

FALCON Faculty/Staff Presentations

Thursday, October 21, 2021

1:15pm – 3:00pm ET

12:15pm – 2:00pm CT

11:15am – 1:00pm MT

10:15am – 12:00am PT

1	Title	Presenters	Institution/Organization
	Safeguarding Natural Heritage Program	Audre Etsitty	Dine' College

ABSTRACT

Each summer, the Diné College Land Grant Office hosts youth camps that engage youth in agricultural education while incorporating traditional Navajo teachings. From these camps, students gain knowledge and understanding of the importance of safeguarding and restoring the environment and valuable natural resources on the Navajo Reservation. Since the onset of the Covid-19 pandemic we have moved to a virtual platform to deliver camp curriculum. Through each camp held, campers have become knowledgeable of horticulture and traditional foods which they now incorporate into their daily lives.

2	Title	Presenters	Institution/Organization
	Dine College Equity Land Grant Project	Filiberto Vecenti	Dine' College

ABSTRACT

The Equity Project is designed to develop and create educational teaching modules that are infused with Navajo traditional language and culture: Curricula design and material development; Faculty development and teacher preparation; Student experiential learning; Student recruitment and retention; Instructional delivery systems and strategic partnership. The project is designed in two parts. First, to prepare interdisciplinary science students for entry-level positions in food, agriculture, natural resources, and human sciences through a 5-week summer camp that utilizes the STEM Curriculum development programs in collaboration with the Center of Dine Teacher Education. Second, to provide continuing educational professional development workshops for Navajo Nation teachers to integrate STEAM into their curriculum/lessons. In addition, increase youth participation in STEAM-related activities through Dine College. In conclusion, the project will incorporate multiple evaluations to monitor the progress and efficacy of the program. Overall, the project will include school outreach activities, advisory meetings, teacher workshops, and k-12 summer student programs.

3	Title	Presenters	Institution/Organization
	Techniques for Regenerating Old Seeds	Frank Kutka	College of Menominee Nation

ABSTRACT

The Food Sovereignty Movement has grown to the point where many Indigenous peoples are looking to expand the use of seeds of traditional varieties of traditional crops, or to find seeds similar to those that were once used but adapted to different locations and methods. Sometimes gardeners have good seeds of traditional varieties in abundance, and sometimes the only seeds still in existence have not been grown out for a long time and are now very old. Others have been collected decades ago and stored in museums for display. Age eventually leads to the death of seeds, and some of the old seeds will never germinate. However, sometimes old seeds are still alive, but very weak, too weak to germinate on their own. This is a review of the various ways in which gardeners and scientists have helped or may help to grow healthy plants from old and weak seeds that are still alive. Because some of the methods are not traditional, each person or group involved will have to make choices among the methods based on the likelihood of success, cultural norms, and other considerations. If successful, regenerated plants can become the basis for new stocks of healthy, vigorous seeds to help meet current and future food sovereignty goals.

4	Title	Presenters	Institution/Organization
	USDA Grant - Economic Feasibility with Companion Plantings with Hemp	Joe Rothberger	Lac Courte Oreilles Ojibwa College

ABSTRACT

This presentation will cover the 2021 growing season at Lac Courte Oreilles Ojibwa College in Hayward, Wisconsin for hemp and the economic feasibility of companion planting with this crop. It will cover the licensing process, the planning process and a short break down of the variety trials of hemp. It will also cover the plan to amend the process for the remaining year 2022 and 2023 covered under the USDA grant.

5	Title	Presenters	Institution/Organization
	FDLTCC's Bimaaji'idiwin Producer Training Program	Erika Resendiz Alonso	Fond du Lac Tribal and Community College

ABSTRACT

The Fond du Lac Tribal and Community College's (FDLTCC) Environmental Institute in conjunction with 13 Moons, the Bimaaji'idiwin Ojibwe Garden Program, and Gitigaaning would like to propose a presentation on our Bimaaji'idiwin Producer Training Program (PTP). The PTP grew out of the Food Sovereignty Initiative (FSI) of the Fond du Lac Band of Lake Superior Chippewa (FDL), aiming to balance social and ecological needs and desires of the band while providing food in a sustainable manner and strengthening community resilience to natural resource vulnerabilities. The veracity of this program is made possible by strong partnerships of ten departments from FDL FSI to FDL Resource Management; the PTP provides an opportunity for land reclamation, cultivation education, and business development. Located on four acres in Cloquet, MN, the program has seen demonstrable growth from seven participants in 2019, its first year, to 34 participants in 2021.

Throughout the program, participants learn the basics of soil health, organic growing, seed saving, and business development, via workshops, and demonstrations by community experts. They attend conferences such as M.O.S.E.S. and the Emerging Farming Conference and receive hands on training by our farm mentor John Fisher Merritt of Food Farm; to encourage education uptake, the participants are given a suite of tools and education materials to help ease them into production. The FDLTCC Producer Training Program places Indigenous practices and knowledge at its center.

Our hope is that the program continues to grow, and that more emerging Indigenous producers join Minnesota Farmer's Markets. We hope to add a youth component in 2022 that will encourage healthy eating and cultivation practices by Fond du Lac youth, and to establish the program within the new Agricultural Division of the Fond du Lac Band to more broadly serve our community.

6	Title	Presenters	Institution/Organization
	TCU Missouri River Watershed Consortium project	Ruth Plenty Sweetgrass-She Kills & Amber Finley	Nueta Hidatsa Sahnish College

ABSTRACT

The Missouri River Watershed (MRW) comprises the ancestral land of many Native communities with deep ties to the river. Our people, the Mandan, Hidatsa, and Arikara have a historic and distinct relationship with the Missouri River in which the river is referred to as our Grandfather. TCUs are uniquely positioned to assist their communities understand and appreciate present-day conditions and issues in the MRW.

There are 15 TCUs located in the Missouri River Watershed. They are distributed throughout the basin from Montana to Kansas. To date these institutions have not had an opportunity to share their knowledge and experiences of the Missouri River with each other.

This two-year project will initiate a TCU-led Missouri River Watershed Consortium dedicated to identifying and addressing tribal water resource issues and information needs in the basin. The project will prototype community-based research on the importance of the Missouri river to Tribal communities, provide research and mentoring opportunities for students, and build the framework to expand relationships between Native Nations and environmental information providers in the MRW.

We propose inviting the other 14 TCUs in the Missouri River Watershed to contact us, expressing interest in participating in this project.

7	Title	Presenters	Institution/Organization
	Developing a Flood and Drought Early Warning Network for the Upper Missouri River Basin: Seeking TCU Collaboration	Kyle Bocinsky	Montana Climate Office, University of Montana

ABSTRACT

The Montana Climate Office (MCO) operates the Montana Mesonet, a growing network of over 100 meteorological and soil moisture monitoring stations that support communities in weather, flood, and drought monitoring. Beginning in 2021, the MCO has partnered with state Mesonets in the upper Missouri river basin to develop the Upper Missouri River Basin Soil Moisture and Plains Snow and Soil Moisture Monitoring Network (UMRB Monitoring Network), which is being coordinated by the US Army Corps of Engineers and will establish an additional 540 stations in the Basin, including over 240 new stations in Montana — roughly one station for every 500 square miles. The MCO is seeking partners from Tribal colleges in Montana who are interested in establishing weather and soil moisture monitoring stations near TCU campuses and co-developing decision-support tools for Tribal resource managers and producers, especially

regarding drought and floods monitoring in Tribal communities. In this brief presentation, I'll introduce the UMRB Monitoring Network project, describe ongoing initiatives to train TCU students in drought and soil moisture monitoring resources developed by the MCO, and invite partnerships with MT TCUs, as well as other TCUs in the UMRB.

8	Title	Presenters	Institution/Organization
	Cooperative Extension in Indigenous Communities: Collaborations between 1862 and 1994 Educators	Katie Hartmann	Iowa State University

ABSTRACT

Indigenous communities are not being equitably served by Cooperative Extension, with Extension offices in less than 10% of Indigenous communities. Educators at 1862 Land Grant Institutions and 1994 Tribal Colleges and Universities can collaborate to share expertise, educate students, and form strong bonds across the Land Grant System. To better understand these collaborations, I conducted a mixed methods study of 1862 Extension educators that collaborate with Indigenous communities. Educators were asked what makes their programs successful, what challenges they face, and what support structures they need to make their programs successful. A small group of these educators were working or had worked in collaboration with educators at 1994 TCUs. These findings will be discussed. Next, I am planning to conduct a similar study of Extension Educators at 1994 Tribal Colleges and Universities to gain their perspectives on these same topics. Understanding the experiences of educators from across the Land Grant System will inform Extension about how to best support these important programs.