



AMERICAN INDIAN  
HIGHER EDUCATION  
CONSORTIUM

# 1994 Land-Grant Tribal Colleges & Universities RESEARCH

## Background

Tribal Colleges and Universities' (TCU) Land-grant research programs seek to understand and solve problems facing Tribal communities in areas such as nutrition, health, the environment, economic and community development, and youth development. Research that specifically addresses Tribal issues provides the best science-based foundation for uplifting Tribal communities, while also providing models for successfully working with other institutions and researchers throughout the U.S. Ultimately, TCU research informs best practices that protect the environment, create jobs, and increase economic prosperity in Tribal communities and within Tribal Nations.

## Protecting the Environment

Keweenaw Bay Ojibwa Community College (KBOCC) has partnered with Michigan Technological University's College of Forest Resources & Environmental Science (CFRES), to address the Keweenaw Bay Ojibwa community's interest in its water quality and fisheries. Research capacity will be enhanced through three courses in KBOCC's Environmental Science curriculum as part of the Associate Degree Program. Over the last year they expanded the stream monitoring to include 100 sites. The expansion focused on streams of suspected brook trout habitat as well as new locations in streams within riparian wetland habitats. They deployed and retrieved 14 dataloggers across the Portage Waterway in and completed relevant research in forested wetlands that adjoin the focal streams. They also have a new weather/hydrology sub-theme, to better understand watershed dynamics related to snowfall, accompanied by new curriculum.



## Increasing Economic Prosperity

Dine College (Arizona-New Mexico) is working with New Mexico State University to increase agricultural productivity and economic profitability and strengthen the Navajo Nation's food and fiber systems. This research project enables Dine College students to enhance field research skills, conduct livestock market research, and develop small business models. Meat and wool quality of Navajo sheep herds were evaluated, and the data showed opportunities for improvement. As a result of the research, producers improved the quality of wool within their herds and the average carcass weight increased by 50 percent. Navajo producers increased profits, supported local jobs, and strengthened local food systems.



## Strengthening Food Sovereignty

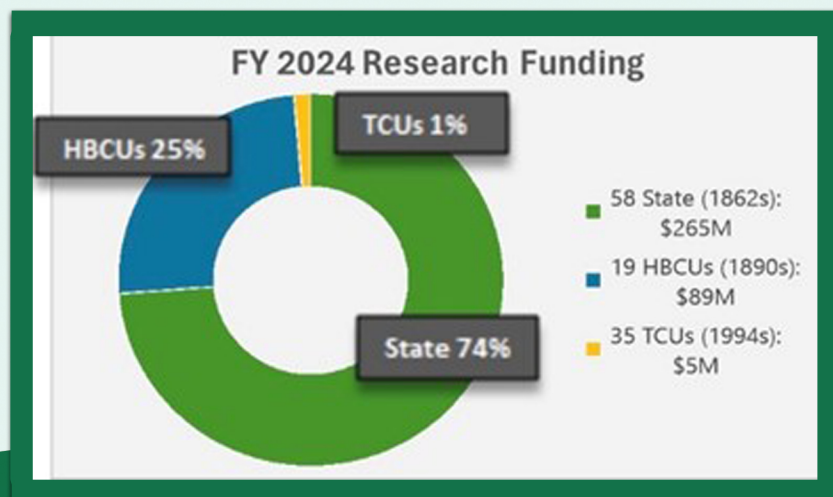
The College of the Muscogee Nation (Oklahoma) is exploring the reintroduction and cultivation of two traditional Mvskoke foods to revitalize their role in the Tribe's diet. Orko, the Mvskoke term for the pawpaw tree, and Cvse, the Mvskoke term for pumpkin, hold significant cultural and nutritional value. Pawpaws, a historical staple in Native American diets, including among the Mvskoke, produce a sweet, custard-like fruit with flavors reminiscent of banana, mango, and pineapple. Beyond its fruit, the pawpaw tree's fibers were traditionally used to craft ropes and nets. Similarly, Este Cate Cvse, or Indian Pumpkin, has been an essential food for the Mvskoke people. The College is researching optimal methods for large-scale cultivation of pawpaws and pumpkins, examining their dietary and nutritional benefits, and developing traditional recipes that are both nutritious and culturally appealing. This initiative aims to reduce diet-related illnesses, lower healthcare costs, and boost economic productivity while honoring Mvskoke traditions.



## The Tribal College Research Grant Program

The Tribal College Research Grant Program helps TCU Land-grant institutions (1994 institutions) become centers of scientific inquiry and learning for remote and rural reservation communities. Funding from USDA's National Institute of Food and Agriculture allows them to address the questions that matter to these communities, such as protecting reservation forests and monitoring water quality. Projects may help a tribe improve bison herd productivity, discover whether traditional plants can play a role in managing diabetes, or control invasive species. Grants support partnerships that ensures that other federal and Land-grant research entities can share resources and knowledge with the 1994 institutions. In addition, grants places an emphasis on training students in science.

For more information on TCU Land-grant research, contact John Phillips, [jphillips@aihec.org](mailto:jphillips@aihec.org).



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