




**Eastern District Innovative Grant Program
Calendar Year 2009**

1. **Project Title:** Aquatic Invasive Species Monitoring, Mapping and Data Collection
2. **Funding Requested:** \$ 3,800
3. **Project Lead/Grant Applicant :** Wally Hitt, Marinette County 4-H Agent
 - a) **Project Collaborators:** 4-H, UWEX; Robert Ruleau, Land and Water Conservation Division(LWCD); Assistant Professor Keith West, Geography, UW Marinette
4. **Signature:** Wally Hitt, 4-H Agent 
Grant Applicant/Lead
5. **Project Description:** This is a collaborative effort to involve a new youth audience and to teach them about science, aquatic invasive species (AIS) and related issues. UW-Marinette college students who enroll in G0-130, Human Impact on the Environment, will work as mentors for the youth as part of the course's service learning. Service learning will be a new addition to this course. The campus has a new Vista worker to help set up service learning.

LWCD just hired an Aquatics Invasive Species Coordinator via a 3-year DNR Grant who will work with Wally to train the youth and to help coordinate their efforts to map aquatic invasive species (AIS) using GPS units.

Marinette County borders Lake Michigan and has 442 lakes and many miles of rivers. A variety of AIS impact these precious waters—Zebra Mussels, Phragmites, Purple Loosestrife and Eurasian Water Milfoil are a few of the plant/animal aquatic species causing ecological and economic harm to local plant and animal species, property values, tourism and recreation. We will use a unique teaching tool, the TOAD—Teaching Outdoor Awareness and Discovery—a LWCD portable classroom/trailer well equipped with waders, etc. to facilitate aquatic studies.

6. **a) Situation Statement:** This project allows UWEX and the UW Campus to work together and to incorporate the 4-H Science, Engineering, Technology (SET) effort which is part of Wally's plan of work. It will also involve new youth in the 4-H program who have an interest in SET.

All of the pieces are there: the new LWCD person, the campus' expanding service learning—the new Vista Worker and the 4-H SET challenge. This grant will allow us to put the pieces together and will be seed money to help us get larger grants to tackle this growing problem. Our goal is to eventually involve youth from other youth organizations to become environmental stewards as well as to involve neighboring counties and to set up a larger data base, as this problem affects more than one county. Invasive species have continued to spread and much needs to be done to make the public aware of it and to generate support to try to prevent, monitor and control them.

b) The following criteria that relate to your project.

- i) Fosters teamwork and collaboration with other agencies, campuses, or colleagues

- ii) Incorporates the use of other funders
- iii) Includes a new program direction that may be replicated
- iv) Focuses on reaching new audiences
- v) Exposes potential employees to UWEX

c) Project Objectives/Expected Outcomes (include plan for sharing results with colleagues and show how project had a net economic impact on the community)

The project's objectives are to expand educational efforts in science and technology to help prevent, control and better respond to Aquatic Invasive Species (AIS) outbreaks.

+Educate participants in basic use of handheld Global Positioning System (GPS) units along with entering mapping data into computer databases.

+Educate participants on some of the harmful AIS and their impacts in the county, i.e. Eurasian Water Milfoil, Zebra Mussels, Phragmites, etc.

+Educate approximately 80 youth at Sand Lake Conservation Camp on how to use a GPS unit and teach a session on invasive species. (This camp would need ten of the same type of GPS units in order to effectively teach it.)

+Monitor, map, record data and distribute information about the presence or absence of AIS in our waters/shorelines.

+The project will share results by making information available to the public in GIS databases at UW Marinette, LWCD and WDNR—statewide.

+Net economic impact on the community—AIS have proven to be detrimental to the economy and ecology of Marinette County disrupting recreational and tourism activities and harming native aquatic species. This project will incorporate long term efforts to help prevent future AIS outbreaks in our lakes and streams. Healthy lakes and streams are vital to a thriving tourism industry and various recreational activities, which not only create substantial revenue for the state and county, but greatly enhances the quality of life for our communities.

+Expected outcomes—That youth will hear about the AIS site contest and respond. Educate 4-H participants in GPS use and AIS issues. Create public awareness of AIS. Build youth connections to UW-Marinette, inspire youth to explore SET careers and become environmental stewards while creating a data base of AIS information in which to educate affected landowners and the public on prevention, control and eradication. 4-H clubs will learn to identify AIS and report sites to earn points in the contest. 4-H members will become environmental stewards and take information back to their families. Landowners will increase cooperation in AIS reporting and eradication as a result of information from 4-Hers. GPS use will expand to other LWCD programs.

d) Project Timeline (include planned responses and activities)

The college course G0-130 will be offered this summer and again in the fall. This summer, the program will be promoted and new 4-Hers will be recruited. We will set up an "AIS Site Location" Contest to encourage youth to report AIS sites, to recruit youth and to create public awareness of the project. Training will be given to recruited youth on using GPS units, map reading, how to identify invasive species and how to meet, greet and work with landowners.

e) Evaluation Plan

How many youth and college students become involved, how many species are identified and mapped. How many landowners are informed of AIS and how to prevent/control them. Surveys of participants, as well as public feedback.

7) Detailed budget breakdown (specifying the amount and purpose of funds requested from District Resource Management funds, and clarifying the source and amounts from other funds):

The grant will purchase ten GPS units and accessories--\$2,750 (10 x 275); \$350 for contest prizes; \$200 handouts on AIS; \$50 log books for member reporting/copies/mailings; \$25 awards/recognitions; \$400 transportation/gas money for college students to meet with members.

8) If you have received Resource Management funds, in the past, include the following information for all funded projects (if you have a number of past projects, this can be a separate (4th) page):

a) Briefly describe your past experiences with resource management grants – project focus, funding received, project collaborators

Wally received two grants in the past. One was to help set up the Sand Lake Conservation Camp at Camp Bird four years ago for \$650 and it is still being conducted by LWCD, UWEX, DNR, Parks, Forestry/Outdoor Recreation. The first year we had 27 campers and last year, 82. The camp's purpose is to teach youth about managing natural resources, the environment and related careers.

The second grant was also four years ago for \$600 to set up Awareness Day - to bring high school students to the UW Marinette campus to learn about risk behaviors. This program still operates and invites 13 schools from Marinette and Menominee, MI Counties to send about 250 teens. An inspiring speaker and sessions on teen issues are provided via a grant. Sponsors are M& M Healthy Youth Coalition, UWEX, Public Health and UW Marinette.

b) How is this project proposal new or different?

This plan is new by involving 4-H with college students in a community service project with a science/technology focus and brings together three partners who have not combined forces in the past. It also is a cooperative program between Extension and a UW Campus which is putting service learning into place while building a critical data base.