



Caption: UAF Natural Resources Management Ph.D. student Tracie Curry inside Decision Theater North, UAF's new visualization facility. (Photo by Todd Paris/UAF)

As Tracie Curry sees it, she's just traded one desert for another.

"I have a love of desert landscapes, definitely," said the Los Angeles native. "Something about the Arctic being another kind of a desert – I just kind of wanted to be up there."

That being said, Curry took a circuitous route to UAF, where she's now a Ph.D. student in Natural Resources and Sustainability (and a fellow in the Resilience and Adaptation Program) focused on using visual tools to help communicate complex concepts. First came an undergraduate degree in Economics at the University of Pennsylvania Wharton School of Business, then three years in Washington D.C. as a financial analyst for a real estate advisory firm. But it wasn't Curry's element: "I just really hated being inside all the time, and in front of a computer, and in front of spreadsheets."

So she enrolled in a Master's program in landscape architecture at the Harvard University Graduate School of Design, where an instructor's offhand remark about the prospect of an ice-free Arctic sparked an interest in the changing North and its peoples that motivates Curry to this day. "I think it's a really interesting place to be involved if you want to have an impact," Curry said. "We have this long view that things will be drastically different in the Arctic in 20, 50 years, and that in my mind is enough time to do something."

Since enrolling at UAF in 2014, Curry has been studying ways in which communication and collaboration can bolster the ability of communities to adapt to climate change. She's focusing particularly on coastal communities on the North Slope, and looking at ways that visual elements can improve interactions between researchers, agencies and residents.

"If you live in the Arctic and you're explaining your observations of change, it's difficult for somebody who is not from that area to really understand the magnitude of change, and the effect that it's having on you and your culture," she said. "But I think that there are some ways to do that visually to give people a better sense of what people are talking about."

Within that broad topic, Curry is involved in multiple research projects. One is studying the human dimensions and cumulative effects of road development, including examining how communities, agencies, industry and academics interact to impact local adaptation. In another project, she interviewed residents of the North Slope village of Wainwright to record their own observations of change, part of an international project researching adaptation to climate change in coastal communities. She also interned with Wainwright through the Resilience and Adaptation Program, where she created a database of existing research information about the village to serve as a resource for the community and for future research.

The first of these projects is giving Curry a chance to flex her visualization skills, because she's also working on an Alaska Experimental Program to Stimulate Competitive Research (EPSCoR) award to translate the research into an interactive narrative, consisting of maps, infographics, animations, photo collage and narration. The idea is to frame the visual elements in an immersive multi-screen environment – in this case, the new Decision Theater North facility on the UAF West Ridge – to help audiences better grasp concepts like the magnitude and scale of change, to aid in their decision-making, and to expose them to a holistic, social-ecological systems approach to resource management.

All of these projects are helping Curry to develop her thesis, which will focus on both sides of research communications: how residents of communities can better express the complexity of their culture and the impacts of change; and how agencies and researchers can better share technical information with policymakers and citizen groups. "Right now what is mostly delivered are scientific reports to communities which are written for academic audiences, and are not easily digestible for most of the people that live there," she said. "And so how can we better communicate research findings?"

Curry said one of her favorite aspects of her research is the opportunity to form friendships with people living the unique lifestyles typical of the Arctic. And she's pretty hooked on the place herself: she said she aspires to open her own consulting firm after finishing her Ph.D., and is open to staying in Fairbanks. She's taken up cross-country skiing, and also spends a lot of time pursuing the pastime that got her hooked on the outdoors in the first place: running. "Trail running and all this sort of thing is new to me," she said. "I think I just didn't know what I was missing."