

Bird Nesting Box Construction and Conservation Project

Contact Information

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Introduction and Description of the Lesson

Mary Peacock School is located in the Northern California town of Crescent City. The student population is primarily Anglo, but there is a strong community of Hispanics, Hmong, and American Indians.

The school is in the close proximity of Lake Earl, which is one of the largest remaining wetland communities in California. Due to changes in habitat many species of birds have been impacted.

Our fifth grade class has chosen three species of birds to study and build nesting boxes to help their populations. Species were chosen based on local needs and habitats. The students constructed a total of thirty nesting boxes. The species chosen were Western Bluebirds, Wood Ducks, and Screech Owls. In cooperation with the California Department of Fish and Game students will also be involved with placement and monitoring the boxes.

By studying the three different native species the students acquire knowledge of local habitats/ecosystems and the diversity that exists among individual species. When our knowledge and personal feelings is increased our ability to provide sound land stewardship and management is enhanced.

Instruction Process

Preparation

After our unit on bird study I give examples of local bird populations that would benefit from nesting boxes. The students choose the species they would like to help in our community. The class voted on six possible species and I narrowed them to the top three.

The nesting box plans were obtained from the Birdhouse Network (birds.cornell.edu/birdhouse/). The California Department of Fish and Game and local Audubon members will provide support and approval for proper habitat placement of the boxes and native species needs.

Because of safety issues students do the nailing, sanding, caulking, and finish work while adults will do the sawing of lumber and placement of boxes where a ladder is needed.

Students will study bird identification, distribution and breeding habitat, diet, pair formation and territoriality, nesting behavior, nest box requirements, and how conservation projects support local wildlife. Most of this was done through teacher lead classroom Instruction.

A pre/post test will be given on students' knowledge both of Service-Learning and bird species habitat needs. See attachment.

Students will be assigned boxes to monitor (with parent supervision) thereby gaining knowledge and appreciation of local species and habitats. The students observe their assigned boxes on weekends and over the summer break.

Academic Content Standards

3rd Grade Life Sciences

3, 3.a, 3.b 3.c

4th Grade Life Science

3.a, 3.b

5th Grade Reading/comprehension

2.0

5th Grade Math/Measurement

1.0

The math standard was met during the actually building of the boxes the others were met during classroom Instruction.

Action

The students will have a say in choosing bird species, help in nesting box construction, and monitor the boxes after placement in the field. I worked with two students a day during our group reading time. Boxes must be constructed to proper specifications to ensure bird needs found through <http://birds.cornell.edu/birdhouse>. Students will learn that our knowledge of ecology can enhance animal habitat and individual actions do make a difference. Nesting box Programs have been successful in many areas of the Country. Because the students are involved with the monitoring of their boxes they will connect with the natural world and will be involved in a healthy activity with their parents.

Reflections

Students will reflect during this service activity by journaling and class discussions. Students will take field notes in their nature/science journals and capture memories with digital cameras. Class discussions will include accomplishments and failures and what we could do to improve future projects. Nature journals will include drawings, poems, and scientific observations.

Student Assessment

The student will be assessed by their nature journals, formal testing of the Content Standards, and informal teacher observations. See appendix.

Project Evaluation and Expansion

The quality of the project will be evaluated by the classroom teacher, students, parents, Fish and Game liaison, and Service-Learning Site Advocate.

In the future the project could include other bird species and greater involvement by parents in monitoring the boxes. The nesting box project could be enhanced by combining with a tree planting activity. Funding and community support could be increased by an Adopt a Nesting Box Project.

Celebration/Public Recognition

Our class celebration will include a slide show and PowerPoint presentation. Our celebration will include birth announcements for all the birds our projects have brought into the world. Parents will be invited to Back to School Night to showcase student journals and photographs.

Materials and Staff Development Needs

- 4X8 sheets of T111 plywood
- 1X6 cedar fence lumber
- Galvanized nails and screws
- Hammers and power drill
- Hardware cloth ½ inch
- 8 foot pressure treated posts/ready mix
- Extension ladder
- Access to table saw to precut lumber

Funding

Funding for the project is provided through the District's Service-Learning funds. Future funds could be made by selling birdhouses and feeders to provide capital. Businesses and other community service organizations may help fund this project through donations and sponsorships.