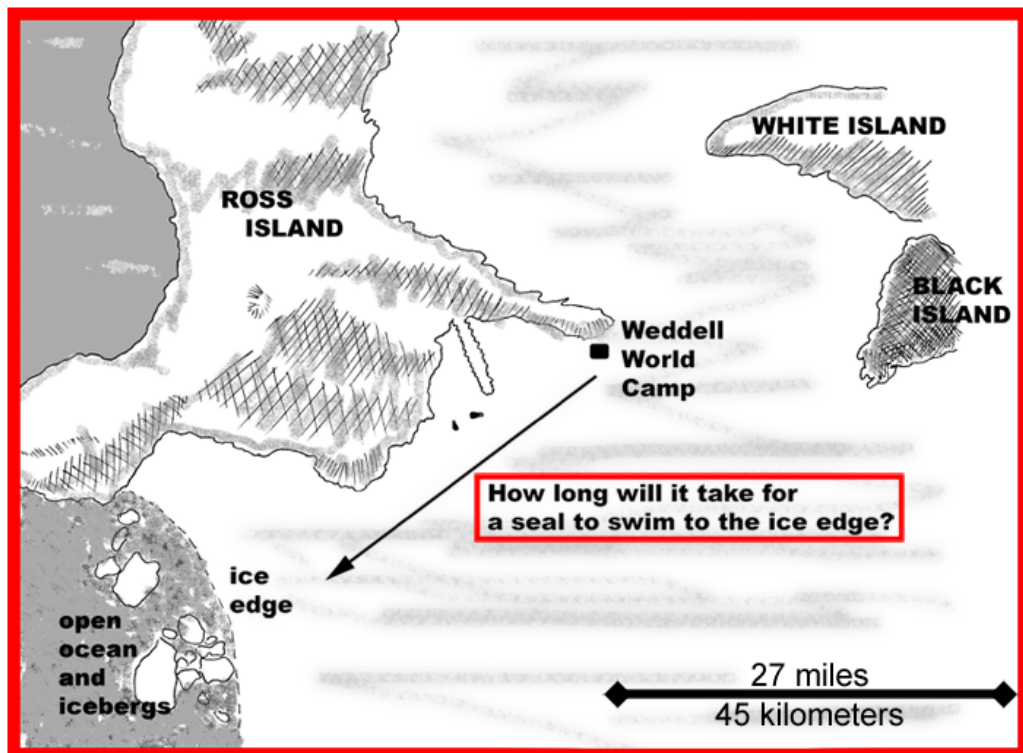




Where are the seals? Dr. Randall Davis uses a radio receiver to try to locate our five camera-wearing Weddell seals. Each instrument pack has a radio tag that can be heard as a "beep" on the receiver when we are within one mile.

SEALS ON THE LOOSE

With the last of the five seals instrumented, now comes the hardest part of the expedition - the waiting. It is the seals' turn to collect data for us about their underwater behavior, hunting tactics, and environment. They are free to swim and dive wherever they want, which leads us on a rugged chase across miles and miles of sea ice. Our job is to find Hairy, Prof. McGonaSeal, Ron WeSealey, Neville and Hagrid the Seal before they swim out to sea - if that happens then all of the data will be lost as the cameras eventually fall off and sink to the bottom of the ocean.



The entire team becomes very nervous as we shuffle our boots on the ice and say goodbye to the fifth and final seal. Before she leaves on her underwater journey Prof. Minerva McGonaSeal returns to the ice hole next to our camp and takes a picture of our anxious team.


Then, like all of the other seals, she submerges in the icy water and is gone.



THE EXPEDITION RESEARCH TEAM

The research team left in Prof. McGonaSeal's wake includes scientists, students, and animal specialists. Two women and five men have withstood some of Nature's harshest treatments during the late Antarctic winter to try to understand how Weddells survive in such an extreme environment. The Winfly members include:

Terrie Williams, PhD



- Co-Investigator on expedition
- Professor of Ecology and Evolutionary Biology at the University of California – Santa Cruz
- Comparative Exercise Physiologist on project

Randall Davis, PhD



Photo by: Terrie Williams

- Co-investigator on expedition
- Professor of Marine Biology at Texas A&M University
- Comparative Physiologist and Behavioral Ecologist
- New technology development

Willem Buitendyk



Photo by: Terrie Williams

- Electronics Engineer
- Hardware and software engineer in the field for the project
- The only Canadian on the team

Ian Davis



Photo by: Terrie Williams

- Graduate student, Texas A&M University
- BS Wildlife Management (HSU)
- Field logistics for project

Beau Richter, MS



Photo by: Terrie Williams

- Head animal trainer for Williams Physiology Lab at UC Santa Cruz
- Field assistant on project
- Animal behavior specialist

Georgina Davis



Photo by: Terrie Williams

- Doctoral Graduate student at Texas A&M University
- Field assistant on project
- Interested in sustainable architectural design in extreme environments

David Williams



Photo by: Terrie Williams

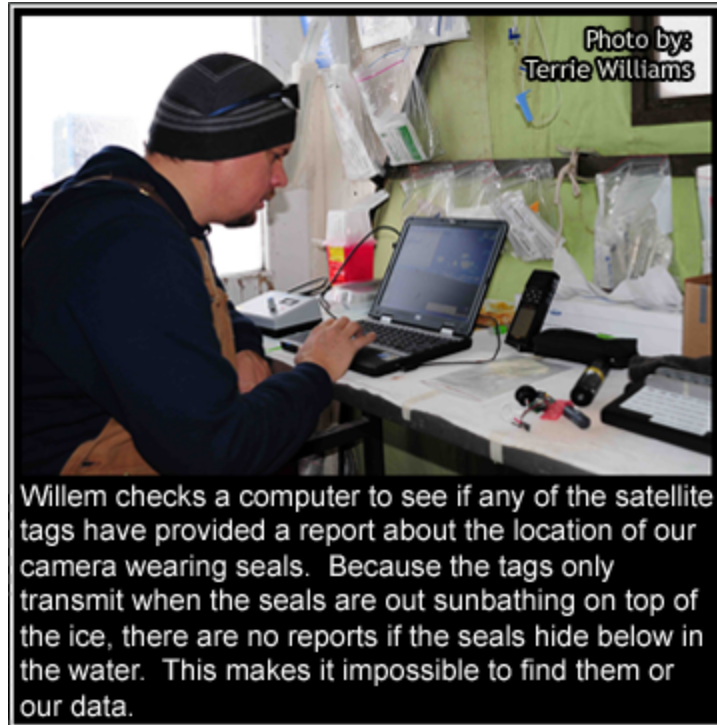
- Undergraduate photography student at The Art Institute of Colorado
- Field assistant on project
- Master ice hole bailer
- An all around OK guy

In addition to the Winfly group, two other team members, Dr. Lee Fuiman (Co-Investigator) and Eddie Farrell from University of Texas fly in during October to help with the data analysis. There are no girl jobs or boy jobs on the expedition. Instead, each member brings a unique skill to help determine the biology and environmental demands of the Weddell seal.

HOW TO FIND A SLIPPERY SEAL

Each day the team uses both high tech and low tech methods to look for the five roaming seals. The instrument package includes a small tag that beams information about all of the Weddell seals' whereabouts to a satellite and to our computers.

Sometimes it is too hard to just sit and wait at the computers, so we also travel on snowmobiles across the wind-scoured ice, checking for cracks and breathing holes where the seals might come up to breathe. It is a back breaking, cold ride that we can only do when temperatures are above -60 °F (- 51 °C).



As the days pass, the winds come up and the temperatures plummet once again. The weather sends us heading back to camp. At the same time Hairy and the rest of the seals retreat to the comfort of the warmer waters below the ice. They are nowhere to be seen; the computers are all silent. The radio tags never "beep".

Hairy, Ron, Neville, Minerva and Hagrid, and all of our instrumentation, are now officially missing. There is nothing we can do but worry - we have to ask ourselves, will our expedition be a failure?

BIG STORMS

With spring come the big winds that blow snow across the sea ice. Huge plumes of snow crushed into fine grains of ice roll across the landscape, obscuring our vision. It is too dangerous to venture outdoors. Everything from the ground to the sky is completely white. Once again Nature has forced us to wait anxiously in camp for the return of Hairy and the other seals. Days turn into weeks and there is a real fear that they have all swum off with our instruments.



SNOW VISITORS

Following each of the storms we find new Antarctic visitors have been blown into our area. Our first encounter is with a pair of snarly, twin female crabeater seals. Much lighter in color than Weddell seals and with longer front flippers and snouts, the crabeaters are easy to differentiate from Weddell seals. There is another important difference - crabeaters are, to put it simply, rather cranky. In fact their name is fitting - the two crabbies are downright crabby in temperament. They snarl, spit and hiss like angry cats if any of our team members approach. The crabbies have been forced to travel great distances over the ice to find breathing holes made by Weddell seals. Without the special ice reaming teeth, crabeater seals cannot return to the water to eat until the Weddell seals make a hole. Maybe that is why they are so crabby.



Other visitors wander in on two feet. Emperor penguins shuffle along the ice, waddling until they find a hole to dive into. Once in the water they are transformed into graceful swimmers, rocketing under the ice leaving a long trail of bubbles behind them. They disappear quickly into the depths and we never see them again.



Much smaller cousins to the Emperors are Adelie penguins. They also sport black and white tuxedo feathering but are much less noble in attitude. If Emperor penguins are the royalty of seabirds then Adelies are the court jesters. Instead of walking or gracefully swimming, Adelie penguins RUN. They run towards us as they cross the ice and then keep on running, shoving by each other as if trying to beat their fellow runner to the finish line of an Antarctic race.

With such short legs even the smallest of cracks in the ice can be a challenge for these running birds. See how one Adelie solves the problem of speeding by his friends:

YouTube Video: "Night Chills: Penguins vs Crack"
http://www.youtube.com/watch?v=KVsnPRw_T6w

Next Week: Hairy Potter's Wild Adventure