**Black Creek Service Learning**

**BLACKS CREEK BIRD RESERVE: OUTDOOR CLASSROOM AND SERVICE LEARNING PROPOSAL**

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<th>Goals</th>
<th>Learning Cycle</th>
<th>Objectives</th>
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| Our objective is to develop a service learning course for BSU students and an outdoor classroom for local high school biology students using the Blacks Creek Bird Reserve. The classes would teach high school students about wildlife, vegetation, geology/soils, and predator/prey relationships. BSU students would have the opportunity to experience teaching and developing environmental education programs as well as provide an opportunity to develop research projects as seniors. This program would touch at three different levels of the Environmental Studies program to create an opportunity for a long-term relationship with this particular project. In this process we plan to implement the EBIPM (ecologically-based invasive plant management) framework to help students learn about rangeland ecosystems and understand restoration processes. | **Outdoor Classroom**
High school students
Introduction to environmental careers

**Service Learning (ENVSTD 121)**
Grant writing assistance
Collaboration with stakeholders
On-site maintenance

**Internship/Co-requisite (CID)**
Grant writing assistance
Environmental education assistant
(Syllabus, Learning plan, Learning objectives)

**Senior Project (Capstone)**
Grant proposal
Select area of focus
Hands-on experience in field of choice
Networking with experts in field | • Gain support and permission from stakeholders and land owners
• Garner interest from local high school teachers
• Get long-term commitments from BSU faculty
• Develop course framework/example syllabus
• Feedback from high school teachers and BSU faculty
• Survey potential students
• Apply for grants |

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<th>Possible Barriers to Success</th>
<th><strong>Sample Learning Objectives</strong></th>
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| • Obtaining funds
Long term success will parallel the availability of funds. Securing long term grants or tuition fees will be essential for long run success. | **EBIPM - High School Curriculum**

**1: Rangeland ecosystems**
Identify a healthy rangeland ecosystem and its importance.
Explain the difference between invasive species and native species.

**2: Plant Identification & systematics**
Identify plant species specific to the location.
Describe the life strategies of species specific to the location.

**3: Scientific Principles**
Describe sampling methods including belt transects, line transects, and quadrants.

**4: EBIPM steps 1, 2, & 3**
Explain the rangeland health indicators.
Identify the ecological principles that are at work in an infested site.

**5: EBIPM Steps 4-5**
Choose tools for weed reduction based on ecological principles.
Create a potential monitoring plan for the management plan. |

• Maintenance
Long term maintenance is necessary for continuing an outdoor classroom. Possible options include: employ a volunteer staff member(s), maintenance personnel, or incorporate into the curriculum.

• Maintain student interest
Partnering with the service learning department will allow classroom access to a wide range of students. The exposure will provide a diverse student pool who are vital to keeping the program running over time.

• Faculty Interest
Being able to maintain long-term faculty commitment is essential. Securing faculty interest will provide the substrate for success.