross Sea when the ice cleared.

Prior to 1991, this process was abandoned in favor of burning trash at the Fortress Rocks landfill above town. "The burnt paper from the landfill would fly all over," said Cathy Young, a six year Antarctic veteran. "We called the little pieces black butterflies."

What a difference a decade makes. Waste management in Antarctica has come a long way. Today, all waste generated at McMurdo, South Pole, and at outlying field camps is segregated, packed in containers and shipped back to Washington State where it is recycled, burned, or turned to landfill.

65 percent of the waste generated was diverted from the landfill –far above the national average.

The key to McMurdo's waste management program is proper sorting by individuals. With more than twenty categories to choose from, finding the right bin for your trash can be a bit confusing, but the effort has paid off.

In the 1996-97 season, 48 percent of McMurdo's solid waste was recycled, 17 percent was burned and converted to energy, and only 35 percent was turned to landfill. That means 65 percent of the waste generated here was diverted from the landfill.

Compared to the US, only Minnesota comes close to this record, recycling 50 percent of its waste in metropolitan areas and 41 percent in rural regions.

"While continuing to increase our recycling rate, we'd like to focus on reducing our overall waste, by reusing as much as possible..." said Eric Juergens, ASA's Safety, Environment and Health Director.

Art Brown, manager of support services for the NSF, emphasized that waste reduction in Antarctica begins with planning at home. "We need to look at minimizing what we bring down, by only taking what is absolutely necessary and taking it in the most efficient manner available."

Waste reduction can be as simple as using your own coffee mug instead of taking a paper cup, or as complex as creating a paperless office by substituting E-mail for written documents. Another part of the waste management plan is to reuse materials within the program.

It's a simple concept –what one work center no longer needs may be a cost saving resource to another. If waste management can't find a department in McMurdo or at the South Pole that needs the equipment, it will be shipped back to the United States for resale or donation to charity.

Thus far the resale program has been a success, turning in a sizeable revenue of $38,000 for the 1996-97 season. Waste management does not receive a direct reimbursement for the resale items, but a percentage of it is credited to waste disposal fees.

The Antarctic continent is this planet's last unspoiled region. By reducing our waste before we reach Antarctica, reusing equipment once it is no longer needed, and reselling items to defer disposal costs, human impact on this fragile environment can be greatly minimized. ✹

- For an updated listing of what can be found in McMurdo's reuse programs, check the LAN under "Community Information." Further questions or suggestions should be directed to the retro office, x 2731.
- The retro program deals with work center materials only. Personal items can be found and dropped off at Skua Central, near building 185.

Did You Know...

by Brenda Joyce

Nathaniel B. Palmer, a young sealing Captain, discovered Antarctica 177 years ago (November 17, 1820). A few weeks later he was scouting seal rookeries when he encountered the two-ship Russian expedition sent by Alexander I for the specific purpose of discovering the Southern Continent. Although disappointed, the Captain of the Vostok, Fabion G. von Bellingshausen, congratulated Palmer and named the peninsula Palmerland.

Hitler had Goering send Dornier flying-boats to Antarctica to claim the continent for Germany. Marker poles with swastikas were thrown out onto the ice to demonstrate land claims of the Third Reich.

The C-5 Galaxy aircraft can carry four helos or eight Greyhound buses as cargo.

Mt. Erebus is the tallest point of Ross Island. It is also the only active volcano in Antarctica.

The Ross Ice Shelf is equal in area to France.

Entombed under Antarctica's ice are mountains, hundred mile long lakes and deep troughs.

In the Dry Valleys tiny ponds of water exhibit microscopic life in the summer. Miniature wingless insects hide in patches of moss and lichens.

A beard-cutting machine was part of Amundsen's gear. This was useful to prevent ice from accumulating on beards from frozen breath. A tooth extractor was also taken and had to be used during the course of the journey.

The penguin is the most highly specialized of all birds for marine life. With wings that resemble flippers, a penguin can swim as fast as 25 m.p.h. in pursuit of fish, squid and shrimp. When on land, it fasts.

Mt. Erebus was named for the flag ship of Captain James Ross in 1841. It is a fitting name for a volcano that reaches perhaps a hundred kilometers into the earth. In the Greek myth, Erebus is the personification of primeval darkness, born together with"Nyx" (Night) from the primordial Chaos. Erebus was the dark region beneath the earth through which the shades passed to the realm of Hades below.

Antarctica has more ice and snow than all the glaciers and snow fields of the rest of the world combined.

Abducted in McMurdo Sound

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ecology. Although the brightly colored butterflies do not appear to derive any benefit from being kidnapped, the amphipods, a kind of marine insect, gain a distinct advantage in the savage game of Antarctic survival.

Studies show that fragile sea butterflies offer protection to the amphipods by synthesizing a compound named pteroenone. In spite of decreased swimming speeds, an amphipod with an abducted sea butterfly in tow is less likely to be devoured by a fish.

Why? Because it tastes terrible.

The ultimate fate of the butterflies is unknown. Amphipods have not been observed carrying dead butterflies so it is believed that the victims are released before they die. It is unlikely that they could escape on their own as they are securely held –so tightly that they do not break free even when spit out of a fish's mouth.

Interactions of this kind have drawn McClintock, an ecologist from the University of Alabama at Birmingham and Baker, a chemist from the Florida Institute of Technology, to Antarctica. Chemical ecology is the marriage their fields: ecology and chemistry. It explores the unseen chemical connections that promote biodiversity and shape evolution. The amphipod and the butterfly are but one small example in this complex chemical web. Many other organisms have also evolved creative ways to increase their chances of survival in competitive marine environments.

McClintock and Baker have found Antarctic sponges to be the source of half of the dozens of chemicals they have isolated in nine collective trips to the ice. Some creatures have developed a resistance to deterrent chemicals and are able to feed on prey rich in these offensive metabolites. The nudibranch Tritoniella belli, for example, can devour soft corals which synthesize chimyl alcohol –a substance offensive to other predators. The frilly, white nudibranch then sequesters this alcohol, making it distasteful to ravenous sea stars.

This Amphipod is shown at 500x magnification with the sea butterfly it abducted to defend itself from being eaten by fish.
Scanning electron Micrograph by Phil Oshel (Nature 1990, v.346, 462-4).

Both mobile and stationary organisms produce secondary chemical metabolites such as chimyl alcohol and use them in a variety of ways. Although the most common function is to deter hungry predators, secondary metabolites may also be used to prevent fouling organisms such as diatoms and bacteria from infecting healthy tissues. In addition, sponges and corals competing for space may be thwarted by the offensive chemicals secreted by their neighbors.

Many marine compounds, meticulously extracted and purified, have potential commercial applications. Chemicals that deter the growth of diatoms and plankton may have a future role in preventing fouling of ships and other undersea structures. Some compounds found in marine organisms have ultraviolet absorbing properties and can be used in sunscreens and other cosmetic products.

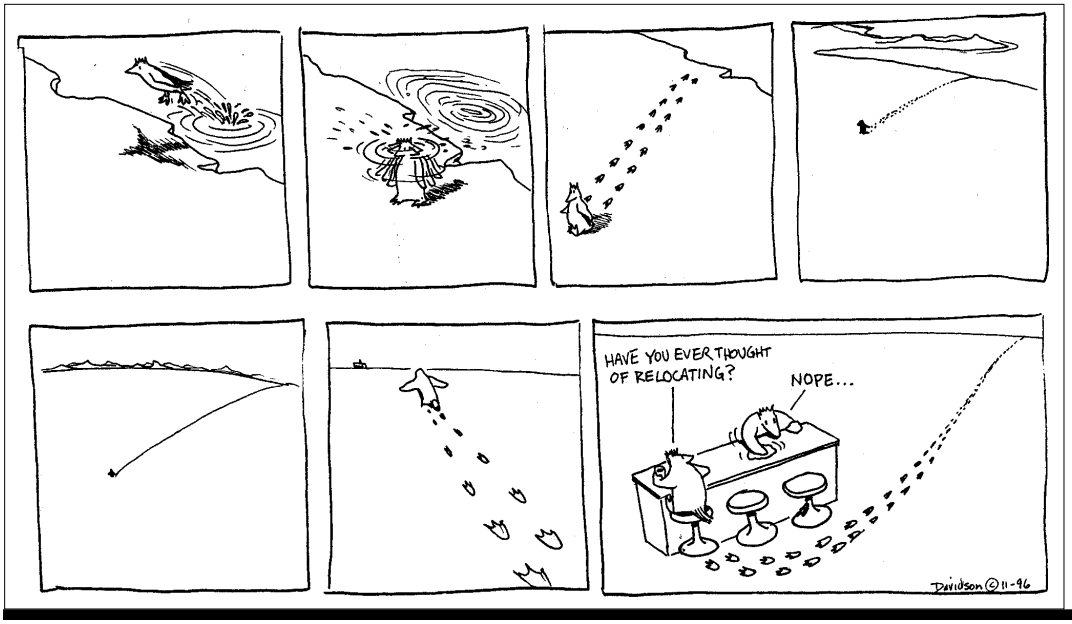
The most exciting discoveries, however, are being made in the field of human medicine.

For thousands of years marine organisms have been harvested for use in medicinal remedies. In England, red coral was prescribed for epileptic children. Eels were used by Egyptians to cure sweaty feet. In some countries, women wear seahorse necklaces to help breast milk flow freely. Pearls were the remedy of choice for insanity in Persia. Folk medicines such as these arose from supernatural beliefs. Today, scientists are using state of the art technology to screen natural products for effective drugs.

While many compounds have been isolated from marine invertebrates in Antarctica, few have shown promise as new drugs. Researchers screen thousands of compounds every year for pharmacological activities useful in the fight against cancer, arthritis, AIDS, and other diseases.

Last year, one of the compounds isolated by Baker from an Antarctic sponge showed toxicity against cancer cells. Unfortunately, it also proved to be generally toxic against all cells and is therefore not a great candidate for a drug. "It is, however, a good starting point" said Bill. "This compound has the potential to be modified in such a way as to be selectively targeted to cancer cells."

While getting a compound through the complex process of testing and FDA approval can take years, it all starts right here with Jim and Bill strapping on their SCUBA gear and diving down into McMurdo Sound in search of more creatures with unique chemical defenses. ✹



UPDATES

from Antarctic stations and ships

FOCUS:

Palmer Station

by Robert Farrell

The pace at Palmer Station kicked into high gear in preparation for the arrival of the M/V World Discoverer, a cruise ship bringing passengers and cargo for the delayed R/V Laurence M. Gould. Everyone and everything arrives in Palmer by ship, so schedules must accommodate.

Today there are thirty-six people here, fifteen of whom are grantees working on science projects. The ship will drop off nine additional people, bringing the total to 45.

I've spent seven seasons in Antarctica and this is my second season at Palmer. While there is still the familiarity of being on "the ice", the peninsula area is very different. The average temperature this time of year - 1 degree Celsius, but it's often above freezing, which is a switch from South Pole. When storms blow through they bring ice pack with them. It'll be open water one hour and then ice pack too tight for the boats the next. We still have a bit of a sunset each day and the scenery is spectacular.

One of the best things about this part of the continent is that wildlife is part of the routine. Elephant, Weddell, Crabeater and Leopard seals are often seen in the area, and the Adelie penguin rookeries on nearby islands can be heard and smelled when the wind is right! The flying variety of birds is well-represented here, not just the delightful Skua, but Blue-eyed Shags (Cormorants), Antarctic Terns, and Snow and Giant Petrels are commonly seen in the skies around the station. The unsung hero of the flighted bird world here is the Sheathbill. These chicken-like birds seem to enjoy foraging near the sewer outfall.

Later in the season the wildlife populations will intensify and hopes are high that the Humpback whales, Minke whales and Orcas will stop by for a visit.

Several major science projects are working on Ozone Depletion/UV Impact studies, looking at how the various organisms in the area are affected by the springtime increase in UVB radiation. One group is looking at the impacts of tourism and human presence on the local birdlife.

Science team's visits to Palmer vary from four weeks to four months. Our small laboratories get a lot of use during the summer season. So far, the weather and ice pack conditions have not accommodated the science schedules very well, but things can change quickly here at Palmer Station, so we'll see what tomorrow brings.

South Pole Station

by David Fischer

The first contingent of South Pole's summer crew arrived on 8 November, after a twelve-day delay, and prepared for the main-body opening on 12 November, by which time the station was prepared to begin the summer season. NSF and ASA managers are examining season schedules to get back on track after the delayed opening.

McMurdo Station

by Stan Wisneski

McMurdo continues to be slammed by nasty storms that have disrupted aircraft schedules as well as field camp openings. South Pole finally opened. This is good news for the science and ASA South Pole folks who have been held in Christchurch since McMurdo had no beds available for them.

The Halloween party was held Saturday 1 November. As in the past, it was a huge success with prizes awarded for best, scariest, most original, and best group costumes.

Christchurch, NZ

by Brian Stone

The R/V NATHANIEL B PALMER was the star attraction of the Port Lyttleton Open Day on 2 November. Close to 4,000 people toured the NBP during the eight hour exhibition. On 8 November Dave Bresnahan returned to Washington, D.C. after turning over the NSF Representative, NZ position to Dr. Polly Penhale. Dr. Penhale is the NSF Program Manager for Polar Biology and Medicine and will be acting as the NSF Representative, NZ until shortly before Christmas. With the first Royal New Zealand Air Force C-130 flight to McMurdo scheduled for 17 November, Christchurch is preparing for the arrival of the 40 squadron aircraft and personnel.

Research Ships

by Jon Alberts

The Research Vessel Ice Breaker NATHANIEL B. PALMER sailed from Port Lyttleton, New Zealand on 5 November 1997 in support of the JGOFS PROCESS IV cruise. This is the sixth JGOFS cruise on the NBP. The scientific party of 34, from 15 different universities, will continue to gather data in their effort to understand the flux of carbon between the ocean and atmosphere, as it relates to global climate change.

Field Support

by Jill Ferris

The science construction crew has completed much of the work at Siple Dome camp. Science teams including the PICO (Polar Ice Coring Office) have begun setting up the large drill and a small drilling project away from the main camp. Ken Borek Air, the Canadian company contracted to provide Twin Otter support, has arrived. Henry Perk will serve as chief pilot. The weather has created havoc for almost everyone involved in field activities –but we'll catch up.

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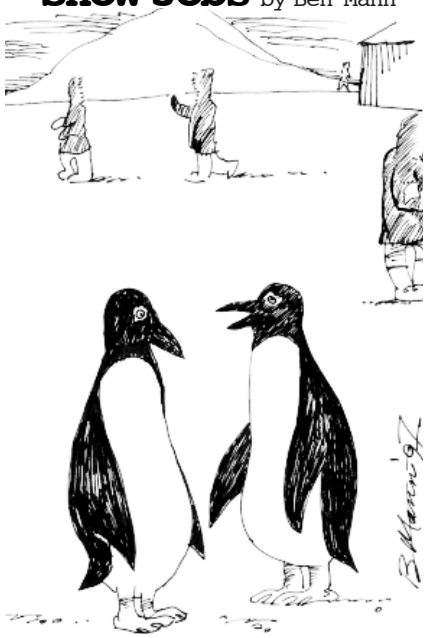
Snow Jobs by Ben Mann



I just love the way they waddle around... so sociable even though they are practically indistinguishable.

South Pole Delay

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Eight months of isolation heightened by a ten day delay of the summer opening of South Pole did little to dampen Glen McConville's enthusiasm for the experience. "It was wonderful," said McConville with a beaming smile. "I'd do it again in a minute. Just give me a little recovery time."

Cockpit Perspective

From the cockpit of Lt. Mike Boyle's ski-equipped Hercules three hundred feet above the South Pole, conditions looked bad. Forward visibility from the flight station was a mere half mile. The surface and horizon were virtually unrecognizable.

"It was like placing a white sheet over your head," said Petty Officer John Voss, the flight engineer. "You couldn't see anything in front of you." Guided by the Herc's radar, the crew flew four approaches to the Pole's skiway in the hope of catching a break in the weather.

Mother Nature won the battle.

To the disappointment of the 50 passengers on board the first attempted flight to the South Pole from McMurdo, the Hercules returned without landing at the Pole.

It was a fortnight of frustration for workers bound for the South Pole. The station was scheduled to open on October 27th, but powerful storms racing through McMurdo scrubbed any departure efforts until October 29th. In the meantime temperatures at Pole hovered near -55 degrees Celsius.

Pole veterans scoffed at these temperatures having survived many a winter night in a place where temperatures often dropped well below that level.

Hercs do not react favorably when temperatures dip below minus 50 degrees. Seals and gaskets shrink and aircraft components such as propellers, engines, landing gear and skis leak excessively. Hydraulic fluid, the life blood of the complicated and fickle ski system, congeals and causes numerous problems.

In addition, while LC-130s have excellent instruments designed for flying in adverse weather conditions and their pilots receive extensive instrument training, there comes a point when pilots approaching a landing site must be able to see the ground. They use these visual cues to align the aircraft with the skiway, and judge their height and rate of descent, all to complete a safe landing. The pilots on the first flight to the South Pole never received these cues.

On Saturday, November 9th it appeared as if the South Pole would finally be opened as a fully loaded LC-130 took to the skies. The odds of a landing looked favorable: skies were clear and temperatures were warm at the Pole.

"The mood was good," said Dwight Fisher, senior National Science Foundation representative in Antarctica. "People thought, 'The past is behind us, this is finally going to be it'." But even the greatest optimism couldn't keep the flight on schedule.

Thirty minutes into the three-hour flight, the plane developed pressurization problems, forcing it to turn around again. "Most people on that flight were veterans," said Fisher. "They took it in stride, but they were disappointed."

Deterred but not defeated, another plane bound for the Pole took off late in the afternoon.

Fast forward to ten p.m. that night in McMurdo. A crowd of sixty people packed the Southern Exposure Bar to catch live music and unwind after a long, busy week. As the band finished a tune, one of the players tapped gently on the microphone. "Hey everybody, I have a message: the South Pole is officially open! They landed!" The crowd went crazy and the music kicked in as a fortnight of frustration came to a close.

Lt. Joe Mohnacs contributed to this story. ✹

Gym Schedule

SUNDAY
- 2-4 pm Free-play basketball
- 4-6 pm Free-play volleyball
- 6-7:30 pm Tai Kwon Do
- 7:30-9:30 pm Free-play soccer

MONDAY
- 6-7 am Aerobics
- 6-7:15 pm Aerobics
- 7:30-9:30 pm Volleyball League

TUESDAY
- 6:30-7:30 pm Dance
- 7:30-8:30 pm Dance
- 8:30-10:30 pm Free-play basketball

WEDNESDAY
- 6- 7 am Aerobics
- 6-7:15 pm Aerobics
- 7:30-9:30 pm Volleyball League
- 9:30-11 pm Tae Kwon Do

THURSDAY
- 6:30 pm Volleyball league game
- 7:30-10:30 pm Soccer League
- 8:30 pm Soccer League

FRIDAY
- 6-7 am Aerobics
- 6-7:15 pm Aerobics
- 7:30-9:30 pm Volleyball League

SATURDAY
- 7-9 pm Free-play floor hockey

The Gym is available for reservations for any time not listed.
Call Kendra at 2443 for more information.

Halloween Snapshot

"It's my favorite holiday of the year," said Anne Vick as she carried her eight foot, lead staff. Despite her vestments, a flock of five less-than-saintly alter boys refused to heed her commands all night.

...this message is brought to you by the letter "T".

"T" is for Trash
"T" is for Tie

Please tie all trash bags before tossing them in the dumpsters.

Reduce • Re-Use • Recycle
call 2528 or 2740 with questions
Thanks,
Your Waste Management Crew

Remember to take your keys with you *every* time you leave your room.

Don't lock yourself out!

TV and Radio Line-up

CH 2	American Forces Network, Pacific: sitcoms, soaps, drama, game shows and movies
CH 4	Weather with FM93.9 audio
CH 6	Information Scroll with FM 104.5 audio
CH 7	Transportation Updates with NPR and Sports audio
CH 9	Movie Channel
CH 11	News and Sports, CNN, ABC, NBC, CBS
CH 13	The Spectrum Channel, a variety of programs

Detailed schedules are available outside the TV station in B-155.

Artists and Writers

...cont. from page 2

provide a concrete plan showing that, as a result of a trip to Antarctica, a significant body of work will reach a significant audience," reads the program information packet. This program is reserved for the creme de la creme —proven veterans with a track record to back up their publishing plans.

In a given year hundreds of requests for information are made, resulting in approximately 20 applications. Of these, typically three to five result in a working trip to the Antarctic.

Norbert Wu was one of the successful applicants this season. "It takes so much time, so much attention to detail and so many logistical efforts to simply get in the water," said Norbert Wu. "Anyone who helps in the process has given me a gift."

Wu plans to return this gift with a bounty of his own including a series of childrens books, co-authored by another member of his team, Taylor; a web site designed and managed by the Scripps Institute of Oceanography in San Diego that will catalog Antarctic marine species; major magazine articles; and even a coffee table book on life under Antarctic ice.

A quick glimpse at Wu's lengthy resume of accomplishments leaves no doubt he'll make good on these promises. As for Legler, she too has a list of ambitious publishing objectives, including an essay in Harpers magazine and a book length collection of her work.

Many months from now, when we sit down to flip through the eye-popping pages of Wu's surreal under-ice world, or when we become lost in Legler's landscapes, conjured up by naked words on a page, the Artist and Writer Program will have come full circle. For the time being, however, Wu and Legler will be hard at work here, trying to sort through their own understanding of this stark implausible world. ✹

Aurora Storealis

		Hours	
Sunday	11-2		
Monday	closed		
Tuesday	7-8:30	11:30-1	5:30-7:30
Wednesday	11:30-1	5:30-7:30	
Thursday	7-8:30	11:30-1	5:30-7:30
Friday	11:30-1	5:30-7:30	
Saturday	4:30-8:30	5:30-7:30	

Siple Dome Camp

by Kelly Wyatt

Twenty-three field staff and put-in crew arrived at Siple Dome (a.k.a. Siple Doom) on 28 October. While the camp fared well during the winter, the four remaining Jamesways were drifted to the roof with snow. The interiors, however, were in excellent condition and devoid of snow. Drillers from the Polar Ice Coring Office (PICO) have arrived recently, as have members of science group 152. During the 97-98 summer season, Siple Dome Camp will serve as a base for over 15 different projects and will accommodate more than eighty scientists and camp staff, making it one of the largest field camps in Antarctic history.

ASA, Denver

by Jim Chambers

The Denver office experienced its own Condition 1 a couple of weeks ago with record snowfalls which closed most of the roads in the Denver area. As luck would have it, the snow began on Friday evening and the primary roads were cleared by Monday morning resulting in no lost time for the Denver based staff.

We currently have thirty-four percent of the Denver based full-time ASA employees deployed to Antarctica.

A draft financial analysis has been completed comparing costs to fly materials to the Mill Glacier and then traverse them on to the South Pole versus flying them all the way to Pole. As simple as such an analysis sounds it gets extremely complicated when you start considering the cost of money and the life expectancy of the equipment.

Tom Hopkins and Ross Dupuin battled with the winds as they dismantled the M2 fuel tank. “The wind picks up these sheets like a sail,” said Dupuin. “You’ve got to be careful up there.” Built in the 1950s, M2 is being taken off-line due to its age.

National Science Foundation,

Office of Polar Programs

by Guy Guthridge

The Foundation has been attentive in recent weeks to a debate initiated in the U.S. Senate over doubling the government's research budget over the next 10 years. Senator Phil Gramm (R-Texas) and three other senators in October had introduced S.1305, the National Research Investment Act of 1998, because "an increased level of investment in basic scientific, medical, and pre-competitive engineering research by the Federal Government is essential to maintaining the position of the United States as the technological leader of the world." The bill, which applies only to civilian research, sets guidelines and spending caps for later appropriations bills that will provide actual funding.

An Office of Management and Budget official predicted that previously forecasted dramatic cuts in federal support for R&D seem unlikely, as is a doubling of future federal support. AAAS recently calculated that total federal R&D for FY 1998 increased 3.9% over last year and basic research support increased 4.0%. NSF got a 5% increase ✹

Filmmakers Visit McMurdo

story and photo by Alexander Colhoun

Katabatic winds originate high above the South Pole. Sweeping down from the skies above they begin a journey to the sea, rushing over the ice, leaving sastrugi waves in their wake. Each breath of wind that leaves the Pole is destined for an epic adventure –and it is one that Mike Single and Jeanne Ackley would like to take you on.

Single and Ackley, film makers of TV New Zealand Natural History, have come to Antarctica to make a film –Katabatic. "The film will look at the physical processes of Antarctica and how it affects all life here," said Single. Using the Katabatic winds as a dramatic vehicle, the two-person team plans to guide the viewer across Antarctica's frozen wasteland.

Just days after they arrived in McMurdo, Single and Ackley got their first taste of Antarctica's natural power. As a storm descended on Ross Island, sending the ice runway into a condition one shut-down, the TV New Zealand team headed out the door.

Together the pair battled their way through town, setting up a camera even as snow swirled into the lens. Shouting through the very winds they were filming, Single began to craft a vision, putting on different filters and moving the tripod from scene to scene.

With eight trips to Antarctica under his belt, Single has a good idea of what he is looking for. "So few people get an opportunity to see this place," said Single. "We like to make in-depth programs that reflect this uniqueness. Our work is a mixture of science and art."

Single and Ackley have only a few weeks to shoot the entire film, and thus have prepared a tightly crafted shot sheet of images they'll

...cont. on page 13

Mike Single and Jeanne Ackley, filmmakers of TV New Zealand Natural History, battle a McMurdo storm as they film in Antarctica for their documentary, Katabatic.

Ask Aunt Arctica

...advice for staying healthy on the Ice

Aunt Arctica is written by a clinical psychotherapist from Washington state with eight years experience working in individual counseling, specializing in cognitive and transpersonal psychologies for personal growth. Please write with any questions you may have. You need not include your name. All queries will be confidential.

Question: *I'm finding myself in a difficult situation with my roommate. Part of this problem stems from a strong desire to be alone at times. It seems that everywhere I go there are always people, this includes my dorm room. My roommate is far more social than I am and although the friends he has are likeable people, I'm beginning to resent what feels like a constant intrusion. Am I being unreasonable? Everyone around me seems to be partying all the time.*

Signed, *Overwhelmed by people.*

Carl Jung coined the terms introversion and extraversion which we have incorporated into our everyday vernacular. For the most part, however, our understanding of these words is incorrect. They are intended to describe two means of restoring needed energy.

For 75 percent of the population, who are extravert, this means a need for socializing. Talking, playing, and working with people is what charges their batteries. While the extravert is sociable, the introvert is territorial. That is to say, (s)he desires space: private places in the mind and private environmental places. These are two styles, or preferences, of recovering energy.

Questioning the legitimacy of your need for time alone suggests that you may be buying into a self-character judgement. This may be quite a lifestyle challenge for you from the life you lead at home. You and your roommate sound as though you are of these two different camps.

The key is to find a balance, both personally and together.

- Discuss with your roommate what's going on with you and your dilemma.
- Talk about your differing needs without judging each other.
- Work together to create a schedule for the use of your dorm room that is mutually agreeable.
- Generate options: consider the lounge, or other social spaces away from home for larger gatherings.
- Make mutual-benefit agreements: Find solutions that will serve you both. Try alternating the use of the room individually, so that you both get a chance to have a sense of privacy.
- Touch base with each other week to week in the beginning and be flexible until a comfortable pattern is found.
- The foundation for this to work is built on the ability to risk talking about your individual needs without blaming each other for them.

Your Turn–

Your questions and comments are welcome here. We'll publish responses in each issue. Contact us at Sun_News.asa@asa.org.

Why doesn't the galley serve ice cream, and why are there only wimpy flavors of Yogurt?

According to Patrick Hicks, assistant supervisor in food service, soft serve ice cream, which used to be served in the galley, is no longer available because there is none in the warehouse. However, ice cream is part of the holiday freshie order and will be available for Thanksgiving. Realizing the needs of ice cream junkies, Hicks ordered enough soft serve ice cream to last through ship's off-load.

Addressing the yogurt flavors issue, Hicks calls the opinions of the flavor choices "relative." Not expecting to please all the people all the time, with six flavors available, there is something for almost everyone. The flavors; strawberry, peach, chocolate, raspberry, lemon and boysenberry, are rotated throughout the week.

By Jacqueline Kiel

I think we are all wondering what the story is with housing? They have to know from day to day that there are "x" number of rooms and "x" number of people. So, why is it so difficult to figure out? What will happen next year? Will third year people be stuck in first year dorms?

According to Housing Director Hope Stout, the housing office doesn't know from day one how many people are coming. "We don't know the breakdown of first, second or third year people until a maximum of two weeks before main body," said Stout. Stout also added that with all the civilian transitions taking place around town there could be fourth year people placed in any type of housing.

"As we take over more military functions, we absorb those people. Many times those people have worked in McMurdo for many seasons," Stout said. "These seasons count toward their housing." Stout said the housing office does try to accommodate peoples requests for specific rooms, roommates, day or night sleepers, and non-smokers/drinkers.

But just the same, people need to be flexible if they want to live and work in McMurdo, Stout said. "It is not a simple process of checking into a hotel," Stout said. "Our number one concern is that everyone has a bed, a place to shower and a place to call home. The definition of home needs to be dynamic and fluctuating because housing in McMurdo is dynamic and fluctuating."

By Mark Perry

MILITARY NEWS:

Air National Guard Prepares for Airlift Transition

by Major Robert E.Bullock
Public Affairs Officer for the 109th Airlift Wing

Since 1988 the Air National Guard has been flying in Antarctica, working in a complementary role to the Navy. Beginning with the 1998 season, that relationship will change as the Air National Guard assumes command and control of LC-130 operations in Antarctica.

From a polar perspective, the Guard began flying in Greenland in 1975 with the 109th Airlift Wing. The mission then was to transport fuel, cargo and personnel to ensure the effective and ongoing operations of the Defense Early Warning (DYE) site radar installations located across Greenland. The Guard took to the rigors of this cold weather, Cold War mission immediately.

Several years after the inception of the unit's ski flying in Greenland, the National Science Foundation requested the support of the 109th in their Arctic-based polar research programs. A decade later the foundation again requested augmentation of their polar requirements, this time in Antarctica. Thus, in 1988 the Schenectady, NY-based unit of the 109th first made their long trip south to work with the U.S. Antarctic Program in a support role.

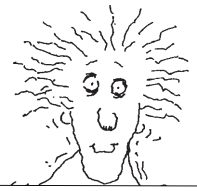
The chief benefit of the use of the Guard in the provision of LC-130 airlift is continuity. Unlike active duty missions where an aircrew member may work in a mission for three years before shifting jobs for reasons of career progression, many Guardsmen will spend several decades flying and maintaining one type of aircraft. With the 109th having flown in the Arctic for 22 years and at both poles for nine years, aircrews often bring more than two decades of ski flying experience to their bipolar responsibilities. In fact, the Air Commander of the 109th, Col. Graham Pritchard, has spent more than 28 years piloting LC-130s.

From a National Science Foundation perspective, the consolidation of bipolar airlift in one unit results in the creation of a concept known as "single point management". This means economies-of-scale and lower logistic operating expenditures for the foundation.

At present, the 109th maintains a fleet of eleven C-130 aircraft, seven of which are ski-equipped. Of this number, last year the unit received three factory-fresh LC-130 H3s, the newest and most sophisticated aircraft of its kind in the world.

From a personnel standpoint the 109th will consist of approximately 1,300 members. Of that number, approximately 500 are full-time.

In 1997, a new chapter begins in the history of the Department of Defense's Presidentially-directed support of science in Antarctica. The 109th is honored to have been selected to assume this important role and to follow in the footsteps of its Navy brethren. ✹



McMurdo Recreation

Gallaghers - Country Music Night on Thursdays (Bring music).
Tue-Fri 7-11pm, Sat 7pm -1am, Sun 4-10pm.
Day Bar open on TUE & THU 8am -11am AND SAT 8-12am
Southern Exposure - Bingo & Karaoke on alternating Weds.
TUE-FRI 7-11pm, SAT 7pm -1am, SUN 4-10pm.
Coffee House -watch the scroll for Acoustic Nights.
TUE-FRI 7-10pm, SAT 7-12pm, SUN 3-9pm.
Bowling Alley - Sat 7-9pm, Sun 2-5pm.
Ceramics - THU & FRI 6:30-8:30pm, SUN 2-5pm.
Gear Rental - Skis, Bikes, CDs Musical Instruments, climbing shoes. Call 2443.

WEATHER

by George Howard, MAC Weather
McMurdo Station, Antarctica

Windchill:

The Antarctic Connection

photo by Alexander Colhoun

Summer finally seemed to have arrived in McMurdo last week as skies cleared and temperatures skyrocketed into the low 30's.

Beyond the everyday practical tie between windchill temperatures and Antarctica, there lies an important historical link. In his 1939 doctoral dissertation titled "Adaptation of the Explorer to the Climate of Antarctica," Paul Siple first proposed use of a measure to quantify the severity of cold environments.

He called it windchill.

Siple's measurement is well known today and helps us understand how cold we feel in a stiff breeze, despite what ambient temperature readings tell us.

On his third expedition to the continent in 1941, Siple and fellow explorer Charles Passel conducted experiments to specify such a measure. The two timed how quickly plastic containers filled with water froze at various temperatures and wind speeds. They then determined the corresponding temperature, under calm conditions, that froze the water in the same amount of time.

Siple used this information to develop an empirical formula describing the relationship between the windchill temperature and the measured wind speed and temperature. Using Siple's equation we can construct windchill temperature tables.

Does it make any sense to equate how cold we feel to the rate at which water freezes in plastic containers? Not really. Windchill temperatures don't take into account factors such as how active or well-clothed we are. But even with its limitations, the calculated wind chill temperature can give us an idea of how we should dress and how cautious we should be in our outdoor activities.

October Weather: a Final Footnote

To find a previous October with weather that affected life and work as much as the October just passed, we have to go all the way back to the 1973-74 season. Congratulations McMurdo, you weathered the worst October in 24 years! ✹

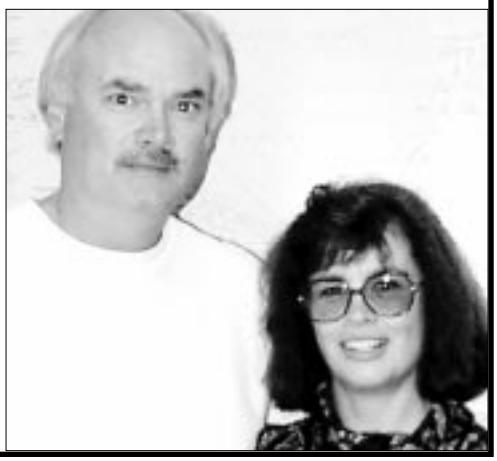
Best Wishes to

Carl and Wendy Norris

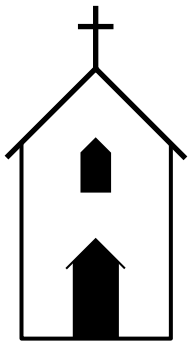
as they move on to the next stage in their lives and relocate to New Zealand. Carl has been involved in the Antarctic Program for 13 years and Wendy for 10. They have made immeasurable contributions to the program and will be sorely missed by many of us who have known them. Following are excerpts from a message they sent to USAP participants on their last day at work.

"Thanks to all of you for the support you've given us over the years and the friendships shared. We wish you all the very best in future endeavors.... We are relocating to New Zealand and are looking forward to new opportunities there. We take with us many fond memories of you, the special people that have made the "Ice" experience what it has been for us. We look forward to lasting friendships with you and continued association with The United States Antarctic Program. You will be missed."

Our best wishes to you all,
Carl and Wendy Norris



Never wrestle with a pig;
you both get dirty
and the pig likes it.



Chapel of the Snows

Sundays:
Catholic Service 9:30 AM
Protestant Service 11:00 AM
Wednesdays:
Prayer and Praise at 7:30 PM

– EDITORIALS –

Our **"Coffee House Considered"** raised more than a few eyebrows. Most people mentioned a disparity between the number of Coffee House visitors cited in the story and the 'real' attendance level. Here at The Sun we use the numbers we are supplied and let you be the judge. We welcome your thoughts.

I am outraged at the idea of closing the Coffee House! In the five years that I have been coming to the ice, the Coffee House has always been a viable alternative to meeting at the bars. Since the 3rd floor lounges have been converted to bigwig private living accommodations, the Coffee House has become a meeting place for clubs, acoustic music performances and quiet afternoons of letter writing and game playing. The yearly fuel usage (1864 gallons) is minimal, equal to what a Herc burns in 2.5 hours of flight. Looking at the recent statistics, it's true that last summer's attendance was low...I blame it on the big screen TV. Why not invest in good coffee and a REAL coffee machine? Attendance would go through the roof and it would pay for itself in no time at all.

Kelly Montgomery, ASA

It would be sad to lose the Coffee House/wine bar. For those who value an intimate social setting with atmosphere, it's the best place in McMurdo. It's also a wonderful spot for live music. The community's tastes change over the seasons, and the Coffee House is getting increasingly popular.

It may be that last year's user numbers don't accurately reflect what is happening this year. MWR should be congratulated for evolving a night spot with real character. Lets keep it!

Bill McCormick , ASA

Filmmakers

...cont. from page 10

need. In the coming weeks the pair, who have worked together for six years, will crisscross the Antarctic, filming scenes from the Pole to the ice edge and everything in between.

One tool they plan to use in the film is time-lapse photography. "We have a special box that tracks the sun," said Ackley. "We track a scene for 24 hours, one frame per minute. We can watch clouds developing from cirrus streaks into full blown blizzards." It also means spending a merciless day in the elements, carefully monitoring the camera. "It's hard work," says Ackley, feigning hardship with a twinkle in her eye. It seems to be suffering she relishes.

To accomplish their objective, the team lugged to the ice more than 900 pounds of gear including 32,000 feet of film (about 20 hours worth), two specially winterized film cameras and a large box of lenses. That's a lot of equipment, especially when your crew is two deep –this is not a Spielberg, deli-catered operation.

They may not have smoked turkey lunches, but they do have top flight partnership. For this production, TV New Zealand has joined ranks with Public Broadcasting Station WNET in New York. With prestige partnership, however, comes pressure to produce.

The production cost of one film is more than $500,000. "There's an awful lot of money involved," said Single. "With that comes a responsibility to come up with something that reflects that."

In the same breath, Single peers from behind a striking red beard and dread locks with a smile. "We live on a fascinating planet. I have a unique privilege to go to special places and make films that excite and educate the public. Little by little they begin to care about these places."

Once completed, the 56-minute film will be seen in the United States and in New Zealand. Single and Ackley will return to Antarctica next summer to produce a second film titled 'Iceberg.' ✹

photo by Alexander Colhoun

Steve Dunbar, the Search and Rescue team leader, checks in with MacOps during a training operation last week. Conditions deteriorated throughout the day, lending authenticity to the exercise –and ice to the digital camera lens.

xj

Pound for Pound in McMurdo's Kitchen

photo and story by Susie Brown

Roasted turkey, sweet potatoes, cranberry salad, stuffing, pumpkin pie –that ought to tickle your palette for a Thanksgiving feast in Antarctica. This year, the average weekly allotment of 5,000 pounds of freshies will be doubled to 10,000 pounds the week of Thanksgiving so the masses can gorge themselves in the spirit of this tradition.

Each of the three galley shifts relies on the talents of five cooks and four bakers, but the quantity of food prepared for Thanksgiving requires additional helping hands. Last year, there were at least 20 volunteers working from 8pm the night before to 9pm Thanksgiving night, carving turkeys, dicing vegetables and washing pots. "People tend to pile their trays high with food and then go back for seconds on Thanksgiving," said Caprice Stevenson, Food Services Administration.

Given this holiday gluttony, why has the weight allotment for freshies been reduced by close to 3,000 pounds a week this year? And why will the stock of several food items, such as bacon, juice, and dry cereal, run low or possibly out before ship offload in February?

For starters, during the past four years ASA has reduced the Food Service budget from over $1.7 million in 1993 to $833,700 for the current year. This has been done to reduce the inventory. In addition to supplying the serving lines in McMurdo, this budget also covers field party food, remote camp food, community functions, and annual food issues to the South Pole.

Warren Hoy, Manager of Station Services, comments that "It will also reduce the dining facility's ability to present the same well-diversified menu that it has in past years."

On a $5.25 per person daily food allowance, the dining facility staff has to be diligent in their food preparation. "The community can help by not putting unreasonable demands for special food treatment on the Food Services department. Everyone is going to have to help conserve what we do have," said Hoy.

The logistics of ordering food a year in advance can also be difficult. "We use past trends to guesstimate food consumption, but there is no constant," said Stevenson. "It also depends on the population –we may order a lot of bananas based on banana consumption last year, but people this year may not like bananas as much."

With this in mind, the number of whole Thanksgiving turkeys has been reduced from 100 to 50 this year –but there will still be plenty of boneless turkey roasts to augment the whole birds. Don't write home for cranberry sauce just yet. The meal will have special holiday touches, including appetizer tables in the hallway in front of the galley for people waiting to be seated. Wine or other beverages may also be brought into the galley to enjoy with the meal.

Despite giving up a few favorite foods during the season, the McMurdo community has plenty to be thankful for.

"People in Food Services put their hearts and souls into giving to the community the best possible day away from home," said Hoy. "Especially when you consider where we are." ✹

Sue Deyoe helps unload a delivery of 'freshies' –fresh food such as fruit and vegetables. Each week ASA orders approximately 5,400 pounds of fresh food from Christchurch, New Zealand.

- **Sign-up sheets** will be posted outside the galley one week prior to Thanksgiving for the 3pm, 4pm, 5pm and 6pm mealtime seatings.
- **Continental breakfast** will be served from 6am to 8am, and a light lunch will be served from 10:30am to 12:30pm.
- **Volunteers** are needed to prepare the meal starting at 8pm the previous night and continuing through cleanup Thanksgiving day.
- **Contact** Caprice Stevenson at x2215 for more information.

Perspectives

Humor is as Humor Does

by Frosty Wooldridge

When men and women travel to the bottom of the world, humor is sure to follow. In Antarctica, where a night lasts six months and sunshine grinds on for 180 days, people express themselves in various ways.

Sometimes they're weird, often times hilarious –always creative. Their humor may be funny, sad or poignant. It may reflect a personal struggle, or it might bite deeper, lashing out at someone or something.

A walking tour around McMurdo offers a glimpse of how humorous humans can be when stuck in Antarctica. While the station's buildings may be dull on the outside, they're anything but boring inside.

Humor follows McMurdo workers wherever they go, even out the door, as Nelson Cochoran discovered while shoveling snow out of the waste barn.

A visit to Fire Chief David Turley's office greets you with, "I can only please one person a day. This is not your day."

Mysterious humor abounds at the carpenter shop on the hill. If you're looking for a spare buck, Kirk Spelman may point you to the wall. Near the door, plastered to the wood with lacquer is a one dollar bill. Above it reads the inscription: "The McMurdo Cursed Bill –Do Not Touch." Everyone in the office wears gloves to protect themselves from an accidental touching, despite the fact that no one can remember the root of its mystery.

In the cargo yard building, large signs on the wall tell tales of wild escapades like: Terry's Terrible Transfer Case Termination; Wild Bills' Ditch Jumpin' T-2 Tippin' Terrible Tragedy; and Murdy's Misguided Mishap Moves Him Measurably Closer to Malaise.

A million parts hang from the walls, under tables and inside plastic drawers in the Communications shop. It's a maze of wires only understood by an electrical wizard. But on the wall there is a copy of a speech given by Vladimir Kabardze, general director of Soviet Machine Works, that is easily understood by all. It reads, "I can't stand this proliferation of paperwork. It's useless to fight the forms. We must nip this in the bud. You've got to kill the people producing them."

At the Machine Equipment Control Center of Antarctica —MECCA, Than Pulsifer, a soft spoken laconic man has a sign above his desk: "This is MECCA, now go away."

At the field safety training building you'll find a poster on one of the walls depicting a thousand-pound leopard seal lunging after a fleeing bug-eyed adelie penguin. On it someone wrote a quip for the penguin saying, "Say big guy, which way to the maul."

Not to be outdone, someone else wrote a quip for the seal. "I dropped a quarter…will you help me find it?"

Steve Dunbar, leader of the search and rescue team and a man who is quite familiar with dangerous missions, works at the field safety center. "We have a corollary to Murphy's Law," he said. "What can go wrong in the Antarctic has already gone wrong."

At the cargo center, Jon Carter and John Simonson work under a bevy of wise sayings that inspire and conspire, including, "When the going gets tough, the weird turn pro."

Additionally, Carter and Simonson devised a Cargo Professional Of The Month Award. This month's award went to Jon Carter who is shown in a picture as a lady ballerina in a tutu and McMurdo bunny boots. The boots are said to give more lift.

Also at the cargo center, two clocks hang in the corner –one telling time at McMurdo Station and the other in Mabalacat, Pampanga. When asked of the second clock's significance, Simonson replied, "In case someone needs to know."

At the end of our McMurdo tour, we turn to housing coordinator, Hope Stout. Stout hired a man in the summer of 1994 who was a Ph.D., and a Summa Cum Laude at Harvard in Physics and Math. This Ivy Leaguer struggled valiantly each day with a mop and bucket, and scribbled this note on his janitor closet wall:

"This is my mop. There are many like it, but this one is mine. My mop is my friend. It is my life. I must master it as I must master my life. My mop without me is useless. I must swab my mop true. I must mop up the dirt that clutters the floor. I must clean before it gets tracked all over the place. Before God, I swear this creed: my mop and I are cleaners of the floor. We are masters of the dirt. So be it until there are no dirty floors." ✹

Profile

Leather On Ice

story and photo by Alexander Colhoun

Thirty pounds of extreme cold weather gear and an oversized Jack Daniels buckle are all that seem to keep Cindy Hale's wispy frame from rising into the stratosphere like a scientist's balloon. Brown hair cascades past piercing, emerald green eyes, down across her shoulders as the smoke of another Marlboro Red wafts like a spell skyward.

But don't let her sublime features fool you. Beneath a seemingly delicate frame is an iron, tempt-the-devil spirit. Though she's quick with a joke and a laugh, the uninitiated will soon discover Hale pulls no punches.

A native of Helena, Montana, Hale grew up on a farm before heading to the University of Montana where she earned a degree in psychology. Standing in Gallagher's Bar in full bikers leather, the picture doesn't fit.

That is until you start talking.

"I like helping the little guy, the underdog," said Hale. "To be a friend of someone who doesn't have any friends, that's something." For six years Hale worked with children and adults with autism and developmental disabilities. "It boiled down to a mind thing –how you are as a person, its all in your head," said Hale. "That is how I got into psychology –a science of the mind."

But after a decade of hard work in a state clinic, Hale was burned out. In search of a new adventure she signed on to visit Antarctica. The rest is history.

"I drove the rock n' roll shuttle," said Hale of her first year assignment in McMurdo. "It was Ted Nugent at 6 a.m. Drive upside down and listen to Floyd. If you didn't like it –catch the classical bus in five."

"I signed on for one season," says Hale. "It's turned into one very long season." Seven years later Hale shows no signs of relenting. With a total of 43 months on the ice, she's a legend, and now holds a full time position with Antarctic Support Associates as a material controls specialist.

From boxes of nails to cases of paint, Hale is tasked with tracking the flow of materials as they make their way to the ice and beyond to the Pole. Keeping an eye on the ebb and flow of thousands of items is a complex job, but well suited to Hale's goal-oriented personality.

Last year Hale and her co-workers saved the program $200,000, finding excess inventory in McMurdo to be used at the South Pole. "In the scheme of 75 million dollars, 200K is chump change," says a modest Hale.

Cindy Hale muses about her chrome and leather children back in Denver: a Harley Davidson Sportster 883 and five Chevy's, one of which she's had since her 16th birthday.

"But hey, we're cleaning out McMurdo."

"Cindy gives 110 percent effort to the customer," said her supervisor, Darrell Kimmes. "She's very detail oriented and puts in the extra time. She doesn't know what a nine hour day is, it's more like ten or twelve."

Talk to any of the men she works with and they'll tell you the same thing. "Cindy is one of a kind, tough as nails," said Harold Gober, a McMurdo plumber. "She does a damned good job. She knows what the parts are and she gets them to you quick."

When she's not sorting out McMurdo's massive inventory of construction items, Hale spends her free time bowling or relaxing to music at home –plenty of Aerosmith and Zepplin.

"Really, I'm stuck in the 70's," says Hale while sipping a Jack and coke with her friend and roommate Karen Welter. The two share a typical small McMurdo room which they've transformed into a mecca of comfort, replete with a stereo and a VCR.

But it's her life back in the states that keeps Hale going through the austral summer. Sucking a drag from a Marlboro Red, Hale muses about her chrome and leather children back in Denver: a Harley Davidson Sportster 883 and five Chevy's, one of which she's had since her 16th birthday.

"It's my baby," says Hale of a red 1970 Chevy Chevelle she calls 'Malibu'. "Harley and Malibu –those are my kids, they're my babes. I take care of them and they take care of me ... and they're cool."

Unlike the living, breathing kind, however, Hale can put her kids in storage and take to the hills. Past adventures have taken her across the globe, from the Maldives to Kenya, from the Cook Islands to India and beyond.

Despite a craving for the exotic, Hale is equally at home riding her Harley to the annual Sturgis bikers gathering in South Dakota or renting a limo for the Horde Music Festival in Colorado. "My priority in life is just to be happy, you know? If you're not, figure it out and change it," she says. "That's it."

Editors Note:

On Tuesday November 11th, Cindy Hale resigned unexpectedly from her position with Antarctic Support Associates. "I cried a lot of tears for McMurdo, but I've got to put me first," said Hale, citing personal reasons and health concerns. Hale plans to head for Minnesota to hunt and fish for Northern Pike. "It's not like I'm mad at the company" said Hale. "I just need a break." ✹