Multifunctional gardens to bring beauty and sustainability to UVM's campus

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ABSTRACT

Until recently, there has been a division between ecologically ethical and aesthetically pleasing landscape design. Urbanization has lead to a marked decrease in native species, and a drastic increase of poor air and water quality. College campuses are one area where conditions can be greatly improved through the addition of multifunctional landscapes. This project aims to restore a more natural, ecologically friendly landscape to a section of The University of Vermont's campus. By combining five ecologically sound design elements - (1) rain garden (2) food source for people or wildlife (3) aesthetics with native plants (4) education and (5) sustainability, the final design will help alleviate some of the problems caused by urbanization, raise awareness of human impacts on our environment, and will encourage more sustainable practices on campus. A final design will be achieved through research of each element involved, review of similar case studies, and by maintaining an ecologically thoughtful mindset while completing the design. The result of this project will be a sustainable, aesthetically pleasing, multifunctional garden design. These gardens will provide an increase in biodiversity, stormwater/sediment capture, and food for wildlife, as well as educational benefits to users of the site. These gardens will also decrease greenhouse gas emissions, fuel use/costs, and noise pollution. Multifunctional gardens are a realistic approach to bringing sustainability and ecologically sound principles to campus and can be achieved at a large or small scale.