Please complete the project summary and return the completed form to April Snyder, Associate Administrator for the Institute on the Environment at april.snyder@umn.edu. Paper copies will not be accepted. Please also attach any photos, publications, brochures, event agendas or other materials that were a result of the mini grant summary.

<table>
<thead>
<tr>
<th>Date of Report Submission:</th>
<th>5/1/2014</th>
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<tbody>
<tr>
<td>Project PI &amp; Dept/School</td>
<td>Ken Gilbertson. Dept. HPER/UMD</td>
</tr>
<tr>
<td>Project Title:</td>
<td>Research and development of a Basic Ecology Course at Cedar Creek Ecosystem Science Reserve (CCESR) for UMD HPER Environmental and Outdoor Education students</td>
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<td>Grant Amount $:</td>
<td>$1,750</td>
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**Project Context & Purpose**

*Please include the original project purpose statement and revise for any changes that occurred in the project after the start date with a short explanation of the changes.*

The purpose of the grant was to design a foundational lower division biology course for UMD HPER Environmental and Outdoor Education undergraduate students. This course will present foundational biology topics through an ecology lens. The lab exercises and in-class activities will involve topics and methods specific to students preparing for professions in environmental and outdoor education. Research underway at CCESR will support lecture and serve as a platform for discussion and in-depth analysis of topics. Curriculum will include lectures, indoor and outdoor lab investigations, hikes and ample opportunities to question, explore and interpret the natural world.

- This course would be an alternative to BIOL 1011, designed to be field based and directly pertinent to the knowledge base that an environmental and outdoor education interpreter should know relative to ecological principles.
- The course will have a BIOL prefix.
Please provide a summary of the work that was completed for the mini grant project.

Project Status:
1) The course (Biol 2800: Understanding the Environment: Ecology for Educators. 5 credits) has been approved for implementation by the UMTC course proposal process.
2) When submitted for approval as a required course for UMD students, it was declined because it was felt that it was asking new students too much in regards to time and cost.
3) It was determined to make the course an elective, not required course.
4) I have presented the course to the UMD Biology Dept. to gain approval for Biol 2800 to count as an equivalent course for Biol 1001 – Biology and Society. That will allow the CCESR Biol 2800 course to be counted for both Category 4 Liberal Education requirements as well as counting for our Environmental and Outdoor Education major Biology requirement.

The UMD Biology department approval is pending. I expect that it will be approved and that the course will begin as planned in May, 2015.
Partnerships & Collaborations

Please provide a summary of the project personnel, partnerships and collaborations that worked directly on the project or were started as a direct result of the mini grant project.

This project has occurred with collaboration with the faculty team from the UMD Environmental and Outdoor Education program and the CCESR team of Mary Spivey and Jeff Corney. This has been an excellent collaboration that has strengthened our working relationships between the UMD academic program and CCESR.
Project Outcomes & Impacts

Please provide a summary of the outcomes and/or impacts of the mini grant project including future plans for the project.

The expected outcome is for students to gain an intensive biology course that teaches ecological concepts in a field setting where students can directly experience the topics they are being taught. This is especially important for students who are intending to teach natural history to the general public as their profession (such as environmental educators, park interpreters, or elementary school teachers. Further, this course is designed as a lead-in to more advanced courses such as Field Interpretive Techniques, a year-long series that is 6 credits total.

Finally, this course is intended to also serve students from the UMTC campus as well as students in the UMD Natural History minor.