



School Grounds for Learning, Case Study

Habitat: Forest

Stage of the Project: Implementation and Usage/Maintenance

Introduction: Broadneck High School is a large suburban school (~2100 students) which models how Maryland's Environmental Literacy requirements can be implemented while keeping students interest in mind. The special coursework focus at Broadneck High is their Environmental Literacy Signature Program offering. They exemplify critical elements of long term success for environmental learning: 1) weaving environmental experience into many different courses, with project based learning that is embraced by the students, 2) a sustained, documented process of how the school stays green through inflow and outflow of staff, and 3) a deep connection with their community and local resources that greatly assist their efforts. What's truly inspiring is that typical high school courses come alive outdoors on their campus, in ways that could happen elsewhere. Awarded the prestigious National Green Ribbon school designation by the U.S. Department of Education in 2016 ([Broadneck Green Ribbon application](#)), Broadneck High is also a longtime MAEOE Green School designee (2008, 2012, 2016).

The Plan: The school's forest trail is used by many classes, not just the A.P. Environmental Science students, those enrolled in the Environmental Signature Program electives (I and II), and the Eco Action Club. In addition, the Physical Education classes come outdoors in most weather conditions, and the Walking Wellness class uses the forest trails and adjacent fields. Students prepared a trail guide for the forest path, with numbered stations explaining issues found at that station (e.g. soil type, invasive species, forest succession, ferns, decay processes, etc.), showing how they could understand and apply concepts from their coursework to their surroundings. Many classes of students (Physics, Biology, AP Environmental Science, Env. Signature, etc.) have planted several projects of watershed restoration trees (over 1,000 trees, seedlings to saplings) on their own school ground and the nearby elementary school. A number of high school students were selected as "planting leaders/teachers" of the younger students, so all could deepen their understanding of watersheds and landscapes, while creating a stewardship ethic.

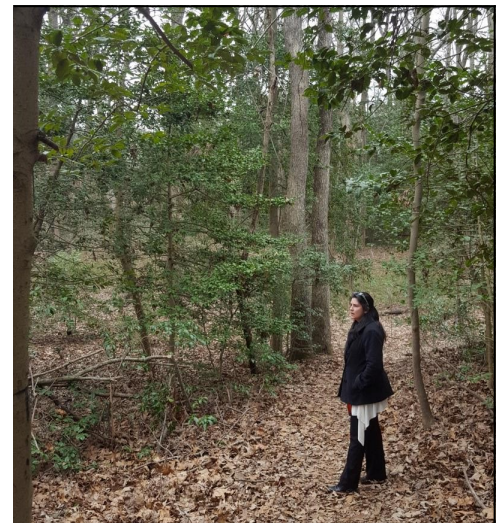
Overview

Broadneck High School

Anne Arundel County, MD

The Challenge: Invasive species and litter

Adaptation to the Challenge: Embraced and Included nearby property owners



Broadneck HS Nature Trail is used by many classes, student research, and stewardship projects.



Soil profile study pit at nearby Goshen Farm, training many students in statewide Envirothon competition.



Broadneck students assist in building hydroponic systems in Goshen Farm greenhouse, with volunteer help.



Students replanted many large mowed areas of Broadneck HS campus to assist watershed pollution reduction goals.

Challenges: As a suburban school in an altered landscape, the forest acreage is impacted by invasive species and periodic litter, which becomes action learning in planning and carrying out removal. Learning to embrace and include property owners adjacent to the school's forest has been helpful, and shows students they can continue these actions once they are out of high school.

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