

The Relationship between Biodiversity Loss and Invasive Species

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This 85 minute block-scheduled curriculum focuses on biodiversity and the effects of invasive species on the biodiversity of different ecosystems. This unit will emphasize the environmental impacts of human introductions of non-native species to various ecosystems, as well as the associated social and economic costs of non-native species introduction. The overall theme for this curricular unit will be diversity, both environmentally and culturally, and mans effect on the biodiversity of the Earth's ecosystems. Students will start to explore the concept of biodiversity within the boundaries of the school property, and expand their investigations to local ecosystems. By having the activities presented in a way that ultimately ends with students working in their own backyards, the lessons will be more concrete and have a larger overall impact. Students will conduct several activities to explore the meaning of biodiversity, and develop their understanding of how it is measured and calculated. Students will then evaluate various local ecosystems for biodiversity and for the presence of non-native invasive organisms. Based on their evaluations and field observations, students will ultimately develop a plan for the rehabilitation of a small local ecosystem to more natural parameters. The students will discuss competing plans, and learn how competing stakeholders view the environmental and social aspects of biodiversity differently. The goal of the unit is to get students to perceive the role that invasive species, and ultimately mankind plays in the decline in biodiversity and ecosystem decline. The unit will culminate with students measuring biodiversity within their own backyards, and developing plans to help increase biodiversity on their own property.