

Presenters



Angela Bartholomay, Associate Professor of Science at Dakota College, holds an M.S. degree in Science and has substantial experience teaching science courses and curriculum development. Angela has extensive experience in educational outreach activities, which includes her role as a Project Learning Tree and Project WET Facilitator, Lead Facilitator of Annual Watershed institutes, and facilitator of water festivals.



Dr. Shubham Datta, Assistant Professor of Wildlife Management at DCB, holds a Ph.D. in Natural Resource Management and has extensive knowledge and experience of conducting research and educational outreach. Shubham has experience conducting applied field research on biodiversity assessment including but not limited to large and small-mammals, birds, amphibians and reptiles.



Beth Hill, Acting Outreach and Education Manager for the ND Forest Service, holds a B.S. degree in Soil Science and has experience delivering curriculum and presentations on many natural resource topics to a variety of age groups. Beth currently serves as the North Dakota Project Learning Tree and Project WILD State Coordinator, and assists with educational events like Envirothon, EcoEds, Earth Day and Arbor Day festivals, fire prevention education, and garden clubs.



Janelle Green, Biology Instructor at DCB, holds a MS in Biology and an MS Ed in Curriculum and Instruction and has experience with molecular biology and crop genetics. Janelle teaches coursework in botany, environmental, and biological sciences with experience at the high school and higher ed level.



Registration information and credit hour information

Registration fee \$20/participant. Includes room and board at Dakota College at Bottineau.

Graduate credit available

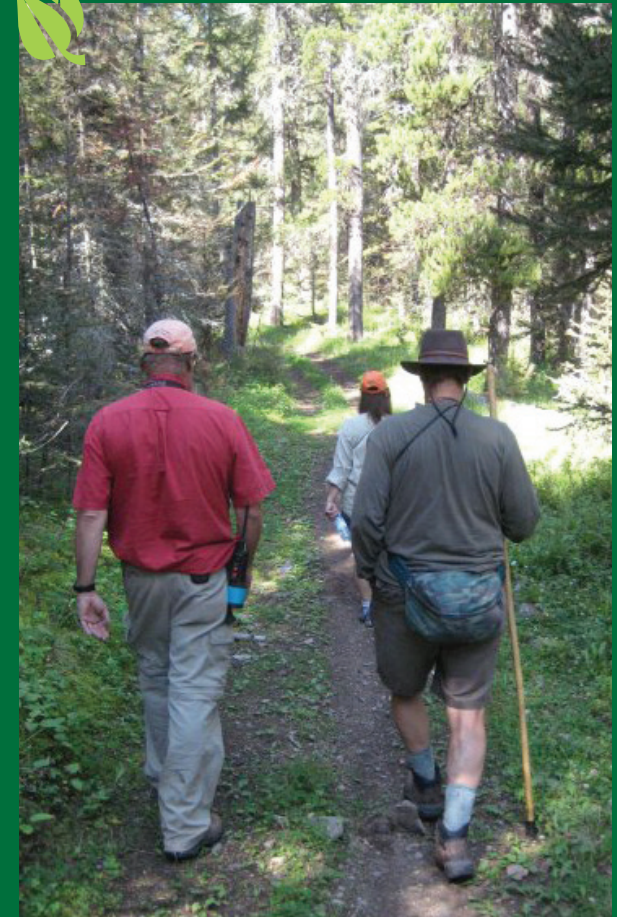
Participating teachers will earn one credit for attending the 2-day camp.

Space is limited

www.dakotacollege.edu/nri



Natural Resources Institute Part II: Focus on the Forest



Dakota College at Bottineau
105 Simrall Blvd, Bottineau ND

June 9-10, 2021

In partnership with ND Natural Resources Trust, North Dakota Forest Service and Project Learning Tree

Start small — go far.

DAKOTA COLLEGE AT BOTTINEAU

Dakota College at Bottineau believes that educating teachers will assist in increasing environmental awareness among students, eventually leading to public awareness on the importance of natural resources and their conservation.



Natural Resource program faculty at Dakota College have designed a 1-credit Natural Resource Management course for K-12 teachers and informal educators focusing on forests. This two-day institute is one of several annual trainings which will:

- ▶ **Familiarize you with the value of trees as a natural resource**
- ▶ **Learn how to perform a forest inventory through tree identification and tree measurements**
- ▶ **Educate you about the applications of conservation techniques in the study of natural resources**
- ▶ **Provide teachers with cross curricular resources, lessons and classroom ready activities related to environmental education.**
- ▶ **Build capacity for educators to transfer the institute's field studies to practical classroom applications.**

Join us in Bottineau for an opportunity to experience current forest management and forest resource issues of North Dakota. While exploring the issues and identifying solutions, participants will receive real world, user friendly and classroom ready instruction from specially trained Project Learning Tree facilitators, resource professionals, and scientists. Participants transfer the institute's field studies to practical classroom applications. Participants will experience hands-on, minds-on learning through a balance of presentations, discussions, activities, field tours, and environmental investigations.

June 9, 2021

Registration begins at 11:00 am.

First Session begins at 12:30 pm

Cruising the Guide

What is Focus on the Forest – an overview of Project Learning Tree and teacher resources.

Looking at Leaves

Take a closer look at leaves and find out more leaf characteristics. Learn how leaves can be used to identify plants.

Tree Cookies

This activity introduces a way of learning about tree growth by looking at annual rings. Tree rings show patterns of change in the tree's life as well as changes in the area where it grows. This activity will trace environmental and historical changes using a cross section of a tree.

Station #1 - Name that Tree Janelle Green
Use a dichotomous key to identify trees.

Station #2 - How Big is Your Tree?

Dr. Shubham Datta and Angie Bartholomay
Measure trees in different ways and become familiar with a trees scale and structure. Learn the importance of standard units of measure and techniques.

Station #3 - Tree Anatomy

Dr. Shubham Datta and Beth Hill
Get to know trees from the roots to the tip of the branches.

Evening Activities

- **Make and Take Projects: Paper and T-shirts**
- **Journaling**
- **i-Tree Design** - Participate in a field study to identify, measure, and assess the health of trees. Calculate the dollar value and ecosystem services of the trees using the iTree Design tool.



June 10, 2021

Participate in a scavenger hunt at Denbigh Forest while touring and completing a forest inventory.

Lunch at Towner Nursery, Towner, ND

Presentation by Jeff Smette, Nursery Manager

After a tour of the Towner Nursery, will wrap up with Every Tree for Itself activity, sharing, journaling and evaluation.

Transportation is provided to and from Denbigh and Towner Nursery. The afternoon will wrap up at 3:30 pm.

