



GRANT GUIDELINES—These guidelines are specific to the *Conserving Missouri's Aquatic Ecosystems* program. You must contact your local Education Consultant to obtain the grant application.

PURPOSE OF PROGRAM

The purpose of the Discover Nature Schools program is to promote conservation education through instructional units that meet grade-level expectations and encourage hands-on outdoor learning experiences. Each unit is designed to increase student understanding and appreciation of our natural resources and our role in conserving them.

In an effort to assist as many teachers/schools as possible with funding towards implementing this unit, *Conserving Missouri's Aquatic Ecosystems* (hereinafter referred to as *CMAE*):

- 1. A one-time only \$1000 grant for approved instructional and outdoor classroom materials will be awarded per school.**
- 2. Only one (1) reimbursement grant for transportation costs will be awarded per school per year.**
- 3. *CMAE* must be taught (as set forth below) to twenty (20) or more students.**

AGREEMENT DURATION

- 1. The application period of this Agreement begins July 1, 2011 and ends with the application deadline of January 15, 2012.**
- 2. The following must be submitted and postmarked by June 1, 2012:**
 - **Final report narrative**
 - **Average pre- and post-instruction test scores**
 - **Dated detailed receipts clearly showing proof of payment for approved grant expenditures**

MEASURABLE DELIVERABLES

MDC agrees to:

1. Furnish *CMAE*, an instructional unit on aquatic ecosystems. *CMAE* consists of a student book and a teacher guide. The teacher guide features activities suitable for classroom and outdoor learning and meets specified science grade-level expectations.
2. Provide required training (minimum of 6 hours) for all teachers using the *CMAE* unit.
3. Provide grant funding for approved *CMAE* aquatic instructional and outdoor classroom materials as listed in "Materials Funded by Grant."
4. Provide grant funding for reimbursement of bus transportation costs specifically for outdoor aquatic field experiences directly related to *CMAE*. (See "*CMAE* Field Experience Guidelines.")
5. Provide a primary local MDC Conservation Education Consultant contact.



Discover Nature School agrees to:

1. Designate a lead contact/teacher who will make decisions and direct implementation of the program. **This person is responsible for submitting a completed grant report and dated detailed receipts clearly showing proof of payment postmarked no later than June 1, 2012.**
2. **Require participating teachers to complete training (minimum of 6 hours) prior to initial delivery of the CMAE unit in the classroom.**
3. Require all students to complete at least eight chapters from the CMAE unit.
4. Require all students to complete at least one of the CMAE lesson activities outdoors.
5. After completion of the CMAE unit, submit dated detailed receipts clearly showing proof of payment (dated at least 5 days after time of approval letter receipt), average pre- and post-instruction test scores, and a final report narrative postmarked no later than June 1, 2012.

MEASURABLE OUTCOMES

All students will complete the educational unit as specified and experience at least one related instructional activity in the outdoors in interaction with the natural environment.

FUNDING AND PAYMENT PROCESS

1. **The school will be notified with an approval letter accompanied with the initial payment. The grant period begins five days after the date of the approval letter. Costs incurred prior to grant period are ineligible for reimbursement.**
2. Payment to the Discover Nature School will be the actual costs as documented, with dated detailed receipts clearly showing proof of payment, up to the maximum amounts stated herein.
3. The Discover Nature School will initially receive 50 percent of the grant award for approved instructional and outdoor classroom materials as outlined on page 5 of this agreement following submission and approval of a signed Agreement.
4. All funds from MDC **must** be deposited in a timely manner.
5. The Discover Nature School shall provide documentation of required reports, average pre- and post-instructional test scores, and all costs associated with the approved Agreement by June 1, 2012, before final reimbursement will be made.
6. The Discover Nature School will be reimbursed for bus transportation costs for field experiences after submission of dated receipts. Transportation documentation must be an official bus company receipt or detailed receipt on school letterhead signed by a school administrator.
7. Final payment will be made upon completion of the program and submission and review of required grant narrative report, average pre- and post-instruction test scores and dated detailed receipts clearly showing proof of payment.

APPROPRIATION

Funds for this project must be appropriated for each fiscal year and the Discover Nature School and MDC's obligations hereunder shall not be binding upon MDC for any period in which funds have not been appropriated.

REPORTING REQUIREMENTS

1. The Discover Nature School shall contact the local MDC Conservation Education Consultant, Aquatic Resources Education Coordinator or Education Programs/Curriculum Supervisor if any changes in the project arise. All changes must be approved prior to implementation. Failure to do so may result in denial of payment.
2. If, for any reason, the Discover Nature School cannot complete the instructional unit and related field experience(s) during the duration of the contract, further funds will not be provided, and any unused funds must be returned.



Missouri Department of Conservation
GRANT GUIDELINES
Discover Nature Schools
Conserving Missouri's Aquatic Ecosystems
2011 – 2012

OWNERSHIP

1. Any equipment purchased with funds under this Agreement becomes the property of the Discover Nature School.
2. MDC reserves the rights to the copyright of all materials it produces and provides.

MONITORING REQUIREMENTS

1. **MDC's local Conservation Education Consultant shall monitor each project through ongoing informal monitoring by phone calls, on-site visits and e-mail.** The Aquatic Education Coordinator, Education Programs/ Curriculum Supervisor or representative will monitor financial information and project reports through desk review.
2. After project completion is verified and final reports are approved, MDC shall process final payment.
3. The Discover Nature School shall allow MDC access to all financial records and/or audited financial statements related to this agreement.

TERMINATION

MDC retains the right to terminate this Agreement at any time, without penalty or recourse, by giving written notice at least thirty (30) days prior to the effective date of termination. All unused grant funds must be returned to MDC.

The Discover Nature School may terminate this Agreement with 30 days of notice if agreed by MDC but must return all unused funds.

LEGAL COMPLIANCE, SAFETY & HOLD HARMLESS

The Discover Nature School hereby agrees to comply with all laws and regulations applicable to it, and to take all reasonable and lawfully required steps to ensure the safety of the public during the performance of this cooperative agreement and the provision of all public programs and activities furthered by it, and the Discover Nature School agrees to indemnify and hold harmless MDC, and its agents and employees, from any claim or suit arising out of, or in connection with, this cooperative agreement and the provision of all public programs and activities furthered by it.

OTHER PROVISIONS

MDC shall be given appropriate credit in all publications, educational materials and in any media contacts related to CMAE and grant. Appropriate wording may include "The Missouri Department of Conservation provides the Discover Nature Schools program and grants so Missouri students learn to connect with nature and conserve it, too."



GRANT ELIGIBILITY

FIRST YEAR OF PARTICIPATION

☞ A field experience grant of up to \$7 per student (*maximum of \$3500 per school*) to cover bus transportation costs for field experiences.

AND

* A **one-time only** grant per school of up to \$1000 to purchase approved *CMAE* aquatic instructional and outdoor classroom materials. (See "Materials Funded by Grant.")

* Grant funds will be disbursed as follows: 50 percent of approved amount for purchase of approved instructional and outdoor classroom materials ***upon notification of approval of Agreement***; balance reimbursed upon completion of *CMAE* and submission of required documentation. (See ☞ NOTE below.)

SUBSEQUENT YEARS OF PARTICIPATION

☞ A field experience reimbursement grant of up to \$7 per student (*maximum of \$3500 per school*) to cover bus transportation costs for field experiences.

(See ☞ NOTE below.)

☞ **NOTE:** Bus transportation costs and the balance for instructional material costs shall be reimbursed after receipt of required documentation postmarked by June 1, 2012. Documentation shall include a grant report narrative, average pre- and post-instruction test scores and ***dated detailed receipts clearly showing proof of payment (no packing slips or purchase orders)*** for all one-time only *CMAE* materials and for bus transportation.



MATERIALS FUNDED BY GRANT

- This grant allows for a **one-time only** amount of \$1000 for approved instructional and outdoor classroom items. These items may be purchased in any combination or number based on a school's need. All purchases must be reflected on clear and legible original OR clear and legible copies of dated detailed receipts showing proof of payment.
- **Only items on this list are eligible for reimbursement.* No substitutions. Keep all dated detailed receipts clearly showing proof of payment.**

Aquatic Studies Supplies

- Water quality test kits, meters or other basic equipment [This may include thermometer, pH kit, conductivity meter, dissolved oxygen kit, nitrate kit (no computer modules)]
- Kick seines with fine mesh
- Aquatic dip nets with fine mesh
- USGS 7.5-minute quadrangle topographic map for each group (If possible, obtain maps that include your school grounds or the field trip/study area and laminate before use.) (www.topomaps.usgs.gov/ordering_maps.html)
- Safety goggles (one per student)
- Field guides relevant to this unit
- Small magnifier boxes/magnifying glasses
- Stopwatches (one per group)
- Materials for construction of kick seines and dip nets (Must be approved by your EC)

Fishing Equipment and Supplies

- Fishing poles (closed-face reels recommended)
- Casting plugs (plastic practice)
- Bobbers
- Sinkers
- Fishing hooks
- Extra fishing line
- Live bait (worms, crickets, minnows)
- Tackle box (1)
- Fishing pole caddies
- Needle-nosed pliers
- Backyard Bass

Outdoor Classroom Supplies

- Potted plants native to Missouri (*or annual plants known to attract specific Missouri wildlife and approved by the local Education Consultant*)
- Seed packets for plants native to Missouri (*or annual plants known to attract specific Missouri wildlife and approved by the local Education Consultant*)
- Plastic liner or plastic pond form
- Pond pump
- Pond plants native to Missouri
- Soil
- Mulch
- Border stone

* **NOTE:** Not all materials required to complete *CMAE* activities are funded by this grant.



CONSERVING MISSOURI'S AQUATIC ECOSYSTEMS **FIELD EXPERIENCE GUIDELINES***

OBJECTIVES

Students participating in a *CMAE* field experience will:

- explore and investigate an aquatic ecosystem
- demonstrate and apply skills and knowledge gained from *CMAE* activities to the planning of the experience and exploration of an aquatic ecosystem
- demonstrate and apply use of science notebooks
- pose questions and predict answers to those questions about the aquatic ecosystem
- plan, collect and organize data while conducting simple field investigations
- present findings and conclusions relating to the field investigations of the aquatic ecosystem

In order to qualify for reimbursement of transportation costs for field experiences taken in conjunction with the *CMAE* unit, field experiences:

- must occur at an aquatic, outdoor ecosystem (i.e., Conservation Area; State Park; National Forest; private property with areas representative of Missouri's aquatic ecosystems included in the *CMAE* student book; etc.)
- must provide students with opportunities to apply inquiry and field investigation skills and knowledge gained through activities in the *CMAE* unit, such as fishing, invertebrate sampling and water quality sampling/testing.

Meaningful opportunities for students to apply the knowledge and skills fully to the field experience should include:

- pre-trip planning time for students to research the aquatic ecosystem, pose questions, predict answers and plan simple field investigation strategies
- ample time for students to conduct simple, hands-on field investigations that allow students
 - to observe the living and non-living components of the aquatic ecosystem and the interactions among those components
 - to collect data related to and in support of their predictions
- ample post-trip time for students
 - to organize their data
 - to prepare and present short class presentations on their field investigations and findings/conclusions

*Tours and demonstrations are acceptable minor components as long as the majority of the field experience is composed of hands-on and experiential learning activities that meet objectives outlined above. Field trips that provide only naturalist-led programs, naturalist-led hikes, or lecture/demonstration stations do not qualify as *CMAE* field trips.