



**UPDATE FROM ANTARCTICA!**  
**News for Students K-5**  
**ANTARCTIC SEALS HELP SCIENTISTS MEASURE WATER TEMPERATURE UNDER THWAITES GLACIER'S ICE SHELF**

**Imagine a team of seals** working as part of this important science project in Antarctica! Weddell and elephant seals are Antarctica's deepest diving seals, plunging down into the ocean and swimming under the thick floating ice shelves in search of food. Around Antarctica over 50 seals help scientists by collecting information on the ocean water as they swim! Our science team wants to learn about the ocean under Thwaites Glacier Ice Shelf and how it might affect the ice. Dr. Lars Boehme and his team are specially trained to be sure the seals are not harmed when they are outfitted with instruments. Each year seals molt losing their fur. Scientists wait until after they molt to attach the small instrument behind their heads where it won't bother them. They dive under the ice collecting science measurements until it falls off in their next molt.



Our scientists in Antarctic have picked a team of seals to help them collect information about the ocean! Can you see the small instrument this seal is wearing? It measures water depth temperature, and saltiness as the seals dive under the ice in front of Thwaites glacier.



This very thick section of ice is floating off the front of Thwaites glacier. Scientists call this an ice shelf because it is firmly attached at the back but the front stretches out freely like a shelf in your home. To form an ice shelf, ice has flowed from land into the ocean.



Look at Antarctica from space! Find Thwaites Glacier where it flows into the Amundsen Sea. This is where our team of seals is collecting information. In the first week 4 seals dove over 1000 times over 2600 ft. (800 meters) deep!



Dr. Lars Boehme is very comfortable working with the seals. Here he makes himself taller by raises his hand, showing his height to an elephant seal. The seal complains a bit but leaves the team alone to continue working.

**Photo credits:** Photo credits: L-R first page, Dr. Boehme, NASA; Bottom L-R NASA, Tasha Snow.  
Jeff Goodell: <https://www.rollingstone.com/politics/politics-features/antarctica-seal-tagging-794759/>  
Tasha Snow: <https://thwaitesglacier.org/blog/snow-on-ice>