

Chilton School Forest Educational Plan



Submitted by
The Chilton School Forest Committee
2010

TABLE OF CONTENTS

Rationale	1
Value Statement	1
Target Messages.....	1
Needs Assessment Results	1
Site Description & Opportunities	2
Site Description & Location	2
Legal Description.....	2
Facilities.....	3
Site History	3
Site Management	4
Educational Connections.....	6
Key Concepts	6
Staff Development	16
Resources	16
Assessment.....	18
Sustaining the School Forest Program.....	18
School Forest Committee.....	18
Communication.....	19
Long Range Plan.....	19
Implementation Plan	20
District Commitment	20

Rationale

Value Statement

Generations that grew up experiencing the outdoors first hand through unstructured play and spending quality time with family, in nature, have become a thing of the past. With the increase in the production, availability, and affordability of new technology, 21st century children have found other ways to spend their time. Couple this with busier family schedules, an increase in the media coverage of crime against children, the decrease in the access to natural areas, and schools becoming more focused on assessment and content, it has become commonplace for children to spend more time indoors than outdoors. This has led to the development of what some refer to as a nature deficit disorder in children. According to Richard Louv, author of *Last Child In the Woods: Saving Our Children from Nature-Deficit Disorder*, “new studies suggest exposure to nature may reduce the symptoms of ADHD, and that it can improve all children’s cognitive abilities and resistance to negative stress and depression” (2006, p.34). It is the goal of the Chilton School District to reverse the effects of this disorder and reconnect students to nature. Our students do not value things that they do not make a personal connection to. However, if we provide them with experiences that allow them to develop an appreciation of their experiences with nature, they will make more informed decisions in the future to help protect our natural resources and hopefully, experience a richer lifestyle that they will pass on to future generations.

Target Messages

1. Humans are a part of the natural world; people rely on their environment.
2. Humans have an obligation to be good environmental stewards through sustainable practices.
3. Environmental health and human health are interrelated.

Needs Assessment Results

In spring of 2009, a survey of the Chilton staff was conducted by the School Forest Committee Chairperson. According to the survey results, approximately 36% of the respondents said they were currently using or planned to use the school forest during that school year. 64% of the survey respondents would use the forest if educational improvements would be made to the forest. Examples of the improvements expressed by the staff include the following:

- Professional development for high quality curriculum
- Development, improvement, and maintenance of existing and new trails
- Construction of an outdoor classroom
- Map and trail markers to include interpretive signs
- Signage to identify the school forest and trails
- Plant specimen trees to expand the school forest
- Accessibility for individuals with special needs

Chilton students are fortunate to have an educational resource in the school forest on the premises; however, very few get the opportunity to learn from this valuable resource. The district does not have an interdisciplinary Environmental Education curriculum or planned outdoor educational experiences that utilize this resource. Ultimately, the students of Chilton do not meet the goals of EE because the district does not address the WI Model Academic Standards for Environmental Education.

In addition, Chilton teachers lack the training and the resources to implement an interdisciplinary curriculum that encompasses the WI Model Academic Standards for Environmental Education that complements the content area standards. Also, professional development is necessary to develop pedagogies to deliver hands-on, inquiry-based activities that reach beyond the classroom to the school forest.

Site Description & Opportunities

Site Description & Location

The Chilton School Forest is a 3.5 acre natural area located in the City of Chilton at the corner of Court Street and Heimann Street. It is on the school grounds and within walking distance from all school buildings. The land is gently sloping from the northeast corner to the southwest down to a lowland and drainage ditch that borders the southwest side of the area. The area was planted with a wide variety of trees and shrubs through the early 1980s. The area has three major habitat stands.

Stand one is an upland area that is characterized by a variety of widely scattered trees of various sizes less than 20 feet tall and an abundance of shrubs. Trees present include white spruce, white pine, jack pine, white cedar, white ash, walnut, elm, and box elder. Shrubs include red osier dogwood, ninebark, highbush cranberry, autumn olive, and buckthorn. There are also open areas of grass mixed within the trees and shrubs along with a system of trails through the area.

Stand two is at the base of the slope and consists primarily of red osier dogwood and widely scattered ash saplings. The dense shrub layer provides excellent cover for birds, rabbits and other wildlife.

Stand three borders the drainage ditch. It is a very wet area that does not support good tree growth. Willow brush and marsh grass dominate the area. A small, shallow pond is located on the south side of the area.

Legal Description

3.5 Acres located in Township 18 North, Range 19 East, and Section 13 in the City of Chilton

Facilities

There are no structural facilities located at the site. There are two maintained trails on the forest property. There is also a small, shallow pond and a drainage ditch with existing natural springs that flow through the property.

Site History

Natural History:

All of eastern Wisconsin sits on the Niagara dolostone.

Cultural History:

The land that the Chilton School Forest and the rest of the school campus occupy was originally farm land. The school district rented out the land to area farmers for a number of years. The elementary school was the first building built on the property. The initial plans for the school forest were designed and approved during the late 1970's and early 1980's, with the assistance of R. Anderson, the county conservationist. The first plantings occurred in the early 1980's. The elementary principal at the time, Bob Garfield, asked one of the teachers, Jeff Horn, to complete paperwork to acquire a number of free trees and bushes offered to schools through the Department of Natural Resources. A mixture of seedlings was planted and the bushes were used to define an initial border to the forest area with trees being randomly planted by students. Annual plantings of this nature continued for three or four years. Jeff Horn continued to be involved in the project along with teacher, Greg Plowman, and sixth grade science teacher Dave Kowal. During this period, at least 500 trees were planted. Initially, Jeff was only able to acquire softwood species, and these were all planted on the east side of the creek that runs across the property. Finally, he was able to procure a number of oak seedlings and planted them in the northwest corner of the school forest property. Unfortunately, due to an error in communication, the oak seedlings were all mowed down the following summer. After this initial start to the school forest, David Kowal began investigating the creation of an environment that could be further used for environmental studies. Fourth grade teacher, David Beres, has also been involved with using the school forest in his curriculum. For many years, under changing leadership, students have gone into the forest in springtime to assist with cleaning up the area.

In the mid-1980's, the city of Chilton constructed a pond on the property. The pond was designed to help minimize the sediment buildup created by the creek that flows through the school forest and into Lake Chilton. The lake is located off of school property to the south. The pond was kept shallow for liability purposes at the request of the school district's superintendent, Dr. William DeMaster.

Sometime after the initial plantings, the forest fell into disuse. In the late 1990's, it was recognized that the school forest had become overrun with invasive species such as prickly apple and buckthorn. The Chilton Tree Board and a number of community volunteers spent several weekends clearing the invasive growth and thinning the maturing trees. A grant received from Wal-Mart funded the equipment needed for this undertaking. At that time, plans were being made for an outdoor classroom. While the classroom was not developed, more planting occurred

and two trails were developed. The Department of Natural Resources provided a Stewardship Forestry Plan for the school forest on October 23, 2000. It contained suggestions for improvement of the area to allow for the growth of native tree species and for enhancing the educational value of the forest.

In February 2009 Tracy Bartels, a Chilton High School science teacher, applied for and received a grant to develop the School Forest Education Plan. It was determined that the DNR Forestry Management Plan developed in 2000 was still applicable to the forest at this time. The renewed interest in the school forest led to an additional planting of 950 trees on an open acre of the forest land running along Heimann Street. This occurred on April 30, 2010.

Future plans include:

- Additional plantings, allowing the school forest to extend south to the fledgling natural prairie
- Development of a Memorial Trail in cooperation with the City of Chilton

Site Management

Key Goals:

1. Provide a diverse, native and accessible site for educational purposes.
2. Provide a diverse, native and accessible site for school and community recreation.
3. Manage the land to eradicate invasive species and maintain and develop the existing ecosystems.
4. Plant trees to expand existing forest to enhance and generate new forest ecosystems.
5. Manage the land to maximize learning opportunities.

Objectives:

Chilton School District began and will continue to manage the Chilton School Forest as recommended by the DNR forestry management plan. In stand one, this includes removing undesirable dogwood shrubs that are inhibiting the healthy growth of the native trees, eradicating invasive buckthorn and autumn olive trees, and cutting and treating excessive box elder trees. In addition, planting more desirable native trees in the dogwood dominated areas and open grassy areas will fill in the open spaces to help with forest density and diversity. Stand two will be left to grow and naturally develop into a mature forest. In stand 3, the pond and drainage ditch will be renovated by removing brush immediately around these areas and planting native grasses to encourage wildlife usage and reduce erosion of the banks.

1. Involve students of all ages in the management of the school forest.
2. Continue to develop students' sense of ownership and accomplishment through involvement in management.
3. Encourage staff to implement lessons to utilize the school forest.
4. Encourage the community to educationally and recreationally use the school forest.
5. Manage the site to reach the key goals of the management plan.

Forest & Prairie



This map is neither a legally recorded map nor a survey and is not intended to be used as such. Calumet County does not guarantee the accuracy, current status, or completeness of the material contained herein and is not responsible for any misuse or misrepresentation of this information or its derivatives. In no event shall Calumet County become liable to users of this data for any loss arising from the use or misuse of these maps. The tax parcel data is compiled from official records, including survey plats and deeds, but only contains the information required for Calumet County business. Original recorded source documents located in the county courthouse should be used for legal or survey purposes. The County shall remain the exclusive owner of all rights, title, and interest in all specifically copyrighted information on this website. To assist Calumet County in the maintenance of this data, users are encouraged to provide information to the County concerning errors or omissions. To report an error, please contact the County's GIS Administrator at (920) 849-1442 or at Hess.Andy@co.calumet.wi.us.

Educational Connections

Key Concepts

1. Cultural, economic, social, and political factors determine human values, understandings, appreciation and individual attitudes toward environment and peers.
2. Sustainable natural resources management aims to provide essential resources for humans, enhance local communities, and protect the health of the land.
3. Human and environmental health is related and the natural world can provide opportunities to enhance our physical and emotional health.
4. The natural world can provide inspiration and creativity.
5. Ecosystems contain both living and non-living components and will change over time due to disturbance and succession.
6. Humans need to play an integral role in protecting and restoring the health of our ecosystems.

Elementary School Classroom Curriculum Connections

Grade Level	Skill/Goal/Content Area	Activity— Site Connections	Key Concepts (see p. 6)	Wisconsin Model Academic/Core Standard(s)
4K-K	Reading/Language Arts	Read, write, draw about things in nature.	4	A.4.1 C.4.1
4K-K	Science	Identify woodland animals & insects in the school forest	5	C.4.1 F.4.1
4K-K	Science	Study using our 5 senses.	3, 5	C.4.1
4K-K	Science	Study how trees change through the seasons. ID types of leaves.	5	C.4.1 E.4.5 F.4.1
4K-K	Math	Recognize shapes: practice counting & sorting items.	4	D.4.1 D.4.2
4K-K	Science	Identify life cycle of Monarch	5	C.4.1 F.4.1

Grade Level	Skill/Goal/Content Area	Activity— Site Connections	Key Concepts (see p. 6)	Wisconsin Model Academic/Core Standard(s)
1	Reading/Language Arts	List things you see and hear.	1, 4	B.4.1
1	Reading/Language Arts	Look for signs of each new season and write informational piece.	4, 5	B.4.1
1	Science	Identify insects for animal group unit.	5	F.4.1
1	Science	Identify parts of plants.	5	F.4.1
1	Science	Collect rocks and list properties.	2, 5	E.4.1
1	Science	Participate in Earth Day clean up.	1, 2, 4, 6	B.4.4 E.4.1
1	Science	Study plant adaptations.	5	F.4.2
1	Math	Collect leaves, make leaf rubbings and classify by shape.	4, 5	C.4.1
1	Math	Find objects and measure, then compare sizes.	4	D.4.4
2	Reading/Language Arts	Take students outside for SSR.	3, 4	A.4.1
2	Reading/Language Arts	Observe and list nouns, etc.	4	B.4.3
2	Reading/Language Arts	Compare/contrast tree types; leaves	5	B.4.1

Grade Level	Skill/Goal/Content Area	Activity— Site Connections	Key Concepts (see p. 6)	Wisconsin Model Academic/Core Standard(s)
2	Science	Study life on the forest floor.	2, 5	E.4.1
2	Science	Study the life cycle of trees and plants.	2, 5	F.4.3
2	Science	Study seeds.	2, 5	F.4.1
2	Science	Study insects.	2, 5	D.4.2
2	Science	Study photosynthesis.	2, 5	D.4.5
2	Math	Study measurement.	3	D.4.1
2	Math	Write story problems involving nature.	4	A.4.2
3	Science	Study different kinds of trees and how they help nature.	2, 5	F.4.3
3	Science	Web how trees help people.	1, 3, 6	F.4.2 F.4.4
3	Math	Compare/contrast leaves and trees using a Venn diagram.	4, 5	C.4.2
3	Social Studies	Study how trees help animals survive and how animals help trees survive.	3, 5	F.4.1
4	Reading/Language Arts	Write a paper detailing the many uses of trees.	4	C.4.6
4	Reading/Science	Assign readings on our natural resources.	1, 2, 4, 6	C.4.6
4	Math	Measure tree length/circumference	1, 2	C.4.1

Middle School Classroom Curriculum Connections

Grade Level	Skill/Goal/Content Area	Activity— Site Connections	Key Concept (see p. 6)	Wisconsin Model Academic/Core Standard(s)
5	Writing Write and understand what a HAIKU poem is.	Hike school forest; select a topic; write a HAIKU poem	1, 3	w.5.1.D
5	Science Understanding of living and non-living factors	Understanding of living & non-living factors in the forest (Scavenger Hunt)	5	F.8.2 F.8.8
5	Science Pond Studies (ecosystems)	Observe inter-relationships of organisms in pond-“yarn-web” game to share observations	2, 3, 5	F.8.8
5	Science/Writing Poetry	Poetry on topics derived from the school forest/nature	1, 3	Writing standard?
6	Science Pond Studies	Study of pond invertebrates (Microscopes)	2, 3, 5	C.8.1 F.8.2 F.8.7
6	Science Insect Identification	Collect, observe & identify insects native to the school forest ecosystem	5	C.8.1 F.8.2 F.8.7
6	Science Plants	Identify stem types, flower structures, root systems	5	C.8.1 C.8.4 C.8.7 C.8.8 F.8.6-9 H.8.1, H.8.3
7	Science Biotic vs. Abiotic Factors in Ecosystem	Observe & document evidence of biotic and abiotic factors & the importance of each in an ecosystem	2, 5	F.8.2 F.8.8
7	Science Cells	Collect samples of various plants to study basic structure of plant cells	2, 3, 5	F.8.1 F.8.3
7	Science Classification/plants	Identify tree species; create dichotomous key	5	C.8.4 C.8.7 C.8.8 F.8.6-9 H.8.1, H.8.3

Grade Level	Skill/Goal/Content Area	Activity— Site Connections	Key Concept (see p. 6)	Wisconsin Model Academic/Core Standard(s)
7	Science Environmental Science	Observe & identify evidence of human impact on forest/pond ecosystems	3, 5, 6	F.8.9 F.8.10
7	Science/Ecology Appreciation of beauty & diversity of nature	Forest clean-up & beautification of forest	4, 6	F.8.8 F.8.10
7	Science/Ecology Invasive Species (Introduction, control resistance, negative impacts)	Remove some of the invasive species we have in our school forest	2, 5, 6	E.8.1-E.8.6
7	Science Fungi	Observe & collect various fungi samples to observe under microscope	5	E.8.2 C.8.4 C.8.7 C.8.8
7	Science Science-related Careers	Discussion of various jobs of people involved in natural resources	1-6	B.8.1-B.8.6
8	Science Rocks & Minerals	Use school forest resources to locate & identify different rock & mineral specimens	2, 5	D.8.1 D.8.2 E.8.5
8	Science Soil Analysis	Collect samples for study & experimentation	2, 5	A.8.6-A.8.8 E.8.3
8	Science Water Studies & Water Testing	Pond site study of water	2, 5, 6	H.8.2
8	Science Erosion & Weathering	Check rates of erosion & weathering	3, 5	E.8.4

High School Classroom Curriculum Connections

Grade Level	Skill/Goal/Content Area	Activity— Site Connections	Key Concepts (see p. 6)	Wisconsin Model Academic/Core Standard(s)
9-12	Social Studies: Government	Taxes of different properties	1	C.12.8
9-12	Social Studies: Economics	Economic value of land over time	1, 2	C.12.8 D.12.2
9-12	Social Studies: Economics	Economics of forestry industry	1, 2	C.12.8 D.12.2
9-12	Social Studies: Geography	Using technology to determine location using GPS, Google Maps, GIS	1	A.12.2
9-12	Social Studies: Psychology/Sociology	Applying research methods	3	E.12.7 E.12.14
9-12	Family & Consumer Science: S.H.A.R.E.	Environmental Science Recycling Planting CC skiing Hiking	2, 3, 5, 6	1.3 2.2
9-12	Phy. Ed.	Cross Country Skiing Snowshoeing Orienteering and GPS	3	A.12.1 B.12.1 D.12.1 D.12.2
9-12	English	Sensory details in poetry and stories	1, 4	B.12.1 B.12.2

Grade Level	Skill/Goal/Content Area	Activity— Site Connections	Key Concepts (see p. 6)	Wisconsin Model Academic/Core Standard(s)
9-12	English	Story simulation – Story Walk	4	A.12.1 A.12.2
9-12	English	School Forest Grant Writing	4, 6	B12.1
9-12	Art	Drawing, sculptures & other forms of art using nature as the inspiration	4	H.12.3 L.12.4
9-12	Agriculture: Wildlife & Forestry	Examine the concept of succession—Illustrate forest succession	2, 5, 6	B.12.4 B.12.6 B.12.9 E.12.3
9-12	Agriculture: Wildlife & Forestry	Identify trees using a dichotomous key	5	B.12.2
9-12	Agriculture: Wildlife & Forestry	Measure the trees in the forest using diameter, circumference, and height to calculate volume & board feet	1, 2	E.12.6
9-12	Technology Education: Construction	Build structures needed for the school forest, including animal houses, benches, gazebo, bridge and other large construction possibilities	3, 4, 6	A.12.1 A.12.2 A.12.3 A.12.7 B.12.2 B.12.5 C.12.4 C.12.6 C.12.9 C.12.10
9-12	Science: Physical Science	Forest Measurements – diameter, circumference, tree height	1, 2	A.12.2, 5 C.12.1-6 D.12.11 G.12.1-5 H.12.1, 5, 6

Grade Level	Skill/Goal/Content Area	Activity— Site Connections	Key Concepts (see p. 6)	Wisconsin Model Academic/Core Standard(s)
9-12	Science: Physical Science	Ecotastic Activities – clinometers to measure tree volume and height	1, 2	A.12.2, 5 C.12.1-6 D.12.11 G.12.1-5 H.12.1, 5, 6
9-12	Science: Physical Science	Forestry Density Measurements – model foresters using a cruiser tool	1, 2	A.12.2, 5 C.12.1-6 D.12.11 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	Tree Identification	5	A.12.2, 5 C.12.1-6 F.12.5 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	Characteristics of Life – living vs. non-living	5	A.12.2, 5 C.12.1-6 F.12.6 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	Food Chains/Webs	2, 5	A.12.2, 5 C.12.1-6 F.12.9, 12 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	Protist Identification (pond life)	5	A.12.2, 5 C.12.1-6 F.12.5 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	Fungi Collection and Classification	5	A.12.2, 5 C.12.1-6 F.12.5 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	Animal Tracks	5	A.12.2, 5 C.12.1-6 F.12.7, 9 G.12.1-5 H.12.1, 5, 6

Grade Level	Skill/Goal/Content Area	Activity— Site Connections	Key Concepts (see p. 6)	Wisconsin Model Academic/Core Standard(s)
9-12	Science: Biology	Orienteering and GPS	3	A.12.2, 5 C.12.1-6 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	Invertebrate Studies – water and soil	2, 5	A.12.2, 5 C.12.1-6 F.12.5 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	Succession Lab – environmental conditions	2, 5, 6	A.12.2, 5 C.12.1-6 F.12.6, 8 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	Abiotic vs. Biotic Factors	5	A.12.2, 5 C.12.1-6 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	Population Studies – diversity measurements	1, 5, 6	A.12.2, 5 C.12.1-6 F.12.6, 7 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	GLOBE protocols	2, 3, 5, 6	A.12.2, 5 C.12.1-6 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	Exotic/Invasive Species	1, 2, 3, 5, 6	A.12.2, 5 C.12.1-6 F.12.7, 8 G.12.1-5 H.12.1, 5, 6
9-12	Science: Biology	Kingdom Classifications	5	A.12.2, 5 C.12.1-6 F.12.5 G.12.1-5 H.12.1, 5, 6

Grade Level	Skill/Goal/Content Area	Activity— Site Connections	Key Concepts (see p. 6)	Wisconsin Model Academic/Core Standard(s)
9-12	Science: Chemistry	Water Quality Testing (pond)	2, 5, 6	A.12.2, 5 C.12.1-6 D.12.11 G.12.1-5 H.12.1, 5, 6
9-12	Science: Chemistry	Soil Testing	2, 5, 6	A.12.2, 5 C.12.1-6 D.12.11 G.12.1-5 H.12.1, 5, 6
9-12	Science: Chemistry	GLOBE Protocols	2, 3, 5, 6	A.12.2, 5 C.12.1-6 D.12.11 G.12.1-5 H.12.1, 5, 6
9-12	Science: Physics	Height of trees measurements – use shadow of tree	1, 2	A.12.2, 5 C.12.1-6 D.12.11 G.12.1-5 H.12.1, 5, 6
9-12	Science: Physics	Ecotastic Activities – Free Falling Filters (leaf and seed dispersal)	5	A.12.2, 5 C.12.1-6 D.12.7, 8 G.12.1-5 H.12.1, 5, 6
9-12	Math	Pythagorean Theorem/Trig with heights of trees, buildings, etc.	1, 2	G-SRT8 G-SRT9 G-SRT10 G-SRT11
9-12	Math	Statistics – use trees sizes, growth	1, 2	S-ID1-6 S-ID2 S-ID3 S-ID4 S-ID5 S-ID6
9-12	Math	Area/Perimeter of forest, prairie, school garden	1, 2	A-CED1 G-MG2

Grade Level	Skill/Goal/Content Area	Activity— Site Connections	Key Concepts (see p. 6)	Wisconsin Model Academic/Core Standard(s)
9-12	Math	Vector addition/subtraction (giving directions to get from one place to another) GPS converting D°m's" to D°	3	N-VM1
9-12	Math	Collect and graph data, identify relationships	4	F-LE2 F-LE3
9-12	Visual Basic Programming	GeoGebra and Google Maps – tree planting layout	4	

Staff Development

Our goals for environmental education are to include attitude or life changes and the establishment of an environmental ethic. For this to be achieved, the district staff needs professional development on creating and infusing environmental education into all subject areas. Professional development is necessary to develop pedagogies to deliver hands-on, inquiry-based activities that reach beyond the classroom to the school forest. Professional development opportunities involving school forests will be shared with all staff by the School Forest Coordinator. The School Forest Committee will work collaboratively with resource professionals and the Chilton School District to provide staff the training necessary to implement environmental education goals involving the school forest and other outdoor educational resources. During the 2011-2012 school year LEAF will hold a half day workshop/in-service for the Chilton Teaching Staff to be hosted within the district and at the school forest. Based on the outcome of this in-service, future workshops will be explored and planned to continue the professional growth of the Chilton staff.

Resources

Pond <ul style="list-style-type: none"> • Educational signs indicating water life • Pier/dock over area of the pond • Bench • Water species identification resources • Nets • Thermometers • Vernier LabQuests and probes 	<ul style="list-style-type: none"> • Calculators • Water sampling equipment • Water quality equipment • Aquatic insect collection equipment • GLOBE Protocol Instruments
--	---

Forest /Prairie

- Paved (or crushed gravel) trails wide enough for wheelchair access
- Educational signs indicating plant species
- Signs defining ecosystems within the forest/prairie
- Pavilion/outdoor classroom
- Picnic tables with wheelchair access
- Benches
- Compasses
- Snowshoes
- Cross country skis
- GPS
- Stations for a fitness trail
- Trail signs with mileage
- Stop watches
- Fruit trees
- Evergreen trees-wreath making
- Deer camera (motion activated)
- Garbage containers/recycling containers
- Tree pruning supplies
- Garden tools
- Composting pile
- Map of school forest/prairie
- Plant and animal identification cards
- Large wheeled wagons for transporting equipment/children
- Binoculars
- Measuring tapes
- Bird feeders
- Habitat construction materials
- Soil testing kits
- Goggles
- Magnifying lenses
- First aid kits
- Collection tools
- Bug boxes
- Storage containers
- Dry-erase boards
- Insect spray
- Clipboards
- Unit totes
- Feather study equipment
- Dissection kits
- Rocks from all over Wisconsin
- Leaf rubbing plates
- Scat replicas of several common animals
- Books dealing with forest/prairies
- Digital Cameras
- Vernier LabQuests and probes
- Calculators
- Clinometers
- Densimeters
- Forest/prairie field guides (birds, wildflowers, trees, reptiles/amphibians, tracks, scat, etc)
- GLOBE Protocol Instruments
- Meter sticks
- String or rope
- Marking Flags

Assessment

The goal of the school forest program is to increase student learning and environmental awareness through regular, sustained utilization of the school forest.

The on-going success of the school forest program will be assessed periodically by surveying staff and using the School Forest Tracking Tool to determine usage and perceived value of the school forest for educational purposes. Student environmental knowledge and awareness will be assessed by individual teachers within their classroom.

Data from the surveys will be analyzed on a 3-5 year basis to evaluate the effectiveness of the educational plan, and the development of the forest. Any changes or modifications to the educational plan and school forest will be addressed.

Sustaining the School Forest Program

School Forest Committee

Tracy Bartels
School Forest Coordinator, Science Teacher
Chilton High School
bartelst@chilton.k12.wi.us

Sara VanderPas
Special Education Teacher
Chilton Middle School
vanderpass@chilton.k12.wi.us

Amy Downham
7th Grade Science Teacher
Chilton Middle School
downhama@chilton.k12.wi.us

Frank Kirschling
DNR Forester
Calumet & Outagamie Counties
Frank.Kirschling@Wisconsin.gov

Jamie Koehler
FACS Teacher
Chilton Middle & High School
koehlerj@chilton.k12.wi.us

Gretchen Marshall
School Forest Coordinator
LEAF/UW-Stevens Point
Gretchen.Marshall@uwsp.edu

Karen Van Offeren
Title 1 Teacher
Chilton Elementary & Middle School
vanofferenk@chilton.k12.wi.us

Communication

- In 2010, the Chilton School Forest Educational Plan will be shared with all Chilton staff members during faculty meetings.
- In 2011-2012, Chilton staff members will be trained in forest related activities that meet the educational goals and curricular connections within the educational plan.
- Information will be shared with the community and school staff and students via the school newspaper, community newspaper, school website, and the district newsletter.
- A school forest website will be established in the future to continue the communication of the activities involving the school forest.

Long Range Plan

- Continue the experiential, hands-on, outdoor focused curriculum to maximize student learning at the school forest.
- Provide on-going workshops to meet specific instructional needs for school forest experiences.
- School forest representation on the physical education department's Adventure Education Advisory Board in response to the receipt of their PEP Grant.
- Pave the existing and new trails with gravel or alternate materials for wheelchair accessibility.
- Build a gazebo or classroom shelter within the school forest.
- Interpretive signs for different plant species and unique ecosystems within the forest.
- Install Chilton School Forest signs at both trailheads.
- Build a pier along and within the pond to gain access to the water resource.
- Build bridges to cross the stream to access other forest ecosystems and develop additional trails.
- Manage the school forest to eradicate invasive species; plant desirable, native species to generate more diversity within the forest.
- Plant trees to expand the school forest.
- Maintain and expand trails within the forest.
- Create a Memorial Trail throughout the existing forest and newly planted forest to enhance the Chilton Tree Board's Memorial Tree Program.
- Plant donated memorial trees through the Chilton Tree Board's Memorial Tree Program.
- Develop a fitness trail in cooperation with the Physical Education Department on school grounds that would incorporate the school forest and prairie resources to be accessible for students and community members.

Implementation Plan

Funding resources would be sought through community donations, grants, and other sources to accomplish our long range goals for the school forest. The following is a projected timeline for some of the major projects planned for implementation in the school forest.

- 2010-2011 → School forest representation on Adventure Education Advisory Board
- Spring 2011 and ongoing → Eradicate invasive species
- Spring 2011 and ongoing → Plant tree seedlings for school forest expansion and increasing diversity within the forest
- 2011-2012 and ongoing → LEAF Workshops/In-service
- 2011-2012 → Interpretive signs and trailhead signs
- 2012-2013 → Pave handicap accessible trails and develop fitness trail
- 2013-2014 → Build gazebo or other outdoor classroom structure
- 2014-2015 → Build pond pier and bridges
- Ongoing → Forest and trail maintenance and development

District Commitment

In spring 2009, the Chilton School Board supported the Wisconsin Environmental Education Board's (WEEB) Educational Plan Grant with matching funds in order to develop a district wide educational plan. A follow-up commitment will be sought after the completion of the grant project in December 2010.