

...PRESENTS:

KIM GOETZ

WHS SCIENTIST IN RESIDENCE, 2013-2014

Some stuff about me:

- Age: 34
- Where I grew up: Denver, Colorado
- High School: Northglenn High School
- Favorite subjects in high school: Biology, Spanish, and Psychology
- College (undergraduate): University of Colorado, Boulder
- Some of my favorite things: Camping, fishing, anything outdoors!
- Something weird about me: I love playing with insects. I used to work with poisonous ants in Costa Rica and spent years raising tarantulas.
- What I think or do when I get frustrated: When life gets tough, I tend to sneak off and do something outdoors. Something about being in nature or simply just watching the ocean puts life in perspective and makes my problems seem so much smaller.



I spend up to four months of year studying Weddell seals in the coldest, driest place on earth – Antarctica! No one knows where these animals go during the winter when there is 24 hours of darkness and heavy ice prevails.

In order to study both Weddell seal behavior and collect data (temperature and salinity) on their oceanographic environment – we attach tags to the seal's head. These special tags collect data and send it back to us through polar orbiting satellites.

How to work with Weddell seals!



Sedate the animal for everyone's safety!



Take measurements and collect tissue samples



Attach flipper tags



Attach satellite tag

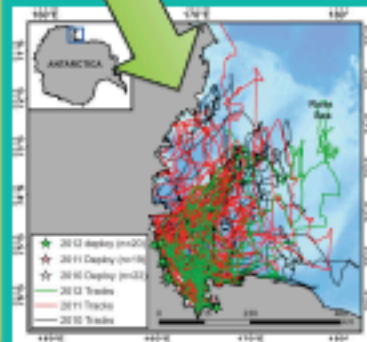


Weigh using a tripod and sling



Weddell seals live further south than any other mammal on earth!

After the seals are released with their newly attached tag, they collect important data on their movement and surrounding environment. We have tagged 62 animals and have over 300,000 recorded dives!



What I study

I study the movement, habitat, and foraging behavior of Weddell seals in the Ross Sea, Antarctica. Little data exists on the year-round movement and foraging behavior of these animals and food webs and trophic linkages are not well understood. I am using stable isotope analysis to measure nitrogen and carbon isotopic ratios present in seal tissues and to determine the proportional contribution of prey species to their overall diet. This is especially valuable given a proposed 50% reduction in toothfish (an important prey item) in the Ross Sea ecosystem due to commercial long-lining. Through my work I hope to determine 1) How Weddell seals move and forage in a 3-dimensional environment through time and 2) what prey items do Weddell seals consume when direct observations are not possible.

I am happy to be apart of the SCWIBLES team and hope to use my background and knowledge to inspire many more young scientists. Science is not always easy but the rewards and excitement make it all worth while!



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<http://scwibles.ucsc.edu>