

National Wildlife Federation EcoLeader Tribal Colleges and University Fellowship Recommendations

The National Wildlife Federation (NWF) is committed to strengthening relationships with Tribal Colleges and Universities (TCUs). As an EcoLeader Tribal Colleges and University Fellow, I was able to research TCU's across the United States to identify ways in which NWF can build knowledge and develop relationships with these respected communities. Currently NWF engages directly with three TCUs; College of Menomonee Nation, Northwest Indian College, and Little Bighorn College. I was able to connect with faculty and school officials from Little Bighorn College to discuss opportunities for future engagement and identified some of the challenges and barriers they face on campus. In this paper I will give an overview of my research, give recommendations on how NWF can strengthen their relationship with Little Bighorn College and highlight ways in which NWF can engage with more TCUs.

Research Overview

Initially I began my research by identifying all the TCU's in the United States. My first task was to form a TCU Directory and identify key personnel at each institution (Figure 1). Through my research I was able to identify 36 accredited TCU's across the United States. After identifying each TCU, I searched the school's website for demographic information and worked to identify key personnel. In most instances I linked the schools staff directory directly to the document, a few schools did not have a staff directory listed on the Web. Each TCU website was as different as the tribes from which the schools represent. As I did a virtual tour across the TCU's of America, it was clear that all TCU's are not the same; each institution has a different focus and purpose to support the people of their Tribe.

My next step was to work with my advisors to develop an introduction email for the project.

This email explained my role as an EcoLeader Fellow and my intention to strengthen relationships between TCU's and the NWF. Then I created a series of research questions. After approval from my

advisors I sought-out interviews with different TCU's of which NWF has engaged with in some way in the past. I reached out to The College of Menomonee Nation, Northwest Indian College, and Little Bighorn College to request interviews with them regarding their current involvement with NWF, perceptions of their current relationship with NWF, and to identify any challenges or barriers that may prevent them from engaging with NWF programs. Though I contacted many TCU staff and representatives, I was only successful in connecting with Little Bighorn College. I was able to interview the President of the school as well as a highly respected faculty member. After my interviews with Little Bighorn, I researched some of the issues and challenges Little Bighorn faces on campus in effort to connect their problems with programs and resources sponsored by NWF.

My research plans shifted as I was not having much success scheduling interviews and connecting with TCU staff. I began exploring best practices around connecting with TCU's by talking to collogues who have previously worked in Tribal Education. I worked to identify opportunities for NWF to engage with TCU's naturally. Through my research I found many opportunities for NWF to participate in different TCU conferences over the next year (Figure 2). I worked to identify key issues affecting Native Communities. My research also took me down a path to identify TCU Networks and Consortiums.

TCU Interviews

Initially I sought out to connect with several TCUs of which NWF has previously engaged with. I sent out an introduction and request to interview to faculty from the College of Menomonee Nation, Northwest Indian College, and Little Bighorn College. I was very fortunate to have been introduced to the President of Little Bighorn College (LBC), Dr. David Yarlott. President Yarlott agreed to an interview, and we met virtually over the Zoom Platform. LBC is located in Crow Agency, Montana, in a rural community of the Crow Tribe. There are currently 300 students enrolled for the Fall Semester at LBC.

President Yarlott shared that LBC is in the beginning process of developing relationships with NWF, currently they do not have a Memorandum of Understanding (MOU) or agreement of interest, but they are interested in seeing what opportunities there are for LBC and NWF to possibly collaborate. I was able to share some information on the Higher Education Programs NWF has to offer. They are very interested in the environment, but they have several barriers that prevent them from actively engaging in Campus Green Project.

Presedent Yarllot shared LBCs efforts with recycling on campus and in their community in general. LBCs rural setting is somewhat of a disadvantage when it comes to recycling on campus. LBC has attempted to implement recycling strategies and programs on campus in the past, but soon realized that there is nowhere for them to store or dispose of recycled materials. The nearest recycling center is 60 miles away for aluminum. The plastics recycling center in their community actually closed leaving their campus and the community nowhere to dispose of their recycled plastics. Going Green on campus is something LBC is striving towards, while LBC could use support in their recycling efforts, they are making strides in their shift to green energy on campus. So far, all but one building on campus is built green with solar energy and water recycling systems. They are proud to have received Platinum Leadership in Energy and Environmental Design (LEED) Certification for their newest facility on campus.

I asked President Yarlott if LBC is currently taking part in any conservation or sustainability efforts and said they are not currently taking part in any sustainability or conservation efforts that he was aware of, but he did say they are conducting research into outreach with their community surrounding water and air. They want to ensure quality air and water for their community. They don't have any programs that focus on conservation efforts directly, but they are working with a bordering state Wyoming in effort to develop programs that focus on conservation, wildlife, and land management. They do not have a formal equity and inclusion department; they abide by the laws but do

not have a formal department. Little Bighorn has a career development department which is part of their student success center, but they do not have any specific opportunities to encourage students to pursue degrees in STEM fields at this time. They are however seeking out and submitting proposals to the National Science foundation and other organizations to obtain funding and supports to develop a program that will encourage students to seek out positions in STEM fields. President Yarlott provided contact information for several faculty members from Little Bighorn that he felt could share some valuable insight into my research. I was able to connect with Professor John Doyle.

Professor Doyle oversees the water quality department at Little Bighorn College. In his department they observe wells and water quality for the entire community. Through their work with water in the community, Professor Doyle works to identify contaminates that are negatively affecting families in his community. They seek to identify where the contaminants are coming from by studying the source of the contaminants in the water. Professor Doyle wasn't aware of any relationships with NWF programs but did meet a representative from NWF at the Rising Voices Meeting in Boulder, Colorado, but he isn't sure if that relationship ever flourished after their initial connection. Professor Doyle wasn't aware of any barriers that would prevent NWF from pursuing relationships with LBC. Doyle said one of LBC's greatest needs is to strengthen their Science Department by attracted a broader range of young people interested in making a difference through science and conservation in their community.

There are a lot of issues with economic transition in the Crow Agency Community that prevent LBC from developing conservation programs as much as they would like. LBC does have a few conservation programs, one being a garden program teaching students about food sustainability, and the other a water conservation program called Guardians of the Living Water. In the Gradians of the Living Water Program participants are paired with youth from their community. Participants are able to mentor kids from their community, allowing students to gain a better understanding of the water and

their connection to the water and the earth. One of the problems Professor Doyle shared that was impacting the Crow Agency Community and the LBC campus is Polyfluoroalkyl Substances (PFAS).

Professor Doyle was concerned that many Tribal Communities don't know about PFAS and suggested that efforts to information Native Communities of the danger of PFASs could possibly reduce exposure to toxic contaminants amongst Tribal Communities across the Country.

Exploring Issues Affecting Tribal Colleges and Universities

This section will explore issues raised by LBC and explore possible areas of interest for collaboration amongst NWF and all TCUs. After my interviews with President Yartlott and Professor Doyle I sought to learn more about some of the issues affecting their campus in hopes to offer some strategies for solutions in my recommendations for this project. I explored their issues with recycling further and explored PFASs contamination. One of the major issues was that they had nowhere to store or dispose of recycled materials as they are located far from any recycling centers. There are 6 recycling centers within 100 miles of the Crow Agency Reservation, located in Montana and Wyoming, but all specialize in metals recycling. There are no centers reasonably located that could support their recycling disposal needs for plastics.

PFAS is a chemical commonly found in fire retardant, water proofer, oil resistant materials, clothing, take out containers, and non-stick cookware. Microscopic PFAS particles are in water, soil, air, fish, and PFAS has even been found in the blood of humans in animals across the globe. Humans are exposed to PFAS by small amounts in the food we eat and more so from environmental exposures. The problem is that PFASs is it is non-biodegradable and overtime accumulates in the environment contaminating drinking water. Exposure to PFAS has been linked to harmful health effects such as cancer in humans and animals. Currently the research behind PFAS is in its infancy and scientifically little is known beyond its presence and harmful effects on the environment.

While exploring the issues LBC discussed, I came across things that affect many Tribal communities across the nation. Some of the key issues affecting Tribal Communities are food severity, water quality, food insecurities, education, healthcare, climate change, violence, hunting, land management, substance abuse, energy, employment, mental healthcare, conservation, pollution, and environmental protection.

Opportunities for Engagement with Tribal Colleges and Universities

Through research I worked to Identify opportunities for NWF to engage with TCUs and came across several organizations and consortiums that would be beneficial to opening pathways to communication between NWF and all TCUs. One of the consortiums I came across is The American Indian Higher Education Consortium (AIHEC). The AIHEC is a support network for all accredited TCU's in the United States. All the schools identified in Figure 1 take part in the AIHEC. The AIHEC regularly hosts meetings and conferences which have been included in Figure 2. Considering that all TCUs in the United States belong to the AIHEC, attending or presenting at an AIHEC conference could potentially open pathways with all TCUs. The Intertribal Agriculture Counsel (IAC) is a respected ally of tribal communities and is well know amongst tribes for their works with conservation, preservation, development, and use of agricultural lands for the betterment of Native Peoples. A possible collaboration between NWF and a respected organization that is trusted by TCUs such as IAC or one of the other Native Organizations listed in Figure 2, could lead to more TCU engagement.

Recommendation

As my EcoLeader Tribal Colleges and University Fellowship project comes to an end, I would like to build upon my research and offer my recommendations on ways in which NWF can gain knowledge of, and strengthen relationships with, TCUs. When it came to connecting with TCUs for interviews, I

found that I had the most success when I was introduced by someone who was associated of familiar with the TCU. Emailing institutions without introduction was not successful during my research. I found that having someone familiar introduce me to the institution faculty or representative gave me more accreditation and schools took me more seriously. My experience interviewing Little Bighorn was very good. Overall, faculty were very open and receptive to developing relationships with NWF. President Yarlott would like for an NWF representative to connect with his institution to further discuss possible opportunities for NWF to engage with students at LBC by collaborating on future conservation and sustainability projects. President Yarlott said the best contact would be the Dean of Admissions, Dr. Emerson Bull Chief.

My recommendation for NWF is to connect with to Dr. Bull Chief to discuss possibilities for collaborative engagement. NWF could possibly assist in developing a Green Campus Project in respects to LBC's needs to develop sustainable recycling programming on campus and throughout their community in general. Due to their rural area a recycling program at LBC would need focus on reducing use of plastics to reduce and minimizing plastics waste on campus, and/or invest in developing their own recycling center for their campus and community. Another opportunity to engage could be for LBC and NWF to collaborate on a water and air conservation project or support their research with PFASs. Dr. Bull Chief's contact information is included in the TCU Directory (Figure 1).

My next recommendation is for NWF to consider developing a new Higher Education Program focusing on key issues affecting Tribal Communities and TCUs. One thing that I noticed when researching the TCUs across America, was that each TCUs course offerings were crafted to fit the needs of their Tribe and community. There are many issues that affect Tribal Communities and TCUs that intersect with the NWF's goals and commitments. I few of the issues I feel NWF could possibly focus on food severity, water quality, food insecurities, education, climate change, land management, career

exploration in STEM, conservation, pollution, or environmental protection. A program that was specifically geared towards TCUs or Native American Organizations, would show TCU staff and students that the NWF is committed causes that affect their communities.

A possible concept for a TCU specific program could be a water conservation and sustainability program in Tribal Communities. I have developed a sample project plan for this concept called NWF Water Protector Program (Figure 3). Water conservation has always been a priority for Native American Communities, and this type of program would attract TCU involvement and allow NWF the opportunity to make a real difference in tribal communities across the country. Water is a building block for life and without it our ecosystem would drastically change. Many Tribal Communities don't have access to clean water, and situations like the Dakota Access Pipeline, Enbridge's Line 5, and Drought further threaten to decimate water quality and availability across Indian Country. Potentially, a program that focused on water quality and conservation could bring awareness to possible hazards that threaten Tribal Communities and TCUs water quality. Potentially, a NWF Water Protector Program could attract involvement from TCUs across the nation, empowering young people to make differences in their communities by protecting water quality for their tribe and their environment in general.

My final recommendations for NWF is to maintain a presence amongst TCUs by taking part in, and presenting at , Tribal College Conferences and Consortiums. Networking within TCU professional circles will go a long way to open the door to developing new relations with TCUs and Tribal Entities. I believe that presenting and attending these conferences would be mutually beneficial to the NWF and TCU communities. By spreading awareness of NWF at events that are well attended by many TCUs, NWF can put their name out there, attract student interest, and gain support for causes and efforts that are dear to them. The TCU students and staff would gain valuable knowledge on opportunities to engage with NWF, and NWF would have an opportunity to gain knowledge from Tribal Communities and

strengthen relations amongst TCUs and the NWF. As part of my research, I have included a list of upcoming American Indian Conferences (Figure 2). These conferences would be excellent opportunities for NWF to connect with TCUs in the United States.

Conclusion

As an NWF EcoLeader Tribal Colleges and University Fellow, it was my privilege to work to identify opportunities for NWF to increase knowledge of, and strengthen relationships with, TCUs across the nation. It is with great hope that the NWF considers pursuing my recommendations for possible opportunities to engagement with Little Bighorn College, consider developing a new Higher Education Program focused on key issues affecting Tribal Communities across the Nation, and to increase NWF presence at TCU conferences in effort to network and connect with TCU educators and professionals.