

State High teacher leaving for Antarctic

By Ben Berkman For the CDT — State College - Centre Daily Times

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State College Area High School learning enrichment specialist Nell Herrmann has been selected for the PolarTREC program which will send her to Antarctica tomorrow to do research. CDT/Nabil K. Mark [Buy Photo](#)

Today, a local high school counselor will leave the friendly confines of State College for the frozen expanses of Antarctica.

Nell Herrmann, a State College Area High School learning enrichment specialist, will journey to the continent to collaborate with scientists from around the country with the environmental outreach program, PolarTREC.

Herrmann has been paired with Charles Amsler, a marine biologist at the University of Alabama at Birmingham. Together they will study ocean acidification, and the effect of changing pH levels in the ocean on surrounding organisms.

“The project has to deal with how fossil fuel emissions since the industrial revolution have put more carbon dioxide into the atmosphere, and that has combined with ocean water to form carbonic acid,”

Herrmann said. “That whole process is really detrimental to a bunch of marine organisms, including any that need calcium carbonate to build skeletons. For example, clams, mussels, sea urchins, and sea stars are all affected.”

An essential aspect of Herrmann’s trip is outreach and awareness. PolarTREC, managed by the Arctic Research Consortium of the United States and funded by the National Science Foundation, couples teachers with researchers to advance the general public’s knowledge of polar sciences.

Herrmann is one of only 12 U.S. teachers to be selected.

“I’m really excited to share with people about what I’ve learned about ocean acidification and polar science in general,” she said. “I think there are a lot of exciting things going on in the polar sciences that people don’t know about.”

As part of her outreach, Herrmann will keep a daily online journal of her experiences and findings while in Antarctica. The journal is available on PolarTREC’s website, www.polarartrec.com. Additionally, State High’s Polar Ambassadors club has worked with Herrmann to further help spread awareness. The 20-member group has, among other outreach endeavors, visited local elementary schools to teach younger students the basics of ocean acidification.

During her five-week stay in Antarctica, Herrmann will gather field samples, often from the surrounding ocean, and then conduct research at on-site labs. At night, she will upload pictures and journal entries onto PolarTREC’s website.

She will stay in Palmer Station, the smallest of three U.S. research facilities in the Antarctic. The population of the station is rarely more than 40 people, even in the summer, as it is now, when temperatures hover near 40 degrees.

“I’ll get to meet other scientists at Palmer Station,” said Herrmann. “We can talk about our own scientific projects. It’s its own scientific community.”

She will need to take four planes and a four-day boat ride through the Drake Passage to reach the station.

Her journey will end, back in State College, on March 15.

Ben Berkman is a State College Area High School student and this year’s recipient of the Bill Welch Journalism Award.

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