

**Environment and Natural Resources Trust Fund
2010 Request for Proposals (RFP)**

LCCMR ID: 184-F

Project Title:

Advancing Environmental Literacy with the Minnesota Master Naturalist

LCCMR 2010 Funding Priority:

F. Environmental Education

Total Project Budget: \$ \$239,000

Proposed Project Time Period for the Funding Requested: 3 years, 2010 - 2013

Other Non-State Funds: \$ \$0

Summary:

This project will deliver an innovative program of environmental education and service-learning based upon the Minnesota Master Naturalist and promote it statewide to raise environmental literacy and stewardship.

Name: Kristen Genet

Sponsoring Organization: Anoka-Ramsey Community College

Address: 11200 Mississippi Blvd NW
Coon Rapids MN 55433

Telephone Number: (651) 402-1882

Email: kristen.genet@anokaramsey.edu

Fax: (651) 433-1521

Web Address: _____

Location:

Region: Statewide

County Name: Statewide

City / Township:

_____ Knowledge Base	_____ Broad App.	_____ Innovation
_____ Leverage	_____ Outcomes	
_____ Partnerships	_____ Urgency	_____ TOTAL

PROJECT TITLE: Advancing Environmental Literacy with the Minnesota Master Naturalist

I. PROJECT STATEMENT

This project will produce a **model program of innovative environmental education** to foster **environmental literacy** and **stewardship** throughout Minnesota. This model program, based on the **Minnesota Master Naturalist**, will be piloted at Anoka-Ramsey Community College in collaboration with City of Ramsey Parks. This model will be disseminated through the Minnesota State Colleges and Universities system (see illustration) and similar partnerships between higher education and community organizations will be promoted **statewide**. Minnesota Master Naturalist, administered by the University of Minnesota Extension and Minnesota Department of Natural Resources, is a volunteer program that teaches **adult audiences** about Minnesota's natural resources, empowers them to educate others, and provides opportunities to do conservation projects (<http://www.minnesotamasternaturalist.org/>).

The underlying principle for this project was expressed in *A GreenPrint for Minnesota* (2008) and *Environmental Literacy Scope and Sequence* (2002), which both emphasize the need for environmental education that engages citizens to become advocates for the environment in their communities. This project will enhance environmental education to provide opportunities for students to become positive **agents of change** for the environment and the **future of sustainable resources**. This will be achieved by offering accredited college biology course material through successful merger of the Minnesota Master Naturalist curriculum with meaningful service-learning opportunities to be carried out by student-citizens in their communities. The overall goal of the project will be realized by providing tools and resources needed to expand this advanced model of environmental literacy.

The project will achieve its goals by:

- Working closely with partner organizations, including **University of Minnesota Extension, Minnesota Department of Natural Resources**, and **Minnesota State Colleges and Universities** to develop course content, service-learning projects, and supporting instructional materials.
- Refining and documenting **effective practices** in environmental education and service-learning using **outdoor classroom settings**.
- Fostering **professional development** of educators and natural resource administrators **statewide** by dissemination of the model program in a manner that supports replication between other higher education and community partnerships.
- Supporting the **expansion** and implementation of the model program around the state through meetings, conferences, websites and other electronic means.
- **Evaluating the significance** of the model program through assessments of instruction, as well as students' experiences, knowledge, and commitment to **long-term community involvement**.

II. DESCRIPTION OF PROJECT RESULTS

Result 1: *Development and dissemination of a model program of innovative environmental education throughout the Minnesota State Colleges and Universities system* **Budget:** \$ 157,000

Design biology course(s) integrating Minnesota Master Naturalist curriculum with service-learning. Pilot model program at Anoka-Ramsey Community College and disseminate statewide (see illustration). Submit program to faculty peers for review to obtain feedback on model and likelihood of broad implementation.

Deliverables

1. Model program design
2. Offer and evaluate model program at accredited institution(s)
3. Report from model program peer-review

Completion Date

Spring 2011
Spring 2012
Spring 2013

Result 2: *Promotion of partnerships between community and higher education* **Budget:** \$59,000

Share effective practices, ideas, and methodology with colleagues in higher education and community organizations to facilitate establishment of academic/community partnerships and replication of model program throughout the state. Materials will be shared at conferences and meetings, as well as made available online (e.g., LCCMR-funded best practices for parks and outdoor recreation: <http://www.bestpracticesmn.org/main/>).

Deliverables

1. Dissemination of effective practices
2. Presentations at meetings and/or conferences

Completion Date

Spring 2013
Spring 2013

Result 3: Improved environmental literacy and stewardship of MN students and citizens**Budget:** \$ 23,000

Enlarge audience of learners served by the Minnesota Master Naturalist program, increasing recruitment and retention of environmental leadership in the community. Assess student knowledge and attitudes before starting and upon completion of the course(s) and associated service-learning experiences.

Deliverable

1. Expansion of population served by Minnesota Master Naturalist program
2. Pre- and post-assessments of Minnesota Master Naturalist students

Completion Date

Spring 2012
Spring 2012

III. PROJECT STRATEGY**A. Project Team/Partners**

Primary Project Team will be responsible for Minnesota Master Naturalist curriculum adaptation, development of service-learning projects, implementation of pilot program, and evaluation and dissemination of model program

- Kristen Genet and Jennifer Braido, Anoka-Ramsey Community College Biology faculty
- Mark Riverblood, City of Ramsey Parks Supervisor

Collaborating/Supporting Institutions and Organizations will provide access to Minnesota Master Naturalist materials and support the expansion of the program at accredited institutions

- Rob Blair, University of Minnesota, Associate Professor of Fisheries, Wildlife and Conservation Biology
- Dawn Flinn, Minnesota Department of Natural Resources, Education Coordinator
- Amy Rager and Nate Meyer, University of Minnesota Extension, Environmental Science Educators

Academic Institutions and Community Partners will receive information from and consult with the primary project team to facilitate replication and implementation of model program statewide

- Minnesota State Colleges and Universities system Biology faculty
- Community Leaders

B. Timeline Requirements

The project will require three academic years for completion:

- 2010-2011 – Development of Minnesota Master Naturalist curriculum with integrated service-learning for college courses
- 2011-2012 – Implementation and evaluation of model program at pilot location
- 2012-2013 – Assembly, dissemination, and evaluation of innovative environmental education materials and professional development of faculty and community leaders statewide

C. Long-Term Strategy

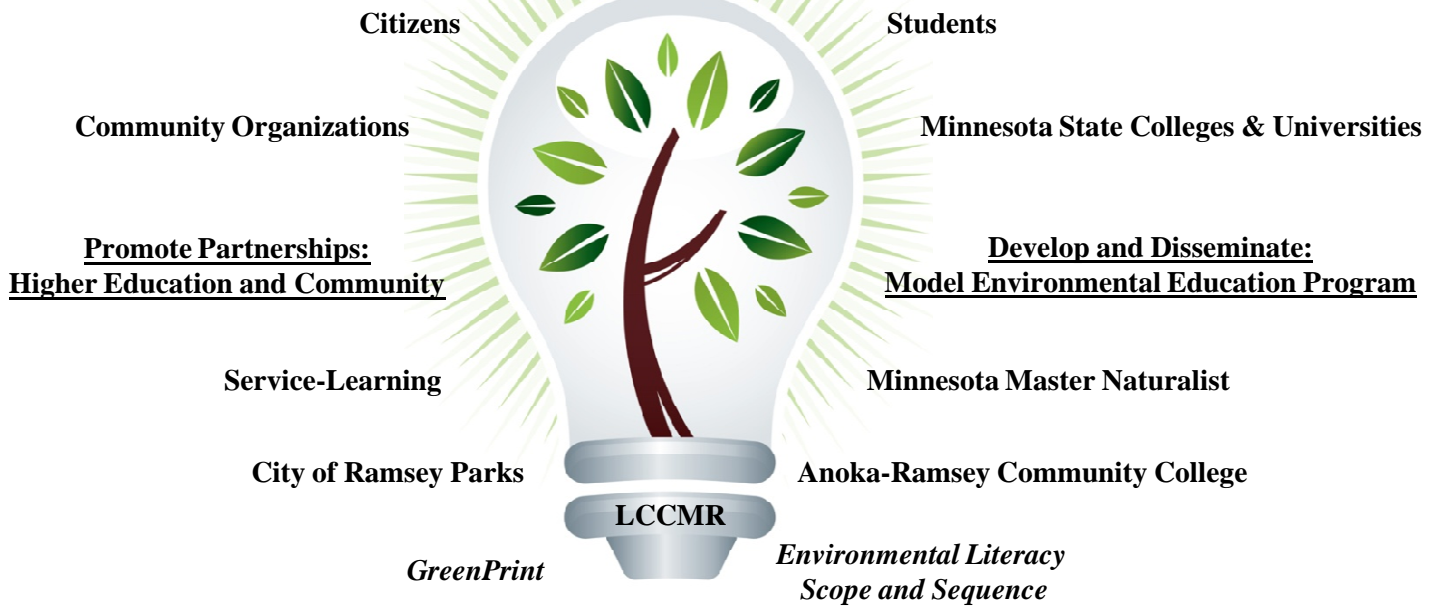
Funds requested will allow establishment and expansion of course(s) and service-learning opportunities that would be self-sustaining within the annual working budgets once these initial investments are made. The final results will benefit not only the piloting partners; the materials developed as a result will be transferable to other higher education/community collaborations statewide to address the need for service-learning, community leadership, and improvements in environmental literacy and stewardship. In the final project year, a survey of model program peer reviewers will indicate the extent to which the program will expand. This will inform the project leaders on the overall effectiveness and strengths, as well as areas for improvement for long-term sustainability of the program. Dissemination of the model program entails strategies for new academic/community partnerships to reach out to help facilitate additional collaborations, such that the program will have the potential to expand throughout the state (see illustration). The project will incorporate several agencies and community organizations into the service-learning component (e.g., Department of Natural Resources, University of Minnesota and Extension Services) and faculty at other campuses in the Minnesota State Colleges and Universities system to implement this initiative for innovative environmental education throughout Minnesota that will encourage environmental literacy and stewardship.

Project Budget

IV. TOTAL PROJECT REQUEST BUDGET (3 years)

<u>BUDGET ITEM</u>	<u>AMOUNT</u>
Personnel: <u>Biology Faculty</u> - develop courses adapting UofM Extension MN Master Naturalist curriculum, including service learning; conduct pilot courses; disseminate courses and train other MN higher education faculty. Detail: 70% salary & 30% benefits for 4.5 credit release (30%) per semester from instruction; two positions, Kristen Genet and Jennifer Braido. Released teaching loads will be taught by existing/new faculty.	\$ 153,000
<u>Project Coordinator</u> - develop and coordinate service learning program. Detail: 72% for salary, 28% for benefits, one third full-time commitment, one position, incumbent to be determined.	\$ 73,000
Contracts: <u>Project Consultant</u> - construct and refine guide for community partners to effectively build a service learning program. Details: 10 days commitment in yrs 1 & 2 at \$200/day; Mark Riverblood. Efforts will not conflict with regular employment with City of Ramsey.	\$ 4,000
Equipment/Tools/Supplies: Water monitoring and research supplies for use in pilot course implementation.	\$ 7,000
Travel: Mileage for personnel to travel in-state to community partner service learning sites, other institutions of higher education, and local meetings to share project results. Details: 450 miles per year at 0.55/mi.	\$ 750
Mileage for students to travel in-state to community service sites and student engagement meetings. Details: 225 miles per year at \$0.55/mile for the second and third years.	\$ 250
	\$ 1,000
Additional Budget Items: Printing and copying. Details: 6,650 copies per year at \$0.05 each.	\$ 1,000
TOTAL PROJECT BUDGET REQUEST TO LCCMR	\$ 239,000

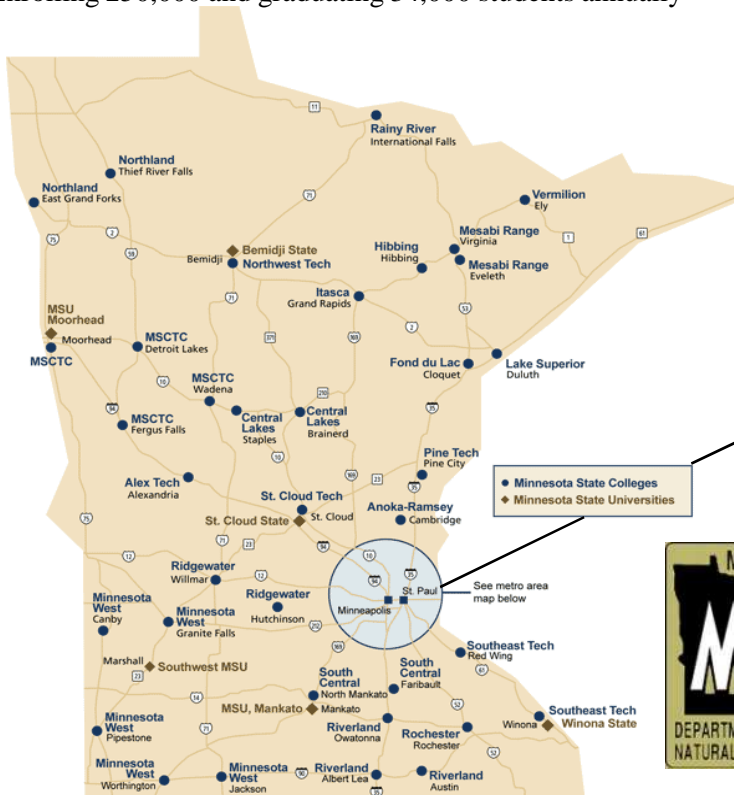
OUTCOME: IMPROVED ENVIRONMENTAL LITERACY AND STEWARDSHIP



NEED: ENVIRONMENTAL LITERACY AND STEWARDSHIP

Minnesota State Colleges & Universities

32 institutions on 54 campuses that serve 47 communities
Enrolling 250,000 and graduating 34,000 students annually



Pilot Partners



Supporting Partners



Project Manager, Kristen S. Genet, Ph.D.

Education

- Ph.D., 2004, Michigan State University, Major: Zoology and Ecology/Evolution/Behavior
- M.S., 1999, Michigan State University, Major: Zoology; Specialization: Ecology, Evolution and Behavior
- B.A., 1996, Gustavus Adolphus College, Major: Honors Biology

Work Experience

- Anoka Ramsey Community College (2003-present); Biology teaching faculty; teach courses in environmental science, ecology, general biology, medical terminology, and anatomy and physiology.

Environmental Education and Service-Learning

- Interpretive signage for Sunfish Lake Park, Ramsey, MN. Service-learning project implemented in Fall 2008 in General Ecology course at Anoka Ramsey Community College in which students developed 6 interpretive signs on various ecological topics for permanent placement along trails at the park
- Ecological Society of America member of Ecological Education division
- Project WILD and Project WET workshop attendee and facilitator
- Environmental Educator, Patuxent National Wildlife Refuge (Summers 1995-1996)

Grants and Professional Development

- Presentation at “Realizing Student Potential” conference (Minnesota State Colleges and Universities Center for Teaching and Learning): Service-Learning for Perpetuity
- Awards for Excellence; Anoka-Ramsey Community College 2006
- E-curriculum grant for development of online Principles of Biology I; Anoka Ramsey Community College 2005

Organization Description: Anoka Ramsey Community College

Anoka-Ramsey Community College, part of the Minnesota State Colleges and Universities system, was established in 1965. Since its beginning more than 19,990 students have graduated or received certificates. Through its two campuses, Coon Rapids and Cambridge, the College serves the northern Minneapolis-St. Paul metropolitan area and the adjacent rural East Central region.

Anoka-Ramsey Community College is an open-door, comprehensive higher education institution committed to excellence in teaching and learning. It is committed to responding to the educational needs of its changing communities and to providing opportunities for enhancing knowledge, skills, and values in a supportive learning environment.

Vision Statement: Anoka-Ramsey Community College is committed to developing articulate, critical and creative thinkers who are responsible contributors to the community.

Philosophy and Mission Statements: Anoka-Ramsey Community College is an open-door, comprehensive higher education institution committed to excellence in teaching and learning. Anoka-Ramsey is committed to responding to the educational needs of its changing communities and to providing opportunities for enhancing knowledge, skills, and values in a supportive learning environment.