

## *Request for Proposals to Create, Enhance and Utilize Schoolyard Nature Areas*

This is a request for proposals from K-12 teachers who want to create or enhance a schoolyard garden site. Through the distribution of several grants, the Schoolyard Ecology Exploration (SEE) program at the University of Minnesota seeks to increase K-12 student interest and knowledge about ecological processes through direct observation and authentic inquiry based activities conducted in their schoolyard garden. Funds for these grants are provided by the Northern Environmental Support Trust and Monarchs in the Classroom.

### *Request for Proposals*

There are two types of funding requests for SEE funds:

- ✓ The A request is for a prescribed garden. It is designed to foster success for teachers who are new to gardening or have limited space.
- ✓ The B request is for teachers who have gardening experience or an established schoolyard garden. Funds can be used to make a new garden, or improve an existing garden. Improvement includes better use of the garden through equipment and curriculum.

### *How to Apply*

1. Form a team. A team is a minimum of 2 persons and a maximum of 5, at least one of whom teaches some science. The team will designate a Team Leader who must be tenured and will be the contact person for the team and the administrator of the grant money. The project team may include educators of any discipline or administrators. The team must have the support of the principal, head building engineer and a parent or community member (see forms at end of application).
2. Select either the A or B request, and then complete the appropriate application. A team of teachers, master gardeners, staff and faculty of the University of Minnesota will evaluate proposals. Criteria for judging applications include, but are not limited to: innovative integration of garden use into multiple disciplines, a clear understanding of the implications of managing a garden at a school site, a plan to involve stakeholders in creating and maintaining the garden, a plan to involve many students in outdoor learning, and a knowledgeable garden plan for B proposals.

3. Preference will be given to urban schools, although some awards will be made to schools in out-state or suburban districts. We also encourage all applicants to consider attending the two-week Schoolyard Ecology Exploration summer workshop 2011.
4. The Application must be received by e-mail by December 6, 2010. Notification of awards will be e-mailed to Team Leaders by January 10<sup>th</sup> 2011.
5. You will need to use the address below to mail the support letters with the required signatures at the end of the application.

Dr. Karen Oberhauser  
University of Minnesota, Dept. FWCB  
200 Hodson Hall  
1980 Folwell Ave.  
St. Paul, MN 55108

6. If your garden is funded we ask that you submit a report of your garden project to receive the final payment of the grant (about 10% of the award). Below are the requirements of the report:
  - a. Before and after photos, preferably electronic, via email or cd
  - b. Receipts for purchases (copies are fine)
  - c. A description of the impact the schoolyard garden has had on student learning and motivation. Please be as specific as possible, using examples of how activities have affected students.
  - d. A description of 3 lessons or activities that utilize the new schoolyard garden space including the number of students involved.
  - e. Samples of student work, if available.

### *Summary of Schoolyard Ecology Explorations Project*

Schoolyard Ecology Explorations (SEE) has grown out of a commitment to support science inquiry in K-12 classrooms. The program seeks to develop students' connections to the natural world by promoting research in their schoolyards, which become the laboratory for both short- and long-term biology and ecology research.

To support this new effort three main initiatives are underway: 1) Grants to support the creation, enhancement and use of nature areas in Minnesota schoolyards, *see attached request form*. 2) The Schoolyard Ecology Exploration summer workshop for teachers. This workshop focuses on techniques for teachers to conduct science inquiry in the schoolyard with their students. 3) A model nature area has been planted on the St. Paul Campus of the University of Minnesota. This nature area is used by summer workshop participants to practice lessons and serve as a model to advise teachers on the construction, maintenance and use of their school garden.

### *Schoolyard, Science and Sustainability Request "A:" Prescribed Gardens*

The "A" request was developed to make schoolyard gardens attainable to all schools. Master Gardeners and teachers that already have schoolyard gardens highly recommend that teachers new to schoolyard gardening "start small and do it well." The prescribed garden includes a variety of prairie species that provide an excellent outdoor laboratory for student observations and investigations. We have chosen this garden type because it survives well in Minnesota, requires less care than other types of gardens, provides examples of native species and is highly visited and utilized by native animals. A list of the plants species that are included in the garden is at the end of this request for proposals. If you would like to plant a different kind of garden, you should use request "B." Request "A" will provide all the plants necessary for your planting, a spatial arrangement plan, and mulch. In addition, up to \$500 are available for annual plants, tools, signage, curriculum, staff development, equipment for the garden and any other items that foster connections between K-12 students and nature. Funds can be used for materials only, not for salary/stipends. Please carefully complete all sections of the proposal, including the three letters of support.

Team Leader's name:

Other Team Members' name(s):

School name:

School street address:

City:

State:

Zip:

County in which school is located:

Phone number of Team Leader:

FAX number of the school:

Email address of Team Leader:

Is your school publicly or privately funded?

Slogan or name for your schoolyard garden project:

### *Schoolyard Site*

The "A" grant provides a prescribed garden which includes both plants and a recommended planting arrangement. There is flexibility in areas of the garden for planting annuals and future expansion. Please make sure you are able to fulfill the following site requirements:

- ✓ South, Southeast, or Southwest facing (the site can be a courtyard)
- ✓ Full sun for most of the day
- ✓ Garden soil area for planting of at least 60 square feet
- ✓ Soil must be well drained, no standing water

What is the accessibility of your schoolyard site to the surrounding community?

What is the current vegetation and ground cover of your potential site?

How will you water your site?

Are there any issues of concern about your site?

Please include a photo of your proposed site. (This photo can be inserted here into your word file, or put onto a separate page at the end. If you only have a “hard” copy of the photo, please mail it to the address on the cover page, with clear indication of the name of the team leader.)

*Schoolyard plan*

Please place X's on the following table to indicate how you will involve different stakeholders in your schoolyard garden project.

	Planning	Promotion	Site Prep	Planting	Maintenance	Summer Care	Improvement
Teachers							
Administration							
Students							
Parents							
Community							

From the chart above describe the proposed involvement of each group of stakeholders.

Teachers:

Administrators:

Students:

Parents:

Community:

*Description of Schoolyard Use*

Please describe some of the successes and challenges you have experienced while engaging students in outdoor investigations.

How do you expect to enhance student learning by using a schoolyard garden?

In the chart below please describe three projects you plan to carry out in your new or enhanced schoolyard garden. Include a description of the project, approximate number of students to be impacted and how students will benefit. At least one project should be science inquiry-based.

Project Description	Numbers of students	Benefit to students

*Evaluation Plan*

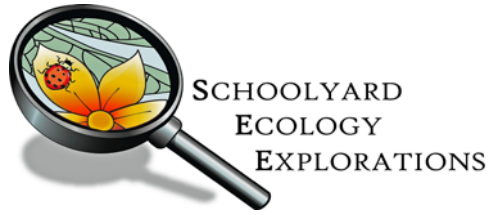
Describe how you will measure your project's success: (suggestions include the number of projects or lessons carried out in the garden, the number of students utilizing the garden, future growth/expansion of garden, new partnerships established, etc.)

*Project Calendar*

Please provide a timeline for development of your schoolyard garden project in 2011:

January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	





*Team Leader and Staff Vitae*

**\*\*Please make copies and provide one page for each team member\*\***

Your name:

Your email:

School name:

School phone:

Current position and duties:

How long have you been teaching in your current position?

How long have you been teaching?

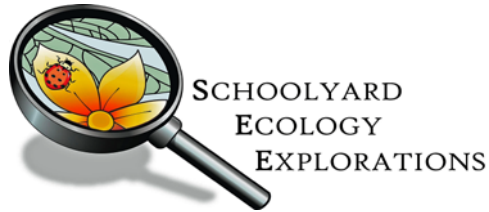
Are you available to participate in the two week Schoolyard, Science and Sustainability workshop in the summer of 2011? (Underline one) YES NO MAYBE

Please tell us a little about your past and present involvement in innovative teaching programs.

How do you plan to enhance your teaching using your new schoolyard garden?

What is/are your role(s) in planning, planting, promoting, maintaining, and enhancing your new schoolyard garden?

Please describe your commitment to maintain and enhance your schoolyard garden during the school year and summer months.



*Principal's commitment of support* (print and mail this form)

**To be filled in by the Team Leader:**

School Name:

Team Leader's name:

Team Member names:

Discuss the project with your principal, and ways that he or she can support this project. Then briefly summarize this support and describe it in the space below. Give the completed form to your principal to sign. Suggested forms of administrative support include:

- ✓ Help receiving and making grant funds accessible to the team.
- ✓ Provision of time needed to successfully plan, plant and maintain the garden. This may include staff development.
- ✓ Coordination of garden plan with building engineers and other personnel affected by the garden.
- ✓ Support in locating a garden site and assuming its permanence.
- ✓ Planning the garden, including timing and involvement of stakeholders.

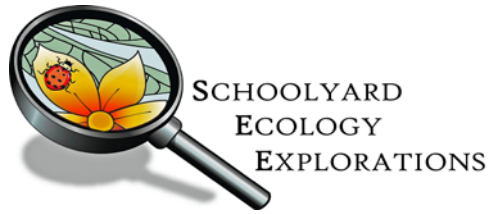
**To be filled in by the Principal:**

By signing below, I agree to the proposed project summarized above. I have discussed the project details outlined above with the Team Leader and Members, and agree to support this project.

Principal's name, printed:

Signature:

Additional comments:



*Building Engineer's commitment of support* (print and mail this form)

**To be filled in by the Team Leader:**

School Name:

Team Leader's name:

Team Member names:

Discuss the project with your building engineer, and ways that he or she can support this project. Then briefly summarize this support and describe it in the space below. Give the completed form to your building engineer to sign. Suggested forms of engineering support include:

- ✓ Support in planting, maintaining and enhancing the schoolyard garden. (*Watering, mowing, equipment use, snow removal and pilling, etc.*)
- ✓ Coordination of garden plan with all building engineers and other personnel affected by the garden, perhaps building improvement such as painting or window replacement activities.
- ✓ Locating a garden site and assuring its permanence.

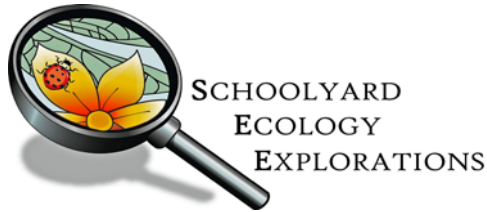
**To be filled in by the Building Engineer:**

By signing below, I agree to the proposed project summarized above. I have discussed the project details outlined above with the Team Leader and Members, and agree to support this project.

Building Engineer's name, printed:

Signature:

Additional comments:



*Parent or Community member's commitment of support* (print and mail this form)

**To be filled in by the Team Leader:**

School Name:

Team Leader's name:

Team Member names:

Discuss the project with the parent or community member, and ways that he or she can support this project. Then briefly summarize this support and describe it in the space below. Give the completed form to your parent or community member to sign. Suggested forms of parent or community support include:

- ✓ Planning the garden.
- ✓ Planting the garden.
- ✓ Helping with garden maintenance, especially during the summer.
- ✓ Providing materials.

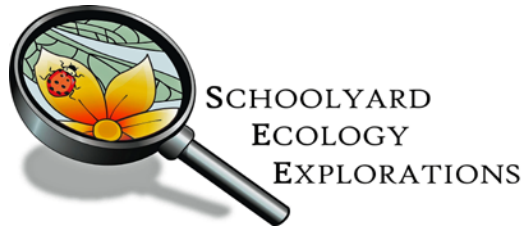
**To be filled in by the Community Member or Parent:**

By signing below, I agree to the proposed project summarized above. I have discussed the project in detail with the Team Leader and Members, and agree to support this project.

Parent or Community Member's name, printed:

Signature:

Additional comments:



*Team Agreement form to provide feedback to Schoolyard Ecology Explorations  
(Please print and mail)*

If your grant is funded we require the following submissions before the final 10% payment of the grant is mailed. Please read the requirements below and sign below to signify your agreement to provide us with this feed back.

- f. Before and after photos, preferably electronic via email or cd
- g. Receipts for purchases (copies are fine)
- h. A short description of the impact the schoolyard garden has had on student learning and motivation. Please be as specific as possible, using examples of how specific activities have affected students.
- i. A summary of 3 lessons or activities that utilize the new schoolyard garden space including the number of students involved.
- j. Samples of student work, if available.

Your feedback allows us to continue the program. Thank you!

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Signature of team leader

date

*Request A, Prairie Plant List*

The prescribed garden will contain most of the species listed below.

Common name	Latin name	Height/Width	Grass or Forb?	Comments
Little Bluestem	<i>Schizachyrium scoparium</i>	H 4' W 4'	Grass	Flowers late Aug-Sept, rusty red in winter
Azure Aster	<i>Aster olientangiensis</i>	H 4' W 3'	Forb	Blue flower yellow center, late summer
Prairie Dropseed	<i>Sporobolus heterolepis</i>	H 3' W 3'	Grass	Clumped weeping grass
Swamp milkweed	<i>Asclepias incarnata</i>	H 1-4' W 3'	Forb	Pinkish red flowers, July - August
Whorled Milkweed	<i>Asclepias verticillata</i>	H 6 – 18" W 15"	Forb	Delicate white flowers form a flat cluster in summer
Common Milkweed	<i>Asclepias syriaca</i>	H 2 – 5' W 3'	Forb	Flowers cream with a pink tinge mid-summer
Butterfly Weed	<i>Asclepias tuberosa</i>	H 1-2' W 3'	Forb	Bright orange flowers early summer
Bee Balm	<i>Monarda fistulosa</i>	H 2 – 4' W 3'	Forb	Pale purple flowers in mid-summer
Pale Purple Coneflower	<i>Echinacea angustifolia</i>	H 3' W 3'	Forb	Purple flowers with orange centers in mid-summer
Goldenrod	<i>Solidago ptarmicoides</i>	H 1-5' W 3'	Forb	Yellow flowers in clusters, mid-late summer
Prairie Smoke	<i>Geum triflorum</i>	H 1' W 2'	Forb	Pink/purple flowers in mid-late spring
Golden Alexanders	<i>Zizia aurea</i>	H 1-3' W 3'	Forb	Yellow flowers in early summer
Dotted Liatris	<i>Liatris punctata</i>	H 3' W 2'	Forb	Purple flowers in late summer
Sideoats Grama	<i>Bouteloua curtipendula</i>	H 3' W 3"	Grass	Flowers in mid-summer
Big Bluestem	<i>Andropogon gerardi</i>	H 5 - 7' W 3'	Grass	Blooms in late-summer
Meadow Blazingstar	<i>Liatris ligulistylus</i>	H 4 - 7' W 1'	Forb	Blooms August - September
Brown-eyed Susan	<i>Rudbeckia triloba</i>	H 3 -4' W 3'	Forb	Blooms mid-summer
Gray-Headed Coneflower	<i>Ratibida pinnata</i>	H 3 - 5' W 3'	Forb	Blooms in mid-summer