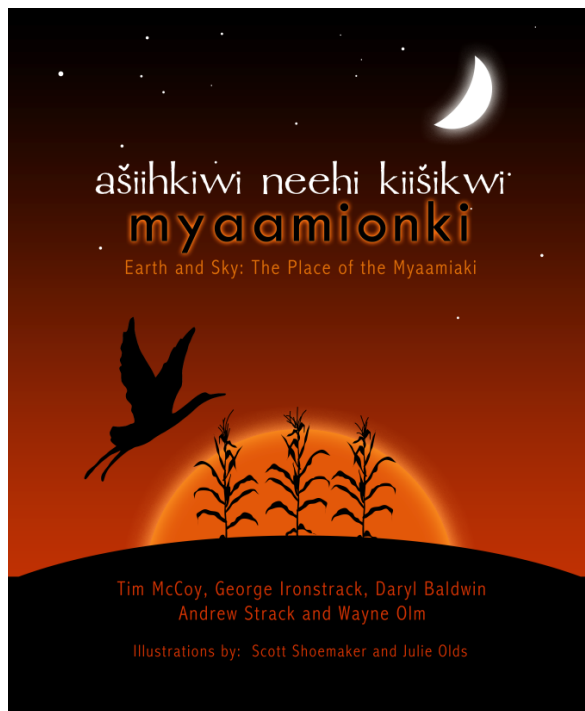


ašiihkiwi neehi kiišikwi: A MULTI-GENERATIONAL, CULTURALLY-EMBEDDED EARTH AND SKY CURRICULUM FOR THE MYAAMIKI. Timothy J. McCoy, Dept. of Mineral Sciences, National Museum of Natural History, Smithsonian Institution, Washington, DC 20560-0119 USA.

Introduction: Over the past 5 years, I have worked as a member of a group of Tribal linguists, cultural preservationists, artists, scientists and engineers to develop a multi-generational curriculum on earth and sky (ašiihkiwi neehi kiišikwi) embedded within the culture of the Miami people. Designed as a printed booklet, the curriculum has an associated website. This work has enjoyed generous financial support from NASA, the Miami Tribe of Oklahoma, Miami University in Ohio, and the Smithsonian Institution.



As a citizen of the Miami Tribe of Oklahoma, my work has focused on the myaamiaki, a Central Algonquian speaking people historically centered along the upper Wabash River near modern Ft. Wayne, Indiana. Forced removal in 1846 took the Tribe west to Kansas, with a subsequent removal in the 1870's to the northeast corner of Indian Territory, which became Oklahoma. Language loss through the 1950's ultimately caused our language to become a "sleeping" language. Current efforts are focused on cultural and language revitalization.

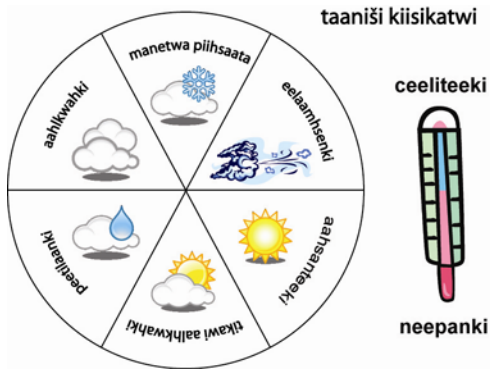
An important component of our work has been a multi-generational approach. Our language and cultural revitalization efforts have focused on the home, where inter-generational knowledge transfer occurs. Our curriculum is designed to both engage the entire

family, from young children to elders, and to grow with the individual throughout his or her life.

For our youngest citizens: Stories – particularly winter stories – are important for many native communities. These stories convey a unique way of knowing about tribal landscapes. For our youngest citizens, connection to place is the focus of our stories. We have written and illustrated three stories. *ahkwanišwa neehi anikwa* (Young Girl and Squirrel) focuses on awareness within landscape. *peepicinehki neehi ahsena* (Mole and Rock) tell the story of our land. *waawaah-samwa neehi kiilhsa* (Firefly and Moon) centers on understanding the cycles of the night. In each, we use myaamia terms for the main characters to encourage language use. These stories are supported by an online glossary with sound clips, allowing emerging language learners to gain help with pronunciation.



For school-aged children: While stories for our youngest citizens emphasize connection to place, activities for school-aged children focus on connections within place. We have designed 11 activities and have supporting online materials including the glossary with sound clips for all words and downloads. An introductory activity focused on visualizing connections within place is followed by three activities designed to explore the four directions through walks and collecting rocks.



Five activities focus on the sky, ranging from the everyday activity of following the weather using the myaamia language to understanding how the cycles in the sky and through the seasons help track myaamia time. As part of our supporting online materials, we have modified the free, open source Stellarium planetary program to project the myaamia sky.



As concluding activities, we have participants draw or write about her/his experience. An important part of the drawing is placing themselves (niila) at the center of drawing, forcing them to see themselves as a part of myaamionki (the place of the Miami).

For teenagers to elders: Places have overlapping histories, ranging from their formation long ago to the histories of the people who inhabit places today. For adults, we look at the geologic and cultural stories of nine places in the homelands of the myaamiaki, ranging for sites in the traditional homelands in Indiana and Ohio through removal sites in Kansas and Oklahoma.

In the traditional homelands, we examine several sites along the Wabash River, stone bridges at Miami University and the effigy mound and impact crater preserved at Serpent Mound. As an example, we examine the confluence of the kociihsasiipi (St. Joseph River) and nameewa siippiwi (St. Mary’s River) to form taawaawa siippiwi (Maumee River). As a center

of our traditional homelands, the Miami controlled the portage between the Maumee (and ultimately the Great Lakes) and the Wabash (which leads to the Ohio and Mississippi Rivers and the Gulf of Mexico). Lesser known in our community is that the pattern of these rivers was established by ancient glaciers.



Sites in Kansas and Oklahoma include the importance in the history of our people of coal mining in Kansas, the influence of lead and zinc mining in Oklahoma, and how shale layers throughout our homelands point to the emergence of our land from the water. An interactive Google map provides information on how to reach each of these sites.

The final site is on Mars. A grouping of rocks informally named Miami by the Mars Exploration Rover team provided the impetus for the start of this project as we sought to engage the Tribal community in planetary science.



Conclusion: Through this project, our engagement transformed from one focused strictly on planetary science to one of connecting myaamiaki (the Miami people) to myaamionki (the place of the Miami). By raising awareness of earth and sky, we have both fostered our community’s efforts at cultural and language revitalization and raised awareness of geology, astronomy and planetary science within the community. This project was never standards driven (although all of our materials have been rated against standards and those assessments are available at the website) and it has met with mixed reviews from NASA funding panels. We suggest, however, that this type of project – allowing Miami people to explore their landscapes and express their findings through the lens of their culture and language – has the best chance of success for engaging native communities.