

Project Invasive Zebra Mussel in our Great Lakes

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Introduction to Stewardship Project

After I returned from the COSEE conference and learned about the Exotic Aquatics, I presented the information I learned to my 8th grade classes. In teaching what stewardship was, the students thought of ways to pass the information forward to continue the link of information about invasive species. They thought of ways to spread the word about zebra mussels to prospective elementary students who were conveniently across the yard.

Objectives

The object of the lesson was for the students to research the history, movement, problems, and solutions to the introduction of the zebra mussel into the Great Lakes. They were then challenged to find ways to impart the facts they found to other students in the district and for those students to give the information to their parents and family members. We live in a community surrounded by lakes and many families have cottages and/or boat and use the lakes for recreation. Also,

- a. To increase students' knowledge of the Great Lakes, particularly the importance of the ecology of this water system and ultimately to us.
- b. To show how man's decisions, impact the environment and can easily change ecological systems without the proper knowledge of those actions.
- c. To impart a mindset of stewardship of our Great Lakes, to "pass it forward," the best practices in caring for this water system.
- d. To allow inquiry to be the process of discovering the impact of an invasive specie on the Great Lakes and man's part in this.
- e. To encourage collaboration of students in completing this project.
- f. To take factual information and creatively package it in a fun teachable lesson.
- g. To become "teacher" instead of "student".
- h. To impart a responsibility to my students, to make sure the lesson delivered the information in an accurate and enjoyable way.
- i. To show teaching is fun.

Student Activities

1. Research: Time was spent collecting data and becoming knowledgeable about the timeline of movement of the zebra mussel from Eastern Asia to the United States, the problems caused to the ecology of the lakes and how communities are working to solve the problem.
2. Designing a Lesson: The students worked in small groups and designed a lesson with a hands-on activity to teach facts, problems, and solutions in handling the zebra mussel. The vehicle for imparting the facts was created by the team. We had everything from outside running games, indoor board games, interactive posters, brochures, stories, and action books,

Outcome/Impact of the Project

1. The students took on this project with a passion. They came up with other ideas in how we could monitor the Great Lakes.
2. The student's idea of stewardship was minimal before they took part in this lesson. This activity along with another community project they were involved in this year gave them a basis for this concept. Passing the information forward made a clearer link from facts from a book or computer to a living link to the idea of them being responsible for the health of their environment.
3. I was amazed how the students embraced the teaching part of this lesson. The comments ranged from, "I felt like a teacher.", "They are so cute.", to "Teaching is really hard." I also saw students in a different light. There were a few students who struggled in class academically who embraced the "teachable" part of the project and excelled. It was nice to see hidden talents revealed when they were put into a new situation.
4. As a caveat to this fun project, I recently was at an appointment and the owner's 3rd grade daughter was there. As we were sharing information I found out her daughter was in one of the classes who came over to our school to learn about the zebra mussel. In talking to the mother and the daughter, much was learned that day by the student and discussed with her family. We did pass it on!