

At left, Macon Early College science teacher Susan Steiner talks on a satellite phone in Fairbanks, AK.

She was there in February to train for two months of scientific research coming up in May and June at Toolik Field Station above the Arctic Circle. Part of the PolarTREC program, Steiner will assist research scientists in studying Arctic soil interactions and ecosystems. Above, a map showing where Toolik Station is located.



Summer on the tundra: Steiner to study Arctic biology in Alaska

By M.A. Lewis
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A Macon County educator will spend her summer in Alaska above the Arctic Circle helping research scientists conduct experiments on permafrost — knowledge she will bring back to the classroom.

Macon Early College science teacher Susan Steiner was one of 13 teachers nationwide to be selected this year for the PolarTREC program administered by the Arctic Research Consortium of the United States and funded by the National Science Foundation Office of Polar Programs.

The Arctic brings to mind bitter cold and blinding snow for most. So what does Steiner say her most important pieces of gear will be?

Mosquito netting and bug repellent.

"They said bring a hat just doused with DEET," Steiner smiled. "It might be blinding sunshine. They said to bring two pairs of sunglasses."

The weather at Toolik Field Station, where Steiner will be from May to July, will be milder than time of year, with high temperatures possibly reaching the 70s.

She got a taste of the cold weather in February, when she went to Fairbanks to train for her trip.

Steiner applied for the program in 2010. Though she made the national cut of 40, she was not selected. This time around she made it. The program pays for all expenses — even the costs of paying a substitute teacher while

Steiner is gone training or on her trip.

Steiner will be working with Dr. Michael Weintraub of the University of Toledo. Weintraub has had a grant to study Arctic soil interactions for a number of years.

"I get to work alongside them (scientists)," she said. "The goal is to work to see the scientific process. As teachers it helps us have a more authentic approach to teaching."

The trek will be a long

one. After the long flight to Alaska, it will take 10 hours to get from Fairbanks to Toolik Station.

"It's not the mileage it's the conditions of the road that slows you down," Steiner said.

Once there, the amenities will be far from posh — sleeping in a tent is one of them.

"We have some pretty fancy above ground out-houses," Steiner laughed.

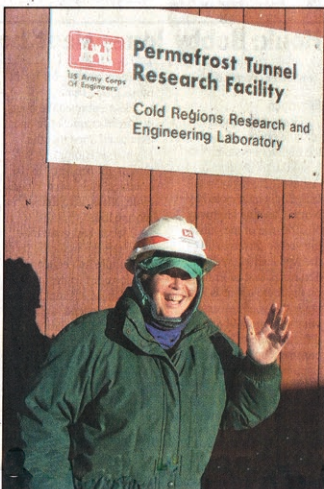
Steiner has a background

in science. With a background in biology (she earned a degree in biology and has a master's in science education), she worked as a laboratory technician at Coweeta Hydrological Laboratory for nine years before becoming a teacher.

The goal of PolarTREC is to invigorate polar science education and understanding by bringing K-12 educators and polar researchers together. What does Steiner hope to take away from the experi-

ence?
"I'm looking forward to going to Alaska and learning about the tundra interactions — learning it firsthand," she said. "A lot of what I learn there I can bring back here to the classroom."

Steiner will be keeping an online journal during her excursion this summer. You can visit it at <http://www.polar-trec.com/member/susan-steiner>. More information on PolarTREC's can also be found there.



Steiner in February in Fairbanks. She had just visited the Army Corps of Engineers Permafrost Tunnel — hulled out underground to give a better understanding of tundra.



Students at Cartoogechaye Elementary try on Steiner's Extreme Cold Weather (ECW) gear. Steiner has visited classrooms to tell students about PolarTREC.