Using the Citizen Science Picture Post Project as the Foundation for Campus Environmental Monitoring by Undergraduate Student Researchers
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Abstract
Penn State Brandywine is utilizing the citizen science Picture Post network as a foundation for collecting campus environmental data and for undergraduate student research investigations. The Picture Post is an environmental monitoring project a part of Digital Earth Watch, a citizen science initiative funded by NASA. Picture Post creates opportunities for educators and community members to take digital photos from octagonal platforms on posts registered as part of the Picture Post national network and then share these photos online. Penn State Brandywine joined the Picture Post project May 27, 2014, to begin a long-term monitoring program, starting with an environmental baseline of the campus landscape. Four post locations were selected on campus based upon projected major construction projects. Photos at each post are being taken by students on a weekly basis and uploaded to the Picture Post website. The campus community and beyond are also being encouraged to take their own photos to upload to the website. Instructional signage has been placed on each post, and a Penn State Brandywine Picture Post website (http://sites.psu.edu/picturepost/) has been created to explain the project and campus objectives in more detail. This project was started by a student as part of her undergraduate summer research experience and will continue to be managed by students in future semesters. With just a half-year of Picture Post photos, it is evident that there are documented changes in the environment because of construction and expected seasonal variations. The Picture Post photos have provided enough data for an initial undergraduate research project with a student analyzing and comparing the variations in the greenness factor of the photos with supplemental temperature and precipitation data. This project will continue to provide opportunities for citizen contributions to the network as well as data for student investigations of the changing campus environment.

Why Four Locations

Why Picture Post at Penn State Brandywine

What is Picture Post

Project Methods

Initial Data

Future Plans

To learn more about our work, scan this QR Code (http://sites.psu.edu/picturepost/)