EXCHANGE FOR LOCAL OBSERVATIONS AND KNOWLEDGE OF THE ARCTIC: AN INFRASTRUCTURE FOR THE COLLECTION, PRESERVATION, AND SHARING OF LOCAL AND TRADITIONAL KNOWLEDGE

CONTACT DETAILS:
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Objectives:

The Exchange for Local Observations and Knowledge of the Arctic (ELOKA) is working to build a community that facilitates international knowledge exchange, development of resources, and collaboration focused on Arctic communities and stewardship of their data, information, and knowledge. Over the last decade, Arctic residents and Indigenous peoples have been increasingly involved in all aspects of Earth system research. Through the communication of local and traditional knowledge (LTK) and the results of community-based monitoring (CBM), Arctic communities have made, and continue to make, significant contributions to understanding recent environmental change. To reap the full benefits of these contributions, a means of recording, preserving, and sharing the data and research outcomes must be available. ELOKA is a growing infrastructure focused on the data management concerns associated with LTK and CBM data. These data are a valuable complement to quantitative results collected via satellite or other sensor networks, and our data management challenge includes supporting the use of LTK and CBM data in the broader data analysis context. ELOKA operates on the principle that all knowledge should be treated ethically, and intellectual property rights should be respected.

On-going activities:

Current ELOKA activities include:

- The Bering Sea Sub-Network (BSSN), an International Community-based Observation Alliance for Arctic Observing Network (http://eloka-arctic.org/projects/bssn.html),
- A Community Based Monitoring Data Set Inventory associated with the Circumpolar Biodiversity Monitoring Program (CBMP) (http://eloka-arctic.org/projects/cbminventory.html),
- The Seasonal Ice Zone Observing Network (SIZONet), focused on the collection of ice observations from Arctic communities experts (http://eloka-arctic.org/projects/sizonet.html)
- The Snowchange Oral History, documenting Indigenous observations of climate change in Siberia, Russia (http://eloka-arctic.org/projects/snowchange.html),
- The Yukon River Inter-Tribal Watershed Council (http://eloka-arctic.org/projects/yukonriver.html), and
- The Yup'ik Environmental Knowledge Project, a project documenting Indigenous placenames and knowledge in the Bering Sea coastal region (http://eloka-arctic.org/projects/yupikknowledge.html).

Results:

ELOKA has published several data sets via the National Snow and Ice Data Center catalog. These include interviews from the Sanikiluaq Sea Ice Project, ongoing observations from the Seasonal Ice Zone Observing Network (SIZONet), and the Kangiqtugaapik (Clyde River) Weather Station Network. We have also established a relationship with the Geomatics and Cartographic Research Centre at Carleton University in Ottawa, Canada, and are exploring the use of their Nunaliit Atlas framework to manage and share a variety of data types, both quantitative and qualitative. Our team includes a member of the DataConservancy project, and we are investigating the use of DataConservancy software to support the data preservation aspects of our data management lifecycle.

URL: http://eloka-arctic.org