

Blair/DeSoto NWR Outdoor Education Partnership

*Blair Community Schools
DeSoto National Wildlife Refuge*



“after all our talk now is the time to insert curiosity’s key, the child, into the wilderness”

Don Welch - *Setting out to Walk a Prairie*



Friends of Boyer Chute
& DeSoto NWR

Mission Statement

Creating a sense of wonder through environmental education in an outdoor classroom, a partnership with Blair Community Schools, “*Where All Students Learn*”, and DeSoto National Wildlife Refuge, “*Where Wildlife Comes First*”.

We achieve this mission by:

- Empowering students and teachers to learn “real time” in nature’s outdoor classroom
- Connecting students with the environment and environmental issues
- Making education challenging and fun
- Creating a partnership for environmental education that meets Blair Community Schools and Nebraska State Standards and is recognized for its accomplishments.

*** This partnership would not be possible without The Friends of Boyer Chute and DeSoto National Wildlife Refuge. Their contributions of countless volunteer hours and financial support help us to succeed.**

Strategic Plan Goals

- 1 Provide every student with the opportunity to experience environmental education in the outdoor classroom
- 2 Provide an inquiry based diversity of education.
- 3 Secure funding through diversified revenue streams.
- 4 Create an infrastructure to achieve quality and sustainability.
- 5 Develop a process to evaluate and to quantify a results based program.
- 6 Maintain a position dedicated to environmental education at DeSoto National Wildlife Refuge.
- 7 Develop an advanced program for selected students.
- 8 Promote the program to families and the community.

At a Glance

- Inspired by a visit of Blair Community Schools' teachers and administrators to the U. S. Fish and Wildlife's Prairie Wetlands Learning Center in Fergus Falls, Minnesota, the outdoor classroom partnership with Desoto National Wildlife Refuge was established in 2006. This partnership involves students in third grade, fifth grade, sixth grade, seventh grade, eighth grade and high school. These students will visit DeSoto six or more times in an academic year.

So far, the program has produced:

2006-07: 63 programs and 2,200 student visits

2007-08: 74 programs and 2,200 student visits and one educator workshop

2008-09: 89 programs and 2,954 student visits and one educator workshop

2009-10: 79 programs and 2,887 student visits and one educator workshop

2010-11: 109 programs and 4,159 student visits and one educator workshop

Programs include the following topics:

3th Grade:

- Fall Exploration
- Winter Exploration
- Spring Exploration

5th Grade:

- National Wildlife Refuge System Orientation
- Sense of Wonder
- Prairie Exploration
- Wetlands and Fall Migration
- Beavers
- Winter Tracking and Birding
- Eagles
- Sensory Awareness
- Outdoor Education Days

6th Grade:

- Photosynthesis/Structure and Function
- Migrating Birds- The Canada Connection
- Physical Properties, Mass/Volume/Density Snow Study

7th Grade:

- National Wildlife Refuge System Orientation
- Habitat Lab Scavenger Hunt
- Insects
- Fish Sampling
- GPS Scavenger Hunt
- Bertrand
- Bird Observation

6th, 7th and 8th Grades:

- Exploratory technology after school program.

High School:

- Ecosystem Observation Hike
- Biomes
- Use of Identification Books and Guides
- Soil Testing
- Water Quality
- Fire Ecology

Educator Workshops: Various topics to enhance the teachers' knowledge of the refuge and the outdoor topics being taught.

- Approximately twenty teachers, staff, and administrative personnel from Blair Community Schools, along with staff and volunteers at DeSoto, guide students in the outdoor classroom.

Facilities and Resources Include:

Blair Community Schools

- Classrooms and auditoriums for lectures, and multi-media presentations
- Libraries
- Computer lab for research and enhancing technology skills
- Nebraska State Standards

The 5th grade students meet state standard 5.2.1 through the outdoor classroom activities at DeSoto.

The 7th grade students meet state standards 8.4.3, 8.4.4, 8.4.5 by studying the relationships of animals and their habitats through hands-on and first-person observations during outdoor labs at DeSoto.

The 12th grade students meet state standards 12.1.1, 12.4.3, 12.4.4, 12.4.5, 12.4.6, 12.7.2, 12.7.3, 12.7.4, and 12.7.5 while on different field trips to DeSoto either during a hands-on activity on site or a discussion during a guided hike.

DeSoto and Boyer Chute National Wildlife Refuges and The Friends of Boyer Chute and DeSoto National Wildlife Refuge

- Visitor Center – wildlife displays, museum for the steamboat Bertrand, and an indoor viewing gallery for wildlife during inclement weather.
- Multi Purpose Room-for optional classroom space.
- Hiking trails and roads – explore all of the major habitats on the refuge.
- Open air shelter – rain or shine, the shelter can be used for lunch or class gatherings.
- As a result of the partnership, an eagle cam is being installed on an active eagle's nest at DeSoto to enhance learning opportunities.
- In all, thousands of acres of outdoor classroom include forest, prairie, and wetlands.

Some examples of materials provided by DeSoto include:

Bald Eagle Activity Kit – skull, talon and egg replicas
Beaver Activity Kit – skull, pelt and tail
Bird Activity Kit – binoculars, spotting scope and field guides
GPS units – housed at Otte Middle School
Insect Collecting Kit – nets, containers and field guides
Library and wildlife films
Pond Study Activity Kit – nets, magnifying viewers, trays, field guides and aquatic insect displays
Tracking Activity Kit – field guides, rubbing plates, molds and stamps

Goals:

Goal 1

Provide every student has the opportunity to experience environmental education in the outdoor classroom.

Rationale: Joining students with nature in the outdoor classroom will instill a sense of wonder and broaden the students' natural curiosity to learn about the environment. This will build a stewardship with the students and the environmental issues we currently face. Learning in the outdoor classroom will help develop the students' observation, problem-solving, critical thinking, and communication skills.

Goal 2

Provide an inquiry based diversity of education.

Rationale: Utilizing the outdoor classroom in conjunction with a traditional classroom can enhance student learning of the sciences. Expanding the curriculum to follow the route of the migratory waterfowl allows the students to study geography as well as social studies and cultural studies of people along the flyway. Language arts skills are enhanced by writing about learning experiences. Fine arts are utilized through drawings, paintings, or pictures of their outdoor experience. Exploratory technology can be incorporated through digital photography, blogs, video storyboards, software, and computer use.

Goal 3

Secure funding through diversified revenue streams.

Rationale: Funding is provided by Blair Community Schools, DeSoto National Wildlife Refuge, Blair Community Foundation Grant, The Friends of Boyer Chute and DeSoto National Wildlife Refuge, and various other grants. We will continue to actively seek alternative funding sources as well as local corporate sponsor to secure the future financial health of the program.

Goal 4

Create an infrastructure to achieve quality and sustainability.

Rationale: Build on the program to produce the highest educational standards while responsibly managing associated cost. Create learning resources to attract families to Blair Community School for education.

Goal 5

Develop a process to evaluate and to quantify a results based program.

Rationale: Utilizing the students' field notes and naturalist journals, writing assignments, blogs, fine arts, exploratory technology displays, and open discussions of the outdoor learning experiences, teachers will be able to evaluate the level of understanding the students have achieved.

Goal 6

Maintain a position dedicated to environmental education at DeSoto National Wildlife Refuge.

Rationale: In order to provide continuity and stability in the environmental education program a full-time Environmental Education Specialist will be placed at DeSoto NWR. This is anticipated in mid-January 2010.

Goal 7

Develop a advanced program for selected students.

Rationale: Provide an opportunity for students who demonstrate interest, ability and task commitment to participate in advanced learning opportunities using the DeSoto outdoor classroom.

Goal 8

Promote the program to families and the community.

Use media, chamber of commerce, business and personal relocation companies and education web-sites to promote the partnership with Blair Community School and DeSoto National Wildlife Refuge.