A Trail To Every Classroom (TTEC)  
Curriculum Development Tool  

UNIT DESIGN COVER SHEET  

Author contact: Patricia Milenkowic  

School name, state and town: JM Hill Elementary and Smithfield Elementary Schools, East Stroudsburg, PA  

Title: “Linking Libraries, Love of the AT and Literature”  

Abstract/Vignette: Students will become familiar with the Appalachian Trail and where it is located in relation to their school. They will be familiar with safe hiking guidelines and practice “Leave No Trace” procedures. Students will enjoy books about the Appalachian Trail and hiking and they will flourish as lifelong readers and hikers.  

Grade level(s): Please check all that apply.  
☑ K-2 ☑ 3-5 ☐ 6-8 ☐ 9-12 ☐ College and Lifelong Learning  

Discipline: Please check all that apply.  
☐ Art and Music ☑ Health and PE ☐ Foreign Language  
☑ Literature and Language Arts ☐ Mathematics ☑ Science  
☐ Social Studies and Geography ☐ History ☑ Technology  

Year Developed: 2010  

Period (month long unit vs. week long): Year Long  

Teaching environment:  
☑ In the Classroom (indoors) ☑ On the Trail  
☐ In the Community ☐ Online/Virtual
Developed for Elementary Libraries in the East Stroudsburg Area School District

Developed by Patricia Milenkowic, Librarian, JM Hill Elementary School and Smithfield Elementary School, East Stroudsburg Area School District, East Stroudsburg, Pennsylvania

Year: 2010

Curriculum Topic:
Linking Libraries, Love of the AT and Literature

INTENDED AUDIENCE:
Students in Kindergarten through Fifth Grade, Teachers and Staff as well as the families of our students will be participating in this program.

INTRODUCTION:
The East Stroudsburg Area School District is located on the Delaware River in Eastern Pennsylvania. The Appalachian Trail brushes a corner of the district, and is only 15 miles from most of the students in the district. The district covers approximately 214 square miles with the Delaware River as its eastern border and is 85 miles north of Philadelphia and 80 miles west of New York City. There are more than 8000 students in the district, grades K – 12 in 10 schools.

This district has changed radically in the past 15 years. As the second fastest growing district in the state, we have moved from a predominantly white, rural “small town” population of students whose parents attended these schools to an extremely diverse and often transient population coming from other countries or from metropolitan areas such as New York and New Jersey. Whereas 20 years ago, most people were aware of the AT and took advantage of its proximity, many people now are new to the area and are unaware of this magnificent resource right in their back yard.

The goals of the activities outlined in this curriculum intend to:

- Inform the children and their parents of the close proximity of this valuable resource
- Incite the children to encourage their parents to take them to the trail and enjoy it together.
- Educate the children about the “Leave No Trace” initiative
- Educate the children about safe hiking procedures
• Create a bibliography of books that are to be included in the district elementary school libraries, which will encourage the children to explore the AT

**BIG IDEA:**
• There is a 2,100 mile trail accessible less than three miles from our school.
• There are books in our library that will introduce you to this resource and books that will teach you about the trail’s wildlife and resources.
• We can enjoy these resources by visiting the trail and listening to seasonal stories with our teachers, friends and families.

After this project, students will be familiar with what the Appalachian Trail is and where it is located in relation to their school. They will be familiar with safe hiking guidelines and practice “Leave No Trace” procedures. The students’ families will accompany their children on the trail and the students will teach their families what they have learned and how important it is to get outside and enjoy nature as well as to respect nature and the environment. By becoming invested in this valuable resource, the students will make these ideas a part of their lifestyle.

Students will be familiar with general facts about the Appalachian Trail such as its history, future, and what is needed to sustain it for future generations. They will absorb the importance of the trail and how large of an influence it is on the eastern part of our country.

**STATE STANDARDS:**
Pennsylvania State Standards Addressed by this Curriculum:

Reading, Writing and Speaking (Prefix 1)
Science and Technology (Prefix 3)
Environment and Ecology (Prefix 4)
Health, Safety and Physical Education (Prefix 10)

**GRADES K-5**

1.1.A Identify and establish the purpose for reading
1.1.B Identify and use common organizational structures, e.g., index, table of contents, to comprehend information
1.1.G Demonstrate, after reading, understanding and interpretation of both fiction and nonfiction text
1.1.H Demonstrates fluency and comprehension in reading
1.2.A Read and understand essential content of informational texts and documents in all academic areas
1.3.A Read and understand works of literature
1.3.F Read and respond to nonfiction and fiction, including poetry and drama
1.4.A Write narrative pieces, eg., Stories, poems, plays
1.4.B Write informational pieces, using graphics when relevant
1.4.C Write persuasive pieces
1.5.B Write using well-developed content appropriate for the topic
1.5.G Present and/or defend written work for publication when appropriate
1.6.A Listen to others
1.6.B Listen to selections of literature (fiction and/or nonfiction)
1.6.C Speak using skills appropriate to formal speech situations
1.6.D Contribute to discussions
1.6.E Participate in small and large group discussions and presentations
1.6.F Use media for learning purposes
1.8.A Select and refine a topic for research
1.8.B Locate information using appropriate sources and strategies
1.8.C Organize, summarize and present the main ideas from the research

GRADE 3
3.1.3.A1 Describe the characteristics of living things and help to identify and classify them
4.1.3.E Identify changes in the environment over time
4.2.3.B Identify plants and animals found in a wetland
4.2.3.A Define the term watershed
4.3.3.B Identify local natural resources
4.5.3.A Identify resources humans take from the environment for their survival
4.5.3.C Identify different types of pollution and their sources
4.3.3.D Describe how waste is generated
   Identify and propose a solution for a waste issue in the school setting
10.4.3 Identify and engage in physical activities that promote physical fitness and health

GRADE 4
4.1.4.E Explain that ecosystems change over time due to nature and/or human influences
4.2.4.B Describe the characteristics of different types of wetlands
4.5.4.A Identify how people use natural resources in sustainable and non-sustainable ways
4.5.4.C Describe how human activities affect the environment
10.4.6 Identify and engage in moderate to vigorous physical activities that contribute to physical fitness and health

GRADE 5
3.3.5.A1 Describe how landforms are a result of the combination of destructive forces such as erosion, deposition of sediment, etc.
4.2.5.B Identify important wetlands in the United States

10.4.9 Analyze and engage in physical activities that are developmentally and individually appropriate and support achievement of personal fitness and activity goals

The following standards are included to stress the importance of self-awareness and community involvement. Although they have not yet been acted upon by the Pennsylvania Department of Education, the basic tenets of these standards support community involvement and community awareness which directly affects the trail’s support system.

*Pennsylvania Department of Education*  
**Student Interpersonal Skills Standards**

*These standards are offered as a voluntary resource for Pennsylvania’s schools and await action by the State Board of Education.*

1. Develop self-awareness and self-management skills to achieve school and life successes.
   
   (A) Identify and manage one’s emotions and behavior.  
   *(Can we use activities on the trail to improve our outlook and behavior?)*
   
   (B) Recognize personal qualities and external supports.  
   *(We are all good at something. Even if we are not star athletes, we can enjoy nature and better our health on the trail.)*
   
   (C) Demonstrate skills related to achieving personal, civic and academic goals.  
   *(We can improve ourselves by joining community improvement activities)*

2. Use social-awareness and interpersonal skills to establish and maintain
positive relationships and respect for cultural diversity.

(A) Respect and recognize the feelings and perspectives of others.
   \textit{(Respecting the trail shows respect for others that follow us)}
(B) Respect and recognize individual and group similarities and differences.
(C) Use communication and social skills to interact effectively with others.
   \textit{(Join a community of socially conscious people and follow their good examples)}
(D) Demonstrate an ability to prevent, manage, and resolve interpersonal conflicts in constructive ways.
(E) Create societal norms which encourage active engagement in creating healthy relationships (upstanders vs. bystanders) and promoting positive responsibility as an observer of ‘negative behavior’.

3. Demonstrate decision-making skills and responsible behavior in individual, family, school, and community contexts.

(A) Consider civic, safety, and societal factors in making decisions.
   \textit{(Consider the rights and feelings of others, and do the right thing for the trail)}
(B) Apply decision-making skills to deal responsibly with daily academic and social situations.
   \textit{(Be a leader)}
(C) Contribute to the well-being of one’s school and community.
   \textit{(Join a community of active people and make a difference in the world and on the trail)}

ESSENTIAL QUESTIONS (CONTENT):
Essential questions that will help guide students toward understanding the Big Idea include:

- What is the Appalachian Trail?
- Where is it located in relation to our school?
- What kinds of plants and animals will I see on the trails?
- Where can I find books and other materials about the Appalachian Trail?
- What is “Leave No Trace?”
- What do I need to hike safely?
- What can I do on the trail to enhance my experience and the experiences of others?

SKILLS AND HABITS OF MIND:
The academic and life skills that the students will gain from this project include:

- Researching a topic and evaluating various resources available in order to choose the best source for the intended job.
- Locating books and resources in the library.
- Sifting through information to find the appropriate details needed for an assignment.
- Developing an appreciation of nature, and incorporating it into everyday life.
- Developing an awareness of human impact on the environment and how to minimize or eliminate detrimental actions.
- Identifying the equipment, clothing and supplies needed for a safe hike.
- Embracing the concept of nature’s grandeur and how this appreciation can positively benefit health and happiness.

COMMUNITY OPPORTUNITIES:
Many opportunities and needs exist in our community that could be addressed by a student project. Because of the extremely heavy use of the trail in our county due to its proximity to major highways, large urban areas and an adjacent National Recreation Area, this section of the trail would benefit from student awareness of:

- the fragility of our ecosystems
- the need to clean up after ourselves and others as we use this invaluable resource
- the need to educate our families and friends about this resource and how it needs respect and care
- the animals and plants that live in this area and what precautions must be taken to ensure their safety and proliferation.

Because many of our students are originally from an urban area, many of them are not aware of safe hiking practices. The community would also benefit from education regarding:

- Safe hiking practices
- Safety items necessary for a hike
- Hiking equipment essentials
- Emergency situation procedures
PARTNERSHIPS:
PA Game Commission
   Posters, speakers
Penn State Cooperative Extension
   Literature, speakers
League of Women Voters (Book Grants)
   Funding, speakers
Local Trail organization (Willmington Trail Club)
   Volunteers, speakers
Public Libraries
   Literature, materials, information
Arbor Day Foundation
   Seedlings, literature
NPS grants
   transportation
Fish and Wildlife Service
   Literature, speakers
ESU students
   volunteers
Church of the Mountain
   volunteers
Local Authors
   Speakers (Lindsay Barrett George)
School Environmental Clubs
   volunteers
LNT.com
   Materials, literature, resources
Art and Phys Ed Teachers
   Teaching assistance, curricular tie-ins
Parents
   Volunteers, speakers, funding
PTO
   Volunteers, speakers, funding
Local Storytellers
   Speakers
District High School Teachers and Students
   Volunteers, speakers
East Stroudsburg University staff and students
   Volunteers, speakers
RESOURCES:
- Bibliography of books and materials related to this project including:
  - Fiction books for the children to read
  - Non-fiction books for the children to use to find information about the trail and its natural resources
  - Professional development materials for teachers to use which would encourage more exposure to the trail during the course of the school year.
- Backpacks to lend to students who are hiking the trail with their parents
- Lists of hiking essentials: Sturdy shoes, water bottle, backpack, snack, proper clothing (rain gear if the weather is threatening), sunscreen, bug spray, first aid kit, whistle, sunglasses, hat, camera, map, etc.
- Experts such as hikers, Park Service personnel, Biology teachers from the district high schools as well as from East Stroudsburg University
- www.childrenandnature.org
- student journal
- Leave No Trace backpack tags www.LNT.org

PROPOSED UNIT PROJECTS:
Students will begin their school year with a mystery. Every week as they enter the library, there will be a “Who Am I?” clue on the bulletin board. These clues will be vague at first and then become more specific, intended to lead them to realize that the mystery “guest” is the Appalachian Trail. Sample clues include the trail’s age, number of visitors, location in relation to the school, etc. As the clues progress, visual clues will be added to the library, such as a hiking stick, worn boots, a log with a blaze, etc. Students will be encouraged to research the given clues to solve the mystery utilizing print and online resources in the library. (1.1.A, 1.1.G, 1.2.A, 1.3.A, 1.6.B, 1.6.D, 1.6.F, 1.8.A, 18.B)

After the students identify our mystery guest, we will open a new bookcase in the library which is dedicated to books about the Appalachian Trail, animals you will find on the trail, hiking information, Leave No Trace guidelines, fictional books about hiking and nature and other texts related to this project. (1.1.H, 1.3.F, 1.6.A)

The library will also check out backpacks for the children to use when they visit the trail with their parents. These backpacks will contain the “10 Essentials” including safety whistles, Leave No Trace guidelines, maps, flora and fauna identification books as well as a fiction story for them to enjoy with their parents.
while they are out on the trail. Journals will be included in all of the backpacks so others can see what different families experienced. A stuffed animal mascot could be included for photo opportunities.  

Third grade students will create board games that contain information about pollution on the trail, the impact of humans on the environment of the trail, and erosion issues that impact the AT. These games will be kept on the AT shelf in the library, and children will be allowed to check them out and/or use them in the library.  
(4.1.3.E, 4.2.3.B, 4.5.3.C, 4.3.3.D)

Fourth and Fifth grade students will meet state standards by using appropriate research strategies to collect information about the Appalachian Trail and create Powerpoint presentations aimed at encouraging their families and friends to visit the trail. These presentations will include information on the plants and animals that can be found near the trail, as well as information about the wetland areas that are found near the trail.  

Third, fourth and fifth grade students will watch the presentations and make lists of the animals and plants mentioned. They will then use the Online Public Access Catalog to determine the Dewey Decimal numbers for these animals and plants and they will locate books in our collection related to these topics.  
(1.8.B, 1.8.C, 3.1.4.A2, 4.2.3, 4.2.4.A, 4.2.4.B)

The culminating activity will be a story on the trail with the librarian.

MODELS AND EXAMPLES:  
When students come for a story on the trail, they will first receive a yellow LNT tag. Every time they come and participate in a “Story on the Trail” event, they will get a bead to add to their tag. Beads can also be earned for the following activities and projects such as:

- Writing an AT story to add to our bookshelf.
- Visiting the AT at other locations and bringing in a photo of themselves at the trailhead sign.
- Joining the ATC
- Introducing friends and family to a hike on the trail and bringing in a photo of their hike.
Supplying proof of trail related activities such as helping at the “Church of the Mountain” weekly hiker dinners
Local litter clean-up opportunities
Visiting another scenic trail and hiking a section of the trail
Interviewing someone who has hiked sections of the AT

By displaying these very visual symbols of participation, other children will become interested in the activities and strive to gather beads and tags. They, in turn, will encourage their families and friends to visit the trail and treat it respectfully.

STUDENT ROLE – YOUTH VOICE:
Students will be asked to suggest titles of books for the AT bookshelf. They will be asked for input on different activities that they would enjoy as they hike. (Plant identification, Native American stories, information on local geology, myths and legends from the area, etc.) Students will be asked to provide feedback on all activities and therefore have a say in what will happen next with this project. Suggestions for stories on the trail will be welcomed.

Reflection opportunities for students will include journaling, graffiti activities and round circle activities as well as specific prompts on activities. These might include reflections as well as hard data on trash collected during litter pick-up activities, solutions to environmental problems such as litter, erosion due to atv activity, etc. Students may respond to the “Who Am I?” prompt with comments relating their first impressions and guesses, what clues led them astray and which clues helped them zero in on the “Mystery guest?”

REFLECTIONS:
Students will have the opportunity to reflect on their trail experiences by journaling, participating in graffiti exercises, creating posters to decorate the library, giving “Trail Talks” to other students, describing their adventures on the trail and hiking highlights, taking photos and creating collages of their experiences as well as small group discussion and sharing.

FINAL CELEBRATION:
The final celebration of this project will be a “Story on the Trail” with the school librarian. For the first year, this will occur in the spring. The following year there will be four stories, one per quarter, and these events will take place on the AT near Delaware Water Gap.
Story on the Trail:
Several lessons in the library will center on hiking safety and the essential items every hiker should have. The librarian will discuss the upcoming “Story on the Trail,” noting when the event begins and when it is over. The trailhead location will be discussed as well as the schedule of activities for the day.

Letters will go home, inviting the students of the school to spend an afternoon on the Appalachian Trail with their families, friends and teachers. These letters will outline the events of the day, list essential items that should be taken on the hike, proper shoe choices, and food and water requirements. The students will hike with their families and meet up with the librarian at a given location on the trail at a specified time to listen to a story. Students participating must be accompanied by an adult member of the family. There will be a sign-in table near the trailhead at the parking lot in Delaware Water Gap. At sign-in, parents will list the names of the people in their group and give a cell phone number that they can be reached at in the event of an emergency. They will be reminded that they are responsible for their own group, all children with them must stay with them and their group and on the trail at all times.
(4.5.4.C, 10.4.3, 10.4.6)

After signing in, students will be supplied with a map of this section of the Appalachian Trail, a small garbage bag and disposable gloves. They will be asked to collect any garbage they find on the trail. Students will be told that they should not pick up any glass. If they see glass, they are to tell an adult who will dispose of the glass safely.
(4.3.3.D)

After the story is over, participating students will receive a yellow “Leave No Trace” backpack tag. The librarian will explain the tag and what it teaches us about trail manners. The students will see the beads that can be added to the backpack tag, showing how many trail events they have participated in. The librarian will list the activities that earn more beads, and show how they can be added to the tag.

Teacher volunteers, PTO members and other community helpers will be patrolling the trail, answering questions, providing commentary on the trail’s history and directing families to the story location as the time nears.

As families leave the trail, they will be informally polled about their experience. Was it enjoyable? What could be done to make it better? Suggestions? Problems? What was the best part? What did you like the least?
Photos and an article describing the event will be submitted to the local newspaper as well as to the district newsletter. Photos will be displayed in the library and on a school bulletin board as an incentive for others to participate.

Post-event follow-up activities may include:

- Journaling
- Posters
- Persuasive writing
- I-movies to inspire others to join us on the trail

The children will create their own trail names, using facts about themselves as “Who Am I?” hints. These will be posted in the library, and the students will try to guess who is the “Face” behind the name.

**VOCABULARY:**
Children will be expected to know the following vocabulary throughout the unit.

<table>
<thead>
<tr>
<th>Trailhead</th>
<th>Wetlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watershed</td>
<td>Renewable resources</td>
</tr>
<tr>
<td>Litter</td>
<td>Responsibility</td>
</tr>
<tr>
<td>“Leave No Trace”</td>
<td>“The Ten Essentials”</td>
</tr>
<tr>
<td>Respect</td>
<td>Rhododendron</td>
</tr>
<tr>
<td>Wildlife</td>
<td>Erosion</td>
</tr>
<tr>
<td>Geology</td>
<td>Habitat</td>
</tr>
<tr>
<td>Overuse</td>
<td>Pollution</td>
</tr>
<tr>
<td>Invasive Plants</td>
<td>Non-native Species</td>
</tr>
<tr>
<td>National Recreation Area</td>
<td></td>
</tr>
</tbody>
</table>

**ANALYSIS AND INTERPRETATION OF LITERATURE:**
Students will be asked to respond to the literature shared in the library by writing the script for a school PSA that will be read in the morning during morning announcements. They will work in groups and their scripts will include information on the following Big Ideas:

- What is the Appalachian Trail and where is it located
- Basic AT Facts such as its beginning and ending points, the trail’s history and the variety of flora and fauna found on the trail
- Safety on the Trail
• Leave No Trace
• Interesting Trail Facts
ASSESSMENT:
Students will be assessed using the following criteria and activities:
- Journaling
- Oral description of activities
- Descriptive writing
- Class discussions
- Participation
- Posters

EVALUATION OF PROJECT:
The project will be evaluated using the following criteria and observations:
- Verbal and written student responses to questions regarding:
  - Enjoyment of activities
  - Retention of information
  - “Would you do this again?”
  - Did you recommend participating in these activities to any of your friends?
- Discussions with other teachers
- Parental Responses on exit surveys
- Discussions with parent, staff and community volunteers helping with activities

IDEAS TO PURSUE:
AT “Museum”:
Many dedicated hikers live in this area. Would they be willing to share some of their hiking memorabilia with the students. This would not have to be a permanent donation, it could be a loan for a week or two. Maybe an article in the local paper would encourage some people willing to share.

Guest Speakers:
Look for hikers willing to come into the school and share their trail experiences.

Nearby Trailheads:
Create a book that gives directions to nearby trailheads that includes interesting and different things they will see on those sections of the AT. Easy to reach trailheads include: Rte 191, Wind Gap, Smith Gap, Lehigh Gap, Sunfish Pond hike from DWG.
District Nature Trail (Currently under Construction at the North Campus):
Can we take our “South Campus” students up there to practice safe hiking? Can all district libraries use this trail to do “Stories on that trail?”

ESU Collaboration:
Who at ESU would be a good resource for information and student helpers?

T-shirts for participants:
Cheap T-shirt supplier?

RESOURCE WISH LIST:
- Cameras
- Bookshelf with AT logo
- multiple backpacks
- book purchase funding
  - plant identification books
  - animal identification books
  - books for AT Bookshelf
- compasses
- GPS Units
- Trail maps
- Collapsible Aluminum hiking poles
- First Aid kits

VALUABLE WEBSITES:
A Childhood Saved: Home
Grade Level: K-5 6-8 9-12
When Brad Hurley was twelve years old and growing up in New York, he began keeping a journal and a sketchbook which chronicled the wildlife and natural events near his home. The sketchbooks and nature journals are included on this web site, along with a hand drawn map of Hurley’s house and the attached three acres of woodland. Also offered are some field notes and a naturalist's notebook Hurley kept for a high school English class he was taking.
Topic: Naturalists, Nature study, Notebooks, Wildlife watching
URL: http://www.firescribble.net/acs/index.htm

A Walk in the Woods
Grade Level: K-5
Get your boots on and let's take a walk in the woods! Virtual hikers are guided through the forest by an audio narrator who explains what is being seen. Learn about the life of the forest; the plants, insects, and animals that inhabit it. The nature's notes feature lets the user get more in-depth information about a particular subject. When you're done with this walk, you can find tips for the next time you take a "real" walk into the world of the forest.

**Topic:** Forest animals, Forest plants, Hiking  
**URL:** [http://urbanext.illinois.edu/woods/index.html](http://urbanext.illinois.edu/woods/index.html)

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**Amphibians**  
**Grade Level:** K-5 6-8 9-12  
With names like mudpuppy and golden poison dart frog, amphibians have got to be interesting creatures! Learn all about these animals that live on both land and water from this excellent web site from National Geographic. Thirteen different amphibians are introduced. Just click on a name from the list to begin your exploration. For each amphibian, there is a photo, a profile, some fast facts, and a map that shows where it is found. Most have printable fact sheets and some have video clips.  
**Topic:** Amphibians, Amphibians--Physiology  
**URL:** [http://animals.nationalgeographic.com/animals/amphibians.html](http://animals.nationalgeographic.com/animals/amphibians.html)

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**Amphibians**  
**Grade Level:** K-5 6-8  
Living part of their lives in the water and part of their lives on land, amphibians seem to have two lives. Frogs look more like fish when they begin their lives as tadpoles. Other amphibians start life with feathery gills for breathing in the water but develop lungs for breathing on land later. One unusual amphibian called a caecilian hunts for worms and insects under the soil but doesn't have any legs. All amphibians are hunters when they grow up.  
**Topic:** Amphibians  
**URL:** [http://www.factmonster.com/dk/encyclopedia/amphibians.html](http://www.factmonster.com/dk/encyclopedia/amphibians.html)

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**Amphibians**  
**Grade Level:** K-5 6-8  
Amphibians are animals that live on both land and in water. They are vertebrates, which means that they have a spinal column. Twelve different amphibians are illustrated here on this page. You can choose from several frogs, toads, salamanders, and newts. "Frogs and salamanders … explore the lives of these slippery pals!" Just click onto one of the photos for a description of that animal and learn more about the amphibian's environment, unique qualities, population status, and food...  
**Topic:** Amphibians
Amphibian: Slimy is Good
Grade Level: K-5 6-8
If you want to learn more about the group of vertebrates known as amphibians, be sure to look at this web page. Amphibians are special because they can survive on both land and in water. On this page, you will learn about special groups of amphibians that have unique qualities. Find out about frogs and toads, salamanders, and caecilians. Caecilians are the most unusual because they are amphibians that do not have legs or feet. Find out why the caecilians found this to be a good thing.
Topic: Amphibians, Caecilians, Frogs, Salamanders, Toads

Bear Facts: Some Different Kinds of Bears
Grade Level: K-5 6-8
There are many different kinds of bears from around the world, but can you tell them apart? If not, the information on this site may help you tremendously. Four different bears are discussed on this site and they are the spectacled bear, the American black bear, the Asiatic black bear, and the sun bear. This site answers questions about these bears including what they look like, where they live, their habits, what they eat, and their typical life cycle.
Topic: Bears

BearDen.org
Grade Level: K-5 6-8
This eye-catching and fun web site from the American Zoo and Aquarium Association Bear Advisory Group is all about bears. A large photograph of a bear greets visitors to the site. You can enter the bear den through one of four paths. The first section has fascinating information about bears. Find links and information about the group. Read fact sheets on the eight species of bears. Have fun with games and other exciting bear activities.
Topic: Bears, Black bear, Black bears
URL: http://www.bearden.org/

Black Rat Snake
Grade Level: K-5
Meet the Black Rat Snake. A drawing of this snake opens the page and you will learn several interesting facts. The snake's scientific name is included along with a description of its physical appearance. You will learn the length this snake can
grow to, what it likes to feed on and how it traps its prey. There is also information about where these snakes can be found and the type of environment it is most commonly seen in. This site is short but contains some great facts about this snake.

Topic: Snakes
URL: http://www.nature.ca/notebooks/english/brsnake.htm

Carolina Chickadee
Grade Level: K-6-8
The Carolina Chickadee is a tiny bird that demonstrates great balance. This report on the Carolina Chickadee tells you about its colors, size, and locations where it can be found. It explains where the Carolina Chickadee nests, how long it takes for its eggs to hatch, and what types of food it likes to eat. You will also discover how it forms feeding flocks with other birds and find a list of its predators as well.

Topic: Birds, Chickadees
URL: http://www.fcps.edu/islandcreekes/ecology/carolina_chickadee.htm

Carolina Wren
Grade Level: K-6-8
Like most wrens, the Carolina Wren holds its tail up when perched. A description of the Carolina Wren's coloring and size can be found in a report along with information related to where it lives and how it builds its nest. You will find out where it builds its nest, how long before its eggs hatch, and the types of food it likes to eat. A list of its predators can be found in the report as well.

Topic: Birds, Wrens
URL: http://www.fcps.edu/islandcreekes/ecology/carolina_wren.htm

Create a Nature Journal
Grade Level: K-5
Have you ever enjoyed the beauty of nature outside? Do you ever wish you could remember all that you have observed? You can capture your memories by making a nature journal, a book for recording your experiences and impressions of nature. A list of materials needed is followed by ideas for several activities you can include in your journal. There is even a sample of haiku, a form of Japanese poetry you can write in your nature journal.

Topic: Diaries--Authorship, Nature poetry, Nature study
URL: http://www.kidsplanet.org/defendit/new/journal.html

Eastern Hognose Snake
Grade Level: K-6-8
As you will find out in this report, the Eastern Hognose Snake can be a variety of different colors. You will also learn about its size, where it lives, and its unusual snout. Information on the Eastern Hognose Snake's life cycle can be found along with descriptions of how it defends itself from predators. The report also tells you what types of food this snake likes to eat and how it is helpful to people.

Topic: Snakes
URL: http://www.fcps.edu/islandcreekes/ecology/eastern_hognose_snake.htm

Get Out!
Grade Level: K-5 6-8
Become O.K. (an Outdoor Kid)! The Texas Parks and Wildlife Department has created this web page, packed with neat ideas and activities to get you outside. Click on the "Are you O.K." link to learn how to create your own "Outdoor Kids Journal." If you've never hiked before, or would like some new games to play on your next hike, browse through the tips in the "Take a Hike" link. Also find important advice for outdoor safety, and a list of essential items for your hike.

Topic: Hiking, Outdoor life, Safety education
URL: http://www.tpwd.state.tx.us/kids/get_out/

Omnivores
Grade Level: K-5
What looks like a newsletter is actually a collection of information on the group of animals called omnivores. There is information on what omnivores eat and examples of the types of animals in this group. It explains how this group of animals can adapt well in a number of different environments and how teeth are important to the diet of an omnivore. You will also discover that although bears are members of the carnivora order, they are still considered omnivores.

Topic: Bears, Omnivores
URL: http://www.nhptv.org/natureworks/nwep10b.htm

Red Squirrel: Tamiasciurus hudsonicus
Grade Level: K-5 6-8
If you want to learn about the red squirrel, be sure to visit this Nature Works web site. You will see photos of this small squirrel with reddish fur. Learn what is special about the red squirrel and why it is such a good climber and jumper. Find out what it likes to eat and drink and how it stores its food for the winter. You will also learn where the red squirrel lives and what sounds it makes.

Topic: Red squirrels, Squirrels
URL: http://www.nhptv.org/Natureworks/Redsquirrel.htm

Reptiles: Rattlesnake
Grade Level: K-5 6-8 9-12
Rattlesnakes are well known for their ability to make their characteristic rattling, or hissing, sound. But how is this actually done and what physical features allow the snake to do such a thing? The answer to this question can be found online at the San Diego Zoo. Not only will you learn about this interesting phenomenon, but you will also fill your mind with other facts related to this snake that will leave you with a better understanding of how this animal behaves.

Topic: Poisonous snakes, Rattlesnakes, Snakes
URL: http://www.sandiegozoo.org/animalbytes/t-rattlesnake.html

Reptiles: Snake
Grade Level: K-5 6-8 9-12
No matter where you live in the world, chances are you have seen a snake. That's because these reptiles exist in every continent on Earth except for Antarctica. Now you can become an expert on this creature with help from this online fact sheet. The topics of the sheet take you on an exploration of the snake's physical characteristics and behaviors. In addition to gaining all this knowledge you will be able to follow the provided links to all kinds of fun activities and projects.
Topic: Snakes
URL: http://www.sandiegozoo.org/animalbytes/t-snake.html

Snakes
Grade Level: K-5
One animal that always ranks high on the list of animals people fear is the snake. Maybe it's the slithering body, sharp fangs, or the flickering forked tongue that invokes fear, but not all snakes are poisonous or harmful. The snake belongs to the reptile family and keeps warm by lying in the sun. Readers will learn about snakes on this site which also discusses how snakes kill their food by either a poison bite or a tight squeeze. Readers will also learn about the snake life cycle.
Topic: Snakes

Something Froggy
Grade Level: K-5 6-8
Something Froggy Wired@School is an interactive story written about the anatomy, behavior, and characteristics of frogs. Colorful diagrams and interactive activities for students make this a fun site to journey through. Two options are offered: Primary Version [K-3], and Junior Version [Gr. 4-8]. Many words are highlighted throughout the story. Click on the word and Frederick’s Froggy Glossary gives a photo and simple definition. There are crossword puzzles, matching games, and more.
Topic: Amphibians, Frogs--Anatomy
Succession in the Forest
Grade Level: K-5 6-8
As a forest mature, the plants and animals in it also change. Forest succession is the changes in a forest over hundreds of years. If the forest gets burned down by a fire, succession starts at the beginning. Learn about pioneer plants like grasses and wildflowers. Insects, birds, and small rodents thrive during the plants stage. Larger predators and deer arrive in the shrub stage as tree seedlings take over.
Topic: Forest ecology, Vegetation dynamics
URL: http://www.exploringnature.org/db/detail.php?dbID=44&detID=2313

Temperate Forest
Grade Level: K-5 6-8
There are many different types of forests in the world. Depending on temperature, climate, and elevation, the trees that grow in any area can be very different. You will read about the temperate deciduous forest on this Web site. The average temperature in temperate deciduous forests is 50 F, and this forest goes through four seasons: spring, summer, winter, and fall.
Topic: Forest ecology
URL: http://kids.nceas.ucsb.edu/biomes/temperateforest.html

The Appalachian Trail
Grade Level: K-5 6-8 9-12
Learn about the history of the Appalachian Trail from this web site, which focuses on Georgia's part of the long hike. You can also access other national scenic trails' homepages or the major trails that hook up with the Appalachian Trail. You can search for trails by city, name, those with waterfalls or with scenic routes.
Topic: Appalachian Trail
URL: http://www.georgiatrails.com/gt/Appalachian_Trail_in_Georgia

Tree Squirrels
Grade Level: K-5 6-8 9-12
The Humane Society of the United States provides information on tree squirrels on its web site. Learn the difference between tree squirrels and ground squirrels. You will discover that there are several species of tree squirrels in the U.S., including the fox squirrel and eastern and western gray squirrels. Discover how the tree squirrels depend on trees in many ways. Find out about their size, coloring, diet and reproductive cycles
Topic: Squirrels
URL: http://www.humanesociety.org/animals/squirrels/
Tufted Titmouse
Grade Level: K-5 6-8
The Tufted Titmouse is a tiny gray and white bird with a crest of feathers on its head. Pictures of the Tufted Titmouse can be found in this report along with a description of the bird. The report also tells you where the Tufted Titmouse lives, where it builds its nest, what it uses to make its nest, and what its eggs look like. Information related to the bird’s flocking behavior, the food it eats, and its predators can be found as well.
Topic: Birds
URL: http://www.fcps.edu/islandcreekes/ecology/tufted_titmouse.htm

Venomous Snakes
Grade Level: K-5 6-8
Here are the very basics about snakes. You will first learn what to do when you encounter a snake and the steps to follow if a snake bites you. Continue reading to learn what they eat and facts about the venom found in their fangs. The site then describes several venomous snakes and includes a photograph of each. The snake’s physical description is given along with their unique characteristics and where they can be found.
Topic: Snakes
URL: http://pelotes.jea.com/vensnake.htm

Walking and Hiking
Grade Level: K-5 6-8
Are you looking for a fun way to exercise? Have you considered walking or hiking? Explore this PBS for Kids web site and read about walking and hiking. Instead of considering walking as a way to get from one place to another place, walking is actually a great way to move you muscles and increase your energy. Did you know that race walking is a world-class Olympic sport? Read some "cool walking and hiking facts" and read what other kids say about walking at this site.
Topic: Hiking, Walking
URL: http://pbskids.org/itsmylife/body/solosports/article6.html

Garter Snakes
Grade Level: K-5
On this web site you will find a brief but informative description of the wandering garter snake. Many characteristics about the snake are presented under specified section headings. The information will tell you about the snakes’ distribution, physical description, habitat, feeding, and reproduction by
summarizing the most important aspects of each. You will also find details about the snakes' status in Alberta, Canada and find links to additional helpful web resources on the garter snake.

Welcome to the Backpacking Site!
Grade Level: K-5 6-8
Pull on your hiking boots, toss on your backpack and get ready to embark on an exciting journey. Wait. First, you will need to do some preparation for the hiking trip. This website will give you all the information you will need to experience this low cost traveling. You will obtain oodles of information such as, travel insurance, passports and visas, what to or not to pack and transportation. This site also includes very helpful links. Enjoy your trip.

White-breasted Nuthatch
Grade Level: K-5 6-8
The White-breasted Nuthatch can often be seen running up and down trees looking for food. You will discover in this report that this little bird has the ability to run down trees head first. You will also learn where the White-breasted Nuthatch can be found, what it likes to eat, and how it nests. You will also find out what other types of birds the White-breasted Nuthatch joins in flocks to search for food. A list of its predators can be found as well. Topic: Birds

White-tailed Deer
Grade Level: K-5 6-8
When you see a white-tail deer run, its tail will be raised like a flag. Introduce yourself to the white-tail deer at this web site from the Texas Department of Wildlife. You will find out where this mammal is found and what it likes to eat. Discover what a baby deer is called and how they are able to hide. You can also learn how to tell how old a deer is and see what other animals prey on the deer.

White-tailed Deer - Odocoileus virginianus
Grade Level: K-5 6-8
A white-tailed deer has white on the underside of its tail. It also has white on its stomach, its throat, and around the eyes and nose. It is a common deer found in parts of Canada and the continental United States, except for Alaska. This nature
Web site describes the characteristics of a white-tailed deer, the white-tailed deer's habitat and diet, the deer's life cycle, and the deer's behavior. White-tailed deer can run very fast, and they are also very good swimmers!

Topic: Deer, White-tailed deer
URL: http://www.nhptv.org/Natureworks/whitetaileddeer.htm

White-throated Sparrow
Grade Level: K-5 6-8
A description of the male White-throated Sparrow tells you about the little bird's size and color patterns. This report also tells you how the female differs, where the White-throated Sparrow lives in the winter, what it eats, and where it finds shelter in the months when it is not nesting. A list of the sparrow's predators can be found in the report as well as the reasons why people like to have this little bird around.
Topic: Birds
URL: http://www.fcps.edu/islandcreekes/ecology/white-throated_sparrow.htm

URL:  www.childrenandnature.org
Description:  programs, news, projects

URL:  www.kidsadventuring.org
Description:  programs, blog

URL:  www.backpacking.net/ten-essl.html
Description:  hiking, forums, safety

URL:  www.appalachiantrail.com
Description:  information on hiking, products, books about the trail, advice

URL:  www.trailplace.com
Description:  hiking information, forums, news

URL:  www.thebackpacker.com
Description:  Trail talk, hiking tips, “How to”

URL:  www.lnt.org
Description:  training, supplies, curriculum

URL:  www.kaboose.com
Description:  Family Activities, crafts
URL: www.gorp.com
Description: hiking activities, destinations, guides, gear

URL: www.dcnr.state.pa.us
Description: Activities, resources

URL: www.fishandboat.com
Description: source of activities and grants

URL: www.pde.state.pa.us
Description: Source for information on PA State Standards

URL: www.nostudentleftindoors.com
Description: lesson plans, activities

URL: www.classroomearth.org
Description: Activities, lesson plans, links

URL: www.pdesas.org
Description: Standards Aligned System Information
RESOURCE NAMES AND CONTACT INFORMATION:

Resource Name: Appalachian Trail Conservancy
Contact Person: Karen Lutz, Mid Atlantic Regional Director, ATC
Address: 4 East First Street, PO Box 625, Boiling Springs, PA 17007
Phone Number: 717-258-5771
E-mail: klutz@appalachiantrail.org

Resource Name: KIVA Kids in the Valley, Adventuring
Contact Person: Chip Donahue
Phone Number: 540-580-3015
website: www.kidsadventuring.org

Resource Name: League of Women Voters of Monroe County (Book Grants)
Contact Person: President, Maria Wieand
Phone Number: 570-595-7146
e-mail: lwv.monroe.pa@gmail.com
website: www.palwv.org/monroe

Resource Name: PA Game Commission, Northeast Region
Contact: Information and Education
Phone Number: 570-675-1143
Address: PO Box 220, Dallas, PA 18612
website: www.portal.stat.pa.us

Resource Name: Penn State Cooperative Extension
Contact Person: Dawn Olsen
Address: 724 Phillips Street, Suite 201 Stroudsburg, PA 18360
Phone Number: 570-421-6430
e-mail: dmo1@psu.edu
website: extension.psu.edu

Resource Name: Wilmington Trail Club
Contact Person: Bill Hardam
Address: PO Box 1184 Wilmington, DE 19899
Phone Number: 302-652-6881
website: www.wilmingtontrailclub.org

Resource Name: Eastern Monroe Public Library - Hughes Brance
Contact Person: Barbara Keiser
Address: 1002 North Ninth Street, Stroudsburg PA 18360
Phone Number: 570-421-0800
Resource Name: Arbor Day Foundation – Nature Explore Classroom Design
Phone Number: 402-467-6112
E-mail: info@dimensionsfoundation.org
Website: www.arborday.org

Resource Name: National Park Service/Appalachian National Scenic Trail
Contact Person: Rita Hennessy
Address: PO Box 50, Harpers Ferry, WV 25425
Phone Number: 304-535-6170
E-mail: rita_Hennessey@nps.gov
Website: nps.gov

Resource Name: Leave No Trace
Contact Person: Sarah Folzenlogen
Address: PO Box 997 Boulder, CO 80306
Phone Number: 800-332-4100 x107
E-mail: sarah@lnt.org
Website: lnt.org

Resource Name: Fish and Wildlife Service
Address: 315 So. Allen Street, Suite 322 State College, PA 16801
Phone Number: 814-234-4090
E-mail:
Website: www.fws.gov

Resource Name: Church of the Mountain – Delaware Water Gap, PA
Contact Person: Karen Nickels, Pastor
Address: PO Box 336, Delaware Water Gap, PA 18327
Phone Number: 570-476-0345
Website: churchofthemountain.org

Resource Name: East Stroudsburg University
Contact Person: Doug Smith, Director of University Relations
Phone Number: 570-422-3532
E-mail: d-smith@po-box.esu.edu
Website: www4.esu.edu

Resource Name: Lebanon Valley College
Contact Person: Pat Woods
BIBLIOGRAPHY:

The books included in this bibliography are books currently held in the Smithfield Elementary School Library that relate to the Appalachian Trail. This part of our library collection is in dire need of attention. When grants are available, any money received will first go towards improving and adding to this part of our library collection.

Fisher, Ronald M. *A day in the woods.* [Washington] : National Geographic Society, c1975. Discusses characteristics of various plants and animals which enable them to survive in the forest.


Cassie, Brian, 1953-. *National Audubon Society first field guide.* New York : Scholastic, c1999. A visual guide to the natural science of trees as well as a field guide to the trees found in the United States and Canada.

McCauley, Jane R., 1947-. *Animals that live in trees.* [Washington, D.C.] : National Geographic Society, 1986. Introduces a variety of animals, such as koala, fruit bat, walkingstick, snail, and howler monkey, that seek safety, food, and shelter in trees.


Cassie, Brian, 1953-. *National Audubon Society first field guide.* New York : Scholastic, c1999. Explores the world of amphibians, discussing their classification, anatomy, behavior, and habitat, and providing photographs and detailed descriptions of individual species.


Behler, John L. *National Audubon Society first field guide.* New York : Scholastic, c1999. Explores the world of reptiles, discussing their subspecies and races, anatomy, behavior, and habitat, with photographs and detailed descriptions of individual species.


they can be found, how they defend themselves, the danger from their bites, and the outlook for their future.

Fichter, George S. *Poisonous snakes*. New York : F. Watts, 1982. Discusses the best known of the poisonous snakes, which use poison mainly for killing or paralyzing their prey, as an aid to digestion, and for protection.


Zim, Herbert Spencer, 1909-. *Reptiles and amphibians; : a guide to familiar American species,. [Rev. ed.]. New York, : Golden Press, [c1956]. Sections on turtles, lizards, snakes, alligators and crocodiles, frogs and toads, and salamanders give information on description, habits and range for each species common in the United States.

Austin, Oliver Luther, 1903-. *Families of birds,. New York, : Golden Press, [1971]. A guidebook designed for those who are familiar with birds and would like to know more about their relationship to one another.

Zim, Herbert Spencer, 1909-. *Birds; : a guide to the most familiar American birds,. [Rev. ed.]. New York, : Golden Press, [c1956]. Pictures 129 common birds, identifying their flight ranges, size, and appearance. Includes a table listing migration dates and nesting and feeding habits.


Harris, Tim. *Woodpeckers*. Danbury, CT : Grolier, 2001. Describes the physical characteristics, habitats, and behavior of different kinds of woodpeckers, including the lineated woodpecker, green woodpecker,
and red-crowned woodpecker.


Goudey, Alice E., 1898-. Here come the squirrels! New York : Scribner, [c1962]. Describes the life cycle and habits of the squirrel.


Johnson, Sylvia A. Animals of the temperate forests. Minneapolis : Lerner Publications Co., c1976. Explores the physical characteristics and habits of ten animals living in the temperate forest--the raccoon, otter, beaver, moose, porcupine, flying squirrel, red fox, koala, European brown bear, and white-tailed deer.


Rinkoff, Barbara. A map is a picture. New York : Crowell, 1965. An introduction to map reading, including key, scale, and different kinds
of maps.


Young, Karen Romano. Small worlds : maps and mapmaking. New York : Scholastic Nonfiction, c2002. Discusses different types of maps, how they are made, and tells about people who create them.


Brinkley, Edward. Birds. Pleasantville, N.Y. : Reader's Digest Children's Books, c2000. Text, illustrations, and activities explore various aspects of the world of birds, including their physical structure, habitats, and behavior.


MISCELLANEOUS RESOURCES:
Hiking coloring pages:
  www.printactivities.com
  www.kinderart.com

Lesson Plans / Teacher Websites:
  www.school.discoveryeducation.com/schrockguide (Kathy Schrock)
  www.plt.org (Project Learning Tree)
  www.nps.gov/kidszone (website for children)
  www.4h.uwex.edu/uphamwoods/programs (outdoor activity lesson plans)
  www.lessonplanet.com (hiking trip lesson plans)