

ALL THE RIVERS RUN – LEVEL I

CURRICULUM OVERVIEW

RATIONALE & PURPOSE

The story of the Cuyahoga River and its watershed represents diverse environmental challenges resulting from human actions. Broader ecological understandings coupled with a nourished emotional attachment to this watershed and all of its life, as well as all of the Earth, are part of building a healthy relationship with our home planet. Awareness of the oneness and interdependence of all life leads to changes in human actions that help solve environmental problems.

GOALS

1. Students will learn how life functions on our planet through building understanding of the ecological concepts of energy flow, watershed, biodiversity, ecosystem interrelationships, sustainability and change as experienced in the Cuyahoga River watershed.
2. Students will develop a personal attachment to, and be instilled with, a sense of wonder and place for the Earth and its life as they are immersed in the natural and cultural dimensions of the Cuyahoga Valley and its watershed.
3. Realizing the effect that people have had over time on the Cuyahoga River and its watershed, students will explore the concept of “sustainability” through a problem based learning experience demonstrating how to lessen human impact on the Earth.
4. Experiencing the cultural and natural history resources of the Cuyahoga Valley National Park, students will come to value this citizen owned park, as well as all national parks, as places preserved for personal understanding of America’s heritage.

TEACHING/LEARNING STYLE

Based on the belief that children learn best when they are actively involved in the learning process, the resident program strongly involves participatory learning experiences. Trained field instructors engage students’ attention at the beginning of each unit and then encourage learning of concepts and processes with hands-on and minds-on activities. Engaging field simulations and activities teach understanding of concepts with higher level thinking skills including comprehension, application, analysis, synthesis and evaluation. The unifying theme of the river and its watershed pulls together concepts and processes primarily from science and social studies, but also including language arts, math, the arts and technology for a truly integrated experience. The integrating theme plus a problem based challenge relating to daily living should assure that understandings gained will make sense to the students as well have meaning for their lives today and in the future.

PROGRAM OVERVIEW

“All the rivers run, dancing in the sun; cradled in their watershed, all the rivers run”. The chorus of Alex Bevan’s song forms the unifying theme that flows from the presite visit in the classroom to the closing ceremony on the last day of the resident program. Throughout the four day experience, students hear and learn the chorus and verses as reinforcement of the new understandings they are gaining about being an earth-friendly citizen of the Cuyahoga River Watershed...or any watershed in which they may find themselves.

Students are invited to become Junior Rangers of the Cuyahoga Valley through a five step process: 1) getting to know the Cuyahoga Valley Environmental Education Center within the National Park as a special place; 2) developing an understanding of some big life processes functioning on Earth; 3) realizing the ways we all affect the watershed; 4) discovering ways to live an “earth-friendly” life; and 5) designing a special building, called “Eco-Place” that will model “earth-friendly” building ideas and behaviors.

The **Presite** visit to the classroom shares some of the excitement for the learning adventure students will soon be undertaking at the Cuyahoga Valley Environmental Education Center in the Cuyahoga Valley National Park. Students will learn a song that sets the theme for their time at the Center, *All the Rivers Run*, and learn the definition of watershed. During their four days at the Center, they will have a very important role to play as they accept the invitation to become ‘Junior Rangers of the Cuyahoga Valley’ and design an earth-friendly life and building called Eco-Place.

An exciting and motivating opening ceremony, **Welcome to the Watershed**, builds enthusiasm for the learning adventure students are beginning. Through interactive songs and chants and costumed historical character stories, students are introduced to the Cuyahoga Valley Environmental Education Center, National Park and Cuyahoga River Watershed. The excitement is capped off with a reminder of what is a watershed and the important task of building an earth-friendly life and building, called Eco-Place.

The first afternoon at the Center leads off with **Top of the Watershed**, a unit designed to immerse students in the wonder and place of the Cuyahoga River Watershed. First, working as explorers who can be either artists or scientists they discover the diversity and wonder of one special place; then in a discovery ramble through the meadows and forests students begin to feel a personal connection to the watershed. The key concept of biodiversity is easily made concrete throughout this experience.

The **Journey to the River** experience begins with personalized water cycle experience and leads to a look at development and effect on a watershed in the Cuyahoga River Realty Game. A bus trip simulating the movement of water drops journeying to the Cuyahoga River focuses on the incorporation of environmental ‘substances’ into run-off. Once at the river, water quality testing; an investigative ramble along the river; and a look at historical remnants as evidence of past usage... leads to an understanding of how our life behaviors affect the quality of this liquid of life for the diversity of living things in our watershed ...yesterday, today, and tomorrow.

In **Watershed Story**, a curious map with interesting notations leads students on a hunt for time capsules that contain objects reflecting the history of change within the watershed. The key concept of the rock cycle is developed within this historic snapshot of the Cuyahoga River Valley. Students create a historic time line from the origin of the Earth through old salt seas to mountain building and glaciation to historic peoples, the Underground Railroad and the formation of the Cuyahoga Valley National Park. All of this illustrates the key concept of change. Throughout the time capsule discovery hunt, students reflect on the changing landforms, biodiversity, and human connections to the watershed.

Roles & Residences time in the watershed is a time of building important concept understandings of life processes on the earth. Plants - their roots, stems and leaves – focus our attention on the capture of sunlight energy and conversion into food energy to be transferred along the food chain. With the understanding of energy and material needs for all organisms, students take on the role of different organisms in order to tour different ecosystems and find where they can best meet their needs. The ecosystem concept helps students create a web of interrelationships where they realize that all things are connected in the watershed, including them.

The week's adventure builds to the **Onward to Eco-place** unit where students rise to the challenge of creating a special earth-friendly building. This 'dream' place will model for future students earth-friendly building design features and earth-friendly living habits. Using the knowledge they have gained of how life functions, the resource buildings of the Center, and the important connections they have made to the watershed, students will build an understanding of what it means to live for a sustainable world. They will determine a location for their "Eco-Place" preserving important ecological features, select sustainable features to incorporate and sustainable behaviors to model.

The last afternoon and evening at the Center, **Eco-Place Prep**, is filled with the excitement of students putting together their earth-friendly building design and earth-friendly living behaviors. Presentation boards are prepared to share at the Eco-Place Fair the following day. During a special campfire this night, all of the understandings are reviewed by the costumed historical character to help students remember the life processes that sustain all life in our watershed.

A "county fair" atmosphere of the final morning bubbles with excitement. At the **Eco-Place Fair** students experience together a slide show of the photos they have taken during the week. Then the trail group members, the teachers and parent chaperones, and the Center staff tour the presentation boards that have been constructed to share the students' designs for an earth-friendly Eco-Place and earth-friendly behaviors it will model. At the conclusion of the fair, students sit quietly and write a letter to themselves identifying five to seven earth-friendly behaviors they are going to try and put into their lives.

The week ends with a **Watershed Walk** to have one last light touch of the natural world that is now so important in all of the children's lives. And, then, everyone gathers for a special **Closing Ceremony** at which the costumed historical character returns once again. Students are thanked for their involvement and letters to self are presented to the historical character. Uniformed National Park rangers bring the group to their feet as they congratulate them on a job well done, administer the Junior Ranger oath and present the students with the Junior Rangers of the Cuyahoga Valley badges.

For a brief period of time each day, students will experience **Solo Time** in a special wild natural setting. This solitude enhancing experience provides students with opportunities to sit or stand alone in nature; to observe the processes going on around them; and to be in touch with themselves as part of the world of nature. During this time they will be able to keep a journal of observations, thoughts, feelings and insights.

A variety of evening units enrich the students' understandings and experiences of the watershed. A **Night Hike in the Watershed** is a favorite way of comparing and contrasting an ecological community between day and night using all of our senses. Optional evening programs include:

Global Festival in which students become acquainted with at least one other river watershed in the world, the culture of its people, and its historic and environmental importance. This is done using music, art, dance and stories.

Night Flight is a simulation where students learn about bird migration in relation to the Cuyahoga Valley National Parks and other parks within the system; feel a personal connection to the National Parks and understand stewardship values.

Arts in the Park in which students participate in one of five areas of art: visual, dramatic, musical, written or kinesthetic. Students have the opportunity to process their experiences indoors and out, and express themselves in an individual manner with a sharing showcase at the end of the evening.

Throughout the week there are many 'touches' that help to enrich and extend the learning adventure at the Center. There are disguise-removing notes, facts and menus around the buildings to help students realize the source of our resources and the need for conservation. Well prepared, nutritious and low-on-the-food chain meals along with a 'Waste Watcher' at meal times focuses our attention on meeting individual needs while conserving energy and materials in food. Visits to the created wet-lands, the compost pile, and experiencing the 'green' features of November Lodge all enrich the children's lives.

After three nights and four days at the Cuyahoga Valley Environmental Education Center everyone is singing and believing:

*We live on a planet so big and blue...All the rivers run.
So much to learn, so much to do...All the rivers run.
There are mountains high and valleys low...All the rivers sun.
In between them waters flow...All the rivers run.*

*All the rivers run, dancing in the Sun
Cradled in their watersheds...All the rivers run!*

Level I Program Schedule

Day 1

9:30 a.m. Opening Ceremony
11:00 a.m. Student Orientation
11:45 a.m. Orientation to Dining Halls
12:00 p.m. Lunch
12:45 p.m. FROG Time - (Fun Recreational Organized Games) - Staff Supervised
1:15 p.m. Unit - Top of the Watershed
4:15 p.m. Free Time/Recreation - Teachers supervise - Staff Assist
5:30 p.m. Dinner
6:30 p.m. Unit - Optional Evening Program *or* Evening Hike in the Watershed
8:30 p.m. Return to Dorms - Teachers supervise overnight

Day 2

7:45 a.m. Chores, table setting for breakfast
8:00 a.m. Breakfast
9:00 a.m. Unit - Roles & Residences *or* Watershed Story *or* Journey to the River
12:00 p.m. Lunch
12:45 p.m. FROG Time - (Fun Recreational Organized Games)
1:15 p.m. Unit - Roles & Residences *or* Watershed Story *or* Onward to Eco-Place
4:15 p.m. Free Time/Recreation - Teachers supervise-Staff Assist
5:30 p.m. Dinner
6:30 p.m. Unit - Evening Hike in the Watershed *or* Optional Evening Program
8:30 p.m. Return to Dorms - Teachers supervise overnight

Day 3

7:45 a.m. Chores, table setting for breakfast
8:00 a.m. Breakfast
9:00 a.m. Unit - Journey to the River *or* Watershed Story *or* Roles & Residences
11:45 a.m. Table setters to Dining Hall
12:00 p.m. Lunch
12:45 p.m. FROG TIME- (Fun Recreational Organized Games)
1:15 p.m. Unit - Onward to Eco-Place *or* Watershed Story *or* Roles & Residences
4:15 p.m. Free Time/Recreation - Teachers supervise - Staff Assist
5:30 p.m. Dinner
6:30 p.m. Unit - Eco-Place Prep & Fair
8:30 p.m. Return to Dorms - Teachers supervise overnight

Day 4

7:45 a.m. Chores, table setting for breakfast, pack luggage
8:00 a.m. Breakfast
9:00 a.m. Unit - Watershed Walk
11:30 a.m. Closing Ceremony/Campfire
12:00 p.m. Lunch
1:00 p.m. Depart