

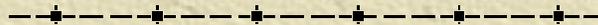
# **Art and Science: Where Do You Draw the Line?**

*A Thoreauvian  
Interdisciplinary Study*



**Or**

**Wayne & Dave's Excellent  
Summer Vacation**



# What to Expect Today:

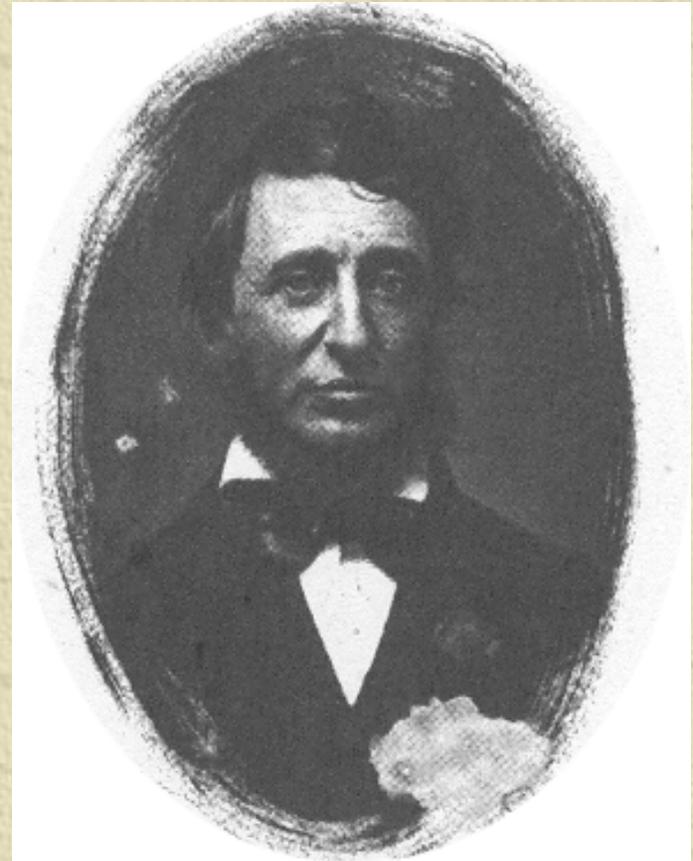
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- Henry David Thoreau and the institute
- The curricular workshop
- Our publication (*the model in theory*)
- Movie “*The Shape of Things*”
- The model in practice
- Student work
- Questions and comments

# Henry David Thoreau (1817-1862)

---

- ❖ Literary genius?
- ❖ First hippie?
- ❖ Wilderness recluse?
- ❖ Jailbird?
- ❖ Abolitionist?
- ❖ First Concordian  
“kook”?
- ❖ New England  
adventurer?



# *CURRICULUM VITAE*

## **Henry David Thoreau**

**Main Street, Concord Massachusetts**

---

*Experience:* Schoolmaster, private tutor, land surveyor, gardener, farmer, house painter, carpenter, mason, day-laborer, pencil-maker, glass-paper maker, writer, poet, naturalist

*Goal:* To find employment that will make use of any of my many practical skills, allowing me the freedom to pursue my interest in the outdoors, writing and teaching.

*Special accomplishments:* Established a private school for advanced students with brother, John (1833-1841); Designed successful pencil for Thoreau Pencil Factory, family business (1843). Built and lived in a cabin beside Walden Pond in Concord for two years (1845-1847)

*Education:* Concord Academy, Harvard College (1837)

# Henry David Thoreau

## *Curriculum Vitae (Continued)*

---

***Languages:*** Some fluency in Greek, Latin, Italian, German

***Publications:*** Books: *Walden, or Life in the Woods, Week on the Concord and Merrimack Rivers, Transmigration of the Seven Brahmins, A Yankee in Canada, Excursions in the Field and Forest, The Maine Woods, Cape Cod*

***Also:*** “Civil Disobedience,” “Plea for Captain John Brown,” “The Last Days of John Brown,” “Journal,” “The Natural History of Massachusetts,” “The Relation of the Individual to the State.”

***Memberships:*** The Hedge Club, Concord Lyceum

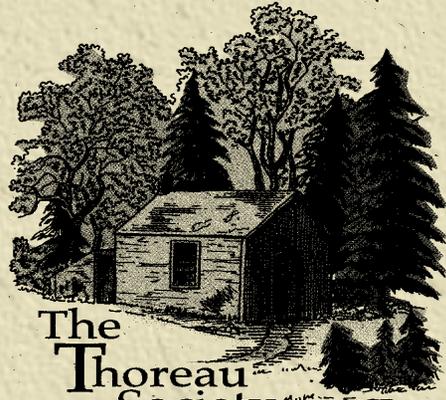
***References:*** Mr. Ralph Emerson, Mr. Bronson Alcott, Louisa May Alcott, Mr. Nathaniel Hawthorne

# The Thoreau Society

## Our Mission

---

The oldest and largest organization devoted to an American author



The  
Thoreau  
Society  
Founded in 1941

*“Could a greater miracle take place than for us to look through each other’s eyes for an instant?”*

*Walden*

- ✦ To stimulate interest in and foster education about the life, works and philosophy of Henry David Thoreau and his place in his world and ours
- ✦ To coordinate research on Thoreau’s life and writings
- ✦ To act as a repository for Thoreauviana and material relevant to Thoreau

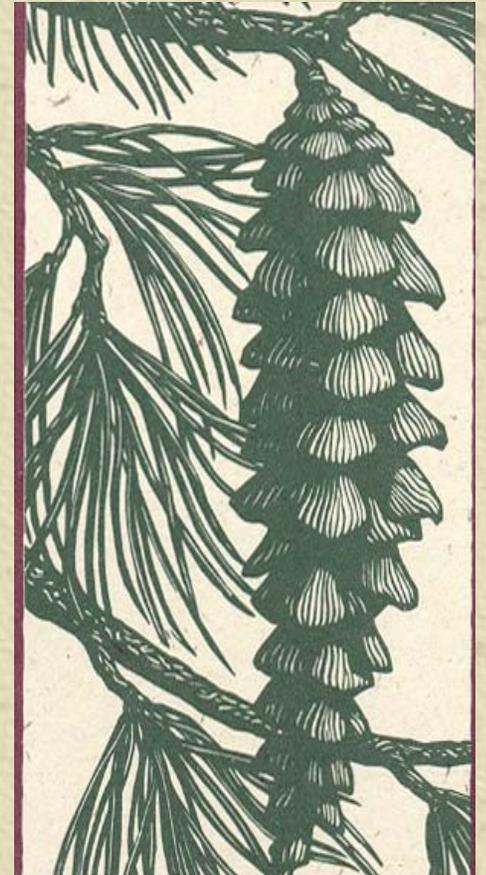
# The Thoreau Institute

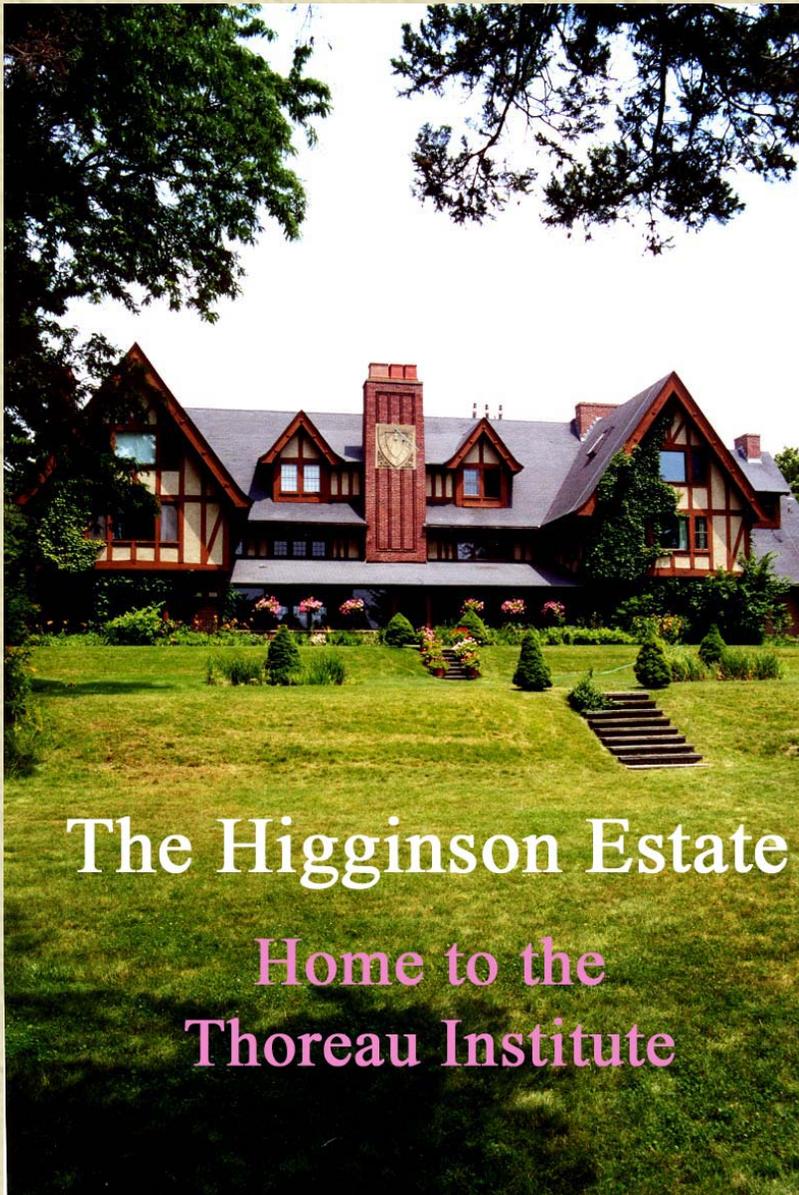
44 Baker Farm

Lincoln, MA 01773-3004

---

- ❖ Center for research and education focused on Henry David Thoreau, his literary achievements and philosophy, and his influence on environmental and social movements
- ❖ Provides opportunities for life-long learning about Thoreau's life and work
- ❖ Collaboration between the Walden woods project, its parent organization, the Isis fund and the Thoreau society





## The Higginson Estate

Home to the  
Thoreau Institute



- Institute was founded by recording artist Don Henley in 1990
- In eight years raised \$18 million for purchase of 100 acres of land in Thoreau's woods
- Purchased Higginson Estate in 1994
- Built Thoreau Research Center and Library in 1996

# The Research Center

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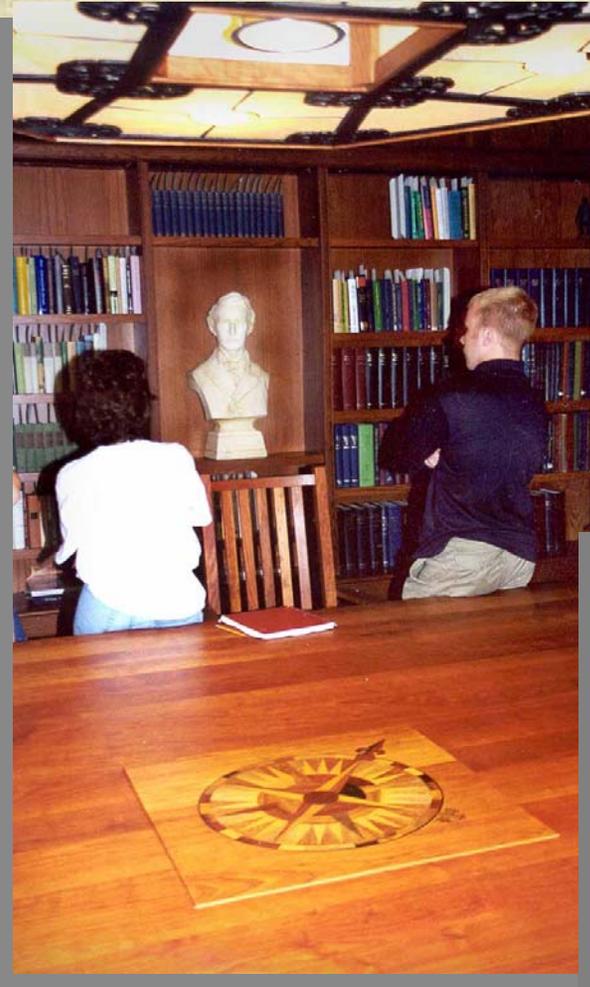
- ✦ Houses the library, reading room and media center
- ✦ Houses the most important Thoreau collections in the world:
  - ◆ (3) collections of Raymond Adams, Roland Robbins and Walter Harding
  - ◆ Scott and Helen Nearing Collection
  - ◆ Thoreau Society Archives



*Includes books  
manuscripts, artifacts, field  
notes, photographs, maps,  
surveys, audio and videotapes,  
slides and scrapbooks*

# Media Center

Dave talks with Bradley P. Dean,  
Editor of Wild Fruits



## Library

HDT silently lectures



Wayne's "Place"

## The Courtyard





# “Saunters”

Reading the Forested  
Landscape, a walking  
tour with ecologist  
Tom Wessels

Walden Pond  
walking tour with  
Tom Harris,  
Director of the  
Thoreau Society

*The view from  
Henry's house*



# “Types and Sites”

— — — — —

Observation and  
Identification in Nature with  
Chris Leahy, Director of Mass  
Audubon Society’s Center for  
Biological Conservation



Surveying concord  
with Jayne Gordon

*Jail site: Henry's  
overnight for civil  
disobedience*



## “The Old Manse”

R.W.Emerson’s grandfather, Ezra Ripley witnessed the North Bridge battle from this home. Later it was rented to Nathaniel Hawthorne.

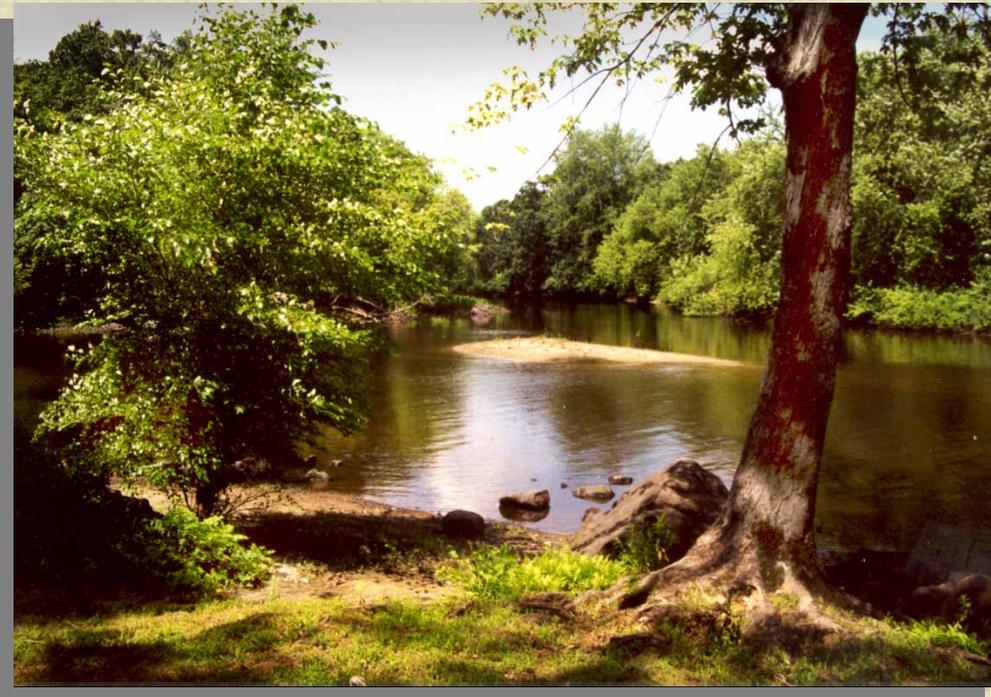
Hawthorne, Emerson, and Thoreau, not only wrote in this same home but ice skated here on the Concord River



# “Why Concord?”

## Concord Museum’s historical and literary exhibit

- 
- Reasons for Revolution
  - Emerson’s living room
  - Thoreau’s walking stick



## Lunch and lecture on the Concord River

*Critical analysis of “Walking” and the concept of “wildness” with Thoreau Scholar Ron Hoag*



# “Nature shapes history”

Natural and cultural history interconnections led by environmental historian Brian Donahue

Excursion on Minute Man National Park's Battle Road Interpretive Trail

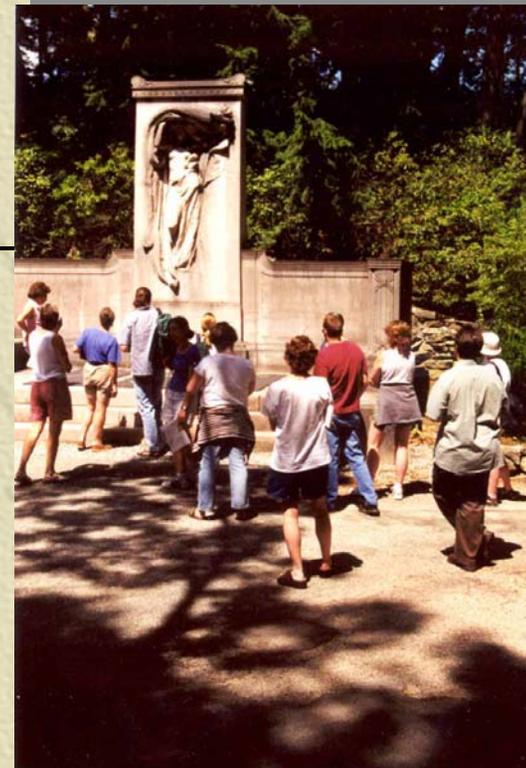
*The view Miriam's Corner and the newly renovated stone wall*



# Monuments “big” and “small”

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## Sleepy Hollow Cemetery



**Civil War monument  
and Henry's grave**

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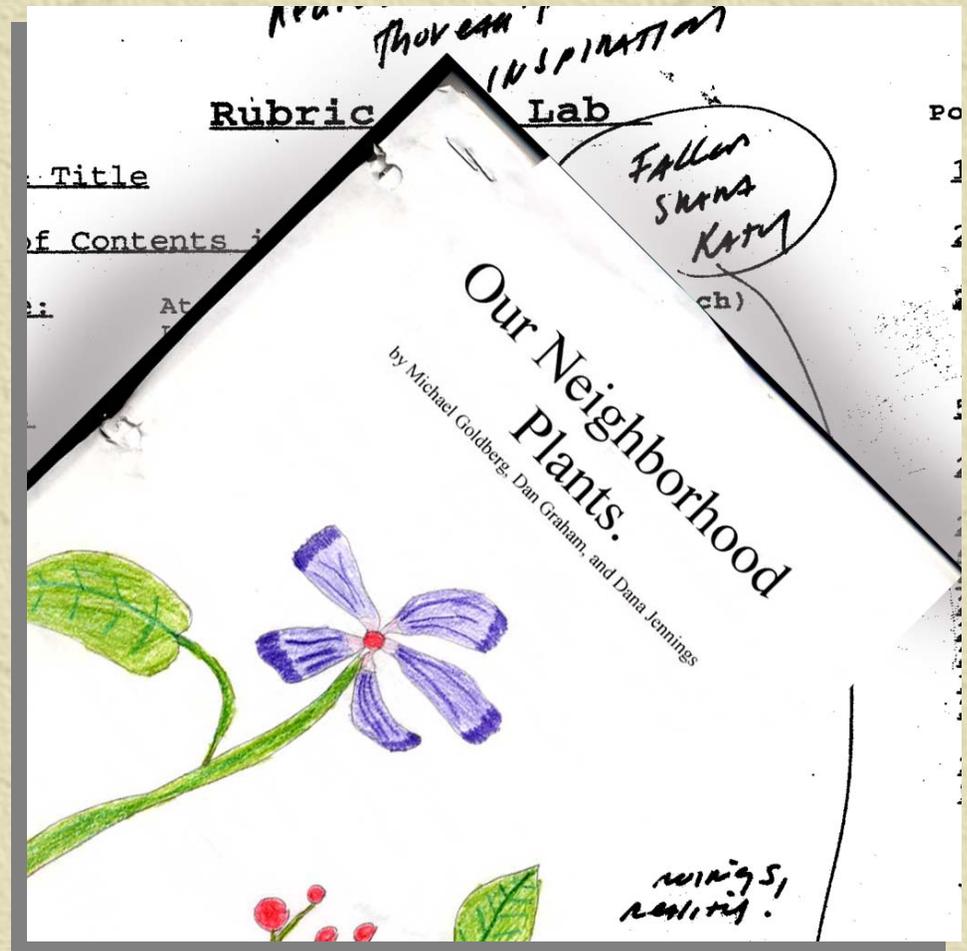
*“The west side of every wood and rising ground gleamed like the boundary of Elysium, and the sun on our backs seemed like a gentle herdsman driving us home at evening.” -Walking*

# The Model in Practice

## Environmental Science

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The following are  
some of the works  
of Burlington  
Environmental  
Science students  
under the  
direction of  
C. David Luther



# A Table of Contents

Table of Contents	
Introduction/Purpose <i>I know</i>	1 ✓
Materials-	2
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Pepperweed	3-5
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The inventory of what is to be found in the report

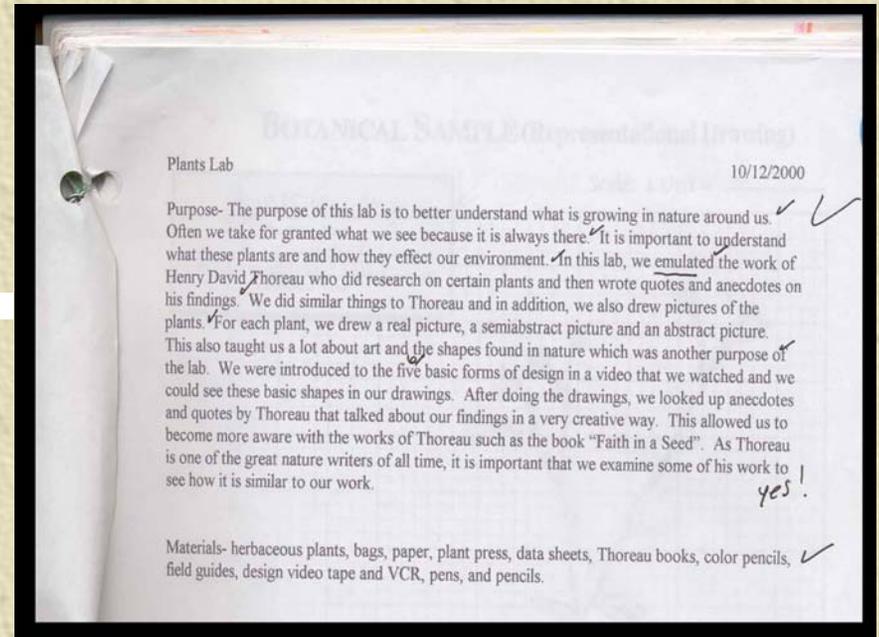
- ✓ Purpose/Introduction
- ✓ Procedure followed
- ✓ Materials
- ✓ Journal pages
- ✓ Illustrations
- ✓ Conclusion
- ✓ Bibliography

# A Purpose

The narrative statement  
of what the students  
intend to show

“In this lab, herbaceous  
plants native to New  
England, specifically the  
Burlington area, were  
collected and drawn  
according to Thoreau’s  
methods and  
descriptions.”

...Environmental Science  
Student



*“All is perfectly distinct to an  
observant eye, and yet could easily  
pass unnoticed by most...”*  
...H.D.Thoreau

# Data Pages (New England Aster)

Aster nova Engländer  
Scientific Name

New England Aster  
Common Name

## BOTANICAL JOURNAL

"... both ice crystals and leaves were the creatures of one law."  
-Henry David Thoreau

August 2000

**Directions:** As you observe your field sample, write a paragraph as H.D. Thoreau would have for each of the characteristics listed below. Feel free to use, add to, and share the wordpool.

**Habitat** (pond, brook, pasture, cultivated, meadow, topography, broadleaf, pine or mixed forest, succession, soil type, etc.)  
Fallon found the New England Aster in my yard near a mixed forest with good soil. ✓

**Climate** (Season, date, time, weather, temp, wind speed, wind direction, etc.)  
The season is fall and the New England Aster seemed to be blooming well. Fallon picked these in the afternoon when the weather was warm and sunny. The wind was not as big a factor because it was probably less than 9 mph. ✓

**What do you see?** (leaf type, design, shape, arrangement, size, color, texture, buds, flowers, fruits, seeds, dispersal mechanism, insects, birds, animals and their evidence, etc.)  
This plant has a long stem and purple flowers. The leaves are larger near the bottom of the plant and they grow smaller at the top. The plant is erect and slightly bushy and is very tall. The seeds of the aster are a good fall and winter food for songbirds. ✓

Lambert/Title

good this is what we meant!

Fallon Hauser Student Name      Data Page # 4      10/4/00 Date

Aster Nova Engländer  
Scientific Name

New England Aster  
Common Name

## BOTANICAL JOURNAL (Continued)

"... we're still far from the time when people will understand the curious relation between one fragment of nature and another, which all the same explain each other and enhance each other."  
-Vincent VanGogh

**What did "Henry" say?** From your selected or optional readings and required readings ("Faith in a Seed" and "Wild Fruits"), select at least two quotes which offer insight into your personal observations.

"Early in November many goldenrods and aster buds, which have been hoary for a month, are now and exuberantly downy, their seed just on the point of falling or being blown away, before they are in the least weather-beaten" \*  
②      good resonance!

August 2000

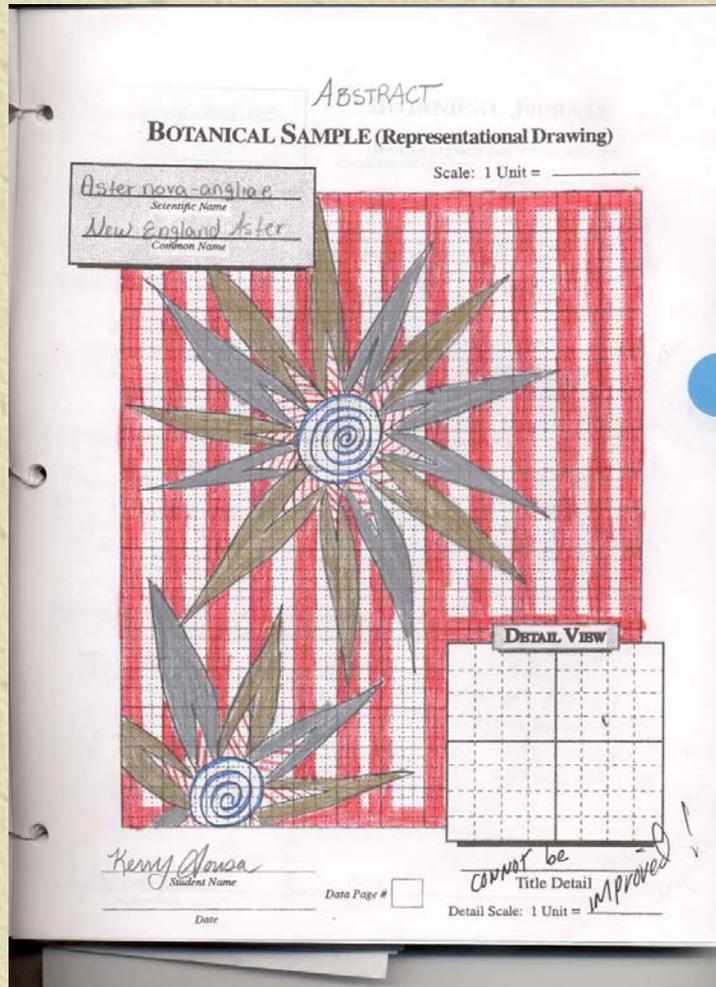
**What else have you learned from this fragment of nature?**  
This fragment of nature shows that I think the flower can be beautiful even in its stage of being blown away. The purple + yellow flower added life to the other weeds. It stands out not only because of its color but because of its height and structure.  
just like H.D.T could have said!

Lambert/Title

Fallon Hauser Student Name      Data Page # 5      10/4/00 Date



# Abstract



“Star like multi-petaled flowerheads . . . Where they fill spangled fields . . . Even botanists find it requires patience to distinguish the many species.”

*-Kerri Sousa*

# Data Pages (Deadly Nightshade)

Solanum dulcamara  
Scientific Name

Deadly nightshade  
Common Name

## BOTANICAL JOURNAL

"... both ice crystals and leaves were the creatures of one law."  
-Henry David Thoreau

August 2000

**Directions:** As you observe your field sample, write a paragraph as H.D. Thoreau would have for each of the characteristics listed below. Feel free to use, add to, and share the wordpool.

**Habitat** (pond, brook, pasture, cultivated, meadow, topography, broadleaf, pine or mixed forest, succession, soil type, etc.)

The deadly nightshade was found in late September on the edge of a mixed forest. They were found among many other weeds common to the fall months of New England.

**Climate** (Season, date, time, weather, temp, wind speed, wind direction, etc.)

The deadly nightshade was found in late September. The wind speed was low and the temperature was in the mid to high 60's.

Lathrop/Little

**What do you see?** (leaf type, design, shape, arrangement, size, color, texture, buds, flowers, fruits, seeds, dispersal mechanism, insects, birds, animals and their evidence, etc.)

Deadly nightshade has small red berries; the less mature ones are orange in color. They form what is known as "drooping clusters." It is a variety of color and the branches are green, the sepals blue and as stated before the berries red+orange. *Nice!*

Kellen  
Student Name

Data Page # 4

Oct. 2000  
Date

## BOTANICAL JOURNAL (Continued)

Solanum dulcamara  
Scientific Name

Deadly Nightshade  
Common Name

August 2000

"... we're still far from the time when people will understand the curious relation between one fragment of nature and another, which all the same explain each other and enhance each other."  
-Vincent VanGogh

**What did "Henry" say?** From your selected or optional readings and required readings ("Faith in a Seed" and "Wild Fruits"), select at least two quotes which offer insight into your personal observations.

"The what a variety of color! ... They hang more gracefully over the river's brim than any pendants in a lady's ear. Yet they are considered poisonous!"

wonderful!  
August 2000

2

**What else have you learned from this fragment of nature?**

This fragment of nature shows that bad things, in this case poisonous, are very appealing to the eye. Something so beautiful can be so bad for you.

well said!  
just like H.D.T.!

Kellen  
Student Name

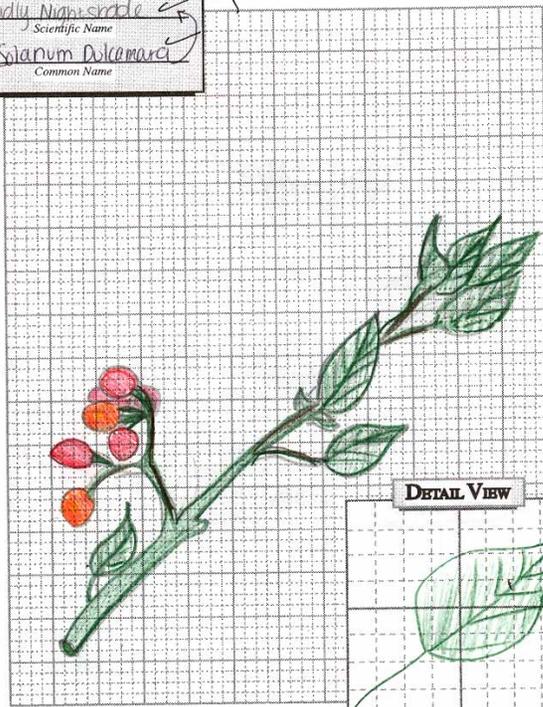
Data Page # 5

Oct. 2000  
Date

### BOTANICAL SAMPLE (Representational Drawing)

Scale: 1 Unit = \_\_\_\_\_

*Deadly Nightshade* ←  
Scientific Name  
→ *Solanum Dulcamara*  
Common Name



Shara Hegde  
Student Name  
Sept. 21-00  
Date

Data Page #

Title Detail  
Detail Scale: 1 Unit = \_\_\_\_\_

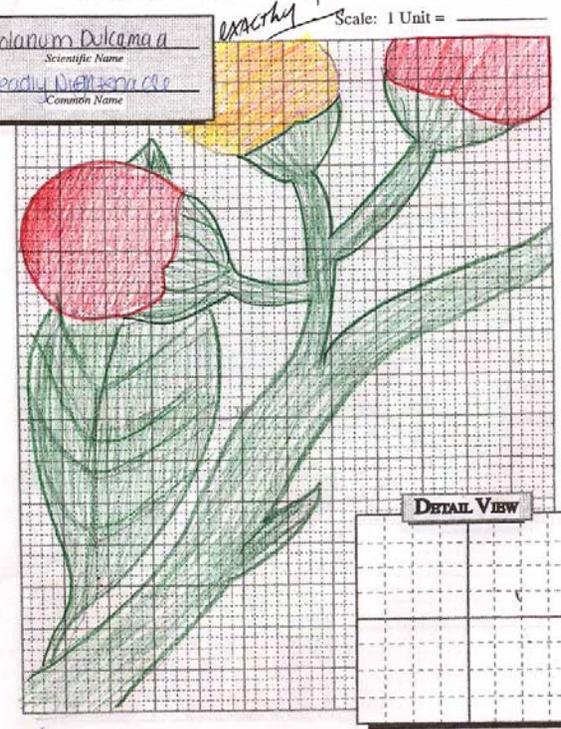
# Representational

# Semi-Abstract

### BOTANICAL SAMPLE (Representational Drawing)

Scale: 1 Unit = \_\_\_\_\_

*Solanum Dulcamara*  
Scientific Name  
*Deadly Nightshade*  
Common Name

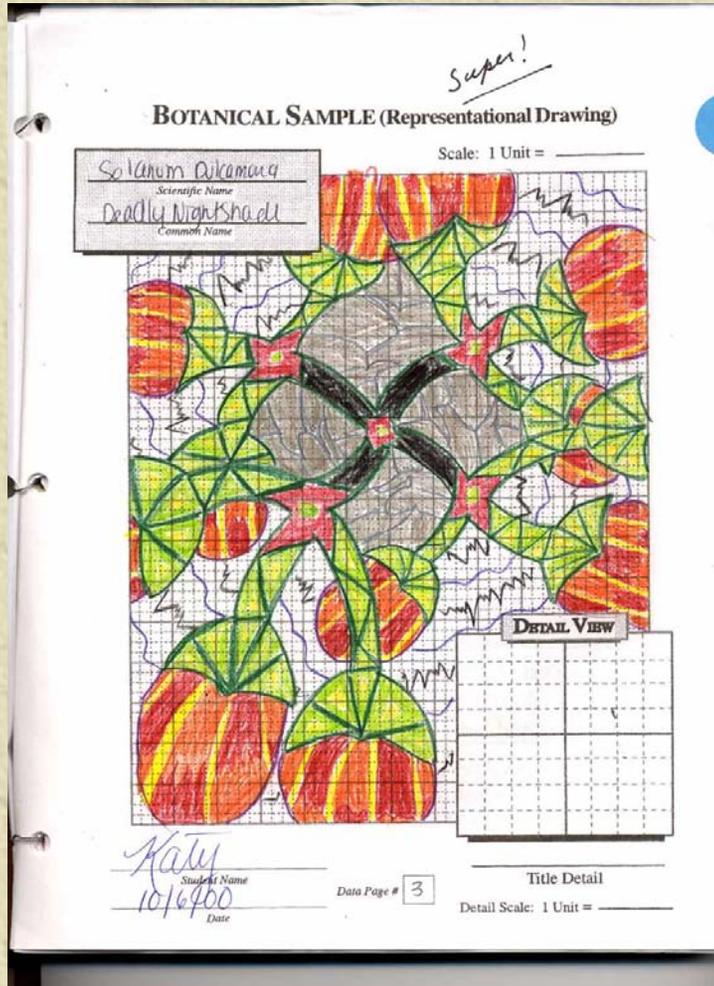


Katy  
Student Name  
Date

Data Page #

Title Detail  
Detail Scale: 1 Unit = \_\_\_\_\_

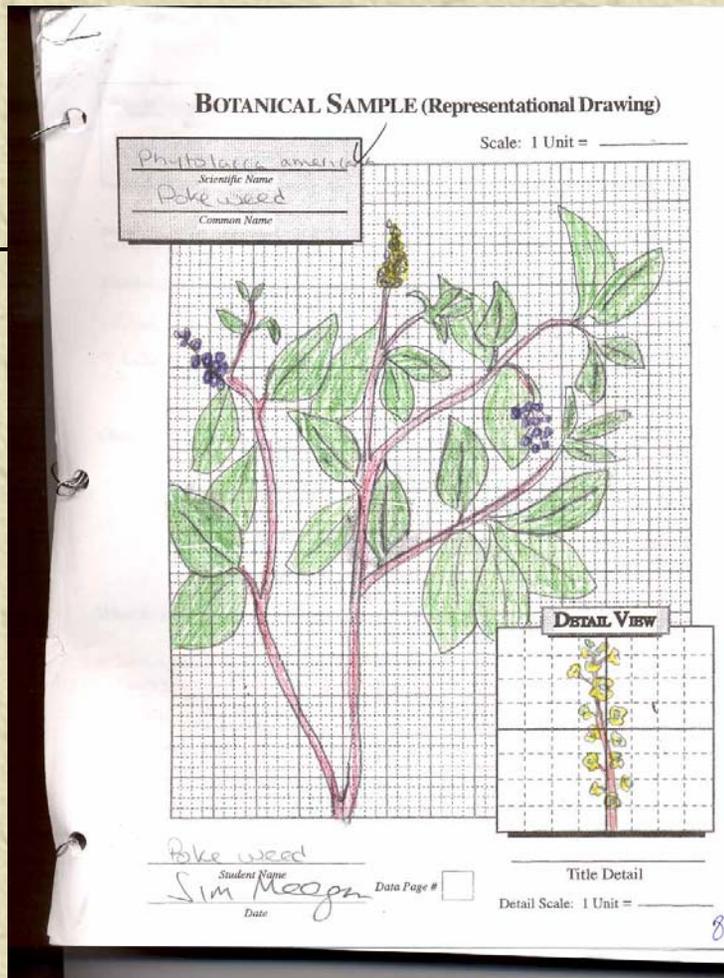
# Abstract



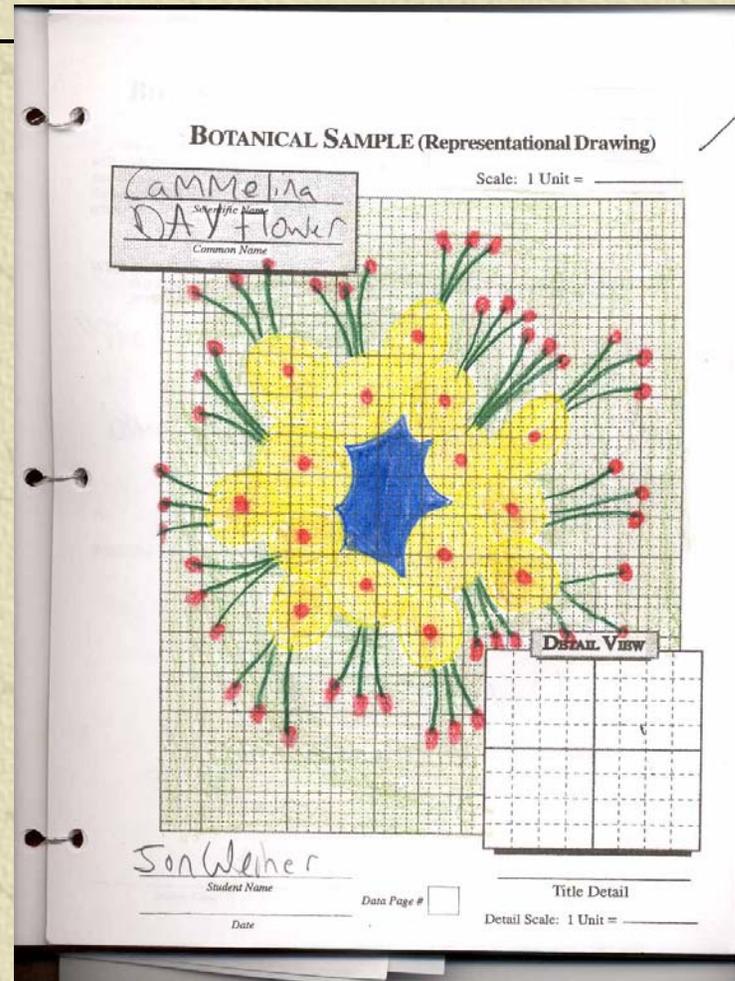
“... This plant is actually considered poisonous, yet it is beautiful as well . . . With small red berries, the younger they are the more orange they are . . . Found on a warm day in late September.”

*-Debra O'Brien*

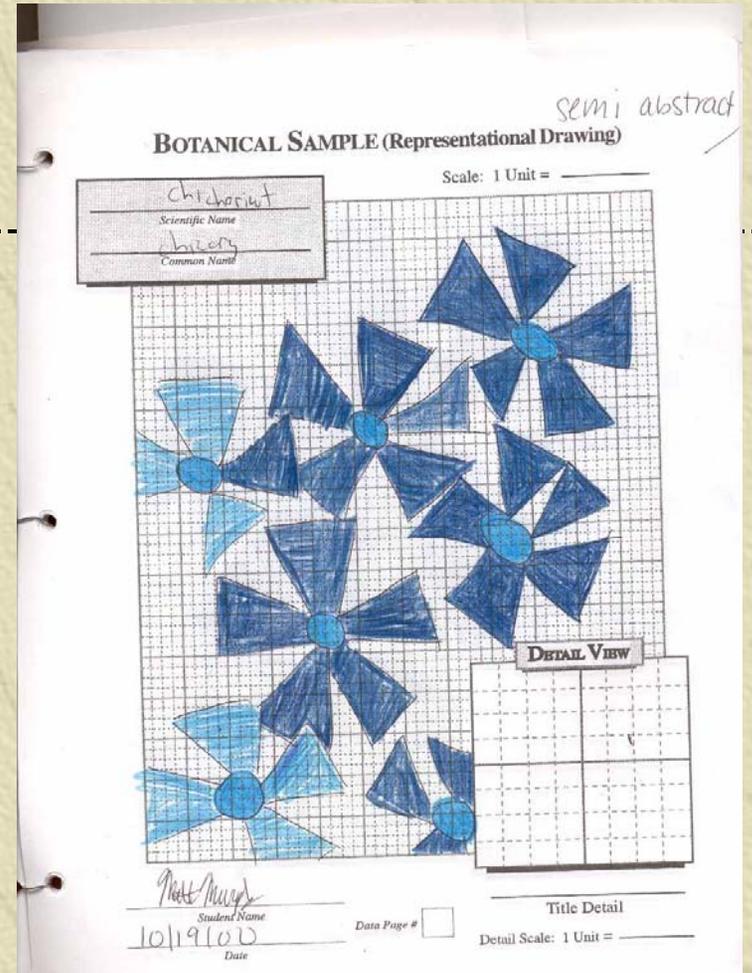
# Abstract Dayflower



# Representational Pokeweed



# Abstract Wood Sorrel



# Abstract Chicory

# A Conclusion

“In this lab, we performed the same activities that Henry David Thoreau accomplished over 100 years ago in the woods and lands of New England. Thoreau was a very influential man and his works along with Ralph Waldo Emerson’s are emulated everyday by botanists and environmentalists. In this project, we acted like botanists because we **discovered, classified** and then **drew** the plants in many different ways.

We also answered questions and found quotes from Thoreau’s books **Wild Fruits** and **Faith in a Seed**. These books offered great insight as to what Thoreau was thinking as he found and classified these plants. The way Thoreau described these plants showed his love for them and nature. His vivid descriptions to describe the plants were amazing and made us think differently about the plants we were studying.”

*-Fallon Hauser, Shara Hegde, Katy Driscoll*

# Another Conclusion

“In this lab, **herbaceous plants** native to New England, specifically the Burlington area, were collected and drawn according to Thoreau’s methods and descriptions. A botanical journal was then filled out for each of the 36 plants collected in this lab. This journal asked and answered questions about the **habitat, climate** and **description** of each plant. Furthermore, in some samples, **quotes from Thoreau** himself were applied to the specific plant.

A **semi-abstract** and **abstract** drawing was completed for at least one plant. In this creative aspect of the lab, one could truly appreciate the beauty and complexity of a plant’s structure. The **helixes, spirals, branches, meanders, spheres,** and **hexagons** that make up a plant’s appearance can be found within the 36 classifications in this lab. Also the fact that things come in threes and fives has proven true once again in this lab.”

*-Danielle Blanc, Amy Lavoie, Diane Lozier, Kerry Sousa*

# Bibliographies

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Martin, Alexander C., Weeds: Golden Press, New York, 1987. ✓

Martin, Alexander C., Flowers: Golden Press, New York, 1987. ✓

## Bibliography

Alden, Peter, National Audubon Society, *National Audubon society Field Guide to New England*: Knopf, May, 1998.

NOVA. *The Shape of things*: PBS, 1995.

Thoreau, Henry D., Bradley P. Dean (Editor), Abigail Rorrer (Illustrator), *Faith In A Seed: The Dispersion of Seeds and other late natural history writings*: Island Press, May, 1996.

Thoreau, Henry D., Bradley P. Dean (Editor) Abigail Rorrer (Illustrator), *Wild Fruits: Thoreau's rediscovered last manuscript*: w. w. Norton and Company, November, 1999.

Martin, Alexander C., *Weeds*: Golden Press. New York, 1987.

Martin, Alexander C., *Flowers*: Golden Press. New York, 1987. ✓

- ✠ Books
- ✠ Periodicals
- ✠ Video presentations
- ✠ Web sites
- ✠ Interviews

# The Model in Practice

## Ninth Grade Design

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**The following  
are some of the  
works of  
Burlington  
Design students  
under the  
direction of  
Wayne D. Little**

Donald Morgan  
10-12-00  
Burlington High School  
West  
Coast

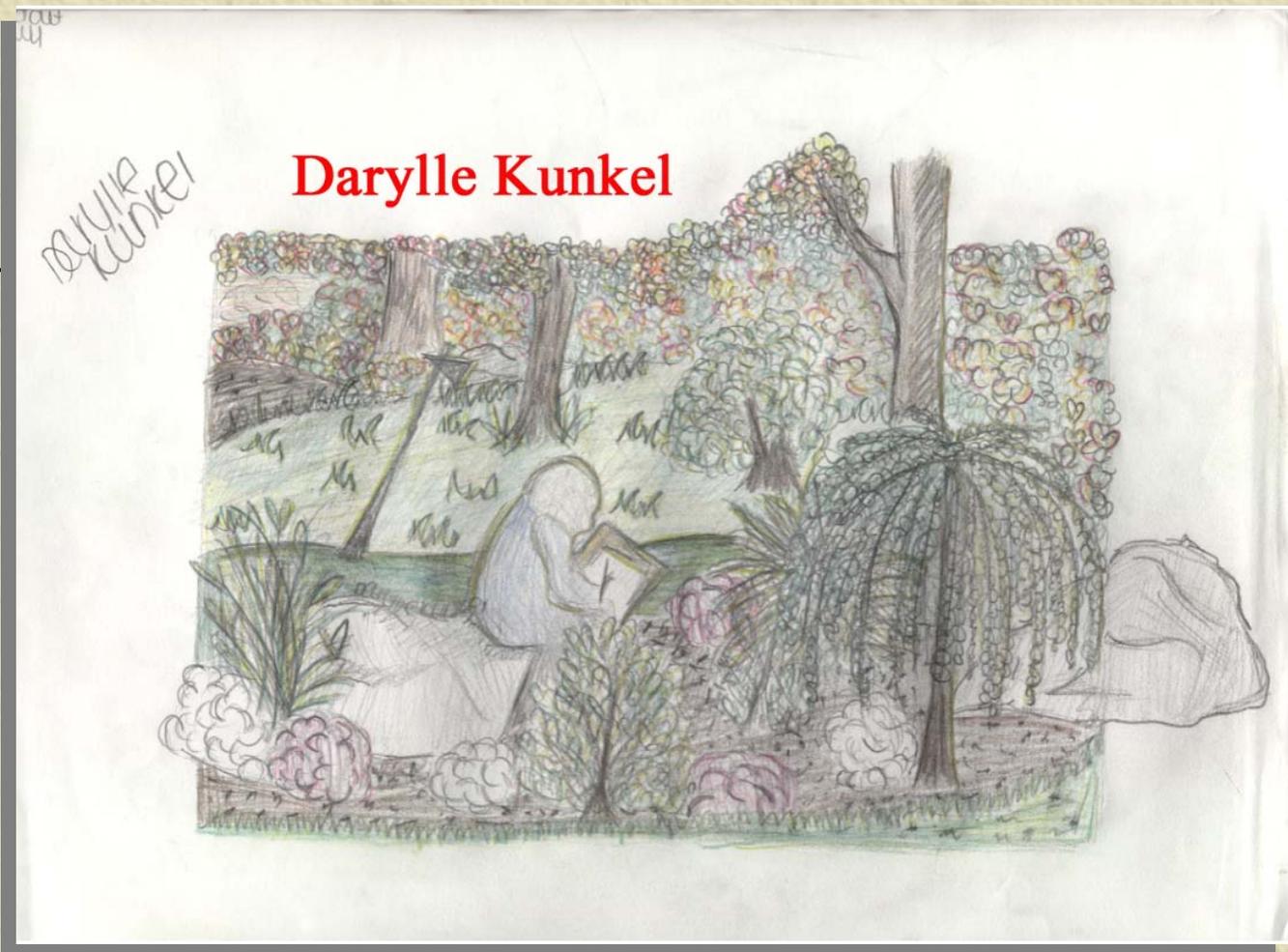
**Donald Morgan**



# A Journal Page

Each Design student had to work outside and do a series of observational drawings which included:

- ✓ An overall landscape
- ✓ An observation of a single tree from within that overall view
- ✓ A detail from that tree
- ✓ Personal observations



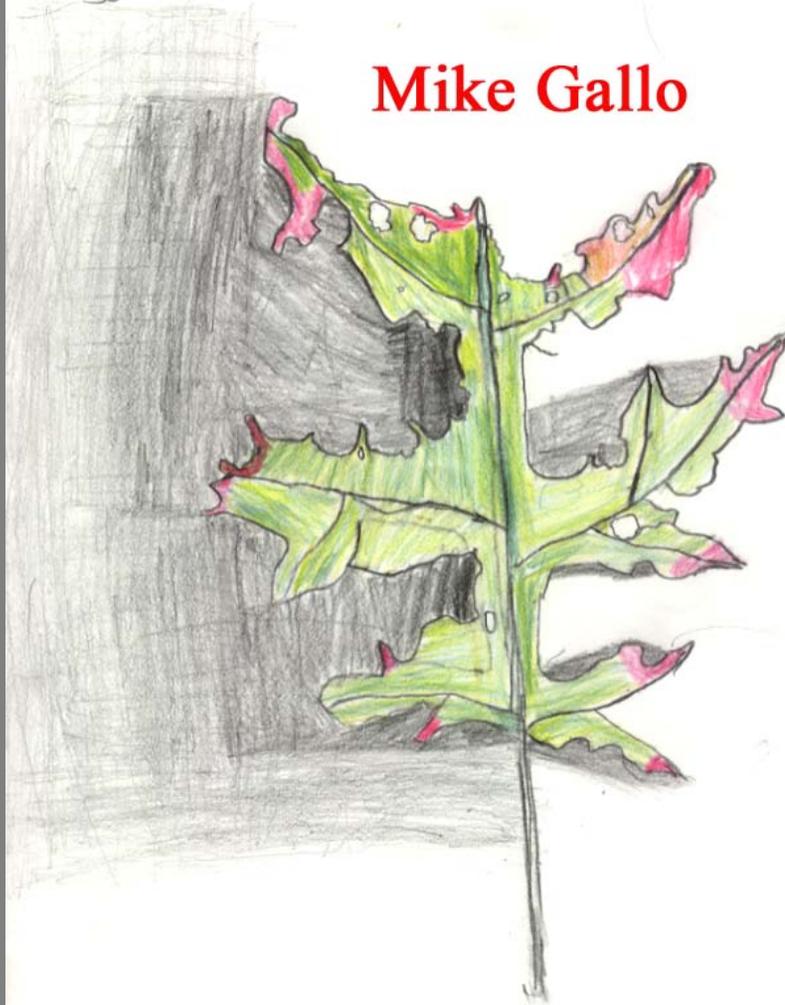
**Darylle Kunkel**

“The thing that I most liked about being outside was getting to be out in the fresh air. Also it was fun drawing all the trees.”

**Impressions**

10/14/06 Michael Gallo  
It was cold  
& no sun  
55°

## Mike Gallo



# Details

“When we went outside I felt calm while drawing and I thought it was relaxing.”

*-Mike Gallo*

# Light

“The thing I liked about this assignment was the challenge of making a smaller and larger picture of one object.”

*-Lucas Hammond*



**Lucas Hammond**

Stephanie Meyer 10/11 BHS (out of front) running to southwest



Oct 11  
cloudy  
55°

Oct 17  
cloudy  
53°



OCT 17  
53° cloudy

**Stephanie Meyer**

# Structure

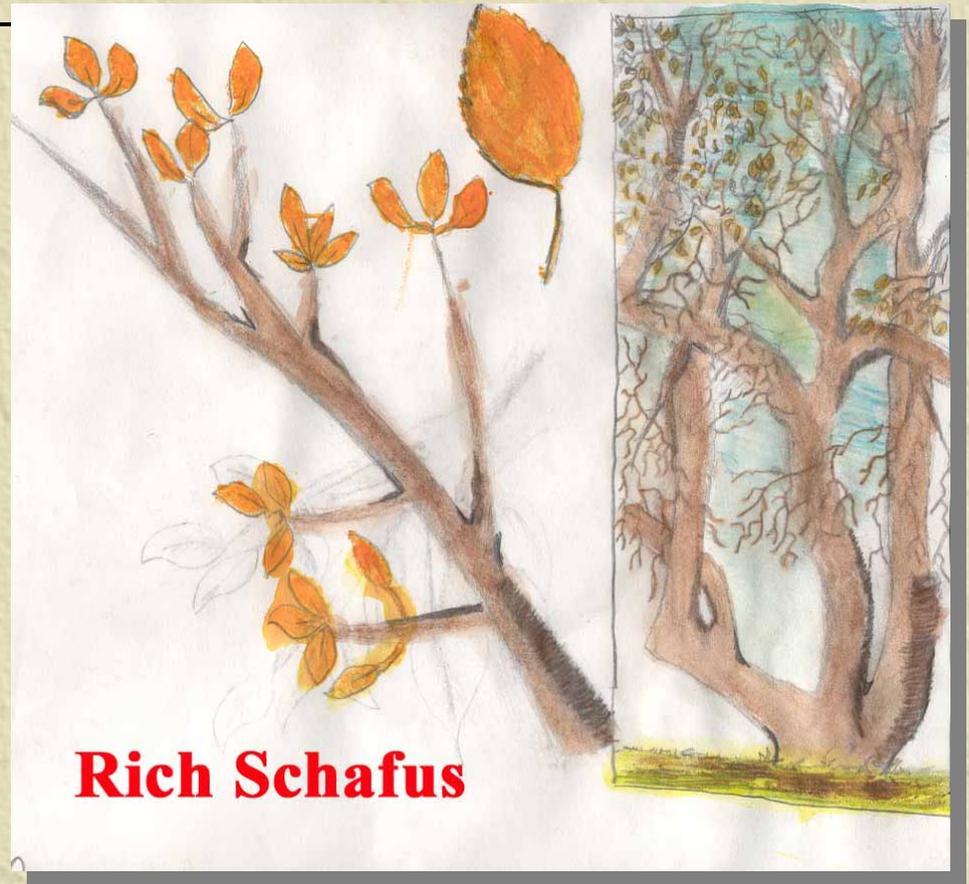
“I observed the proper way to shade while our class went outside.”

*-Stephanie Meyer*

# Atmosphere

“Drawing outside I felt related and my mind was open. I think if everyone took the time to look at nature the world would be less stressful.”

*-Richie Schafus*





# Design

---

“I enjoyed working outside because it gave me a good point of view which allowed me to notice the true qualities of nature.”

*-Donald Morgan*

# Realism

“I had fun going outside to draw nature; the challenge of drawing small details on leaves and trees results in enjoyment for me.”

*-Laura Young*



# Special Thanks to:

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Jayne Gordon, Helen Bowdoin and our friends  
from the Institute

■  
Bill Brown and Joan Tuttle, Burlington  
Media Services

Our Students whose talent and effort made  
this possible