



WABANAKI YOUTH in SCIENCE (WaYS)

Integrating Technology, Science and Traditional Culture

Newsletter

Spring 2018



Upcoming Events: - Mark your calendars!

Spring Mini Camp May 4-6; Wilderness Pines, Monticello Maine

Earth Camp—July 9-13, 2018—Location To Be Determined

It has been a bit of time since WaYS has had a newsletter. We have been incredibly busy! Even so, please keep in mind if you know of a Native youth that would be interested in the WaYS program or if you are a Native youth interested in becoming a part of the WaYS program, please contact John Neptune, tish carr or your tribal Education Director!

INTERNSHIPS! INTERNSHIPS!! INTERNSHIPS!!!

Turtle Survey on the North Branch of Meduxnekeag River

Dave Putnam (University of Maine Presque Isle) is looking for high school and college students to help with a complete survey of the North Branch of the Meduxnekeag River to determine the presence, general population density, and locations of possible wood turtle clusters within the drainage. The overall objective is to assist Maine Department of Inland Fisheries and Wildlife to complete their statewide assessment of wood turtle population. The project is planned to be conducted on Fridays and Saturdays in May and the first half of June. Students will record all captured or observed turtles, including water and air temperatures, habitat, gender, carapace length, and take carapace and plastron photographs of captured turtles. Turtles will be replaced exactly as they were found following recording procedures. We will also make observations about glacial and fluvial geomorphology, and record any evidence of archaeological material that we may encounter. If you are interested, please contact Cara O'Donnell (water@maliseets.com) or tish carr (waysprogram@gmail.com).

Maine Coastal Shell Middens

Alice Kelly (University of Maine Orono/School of Earth and Climate Sciences) has developed an exciting research program on Maine's shell middens — mapping, investigating, preserving them. Her work would be fascinating to students with an interest in the natural sciences and/or archaeology, and it could be a natural fit for collaborating with TEK mentors from the Wabanaki community. Alice is already working with community organizations in Damariscotta and has made some waves in the news. Here are some links to see what this is all about!

<https://www.nytimes.com/2017/10/19/science/native-americans-shell-middens-maine.html>

<http://www.islandinstitute.org/working-waterfront/ancient-shell-middens-speak-climate-and-culture>

<https://bangordailynews.com/2017/11/15/homestead/citizen-scientists-may-help-save-maines-ancient-garbage-piles/>

Marine Sedimentation Studies

Katherine Allen (University of Maine Orono/School of Earth and Climate Sciences) has projects in the marine sedimentology and stable isotope laboratories. There are two main projects in which the student/s will be involved, depending on interest: 1) Investigating Maine's water cycle through stable isotope analysis, and 2) Paleoceanography of the Gulf of Maine. To prepare for this work, the student/s will receive lab and field safety training, as well as training in specific methods: field collection of water samples for stable isotope analysis, laboratory training in stable isotope analysis, processing of marine sediment samples, and micropaleontology (fossil identification). Student/s will take weekly water samples from the Penobscot River to monitor composition from winter through the spring runoff and into the summer. They will assist with laboratory analysis of these samples and participate in construction of an online database where data will be stored and eventually shared with the community. The working hours are flexible.

These are just a sampling of internships. Check out WaYS website at:

<https://umaine.edu/nativeamericanprograms/wabanaki-youth-science-program/>

To learn more contact waysprogram@gmail.com or contact info provided to get more information!!

Student Highlights

Alexis Ireland

Alexis “Lex” has been a part of WaYS since its inception, when she was a freshmen in high school. Lex had an internship throughout her high school career. Now as a freshmen in college (UMaine, Orono -majoring in Anthropology), Lex is continuing her internship, but in a different capacity at the college level. She will be helping with the after school TEK program and working on the INCLUDES grant . In the Fall, 2017, Lex had an opportunity to travel to a national conference in New Mexico. The presentation topic was tied into WaYS and co-presented with tish carr . She spoke passionately about her experience and what has been some of her best experiences related to WaYS. The presentation garnered second place in the Student Presentation category! Way to go Lex!



tish and Lex at petroglyphs in NM

Ethan Jacobs

Ethan has been a part of WaYS as long as Lex, beginning when he was a freshmen in high school. Ethan has participated in the internship program from the very beginning. Currently a freshmen in college (UMaine, Orono—majoring in forestry), Ethan has an in internship with the Cooperative Forestry Research Unit working with Dr. Brian Roth. Some of Ethan’s work has looked at the American Chestnut and helping with the development of blight resistant chestnuts. Way to go Ethan!



Shantel Neptune

Shantel has been a part of WaYS as long as Lex and Ethan. Shantel is currently a junior at University of Maine, Orono majoring in Ecology and Environmental Science. Recently, Shantel was recognized as the “Outstanding student contribution to sustainability research (undergraduate or graduate)”. She received this award for the internship work that she has been doing with Sam Roy. According to Sam *“Shantel is a very dedicated and capable researcher, having proven herself with her work on mapping the loss of riparian zones due to the century-by-century development of dams on the Penobscot River. As a Wabanaki Youths in Science (WaYS) intern, she has shared with us her strong motivations to study changes in these riparian zones and to interpret their significance from an ecological and tribal perspective. Over the summer of 2017, Shantel began drawing valuable connections between tribal knowledge and western science, seeking field sites that are critical from both perspectives and simulating potential changes to these ancient riparian landscapes under different dam decision scenarios. As one of her western science mentors, I continue to be impressed by Shantel’s capacity to find connections between these often disparate worlds and bring them closer. Her work is far reaching in the Future of Dams project, connecting to other similar research interests such as changes in sea-run fish migration and habitat, river flow management and water storage in dams, and shoreline land use and erosion. But just as important, her research is symbolic of a trust between university researchers and the Penobscot Indian Nation that will allow us to build a more holistic understanding of the Penobscot River and its communities.”*



To learn more about WaYS or the opportunities that are available please contact

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