

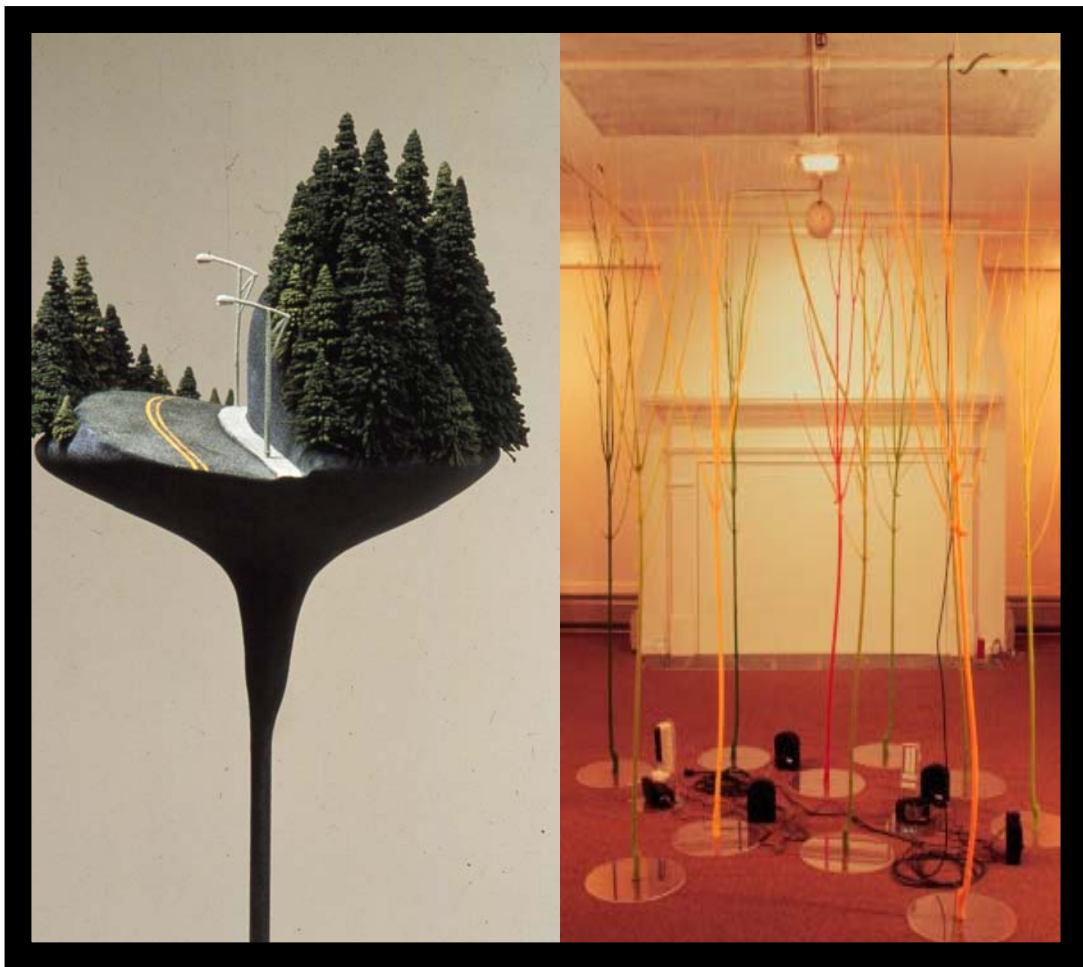
Earth, Wind, and Desire: Nature Park

Featuring Rob de Mar and Victoria Palermo

October 2, 2003 – February 1, 2004

TEACHER CURRICULUM GUIDE

FALL 2003



(L) *Street Lamp II*, Rob de Mar, 2001. (R) *Virgin Timber*, Victoria Palermo, 2003.

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Earth, Wind, and Desire: Nature Park

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Introduction to *Earth, Wind, and Desire: Nature Park*

Exhibition Overview

Earth, Wind, and Desire: Nature Park has transformed the Kidspace gallery into an indoor “nature park” An Astroturf path winds through the gallery, gently leading you through an exhibit of sculpture by Victoria Palermo and Rob de Mar. Both artists use nature as the inspiration for their art making, and are especially interested in how the natural environment is effected by human intervention.

Victoria Palermo surprises us in her choice of medium. She transforms natural materials such as grass and moss into whimsical chairs and abstract sculpture. At the same time, she also makes use of a manufactured material—rubber—to create forests of colorful birch trees. The contrast in Palermo’s choice of materials and subject matter encourages viewers to think about dualities that exist in natural and human-made surroundings. The exhibition includes three grass chairs, seventeen colorful rubber birch trees and twelve abstract moss sculptures.

Rob de Mar presents us with two types of fanciful environments. In some of his 3-D landscapes, he seamlessly integrates roads and cell phone towers with rolling hills and lush forests. In others, he creates natural ecosystems that have not yet been intruded upon by humans. We might encounter a green hilly mountainside pierced by a stark, seemingly endless black top road. Or we might find futuristic lush green landscapes with bulbous hills and fluffy white clouds that grow strangely from metal poles. The exhibition features two wall landscapes and four standing pieces.

About the Artist – Victoria Palermo

Victoria Palermo, a sculptor residing in Queensbury, New York, holds a Bachelor of Science degree in Art from Skidmore College, Saratoga Springs, New York and a Master of Fine Arts degree from Bennington College, Bennington, Vermont. She is a Visiting Assistant Professor of Art at Skidmore College and previously was a scenic painter and art department director for Adirondack Scenic, Inc., in Glens Falls, New York. Victoria has been awarded artist fellowship grants from the New York Foundation for the Arts and the New York State Council on the Arts, and was an artist-in-residence at YADDO in Saratoga Springs, New York. Her work has been in solo and group shows in such

galleries and museums as: The Arts Center at Troy, New York; Pierogi 2000, Williamsburg, Brooklyn; ART/OMI Sculpture Park, Ghent, New York; Galerie Du Tableau, Marseilles, France; One Mellon Bank Center, Pittsburgh, Pennsylvania; Schenectady Museum, Schenectady, New York; Rice Gallery, Albany, New York; White Columns, New York City; and Art In General, New York City.



Artist Statement – Victoria Palermo

Nature has the power to seduce and terrify us--sometimes both at once. It has always been a source of fascination for human beings. Earlier civilizations explained it through myths and stories. Artists have celebrated it on canvas, writers through poetry. People attempt to tame it, reproduce it, bend it to their will in gardens, farms, lawns, and parks.

Much of my work looks at this relationship with nature. Sometimes I like to use landscape gardening materials and techniques to make surprising objects. Other times, I use very artificial materials to produce something botanical-looking. In this exhibit, I've used both approaches--to make a kind of "nature theme park."

About the Artist – Rob de Mar

Brooklyn-based sculptor Rob de Mar holds a BFA from New York's School of Visual Arts, and has been an artist-in-residence at the Skowhegan School of Painting and Sculpture as well as the Vermont Studio Center. In addition to his work as a professional artist, he is a set dresser for movies and television commercials. He has created furniture, gates, and various settings for such movies as the *Royal Tenenbaums* starring Ben Stiller and Gene Hackman, and *Birth*, starring Nicole Kidman. He is currently represented by the Clementine Gallery, New York City. Rob's work has been in solo and group exhibitions in

such galleries and museums as: White Columns, New York City; PS 1 Contemporary Art Center, Long Island City, New York; Whitney Museum of American Art at Philip Morris, New York City; Portland Museum of Art, Portland, Maine; Wave Hill Glyndor Gallery, Bronx, New York; Nylon Gallery, London, England; Inman Gallery, Houston, Texas; Aldrich Museum of Contemporary Art, Ridgefield, Connecticut; and the Pittsburgh Center for the Arts, Pittsburgh, Pennsylvania.



Artist Statement – Rob de Mar

My work is about simplifying the elements that are between humanity and nature. I attempt to address man's complicated relationship with nature, combining pastoral elements alongside structures of urban development. My sculptures are microcosms of our world: waterfalls, grassy hills, stone dwellings, forests, ponds, mountaintops, tree lines, autumn days mixed with cell towers, winding roads, stone walls, parking lots, and street lamps. These imprints of humanity on nature create an unlikely beauty.

* * * * *

When at Kidspace

Some key points that we will address when your students visit Kidspace are:

- Artists and scientists analyze the world around them in surprisingly similar ways.
- There are strong relationships between artists' choice of material and the content of their work.

- Through artistic endeavors, one can express interests in the natural environment.
- Artists have many different approaches to creating images of nature in 3-dimensions.

Your students will role-play as scientists, observing and analyzing art and nature. They will be asked a series of questions about the art on view, however, the questions will be phrased using scientific terminology (found in the science MA Learning Frameworks). For instance, *describe* how it feels to be standing among these colorful trees. *Observe* the patterns you can find repeated in "Waterfall" *Formulate a hypothesis or theory about* why the artist made these chairs out of grass. *Predict* what will happen when you get to the end of the road in "Street Lamp II".

At the conclusion of the gallery tour, your students will work on a grade-appropriate art project. Students will try their hand at making their own sculptures depicting scenes in nature. These projects will enable your students to practice making 3-dimensional objects. When the artist visits your class, your students will also have the opportunity to create more complex sculptural works.

Additional Programs

In addition to classroom and Kidspace activities, specialists in the arts and sciences have been invited to extend programs in your school. North Adams 4th-graders will visit Williams College's Hopkins Forest with Williams staff to gather information for their projects and the Kidspace experience. They will explore how the forest has changed over time as a result of weather, growth patterns, and land usage by humans and animals. Prior to their visit to the forest, students will work with Williams College students in their classrooms. Using primary source materials documenting the forest's growth over the past 60 years, they will learn what they need to look for while at the forest that provides evidence of change.

The artist residency component of the Kidspace program has been expanded in FY04 with Massachusetts Cultural Council funding. **Each school will have six days with the artists.** For the North Adams schools, the plan is as follows: Victoria Palermo will work in Greylock (13 classes) and Sullivan (19 classes), and Rob de Mar will work in Brayton (25 classes). Each class will have one visit from the artist. Each session will be 45-minutes. In addition, the 4th-graders will work

on more extensive projects and will have two additional visits with the artist, one of which will take place at Kidspace.

Program Goals

- Contemporary art can be used to sharpen student visual literacy skills, which can be applied in many subject areas, in particular in art-making, English language arts and science.
- Interactions with artists and their artwork and scientists and their primary source materials are a means for students to more fully understand the relationship between the scientific and artistic problem-solving processes.
- Curriculum materials and teacher workshops can motivate classroom educators to make connections among multiple ways in which to explore the natural environment.

Learner Outcomes

Through multiple activities focusing on contemporary art and the natural environment, students will:

- discuss their understanding of how an artist's selection of material influences meaning in works of art;
- recognize natural materials as viable sources for art works;
- express key points connecting the artistic and scientific problem-solving processes;
- describe their concerns and/or admiration for the natural environment;
- illustrate their interpretations of nature in sculpture and drawings, and in written and oral stories.

Your Feedback and Sharing with Others

In February, we have scheduled an evaluation workshop with all the teachers in your school. We would like to know your thoughts on the curriculum and programs. We also ask that you share your comments on the exhibition. We will provide you with an evaluation form to complete at the workshop. Meanwhile, we would appreciate hearing your thoughts along the way. Drop us a note at lhompson@massmoca.org, or phone us at 413-664-4481 ext. 8131. Your comments do make a difference. For instance, you will notice that based on teacher comments made last year, we have broken down this curriculum by grade levels: Pre-K – 2nd grade, 4th grade, and 3 and 5th grade.

We hope that you will share your class projects with others in your school. Since each class in your school is involved with Kidspace, it would be interesting to see the different interpretations of the activities and the Kidspace experience. You might display your work throughout the school and meet with other classes to discuss the artists' work and Kidspace.

We would like to visit your school to document your students' work and to hear about the other projects that you develop on your own in conjunction with the *Nature Park* exhibit. You may also send digital photographs, scanned work, or project ideas to the email address above.

We look forward to a successful collaboration!

Laura Thompson, Ed.D.
Associate Curator of Exhibitions and Education

Megan Hack
Kidspace Assistant

TIME

4th Grade Activities

Overview

This semester 4th grade students will participate in a number of new Kidspace program activities, as part of the Kidspace program. Kidspace has teamed up with the Williams College Science Department to provide additional teacher training, special classroom visits by Williams College students, and a trip the Hopkins Memorial Forest. These three activities are in addition to a regular visit to the Kidspace gallery to view our current exhibition *Earth, Wind, and Desire: Nature Park*.

New funding from the Massachusetts Cultural Council to the North Adams School District has also enabled us to "beef-up" the Artist-in-Residence Program. This semester, all students will have a chance to meet an artist in their own classroom, and every fourth grade classes from each elementary school will spend over two hours with either Victoria Palermo or Rob de Mar. This time will be spent both in Kidspace and in the classroom.

Themes addressed in these activities

Fourth grade classrooms will be busy, with many field trips and special classroom visitors. Because of all of this activity, the classroom projects described in this curriculum have been designed to be the "glue" that holds everything together. All of the activities involve observing, evaluating, and documenting from both a scientific and artistic points of view. The overriding theme for the activities is how we as human have interacted with nature, and how the effects of time are found in the natural world. The timeline below illustrates how the pieces fit together and briefly explains the Williams College visit, the field trip to the Hopkins Memorial Forest, and the Kidspace field trip.

Activity Schedule

Before Your Kidspace Program

1. Art/Science: Looking as a Scientist and an Artist
2. Classroom Visit with Williams College Students: Hopkins Memorial Forest Discovery
3. Site Visit: Hopkins Forest

After Your Hopkins Forest Visit

1. Math/Science: Documenting Change
2. Language Arts/Science: Extension: Interview with a place (or your plot)

During Your Kidspace Visit

1. Guided Discussion
2. Art-Making Activity

After Your Kidspace Program

1. Language Arts/Science: Humans in Nature
2. Language Arts Extension: Modern Attitudes
3. Art Extension: Artists and Nature
4. Film: The Moon Lot

Artist Residency*

1. Preparing for Artist Residency
2. Project with Artist

*NOTE: Please keep all Kidspace-related art projects created at school and at Kidspace in the classroom until after the artist residency. The artist will want to view your students' work and will connect the residency project to the work your students have already completed.

BEFORE YOUR KIDSPACE PROGRAM

4th Grade

Objectives

- Students begin to discuss subjects that will be addressed both in Kidspace and on their Hopkins Forest visit.
- Students will practice looking, questioning, hypothesizing, interpreting, and evaluating; skills which are used in both science and art.

PRE-VISIT ACTIVITY 1

Art/Science: Looking as a Scientist and an Artist

(Materials: Images of Victoria Palermo and Rob de Mar's artwork)

Students will explore the similarities between the scientific and artistic inquiry process by discussing images of Victoria Palermo's *moss experiments* and *grass chairs*. By examining the images closely, using their prior scientific knowledge, and learning specific facts about the pieces of artwork, students will develop theories on the artworks' construction and how the pieces function. They will also formulate guesses as to **why** Palermo created these pieces.

Project the overhead transparencies of Victoria Palermo's *Cushion Me Soft* and *See Creatures* and discuss these pieces of artwork as a class (see the **Teacher Information Sheet for discussion of artwork by Victoria Palermo (TIS)**). As illustrated in the Information sheet, approach the discussion from a scientific and an artistic viewpoint. On one hand, use specific terminology used in scientific inquiry. On the other hand, discuss the artwork in terms of its aesthetic value, sociological meaning, relevance to contemporary art making issues (see the TIS), etc.

After the discussion, ask your students to compare and contrast the two approaches. How were they similar / different? Did the two paths ever cross? Did the two approaches ever lead them to similar conclusions?

Extension

Apply the two discussion approaches to images of Rob de Mar's artwork. Try discussing the human imprint illustrated in his artwork.

Teacher Information Sheet for discussion of artwork by Victoria Palermo

The following is a series of questions to aid in the discussion of Victoria Palermo's artwork. Key information is in bold. This factual information can be worked into the discussion as is outlined below or as seems natural within the discussion framework.



Cushion Me Soft, 2003

materials: soil, sod, steel infrastructure, hoses, pump, water tank, cart



See Creatures, 2003

materials: soil, moss, plastic jars

Investigation

- What are the pieces entitled *See Creature* made of? Are they alive?
The *See Creatures* are completely self-sufficient ecosystem. The canisters are sealed. They were made by forming soil into the abstract shape seen in the image, collecting moss samples from local woods, creating a moss slurry by combining the moss and water in a kitchen blender, and then applying the slurry to the soil form (like a "chia pet"). This form is then placed in the plexi canister with a specific amount of water and then the canister is sealed. Under the correct temperature conditions, the ratio of water to air to moss type and rate of moss growth is such that the moss keeps itself alive.
- What are the pieces entitled *Cushion Me Soft* made of and how are they constructed?
- Why don't they fall apart? Do you think you could sit on them?
The pieces entitled *Cushion Me Soft* are made of living grass and have an internal watering system. Palermo constructs the grass chairs by initially creating an internal armature of steel. This armature (a sturdy

support system like the bones in our body) is shaped like the body of the chair but is hollow. Its cavity is filled with vermiculite, a light-weight low-moisture soil. On the outside of the armature, Palermo builds a layer of nutrient rich soil. Finally, she covers the entire surface with sod.

The watering system is made of a network of small rubber tubes that converge into a large tube which is connected to an external water tank with a pump. These tubes have small holes along their length and are interwoven with the armature and thus evenly water the roots from the bottom up. The chairs sit on a special platform that allows them to drain.

- How do the moss and grass continue to thrive indoors?
When the chairs are on exhibit outdoors, they have the sun and the rain. Here in Kidspace we have the watering system and two special grow-lights that mimic the sun's rays.
- Are these pieces part of an animal's habitat or could they be?

Interpretation

- Do the chairs or moss experiments remind you of anything you've seen indoors or outdoors?
- Why did Palermo make chairs out of living grass?
- What is Palermo trying to tell us about nature or about ourselves through her artwork?

Prediction

- Do you think the pieces of artwork will continue to grow? Why?
- Do you think their growth will be affected by anything (stimuli) in Kidspace? What if they were placed in the woods?
- Do you think the grass chairs will manage to change their environment over time?
- What do you think the chairs would look like if left in Kidspace for the next 20 years?

What if they were left outdoors?

Documentation

- How and why might we document the chairs and moss experiments?
Possible suggestions might be: photographs, drawings, written descriptions, actual measurements, etc.
- Is there anything about these chairs or moss experiments that could be measured quantitatively?

PRE-VISIT ACTIVITY 2

Classroom Visit with Williams College Students: Hopkins Memorial Forest Discovery

During a visit to your classroom, Williams College science students will use historical photographs of the Hopkins Memorial Forest over the past 80 years and primary sources to illustrate several concepts. This activity will build upon Pre-Visit Activity 1. It will provide your students with a vocabulary that will be useful in the forest, and Kidspace, and during the artist residency and for the post-visit activities. A few things discussed will be documentation, primary source, and documentation.

PRE-VISIT ACTIVITY 3

Site Visit: Hopkins Forest

When visiting Hopkins Forest, Williams College guides will show your students areas of the forest where human interaction over the course of time is apparent. They will lead an activity that teaches your student how to put to use some of the terminology they have learned in the classroom. Specifically, the guides will teach the students how to measure qualities and quantities of plant and animal life. Students will see how this field work is quantified and translated into the primary source documentation they saw in the classroom. The Williams guides will also explain **why** they want to collect certain sets of data and **how** the data is eventually interpreted and put to use. Terms that may be introduced to your students are preservation, manipulative sampling, interpretation, field study, and usage zones.

◇ **Field trips to the Hopkins Memorial Forest will NOT be postponed unless the weather is truly frightful (i.e. hail, hurricane, blizzard). Please ask your students to be prepared with warm clothing, boots, hats/scarves/mittens, and rain gear.** ◇

AFTER YOUR HOPKINS FOREST VISIT

4th Grade

Objectives

- This activity will encourage your students to investigate their immediate environment using the terminology and practices learned in class discussions, the classroom visit by Williams students, and the trip to Hopkins Forest.

POST-HOPKINS FOREST VISIT ACTIVITY 1

Math/Science: Documenting Change

(Materials: flags, colored tape, stakes)

Both Victoria Palermo and Rob de Mar comment on the environment in their artwork. Palermo takes a more scientific approach in that she must study the growth of the grass and moss in order for her artwork to thrive. De Mar is more interested in the aesthetic changes that humans inflict on the natural environment. This activity allows your students to study their own environment from both of these view points.

Designate one week in which you can commit 30 minutes everyday at the same time to the project. Divide your class into groups of three students each. On the first day have each group choose a 1'x 1' plot of land on the school grounds. Ask the groups to mark their plot with stones, flags, yarn, or anything that will withstand a week of weather. Remind your students that the plots could be on a horizontal or vertical plane (i.e. the side of a tree). Each day at the same time take your class out to their plot and allow them 30 minutes to observe and document. Ask your students to use the skills they learned in the woods to observe and record all that they see, smell, hear, and feel in their plot. This data can be recorded in a chart, through drawings, in paragraph form, etc. **Ask the groups to choose the method of documentation that they think is most appropriate for their plot.**

After one week (or more if you wish!), ask each group to analyze their data, looking for patterns and change. Ask them to think about how and why their plot changed, taking into consideration local plant, animal, and human life. Allow the groups 40 minutes to develop a short paragraph describing their plot and all that happened over the course of the week. In addition, ask your student to predict what will happen to their plots in the following weeks, months, and years.

EXTENSION 1

Language Arts/Science: Interview with a place (or your plot)

Have your students explore and "interview" a place in their local environment. First have your students visit this website:

http://www.williams.edu/CES/hmf/interview_landscape.html

And click on *click images to see interviews*

There you will find an interview between Henry Art, a biology professor at Williams who has studied Hopkins Forest for over 20 years, and the Taconic Crest. Over the years, Art has researched the long-term changes in the various plant communities and how human disturbances have played a role in shaping the present ecosystems.

In this interview, Art asks the forest questions like:

- ✦ "Why are there pockets of clay inter-bedded with pockets of silt and chunks of limestone in your soil?"
- ✦ "Where did all of these big trees come from? Why are they still here?"

The forest then replies by outlining the history of the forest growth and the people that lived and worked there.

Ask your students to imitate the format of this interview. They may choose to interview a part of the school grounds, the school interior, or their own home.

POST-VISIT ACTIVITY 2

Film: The Moon Lot

View the short film "Moon Lot" by Hank Art, Biology Professor at Williams College. (Supplied by Kidspace)

DURING YOUR KIDSPACE VISIT

4th Grade

When your students visit Kidspace, they will be asked to talk about the art on view in guided discussions. A series of questions will be used to help guide the students in their exploration of the artwork: they will be asked to respond to these questions using the artwork as a source of information and inspiration. Each question builds upon another so that students might create stories about nature based on the artwork. For instance, they might be asked the following questions when standing in front of one work of art:

- What do you think is going on in this sculpture?
- Who do you imagine would live in this place?
- Have you ever seen something similar to this piece in real life?
- How do you think the artist made it?
- Why do you think the artist chose to use that material?
- What are the different parts of this sculpture?
- How does this piece relate to the last piece we looked at?

These guided discussions serve two purposes: to build students' visual literacy skills and to increase their knowledge of the various ways in which artists represent the natural environment. In terms of visual literacy skills, students will be asked to think critically and to form opinions and interpretations of the artwork. Students will be encouraged to talk about the meaning of the art and to make comparisons between an artistic composition and an ecosystem.

Following the guided discussions, students will have the opportunity to reflect on the artists' art-making processes. We will talk about what the artists needed to do in order to create their works of art. Then students will create their own sculptures depicting an ecosystem -- a forest. Having been prepared in the classroom to use Model-Magic clay, students will design their own forest at Kidspace using this material. We will review with them how to model the clay to form trees, rocks, and animals.

AFTER YOUR KIDSPACE PROGRAM

4th Grade

Objective

- Building on the concept of documentation discussed in the pre-visit activities, students will explore how other people have interacted with, shaped, and documented the natural world.
- By reading an excerpt from Walden by Henry David Thoreau, students will explore Thoreau's interpretation of nature and use it as inspiration for their own writing.

POST-VISIT ACTIVITY 1

Language Arts/Science: Humans in Nature

(Materials: excerpt from Walden – found at the end of this activity, journals)

In Kidspace students observed and discussed the artwork of Victoria Palermo and Rob de Mar. Both artists explore the elasticity of nature; Victoria by forming a natural substance into a utilitarian object and Rob by depicting the changes that humans inflict on the natural world. Both of these concepts are present in the writing of Thoreau.

Ask your students to read aloud the excerpt from Henry David Thoreau's Walden provided by Kidspace. This excerpt is from the Pond chapter and gives, in great detail, a description of the pond and how Thoreau interacted with it. Considering the difficulty of the writing style and vocabulary of Walden, we have chosen two excerpts that are clear, very descriptive, and closer to your students reading level.

Discuss what they have read and how it relates to their experiences in Kidspace and the Hopkins Forest. Focus your discussion on how Thoreau investigates the pond in terms of his five senses, the date and time, how the other natural elements influence it, and his own interactions with it.

One of Thoreau's pet peeves was writers who do not relate their own personal experiences in their writing (he wonders what "distant land" they live on). Ask your students to compare and contrast Thoreau's experiences with the pond with their own. Have they ever been camping? Have they ever explored something in nature to the depth that Thoreau explored the pond? What are the differences between life at home and life in the woods? Could they imagine

living in the woods for over two years?

There are several possible writing and drawing activities that could connect Thoreau's writing with the rest of the Kidspace activities and your students' personal experiences:

- ✦ Ask your students to keep a journal about their daily life for one week. The entries could later be re-examined and composed in essay or poem form.
- ✦ Write an essay or ode to an element in nature they feel particularly close to.
- ✦ Write a short essay or poem about a personal experience they had in nature.
- ✦ Create a short comic strip that includes writing and illustrations about an experience in nature.
- ✦ Write an essay or comic strip about their experience in the Hopkins Forest.

EXTENSION 1

Language Arts: Modern Attitudes

Ask your students to research modern attitudes about nature found in magazines, retail stores, newspapers, and on the Internet.

EXTENSION 2

Art: Artists and Nature

Students may also explore how other visual artists have represented nature. For instance, Monet's haystacks and cathedrals show the passage of time through light and season. Other artists work reflect the human interaction with nature and how that has changed over time such as Andy Goldsworthy, the Hudson River School artists, and Robert Smithson (the Spiral Jetty).

Excerpt from Walden by Henry David Thoreau

Chapter: Pond

These excerpts were taken from <http://eserver.org/thoreau/walden9a.html#notes> where you can find the writings in their entirety.

[6] The water is so transparent that the bottom can easily be discerned at the depth of twenty-five or thirty feet. Paddling over it, you may see, many feet beneath the surface, the schools of perch and shiners, perhaps only an inch long, yet the former easily distinguished by their transverse bars, and you think that they must be ascetic fish that find a subsistence there. Once, in the winter, many years ago, when I had been cutting holes through the ice in order to catch pickerel, as I stepped ashore I tossed my axe back on to the ice, but, as if some evil genius had directed it, it slid four or five rods directly into one of the holes, where the water was twenty-five feet deep. Out of curiosity, I lay down on the ice and looked through the hole, until I saw the axe a little on one side, standing on its head, with its helve erect and gently swaying to and fro with the pulse of the pond; and there it might have stood erect and swaying till in the course of time the handle rotted off, if I had not disturbed it. Making another hole directly over it with an ice chisel which I had, and cutting down the longest birch which I could find in the neighborhood with my knife, I made a slip-noose, which I attached to its end, and, letting it down carefully, passed it over the knob of the handle, and drew it by a line along the birch, and so pulled the axe out again.

[13] The pond was my well ready dug. For four months in the year its water is as cold as it is pure at all times; and I think that it is then as good as any, if not the best, in the town. In the winter, all water which is exposed to the air is colder than springs and wells which are protected from it. The temperature of the pond water which had stood in the room where I sat from five o'clock in the afternoon till noon the next day, the sixth of March, 1846, the thermometer having been up to 65 degrees or 70 degrees some of the time, owing partly to the sun on the roof, was 42 degrees, or one degree colder than the water of one of the coldest wells in the village just drawn. The temperature of the Boiling Spring the same day was 45 degrees, or the warmest of any water tried, though it is the coldest that I know of in summer, when, beside, shallow and stagnant surface water is not mingled with it. Moreover, in summer, Walden never becomes so warm as most water which is exposed to the sun, on account of its depth. In the warmest weather I usually placed a pailful in my cellar, where it became cool in the night, and remained so during the day; though I also resorted to a spring in the

neighborhood. It was as good when a week old as the day it was dipped, and had no taste of the pump. Whoever camps for a week in summer by the shore of a pond, needs only bury a pail of water a few feet deep in the shade of his camp to be independent of the luxury of ice.

ARTIST RESIDENCY

4th Grade

Your students will have the opportunity to work with either Victoria Palermo or Rob de Mar in your classroom. The artist will visit for 45 minutes and we recommend that you prepare your students ahead of time for this exciting piece of the Kidspace program. Please review the art that your students viewed at the Kidspace gallery. Ask them to create a list of any questions that they might have for the artist, such as why he/she made a certain piece and why he/she decided to become an artist. Inform students that they will have the opportunity to ask the artist some of these questions and to begin working on an art project with the artist. Since time is limited, you may be asked to complete the art project with your students after the artist leaves. (We will discuss the specific art projects with you at our teacher workshop in January.)

Please remember to have handy Kidspace-related art projects for the artist to review.

EARTH, WIND, AND DESIRE: NATURE PARK MASSACHUSETTS LEARNING STANDARDS

The *Earth, Wind, and Desire* project addresses multiple learning standards as the project is interdisciplinary including activities in the arts, science/technology, history/social sciences, and English language arts. The following selected standards will be addressed:

Arts

- Students will demonstrate knowledge of the media, materials, and techniques unique to the visual arts (MA Standard 1).
- Students will demonstrate their powers of observation, abstraction, invention, and expression in a variety of media, materials, and techniques (MA Standard 3).
- Students will use imaginative and reflective thinking during all phases of creating (derived from MA Standard 4).
- Students will use analytical and critical thinking to respond to and interpret works of art (derived from MA Standards 5 & 6).
- Students will apply their knowledge of the arts to the study of the English language arts, mathematics, and science and technology (MA Standard 10).

History/Social Science

- Students will describe the location and features of places in the immediate neighborhood of the student's home or school (MA Standard - Pre-K – K.5).
- Students will describe the major natural resources in their community (derived from MA Standard – 4.17).

Science/Technology

- Students will examine evidence that where people live reflects technological changes (derived from MA Learning Standards Pre-K – 4).
- Students will give examples of the decisions we make as individuals, groups, and communities that can affect society and the natural environment, and will explain that these changes are not always easy to reverse (MA Learning Standard Pre-K – 8).
- Students will apply multiple lines of inquiry to address and analyze a question (MA Learning Standard 5 -8).
- Give examples of how organisms can cause changes in their environment to ensure survival. How do these changes affect the ecosystem? (MA Learning Standard 3-5).
- Give examples of how inherited characteristics may change over time as adaptations to changes in the environment that enable organisms to survive. (MA Learning Standard 3-5).
- How do organisms respond to stimuli (not just instinctive)? (MA Learning Standard 3-5).

English Language Arts

- Students will pose questions [about works of art], listen to the ideas of others, and contribute their own information or ideas in group discussions and interviews in order to acquire new knowledge (derived from MA Standard 2).
- Students will understand and acquire new vocabulary and use it correctly in reading and writing (MA Standard 4).
- Students will identify the basic facts and essential ideas in what they have read, heard, or viewed (MA Standard 9).
- Students will identify, analyze, and apply knowledge of a theme in art and literary works and provide evidence to support their understanding (derived from MA Standard 11).

Glossary of Key Terms

Adaptation

An alteration or adjustment in structure or habits, often hereditary, by which a species or individual improves its condition in relationship to its environment. Change in behavior of a person or group in response to new or modified surroundings.

Appreciation

Recognition of the quality, value, significance, or magnitude of people and things.

Data

Factual information, especially information organized for analysis or used to reason or make decisions.

Documentation

Something, such as a recording, photograph, printed or written paper, that can be used to furnish decisive evidence or information.

Ecosystem

A system formed by the interaction of a community of organisms with their physical environment

Environment

The totality of circumstances surrounding an organism or group of organisms, especially:

- a. The combination of external physical conditions that affect and influence the growth, development, and survival of organisms: "We shall never understand the natural environment until we see it as a living organism" (Paul Brooks).
- b. The complex of social and cultural conditions affecting the nature of an individual or community.

Habitat - the normal environment in which an organism lives

Hypothesis

A tentative explanation for an observation, phenomenon, or scientific problem that can be tested by further investigation.

Journal

A personal or official record of occurrences, experiences, and reflections kept on a regular basis.

Landscape

An expanse of scenery that can be seen in a single view or the aspect of the land characteristic of a particular region

Museum

A depository for collecting and displaying objects having scientific or historical or artistic value

Organisms

An individual form of life, such as a plant, animal, bacterium, protist, or fungus; a body made up of organs, organelles, or other parts that work together to carry on the various processes of life.

Prediction

A statement about the future

Plot

A small piece of ground, generally used for a specific purpose.

Survival

A living or continuing longer than, or beyond the existence of, another person, thing, or event; an outliving.

Tool

Something used in the performance of an operation

Definitions found at www.dictionary.com.