Research in Antarctica is vast, there is a lot about Antarctica is still unknown. There is a huge piece of ice that is melting due to global warming. This particular Ice sheet is in total, the equivalent to 53 meters of in mean sea level. This means that even the slightest change in the volume of the East Antarctic can be a huge factor to the global sea level.

Background

Antarctica is arguably the most remote place on the planet. Also, it is one of the most important places on the planet, especially with the temperature rising. Antarctica and its surrounding ocean are a hugely important for our survival. Antarctica is home species that cannot live anywhere else in the world. Antarctica is the fifth largest continent and accounts for 90 percent of the world’s ice. Antarctica is divided into two sections East and West. The eastern portion accounts for two thirds of the continent (Redd, 2012).

Laturnula elliptica in the intertidal zone for the first time

The Laturnula elliptica is a bivalve. Bivalves are known to be stenothermal, which means they are only able to live in a very small range of temperature. But these were found in the intertidal zone. Seven of them were collected from St. Martha Cove on James Ross Island. This brings questions about the current idea that "many Antarctic marine invertebrates cannot adapt to higher temperatures." (Boehme 2016)

Weddell Seals (Leptonychotes weddellii)

The Weddell seal is one of the three pinniped species that are in the pack and fast ice zones all year. These seals were being researched in the Southern Weddell sea for their haul out patterns during winter. "Haul out" is when the seals are out of the water, either to moult, rest, feed their young, or avoid predators in the water. (Boehme 2016)

The goal of this research was to try and determine predictors in how these seals interact with the environment around them. In an effort to achieve this goal, 33 adult Weddell seals were tagged with satellite telemetry tags in the Weddell Sea. Then their time in and out of the water was measured using the data from the tags. (Boehme 2016)

Penguins and Humans

Adelie penguins and humans live pretty close together in East Antarctica. One million Adelies (one third of the adult population) breed close to stations. (Southwell 2017) Fisheries and other human interferences effect the breeding patterns of these penguins. These penguins depend on marine and terrestrial environments to breed and forage. Adelie penguins eat about 212,000 tons of krill and fish in East Antarctica during breeding season. (Southwell 2017)

This graph shows Adelie penguins in breeding age in relation to distance from the nearest permanently occupied station. (Southwell 2017)

References


