

URGE Session 4 Deliverable - Working with Local Communities

A. Future improvements

To improve interactions with local communities, especially minoritized or indigenous communities, we are recommending to our department IDEA committee that the following updates to the department website homepage and IDEA website be considered. We aim to have the IDEA committee consider these changes by **30 April 2021**. We also aim to incorporate pieces of these guidelines and ideas from our URGE pod discussions into a future Code of Conduct in the Field (see deliverable 6).

- (1) Including this non-definitive guide to native lands or similar resource on the 'resources' page of the IDEA website: <https://native-land.ca/>
- (2) Including the official Yale land acknowledgement, commonly used by upper levels of administration, on the department home page (recommended) or at least on the IDEA website. Details here: <https://secretary.yale.edu/services-resources/land-acknowledgment-statements>
- (3) Including a version of the 'best practices' guidelines below on the IDEA website.

Framework of Policies for Working with Local, Minoritized or Indigenous Communities

These should serve as guidelines for Yale EPS members, highlighting best practice when working with and interacting with local communities, and specifically minoritized or indigenous communities. The guidelines fall under four broad categories: 'Collaborations and Connections', 'Land Acknowledgement', 'Conduct', and 'Research Accessibility'. When applicable, Yale EPS members should make efforts to follow these guidelines in their work, in order to respect local communities, promote equity and fairness in the scientific community, and actively support outreach.

Collaborations and Connections

- When carrying out fieldwork in different countries/regions, consider collaborating with local researchers and/or communities.
 - Involve local collaborators at all stages of designing projects (setting out aims and objectives, developing methodology, carrying out work, evaluating outcomes).

- Consider local community needs in planning the outcomes of projects when applicable; note the complexities of project outcomes having different impacts for different local stakeholders.
- Accommodate students from local institutions in research projects (as is common practice when collaborating with researchers from international institutions).
- Include local collaborators as co-authors where appropriate.
- Pay field assistants or other non-academic staff at a rate appropriate to the level of funding for the project; and at/above living wage.
- Acknowledge the contribution of all facilitators of the project (within reason) in research outcomes and presentations - not just academic workers.
- Facilitate long-term relationships and links between Yale EPS and other institutions that have been involved in local collaborations.
 - Organise visits/exchanges for students and academic staff.
 - Explore partnerships in other fields of research.
 - Address any concerns and negative experiences of related institutions (be it Yale, Ivy League, U.S.A., industrial or commercial actors).

Land Acknowledgement

- Make a standard practice of including acknowledgement of land ownership (current and/or historical) for field sites, in publications and presentations of work from those sites.
 - Resources: <https://native-land.ca>; <https://secretary.yale.edu/services-resources/land-acknowledgment-statements>
 - If you do acknowledge land ownership for a local community that you have not previously contacted when planning the research, make an effort to reach out to the community in question to inform them about this research and its outcomes.

Research Accessibility

- Enable the local community where research has been conducted to benefit from the outcomes of this research.
 - Consider making provisions for translation of the research into language(s) spoken in the local area.
 - Consider producing additional resources/materials to relay findings of research to the local community in a way that is useful to them (for example as a teaching resource).
 - Share scientific literature with local communities - many research outcomes (scientific papers) are inaccessible to those outside of the scientific community because they are behind a paywall.

- Recognise the role of involving local collaborators and students in the project at all stages (see “Collaborations”) in bringing about research outcomes that are relevant and helpful to the local community.

Conduct

- Respect the customs, knowledge and authority of the local community you are working with and around.
 - Educate yourself about local history, culture, traditions, politics, and priorities; both prior to field work, and during the course of it.
 - Have a code of conduct in place for you and your co-workers that reflects these (see also URGE Session 6).
 - Consider the impacts of physically altering the local area through your activities; this includes e.g. footprint of campsites, drill scars from sampling, removal of fossil specimens. Note that removal of artifacts/samples may constitute a loss of significant scientific, cultural or historical value to local communities and jurisdictions, even when legally sanctioned.

B. Past experiences of research with communities of color (and local communities in general)

Leading up to and during our pod discussions, several EPS members shared their experiences of fieldwork and interactions with local communities. These included fieldwork in South and Central America, Southern Africa, the Arabian Peninsula, Arctic Canada, and Australia. In our sections we particularly spent time discussing:

- how to think about work that is far removed in scope from the needs of local communities (e.g. Precambrian geochemistry, deep Earth research)
- thinking about ways to improve connections and relationships with the local New Haven community in our backyard, particularly for people who don't do external (or terrestrial) fieldwork
- the consistency of data sovereignty with funding guidelines

Some of the specific challenges to be overcome emerged in the accounts of previous experience, and some positive aspects also emerged. Here we've

Funding

- While doing fieldwork with the GSC in Tuktut Nogait National Park, we were accompanied by two local wildlife guides and their dog. This was a substantially larger camp than the rest of my work with ~12 people. Otherwise, most of my other work was in Sirmilik National Park. There we communicated with the local Hunters and Trappers Association about our proposed field sites to get their permission ~6 months in advance of the trip, but we did not hire local guides to join us in the field. The simple reason for this was money. The research grants funding this work generally supported us working in groups of 4 geologists, and the Long Ranger helicopters we used can only carry 2 passengers plus gear. So bringing additional people in many cases would have required an additional flight and increased the cost of each camp by ~50%.
- Considering the Geological Survey of Canada has taken the initiative to collaborate with local guides, I would hope that NSERC and PCSP would start providing funds for independent expeditions to do the same. I also hope the NSF and other agencies in the US would start explicitly accounting for this for work that takes place on or around indigenous land.

Facilitating Contributions

- Throughout the project there was contact with the government (Ministry of Mining, for sample export permit), local geologists at a petroleum company who were not involved in the project directly but advised on sample export and seismic data acquisition, and local residents of the field area (including some who offered us hospitality). Research output in this project did not acknowledge any of these groups (other than the petroleum company for providing data), as they were not involved in the research itself - should facilitating contributions be acknowledged in future?

- Many of the researchers involved in the project were from Latin America, particularly Colombia. The staff at the institute were Panamanian but there were no or very few Panamanian researchers that I know of. I was told that this was in part because there are no geology or paleontology programs in Panamanian universities to draw students from. However, much of the lab and field work for these projects doesn't require much paleontological background. Panamanian biology students could have been hired as interns. Pairing American and Panamanian interns on teams would allow for greater parity and encourage communication and cultural education. The institute acted as a pipeline for Colombian researchers to get their foot in the door at American institutions, and it could do the same for Panamanians.
- To my knowledge, the wildlife guides were not included as authors on any papers or presentations from that fieldwork, but they were thanked in acknowledgements. The guides that we worked with had been on GSC expeditions in the past, but I don't know if there were any formal long-term agreements.

Political history

- We lived in a house built for American military personnel and their families working the Panama canal. The institute we were part of was built on what was previously American-occupied soil. This history of occupation was something we learned about while there, and discussed regularly among ourselves, but we were also in many ways a continuation of it.
- I spoke with just a few white "landowners" who "owned" enormous tracts of land, for permission to sample rocks ("take what you want, we've got enough rocks"). But we also passed by indigenous settlements in extreme poverty, and I encountered a handful of petroglyphs near my sample sites, forcing some reflection on the disorder between what had been and the current state of things.

Some positives

- I do know that co-workers in the project have collaborated with Omani geologists previously and presented at the Geological Society of Oman. Also actively involved in Omani geoconservation efforts.
- Worked with a local collaborating scientist who was involved at the proposal stage, included as a co-author on all publications, attended US-based project workshop, etc.; Local students were involved in field work and scientific analyses, including co-authoring papers.

- Connections were made with local institutions (churches, community centers, etc.), although the depth of such connections varied.
- Financial assistance was provided to many local families who hosted scientific equipment on their land.
- Research was presented through talks, newspaper and radio interviews, site tours for local journalists (and I think some school teachers?), a bilingual blog, and an exhibit at the new biology museum. We were encouraged to find other ways to engage with the community as well. Translating into Spanish wasn't a problem thanks to Colombian colleagues and some language proficiency on our part, but the research was not translated into any indigenous (Emberá) languages as far as I'm aware.