Held August 2nd – 4th, 2017, DOTS partners from Escuela Verde, Urban Ecology Center, La Crosse, Northland College, and Bayfield, came together at Upham Woods to share the stories of the water in their areas. Youth collected data while on-site, exploring transects of the Wisconsin and Lemonweir Rivers while canoeing, investigating a riparian ecosystem while hiking Black Hawk Island, and during an all Summit Data Blitz at 8 different Upham Woods locations. In addition to the data collection, students got a chance to interact with their fellow young scientists from around Wisconsin. On the final day of the Summit, students all presented their water stories in front of the large group. These stories included water quality issues where they’re from and around the U.S. as well as their findings while at Upham Woods. There were seven presentations and water quality issues explored included lead, E.coli, litter, rising water levels, and human intervention of natural waterways.

Participants self reported feeling more that they could help fix local water problems after the Summit (p=.02).

“[Science is] the study of anything known or unknown in this universe”
~La Crosse Student

While canoeing both the Lemonweir and Wisconsin Rivers, participants collected data at select transects of the rivers to compare to each other as well as past collected data. This water quality monitoring included tracking nitrates and phosphates, dissolved oxygen, pH, temperature, conductivity and more. Overall, students found the river to be in good condition and were able to compare it to rivers and other bodies of water they were familiar with such as Chequamegon Bay, the Mississippi River, the Menominee River, Lake Michigan, and the Kinnikinnic River.

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Participants collected data and inquired about microclimates while hiking on Black Hawk Island. This island is home to a riparian ecosystem and has unique features such as several small caves and sand beaches. Students wondered about animal and plant life while on the island and how water and climate affect that life. Using the DOTS and water quality monitoring tools, participants gathered quantifiable information about the area to compare with other data time and locations later.

“I feel like learning is easier outside. Like I can learn anything here.”
~Escuela Verde student

At the symposium, students presented their findings from their homes and while at Upham Woods. Groups made and shared powerpoints and answered questions about their hypotheses. Many groups included next steps that were further data collection and conservation once they returned home.

At the end of the Summit, students in 10-12th grade (n=23) self reported an increase in their liking of science (p=.04).

19 total data points were collected around Upham Woods and the Wisconsin and Lemonweir Rivers.

Participants (n=52) self reported that they were more aware of water problems in their communities (p < .01) and Wisconsin (p < .01) after the Summit. After the Summit, students reported they liked using the DOTS kits (p < .01) and considered what taking measurements with the DOTS kits to be science (p < .01).

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