



The botany of the Black Hills

Ryland Sprague spends a lot of time roaming the Black Hills National Forest. As a botanist for the Forest Service, he identifies areas that support rare plants, maintains fences that protect plants and provides botanical reviews of timber sales and other projects in the Northern Black Hills.

He also focuses on ethnobotany, the study of how people of a particular culture and region use native plants. For centuries, the indigenous people of this region used plants they found in the Black Hills for medicinal, edible, structural and spiritual purposes.

“It’s not an extinct practice. People still use these plants today the same way they have for thousands of years,” Sprague said. “These plants provide sustenance and healing and instill a sense of self-reliance and confidence when navigating through nature.”

Sprague will discuss ethnobotany, the unique habitats of the Black Hills and plant compositions during the next Deep Talks, Thursday, April 13. His presentation includes a hands-on session with plant materials.

Compared to nearby grasslands, the Black Hills’ unique and diverse ecosystems contain plants that do not grow elsewhere for hundreds of miles. As such, they have always been a major source for gathering plants and materials.

“It’s one of many reasons the Black Hills hold such significance to so many indigenous peoples,” Sprague said. “Understanding the properties and capabilities of plant life solidifies the value of the resource and [ethnobotany] serves as a reminder of times that are not as far removed as we might think.”

The Forest Service manages approximately 32 plant species that are rare in the Black Hills National Forest,



Ryland Sprague examines a local plant through a microscope. Courtesy photo.

including orchids, grasses, sedges, shrubs and trees. One species of plant is listed as threatened.

“We also track some plant species to determine whether they need protection from the many activities occurring in the forest,” Sprague said.

Sprague’s work takes him all over the forest, but also includes a fair amount of paperwork. He works on projects big and small, analyzing the impacts they will have on resources and documenting findings.

“Understanding how to approach a project and how to document the

findings can be a challenging process, but it’s rewarding when you find that solution,” Sprague said.

“Still, hiking outdoors through all the seasons, sometimes to areas I have never visited, is pretty tough to beat.”

Sprague holds a Bachelor of Science in Biology with a Botany emphasis and Master of Science in Sustainability from Black Hills State University. He serves on the Cultural Advisory Committee for the Sanford Underground Research Facility and is a member of the Cheyenne River Sioux Tribe.

Deep Talks this Thursday: Botany of the Black Hills

“Deep Talks: The Botany of the Black Hills,” takes place at the Sanford Lab Homestake Visitor Center, 160 W. Main, in Lead, S.D. The event begins Thursday, April 13 at 5 p.m. with a social hour; the talk begins at 6 p.m. Deep Talks is free to the public. Donations to support community education are welcome. Guests aged 21 and older may sample craft brews from Crow Peak Brewery; light refreshments will be provided.