

St. Johns County School District News

A Cool Way to Spend a Summer

Last summer, Liberty Pines 7th and 8th grade science teacher Steven Kirshe spent the month of June in the Arctic collecting ice core samples. Earlier this fall at a meeting of the Florida Association of Science Teachers in Orlando, he shared this experience and explained how it can be used in the classroom.

There he met up with Adeena Teres from Parkland's Stoneman Douglas High School, the other Florida teacher in the PolarTREC program, a professional development activity for k-12 teachers administered since 2004 by the Arctic Research Consortium of the United States. Teachers are paired with researchers for 2-6 week research experiences in the polar regions. Overall more than 150 teachers from around the United States have joined scientists in the Arctic and Antarctica to learn about science, the polar regions, and to bring back what they have learned to share with their students and communities.



Kirshe and Teres

...ples to a depth of 80 meters. He found ice cores "A cool way to study the past." The project title was: Dynamic Observations of the Microstructural Evolution of Firn. He worked with Dr. Ian Baker, professor of Engineering and Senior Associate Dean at Dartmouth College and PHD student

Kirshe spent his time at Summit Station, Greenland, collecting ice core sam-

Eric Wagner, studying how the structure of ice crystals change as firn (granular snow, especially on the upper part of a glacier, where it has not yet been compressed into ice) turns into ice and the changes caused by temperature gradient and compression due to snow accumulation.

See www.polartrec.com/expeditions/dynamic-observations-of-the-microstructural-evolution-of-firn for a complete report.

Teres was part of Operation Ice Bridge, a NASA run Polar data collection program, also in Greenland, involving land ice, sea ice and sea level rise. Read about her expedition at polartrec.com/expeditions/operation-icebridge-2017

All data collected is archived at The National Snow and Ice Data Center (<https://nsidc.org/data/icebridge>).

Creekside a Difference



Students from the Academy for Environmental Science are working on wheel chair ramps for the Housing Partnership c