

Final Report – 041 – The Future of Culturally Important Species in North America

ADMINISTRATIVE:

Project Number: 041

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Project: 582787

PUBLIC SUMMARY:

Many thousands of plant and animal species are culturally important to the Indigenous peoples of North America. Global change is leading to major shifts in the abundance, distribution, and life history of these species, with concomitant effects on their value to the peoples for whom they are most culturally important. While a number of studies have begun to explore the futures of culturally significant species, these studies typically do so in isolation, focusing on individual plant species and single future scenarios, and involve little engagement with the people for whom such species are most important.

A main goal of this effort focused on engaging Indigenous stakeholders, communities, and nations in conversations about the impact of climate change on their culturally important plant communities. To this end, we engaged with citizens of Southern and Eastern Tribal Nations through attendance at regional and national meetings, both in the context of formal presentations and smaller break-out group conversations. The work carried out in this project allowed development of individual partnerships with Tribes, in particular with the Seminole Tribe of Florida, resulting in an ongoing Tribal-led collaboration with the project team and SE CASC to study the impacts of climate change on their species of cultural significance. This process of relationship-building can serve as a foundation for building future collaborations between the University, USGS, and Tribal partners to assess the vulnerability of species of cultural significance to climate change.

TECHNICAL SUMMARY:

A main goal of our effort has been to engage Indigenous stakeholders, communities and nations in conversations about the impact of climate change on their culturally important plant communities. To this end, we have engaged with citizens of Southern and Eastern Tribal Nations through attendance at regional and national meetings, both in the context of formal presentations and smaller break-out group conversations. While we modestly proposed to engage Tribes through a single broad conversation, one of the long-term visions we laid out in our original proposal was a model in which we might engage with many individual Tribal communities in the southeastern United States.

The work carried out from this project has allowed us to create individual partnerships with Tribes, in particular with the Seminole Tribe of Florida (STOF), which has resulted in an ongoing Tribal led collaboration between our group, the SE CASC and the Seminole Tribe of Florida to study the impacts of Climate Change on their species of cultural significance. This has culminated in a contract with the Seminole Tribe of Florida that will allow us to continue and expand on this work.

PURPOSE AND OBJECTIVES:

Our initial proposal consisted of two initial steps to initiate conversations about the ways in which we can build participatory models of climate change science that both include and benefit Tribal Nations: 1) A set of climate-analogue maps that could serve as a framework for conversations with the Tribes, and 2) a single listening session to solicit feedback on the best paths forward for studying and managing species on Tribal land.

Our initial proposal outlined predetermined questions and a set-framework for engaging with Tribal citizens. Based on early feedback from our Tribal partners, we shifted our efforts from building climate-analogue maps and using a predetermined listening framework to investing more effort on Tribal-led conversations.

ORGANIZATION AND APPROACH:

As mentioned above, our initial proposal outlined predetermined questions and a set-framework for engaging with Tribal stakeholders. Based on early feedback from our Tribal partners, we shifted our efforts toward investing more effort on Tribal led conversations. Rather than a single listening session, we have held many dozens of conversations. We have engaged with citizens and representatives of Southern and Eastern Tribal Nations through attendance at regional meetings, both in the context of formal presentations, workshops and lectures, but also in the context of smaller break out conversations and regularly scheduled online video calls. These smaller meetings allowed us to more informally gauge the needs, concerns, and interests of individual Tribal nations and communities.

Due to the onset of COVID-19, a number of engagement meetings had to be canceled. Despite these limitations, we were able to successfully continue to engage with Tribes, in particular with the Seminole Tribe of Florida, by transitioning to a fully online engagement platform.

PROJECT RESULTS:

The main product from this work has been the development of an ongoing Tribal led collaboration between our group, the SE CASC and the Seminole Tribe of Florida (STOF) to study the impacts of Climate Change on the habitats that hold cultural significance. This collaboration directly carries out some of the goals we originally envisioned and does so in a way that is

directly informed by our many conversations. More specifically, this work is led by our STOF partners and our role in the project has been, in light of their lead and ongoing conversations, to provide the data, contextualization and other scientific products that are most useful to our Seminole partners. Importantly, this process has been iterative, with the work we carry out becoming more ambitious as trust is built between and among individuals in our partnership. As part of this collaboration, the STOF has awarded our group and the SE CASC a contract to assist with their BIA-funded Climate Impact Assessment. Thanks to the relationships we were able to build based on our SE CASC award, the Seminole Tribe of Florida recognized our group as better partners than were more local institutions and collaborators.

ANALYSIS AND FINDINGS

The work associated with this grant was not the kind of research that has simple “analyses and findings” but instead represented a series of events in which we listened to and learned from Tribal partners (and potential partners), and in which we posed new and better questions as we became better at listening.

CONCLUSIONS AND RECOMMENDATIONS:

The main product of this work has been the development of relationships with Tribal Nations that can serve as the foundation for building future collaborations between the University, USGS, and Tribal partners to study the impacts of climate change on species of cultural significance. This grant afforded our group the opportunity to engage in open-ended conversations with potential Tribal partners. By approaching these conversations without a predetermined agenda and allowing these conversations to be Tribal-led, we were able identify opportunities for collaborations that would not have been possible using a more product-led approach.

A secondary product from this work has been the lessons learned about building relationships and trust with Tribal partners. By developing strong long-term collaborations and building trust through slow and iterative conversations, we can collaboratively determine frameworks for working with Tribes on questions that can move climate science forward, while ensuring and protecting Tribal sovereignty as the central pillar of our work.

At the same time, it has become clear that in many contexts, the default approaches of universities, departments and federal/university partnerships are likely to lead to problems in working with Tribal partners.

First, universities tend to require open data, but assume data should be open to everyone. In the context of Tribal partnerships, it is the Tribe that needs to decide who has access to data (and when). This may seem like a trivial point, but open data policies are built into most university contracts and into, for example, USGS reporting structures.

Second, university partnerships are often diffuse, with different individuals playing replaceable roles on projects and PIs often delegating to different individuals at different times. This approach is at odds with the importance of individual relationships and trust in those relationships for developing Tribal partnerships.

Third, the trust built in relationships is often around long-term relationships, but funding cycles are not long-term. For example, we extended this award multiple times to accommodate the reality that the conversations we needed to have as part of the award needed to take place slowly and iteratively. The denouement of this award will take many years, long after the funding has lapsed. The challenge here is that universities do not pay staff or faculty for such long-term work and grants only very rarely accommodate such work. As a result, such efforts depend either on the personal time and emotional capital of faculty and staff or they depend on frenetic attempts to get grant after grant. Neither is fully sustainable. Additionally, a lapse in funding does not only have a detrimental impact on a particular project, but erodes Tribal trust in the ability of institutions and agencies to uphold long-standing commitments, and impinges on future efforts to build collaborations.

Fourth, while different tribes may share many features with regard to the general challenges of dealing with culturally important plants and other organisms and the future, they do so in the context of unique cultures and histories. In addition, they do so as represented by distinct individual relationships. As a result, while there might be advantages of scale (in theory) of developing generalized projects on culturally important plant species, an important disadvantage of such efforts is that they rely upon the development of MANY individual relationships (and, almost invariably, the dilution of the strength of those relationships). Thus, the advantages of “general” projects are likely to be illusory.

Fifth, in theory a key potential component in projects with tribal communities is the involvement, on the university side of such projects, of Indigenous scholars at the university (or in federal positions). However, in practice the few Indigenous scholars at most universities and in federal positions are often pulled in many directions (on many such projects, in many mentor roles, on many committees) and so a persistent challenge is that the inclusion of Indigenous university partners may actually come at a cost (emotional, financial, time, etc..) to those individuals. Long-term projects have the potential to better allow for more meaningful and less costly involvement, but, as noted, long-term projects are exceptionally difficult to keep running.

MANAGEMENT APPLICATIONS AND PRODUCTS:

These applications and products were described elsewhere.

OUTREACH AND COMMUNICATION:

- 1) USET SPF Annual Meeting, Oct 2018, Seneca Nation, FL
- 2) Seminole Site Visit, Partnership on BIA RFP Climate Resilience, Feb 2019, FL
- 3) USET Climate Summit, Aug 2019, Syracuse, NY. This was a multi-day event consisting of break-out groups, mini-sessions, and a scheduled working session with the Seminole Tribe of Florida’s Heritage, Environment and Resources Office (H.E.R.O.), as well as many more informal conversations with the citizens of Tribal nations. The following presentation was delivered twice during the Summit: Nichols, L.M. and Dunn, R. R. Aug 2019 “Culturally Relevant Climate Change Mapping” USET Climate Summit, Syracuse, NY
- 4) Rising Voices Workshop, May 2019, Boulder, CO

- 5) NCSU AISIS (American Indian Science and Engineering Society) meeting, Feb 2020
- 6) USET Virtual Climate Change Vulnerability Assessment/Adaptation Plan Writing Retreat, Jan 25-28
- 7) Ongoing monthly (and bi-weekly starting in 2021) online meetings with the Seminole Tribe of Florida H.E.R.O. (Heritage, Environment and Resources Office) to discuss the ways to integrate western science and Traditional cultural knowledge for Tribal led climate change impact planning.