Missing Perspectives: The Inaccessibility of Environmental Community Science

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Background

- Environmental Community Science is defined as the utilization of community volunteers to complete scientific research and projects (Figure 1)
- Environmental spaces are historically not as diverse as the communities they are serving particularly excluding college-age individuals
- Stillwaters Environmental Center utilizes community science to execute scientific research and projects in the Carpenter Creek Watershed in Kingston, WA

Research Question

What are the best practices for engaging college students in environmental community science projects?

Internship & Methods

- Interned with Stillwaters Environmental Center in Kingston, WA from January 2021 - March 2021
- Learned how community science projects run by collaborating with volunteers to analyze data and interpret results
- Developed and administered a survey to UW college students about their participation in environmental community science projects

Results

“I feel like I just don’t really hear about many of these opportunities.”  
- Survey respondent discussing barriers

Best Practices

- Provide necessary gear and tools for volunteers - gloves, shovels, protective pants, rain gear, etc.
- Provide info about transportation to events and opportunities for volunteers to carpool - Bus schedules, Uber/Lyft drop-off info, etc.
- Increase outreach on college campuses and within classrooms - Facebook posts, emails, information sessions, etc.
- Provide opportunities to involve students in classes - Service learning, internships, research, etc.

Significance

- Expanding the age range of participants results in broadened ideas and life experiences that contribute to greater problem solving and expedited project completion
- These best practices can provide opportunities for college students to:
  ○ Work collaboratively
  ○ Practice communicating ideas
  ○ Gain environmental education and literacy
- Further research is needed to explore best practices for:
  ○ Engaging People of Color college students
  ○ Engaging communities beyond college students
  ○ Creating space for Native Peoples and their knowledge

Acknowledgements

I would like to thank my site supervisor (Melissa Fleming), faculty advisor (Stanley Asah), Capstone cohort, family, and friends for the support and help as I completed this project.

Figure 1 from https://caes.ucdavis.edu/news/articles/outlook/2015/08/design-it-build-it depicts UC Davis students working on an environmental landscape design project in 2015

Figure 2: UW students’ responses to the survey question. Responses were recorded from January 2021 - March 2021 to gauge the amount of college students who had previously accessed a project

Figure 3: UW survey respondents’ rankings of the provided barriers from 1 (Least significant) to 5 (Most Significant). Responses were recorded from January 2021 - March 2021 to learn what impacts UW student’s participation.