

How Can the Use of Mapping Aid Indigenous Communities in Decisions Making Concerning Cultural and Environmental Resources



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INTRODUCTION

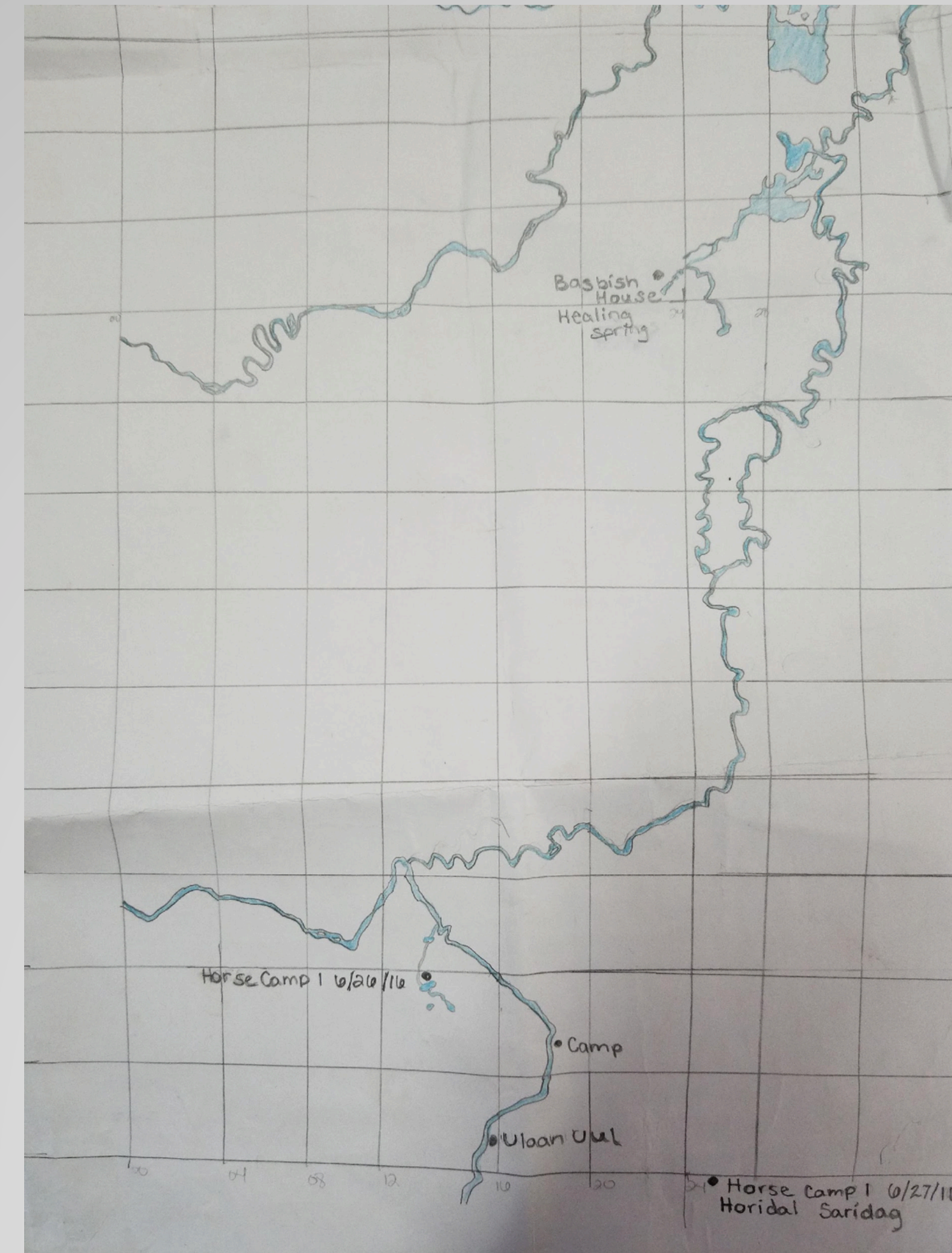
A Bioregion is where geography, the environment, and culture intersect. They are places defined by landscapes, natural processes, and human elements (BioRegions 2016). Although on different sides of the world, areas in Mongolia and Montana are thought to be bioregions because of their shared characteristics. The occurrence of these similar bioregions presents a unique opportunity to compare the challenges that each of the regions face. With the ever-increasing pressures of westernization, both cultures have in the past, and are currently experiencing rapid change in their cultural ways of life and natural environment. This emphasizes the need to document the landscape, cultural spaces, language, stories, and culture so that it is not lost. A composite map would act as a tool to further cultural continuity both from a local and global perspective and aid in community decision-making.

METHODS/METHODOLOGIES

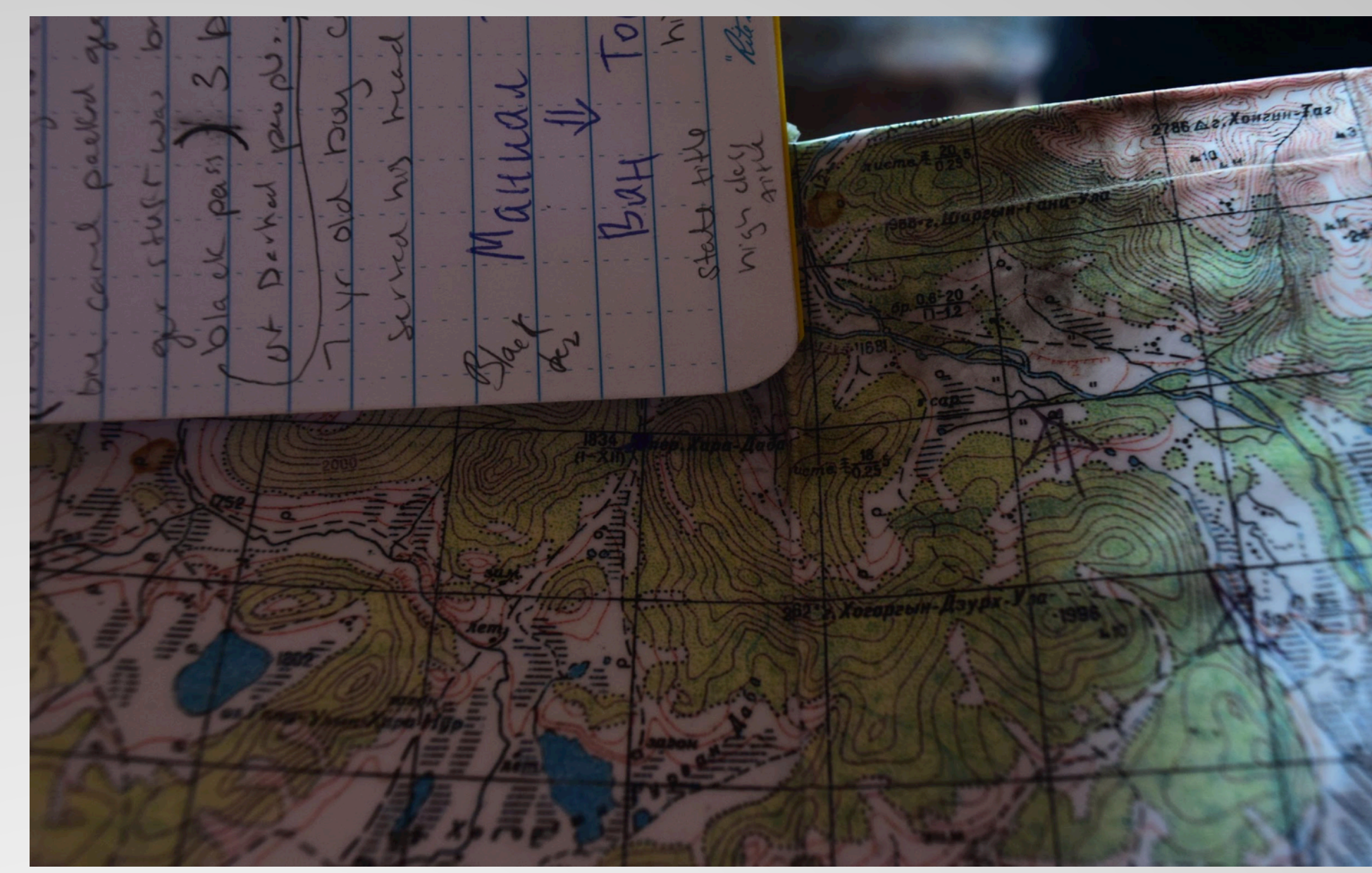
Holistic management and indigenous research methodologies were employed to carry this research. Both methodologies have been imbedded in the work from start to finish. This can be seen from preliminary interviews done with tribes, the ways in which interview questions were asked, to involving the entire research group in each step of the process, to considering indigenous research partners and perspectives as a whole, and distributing knowledge back to each of the communities. Established relationships in Mongolia (through the efforts of BioRegions International) and Fort Peck contributed greatly to the level and trust and openness of each. GIS technologies will be used to compile a composite map designed for use by local indigenous communities.

BACKGROUND

The rise of advanced spatial analysis has allowed cartographers to reveal information about physical landscape and social landscape but is still a relatively new approach in the US. The need for land has emphasized the importance of borders and boundaries in protecting established land tenure. Cultural mapping has been attempted in cooperation with indigenous people in order to protect and establish tribal homelands, areas of cultural significance, and aid in decision making in relation to natural resources such as woodlands (Mabee & Hoberg, 2004). In one case, cultural mapping was carried out by bringing together scientific and aboriginal knowledge by recording traditional stories, taking photographic and video records of campsites, and recording place and family names that were then combined with archaeological, geological, and ecological information (Mahood, 2006). The map was originally recorded on a painted canvas which was then synthesized. In Richard's dissertation, she examines indigenous cartography and how it can be used by tribal entities in asserting sovereignty in relation to land claims, cultural resources, and sacred sites (2015). Richard examines how GIS can be implemented and be made to work for indigenous communities.



Clockwise from top. Hand drawn field map used to document important water ways and places. Top right, Russian map used to pinpoint areas of significance from interview notes. Bottom right, prayer ties on an Ovoo at the entrance to the Darhad Valley.



A ranger demonstrates how to pack a horse in Ulaan Uul, Mongolia (taken by Kendra Teague)

OBJECTIVES

The purpose of this research is to produce a prototype map that would aid the local people in the Darhad valley in decision making related to the landscape. The final product would be a multi-layered map consisting of the collective information gathered by the native students including geographical, ecological, biological, as well as a cultural layer unique to the Darhad Valley. The cultural layer will include sacred sites and locations of cultural importance as well as the names, meanings, and stories associated with them, medicinal plant knowledge, hunting practices, and local water use. Maps are a valuable and powerful tool but can also have positive and negative consequences. This research also carries the goals of sharing information cross culturally to foster relationships between communities and, in turn, attempting to bring native people together and strengthen the global indigenous community.

CONCLUSIONS

There is a vocalized need to document indigenous culture, language and spaces for native communities to aid in prolonging cultural continuity. This documentation helps ensure that important practices, stories, and language vital to indigenous peoples' ways of life and history are not lost. It can also play a role in maintaining the cultural landscape and assisting in decision making in relation to environmental and cultural resources.

ACKNOWLEDGEMENTS/REFERENCES

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