CHILDREN'S MATERIALS

BOOKS:

AMPHIBIANS

FISH IS FISH; Lionni, Leo, author, illustrator; New York: Scholastic; c. 1970. A tadpole and a minnow are friends but the one goes through metamorphous and becomes a frog and the other remains a fish. The frog goes out into the world and comes back to tell tales to the minnow. The minnow is so jealous of all the frog sees that it flips out on to the bank and learns he cannot live out of the water and frog saves the day. A Lionni classic, the books generally express the difference between frogs and fish.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Primary

From Tadpole to Frog (Let's-Read-and-Find-Out Science 1) (Paperback) by Wendy Pfeffer (Author), Holly Keller (Illustrator) Publisher: HarperTrophy (May 30, 1994)

An introduction to the life cycle of frogs, with additional facts about individual species on the last two pages. Sentences are simple, with questions and exclamations to help break up the informative text. Keller's clean, clear watercolor illustrations, similar in style to those of Nancy Tafuri, show a variety of pond animals and plant life through the seasons. Other books on this topic are generally geared to older readers, making this attractive picture book a good starting point for beginning readers interested in nature.

Kindergarten-Grade 2

HIDING TOADS; Dell'Oro, Suzanne Paul, author; Lerner Publications, publishers; c. 1999 (Pull ahead books series).

Introduces the physical characteristics, behaviors, habitats, and life cycles of North American toads. (AR book Perma – Bound List).

Reading Level: 2.3 Read Aloud Level: P-2 Uses: Preschool – 4th grade

IF YOU HOPPED LIKE A FROG; Schwarts, David M., author; Warhola, James, illustrator; New York: Scholastic, Inc.; c. 1999.

Not exactly a "what if" book but a book that tell how you would perform should you have the special qualities of animals such as hopping like a frog, brain size like a brachiosaurus and scurrying like a spider. Illustrated humorously, the text puts these special qualities great comparisons using math. The end pages give the specific information need to make more comparisons.

Reading Level: Primary Read Aloud Level: Pre-K – Primary Uses: Pre-K – 5th grade

THE LIFE CYCLE OF A FROG; Kalman, Bobbie & Smithyman, Kathryn, authors; various photographers & illustrators: New York: Crabtree Publishing Company; c. 2002.

Using sketches and photographs, this series studies a topic form definition — What Is A Frog — Helping Our Frog Friends. Life cycles are explained in general terms. Types of frogs, habitat, feeding, courtship, habitats and egg to froglet cycle are explained. Book contains an index, glossary, web sites, and suggestions about how to help frog habitats as well as a small section on environmental dangers.

Reading Level: Upper Primary Read Aloud Level: Pre-K & up Uses: All Ages

SALAMANDER ROOM; Mazer, Anne, author; Johnson, Steve and Fancher, Lou, illustrators; New York: Alfred A. Knopf; c. 1991.

Detailed illustrationshelp tell the story of a child who wants to take an orange salamander home. He imagines all the things the salamander will need to survive, creating a fantasy environment to make the salamander comfortable and able to live. Information about what a salamander needs to live is brought out even though the illustrations are fanciful. Children can also glean what responsibility it is to take an animal from its natural habitat.

Reading Level: Primary Read Aloud Level: Pre- K & up Uses: Pre-K – Upper Primary

WHERE DO FROGS COME FROM?; Vern Alex, author, illustrator; New York Harcourt, Inc.; c. 2000

A "beginning reader" and simple explanation of the life cycle of the frog. Vern uses photographs to illustrate the stages and add a few frog facts. Does not show the jelly like substance that surrounds the egg., states that the eggs "pop" and does not clearly show that all this development takes place in water.

Reading Level: Primary Read Aloud Level: Pre-K & Up Uses Pre-K – Early Primary

ANIMALS – General books with a variety of animals and insects

ANIMALS EATING: HOW ANIMALS CHOMP, SLURP, CHEW AND SWALLOW; Hickman, Pamela, author; Stephens, Pat, illustrator; Kids Can Press, Tonawanda, NY; c. 2001.

Animals from all around the world are used to learn about particular eating habits. Organized in two page chapters (Gizzards, Jaw Design are just two), the book highlights carnivores, herbivores and scavengers and explores the mouth, tongues and teeth animals use to eat. Has activities that exemplify the information such as food webs. Illustrations correspond and add to the text information.

Reading Level: upper primary Read Aloud Level: primary & up Uses: All ages

ANIMALS AND THEIR YOUNG; Elizabeth Dana Jaffe, author; c. 2002, Bridgestone Books from Capstone Press, publisher.

These great titles help readers learn about the appearance, development, and behavior of animals as they grow. Beautiful photos and informative text share facts about the lives of young animals from birth to adulthood. APPROVED TITLES IN SERIES: DEER HAVE FAWNS, BEARS HAVE CUBS, DUCKS HAVE DUCKLINGS, RABBITS HAVE BUNNIES, WOLVES HAVE PUPS

BACKYARD DETECTIVE: Critters Up Close; Bishop, Nic, author, illustrator; Tangerine Press (Scholastic), New York; c. 2002.

Highlights 125 different creatures in seven backyard habitats, this book uses computer organized photographs to explore what is right in the backyard. There are facts and science projects included. Bishop is an award winning science writer though reviews state this one is not his best, mostly because of making some animals deceiving larger. Includes some safety notes.

Reading Level: upper primary Read Aloud Level: primary & up Uses: All ages

LIFE CYCLES SERIES (ANIMALS): Lisa Trumbauer, author, Pebble Books from Capstone Press, c. 2002-2004

Introduce young readers to the fascinating cycle of life! Using familiar, engaging animals, the books describe the stages of development, from the beginning life stages through the maturation of each animal. Since the books in this series are created using the same organizational structure, teachers can use the books together for comparing and contrasting exercises. This series explores and supports the standard "The Living Environment: Diversity of Life and Heredity," as required by Benchmarks for Science Literacy: Project 2061. This series is leveled for early-intervention reading programs: Newly Fluent to Fluent Level.

TITLES IN SERIES: THE LIFE CYCLE OF A BEE, THE LIFE CYCLE OF A BUTTERFLY, THE LIFE CYCLE OF A FROG, THE LIFE CYCLE OF A GRASSHOPPER, THE LIFE CYCLE OF A RABBIT, THE LIFE CYCLE OF A TURTLE

WILDLIFE DETECTIVES: How Forensic Scientists Fight Crimes Against Nature; Jackson, Donna, author; Shattil, Wendy, Rozinski, Robert, photographers; Houghton Mifflin, New York; c. 2000.

This book looks at the Fish and Wildlife Forensic Lab that solves crimes against animals like poaching and killing for vanity and fashion. The book highlights a case where a bull elk was shot for his antlers in Yellowstone Park. Photos as well as text show how the scientists use scientific equipment, clues and analyze tips to solve the crimes. "Wild Files" (on two page spreads) gives more information. Glossary and follow-up suggestions are included.

Reading Level: upper primary Read Aloud Level: primary & up Uses: All ages

WOODLAND ANIMAL SERIES; Emily Townsend & William Ripple, authors; Pebble Books from Capstone Press Publishers; c. 2004-2006
Supports National Science Education Standards for Life Science: The Characteristics of Organisms, Life Cycles of Organisms, Organisms and Their Environment.
TITLES IN SERIES: DEER, OPOSSUMS, OWLS, PORCUPINES, RACCOONS, SQUIRRELS, WOLVES, WOODPECKERS

ARCHEOLOGY

HOME PLACE; Dragonwagon, Crescent, author; Pinkney, Jerry, illustrator; Atheneum, 1990, BT Bound, 1999 (reprint).

Pinkney's soft illustrations help tell the story of a family on a walk finding clues in the woods about a family that may have once lived there. Noticing daffodils, scratching the surface of the soil and finding a marble, a doll's arm, a chimney, all help the explorers speculate what family might have lived there before the woods reclaimed the abandoned home place.

Reading Level: Primary Read Aloud Level: K & up Uses: K - Intermediate

KENTUCKIANS BEFORE BOONE; Henderson, Gwynn, author; Smith, Dr. Virginia, some illustrations; University of Kentucky Press; 1992.

Henderson gleaned the story of Fishes-With -Hands from visiting archaeological sites in Bourbon County, Clark County and Greenup County and is about a family who lived in central Kentucky in 1585. Henderson asks the reader to "picture in their mind" and then describes the scene giving specific details of what we believe it was like to live and survive using the natural resources available in that time period. Originally written as part of a literacy project for emergent readers.

Reading Level: Intermediate Read Aloud Level: Intermediate - Adult Uses: Intermediate & Up

ONE SMALL BLUE BEAD; Baylor, Byrd, author; Himler, Ronald, illustrator; Atheneum, 1992 reprint (original c. 1965).

This is the perfect book to help start the process of understanding the importance of finding objects from the past and inferring the story behind the objects. Where did it come from, how did it get here, how was it used are just a few of the questions asked. This book starts with the object and the story behind it and ends with a modern child finding it. The book tells what life was like for the original peoples in the time when they were just discovering there were other tribes just like them. Poetically written and beautifully illustrated.

ART & POETRY

A COOL DRINK OF WATER; Kerley, Barbara, author; various photographers; Washington, D.C.: National Geographic Society; c. 2002.

A photo essay of how people around the world get water to drink. End pages include where each photo was taken and a few sentences about the photograph (and who took it) and a note about water conservation from John M. Fahey, Jr., president and CEO of National Geographic Society. Could be used in conjunction with social studies and a great book for discussion.

Reading level: primary Read Aloud Level: Pre-school & up Uses: All ages

LEAST THINGS; Yolen, Jane, author; Stemple, Jason, photographer; Homesdale, PA: Wordsong, Boyd Mills Press, Inc.; c. 2003.

Using haiku, Yolen highlights small things – snail, crab, caterpillar, butterfly, chipmunk, grasshopper, squirrel, dragonfly, spider, lizard, hummingbird, turtle, tree frog and a human baby. Photographed by her son, the images are spectacular. Included on each page is a short informational paragraph about each animal. There are no notes about where each animal lives or where it was photographed. A good introduction to haiku and the named animals.

Reading level: primary Read Aloud Level: Pre-school & up Uses: All ages

BIRDS

BARN OWLS; Johnston, Tony, author: Ray, Deborah K., Illustrator; New York: Charlesbridge Publishers; c. 2000

A poetically written but realistically illustrated (watercolor and pencile) look at barn owls. The owls awaken and hunt bringing mice back to the owlets. Descriptions and illustrations of habitat are lush and informative. End notes and how generations of barn owls lived there.

Reading Level: Primary Read Aloud: Pre-K & Up Uses:Pre-K – Up

BIRDS SERIES: Helen Frost, author; Pebble Books by Capstone Press, c. 1999 Reading Level: Grades K-1 • Interest Level: Grades K-2

Baby Birds describes and illustrates the development of young birds from hatching to leaving the nest. The other three titles in the series present information on different types of birds. Readers examine various eggs, nests, and family groupings. The close picture-text matches in this series support early readers.

TITLES IN SERIES: BABY BIRDS, BIRD EGGS, BIRD FAMILIES, BIRD NESTS

THE BIRDWATCHERS; James, Simon, author, illustrator; Chandlewick Press, Cambridge, MA; c. 2002.

Jess (girl) hears her Granddad stories about bird watching and decides to join him one day because Granddad says when you go bird watching, things happen. Book encourages observation, patience and drawing. Ink and watercolor illustrations reviewed as "expressive" and humorous like the one of Granddad and bird in a tree sketching each other. Nice blend of the imagination and fact.

Reading Level: Primary Read Aloud Level: Pre-School & up Uses: Pre-School & up

BIRD WATCHING WITH MARGARET MORSE NICE; Ross, Michael, author; Caple, Laurie A., illustrator; New York: Lerner – Carolrhoda Books; c. 1997.

This book is a part of a series highlighting scientists not as well known along with a look at the subject area they were famous for studying. This series includes biographical information about Nice and her study of bird behavior and choosing this career and that of psychology when career options were limited for women at the turn of

the century. From her observation of song sparrows, the role of birdsong and territorial behavior was explained. Included in the biography is information about bird watching, choosing binoculars, behavior observation and gardening for the birds. The book contains activities, and index and glossary.

Reading Level: Upper Primary Read Aloud Level: Primary & up Uses: All ages

Bluebirds and Their Survival (Paperback) by Wayne Harry Davis (Author) Publisher: University Press of Kentucky (May 1995)

To ensure the survival of bluebirds (a North American native threatened by sparrows and starlings), the authors instruct on how to build habitats, distribute winter feed, and foil enemies, both feathered and furred. Scientific research is cited to back the authors' claims on the best diet, nesting locations, and shelters. Finally offered are photography lessons and specific birdhouse designs, from simple milk jugs to a sparrow-inhibiting nest box. Bird-watchers, earnest and casual, will benefit from this guide

CARDINALS (Originals Publisher's Binding); Stone, Lynn M., author, Rourke Press Publishers; c. 1998 (Backyard birds series).

Describes the physical characteristics, habitats, and behavior of different kinds of cardinals, including the red – capped cardinal, pyrrhuloxia, and red cardinal. (AR Book – Perma – Bound List).

Reading Level: 3.9 Read Aloud Level: 1-4 Uses: K-6

Chickens Aren't the Only Ones (World of Nature Series) (Paperback) by Ruth Heller (Author) Publisher: Putnam Juvenile (May 24, 1999)

Ruth Heller's prose and pictures are the perfect means for discovering the variety of oviparous animals and their unique ways of laying eggs.

The Complete Birdhouse Book: The Easy Guide to Attracting Nesting Birds (Paperback) by <u>Donald W. Stokes</u> (Author), <u>Lillian Q. Stokes</u> (Author) Publisher: Little, Brown and Company; 1st ed edition (June 25, 1990)

GARDENING FOR THE BIRDS; Thomas G. Barnes, author; University Press of Kentucky; c. 1999

Gardening for the Birds is an easy-to-use guide to transforming your yard into an oasis for urban wildlife. By planting the right kinds of flowers, trees, shrubs and grasses, you may soon be enjoying the sounds of a Carolina wren, following the graceful movements of the black-tailed swallowtail butterfly, or watching the antics of a chipmunk gathering food for the winter. Which birdseed attracts the most species of birds? What type of feeder is best to use? How do you deter squirrels? Barnes answers all these questions and more. He includes a plant encyclopedia of trees and shrubs native to the Upper South that attract a variety of birds, butterflies, and mammals. Barnes's plans and plant lists can also be used to create a woodland, a prairie, or a water garden. Also included are tips for birdwatchers of all levels and suggestions for deterring common garden pests.

GOLDEN EAGLES OF DEVIL MOUNTAIN; Rauzon, Mark J., author;

GREAT HORNED OWLS (Originals Publisher's); Wechsler, Doug author; Rosen Publishing Group, Publishers, c.2001; (The really wide life of birds or prey series).

Describes the physical characteristics, behavior, and habitat of the great horned owl.

Reading Level: 3.8 Read Aloud Level: 2-5 Uses: All ages

HUMMINGBIRDS (Original Publisher's Binding); Stone, Lynn M., author; Rourke Press Publishers; c. 1998 (Backyard series).

Describes the physical characteristics, habitats, and behaviors do different kinds of hummingbirds, including the ruby-throated, rufous, and Club hummingbirds. ((AR Book Permsa – Bound list).

Reading Level: 4.1 Read Aloud Level: 1-4 Uses: K-6

The Kentucky Breeding Bird Atlas (Hardcover)

by <u>Brainard L., Jr. Palmer-Ball</u> (Author) **Publisher:** University Press of Kentucky (August 1996)

THE LIFE CYCLE OF A BIRD; Kalman, Bobbie & Smithyman, Kathryn, authors; various photographers & illustrators; New York: Crabtree Publishing Company; c. 2002.

Using sketches and photographs, this series studies a topic from definition – What Is A Bird – to Helping Birds in Danger. Life cycles are explained in general terms. Nesting habits, feeding, types of birds, migration, courtship, and habitats are also defined and illustrated. Book contains an index, glossary and bird feeding tips. Reading Level: Upper Primary Read Aloud Level: Pre-K & up Uses: All Ages

A Nest Full of Eggs (Let's-Read-and-Find-Out Science, Stage 1) (Paperback) by Priscilla Belz Jenkins (Author), Lizzy Rockwell (Illustrator) Publisher: HarperTrophy (May 30, 1995)

PreSchool-Grade 2?A young boy and girl observe the activities of a robin family from the first "cheer-up" call of spring, through nest building, hatching, and fledging. Additional information about other kinds of birds and their behaviors is touched upon. One double-spread shows development within the egg. The format is open and inviting with illustrations that have child appeal. However, the colors appear rather flat and washed out, lacking the exuberance one associates with the season. An adequate accompaniment to Barrie Watts's Birds' Nest (Silver Burdett, 1991), a photographic presentation of the nesting season of the blue titmouse.?

Ortho's All About Attracting Hummingbirds and Butterflies (Ortho's All About Gardening) (Paperback)

by Ortho (Author) Publisher: Ortho; 1st ed edition (January 1, 2001)

Explanation of anatomy, life cycle, and food requirements. 15 plans for gorgeous gardens that double as friendly habitats. Gallery of plants, including regional recommendations.

Where Do Chicks Come From? (Let's-Read-and-Find-Out Science 1) (Paperback)

by <u>Amy E. Sklansky</u> (Author), <u>Pam Paparone</u> (Illustrator) **Publisher:** HarperTrophy (February 1, 2005)

PreSchool-Grade 2 - Sklansky's clear and accurate text begins with fertilization when the rooster's "sperm joins the growing egg" and concludes with the dry, fluffy baby. She uses the correct terminology to discuss the anatomy of the egg and the purpose of each part. She also explains that the "egg you eat for breakfast" is unfertilized and cannot grow into a chick. As the hen sits on her nest for the 21-day incubation period, the day-to-day development of the embryonic chick is detailed in easy-to-understand paragraphs and full-color drawings. The illustrations are soft and friendly, but retain enough realism for children to understand the subject matter. Suggested activities and a list of stories about chicks are appended. This is an enjoyable and informative introduction to scientific information.

ENERGY

WHERE DOES ELECTRICITY COME FROM?; Cast, C. Vance, author; Wilkinson, Sue, illustrator; Barron's Educational Series, Inc., Hauppauge, NY; c. 1992. Part of the "Clever Calvin" series, Calvin explains in simple terms all about electricity. A glossary is included in the back. Illustrations are simple and help define the text. Batteries, static electricity and some pros and cons of energy production, such as nuclear energy, are discussed.

Reading Level: upper primary Read Aloud Level: upper primary Uses: All ages

FOLKLORE

AUNT MARY, TELL ME A STORY, A Collection of Cherokee Legends and Tales; Galloway, Mary Regina Ulmer, editor; various illustrators; Cherokee, NC: Cherokee Communications; c. 1990.

Galloway tells 29 legends and tales of the Cherokee in this chapbook. She explains the difference in legends, myths and tales. The tales give explanation to that which has no explanation. Stories are about the "Little People", creation stories, the why of things - names, looks or actions and historical Cherokee information and explanations in prefacing the stories.

Reading Level: Upper Primary Read Aloud Level: Primary Uses: All ages

DANCING DRUM, A Cherokee Legend; Cohlene, Terri, author; Reasoner, Charles, illustrator; Vero Beach, Flordia: The Rourke Coperation, Inc.; c. 1990.

This story tells the legend of how Dancing Drum went to the sky world and tried many ways to make Grandmother Sun smile on the people. Grandmother Sun did not think the People loved her enough so she was offended and sent scorching heat. Dancing Drum got advice from the little people and went to the sun as a snake but did

not kill Grandmother Sun but her daughter. Dancing Drum, in trying to bring her back from the "Land of the Spirits", released the daughter who had turned into a cardinal. Since that time souls could not return. A history and further information abut the Cherokee complete the book.

Reading Level: Upper Primary Read Aloud Level: Primary Uses: All ages

GULLYWASHER (El Chaparron Torrencial); Rossi, Joyce, author/illustrator; Northland Publishing; c. 1999.

Sprinkled with Spanish words, this book tells a few facts about gully washers then turns to folklore. The young girl asks her grandfather to tell of the days when he was a "vaquero" (cowboy). One example explains he got his wrinkles - from rain rushing over him during a gullywasher when he was caught out in the storm. It is a humors tall tale and has a glossary and pronunciation key.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K - 4th

GRANDMOTHER SPIDER BRINGS THE SUN, A Cherokee Story; Keams, Geri, author; Bernardin, James, illustrator; Flagstaff, AZ: Northland Publishing; c. 1995.

In this picture book, the folktale explains how opossum and buzzard got their bald tail and head as well as how sun came to the other side of the earth. The story ends with Grandmother Spider going through the tunnel and bringing back light and there after puts a sun circle in the middle of her web. In the forward to the book, it tells us that the story "teaches us to respect and honor Fire, Grandmother Spider and our four legged friends, just as the Cherokee do." A brief statement is also made about Cherokee potters way of making pots.

Reading Level: Primary Read Aloud Level: Pre-School & up Uses: All ages

HOW CHIPMUNK GOT HIS STRIPES: A Tale of Bragging and Teasing; Bruchac, James & Bruchac, Joseph, authors; Aruego, Jose, illustrator; New York: Penguin Putnam Books for Young Readers; c. 2001.

Brown Bear brags and brags until Brown Squirrel challenges him to make the sun not rise. Of course the sun does rise and it makes the bear angry especially after Brown Squirrel teases him relentlessly and so Brown Bear teaches Brown Squirrel a lesson forever showing the claw mark down his back thus becoming the chipmunk. A retelling of the Native American pourquoi tale, the authors explain the history of the tale at the beginning of the story.

Reading Level: Primary Read Aloud Level: K & up Uses: All ages

IF YOU LIVED WITH CHEROKEES; Kamma, Anne & Roop, Connie, authors; Smith, Kevin, illustrator; New York: Scholastic, Inc.; c. 1998.

Using a Q & A format this book contains a great deal of information about the Cherokee people. Topics include a wide variety of subjects like "Who are the Cherokee" and leaders, jobs, housing, food, ceremonies, games, and the Trail of Tears. A time line is included as well as a Cherokee syllabary. Illustrations are child like and simple.

THE KENTUCKY BREEDING BIRD ATLAS; Brainard L. Palmer Ball Jr., author; University Press of Kentucky; c. 1996

Ten years in the making, this atlas presents by far the most detailed guide to birds that nest in the state. Includes photographs of each species and summaries of their distribution and abundance.

LIVING STORIES OF THE CHEROKEE; Duncan, Barbara R., collector, editor; Chapel Hill, NC: University of North Carolina Press; c. 1998.

The collection contains stories by Davey Arch, Robert Bushyhead, Edna Chekelelee, Marie Junaluska, Kathi Smith Littlejohn, and Freeman Owle. The Tribal Council of the Eastern Band of the Cherokee gave approval to the collection. A short history of the Eastern Band is also included in the introduction as well as the history of the collecting of the oral traditional stories of the Cherokee. A brief biography is given of each of the storytellers whose work is transcribed and written in the "oral poetic" method. The seventy-two traditional and contemporary tales contained in the collections include animals stories, creation myths, legends and ghost stories and well as family stories telling the history of the Cherokee Nation.

Reading Level: Accomplished readers Read Aloud Level: K & Up (depending on story) Uses: All ages

NEVER CRY WOLF; Mowat, Farley, author; New York: Holt Rinhart & Winston; c. 1999. (Franklin Watts; c. 1979; Back Bay Books; c. 2001).

The Canadian Wildlife Service asked Mowat, a naturalist, to study why wolves were killing the caribou. He spent a summer observing and learning about the wolves and the Inuit people who lived near by. Hailed as a pioneering piece of nature study in literature at the time, the book narrates his observations and his beginning activism for the wolf and the indigenous people of the north.

Reading Level: young adult & up Read Aloud Level: YA & up Uses: YA & Up

SNAIL GIRL BRINGS WATER; Reams, Geri, author; Ziehler-Martin, Richard, illustrator; Rising Moon Press; c. 1998.

Editorial Reviews

From School Library Journal

Kindergarten-Grade 3-In this creation story, the first People are flooded out of the Underworld and emerge into this, the Fifth World, at the shore of a large salty ocean. First Woman constructs a water bottle out of seashells and calls on the animals of the Water Clan to return to the Underworld and fill it with fresh water. One by one, Otter, Beaver, Frog, and Turtle fail in this quest. Finally, brave but slow Snail Girl volunteers and returns with enough fresh water to enable First Woman to create a river. Snail Girl is a hero who succeeds through quiet perseverance and humility. Written by a Navajo storyteller, the text of this picture book is a clear and careful example of storytelling set within a specific Native American culture. Ziehler-Martin uses a brilliant palette that is reminiscent of contemporary animated movies. While the animals are drawn clothed, it is evident that they do not represent humans. There is one point of disconnection between the text and artwork: Snail Girl is described as so exhausted that she cannot cry, yet the illustration shows tears streaming down a reflection of her face. Still, this is

an excellent addition for collections looking for folktales that explore multicultural and ecological themes.

Loriene Roy, University of Texas, Austin Copyright 1999 Reed Business Information, Inc.

FOOD CHAINS

*HUNGRY ANIMALS: MY FIRST LOOK AT A FOOD CHAIN; Hickman, Pamela, author; Collins, Heather, illustrator; Kids Can Press; c. 1997.

This lift the flap book is intended for infants and toddlers but has information for all ages. This book is a simple introduction to the food chain for young children.

Reading Level: Primary Read Aloud Level: Infant & up Uses: Infant & up

THE MAGIC SCHOOL BUS GETS EATEN: A BOOK ABOUT FOOD CHAINS; Reif, Patricia; Degen, Bruce; & Cole, Joanna, authors; Bracken, Carolyn; Leigh, Tom, illustrators; New York: Scholastic; c. 1996.

The Magic School Bus takes a trip the beach and discovers an underwater lesson about food chains. A very popular series including a series of videos, general explanations and examples are used with the well known characters to explain the food chain and what some unusual things have in common. Enough information is given to even use as reference material for simple reports.

Reading Level: Upper Primary Read Aloud Level: Primary Uses: Primary & up

WHO EATS WHAT?; Lauber, Patricia, author; Keller, Holly, illustrator; New York: HarperCollins; c. 1995.

A Let's Read and Find Out series book, Lauber explains the food chain simple and to the point with Keller's simple illustrations that depict food webs as well. Wild animals as well as domestic and the human animal are shown and readers might see how they belong in the food web.

Reading Level: Primary Read Aloud Level: K & up Uses: All ages

GARBAGE/RECYCLING/ECOLOGY

AND STILL THE TURTLE WATCHED; MacGill-Callahan, Sheila, author; Moser, Barry, illustrator; New York: Dial Books; c. 1991.

Barry uses watercolor to describe the story based on a rock that can be found in the New York Botanical Garden. A Delaware Indian carves an turtle on a rock that (as the story begins) over looked the river. The rock is shown through the ages and the use changes that happen to the land. Covered with graffiti, the rock is saved. Part archeology, part ecology, this book will cause most readers to pause.

Reading Level: Upper Primary Read Aloud Level: older K - & up Uses: All ages

ARNOSKY'S ARK; Arnosky, Jim, author, illustrator; National Geographic Publishers; c. 1999.

Arnosky states this is a "act of kindness" to tell about his favorite animals and their survival story. Depicted with bright, fun and accurate illustration, each double page spread tells of an animal and a brief statement about that animal including why Arnosky included it in the book. Beaver, bison, alligator, crocodiles, cougar, black bear, white-tail deer, brook trout, osprey, manatee, great whales, and mountain gorilla are highlighted. Information about laws that helped protect the survival of these animals and their importance to the eco system is included.

Reading Level: Upper Primary Read Aloud Level: K & Up Uses: All ages

BROTHER EAGLE, SISTER SKY: a MESSAGE FROM Chief Seattle; Jeffers, Susan, illustrator; New York: Dial Books for Young Readers; c. 1991.

The book contains a powerful message that all things are connected with stunning pen and ink illustrations. Illustrations depict Native Americans living in harmony with and respect towards nature. The problem is this book has lots of flaws. Hailed at publication time and put on many "must have" lists, the book has overly romantic illustrations that depict several images not in keeping with Chief Sealth's homeland. And the adaptation of the speech attributed to the Chief were never spoken by him but were part of a 1972 movie screenplay by Ted Perry.

Reading Level: Primary Read Aloud Level: K & up Uses: All ages

COME BACK, SALMON; Cone, Molly, author; Wheelwright, Sidnee, illustrator; San Francisco: Sierra Club Books; c. 1992.

The Jackson Elementary School adopts a stream and this is the story of that school wide project. Dialogue is based on interviews with the participating children and teachers. This book tells the process including where they got the money to do things, art projects, information about salmon, fish habitat improvement, water testing, environmental protection and the difference one group of school children can make. They returned the stream bed from a waste heap to spawning ground. Photos do show pictures of children doing what is now considered improper techniques (barefoot in the stream, removing trash without gloves, etc.).

Reading Level: Intermediate Read Aloud Level: Primary & up Uses: All ages

COMPOST CRITTERS; Lavies, Bianca, author, illustrator; New York: Dutton Children's Books; c. 1993.

Detailed photography show all the critters and plants found returning garbage to more useful soil. Lavies includes size clues in the pictures to aid readers in just how big or small the critters are depicted. Text gives information about the objects including historical references. The picture study spans a year in recycling the compost heap. This book is an excellent source of information and up close look at earthy creatures and plants.

Reading Level: Upper Primary Read Aloud Level: Primary & up Uses: All ages But could be used in K

COMPOST! GROWING GARDENS FROM YOUR GARBAGE; Glaser, Linda, author; Hariton, Anca, illustrator; Brookfield, Connecticut: Millbrook Press; c. 1996.

Using soft water color illustrations, the book states simply what goes into a compost heap, how to take care of it and what to do with it when it returns to soil. Three pages at the end explain composting in detail, how to make a compost bin and other questions are answered.

Reading Level: Primary Read Aloud Level: Toddler & Up Uses: Pre-K – Primary

COMPOST HEAP; Rockwell, Harlow, author, illustrator; New York: Doubleday & Co.; c. 1974; (out of print).

A very simple version of what happens in a compost heap. Illustrates what goes into a compost heap, worms and how to take care of compost heap. Illustrations show child and father returning the new earth to a garden.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K – early primary

THE DAY THE TRASH CAME OUT TO PLAY; Beadle, David M. author; Faust, Laurie A., illustrator; South Pasadena, CA: Ezra's Earth Publishing; c. 2004.

Using a rhyming text and colorful fun illustrations, the story tells of a candy wrapper not properly put in the trash container and what happens next. The whole town of Sutton Nash gets together to solve the problem when one piece of trash sees that another one has been allowed to go free. Although a bit trite and a bit silly, this book shows how the wind and carelessness can make a big mess and also in a double page spread, how trash affects wildlife. Kids love this book for its simplicity and directness and little over the top solution to the day the trash came out to play.

Reading Level: Primary Read Aloud Level: Pre-School & up Uses: Pre-School & up (prepared pre-school)

ECOLOGY (Usborne Science and Experiments Series); Spurgeon, Richard and others, authors; Chen, Kuo Kang and others, illustrators; E D C Publications; c. 1989, 1990 (paper).

Introduces students to the study of Ecology and discusses a broad range of topics such as cycles in nature, the ocean, adaptations, forest, population and conservation, evolution, and more. Addresses current environmental problems and suggestions for improvements. Projects are included. (Please Note: Copyright date must be taken into consideration when using this book for facts and figures). Reading Level: Intermediate Read Aloud Level: Intermediate Uses: All ages

THE FAMILY OF EARTH; Schimmel, Schim, author, illustrator; Minnetonka, MN: NorthWord Press; c. 2001.

Through striking illustrations, Schimmel superimposes a space shuttle eye view of the earth and different habitats to explain that we all share the same planet and are all connected. The illustrations show a variety of animals found throughout the world

with hints about their habitat show visually and in the text. The main concept is the interconnectedness of all animals. No scientific information is given.

Reading Level: Primary Read Aloud Level: Pre-School and & Uses: Pre-School - Primary

50 SIMPLE THINGS KIDS CAN DO TO SAVE THE EARTH; Earthworks Group, author/illustrator; Publisher: BT Bound; c. 1999.

Briefly the book has one to "Take A Guess" and then the problem is outlined in a "Did You Know" section that is followed by "What You Can Do" and "See For Yourself". Comparisons are made in kid friendly terms that they can relate to and understand. The book contains practical tips that explain not only how kids but also adults can conserve energy, recycle and take saving the environment seriously. The book emphasizes the need for adult help and advice. Upper primary reading level and could be used for lower grades with assistance.

THE GARBAGE MONSTER; Sensel, Joni, author; Bivins, Chris, illustrator; Seatle: Artful Dragon Press, Dream Factory Books,; c. 2000.

Written in rhyme with colorful illustrations and interesting fonts, this imaginative story tells a tale of what happens when a youngster does not take the trash out in a timely manner. The Garbage Monster is created from objects and junk discarded. The recycling tale does not preach but introduces alternatives to just throwing away. Reading Level:Primary Read Aloud Level: K & up Uses: All ages

GLASS; Oxlade, Chris, autor; Heinemann Library Publishers, c. 2001; (Materials, materials, materials series).

Explains where glass comes from, how it is processed, and how it is recycled. (AR Book Perma – Bound List).

Reading Level: 3.5 Read Aloud Level: K-3 Uses: K-5

THE GREAT TRASH BASH; Leedy, Loreen, author, illustrator; Holiday House, publisher, New York, New York; c. 2000

The mayor of Beaston declares there is too much trash around so the town explores solutions such as the town dump, incinerator and landfill. Text includes pros and cons of each solution and talks about recycling. Comic-strip format might make it difficult for large group reading aloud. Appended with a list of trash cutting ideas. Reading Level: Primary Read Aloud Level: Pre-School & up Uses: Pre-School & up

HEALING APPALACHIA SUSTAINABLE LIVING THROUGH APPROPRIATE TECHNOLOGY, AI Fritsch and Paul Gallimore

Healing Appalachia is the first book to apply "appropriate technology," or the simplest level of technology that can effectively achieve the desired result, specifically to the Appalachian region. The authors examine thirty low-cost, people-friendly, and environmentally benign appropriate technologies that are concerned with such issues as food preservation, land use, shelter, and transportation. They pay close attention to the practicality of each technique according to affordability, ease of use, and ecological

soundness. Details on construction and maintenance and resources for locating further information are included, making this an essential volume for everyone who cares about the future of Appalachia.

Al Fritsch is founder of Appalachia – Science in the Public Interest and coauthor of *Ecotourism in Appalachia: Marketing the Mountains.*

Paul Gallimore is founder and executive director of the Long Branch Environmental Education Center in Leicester, North Carolina.

HOW SPIDER STOPPED THE LITTERBUGS; Kraus, Robert, author, illustrator; New York: Scholastic, (currently out of print, some stores have copies); c. 1991. (Scholastic).

Spider and his first grade class are going on a picnic in Bugg Park where they find that all the trash and been scatter about and graffiti about the park. Spider and his classmates work to clean up the mess so they can enjoy the day. Crashing the party are the litterbugs who are first grade dropouts. Spider remembers the saying "Music hath charms to soothe the savage bug" and the bug concert begins. "Don't litter, litter, litter. Just jitter, jitter, jitter" the lyrics go and as unbelievable as it is the litterbugs stop and start cleaning up. The book stresses cooperation and on the end page gives a short list of what kids can do to help save earth.

Reading Level: primary Read Aloud Level: Pre-K and Up Uses: Pre K - Primary

JUST A DREAM, Chris Van Allsburg, author, illustrator; New York: Houghton Mifflin; c. 1990.

A what if cautionary story about what happens in the future. His story starts with the thinking his friend's birthday present of a tree is ridiculous. But through his dreams he learns how important a tree can be. His dreams take him to garbage filled, fishless, choked environments. He realizes what one person can do to help stop the possibility. Reading Level: Primary Read Aloud Level: K - & up Uses: All ages

LANDFILL LUNCH BOX; Riley, Karen, author, illustrator; Cathedral City, CA: City of Cathedral City, publishers; c. 2000.

Riley developed the book to demonstrate the integration of art and the environment by using reused and recycled materials as the basis for all activities. Although the activities (14 different ones) are not all new to the creative teacher, the resource recover tips might be. These tips remind you of trash or recyclable resources that might be available locally from printing business to senior centers and the grocery store. With each activity there is a factoid about trash. There is an explanation of the plastic recycle symbols, how long it takes for materials to degrade, glossary, California specific contact information and bibliography.

Reading Level: Intermediate Read Aloud Level: na Uses: All ages

LET'S CELEBRATE EARTH DAY; Roop, Connie and Peter, authors; Connelly, Gwen, illustrator; Publisher: Millbrook Press; c. 2001.

Many concepts from the why's of the Clean Air Act to endangered species to the good things about forest fires are highlighted in this book. With a question and answer

format, the book also includes basic facts, famous quotes and informational side bars incorporated in the illustrations. This book is on a primary reading level.

LET'S GET READY FOR EARTH DAY (Welcome Books: Celebrations Series); Douglas, Lloyd G., author; photography; Publisher: Children's Press; c. 2003.

This book, recommended for kindergarten through primary, follows a young boy and his class as they learn about and prepare for Earth Day. The story culminates in creating posters and planting a tree.

THE LORAX; Seuss, Dr., author, illustrator; New York: Random House; c. 1971.

Written one year after the firs Earth Day, this book may be a surprise for most Seuss fans who think of the Cat in the Hat. Written in typical Seuss rhyme and made-up words like Once-ler and Whisper-ma-Phone, the books tells the tale of what will happen when business is allowed to do anything for a "Thneed". Animals leave the forest, water is polluted beyond use and smog. But the book ends on a hopeful note asking the child to take care of the last seed of the Truffula Tree. One child reviewer call the book a bit scary.

A stronger message on ecology and activism than Seuss's Grinch about commercialism.

(Personal note: When I use this book for PLT activities I always try to balance with a report about the laws that came after the book (clean water act, clean air act, Kentucky's Forestry Laws, etc.) and for older grades talk about the possible impact of just one book even after 30 some years.)

Reading Level: Primary Read Aloud Level: Primary & up Uses: All Ages Could be used in K with preparation.

MAKING PAPER; Costain, Meredith, author; BT Bound Publishers; c. 2001; ages 4-8.

MISS RUMPHIUS; Cooney, Barbara, author, illustrator; New York: Scott Foresman (reprint edition); c. 1985.

Deciding at an early age that she wanted to see the world, Alice who grows up to be the librarian Miss Rumphius, does just that but has not forgotten a charge from her grandfather to "make the world beautiful". A deceivingly simple story that gives pause as to what each could do to make the world more beautiful. Winner of the American Book Award and New York Times Best book of the Year. Illustrated in the now famous Cooney folk art style.

OLD TO NEW; Costain, Meredith author: Sundance Paperback Distributors. (Little Green Readers series) C. 2000;

You use old things to make new things.

Reading Level: 1.9 Read Aloud Level K-3 Uses:

PAPER: Oxlade, Chris, author; Heineman Library; Publishers. C 2001;

Explains where paper comes from, how it is processed, and how it gets recycled. (Heinemann first library series).

(AR book, Perma-Bound)

Reading Level: 3.5 Read Aloud Level: K-3 Uses: All ages

PLASTIC; Oxlade, Chris, author; Heineman Library; Publishers. C 2001; Explains where plastic comes from, how it is processed, and how it gets recycled. (Heinemann first library series).

(AR book, Perma-Bound)

Reading Level: 3.5 Read Aloud Level: K-3 Uses: All ages

RECYCLE; Gibbons, Gail, author, illustrator; New York: Little, Brown and Company; c. 1992.

Using Gibbons signature illustrative style of bold colors and simple shapes, she explains all aspects of recycling from start to finish including recycling plants and land fills. Text is simple but very informative and urges the reader to reduce, reuse and recycle. She includes cautions like burning plastics that give off harmful gases to non-biodegradable products. Gibbons add statistics about how much garbage is generated and where it goes.

(One must keep in mind the stats are from 1992.)

Reading Level: Primary Read Aloud Level: K & up Uses: All ages

Could be used in Pre-K with preparation

RECYCLE, REDUCE, REUSE, RETHINK SERIES: Includes PAPER, STEEL, GLASS, ALUMINUM (4 Books); Kate Walker, author; Smart Apple Media, publisher; c. 2005.

These books explain what each material (paper, steel, glass, & aluminum) is, how it is recycled, and why we should recycle it.

RECYCLED PAPER: FROM START TO FINISH; Woods, Samuel G.; Zucker, Gale, photographer; Blackbirch Marketing; c. 2000; glossary, index; all ages.

RECYCLING; Costain, Meredith, author; BT Bound Publishers; c. 2001; ages 4-8.

REDUCE, REUSE, RECYCLE; Williams, Rozanne, L. author; Chawla, Neena, illustrator; Creative Teaching Press; 1995. Out of Print

Sandwich Bag Science: 25 Easy, Hands-on Activities That Teach Key Concepts in Physical, Earth, and Life Sciences-and Meet the Science Standards (Paperback) by Steve Tomecek (Author) Publisher: Teaching Resources; 1st edition (September 1, 2006)

Find out how an empty sandwich bag can be jam-packed with science in this collection of learning-rich, hands-on activities. Students discover the force of atmospheric pressure, investigate physical and chemical changes in matter, test

germination rates of seeds, and so much more. A fun and easy way to meet the National Science Education Standards! For use with Grades 4–8.

SAVE OUR PLANET; 750 Everyday Ways You Can Help Clean Up the Earth; MacEachern, Diane, author; Johnson, Lonni Sue, illustration; Publisher: Dell Publishing; c. 1990.

The book is printed on recycled paper and gives such great comments like "The average American throws out his own weight in packaging every month." The introduction alone is worth the read explaining why the planet is in peril. In the introduction water issues are explained as well as others such as deforestation, global warming and acid rain and more. The succeeding chapters outlines ways you can "save the planet" in the home, garden, garage, at the supermarket, school, office and in your community, your apartment and even on vacation. Each chapter is full of "bright ideas" and "source" where you can find out more about a subject. Full of information and suggestions, please remember the copyright date when using the "source" information and actual naming of recommendation such as appliances and models.

SIMON AND HIS BOXES; Tibo, Gilles, author, illustrator; New York: Tundra Books; c. 1994; (out of print).

A child using his imagination builds all sorts of houses for animal friends but finds they already have homes. Great ideas about how to use boxes as play are illustrated. In the end, the child must find something to do with all his boxes so he uses them to clean up the forest.

Reading level: Primary Read Aloud Level: Pre-K – Primary Uses: Pre-K - Primary

SOIL; Adele Richardson, author; c. 2002, Bridgestone Books by Capstone Press, publisher.

Reading Level: Grades 2-3 • Interest Level: Grades 2-4

Discusses the different types of soil, its properties, erosion, pollution, and how humans can protect soil.

TEMPERATE FORESTS; Sally Wilkins, author; c. 2004, Bridgestone Books from Capstone Press, publisher.

Reading Level: Grades 2-3 • Interest Level: Grades 2-4

Discusses the plants, animals, and climate of a temperate forest ecosystem.

TRASH; Wilcox, Charlotte, author; Bushey, Jerry, photographer; Lerner Publishing Group, New York (reprint); c. 1988, 1993 (reprint).

An explanation of how garbage is removed and what happens to it is contained in this book. Illustrates traditional methods (landfills), encourages recycling and waste reduction and makes a few recommendations (mass burning). Copyright date should be taken into consideration.

Reading Level: upper primary Read Aloud Level: upper primary Uses: All ages

THE WARTVILLE WIZARD; Madden, Don, author, illustrator; New York: Macmillian Publishing; c. 1986.

This is the story of an old man who became upset over all the trash and garbage along the road to Wartville. After talking to Mother Nature, he is given a special power to send trash back to the one who carelessly discarded it. The garbage would stick to the person who threw or dumped it showing all the world how much garbage they disposed. Every time the old man found a pile of trash, he sent it back. Finally at a town meeting they decided to go to the old man and demand he quit. He replies "Hello Slobs!" Finally realizing their mistake, they promised to not throw trash in the wrong places. He told them to put it where it belonged and it would not stick to them again. A good book to illustrate how we all litter a little and the impact it has on the environment although it does not go into the "why" we should not litter. It is implied.

Reading Level: Upper Primary Read Aloud Level: K & up Uses: All ages

WHERE DOES THE GARBAGE GO; Showers, Paul, author; Chewning, Randy, illustrator; New York: HaperCollins Publishers; c. 1994.

The revised edition(1994) of the book is based on his book published twenty years earlier. The text and pictures show a garbage truck and the journey all garbage takes. In the revision, a teacher tells about how garbage use to be handled and talks about changes that have happened over the years such as recycling programs that are (or could be) available to use.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: All ages

WUMP WORLD; Peet, Bill, author, illustrator; New York: Houghton Mifflin Co. (reprint edition, 1981); c. 1970.

Often compared to Dr. Seuss's THE LORAX, this book came first. In the book where science fiction meets Peet's wonderful characters there is a strong environmental message when the Pollutians invade the Wump World and turn it from green meadows to concrete.

Reading Level: Primary Read Aloud Level: K & up Uses: All Ages

GEOLOGY/ LAND/ SURFACE FEATURES

Caves; Ellen Sturm Niz, author; c. 2005, Bridgestone Books from Capstone Press, publisher.

Reading Level: Grades 2-3 • Interest Level: Grades 2-4

Caves – Describes caves, including how they form, plants and animals in caves, and how people and weather change caves.

COAL (A True Book series); Ditchfield, Christin, author; various photographers; New York: Children's Press (Scholastic Inc.); c. 2002.

This controlled vocabulary book about coal is very informative. Beginning with an explanation of how coal is formed, the book discusses simply and thoroughly where coal is found, how it is processed, what it is used for and future expectations for the demand for coal. Photographs add to the text to help explain terms and give a visual

idea for those not exposed to the coal industry. There are two pages of additional resources as well as a glossary and index.

Reading Level: upper primary Read Aloud Level: primary Uses: All ages

EARTH FEATURES SERIES; Mari Schuh & Lisa Trumbauer, authors; c. 1999; Pebble Books from Capstone Press, publisher.

Explore the earth in this introductory geography series! Young students will learn about basic physical features of the earth. Simple text and supportive images help beginning readers learn about the wonderful variety of land and water forms that make up our earth. Grades K-2.

OTHER TITLES IN SERIES: WHAT ARE CAVES? WHAT ARE DESERTS? WHAT ARE FORESTS? WHAT ARE LAKES? WHAT ARE MOUNTAINS? WHAT ARE OCEANS? WHAT ARE RIVERS? WHAT ARE VOLCANOES?

EARTH'S LAND AND WATER; Bonnie Beers, author; c. 2001, Yellow Umbrella Books from Capstone Press, publisher.

Reading Level: Grades K-1 • Interest Level: Grades PreK-2

Text and photographs describe bodies of water, such as oceans, lakes, and rivers, as well as land forms such as mountains, island, valleys and plains.

EROSION; Becky Olien, author; c. 2002, Bridgestone Books from Capstone Press, publisher.

Reading Level: Grades 2-3 • Interest Level: Grades 2-4

Discusses water, wind, ice, and soil erosion.

HILLS; Christine Webster, author; c. 2005, Bridgestone Books from Capstone Press, publisher.

Reading Level: Grades 2-3 • Interest Level: Grades 2-4

Provides a description of hills and explains how they form and change, along with some information on the kinds of plants and animals that can be found on hills. Hills found in North America and in the world are highlighted including the Sand Hills in Nebraska.

MOUNTAIN DANCE; Locker, Thomas, author, illustrator; New York: Harcourt, Inc.; c. 2001.

Locker, in his distinctive and powerful oil on canvas illustrations, shows how that the earth is never quiet or still but always changing. How mountains are formed, erosion, glaciers and diverse mountains are topics covered in the sparse but informative text. End pages give more information about mountains and their formation. Locker is an award winning author, illustrator.

Reading Level: Primary Reading Level: Pre-K – up Uses: All ages

PEOPLE CHANGE THE LAND; Dave Bauer, author; c. 2004, Yellow Umbrella Books from Capstone Press, publisher.

Reading Level: Grades K-1 • Interest Level: Grades PreK-2

SOIL; Adele Richardson, author; c. 2002, Bridgestone Books by Capstone Press, publisher.

Reading Level: Grades 2-3 • Interest Level: Grades 2-4

Discusses the different types of soil, its properties, erosion, pollution, and how humans can protect soil.

THE SUN, THE WIND AND THE RAIN; Peters, Lisa Westberg, author; Rand, Ted, illustrator; New York: Henry Holt & Co.; c. 1990.

Geology is explored in an unusual presentation where a child makes a mountain on one page and the elements that were necessary to make the other mountain are shown on the opposite page.

Reading Level: undetermined Read Aloud Level: undetermined Uses: undetermined

WHO CAME DOWN THAT ROAD?; Lyon, George Ella, author; Catalanotto, Peter, illustrator; New York: Orchard Press; c. 1992.

Illustrated in watercolor with the pictures interconnected to represent a time line, the picture books relays the passing of time and the formation of a salt lick that over thousands of years has drawn people and animals to a place. Inspired by Blue Lick State Park, Lyon writes of an "old, old road" but avoids the question of evolution or creation through the lines replied after "What came before the sea? Questions! Questions crowded like a bed of stars, thick as that field of goldenrod—questions came before sea and ice, before mastodon and grizzly bear…" Many concepts are taught in this simple picture book.

Read Level: Primary Read Aloud Level: Pre-K & up Uses: All ages

HABITATS

Animal Habitats Photo Book Series: lakeshorelearning.com

Students journey to the heart of eight unique habitats—and learn all about the animals that live there! 8 paperback books have color photos and simple text that clearly explain how ecosystems support a variety of animals. Each is 24 pages.

Targets standards in these areas:

- Characteristics of biomes
- Life in different environments
- Habitats within ecosystems

ANIMAL HOMES SERIES; Linda Tagliaferrs & Martha Rustad; Pebble Plus Books from Capstone Press; c. 2004-2005

Some animals build their homes out of grass and twigs, while others make burrows in the soil. These colorful, easy-to-read books welcome readers into the homes of a variety of animals.

TITLES IN SERIES: ANTS & THEIR NESTS, BEAVERS & THEIR LODGES, BEES & THEIR HIVES, BIRDS & THEIR NESTS, FOXES & THEIR DENS, RABBITS & THEIR

BURROWS, SPIDERS & THEIR WEBS, SQUIRRELS & THEIR NESTS, BEARS & THEIR DENS

ANIMAL HOMES; Kalman, Bobbie & Everts, Tammy, author, illustrator; Crabtree Publishing Co.; c. 1994 (Crabapples Series).

Illustrated cross-sections and superb photos of animals' homes accompany the intriguing information about where and how animals build their homes. (AR book – Perma – Bound List)

Reading Level: 4.3 Read Aloud Level: P-3 Uses: All ages

ANIMAL HOMES; Hewitt, Sally, author; Two – Can Press Publishers; c.2000; (A First Look at Animal Series).

Find out about all kinds of animal homes, from underground tunnels, to tree houses, shells, and more. (AR book Perma – Bound list).

Reading Level: 4.0 Read Aloud Level: K-3 Uses: All ages

ANIMALS THAT BUILD HOMES (Original Publisher's); Carter, Kyle, author; Rourke Press Publishers; c. 1995; (Things Animals Do Series).

Discover, with scientific facts and full – color photos, the different habitats animals build. (AR – Perma – Bound list).

Reading Level: 3.7 Read Aloud Level: K-3 Uses: All ages

ANIMALS AT REST: SLEPPING PATTERNS AND HABITATS; Riha, Susanne author; Blackbirch Press Publishers; c. 1999.

Describes the behavior and habitats of a variety of animals, with an emphasis on when, where, and how they sleep. (AR book Perma – Bound list).

Reading Level: 4.4 Read Aloud Level: 3-6 Uses: All ages

ALL KIND OF HABITATS; Hewitt, Sally, author, illustrator; New York: Children's Press; c. 1999. (It's Science Series).

Hewitt presents and very basic treatment of habitats through a two page photographic spread showing a habitat such as a rain forest, city or grassland and very briefly describes its plants and animal life. Large, colorful photographs. (From SLJ) Reading Level: Primary Read Aloud Level: Pre-School & up Uses: Pre-School – Primary

ALL THE PLACES TO LOVE; MacLachlan, Patricia, author; Mike Wimmer, illustrator; New York: HaperCollins; c. 1994.

Breathtakingly illustrated, this idyllic story tells of a young boy waiting for the birth of a sibling. The young boy, shown with extended family, loves his farm so much, he has already picked out places to show the new arrival and share his connectedness to the land. The rural backdrop and woods is as much a part of the story as the child. Reading Level: Primary Read Aloud Level: Pre-K & up Uses: All

ages

ANIMAL DAZZLERS: The Role of Brilliant Colors in Nature; Collard, Sneed B., author, illustrator; New York: Franklin Watts/Scholastic; c. 1998.

(from book description, no review)

"Discusses the reasons various animals are the color they are and explains the science behind colors in the natural world." Ages 9-12

THE ARMADILLO FROM AMARILLO; Cherry, Lynne, author, illustrator; New York: Harcourt Brace & Co.; c. 1994.

Lynne Cherry's illustrations are extremely accurate depictions of Texas's flora and fauna. An armadillo ventures around the state to see what is out there and from many different perspectives: ground, tower, eagle wing and the space shuttle. The armadillo encounters many different ecosystems and describes what he sees in postcards to a friend at the Phidelphia Zoo. This book is useful in teaching mapping skills as well.

Reading Level: Primary Read Aloud Level: Primary and up Uses: All ages

BED FOR WINTER; Wallace, Karen, author; Dorling Kindersley Publishers; c. 2000; (Dorling Kindersley Readers Series).

A dormouse encounters many different animals as she searches for a place to spend the winter. (AR book Perma – Bound List).

Reading Level: 2.3 Read Aloud Level: P-2 Uses: All ages

BIODIVERSITY; Patent, Dorothy Hinshaw, author; Munoz, William, illustrator; New York: Clarion Books; c. 2003.

Editorial Reviews (From amazon.com)

From School Library Journal

Grade 5-9-Threads from Patent's personal experiences in Costa Rica and North America are woven with scientific strands to provide a perspective on the tapestried life that shapes our planet. The clearly written text, comfortably conversational in tone, is readily approachable and organized to lead novices through the unknown landscapes of DNA, natural selection, keystone species, and the like, with a minimum of mental discomfort. Examples have been carefully chosen to acquaint young people with the intricacies of interdependency and to explain why such a rich biodiversity is essential to planetary well-being. Also included are current efforts of scientific/conservation groups to name organisms before they vanish and to preserve habitats and the life forms that inhabit them. This lucid introduction is accompanied by bright, full-color photos, and its large format and well-planned layout are attractive and inviting. Even if you own Laurence Pringle's Living Treasure (Morrow, 1991), you should make space on the shelf for this lively new presentation.

Patricia Manning, formerly at Eastchester Public Library, NY Copyright 1996 Reed Business Information, Inc. --This text refers to the <u>Hardcover</u> edition.

From Booklist

Gr. 6^-10. The subject of biodiversity is as big as nature. It's about everything, or at least about the connections between everything. Only by focusing on particulars is it at

all possible to explain some of the issues and processes. Patent uses lots of examples-of various habitats and ecosystems and keystone species--but nothing is discussed in depth, and the generalizations seem random. Many paragraphs could be in any chapter. The same thing applies to the glorious color photographs: it is not always clear how they relate to the pages they are on. It's those photographs, however, that will draw readers to the subject. This is a book for browsing, with an alluring cover, a handsome, spacious design, and a crucial message. *Hazel Rochman --This text refers to the Hardcover edition*.

From Kirkus Reviews

Patent (Children Save the Rain Forest, p. 903, etc.) stresses the importance of protecting the planet's rich gene pool for the survival of all species, and makes clear that seemingly insignificant species may provide medicines and products of great usefulness. With plants and animals in tropical Costa Rica and the more temperate US as models. Patent demonstrates how life forms evolve, adapt, and become extinct. She describes the natural forces of evolution and the threat posed by people. Readers learn of the private and public efforts to catalog and conserve plants and animals, e.g., Costa Rica's National Institute of Biodiversity, a government program that trains local people to collect and categorize specimens. Although Patent mentions the government agreements with drug companies that encourage exploration in exchange for a percentage of the profit when useful substances are identified, there is no discussion of the ethical considerations. The many handsome, full-color photographs are not always well placed and sometimes are only marginally related to the text. Still, this is an attractive and personal discussion of an important issue. (glossary, index) (Nonfiction. 10-12) -- Copyright ©1996, Kirkus Associates, LP. All rights reserved. --This text refers to the Hardcover edition.

BOBCAT; Barrett, Jalma, author; Blackbirch Press Publishers; c.1999; (Wildcats of America Series).

Describes the bobcat and its natural habitat, including physical traits, social life, survival instincts, birth and development, and interaction with humans. (AR book Perma – Bound List).

Reading Level: 5.1 Read Aloud Level: 2-5 Uses: All ages

BIOMES: TERRESTRIAL ECOSYSTEMS

COMMUNITIES OF LIVING THINGS: Second Edition:

No other info on line. The following from supplier:

"Accompany your students on a fascinating field trip to six North American biomes: the desert, tundra, coniferous forest, deciduous forest, grassland, and tropics. Viewers will learn about each biome's location and special characteristics as well as the plants and animals that inhabit it. The effect of humans on the natural balance of these communities, and the need to protect this equilibrium, are presented in a manner that will catch your students' attention and encourage their ideas and action."

CRINKLEROOT'S GUIDE TO KNOWING ANIMAL HABITATS; Arnosky, Jim, author, illustrator; New York: Simon Schuster Books for Young People, Aladdin Paperback; c. 1998.

Arnosky explains general habitats and the animals that live there around animal's needs for food, water and shelter. He begins with wetlands and includes woodlands, grasslands, drylands and rocky mountains. Illustrations also associated with the program seen on public TV.

Reading Level: Primary Read Aloud Level: Kindergarten & up Uses: All Ages

THE DESERT IS THEIRS; Baylor, Byrd, author; Parnall, Peter, illustrator; New York: Simon & Schuster, Aladdin Paperbacks; c. 1975.

A 1976 Caldecott Honor Book, this book generally describes the flora and fauna of the desert. This book illustrates the harsh environment in which people (the Papage Indians) have come to love and animals that live there as well. The poetic writing style help children learn what it is like to live there. Parnall's striking illustrations are line and color.

Reading Level: Primary Read Aloud Level: Pre-school & up Use: All ages

ECOSYSTEMS OF NORTH AMERICA; various authors/illustrators; Marshall Cavendish Publishers; c. 1999-2001

Titles Available: THE DESERTS OF THE SOUTH WEST, THE EASTERN FOREST, THE GREAT LAKES, THE PRAIRIE, THE ATLANTIC COAST, THE EVERGLADES AND THE GULF COAST, THE NORTHERN FOREST, THE TUNDRA, THE MISSISSIPPI RIVER, THE PACIFIC COAST, THE RAIN FOREST OF THE PACIFIC NORTHWEST, THE ROCKY MOUNTAINS.

Each group of four is \$108.29 (from publisher) Info from publisher –

...Explores the delicate balance of life in all major continental exosystems. The vital importance, stunning diversity and fascinating adaptability found in each area-along with the urgency now felt to protect them-are all explored, giving the reader an excellent introduction to the science of ecology. ...An in-depth glossary, index, bibliography and a guide to additional sources make these titles a valuable resource for anyone interested in ecology."

Reviews for School Library Journal – "These well-written well-organized titles examine how the plants and animals in each exosystem affect one another and their environment." In another review SLJ stated "In addition to serving as good sources for reports, the books are engaging enough to recommend for general-interest reading.

Ages 9- up, grades 5-9

ENDANGERED ENVIRONMENTS; Burton, Bob, author; Gareth Stevens, c. 1997. ages 9-12 NO INFO

EXPLORING MOUNTAIN HABITATS; Lovell, Scarlett, & Smith, Sue, authors; Noreika, Robert & Katin, Mirian, illustrators; Mondo Publishing, c. 2000. NO INFO

EXPLORING UNDERGROUND HABITATS; Phinney, Margaret Y., author; Katin, Mirian, & Petruccio, Steven, illustrators; Mondo Publishing, c. 2001, ages 4-8 NO INFO

FOOTPRINTS IN THE SAND and FOOTPRINTS IN THE SNOW; Benjamin, Cynthia, author; Rogers, Jacqueline, illustrator; Cartwell Books; 1999 and 1994. (Hello Science Reader, Level 1 series).

Detailed illustrations show the habitat of animals in the desert and the tracks they leave. Nine animals are highlighted. In SNOW, again the illustrations add to the book and show a variety of animals of the woods and the tracks they leave in the snow as well as a little girl's tracks. Simple sentences make the book accessible to beginning readers who will get more that learning words from reading this book. A great introduction (From School Library Journal)

Reading Level: beginning primary Read Aloud Uses: Toddler & Up

Uses: Toddler – Primary

FAWN IN THE GRASS; Ryder, Joanne, author; Narahashi, Keiko, illustrator; New York: Henry Holt & Co., Inc.; c. 2001.

Ryder in a lyric poem describes days of discovery of a child through the meadow and woods. Found in their natural habitats, the child sees a fawn watching him and off the child goes to find other unexpected pleasures exploring the world around. Simple illustrations pull the reader through the book with visual hints as to the next animal to be discovered.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: All ages

IN FIELDS AND MEADOWS; Tessa, Paul, author; Crabtree Publishers; c. 1997; ages 9-12; Animal Tracker Series.

The book makes children aware of details of the title environment. Full illustrations show tracks, homes and natural surroundings. Book contains a glossary and index. Deer mouse, prairie dog, mole, barn owl are just a few of the animals depicted.

NO REVIEW

IN WOODS AND FOREST; Tessa, Paul, author; Crabtree Publishers; c. 1998; ages 9-12; Animal Tracker Series.

The book makes children aware of details of the title environment. Full illustrations show tracks, homes and natural surroundings. Book contains a glossary and index. Red squirrel, chipmunk, opossum, weasel are just a few of the animals depicted.

LIVING IN A BIOME SERIES; Carol Linden, author; Pebble Books from Capstone Press Publishers; c. 2004

Reading Level: Grades K-1 • Interest Level: Grades K-2

Animals adapt in a wide variety of environments. Their adaptations make it possible to eat, drink, and find shelter in places as diverse as the desert and the rain forest. In this colorful new Pebble Plus series, explore the diversity of these environments and read about the animals that make these places their homes. Pebble Plus offers the same high-quality nonfiction topics and low reading levels of Pebble Books in an enlarged, graphically enhanced format.

TITLES IN SERIES: <u>Life in a Desert</u>, <u>Life in a Forest</u>, <u>Life in a Polar Region</u>, <u>Life in a Pond</u>, <u>Life in a Rain Forest</u>, <u>Life in a Stream</u>, <u>Life in a Wetland</u>, <u>Life in an Ocean</u>

MAGIC SCHOOL BUS EXPLORES THE WORLD OF ANIMALS; White, Nancy, author; Scholastic Book Services Publishers; c. 2000.

When Arnold, one of Mrs. Frissle's students, finds a small fox like animal wit huge ears in the lost and found, he and the rest of the class join Friz on a rollicking round the world trip in search of the animal's habitats. (AR Book Perma – Bound list). Reading Level: 4.2 Read Aloud level: K-3 Uses: Elementary

MAGIC SCHOOL BUS HOPS HOME; Relf, Patricia, author; Stevenson, Nancy W., illustrator; New York: Scholastic Trade; c. 1995.

Based on an episode from the animated TV series, "the best way to find a frog is to be one," says Ms. Frizzle and off the class goes to learn about all kinds of animal habitats. Cartoon format makes it a little difficult to read aloud but book contains enough information for simple reports.

Reading Level: Primary Read Aloud Level: K & up Uses: K – 5th grade

MORNING ON THE LAKE, Jan Bourdeau, author, illustrator; Buffalo, New York: Kids Can Press, c. 1998.

Three stories follow one another about a grandfather and granddaughter who go to the lake in the morning and paddle in a birch bark canoe. They encounter a loon family, explore a cliff and then travel into the forest at night. Beautifully illustrated with watercolor and with reproduced beadwork of the Ojibwa Indians.

Reading Level: Upper Primary Read Aloud Level: K-& up Uses: All ages

MY FIRST LOOK AT NATURE; Pinnington, Andrea, Davies, Charlotte, editors; Gorton, Steve, photographer; New York: Dorling Kindersley (DK); c. 1991.

An introduction for the very young to nature by naming things with clear, bright photographs as in DK's "Eyewittness" series. Begins with flowers and moves on to mini beasts, trees, common animals, birds, around the water, seashore, and has questions at the end to begin discussions. Sturdy pages and binding.

Reading Level: Early Primary Read Aloud Level: Infant & up Uses: Infant - Primary

ONE DAY IN THE WOODS; George, Jean Craighead, author; Allen, Gary, illustrator; New York: HarperTrophy; c. 1988.

A young explorer and budding naturalist sits in the canopy of a tree in the Teatown Woods of NY's Hudson Highlands. The day long trip and wait to see the oven

bird accurately describes the symbiotic relationship of animals and plant life in a Northeastern Deciduous Forest in the spring time. Several other eco systems are featured in George's chapter book "One Day in " series.

Reading Level: 4th-5th grade Read Aloud Level: 3rd. grade up Uses:

All ages

ONE SMALL SQUARE: BACKYARD; Silver, Donald, author; Wymme, Patricia J., illustrator; W. H. Freeman; c. 1993.

A very popular series where Silver uses one square yard of an environment to show what might be observed there. In BACKYARD, the focus is very close to home and gives information on plants and animals with an added bonus of suggested activities. Could also be used as an identification guide and as a spring board for further exploration. Although reading level is high it is useful for lower grades because of the accurate and informative illustrations.

Reading Level: Upper Primary – 6th grade Read Aloud Level: K & up Uses: All ages

ONE SMALL SQUARE: CACTUS DESERT; Silver, Donald M., author; Wynne, Patricia J., illustrator; New York: McGraw-Hill/Contemporary Books; c. 1997.

This series takes a square of habitat and illustrates the flora and fauna particular to that space. The book is even a square (about 9" x 9"). The bright and detailed illustrations make it almost usable as an identification book and helps the students get to know intimately an area of the earth. Helps teach identification and observation skills. Text and illustrations describe what is above ground and below. A complete ecosystem is explored. In CACTUS DESERT, the book shows how animals have adapted to survive the extremes - heat and cold - and no or little water. Other types of deserts are described in a chapter.

Reading Level: Primary Read Aloud Level: K & up Uses: K -

Intermediate

ONE SMALL SQUARE: POND; Silver, Donald M., author; Wynne, Patricia J., illustrator; New York: W H Freeman & Co., publisher; c. 1994.

A part of the "One Small Square" series that studies a "square" of a habitat and in this case, the pond. This book could almost be used as a guide book, so great are the illustrations and the detail. Illustrations show plants and animals that might be seen on, around, in and even above a pond. Activities encourage keeping a notebook, how to look underwater and observations of mud. Safety precautions are included along with respect for the space and wildlife.

Reading Level: Primary Read Aloud Level: Pre-school & Up Uses: All ages

ONE SMALL SQUARE: WOODS; Silver, Donald M., author; Wynne, Patricia J., illustrator; New York: McGraw Hill, Contemporary Books Division; c. 1997.

Part of the "One Small Square" series, this entry highlights the woods. Marking off a square, the book encourages exploring the woods from sky to underground. The

book begins in the fall and goes through all the seasons. The book illustrates and gives information about what "might" be discovered in that small square. There are many suggested activities and includes a safety list, supply suggestions, glossary and is indexed. Could serve as a simple field guide.

Reading Level: Primary Read Aloud level: Pre-K & Up Uses:

All ages With supervision

THE OTHER WAY TO LISTEN; Baylor, Byrd, author; Parnell, Peter, illustrator; New York: Atheneum Books, (Aladdin paperback); c. 1978.

For those who remember "stop and smell the roses" this is a "listen and know" book. In Baylor's quiet narrative we learn of a young girl's quest to hear the corn sing. It takes time; it takes patience. But to know a place you must sit and listen. In a time when we are so harried, here is a book that really starts the beginning of scientific observation.

Reading Level: Primary Read Aloud Level: K & up Uses: All ages

OVER IN THE MEADOW; Wadsworth, Olive, author; (various illustrators, Keats, Ezera Jack, illustrator, example used), New York: Puffin Paperbacks; c. 1999 (reprint edition).

This lovely counting rhyme with Appalachian roots is almost a lullaby. The illustrations show a mother animal in the meadow and her babies from turtles to fireflies in this special habitat. There are several variations of the rhyme currently published. Reading Level: Primary Read Aloud Level: Infant & up Uses: Infant - Primary

THE RAFT' Jim La Marche, author, illustrator; New York: Harpercollins Publishers, 2000. A picture book using pencil, colored pencil and water color to show the variety of animals around a river and the surrounding wood. Named one the Best Picture Books by the school children of Kentucky. A young boy learns to enjoy his grandmother's company and river environment and how to observe nature around him. Reading Level: Upper Primary Read Aloud Level: K - & up Uses: All ages

SALAMANDER RAIN; Pratt-Serafini, Kristin Joy, author, illustrator; Nevada City, CA: Dawn Publications; c. 2000. "Sharing Nature With Children" Series.

This book was written by a young person, and it is not her first. She began writing and publishing books at 15. This book comes from journal notes she kept. This "journal" observes a lake or pond during a year. Several creatures are discussed as well as plants and microbes. This book is packed full of information, drawings, web sites and more. Illustrations are childlike and give the impression of a journal with information boxes pasted to the illustrations. The book can be used as an introduction to journaling, nature observation and the power of studying something for an entire year.

Reading Level: Upper Primary Read Aloud Level: Primary Uses: Pre-K - Middle School Could be used in younger groups for information and pictures

SCHOOLYARD MOSAICS: Designing Gardens and Habitats; National Gardening Association;

From the National Gardening Association – Gardening With Kids Store Apparently only place available?

SIGNS ANIMALS LEAVE; Staub, Frank, author, photographer; New York: Franklin Watts, (Scholastic Inc.); c. 2001.

This well organized book takes a close look at signs – not just tracks but other ways animals leave their mark such as chew marks, dropped antlers, scat, nests and more. Book includes a glossary, where to find more information and a note on sources used in the book. In the text, key words are in bold type and the larger print and well spaced sentences makes this a good book for readers.

Reading Level: Upper Primary Primary – Adult

Read Aloud Level: Primary& up Uses: Sections could be used by younger classes

SUPER SCIENCE PROJECTS ABOUT ANIMALS AND THEIR HABITATS; Cobb, Allan B., author; Rosen Publishers; c. 2000..; c. 1993.

Using woodblock prints to illustrate the book, Bowen uses each double page spread to illustrate the animal in its habitat, behavior and gives information about the animal, a famous quote and personal observation. Animals described are the mouse, ermine, grouse, pine marten, snowshoe hare, red fox, raven, river otter, beaver, gray wolf, deer, moose, and black bear.

Reading Level: Upper Primary Read Aloud Level: K & up Uses: K & up

THIS PLACE IS DRY (Imagine Living Here Series); Cobb, Vicki, author; Lavallee, Barbara, illustrator; Walker and Co., publisher; c. 1989. Editorial Reviews (from amazon.com)

From School Library Journal

Grade 3-5-- Arctic Alaska and the Sonoran Desert of the southwest are described in these colorful companion volumes. The information is excellent, and Cobb's text is well presented and accurate, but the format leaves much to be desired. Lavallee's beautiful full-color primitive paintings are colorful and dramatic, but these interesting science books cry out for either color photographs or careful, accurate scientific drawings. Although the print is large and uncluttered, it often overlaps the illustrations, which will present difficulties to many young readers. These two volumes are fine for interested browsers or advanced nonfiction picture book readers, but students will find other books, such as the "New True" series (Childrens) to be more useful for assignments. The "Imagine Living Here" books have no indexes or chapter headings, but new or difficult words are carefully explained in the text and pronunciations are given in parentheses. Special or regional collections will probably want to include these, but most collections will find them supplementary titles best used for displays or general nonfiction reading. --Rosanne Cerny, Queens Borough Public Library, N.Y. Copyright 1989 Reed Business Information, Inc.

Ingram

Surveys the living conditions in Arizona's Sonora Desert for the people and unusual

animals that live there. Also describes the engineering accomplishment of Hoover Dam. -- This text refers to the Paperback edition.

TRACKS IN THE WILD; Bowen, Betsy, author, illustrator; New York: Little, Brown and Co.: c. 1993.

Using woodblock prints to illustrate the book, Bowen uses each double page spread to illustrate the animal in its habitat, behavior and gives information about the animal, a famous quote and personal observation. Animals described are the mouse, ermine, grouse, pine marten, snowshoe hare, red fox, raven, river otter, beaver, gray wolf, deer, moose, and black bear.

Reading Level: Upper Primary Read Aloud Level: K & up Uses: K & up

TRACKS, SCATS AND SIGNS; TREES, LEAVES AND BARK; Take-Along Guide Series; Minnetonka, Minnesota: Cowles Creative Publishing, Inc.; c. 1995.

These books are meant to be taken along with on walks and adventures. Simple illustrations and information about animals and insects are given in each book as well as advice about identifying what is seen in the specific habitat. Extended activities are suggested. End pages are blank to encourage nature study by the owner of the book through art or writing and a ruler is printed on the back cover. Most important a "Be Smart and Safe" section is at the beginning of the book for the novice nature observer. Helps encourage observation and exploration as well as respect for the environment. Reading Level: upper primary Read Aloud Level: Pre-K & up Uses: All ages

UNDER A STONE; Green, Jan, author; Crabtree Publishers; c. 1999; ages 9-

Describes various creatures that live beneath rocks and in the soil, index and glossary.

NO REVIEW

THE SNAIL'S SPELL; Ryder, Joanne, author; Cherry, Lynne, illustrator; New York: Viking Penguin Group; c. 1982.

This well illustrated picture book squarely puts a child in the picture imagining what it is like to be a snail. The snail's habitat is shown accurately if not a little idealistic. The book could make many curriculum connections with the arts such as movement and creative writing.

Reading Level: Primary Read Aloud Level: Pre – K & up Uses: Primary

THIS HOUSE IS MADE OF MUD – ESTA CASA ESTA HECHA DE LODO; Buchanan, Ken, author; Tracy, Libba, illustrator; Flagstaff, AZ: Northland Publishing; c. 1991.

A Reading Rainbow featured book, this book can be purchased bilingual. The story is told from a child's point of view of what it is like to live in a mud and straw dwelling and all the creatures (some pets) that co-habitat in harmony around the house. Illustrations feature brilliant "hot" colors of the southwest.

Reading level: Primary Read Aloud level: Pre-school on Use: All ages

WHERE ONCE THERE WAS A WOOD; Fleming, Denise, author, illustrator; New York: Henry Holt and Company; c. 1996

Bold illustrations highlight Fleming's introduction to a wooded area and states simply what is lost when it becomes a neighborhood. Many forest animals are shown in a natural setting and some almost hiding. Fleming also includes wonderful end notes about backyard habitats and other useful information such as further reading and contact information for Nation Wildlife Federation.

Reading Level: Primary Read Aloud Level: Pre-K & Up Uses: All ages

WHAT DO YOU CALL A TERMITE HOME?: AND OTHER ANIMAL HOMES; Nathan, Emma, author; Blackbirch Press Publishers, c. 2000 (What do call a series)
Discusses, in question and answer format, the habitations built by such animals as termites, spiders, and beavers. (AR Book Perma – Bound list).

Reading Level: 4.7 Read Aloud Level: 3-6 Uses: Elementary

WORM'S EYE VIEW: MAKE YOUR OWN WILDLIFE REFUGE; Johnson, Kipchak, author; Yardley, Thompson, illustrator; Brookfield, Connecticut: Mill Brook Press; c. 1990.

This book has enough information to use in reports about what is in soil from microbes to worms to seeds. Text encourages the reader to take part of a backyard and make a natural place to attract insects, animals and other plants. The book also encourages respect for worms and other things we tend to smash and shows their importance in the natural world. Text may be hard to read for some readers.

Reading Level: Upper Primary

Read Aloud Level: K – Up Uses: K – 8th grade

HISTORY

APPALACHIA: A History; Williams, John Alexander, author; University of North Carolina Press, Chapel Hill, NC; c. 2002.

Williams, professor of history at Appalachian State, studies four and a half centuries of the contradictory realities and perceptions of the region. He helps the reader understand the cultural and economic influences and history. He explores Native American settlement, history and influences as well as industrialization and settlement and the influences of wars. Reviewed by several as "enlightening" and "very sad".

THE GREENING OF THE SOUTH: the Recovery of Land and Forest; Clark, Thomas D., author; historical photographs, various photographers; University of Kentucky Press, Lexington, KY; c. 1984; paper c. 2004.

Clark, historian laureate of Kentucky, describes the lumber industry and its importance in southern economics. Clark traces forest history of the Appalachian region during the last century. He describes the harvesting and destruction that led to conservation, replanting and recovery. "Described as "beautifully written" and scholarly.

INSECTS

AMAZING BUTTERFLIES AND MOTHS; Still, John, author; Young, Jerry, photographer; New York: Knopf; c. 1991; (Eyewitness Junior Series).

Using close-up photographs to illustrate this typical "Eyewitness" book, young readers are introduced to butterflies and moths and their differences. Caterpillar traits and behavior both of butterflies and moths are explained. (From jacket description) Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K – 4th grade

BACKYARD BUGS BOOK SERIES: ARE YOU A SPIDER (BUTTERFLY, DRAGONFLY, ANT, LADYBUG, GRASSHOPPER, BEE, SNAIL)? by <u>Judy Allen</u> (Author), <u>Tudor Humphries</u> (Illustrator) **Publisher:** Kingfisher (April 15, 2002)

Reading level: Ages 4-8

PreSchool-Grade 3-Easy-readers that offer a virtual bug's-eye view of the world. Vivid watercolor paintings on two-page spreads depict the subject insect in its backyard habitat; most views are close-ups, with the creature juxtaposed against towering leaves of grass, weeds, flowers, etc. (Several illustrations in Ant show the worker in its underground nest.) Short sentences in large, bold type are set against a white background. The lines of text are fluid, often broken up and framed by foliage, or sometimes wings of birds and body parts of other small animals. Each book begins by asking the title question, and then addresses readers directly, outlining the insect's daily experiences (e.g., "Work hard to build a nest.-It's all right; you don't have to work alone"). The books briefly describe hatching, growth and development, outstanding physical and behavioral characteristics, diet, defense mechanisms, and natural enemies, and conclude with a reality check: "However, if your mother and father look like this-you are not a-.You are-a human child." An addendum offers miscellaneous facts. Although the texts are clearly written and well organized, not all of the terms are defined, such as "aphid," "acid," and "poison" in Ant.

BORN TO BE A BUTTERFLY; Wallace, Karen, author; staff photographers; New York: D K Publishers; c. 2000. (Level 1, Beginning to Read).

Creators of the "Eyewitness Series" have taken their talents to beginning readers. This is the story of a Red Admiral butterfly from a mature insect laying eggs to hatching caterpillar to butterfly. Picture dictionary boxes with labels "show" the definition. DK's amazing photo and white space style combine simple test reading skills with the hungar of a child to learn about nature. Designed for the early reader. Accurate information. Others in the series for Level 1 readers are: DVING DOLPHIN, TALE OF A TADPOLE, DAY AT SEAGULL BEACH (about seagulls), A BED FOR WINTER (about a dormouce and hibernation) and DINOSAUR'S DAY. Reading Level: Early Primary Read Aloud Level: Toddler & up Uses: Toddler – Primary

BUGS, York, Penelope, author; New York: Dorling Kindersley (DK); c. 2002. **Book Description** Open your eyes to a world of discovery.

Enter the extraordinary empire of the creepy-crawly. From dung beetles to dragonflies, meet the neighbors you rarely see -- but are essential to your life. A wealth

of facts, combined with dramatic photography, ensures that Eye Wonders are the perfect educational start for young children. Eye Wonders is a groundbreaking reference series specially developed for younger children aged five plus. In a stunning style departure for DK, wonderful photography shows subjects within their natural setting, offering a whole new level of information through powerful images. Vocabulary is accessible to children aged five plus, with the meanings of new, subject-related words clearly explained. The series provides an excellent knowledge base on the natural world for children starting to learn. The combination of breathtaking visuals and informative, accurate text will hook even those children who usually avoid books.

About the Author

Consultant Paul Pearce-Kelly is the Curator of Invertebrates at London Zoo.Reading Level: Primary Read Aloud Level: K & Up Uses: K – 4th Grade

BUGS, BEETLES AND BUTTERFLIES; Ziefert, Harriett, author; Flather, Lisa, illustrator; New York: Puffin; c. 1998. (Science Easy-to-Read, Level 1 Series)

Readers learn about different insects through illustrations and simple text. Q & a's at the end of the book encourage discussions and further discoveries. Book has a glossary and activities at the end. (From book description) No Review Reading Level: Early Primary Read Aloud Level: Toddler & Up Uses: Toddler - Primary

BUGS! BUGS! SERIES; Fran Howard & Margaret Hall, authors; c. 2005-2006; Pebble Books Plus by Capstone Press, publishers.

Reading Level: Grades K-1 • Interest Level: Grades PreK-2

If you like crawly creatures, then these informative books are for you! Large full-color photographs and easy-to-read text introduce the bugs' appearance and common behavioral characteristics. Take a close-up look at the world's creepiest creatures. TITLES IN SERIES: ANTS, BEETLES, BUMBLEBEES, BUTTERFLIES, CENTIPEDES, CICADAS, CRICKETS, DRAGONFLIES, FIREFLIES, FLIES, GRASSHOPPERS, LADYBUGS, MOSQUITOES, MOTHS, PRAYING MANTISES, SPIDERS, WALKING STICKS, WASPS

BUG WATCHING WITH CHARLES HENRY TURNER; Ross, Michael, author; Caple, Laurie A., illustrator; New York: Lerner – Carolrhoda Books; c. 1997.

This book is a part of a series highlighting scientists not as well known along with a look at the subject area they were famous for studying. This series includes biographical information about Turner and his challenge of overcoming prejudice as the only African-American in his college classes. He experimented and studied webbuilding instinct, the intelligence of spiders, homing of ants, color blindness in bees. The book contains suggestions for projects and experiments to replicate Turner's. The volume contains a list of supplies, glossary, index and background information on Turner's studies as well as information about insects and spiders.

Reading Level: Upper Primary Read Aloud Level: Primary & up Uses: All ages

BUTTERFLIES; Saunders-Smith, Gail, author; Pebble Books; c. 1997.

Life cycle of butterflies explained.

BUTTERFLIES; (Original Publishers Binding) Holmes, Kevin J. author; Capstone; c. 1998 (Animals series)

An introduction to butterflies' physical characteristics, habits, behavior, and relationships to humans.

Reading Level: 3.3 Read Aloud Level: K-3 Uses:

BUTTERFLIES; (Original Publishers Binding) Gerholdt, James E. author; Abdo & Daughters Publishing; c. 1996 (Incredible Insects series)

An introduction to the world or insects, covering the life cycles, sizes, shapes, colors, habitats, sensed, defenses, and foods of various butterflies.

Reading Level: 4.6 Read Aloud Level: 2-5 Uses:

BUTTERFLIES; Neye, Emily author; Grosset & Dunlap; c. 2000 (All aboard reading series)

Describes the appearance, life cycle, habits, habitat, and winter migration of butterflies.

Reading Level: 4.6 Read Aloud Level: 2-5 Uses:

BUTTERFLIES; Saunders-Smith, Gail, author; Pebble Books; c. 1997. Life cycle of butterflies explained.

BUTTERFLIES; Brust, Beth Wagner, author; various photographers; Mankato, Minnesota: Creative Education, Inc. (ZOO BOOKS SERIES); c. 1990.

Using the Zoological Society of San Diego as consultants, this and other ZOO BOOKS, take a theme and through text, illustration and photography, give an indepth look at all aspects. In BUTTERFILES, topics such as butterflies' important role in nature, species, butterfly changes, wings, preditor/ prey information, the Monarch in particular and what butterflies like to do are highlighted. An index is included as well as activities are on the end pages.

Reading Level: Upper Primary Read Aloud Level: K – Up Uses: K – adult

BUTTERFLIES AND MOTHS: Brimner, Larry Dane author; Children's Press; c. 1999; (A true book series)

Describes the physical characteristics, behavior, and life cycle of butterflies and months.

Reading Level: 4.8 Read Aloud Level: 2-5 Uses:

BUTTERFLIES AND MOTHS: Morgan, Sally; Creative Education, Inc. c. 2000 (Looking at minibeasts series)

Describes butterflies and moths in their natural habitats, with information on how to observe these creatures without harming them or their environment.

Reading Level: 4.0 Read Aloud Level: 1-4 Uses

BUTTERFLIES FLY; Winer, Yvonne, author; Lloyd-Jones, Karen, illustrator; Charlesbridge Publishers; c. 2001.

This author-illustrator team has created several other books. Using simple rhyming verse, the book introduce 15 different types of butterflies and the end features an identification guide with more specific information, further reading lists and web sites. Illustrations are very real. SLJ stated that other books may give more information on insect science. (from reviews by SLJ and Booklist)

Reading Level: Primary Read Aloud Level: K & up Uses: K – 5th grade

BUTTERFLIES: Pollinators And Nectar Sippers (Original Publisher's Binding) Richardson, Adele D. author; Capstone; c. 2001 (The wild world of Animals series) An introduction to butterflies describing their physical characteristics, habitats, young, food, enemies, and relationships to people.

Reading Level: 3.9 Read Aloud Level: K-3 Uses

BUTTERFLY (Original Publisher's Binding) Stefoff, Rebecca, author;

Marshall Cavendish; c. 1997 (Living things series)

Introduces the life cycle and habitat of butterflies.

Reading Level: 4.7 Read Aloud Level: 1-4 Uses

BUTTERFLY; Crewe, Sabrina, author; Lafford, Stuart, illustrator;

Raintree/Steck Vaughn; c. 1997. ages 4-8. (Life cycles series)

Describes the habitat, food, and life cycle of the monarch butterfly.

Reading Level: 3.2 Read Aloud Level: 2-5 Uses

THE BUTTERFLY ALPHABET; Sandved, Kjell B., author, illustrator; New York: Scholastic: 1999.

Poetically written with incredidable photographs, Sandved took 25 years and traveled the world to find butterflies with letter designs to create this book. Although not really for the pre-school set, this book is more than an alphabet book. It teaches observation, classification and identification as well as poetry.

Reading Level: Upper Primary Read Aloud Level: Primary Uses: All ages

Butterfly Battle (The Magic School Bus Chapter Book #16) (Magic School Bus) (Paperback)

by <u>Nancy White</u> (Author), <u>Hope Gangloff</u> (Illustrator) **Publisher:** Scholastic Inc. (November 1, 2003)

Hi, I'm Phoebe, one of the kids in Ms. Frizzle's class. When we started our unit on butterflies, I figured I would get to see a live butterfly - but I never thought I would get to be one. But when Ms. Frizzle took us on our butterfly field trip, she accidentally turned us all into butterflies! But being a butterfly wasn't all fun and games. We had to battle all kinds of things: wind, birds, even people! We knew we had to win this Butterfly Battle -- before things got carried away!

BUTTERFLY COLORS: (Original Publisher's Binding) Frost, Helen, author; Capstone; c. 1999 (Butterflies series)

Examines the colors and patterns of various butterfly wings.

Reading Level: 1.6 Read Aloud Level: P-2 Us

BUTTERFLY EGGS: (Original Publisher's Binding) Frost, Helen, author;

Capstone; c. 1999; (Butterflies series)

A simple introduction to where and how butterflies lay their eggs.

Reading Level: 1.5 Read Aloud Level: P-2 Uses

BUTTERFLIES SERIES; Helen Frost, author; c. 1999, Pebble Books from Capstone Press.

This fascinating series introduces readers to the shapes, patterns, and symmetry found in butterfly wings. Students also examine the eggs and follow the life cycles and the development of a caterpillar from hatching to becoming a chrysalis. Grades K-2.

OTHER TITLES IN SERIES: BUTTERFLY COLORS, BUTTERFLY EGGS, CATERPILLARS, MONARCH BUTTERFLIES.

BUTTERFLY STORY: Hariton, Anca, author; Dutton; c. 1995

Beautifully illustrated scientific treatment of metamorphosis in simple language using the Red Admiral Butterfly's five week process.

Reading Level: 3.4 Read Aloud Level: 2-4 Uses

BUTTERFLY WATCHING; (Original Publisher's Binding) Bair, Diane & Wright, Pamela; Capstone; c. 2000 (Wildlife watching series)

Describes the physical characteristics and habits of butterflies and discusses how to go about observing them.

Reading Level: 4.7 Read Aloud Level: 4-7 Uses:

FROM CATERPILLAR TO BUTTERFLY; Heiligman, Deborah, author; Weissman, Bari, illustrator; New York: HarperTrophy; c. 1996.

Outstanding Science Trade Book for 1997. *From School Library Journal* PreSchool-Grade 1?

Although the drama of metamorphosis has been documented with greater detail in other titles, this presentation stands out because of its classroom setting. The process is seen through the children's eyes as they experience the excitement of observing the wiggly caterpillar, watch it molt, change into a chrysalis, endure the endless waiting, and stare in wonder as a Painted Lady butterfly emerges and dries its wings. The closing pages show the class at the window watching the insect pause on a flower before flying away to begin the life cycle once again. Pen-and-ink and watercolor illustrations create a cheerful setting similar in style to those found in Miriam Cohen's books about classroom events. Close-ups show the stages of transformation as captions wend along plant leaves and stems reminiscent of a caterpillar crawling. A small collection of butterflies commonly found in most parts of the U.S. and a list of addresses of butterfly centers are appended. An inviting book that young children can relate to and one that teachers will find valuable to support nature-study projects.?

Diane Nunn, Richard E. Byrd Elementary School, Glen Rock, NJ Copyright 1998 Reed Business Information, Inc.

Reading Level: Primary Read Aloud Level: Pre-school & up Uses: Pre-

School & Up

CATERPILLERS, BUGS AND BUTTERFLIES; Boring, Mel, author; Garrow, Linda, illustrator; Take-Along Guide Series; Minnetonka, Minnesota: Cowles Creative Publishing, Inc.; c. 1995. (Caterpiller, Bugs and Butterflies - Northword Press; c. 1999.)

This book gives an introduction to insects, caterpillars and butterflies. These books are meant to be taken along with on walks and adventures. Simple illustrations and information about animals and insects are given in each book as well as advice about identifying what is seen in the specific habitat. Extended activities are suggested. End pages are blank to encourage nature study by the owner of the book through art or writing and a ruler is printed on the back cover. Most important a "Be Smart and Safe" section is at the beginning of the book for the novice nature observer. Helps encourage observation and exploration as well as respect for the environment.

Reading Level: upper primary Read Aloud Level: Pre-K & up Uses: All ages

CATERPILLAR TO BUTTERFLY; Owen, Oliver, author; Abdo & Daughters, c. 1994; "Life Watch" series; ages 9-12 NO INFO

THE CATERPILLAR AND THE POLLIWOG; Kent, Jack, author, illustrator; New York: Simon Schuster Books for Young People or Aladdin Paperbacks; c. 1982.

A caterpillar brags about turning into something else to all around the pond and impresses a polliwog. Informed by a fish that the polliwog will turn into something else, he watches the cocoon and turns into a frog as the butterfly emerges. A very simple introduction to metamorphosis, this book also has very entertaining illustrations. Reading Level: Primary Read Aloud Level: K & up Uses: All ages

CLARA CATERPILLER; Edwards, Pamela Duncan, author; Cole, Henry, illustrator; New York: HarperCollins Juvenile; c. 2001.

Using alliterative style of writing and illustrations that are bright, this team tells a tale of not judging a butterfly by her colors. Clara is not a flashy caterpillar and she knows that she will not be a flashy butterfly but her friend is and a target for a hungry crow. Clara the cabbage butterfly saves the day by distracting the crow and then blending in with the camellia. Although no scientific information is given, it is an example of camouflage, metamorphous, survival and predator – prey situations. Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K – 4th grade

CRINKLEROOT'S GUIDE TO KNOWING BUTTERFLIES AND MOTHS; Arnosky, Jim, author, illustrator; New York: Simon Schuster Books for Young People; c. 1996.

Arnosky introduces readers to butterflies and moths with basic information, labels and actual size watercolor drawings of the insects. It is a cross between picture book and field guide. Includes life cycle information.

Reading Level: Primary Read Aloud Level: K & Up Uses: all ages

DIARY OF A WORM; Cronin, Doreen, author; Bliss, Harry, illustrator; Scholastic Press, New York; c. 2003

Set up in diary entries, this book tells about a worm. Living with a worm family and having a spider for a friend is the imaginary part but worm facts are included such as what they eat, what the do for the earth and what they can and can't do.

Reading Level: Primary Read Aloud Level: Pre-School & up Pre-School & up (prepared pre-school)

Uses:

THE FAMILY BUTTERFLY BOOK; Mikula, Rick, author; Storey Book Publishers: c. 2000.

(From School Library Journal)

"This handsome, oversized volume, chockablock with family/classroom projects and experiments, is sure to be greeted enthusiastically. Lavish, crisp full color photos, information boxes, maps, lists of butterfly do's and don's make clear the creatures' physiology and metamorphosis. Mikula gives solid instructions on raising butterflies and creating butterfly habitats. He discusses the capture of wild specimens (to be released) and the taking of pupae/chrysalides for home/classroom rearing, including lots of caveats to young collectors throughout. No commercial sources are listed. The author also presents the joys of color photography, giving tips on equipment and techniques." Contains 15 projects and activities and photos of 40 North American favorite butterflies. Mikula is known as the 'grandfather of butterfly farming" and is a consultant to many aviaries and butterfly farms. Book dispels myths, gives instructions on how to hold and hand feed butterflies. Information about plants, shrubs and trees that provide food and habitat for butterflies is also given. This book is highly recommended.

Reading Level: Young Adult Read Aloud Level: N/A Uses: All Ages

From Caterpillar to Butterfly (Let's-Read-and-Find-Out Science, Stage 1) (Paperback) by <u>Deborah Heiligman</u> (Author), <u>Bari Weissman</u> (Illustrator) **Publisher:** HarperTrophy (May 31, 1996)

A caterpillar comes to school in a jar. The class watches the caterpillar each day as it grows and changes. Soon, it disappears into a hard shell called a chrysalis. Then the chrysalis breaks, and a beautiful butterfly flies out of the jar! This is a perfect beginner's guide to the mystery of metamorphosis.

HEY, LITTLE ANT; Hoose, Phillip and Hanna, authors, Tilley, Debbie, illustrator; Berkeley, CA: Tricycle Press; c. 1998.

Although School Library Journal called it "tepid", there aren't many like this book. The book is lyrics to a song included at the end of the book but it is printed up like a play. It is a conversation between a boy and an ant. The boy wants to squish the ant and the ant is trying to reason with the boy. The end is a question of should or shouldn't the boy squish the ant. Could lead to discussions about bullies, tolerance, respect for living things, peer pressure, and ethics. Illustrations are bold and insightful but the end is truly open ended.

Pre-School & up

Reading Level: Primary Read Aloud Level: Pre-School & up (prepared pre-school)

Uses:

HONEY BEES SERIES; Lola M. Schaefer, author; c. 1999; Pebble Books from Capstone Press, publisher.

Young readers love the rich photographs in these books as they explore the world of honey bees. The book Honey Bees identifies the body parts of these insects. The other three books focus on pollination, the hive community, and the production of honey. Labeled photographs support readers' understanding of content-area vocabulary. Grades K-2.

OTHER TITLES IN SERIES: HONEY BEES, HONEY BEES & FLOWERS, HONEY BEES & HIVES, HONEY BEES & HONEY.

INSECTS SERIES; Cheryl Coughlan & Helen Frost, authors; Pebble Books from Capstone Press; c. 1999

The fascinating world of insects comes alive in this colorful series. Young scientists can use these books to discover similarities and differences among these unique creatures. The books support science activities while giving students practice in reading nonfiction materials.

TITLES IN SERIES: ANTS, BEETLES, BUMBLE BEES, BUTTERFLIES, CICADAS, COCKROACHES, CRICKETS, DRAGONFLIES, FIREFLIES, FLIES, GRASSHOPPERS, HONEY BEES, LADYBUGS, MOSQUITOES, MOTHS, PRAYING MANTISES, TERMITES, WALKING STICKS, WASPS, WATERBUGS

JOYFUL NOISE: POEMS FOR TWO VOICES: Fleischman, Paul, author: Beddows, Eric, illustrator; New York: HaperCollins Publishers; c. 1988.

The Newberry award winning book of poetry is designed to be read aloud by at least two people. Creatively, Fleischman describes insects attributes and traits. The poems help the reader see the world through the eyes and feelers of insects. Reading Level: Upper Primary Read Aloud Level: K & up Uses: All ages

LADYBUG; Hartley, Karen author; Heinemann Library Publishers; c.1998. A simple introduction to the physical characteristics, diet, life cycle, predators, habitat, and lifespan of the ladybird beetle, also know as the ladybug. (AR books Perma – Bound list).

Reading Level: 3.6 Uses: K-6 Read Aloud Level: K-3

LADYBUGS AND BEETLES; Morgan, Sally, author; Creative Education, Inc. Publishers; c. 2000 (Looking at minibeasts series).

Looks at ladybugs and other beetles in their natural habitats, with information on how to observe these creatures without harming their environment.

Reading Level: 3.5 Read Aloud Level: 1-4 Uses: K-6

LIFE CYCLE OF A BUTTERFLY: Royston, Angela, author; Heinemann Library; c. 1998 (Heinemann first library)

Introduces the life of a Monarch butterfly, from its beginning as a tiny egg laid on a milkweed leaf through its metamorphosis from a caterpillar to an adult butterfly.

Read Aloud Level: K-3 Reading Level: 3.6 Uses

THE LIFE CYCLE OF A BUTTERFLY; Kalman, Bobbie & Smithyman, Kathryn, authors; various photographers & illustrators; New York: Crabtree Publishing Company; c. 2002.

Using sketches and photographs, this series studies a topic from definition – What Is A Butterfly – How to Raise Butterflies. Life cycles are explained in general terms. This book which highlights the Monarch butterfly explains the states – eggs, pupa, chrysalis, migration, growth and a section on Monarchs in Danger. Books contains an index, glossary, web sites, and suggestions about butterfly gardens and houses.

Reading Level: Upper Primary Read Aloud Level: Pre-K & up Uses: All Ages

Ortho's All About Attracting Hummingbirds and Butterflies (Ortho's All About Gardening) (Paperback) by Ortho (Author) Publisher: Ortho; 1st ed edition (January 1, 2001)

Explanation of anatomy, life cycle, and food requirements. 15 plans for gorgeous gardens that double as friendly habitats. Gallery of plants, including regional recommendations.

Butterfly: See How They Grow (Paperback) by DK Publishing (Author) Publisher: DK Preschool (April 16, 2007)

A photographic paperback series designed to introduce the fascinating world of animals and how they develop. In this informative and highly visual series, appealing step-by-step photography allows children to see a butterfly emerge from its cocoon and spread its wings, or see what happens when an egg hatches and a chick emerges. Each book comes with a sticker sheet packed with cute images of the animals featured in the book.

Stokes Butterfly Book: The Complete Guide to Butterfly Gardening, Identification, and Behavior (Paperback) by Donald Stokes (Author), Lillian (Author), Ernest Williams (Author) Publisher: Little, Brown and Company; 1st ed edition (October 17, 1991)

This book will give you all the information you need to select the plants necessary to attract butterflies and feed their caterpillars. Pictures help you identify both adult butterflies and their caterpillars.

SQUIRMY, WORMY COMPOSTERS; Kalman, Bobbie, author; various illustrators; New York: Crabtree Publishing; c. 1991.

Kalman's series of books has eye catching photos and lots of information. This book in the ecology series explains all aspects of worms and vermicomposting on a child's level.

Uses: All ages Reading Level: Upper Primary Read Aloud Level: Primary

UNDER A STONE; Green, Jan, author; Crabtree Publishers; c. 1999; ages 9-12.

Describes various creatures that live beneath rocks and in the soil, index and glossary. NO REVIEW

MAMMALS

ANIMAL ACTION A B C; Pandell, Karen, author; Wolfe, Art, wildlife photography, Sheehan, Nancy, child photography; New York: Scholastic, Inc. (paper only); c. 1996.

This book is an innovative concept book about the alphabet that uses verbs as the key word like charge for c, flap for f or peek for p. Photographs of animals demonstrating the key word are used as well as photographs of children superimposed in the white spaces imitating the animals or doing the same action. The text is sometimes forced to fit in the rhyme scheme and the verbs are not unique in some cases (quack for q, trumpet like an elephant for t). Information about the animals featured is inferred and broad. A good selection to use general introduction and identification of animals.

Reading Level: Primary Read Aloud Level: Infant – Primary Uses: Infant – Primary

ANIMAL TRAILS AND TRACKS: Renne, author; Gareth Stevens Publishing; c. 2000 (Animals up close series)

Discover the different signs of animal life and why they leave them behind. Reading Level 5.1 Read Aloud Level: 2-5 Uses:

BATS LOVE THE NIGHT; Davies, Nicola, author; Fox-Davies, Sarah, illustrator; Candlewick Press, Cambridge, MA; c. 2001.

Book illustrates the life of a pipstrelle bat from dusk to dawn. Story and scientific facts (printed on smaller type) are woven together such as how they hang upside down, what they eat, how they hunt and feet batlings. End papers have sketches of bats with common and scientific names.

Reading Level: Primary Read Aloud Level: Pre-School & up Uses: Pre-School & up (prepared pre-school)

BEAVERS AND THEIR HOMES; Gibson, Deborah Chase, author; New York: Rosen Publishing Co.; c. 1999.

Large print and photographs highlight this book that contains an overview of beavers. All aspects are covered from classification (rodent) to behavior and impact on the environment. Important words are in bold letters with a phonetic pronunciation key. Photos are labeled and a glossary at the end defines words in bold type. Life cycle is described in very general terms. Web site addresses are listed in the back. This is a part of the "Animal Habitats" series.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K – 4th grade

BIG TRACKS, LITTLE TRACKS: Following Animal Prints; Selsam, Millicent, author; Donnelly, Marlene Hill, illustrator; New York: HarperCollins Childrens Books; c. 1999 (revised edition).

Selsam is an award winning author and Donnelly is the staff artist at the Field Museum Of Natural History in Chicago. Selsam uses q & a's to help children make discoveries and make predictions. The book gives facts and information about tracks and how to identify them. Helps the reader develop observation skills. (from book description) No Reviews

Reading Level: Primary Read Aloud Level: Pre-K & Up Uses: Pre-K – 4th grade

THE EYES OF GRAY WOLF; London, Jonathan, author; Van Zyle, Jon, illustrator; San Francisco, CA: Raincoast Books/Chronicle Books; c. 1993

Exquisit illustrations show the life of a gray wolf one full moon night. Simple text but the end notes are full of information and resources.

Reading Level: Primary Read Aloud Level: Infant - Primary Uses: Infant - Primary

I SEE ANIMALS HIDING; Arnosky, Jim, author, illustrator; New York: Scholastic Press; c. 1995.

Camouflage is quietly illustrated in this book that has animals hiding throughout. Noted naturalist Aronsky shows how animals adapt to their surroundings and helps the listener to become better observers of nature. Mammals, as well as birds, insects, fish and reptiles and presented in this book.

Reading Level: Upper Primary Read Aloud Level: K. & up Uses: All Ages

LIES (PEOPLE BELIEVE) ABOUT ANIMALS; Sussman, Susan & James, Robert, authors; Leavitt, Fred, photographer; Morton Grove, Illinois: Albert Whitman & Company; c. 1987.

Each "chapter" discusses a misconception about the following animals: alligators, armadillos, bats, bears, elephants, opossums, ostriches, porcupines, snakes, spiders, squirrels, and several pages of 16 "lies" followed by the truth explained briefly. The book is very informative with black and white photography. Large print makes it easy to read by the younger student. Has enough information for simple reports. One reviewer said each of these highlighted animals had pr problems and the text explains the "lies" that are perpetuated about these maligned animals.

Reading Level: Upper Primary Read Aloud Level: primary Uses: primary - Adult

Mammals Nature Activity Book: Educational Games & Activities for Kids of All Ages (Paperback) by <u>James Kavanagh</u> (Author) Publisher: Waterford Press; 1.00 edition (November 1, 2002)

Each book features 64 pages of fun games and activities relating to nature study. Contents feature more than 16 types of games that highlight a wide range of topics. Suitable for ages 5 and up.

Mammals of Kentucky; Roger Barbour & Wayne Davis, authors; University Press of Kentucky; c. 1974

Mammals are the most highly developed of all animals and therefore are placed at the top of our system of classification. This book is a field guide to Kentucky mammals and more.

MORNING, NOON, AND NIGHT; George, Jean Craighead, author; Minor, Wendell, illustrator; New York: HarperCollins Publishers; c. 1999.

In simple text, George mentions animals and their activity at certain times throughout the day. Many habitats and animals are depicted. Through landscape illustrations, Wendell shows animals mentioned in the text, though not all animals. Almost a lullaby, the only scientific information is that some animals are diurnal and some nocturnal.

Reading Level: Primary Read Aloud Level: Infant – Primary Uses: Infant – Primary

RABBITS & RAINDROPS; Arnosky, Jim, author; Peskin, Joy, illustrator; New York: Putnam, (Puffin – paperback; BT Bound – school binding); c. 1997.

Nature is observed through the eyes of very young rabbits on their first outing from the nest. They encounter meadow creatures and meadow food but are forced back to the hedge by a sudden shower. There is literal depiction of raindrops. Children can seek other animals hiding in the illustrations. Accuracy is key as in all Arnosky books.

Reading Level: Primary Read Aloud Level: Infant & up Uses: Infant & up

RED FOX RUNNING; Bunting, Eve, author; Minor, Wendell, illustrator; New York: Clarion Books; c. 1993.

Bunting's lyrical rhyming text tells of a hungry red fox looking all day for food. The story ends with a successful kill and return to the den and the rest of the fox family. Wendell's illustrations are an integral part of the story and shows what the words don't about habitat and food chain.

Reading Level: Primary Read Aloud Level: K - & up Uses: All ages

STELLA And ROY GO CAMPING; Wolff, Ashley, Dell: c. 1999

During their camping trip, Roy continually tries to find evidence of bears in the animal tracks around them, only to be contradicted by sister Stella, but then one night a bear really does appear.

Reading Level: Primary - Read Aloud Level: Primary - Up Uses: Primary - Adult

STELLALUNA; Cannon, Janell, author, illustrator: New York: Harcourt, Scholastic Press (paperback edition); c. 1993.

The author includes two pages of "Bat Notes" at the end of the tale of a lost fruit bat that ends up in a bird's nest. Mamma bird feeds Stellaluna even when Stellaluna tries to teach the birds to hand upside down. She eats the bug provided and does not sleep upside down and sleeps at night like the other birds. This book very subtly teaches the difference between bird and bat and conflict resolution (inner conflict for Stellaluna and group conflict within the nest).

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: All ages

WILDLIFE WATCHING WITH CHARLES EASTMAN; Ross, Michael, author; Caple, Laurie A., illustrator; New York: Lerner – Carolrhoda Books; c. 1997.

This book is a part of a series highlighting scientists not as well known along with a look at the subject area they were famous for studying. This series includes biographical information about eh Native American physician, writer and naturalist. Growing up respecting tribal custom of honoring nature, Hakadah (Eastman) studied animal behavior after becoming a physician. He wrote children's books on nature and the book includes activities on how to observe nature and information about birds, animals and plants. The book contains an index and glossary.

Reading Level: Upper Primary Read Aloud Level: Primary & up Uses: All

Reading Level: Upper Primary Read Aloud Level: Primary & up Uses: All ages

Wildlife Conservation Society Books

A WHALE BIOLOGIST AT WORK, Collard, Sneed B., III, author, Orchard Press, c. 2000; THE SEARCH FOR POISON-DART FROGS, Fridell, Ron, author, Franklin Watts, c. 2002; THE CHIPMUNK FAMILY, Bastian, Lois Brunner, author, Franklin Watts, c. 2000; GOLDEN EAGLES OF DEVIL MOUNTAIN, Fauzon, Mark J. author. Orchard Press, c. 2000; SAVING THE PARIRIE BANDIT, Patent, Dorothy Hinshaw, author, Franklin Watts, c. 2001; A FIREFLY BIOLOGIST AT WORK, Collard, Sneed B. III, author, Franklin Watts, c. 2002; WOODPECKER IN THE BACKYARD, Mania, Cathy, author, Franklin Watts, c. 2000; POLAR BEAR BIOLOGIST AT WORK, Dorothy Hinshaw, author, Franklin Watts, c. 2001; (possible titles).

Apparently Scholastic Trade has pulled the series under one umbrella. Review from BOOKLIST – "The series takes a distinctly personal approach to the presentation of an animal species. Each book begins with an illustrated, four-page biographical and professional introduction to the author as well as information about how he or she came to write the book. Colorful maps show where the animals were studied. In WHALE, biologist Callard shows how John Calamokidis' observations of the humpback and blue whales off the Pacific coast of North America have contributed to our knowledge of their numbers, migration patterns and behaviors....Each book is illustrated with many clear, colorful photos. Appendixes include glossaries, bibliographies and lists of related organizations and on line sites." Review from SCHOOL LIBRARY JOURNAL - "This series focuses on scientists who study animals. Lots of information about the creatures themselves is included in the engaging texts, but for the most part, the books detail each person's work, giving a balanced picture of what life in the field is like. Clear photos, both of the animals and the scientists, add to the overall appeal....These books will be helpful for reports on animals, but their real appeal will be to kids with strong interest in natural history. Budding biologists will appreciate learning what scientists in the field do and might even find some inspiration for their own futures." All individual reviews were favorable especially considering there is much "human" interest included in the very readable books. Conflicting age appeal and reading ability. Reading Level: Upper Primary Read Aloud Uses: Primary & Up Uses: All ages

WILD, WILD WOLVES; Milton, Joyce, author; Schwinger, Larry, illustrator; New York: Random House; c. 1992.

This book is a part of the "Step Into Reading" series, step 2. First facts are given clearly about the wolf. They include information about hunting, packs, pack life, pups, myth and historical references. There is a controlled vocabulary to fit the series but this does not affect the information given about the wolf.

Reading Level: Primary Read Aloud Level: K – up Uses: K – 4th grade

ORAL HISTORY & STORYTELLING

GROWING UP IN COAL COUNTRY; Bartoletti, Susan Campbell, author; various photographers; Boston: Houghton Mifflin Co.; c. 1996.

A well researched book about what it was like to grow up in a coal town and work as a child in the mines (mostly in PA) in the nineteenth and twentieth centuries. The historical photographs invite anyone and especially children to read more about the breaker boys, the nippers, spraggers, mule drivers and much more. Based on oral histories and recorded stories, the book tells courageous, sad and sweet stories of child labor.

Reading Level: upper primary Read Aloud Level: upper primary Uses: All ages

PLANTS & TREES

A B CEDAR; Lyon, George Ella, author; Parker, Tom, illustrator; New York: Orchard Books; c. 1989.

An unusual alphabet book, Lyon identifies 26 trees and gives a few sentences about the use and need for trees. It wa named an NDTA-CBC Outstanding Science Trade Book for Children. Parker's illustrations show a branch with leaf, berries, fruit, and shadows showing the size and shape of the tree in proportion to people and animals.

ACORN TO OAK TREE; Owen Oliver S. ; Abdo & Daughters Publishing (Lifewatch series) c. 1994

Explores the life cycle of a familiar plant.

Reading Level: 2.9 Read Aloud Level: 2-5 Uses:

Apple Farmer Annie (Paperback) by Monica Wellington (Illustrator) **Publisher:** Puffin; Reprint edition (August 19, 2004) Ages 3-7.

Although she appears to be around 12, Apple Farmer Annie is the keeper of an orchard. In this cheerful book, Wellington follows Annie as she harvests her apples, makes cider and applesauce, and takes apples to market to sell. Many books for youngsters deal with farm life in general and apples in particular, but this one is unusual in that it's about a female farmer whose rural occupation isn't centered on livestock. The illustrations, bright, colorful, and detailed, have a pleasant, childlike quality, and recipes for applesauce, muffins, and cake make for extra fun.

APPLE TREES; (Original Publishers Binding)Prevost, John F. author; (Trees series) c. 1996

Presents brief information about the roots, trunk, leaves, fruits, and varieties of apple trees, pests that affect them, their economic uses and more.

Reading Level: 4.2 Read Aloud Level: Uses:

AUTUMN LEAVES; Robbins, Ken, author/photographer; New York: Scholastic Press; c. 1998.

In this celebration of autumn leaves, Robbins shows (life-size) photographs of various trees in the autumn. Tree identification by leaf is done with simple explanations of the different types of leaves and observation of shape. He highlights smoke tree, birch, ginko, linden, sassafras, sweet gum, hickory, red oak, beech, cherry, dogwood, yellow poplar and maple with an end page about leaves and how and why they change color.

Reading Level: Primary Read Aloud Level: K & up Uses: K – 4th & 5th grades

A BUSY YEAR; Lionni, Leo, author, illustrator; New York: Random House (current - David McKay Co., c. 1995); c. 1992.

Typical Lionni paper collage illustrates the story of twin mice who talk with a fruit tree "Woody" each month. This chronicles all the possible changes a tree goes through. There is even a threat of forest fire and simple statements about the importance of trees. As noted in reviews, the fruit on the tree starts out red and stays red throughout the growing season.

Reading Level: Primary Read Aloud Level: Pre-School & up Uses: Pre-School - Upper Primary

BE A FRIEND TO TREES; Lauber, Patricia, author; Keller, Holly illustrator; New York: HarperCollins; c. 1994.

This is a "Let's Read And Find Out Science" series book, stage 2. This highly regarded series presents information in a logical and straight forward manner, in this case, about trees. The illustrations are simple and informative (such as tree identification) and the text includes uses for trees both ecologically and esthetically. Simple explanations of how paper is made and a tree's part in the food chain are included. Literally, how to be a friend to trees, is included in the end papers and mentions recycling, conservation and encouragement to plant a tree.

Reading Level: Primary Read Aloud Level: Pre-K – up Uses: Pre-K – 4th grade

BEAUTIFUL CHRISTMAS TREE; Zolotow, Charlotte, author;, Nascimbene, Yan, illustrator; New York: Houghton Mifflin; c. 1999 (new illustrations, text originally published in 1972).

New water color and pen and ink illustrations have been given to award winning author Zolotow's book about a Christmas tree. The character Mr. Crockett buys a brownstone and fixes it up since it had been empty for a long time. He then purchases a pine tree that had been at the florist shop too long as well and nurtures the pine until

in the spring he plants it in the front yard. It grows over time and becomes the beauty of the neighborhood. This is a quiet story of taking care of one tree. (from Kirkus Review) Reading Level: Primary Read Aloud Level: $K = 4^{th}$ grade

BIG TREE; Hiscock, Bruce, author, illustrator; New York: Simon & Schuster; c. 1994 (reprint edition).

This book is part story of the life cycle of a tree and part history. Hiscock uses a tree in a neighbor's yard to illustrate how a winged seed during the American Revolution can give shade and maple syrup for generations. The story takes place in New York state but could be any historical tree. (from Booklist and other reviews).

Reading Level: Primary Read Aloud Level: Pre-K & Up Uses: Pre-K – 4th grade

CARROT SEED; Krauss, Ruth, author; Johnson, Crockett, illustrator; New York: HarperCollins Publishers; c. 1945, (1988).

This clear and simple tale of a carrot seed tells of a child's faith that the seed will come up and grow even though others say it won't. Although the book is more a story about having confidence and faith in your actions and decisions than about the seed, the seed does grow to win a prize at the fair.

Reading Level: Primary Read Aloud Level: Infant & up Uses: Infant & up

COUNTING ON THE WOODS; Lyon, George Ella, author; Olson, Ann W., photographer/illustrator; New York: DK Publishing; c. 1998.

With photographs taken in Rowan County, Elliott County and at Cave Run Lake, the simple poem by Lyon leads the reader to count objects (to the number 10) found near and around a wood. Animals such as Canada Geese, worms, beetles, toads, and nests, plants, flowers and trees create a introduction to a woodland habitat. All objects are identified.

Reading Level: Primary Read Aloud Level: Infant & Up Uses: Primary

THE DANDELION SEED; Anthony, Joseph A., author; Arbo, Cris, illustrator; Dawn Publications; c. 1997.

A dandelion seed is blown by the wind and continues the life cycle of the plant. Reading Level: undetermined Read Aloud Level: undetermined Uses: undetermined

A DEAD LOG; Green, Jen, author, illustrator; New York: Crabtree Publishing Co.; c. 1999.

Up close photographs are used to show just what happens when a tree falls and rots. Full of facts, identifications and information, chapters include Life in a dead log, On the bark, Under the bark, Inside the log and Be a log detective. Short glossary is included at the end. Encourages one to take a closer look and see how important a "dead" log is to the forest.

Reading Level: upper Primary Read Aloud Level: K & up Uses: all ages

DESERT GIANT; Bash, Barbara, author, illustrator; San Francisco: Sierra Club Books/ Little, Brown and Co.; c. 1989.

In this book the giant cactus, saguaro is described. The desert, animals that live in and around the cactus and the cactus life cycle are explained in detail. Bash's illustrations and text show the ecological importance of the saguaro and is attractively presented.

Reading Level: upper primary Read Aloud Level: K and up Uses: Primary and up

FALL LEAVES FALL!; Hall, Zoe, author; Halpern, Shari, illustrator; New York: Scholastic Press: c. 2000.

Using paper collage and simple sentences, children share their love of the fall time of the year in this book. Centering around leaves, children observe changes until the fall colors and speak of simple activities - stomping, crunching, kicking up. Six trees are identified by their leaf through identifying the structure of the leaf. Leaf pictures show some art activities that can be done with fallen and collected leaves. An informational page at the end shows the seasonal changes of a leaf from spring bud to winter bud. A book perfect for introducing fall leaf activities. No scientific explanation of why or how the leaves change but would not be appropriate for the intended audience. Reading Level: Primary Read Aloud Level: Infant & up Uses: Pre-school-Upper Primary

FLOWERS, TREES AND FRUITS: Biology Facts and Experiments; Morgan, Sally, author; New York: Houghton Mifflin Co.; c. 2002. Young Discoverers Series (From book description) This book is activity based and used to go from simple to more complex concepts and experiments. Ages 4-8.

FLOWER WATCHING WITH ALICE EASTWOOD; Ross, Michael, author; Caple, Laurie A., illustrator; New York: Lerner – Carolrhoda Books; c. 1997.

This book is a part of a series highlighting scientists not as well known along with a look at the subject area they were famous for studying. This series includes biographical information about Eastwood and her studies of plant life in Colorado and California at the turn of the century. A largely self-taught naturalist, she became the curator of botany at the California Academy of Sciences in 1950 at the age of 91 and was a pioneer in the study of flowers. The book contains activities for those wanting to explore botany and encourages the use of magnifying glasses, journals and more. It is beautifully illustrated with water color and black and white photos. Also contains a glossary and index.

Reading Level: Upper Primary Read Aloud Level: Primary & up Uses: All ages

FOREST CHILD; McGee, Marni, author; Banfill, A. Scott, illustrator; New York: Simon & Schuster, Aladdin Paperbacks; c. 1994, (1999 paperback).

A small child wanders into the forest and becomes lost and afraid. Hearing a cry he follows the sound until he rescues a rabbit from a trap. The wary animals then befriend him and keep him safe through the night. Although a sweet lullaby of a story believing that we can all live together peacefully, the book does identify forest animals, but no specific information is given.

Reading Level: Primary Read Aloud Level: Toddler & Up Uses: Toddler –

Primary

FORESTS; Owen, Andy, author; Heinemann Library; c. 1998 (Geography starts series)

Introduces the various forests of the world, including mangrove, broadleaf, evergreen and rainforests.

Reading Level: 2.9 Read Aloud Level: K-3 Uses:

FRANKLIN PLANTS A TREE; Bourgouis, Paul, author; various illustrators (A Franklin T.V. Storybook); New York: Scholastic Trade; c. 2001.

Franklin loses three trees that he is give at an Earth Day event and retraces his steps to find them. He then plants them in his back yard. Book is an example of being responsible. (from book description).

Reading Level: Primary Read Aloud Uses: Pre-K & up Uses: Pre-K

Primary

FROM ACORN TO OAK TREE; Kottke, Jan author; Children's Press c. 2000 (How Things Grow series)

Follows the journey of an acorn and explains how it becomes a tree.

Reading Level: 1.6 Read Aloud Uses: P-2 Uses:

FROM SEED TO PLANT; Fowler, Allan, author; Anderson, Caroline, photo researcher; New York: Grolier Publishing (Children's Press); c. 2001.

Using excellent photographs, Fowler introduces the concept of seeds from the ones we eat to the ones we spit out. Familiar plants and fruits are used as examples. The importance of seeds is stressed as well as seed development and disbursement. The end pages outlines important words. Although aimed to a younger audience, this could be used in the 4th grade for simple explanation and introduction to seeds. This is a Rookie Read-About Science Reader.

Reading Level: Primary Read Aloud Level: Infant & Up Uses: Infant & 4th

grade

FROM SEED TO PLANT; Gibbons, Gail, author, illustrator; New York: Holiday House; c. 1991.

A simple, concise and very accessible book, Gibbons explains all aspects of a seed and the plant life cycle. Parts of a flower, germination and how seeds are dispersed are also explained. Enough information is given for simple reports and the illustrations are clear and well marked.

Reading Level: Primary Read Aloud Level: K - up Uses: $K - 5^{th}$ grade

Ginseng Dreams: The Secret World of America's Most Valuable Plant; Kristin Johannson, author; University Press of Kentucky; c. 2006

In Ginseng Dreams, Kristin Johannsen chronicles the remarkable world of the mysterious plant that commands as much as two thousand dollars a pound. She unfolds ginseng's history and its future through the stories of seven people whose lives center

on it: a huckster, a field researcher, a farmer, a ginseng "missionary," a criminal investigator, a broker, and a cancer researcher. Each of them brings a different perspective to the elusive root—and each is consumed by a different dream. Despite its venerable past and medicinal promise, American ginseng faces an uncertain future. Urban sprawl and environmental destruction threaten its fragile forest habitat, and the law provides little recourse against ginseng thieves who roam the backwoods. One step away from endangered species status, this precious plant of so much promise could soon be lost to us forever.

GROWING FLOWERS SERIES; Gail Saunders-Smith, author; c. 1998; Pebble Books from Capstone Press, publisher.

Reading Level: Grades K-1 • Interest Level: Grades K-2

Young readers will delight in learning about the natural world by studying a variety of flowers and the function of seeds, stems, leaves, and flowers. The series also explains the growing process. Labeled photographs clearly identify parts of plants and support understanding of content-area vocabulary.

TILTLES IN SERIES: FLOWERS, LEAVES, SEEDS, STEMS

GROWING TREES; (Original Publisher's Binding) Maurer, Tracy Nelson author; Rourke Press; c. 2001 (Green thumb guides series)

Describes how to plant, care for, prune, and protect various kinds of trees.

Reading Level: 3.8 Read Aloud Level: K-3 Uses:

HAVE YOU SEEN TREES?; Oppenheim, Joanne, author; Tseng, Jean, illustrator; New York: Scholastic, (Scholastic paperback reprint 1995); c. 1967.

Delightful images and word choices describes deciduous trees through the seasons. The book describes tree uses, life cycles and includes a three page identification guide. Although this book has been around for years, it is an industry standard and excellent example.

Reading Level: Primary Read Aloud Level: K & up Uses: All ages

HOW A SEED GROWS; Jordan, Helen J., author; Krypinski, Loretta, illustrator; New York: HarperTrophy; c. (revised) 1992.

From School Library Journal

Grade 1-3-- Revised illustrations and format make this book, originally published in 1960, a valuable choice.

With charming illustrations and clear text, this simple introduction leads young readers through a series of steps that result in bean plants as well as a basic understanding of how seeds work. Children are encouraged to follow each aspect of the botanical process, from sowing bean seeds, to the growth of tiny root hairs, to transplanting the plant in the garden. Realistic and inviting full-color watercolors show only procedures that are possible for youngsters to follow with minimal involvement from adults.

--Eva Elisabeth Von Ancken, Trinity Pawling School, NY Copyright 1992 Reed Business Information, Inc. --This text refers to an out of print or unavailable edition of this title.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K – 4th Grade

HOW DO APPLES GROW?; Maestro, Betsy, author; Masestro, Giulio, illustrator; New York: HarperCollins; c. 1992.

How an apple tree produces an apple is discussed in simple straight forward facts. Proper scientific terms are used and illustrated. Plant development, seeds, reproduction, importance of bees and other pollen carrying insects are also discussed. The story follows the seasons.

Reading Level: Primary Read Aloud Level: K – up Uses: K – Intermediate

HOW LEAVES CHANGE; Johnson, Sylvia A., author; Sato, Yuko, photographer; Lerner Publishing Group; c. 1986.

From SCHOOL LIBRARY JOURNAL – book contains glossary, index and photographs. "Colorfully illustrated introductions to their subjects on how leaves change color in autumn. The importance of leaves as the food-producing unit of a tree is defined, and the process of photosynthesis is described in the text and in a diagram. The chemical changes brought about in the leaf by cold weather and the resulting color change from green to the autumnal colors of yellow, orange and red are described....book does not have a table of contents but has an index and helpful glossary/pronunciation guide." Book received unfavorable review from Seymour Simon and relayed the fact that this is a "translation of the original (Japanese) text and reads much like a stilted high school biology text." Another reviewer noted the trees highlighted are Eurasian. Ages 9 – 11 recommendations.

HOW SEEDS TRAVEL; Overbeck, Cynthia, author; Hani, Shabo, photographer; Firs Avenue Editions, Publisher; c. 1990.

(from book description, no review)

"Describes how seeds are moved from place to place by wind, water, and animals and how they function in plant reproduction." Ages 9-12

HOW THE FOREST GREW; Jaspersohn, William, author; Echart, Chuck, illustrator; New York: Greenwillow Books; c. 1980 (Mulberry Paperback Books, reprint 1992).

The illustrations are pen and ink and the text is in large print making it a great "new reader" for upper primary. The book describes how a cleared field becomes a forest – again. Although it takes place in Massachusetts, the transformation is the same for any forest. Tree naming, forestry terms are discussed and defined as well as the animals that inhabit the field and forest through all the changes.

Reading Level: Upper Primary Read Aloud Level: Primary & up Uses: Primary - Adult

IF THE TREES COULD TALK (Original Publishers Binding) Kallen, Stuart A. author; Abdo & Daughters Publishing; c. 1993 (Target earth series)

A tree talks about how it was planted and the important part it plays in the environment.

Reading Level: 3.6 Read Aloud Level: K-3 Uses:

IN A TREE; Schwartz, David M., author; Kuhn, Dwight, photographer; Cypress, CA: Creative Teaching Press, Inc.; c. 1997.

Part of the "Look Once, Look Again" Science Series, Schwartz uses the Kuhn photographs to help describe the variety of life found in and on a tree. Red squirrel, owl, white pine, raccoon, Luna moth caterpillar, yellow warbler and fall leaves are highlighted by posing the statement to look once, turn the page and look again to see what the animal is. Large print and interesting questions make this a good book for starting a discussion to read aloud presentation. Though vocabulary is not controlled, text is simple with a few more difficult words.

Reading Level: Primary Read Aloud Level: pre-k and up Uses: Pre-k - primary

IN THE WOODS: Who's Been There; George, Lindsay Barrett, author, illustrator: New York:

Hoping to connect to children who liked to stop and look, George has created a simple book about habitat and who lives there. Giving readers simple clues, the brother and sister team in the book take a walk in the woods and discover tracks and traces of animals. After readers are given clues in text and visual form, the following double page spread reveals the animal. This book is useful *before* taking a walk in the woods by giving examples of "how to look". A good introduction to the habitat and identifying a few animals in a fun way and helps children learn to observe and see what is left behind for us to find to see who's been there. End notes provide additional information. Reading Level: Primary Read Aloud Level: Infant & Up Uses: Infant – Primary

IT COULD STILL BE A TREE; Fowler, Allan, author, photographer (?); New York: Children's Press; c. 1991; Rookie Read About Science Series.

Uses photographs to identify the characteristics of a tree. Specific common trees are identified such as evergreen, maple, redwood. Also includes the need and uses of trees for the environment.

Reading Level: Primary Read Aloud Uses: Toddler & Up Uses: Toddler – Primary

JUST A DREAM, Chris Van Allsburg, author, illustrator; New York: Houghton Mifflin; c. 1990.

A "what if" cautionary story about what happens in the future. His story starts with the thinking his friend's birthday present of a tree is ridiculous. But through his dreams he learns how important a tree can be. His dreams take him to garbage filled, fishless, choked environments. He realizes what one person can do to help stop the possibility. This book is recommended for primary and up.

KIDS GUIDE TO HOW TREES GROW; Ayers, Patricia, author; PowerKids Press; c. 2000; Digging in the Dirt Series, ages 4-8.

LEAVES AND TREES; Pascoe, Elaine, author; Kuhn, Dwight, photographer; Blackbirch Marketing; c. 2001; Nature Close-up Series; ages 9-12.

LIFE CYCLE OF A TREE; Kalman, Bobbie, author; Smithyman, Kathryn, & Bedell, Barbara, illustrators; BT Bound Publishers; c. 2002; ages 9-12

A LOG'S LIFE; Pfeffer, Wendy, author; Brickman, Robin, illustrator; New York: Simon & Schuster; c. 1997.

Lightning strikes an oak tree and the story begins of what happens next. From squirrels having to find a new home to the new insects moving in, this story illustrated using natural materials follows the tree and all the creatures that call it home as it decays over time. A very interesting way to discuss this end of the tree life cycle. The story ends with the sprouting of a new tree in the rich loam from the dead tree. Reading Level: Primary Read Aloud Level: K & up Uses: All ages

The Magic School Bus Plants Seeds: A Book About How Living Things Grow (Magic School Bus) (Paperback) by <u>Joanna Cole</u> (Author), <u>John Speirs</u> (Illustrator), <u>Bruce Degan</u> (Illustrator) **Publisher:** Scholastic Paperbacks (February 1, 1995)

Book Description

Ms. Frizzle's class is growing a beautiful garden. But, Phoebe's plot is empty. Her flowers are back at her old school! So, the class climbs aboard the Magic School Bus. And, of course, the kids don't only go back to Phoebe's school, but they go inside one of Phoebe's flowers! Follow the kids' adventure and learn how living things grow.

MAPLE TREE; Schwartz, David M. author; Learning Works; c. 1999 Life Cycles series.

See how a seed can grow into a tree.

Reading Level: 3.5 Read Aloud Level: P-2 Uses:

MATHEW'S MEADOW; Bliss, Corinne Demas, author; Lewin, Ted,illustrator; New York: Voyager Books-Harcourt Brace & Co.; c. 1992.

During blackberry time a young boy visits a red-tail hawk seven years in a row where the hawk teaches him how to use his senses to learn and understand about the land that surrounds him. This quiet book has Lewin's magical watercolors. Book ends with the child becoming a father and taking his daughter to the meadow where he learned from the hawk. (Maybe out of print)

Reading Level: Primary Read Aloud Level: undetermined Uses: undetermined

MY MOTHER TALKS TO TREES; Gove, Doris, author; Mallory, Marilynn H., illustrator; Atlanta: Peachtree Publishers; c. 1999.

A Mother walks through the neighborhood and talks to the trees while her daughter, listening but embarrassed and watching to see if her friends watch too. But the illustrations besides showing the daughter's discomfort, also identify each tree by leaf and leaf cluster, bark, flower, seed, and leaf in fall. Catchy ways to identify the trees are in the text such as the flowers of the tulip poplar look like tulips and the leaves

look like fox faces. The end pages further help teach how to identify trees and define key words through definition and illustration.

Reading Level: Upper Primary Read Aloud Level: Pre-K & up Uses: Pre-K – 4th grade

OAK TREE, (Webs of Life Series); Fleisher, Paul, author; various photographers, illustrators; New York: Benchmark Books, Marshall Cavendish; c. 1998.

The whole ecosystem of a hundred year old oak tree is explored in this book. Life cycle, animals, insects, plants near by, and through different seasons is explained in the text and illustrated by photographs. Younger students can use this as a beginning identification guide to the forest. A short further reading list is included in the end as well as a double page spread showing all the plants and animals in a oak woodland.

Reading Level: Primary Reading Aloud Level: Pre-K & upUses: Pre-K – 4th Grade

ONCE THERE WAS A TREE; Romanova, Natalia, author; Spirin, Gennady, illustrator; New York: Penguin Putnam Books for Young Readers, Puffin Books; c. 1983 (Russian release, English version, 1985).

An old tree is struck by lightning and a woodsman cuts it down leaving only a stump. The story unfolds with each new insect, bird, frog, bear or man coming to claim the stump as their own. This philosophical book which asks "But who really owns the tree stump?" is also a statement about living together in harmony with the idea that the stump belongs to all. Illustrations are informative. This book could also be used to illustrate how Russia and the U. S. are general the same in nature. Each living thing in nature that lives in the stump is identified in the text and keystone illustration. Reading Level: Primary Read Aloud Level: K & up Uses: $K - 6^{th}$ Grade

Plants That Never Ever Bloom (World of Nature) (Paperback) by Ruth Heller (Author) Publisher: Putnam Juvenile; Reissue edition (February 15, 1999)

The natural world is illuminated with the same flair and fun Ruth Heller brings to language. *In Plants that Never Ever Bloom*, rich, colorful illustrations and informative, rhyming verse unlock a world where mushrooms glow at night and seaweed grows to be gigantic--without a flower in sight!

REASON FOR A FLOWER; Heller, Ruth, author, illustrator; New York: Penguin Putnam Books for Young Readers; c. 1983.

This brightly illustrated book simply states the beginning concepts of insects and flowers and how pollen is spread. "The reason for a flower is to manufacture seeds...". The book shows how seeds spread, what some seeds grow up to be and what seeds need to live. Uses of seeds from food to perfume is included in this deceivingly simple book. It is packed full of information.

Reading Level: Primary Read Aloud Level: Pre-K – Up Uses: All ages

RED LEAF, YELLOW LEAF; Elhert, Lois, author, illustrator; New York: Harcourt Brace Jovanovich; c. 1991.

This bright and beautiful book illustrates the life of a sugar maple tree from seedling in the woods, to nursery and then a backyard. The simple text and bold pictures relay lots of information about the maple through all the seasons. End notes include how to plant a tree and what a tree needs.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: All ages (end notes)

THE SEASON'S OF ARNOLD'S APPLE TREE; Gibbons, Gail, author, illustrator; New York: Harcourt; c. 1988.

This very informative book about an apple tree takes the tree throughout the seasons with information about bud, pollination, growth and seasonal changes. Simple suggestions about using the tree branches to hang bird food in the winter, to enjoying the shade in the summer help describe the many uses of the tree besides fruit. Enough information is included so that the book could be used for reports.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: All ages

A SEED GROWS: FIRST LOOK AT A PLANTS'S LIFE CYCLE; Hickman, Pamela, author; Collins, Heather, illustrator; Buffalo, NY: Kids Can Press; c. 1997.

Using a backyard garden this lift the flap book helps the reader investigate plants and their life cycle. Bright illustrations and facts help the reader get lots of information from the book.

Reading Level: undetermined Read Aloud Level: undetermined Uses: undetermined

SKY TREE; Locker, Thomas with Christiansen, Candace, author, illustrator; New York: HarperCollins; c. 1995.

This book subtitled Seeing Science Through Art, shows a single tree on a knoll through thirteen paintings depicting seasons and time of day changes. Simple text describes what is happening in the pictures and at the bottom of the page, a question is posed that leads the reader in thinking about the painting. As the subtitled implies, this book is a wonderful blend of art and science.

Reading Level: Primary Read Aloud Level: Pre-School & Up Uses: All Ages

SUNFLOWER HOUSE; Bunting, Eve, author; Hewitt, Kathryn, illustrator; New York: Harcourt Brace & Co.; c. 1996.

Popular author Eve Bunting describes the life cycle of a sunflower as well as encourages children to use their imaginations (the planting of sunflowers made a great place to play). She shows from seed development to adult plant and reseeding for the next year of possibilities.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K – 4th grade

TANYA'S BIG GREEN DREAM; Glaser, Linda, author; McGinnis, Susan, illustrator; Publisher: Simon & Schuster; c. 1994.

A great book for beginning chapter book readers about a fourth grader with an Earth Day project – to plant a tree has a realistic story about how a great idea has obstacles. Tanya wants to plant the tree but her apartment complex manager won't let her and so she get permission to plant it in the city park. She also has to raise the money to buy the tree. Doing good deeds has responsibilities and Tanya not only learns this but also succeeds. The paper and binding are made from recycled materials.

TELL ME, TREE, All About Trees for Kids; Gibbons, Gail, author, illustrator; New York: Little, Brown & Company; c. 2002.

Posing the questions to a tree, the reader is lead through all kids of information about trees. This book can be used a page at a time and has enough information for reports. The information is presented in a logical and simple matter. Illustrations show different seeds, fruit, parts of a seedling, parts of a tree including roots, bark, leaves and trunk and the different types of trees – evergreen and broadleaf. The last of the book is devoted to tree identification by shape, leaf and bark. Activities are included at the end. Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K & up

TEMPERATE FORESTS; Sally Wilkins, author; c. 2004, Bridgestone Books from Capstone Press, publisher.

Reading Level: Grades 2-3 • Interest Level: Grades 2-4

Discusses the plants, animals, and climate of a temperate forest ecosystem.

THIS IS THE SUNFLOWER; Schaefer, Lola M., author; Crews, Donald, illustrator; Greenwillow Publishers; c. 2000; New York: Scholastic, Inc., (paperback); c. 2002 (paperback edition).

Award winning illustrator Donald Crews adds visual delight to a simple lesson in the life cycle of the sunflower. The short text is reminiscent of the rhyme "This I The House That Jack Built" and includes bird identification key and sunflower facts on the end page. Illustrations show the passage of time in the life cycle. Text also states that the seeds are scattered by the birds to help create new sunflowers the next season. Reading Level: Primary Read Aloud Level: Infant – lower Primary Uses – Infant – Primary

TINY SEED; Carle, Eric, author, illustrator; New York: Simon & Schuster, (Scholastic, Inc., paperback reprint); c. 1987.

Carle's typical bold collage work helps describe the life cycle of seeds and all the ways a seed can be carried in nature. This simple book is accurate and helps the young understand how seeds travel and grow in unusual places.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: All ages

A TREE FOR ALL SEASONS; Bernard, Robin, author; Washington, D C: National Geographic Society; c. 1999.

Photographs of the same single sugar maple tree are shown throughout the seasons in this picture book beginning with winter. Uses for humans and animals are

explained for each season of the tree with photographs illustrating the changes in tree, buds, leaves and seeds.

Reading Level: Primary Read Aloud Level: Pre-K and up Uses: Pre-K - Primary

A TREE IS NICE; Udry, Janice May, author; Simont, Marc, illustrator; New York: Harper & Borthers; c. 1956.

The wonderful qualities of a tree are explored in this classic picture book. Suggestions about the recreational and esthetic value of trees as well as the beneficial use of trees in the landscape are expressed. "Trees are very nice. They fill up the sky." is just the beginning to this thoughtful introduction to trees.

Reading Level: Primary Read Aloud Level: Pre K – up Uses: Pre-K - Primary

TREES ARE TERRIFIC; Lisa Trumbauer, author; c. 2004, Yellow Umbrella Books from Capstone Press, publisher.

Reading Level: Grades K-1 • Interest Level: Grades PreK-2

Provides an introduction to the some characteristics of different kinds of trees.

TREES SERIES; Marcia Freeman, author; c. 1999, Pebble Books from Capstone Press, publisher.

Reading Level: Grades K-1 • Interest Level: Grades K-2

Readers can use this series to compare and contrast trees by their shapes, sizes, seeds, and leaves. The content area deals with trees from a variety of regions and climates.

TITLES IN SERIES: PINE TREES, MAPLE TREES, OAK TREES, PALM TREES

The Ugly Vegetables (Paperback) by Grace Lin (Author) Publisher: Charlesbridge Publishing (July 2001)

Reading level: Baby-Preschool Kindergarten-Grade 3 A Chinese-American girl and her mother grow a vegetable garden in a neighborhood where everyone else grows flowers. The girl thinks their plants are ugly compared to flowers, but soon learns that vegetables can make a very delicious soup one that the whole neighborhood wants to try. Soon everyone is growing Chinese vegetables as well as flowers. A recipe for "Ugly Vegetable Soup" is included. Lin's brightly colored gouache illustrations perfectly match her story, creating a patchwork-quilt effect as the neighbors' backyards all converge. Families of all kinds engage in all sorts of activities while children play happily together. Each double-page spread is a different color with a different pattern scattered lightly across it, serving as a frame for the illustrations and as background for the text.

WHAT IS A PLANT; Kalman, Bobbie, author, illustrator; New York: Crabtree Publishing Company; c. 2000

Using clear photographs and illustrations, the book explains what are plants including trees and what are not plants like fungi. Parts of a plant, life cycle, classifications of plants, photosynthesis, pollination, reproduction and simple plant experiments are presented. A glossary and index are at the end of the book Reading Level: Primary Read Aloud Level: Primary & up Uses: Primary

WHO IS IN THE GARDEN; Rosenberry, Vera, author, illustrator; NewYork: Holiday House; c. 2001

Bright watercolors splash across the pages reminiscent of an English countryside in

this book about a garden. A young child asks "Who is in the garden?" and the story unfolds. Birds, snakes, worms, bugs and a variety of plants, wild and cultivated provide some of the who but it is also the visitor. A nice introduction to gardens and supports introductory activities around gardens and habitats. Reinforces the importance of observation with all one's senses. This book's illustrations are visually and accurately detailed and informational sentences are spare and to the point. Reading Level: Primary Read Aloud Level: Pre-School & up Uses: Pre-School - Upper Primary

WHY DO LEAVES CHANGE COLOR?; Maestro, Betsy, author; Krupinski, Loretta

illustrator; New York: HarperCollins Publishers; c. 1994.

In this stage 2 "Let's Read and Find Out Science" book, instructing the reader to make simple observations leads to identification and inquiry about leaves and their role in the life of a tree. The book then leads the reader in an explanation from why leaves change color to how this process happens. The book relates the information to other plants and pigments observed thereby extending the concept of the book. What happens to fallen leaves completes the book with two end pages to leaf activities and a page devoted to suggestions about where to go to observe fall foliage and the U. S. Forest Service 800 number.

Reading Level: Primary Read Aloud Level: Pre-k and up Uses: Pre-k and up

WILDFLOWERS - Hood - Review with the Audubon Series

Woods Walk: Peepers, Porcupines & Exploding Puffballs! What You'll See, Hear & Smell When Exploring the Woods (Hardcover) by Henry Warren Art (Author), Michael W. Robbins (Author) Publisher: Storey Kids (July 2003)

Grade 4-6-Divided into seasonal chapters that are further subdivided into Eastern and Western forests, this book describes many different woodland plants and animals. The authors give tips for what readers might see and hear during the seasons, such as chirping frogs in the springtime; the night sounds, wild flowers, and berries of summertime; fall's characteristic migrating birds; and animal tracks in winter, all of which are well described and further illustrated with glorious color photographs. Mention is made of the six types of forests found in America; activities, such as fall leaf collecting, are scattered throughout the book; and side boxes offer explanations to common questions, such as why leaves fall. Attempting to cover so much information in one book results in a cursory overview of the topic. If your library needs a well-illustrated, clearly written, general book about forests, this one will work; if readers are looking for a field guide to take along while strolling in the woods, direct them elsewhere.

REPTILES

BOX TURTLE AT LONG POND; George, William T., author; George, Lindsay Barrett, illustrator; New York: Greenwillow Books; c. 1989. (currently out of print).

A day in the life of a turtle, this realistic book follows a hungry turtle at Long Pond. Text describes the flora and fauna of the illustrations which are almost photographic in realism. What a turtle see, eats, can and can't do are revealed as well as all the other animals – predator and prey – found around the pond. An excellent introduction to life around the pond, turtles and food chains.

Reading Level: Primary Read Aloud Level: Toddler – Up Uses: Toddler – 4th grade

GARTER SNAKES; Matt Doeden, author; c. 2005, Bridgestone Books from Capstone Press, publisher.

Reading Level: Grades 2-3 • Interest Level: Grades 2-4

An introduction to garter snakes including a description of their appearance and information on where they live, what they eat, how they produce young, and the dangers that garter snakes face.

WATER - CYCLES AND SHEDS

ACID RAIN; Morgan, Sally, author, illustrator; New York: Franklin Watts; c. 1999; (Earth Watch Series).

Morgan clearly and informatively presents an introduction to the problem of acid rain, its causes and possible scientific solutions and ways to help. Illustrations are photograph and diagrams which are labeled. In side bar boxes Morgan offers related facts and suggested activities. (From SLJ review)

Reading Level: Upper Primary Read Aloud Level: Primary & up Uses: Primary – Middle School

ALL ABOUT RIVERS; Emil, Jane, author; Veno, Joseph, illustrator; New York: Toll Communications; c. 1984. (Out of print)

Using a Q & A format, the book gives information about rivers - their formation, common terms, fun facts, erosion and other ways rivers impact the earth surface. The book uses cute illustrations all over the pages and asks some questions children might not have but need to know – "Can rivers be dangerous?", "How can we stop floods?" and "Why should we keep our rivers clean?".

Reading Level: Upper Primary Read Aloud Level: K & up Uses: K – 5th grade

ALL ABOUT WATER; Gerger, Melvin, & Meisel, Paul, authors; Fisher, Cynthia, illustrator; New York: Scholastic, Inc.; "Do It Yourself" science series; c. 1994. (Out of print)

A concept about water is presented and then followed by experiments or observations one can do to further understand or demonstrate the concept in this book. The book generally explains the properties of water from the three states to salt water to

plants and water and humans and water. The book ends with a few pages that tie all the information together.

Reading Level: Upper Primary Read Aloud Level: K & Up Uses: K & 5th grade

AROUND THE POND – Who's Been There; George, Lindsay Barrett, author, illustrator; New York: Greenwillow Press; c. 1996.

Hoping to connect to children who liked to stop and look, George has created a simple book about habitat and who lives there. Giving readers simple clues, the brother and sister team in the book explore around the pond and the tracks and traces of animals. After readers are given clues in text and visual form, the following double page spread reveals the animal. A good introduction to the habitat and identifying a few animals in a fun way and helps children learn to observe and see what is left behind for us to find to see who's been there. End notes provide additional information. Reading Level: Primary Read Aloud Level: Infant & Up Uses: Infant – Primary

BEAR LOVES WATER; Weiss, Ellen, author; Rillo, Cary, illustrator; New York: Simon & Schuster; c. 2001 (only board book available at this time). This board book is based on the TV series "Bear's Big Blue House, this book teaches very simply, about the different forms of water using Bear (puppets in the TV program) as the main character and his different experiences with water (splashing in puddles, snowflakes, watching clouds).

Reading Level: Primary Read Aloud Level: Infant - Primary Uses: Infant - Primary

BY LAKES AND RIVERS; Paul, Tessa, author, illustrator; Crabtree; c. 1997; (Animal Trackers Series). Ages 9-12.

(Book description) Illustrations show the tracks, habitat, behavior and interesting facts of animals found mostly in North America by or in lakes and rivers. Otter, beaver, frog, mink, trout, herons swan and loon are some of the animals discussed in simple text.

CANOE DAYS; Paulsen, Gary, author; Paulsen, Ruth, illustrator; New York: Doubleday; c. 1999.

Paulsen is an award winning juvenile author who has recently teamed up with his artist wife to create children's books. The text is a prose poem and tells what it is like to take a canoe out on a lake and what you might see. The book encourages a stillness and concentrated listening. Illustrations show what is under the water as well as what it is like to be in a canoe. Text identifies animals shown in the illustrations. Although little scientific information is given this book would be useful as an introduction to river habitat and animal identification.

Reading Level: Primary Read Aloud Level: Infant & up Uses: Infant – 4th grade

THE CLOUD BOOK; De Paola, Tomie, author, illustrator; New York: Holiday House; c. 1975.

In typical dePaola style, types of clouds are described and illustrated. Brief text is informative and age appropriate. Explanation of mist and fog, a few myths and weather sayings are included. It also has an index.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K – 4th grade

CLOUD DANCE; Locker, Thomas, author, illustrator; New York: Silver Whistle - Harcourt, Inc.; c. 2000.

Using oil on canvas illustrations, Locker describes clouds of every size, shape and type. Text refers to the water cycle and a two page information guide at the end of the book answers "How high does the sky reach?, How are clouds formed?, How many kids of clouds are there?, and Why are clouds different colors?" and illustrates the different types of clouds. This book clearly links art and science with the "Hudson River" style art. Locker has won several awards for illustration as well as from science organizations for his other books.

Reading Level: Primary Read Aloud Level: Pre-School & up Uses: All Ages

COME A TIDE; Lyon, George Ella, author; Gammell, Stephen, illustrator; New York: Orchard Press; c. 1990.

Lyon, a Kentucky author from Harlan County, wrote this from a childhood experience during the 1957 flood in Hazard. The book's text is from the innocent eyes of a child experiencing a flood. Family and neighbors are call upon and checked on and the book explains how all cope with the flood when in March "the rain and snow come together". Although Gammell's water color illustrations are light hearted (and portray dangerous activity – wading in the flood water), the pages nearly drip water from the colors. No scientific information is given but gently tells of what a flood is all about. This book is mentioned as a literature connection in several thematic units on water.

COMMON GROUND: The Water, Earth and Air We Share; Bang, Molly, author/illustrator; New York: Scholastic (Blue Sky Press); c. 1997. Caldecott Honor illustrator. Bang presents a book about conservation through a parable about sheep grazing in the commons. Her strong, naïve illustrations depict over fishing, tree cutting, industrial and individual use of oil, gas and coal, and over use of water. Although a small book, many discussions of personal and commercial responsibility could start from this book and Bang's cry to save our natural resources.

Reading Level: Primary Read Aloud Level: Primary Uses: Primary & Up

DRIP! DROP! HOW WATER GETS TO YOUR TAP; Seuling, Barbara, author; Tobin, Nancy, illustrator; New York: Holiday House; c. 2000.

Colorful illustrations and text describe the water cycle in very basic, simple terms as well as explain a reservoir, water treatment plants and how water gets to the faucet. The book is clear and age appropriate with a few hands on activities at the end of the book. In two reviews, mistakes were pointed out – text implies that glaciers are contain salt water not fresh and in an experiment on evaporation saying that water in an enclosed container does not evaporate (it does, just not release into the atmosphere). Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K – 4th grade

THE DROP IN MY DRINK; Hooper, Meredith, author; Coady, Chris, illustrator; New York: Viking; c. 1998.

The book states that the story tells "where water came from, how it behaves and why it matters." It reinforces the idea that water is old, constantly moving, reforming and recycling. Properties and states of water, uses, water as an erosive force and the need for clean protected water are themes clearly stated. The end has a 2 page spread about the water cycle and water facts.

Reading Level: Upper Primary Read Aloud Level: Primary & Up Uses: Primary – 6th grade

THE EARTH AND I; Asch, Frank, author/illustrator; New York: Harcourt Publishing; c. 1994.

Reviewed as a "sentimental" (Publishers Weekly) and "bland" (Kirkus Review), popular author Asch writes a story about a boy and his relationship with the earth. In simple sentences such as "I help her to grow. She helps me to grow.", ecological statements are made about human interaction with the earth, including a illustration of a garbage dump. Illustrations have simple shapes and very colorful which is a draw for new readers. Lends itself to "first" discussions about the environment.

Reading Level: early Primary Read Aloud Level: Pre-K & 4th grade Uses: Pre-K & 4th grade

ENDANGERED WETLAND ANIMALS; Taylor, J. David; Taylor, Dave, authors; Crabtree Publishing Co.; c. 1992 (revised 1995).

(From School Librarians' Book review) Environmental issues must be addressed with our children and this book clearly tells of the endangered wetland animals. From the book description ten endangered animals are included – the great egret, white pelican, hippopotamus, Nile crocodile, Indian rhino, alligator, osprey and more. It is part of the Endangered Animals Series published by Crabtree Publishing. From the publisher's description: the book contains clear simple text with full color photographs by wildlife photographer Dave Taylor. The book helps guide the reader toward a better understand of the animal and habitat and the dangers to both. Information about what a wetland is as well as its importance to the ecosystems of the earth.

Reading Level: Primary Read Aloud Uses: Primary & up Uses: All ages Younger with preparation

FOLLOW THE WATER FROM BROOK TO OCEAN (Let's Read and Find Out Science Book); Dorros, Arthur, author, illustrator; New York: HarperCollins Publishers, Inc.; 1991 c.

Using pen and ink and watercolors Dorros illustrates the journey of water from storm rain gushing from the gutter to the ocean. Different properties of surface water are discussed such as water flows downhill, erosion and he defines different bodies of water. Habitats are discussed briefly.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: All ages

THE FOUR ELEMENTS: WATER; Vendrell, Carme Sole, Parramon, J. M., author/illustrators; Hodder & Stoughton, Children's Division; c. 1988.

OUT OF PRINT

A very simple introduction to water and how water travels from brooks to the ocean. Has more information notes for adults.

Reading Level: Primary Read Aloud Level: Infant - Primary Uses: Infant - Primary

I AM WATER (Hello, Reader Science Series, Level 1); Marzollo, Jean, author; Moffatt, Judith, illustrator; New York: Cartwheel Books; c. 1996 (1996 paperback edition, Bt, 1999). Spanish edition available.

Marzollo has also written in this "I Am" series Snow, Star, Rock, Caterpillar, Leaf, and Seed. Moffatt uses bold paper collage to highlight the large type and one sentence per page format of the book that tells of the properties, uses and usefulness of water. Esthetic qualities of water are also relayed. Note to parents precedes the book about reading skills.

Reading Level: Early Primary Read Aloud Level: Infant & up Uses: Infant - Primary

IN THE SNOW: Who's Been There?; George, Lindsay Barrett, author, illustrator; New York: Greenwillow Press; c. 1995.

Hoping to connect to children who liked to stop and look, George has created a simple book about woodland habitat in the snow and who lives there. Giving readers simple clues, the brother and sister team about to go sledding in the book explore the woods and traces of animals left behind. After readers are given clues in text and visual form, the following double page spread reveals the animal. A good introduction to the habitat and identifying a few animals in a fun way and helps children learn to observe and see what is left behind for us to find to see who's been there. Reading Level: Primary Read Aloud Level: Infant & Up Uses: Infant - Primary

KENTUCKY WEATHER; Jerry Hill, author; University Press of Kentucky; c. 2005 In Kentucky Weather, meteorologist Jerry D. Hill discusses early concepts of weather in Kentucky and its effects on the state's history and development. He describes past weather events that have become part of Kentucky's history, such as the great rainstorm that saved pioneers from an Indian attack on Fort Boonesboro in 1778; the great flood of 1937; the devastating tornado outbreak of April 1974, when twenty-seven tornadoes raced across the state in a single day; and the severe ice storm that crippled much of central Kentucky in 2003. Hill also explains how the atmosphere creates Kentucky's weather, and he provides insights into what conditions affect temperature, precipitation, storms, drought, and other aspects of the state's climate.

LET'S EXPLORE A RIVER; McCauley, Jane R., author; Bailey, Joseph H., photographer; Washington D.C.: National Geographic Society, (Merchandizing-Random House, 1994); c. 1988. Out of Print – Available at Libraries

Large text and large photographs make this a good book for all ages. Written from the point of view of a father and children exploring the river and the river's edge, this book identifies common living things and habitat. Most photographs are labeled and text and photographs further identify what is illustrated. The last pages mention

that on a return trip to the river there will be changes and may look very different. The final page gives more information and how to do the activities shown in the photographs as well as additional reading.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K & up

LETTING SWIFT RIVER GO; Yolen, Jane, author; Cooney, Barbara, illustrator; New York: Little Brown & Co.; c. 1992; paper 1995, Library Binding 1999.

In Central Massachusetts between 1927 and 1947, reservoirs were created. This is the story of the Quabbin Reservoir as experienced by 6 yr. old. A woman relates the story of the "cost of progress" where graveyards are moved, houses are bulldozed and trees are cut down to make way for the reservoir so people in the city can have water. In the story the father and child return to a spot on the new lake that may have been close to where they lived and remember. In the Kirkus review it is stated that this is a "lovely book about reconciling necessary change with enduring values of what is lost." Although this book takes place in Massachusetts, the process, feelings and change are universal.

Primary – 6th grade

Reading Level: Primary Read Aloud Level: Primary K with preparation

Uses:

LISTEN TO THE RAIN; Martin, Bill Jr. & Archambault, John, authors; Endicott, James, illustrator; New York: Henry Holt & Co.; c. 1988.

Named a NCTE Notable Trade Book for the Language Arts, the well known authors (BROWN BEAR, BROWN BEAR WHAT DO YOU SEE, CHICKA CHICKA BOOM BOOM) teamed up to create a rhythmical and onomatopoetic story about rain. The illustrations in watercolor convey the many moods of rain from gentle drips to raging storm. No scientific information is given but the book is on several literature connection lists for water and weather units.

LITTLE CLOUD; Carle, Eric, author, illustrator; New York: Philomel Books; c. 1996: Puffin, reprint – paperback, board; c. 2001.

In Carle's tissue paper and water color illustrations a little cloud leaves the group of clouds and visits a tree then becomes other shapes like a sheep, airplane, cat and even a shark using bold blue and white color with simple shapes. The little cloud returns to the group on the last pages and it rains. Good read aloud, using the imagination to see shapes in clouds or to introduce the concept that rain comes from clouds but no other science information is given.

Reading Level: Primary Read Aloud Level: Infant & up Uses: Infant - Primary

MAGIC SCHOOL BUS AT THE WATERWORKS; Cole, Joanna, author; Degen, Bruce, illustrator; New York: Scholastic Trade; c. 1988 (reprint edition).

Ms. Frizzle and her students travel to a cloud in the Magic School Bus and become small enough to fit in a drop of water. The journey water takes to finally end up in the city's waterworks system is explored as well as how water is treated to travel on to be a glass of water in our home. The book is illustrated much like a comic book and is full of facts and information about water, water cycles and waterworks systems. Good to make students become aware of where our drinking water comes from. This

book is somewhat difficult to read aloud because of the small illustrations but has enough information for simple reports.

Reading Level: upper primary Read Aloud Level: K & up Uses: K – 5th grade

MAGIC SCHOOL BUS: WET ALL OVER; (El Autobus Magico: Se Salpica Toda); Relf, Patricia, author; Bracken, Carolyn, illustrator; New York: Scholastic Press; c. 1996.

This very popular series of informational books takes readers on journeys with students of Ms. Frizzle, an unusual teacher, in her "magic school bus". During these journeys students magically take journeys through the theme. Based on the TV series from the popular Magic School Bus books by Joanna Cole, readers learn about the water cycle and from evaporation to condensation and precipitation. Small illustrations make it somewhat difficult to use as a read aloud but lap sit or in small groups works wonderfully. Can be read on many levels of story line and has enough information for simple reports. (Available in Spanish)

Reading Level: Primary Read Aloud Level: K & up Uses: All ages

MY RIVER; Halpern, Shari, author, illustrator; New York: Macmillian Publishing Company; c. 1992. (Out of Print possibly)

With illustrations similar to Eric Carle's, frogs, fish, beetles and others express their need and use of the river. "It's everyone's river" is the conclusion. This book is a very first look at a habitat and ecology and has very brief text. The collage work gives no detail about the habitat. The end pages list the animals illustrated and what they are. Reading Level: Lower Primary Read Aloud Level: Infant & Up Uses: Infant – Primary

PINK SNOW AND OTHER WEIRD WEATHER; Dussling, Jennifer, author; Petach, Heidi, illustrator; New York: Grosset & Dunlap; c. 1998. (Available digital format, 2001).

This "All Aboard Reading, Level 2" book discusses little know weather happenings and how they happened. Pink Snow happens when high winds pick up red soil and continues up into a cloud and makes snow that looks dark pink. Raining frogs (water spouts), snow in the summer (volcanic ash) and other oddities are explained. Reading Level: Primary Read Aloud Level: Pre-k and up Uses Pre-K – 4th grade

POND YEAR; Lasky, Kathryn, author; Bostock, Mike, illustrator; Cambridge, Massachusetts: Candlewick Press; c. 1995.

This excellent example of the wonder of two girls sharing a pond and adventures with and in that pond shows what happens when children are allowed to explore and experience their natural world. The girls discover frog eggs in a clear bead clump and yellow lady slipper near. The girls play and pretend from mud pies to catching crayfish to watching for the muskrat. The books moves naturally through the seasons to winter's ice for skating on the pond. Illustrations are soft but accurate.

Reading Level: Primary Read Aloud: pre-K & up Uses: All ages

RAIN; Stojic, Manya, author, illustrator; New York: Crown Publishers; c. 2000. Animals of the African Savanna plain are featured in the book that uses the five senses to carry the story and track the strom coming. Results of the storm on the land and how it affects the animals is portrayed in this book with bright and exciting illustrations. Stojic relays in simple, strong sentences the need of rain for all living things. Animal identification is expressed in the text.

Reading Level: Primary Read Aloud Level: Toddler & Up Uses: Toddler - Primary

RAIN AND SHINE; Kespect, Deborah, author; various illustrators; Two-Can Publishing; c. 2000.

Using photograph and illustrations, fact boxes and stories this book helps student with facts and fiction about weather – rainy and sunny.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Primary

RED RUBBER BOOT DAY; Ray, Mary Lyn, author, illustrator; New York: Harcourt; c. 2000.

What does a little boy do on a rainy day? This is answered in this simple book illustrated with sharp yellow, green, blue, and, of course, red. After doing inside things like coloring, playing with toys and pretending the closet is a cave, the boy ventures out to play in puddles and drips and to see his neighbor outside barefoot in the grass. Full of unusual observations but no scientific information is conveyed.

Reading Level: Primary Read Aloud Level: Infant – Up Uses: Infant - Primary

RIVER DISCOVERIES; Wadsworth, Ginger, author; Kratter, Paul, illustrator; Charlesbridge Publishers; 2002.

This book takes a look at a river and gives information about the 13 different animals that depend on the river. The story covers a 24 hour period. Otters, trout, salamanders, raccoons, mountain lions, osprey, moose and others (from big to small) are "discovered" and readers come away with a better understanding of the ecosystem and how intertwined and important each animal. Questions are raised in the text to help with discussion or further inquirery.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: All ages

A RIVER RAN WILD; Cherry, Lynne, author, illustrator; New York: Harcourt Brace& Company; c. 1992.

Cherry tells the story of the life of the Nashua River watershed and all that came to live near it. Native bird and animals are identified in the boarder of the text page and shown in a natural setting on the opposite page. This pattern continues for each set of page themes identifying Native American objects, settlers objects, industrial revolution impact, and eventually the pollution of factories. She next explains how through activism the river was cleaned up and restored. Included are author notes about the river at the citizen campaign after the first Clean Water Act.

Reading Level: Primary Read Aloud Level: K & up Uses: All ages

RIVER STORY; Hooper, Meredith, author; Willey, Bee, illustrator; New York: Candlewick Press; c. 2000.

Hooper tells the life of a river from birth up in the mountains to meeting the ocean. Illustrations reflect the poetic text that also relays information about the river's force – erosion, carrying trash and wood, and creating new land. Illustrations and text show the different land forms from rocky mountain start to farm land with cows drinking and people boating, from the river to the city full of river transportation until it meets with the ocean. In the text key word are in bold print and explained in the informational pages at the end. Also contains a simple map.

Reading Level: Upper Primary Read Aloud Level: K & up Uses: Pre-K and Up Pre K with preparation

RIVERS AND STREAMS, Martin, Patricia Fink, author; illustrator unknown; New York: Franklin Watts; c. 1999. *From* <u>Booklist</u>.

A square-foot area of stream water may be home to 4,000 aquatic insect larvae and stream invertebrates. Microscopic plankton provides food for the insects and can be collected with a plankton net and observed through a compound microscope. Water temperature and depth determine the kinds of fish found in various stream sections, and students may investigate to find out what lives where. This project and experiment book considers these and several other issues of inland stream and river ecosystems. The well-written, generally well-illustrated text provides abundant information beyond the activities. Mapping a stream with transect lines, cutting channels through a model streambed, and testing soil, as well as several insect and plant investigations, make up some of the more than 30 activities, several of which are probably better as teacher-led classroom projects due to their complexity. Students will find the information useful for research and several of the activities doable for fairs. Teachers may be able to put some of the offerings to use. Excellent glossary, appendixes illustrating tools and equipment, and resource lists. *Anne O'Malley*

Reading Level: Middle School – Adult Read Aloud Level: not appropriate Uses: 6th & Up

SAVING WATER; Rebecca Olien, author; c. 2005, First Facts Books from Capstone Press, publisher.

Reading Level: Grades 1-2 • Interest Level: Grades 1-3

Describes the sources of freshwater on the earth and ways people can conserve water. Includes an activity.

SPLISH, SPLASH, SPLOSH; Manning, Mick, & Granstrom, Brita, authors & illustrators; New York: Franklin Watts; c. 1997.

Editorial Reviews

From School Library Journal

PreS-Gr 1--There is not enough story to make this picture book fiction, and not enough fact to make it nonfiction, although the CIP places it in 553.7. In an oversimplification of the water cycle, a boy and his dog follow water from ocean to sink to sewer. With the tedious refrain of "Splish, splash, splosh," each page includes a main chunk of text and a watercolor illustration, as well as smaller pictures and diagrams with additional text that adds little and is sometimes just plain wrong. For example, children are told, "Sometimes frogs and small fish can be sucked up into the clouds and fall with the rain somewhere else" and that three types of clouds are "fine day clouds," "thunder clouds,"

and "grey day clouds." Pass on this one and stick with Joanna Cole's The Magic School Bus: At the Waterworks (Scholastic, 1986).

WATER; Asch, Frank, author & illustrator; Gulliver Books; c. 1995. Editorial Reviews

From Publishers Weekly

Stylistically and thematically reminiscent of Asch's recent The Earth and I, this picture book offers variations on a basic ecological concept: the importance (and omnipresence) of water. With simple, declarative sentences, the author runs through a litany of definitions, from the specific ("Water is rain. Water is dew") to the abstract ("Water is high in the sky. Water is deep in the earth"). Unfortunately, the cumulative effect of the "Water is" construction is tiresome; teachers and purists may object to misleading statement ("Water is what fish breathe"). The accompanying watercolor and acrylic illustrations are appropriately liquidy and abundantly prismatic, with colors bleeding into one another for a rainbow effect. The result includes striking, multicolored snowflakes, confetti-like rainstorms and striped waterfalls. Wavering between narrative and nonfiction, this title struggles to find an appropriate audience. For a more solid-er, fluid-presentation, see Ken Robbins's Water (Children's Forecasts, Nov. 28), a photoessay released last season. Ages 3-7.

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From School Library Journal

PreSchool-Grade 1?This celebration of water is a companion volume to The Earth and I (Harcourt, 1994), and shares its format and theme?nature appreciation. Asch identifies some of the many places water is found, from the obvious (rivers, lakes, rain, ice) to the not so obvious (clouds, dew, a tear). Although most examples will be familiar to young children, the picture of clouds with the caption "Water is high in the sky" may confuse them. A double-page spread of an urban scene shows the many uses of water, from car washing to putting out fires. As in The Earth and I, brightly hued watercolor, acrylic, and colored-pencil illustrations executed in collage style create a kaleidoscopic effect. However, despite the vivid colors and flowing lines, some of them appear static. Overall, though, the book is visually appealing. Michelle Koch's World Water Watch (Greenwillow, 1993) offers a similar message at a slightly higher level and provides more substantial information. Asch's title is not an essential purchase, but it is a useful and attractive way to develop an appreciation for the environment in young readers.?Heide Piehler, Shorewood Public Library, WI Copyright 1995 Reed Business Information. Inc.

WATER: Lies Trumbauer author: c 2006 Vellow Lie

WATER; Lisa Trumbauer, author; c. 2006, Yellow Umbrella Books from Capstone Press, publisher.

Reading Level: Grades K-1 • Interest Level: Grades PreK-2

Text and pictures present the different forms water can take including rain, snow, ice, hail, dew, steam, and fog.

WATER DANCE, Thomas Locker, author, illustrator; New York: Harcourt, Inc., 1997.

Starting with a poem about rain, Locker follows water through the cycle. Oil on canvas pictures are "lushly romantic". It is an Outstand Science Trade Book for

Children, Notable Children's Trade Book in Language Arts and a IRA Teachers' Choice award winning book.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: All Ages

WATER: MY FIRST NATURE BOOK; Soutter-Perrot, Andrienne, author; Delessert, Etienne, illustrator.

Out of print. No information available. Might be a DK publication.

WATER SCIENCE, WATER FUN: GREAT THINGS TO DO WITH H2O; Fiarotta, Noel, author; Fiarotta, Phyllis, contributor; Sterling Press; c. 1996. Editorial Reviews

From School Library Journal

Gr 3-5--A hands-on approach to the properties and forms of water. Surface tension, absorption, emulsion, saturation, etc., are each addressed on a single page with a brief explanation of the term followed by the outline for an activity to demonstrate the concept. A large, full-color drawing and a description of the expected result accompany each demonstration. In a few instances, however, both the explanation and the activity are too brief and oversimplified to be effective. A short but helpful index is included and, in most cases, difficult words are defined within the text. Both the introduction, which explains the history of the world in a few paragraphs, and a page on water safety at the back of the book, seem unnecessary. Nonetheless, this is an adequate addition for libraries looking for simple science demonstrations. *Todd Morning, Schaumburg Township Public Library, IL* Copyright 1997 Cahners Business Information, Inc.

WATER, WATER EVERYWHERE; Berger, Melvin & Gilda, authors; Tull, Bobbi, illustrator; Nashville, TN: Ideals Children's Books; c. 1995.

This informative book explains the water cycle, uses, the need for water, and all phases of water. It discusses wells, reservoirs, water treatment plants and water conservations. The water color illustrations are clear and bright and help illustrate the text. The book also contains an index. Using large text font makes this a good book for readers in primary grades.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-k – 4th grade

WATER'S JOURNEY; Schmid, Eleonore, author, illustrator; New York: North-South Books; c. 1989.

Originally published in Switzerland, this book describes the water cycle from snow on the mountain, melting, becoming a brook, stream, into a lake, to a reservoir, to a port and then to the ocean. What it is like around the water way, how the water might get polluted and different states of water are all described and illustrated (even though it is with a European flavor). Simple text and large pictures.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K - Primary

WATER'S WAY; Peters, Lisa Westberg, author; Rand, Ted, illustrator; New York: Arcade Publishing (Little, Brown and Co.); c. 1991.

This book introduces the different forms of water. Using a young boy in the illustrations, each form is explained and shown in nature as well as how the boy

observes those forms in and near his home such as kitchen window fog, ice crystals on upstairs windows and other water cycle examples.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K – 4th grade

WATERSHEDS – a Practical Handbook for Healthy Water; Beck, Gregor Giolpin, author; Dobson, Clive, illustrator; Buffalo, New York: Firefly Books; c. 1999.

This simply stated book about watersheds begins with explanations. It explains what a watershed is, where they are in North America, how watersheds work, water cycles, nutrient cycles, parts of a watershed like wetlands, streams, river, still water and estuaries and natural changes in watersheds. The second part of the book deals with environmental issues, implications and solutions. Explanations of acid rain, bioconcentration of contaminants, industrial sources of water pollution, exotic species, habitat loss and degradation are followed by a section called "How We Can Help". The book actually points the finger at just about everyone and no specific industry but explains how all industry and each individual is responsible for pollution in our water systems. The book also points out success stories where our laws and regulations have improved water quality in the past 25 years. Contains appendices, glossary, and index.

Reading Level: Middle School & up Read Aloud Level: Intermediate Grades Uses: 5th - Adult

WEATHER WISE (Spyglass Books); Weber, Rebecca, author; Compass Point Books, c. 2002.

From Publisher's information – For the early reader this book combines appropriate vocabulary with information about weather. Large photos and accompanying text give simple and clear weather instruction.

Reading Level: Lower Primary Read Aloud Level: K & up Uses: K – Primary

WETLANDS; Matthews, Downs, author; Guravich, Dan, photographer; New York: Simon & Schuster Books for Young Readers; c. 1994.

This book begins with the diverse definitions of wetlands. He explains their functions and value to the natural world. The photographs are excellent and close up. In reviews the book was criticized for images having no scale size reference and no specific location is mention. A variety of wetlands are illustrated but not labeled. All plant, insect and animal photos are labeled. Reviewed as a great introduction to wetlands but flawed.

Reading Level: Upper Primary Read Aloud Level: Primary & up Uses: Primary – 8th grade

WHAT MAKES IT RAIN? The Story of a Raindrop; Brandt, Keith, author; Miyake, Yoshi, illustrator; Mahwah, NJ: Troll Associates; c. 1982. (c. 1989 paperback only)

This book tells about the water cycle in terms that the young can understand. The book logically follows a drop through water's different properties as well as the

importance of water to every living thing. Simple explanations of drought, flood, how water gets to your house and the salty sea are also included. Key words are italicized and the word is explained in the text. Good watercolor illustrations help illustrate the text. One experiment is included about how the ocean stays salty.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K – 4th grade

WHERE DO PUDDLES GO; Robinson, Fay, & Fowler, Allan, authors; , photographs; New York: Children's Press; c. 1995 (reprint).

Part of the "Rookie Reader - About Science" series this very simple book with a controlled vocabulary that tells about the water cycle. Photos are clear and simple to "read" as well.

Reading Level: K - Primary Read Aloud Level: Infant - Primary Uses: Infant - Primary

WHERE DOES WATER COME FROM; Cast, C. Vance, author; Wilkinson, Sue, illustrator; Barrons Juvenile Books; c. 1992.

Part of the "Clever Calvin" series this book illustrates water on the earth, wells and water treatment plants. Ages 4-8.

NOT REVIEWED

WHERE FISH GO IN WINTER And Answers to Other Great Mysteries; Koss, Amy Goldman, author, illustrator; Los Angeles: Price Stern Sloan Publishers; c. 1987.

Through long verses in rhyme the book answers questions simply. "Where do fish go in winter?", "Why does popcorn pop?", "How do birds fly?", "Why do leaves change colors?" are just a few of the poems. The book is set up with an illustration on one side and the poem on the other page. Enough information is given to answer the question very simply. Questions are especially cleaver in that they are the ones kids usually ask.

Reading Level: Primary Read Aloud Level: Pre-K & Up Uses Pre-K – 4th grade

WHERE THE RIVER BEGINS; Locker, Thomas, author, illustrator; New York: Puffin Books; c. 1993.

Boys sit on the porch of their home and make up stories about where the river begins that flows by their house. Grandfather decides to take them to see just where the river does begin. Locker's Hudson River Style of oil on canvas illustrations are breath taking as the journey by the family.

Reading Level: Primary Read Aloud Level: Pre-K & up Uses: Pre-K – 5th grade

WHO SANK THE BOAT; Allen, Pamela, author, illustrator; New York: Coward-McCann, Inc.; c. 1982; reissue by Paper Star, 1996 (paperback).

A cow, donkey, sheep, pig and mouse leave the farm to take a boat trip. Using a repeated refrain each animal steps into the boat from biggest to smallest with the mouse causing the boat to sink. Illustrations show the boat sinking deeper and deeper in the water as each animal steps in. No scientific information is given except to illustrate the floating and sinking properties of water.

Reading Level: Primary Read Aloud Level: Infant & up Uses: Infant - Primary

ACTIVITY BOOKS

AMAZING SOIL STORIES; National Association of Conservation Districts; www.nacdnet.org (then click on education link).

These comic book type publications teach about various topics in a fun way. Full of activities that inform as well as entertain, they are inexpensive and good to use in a classroom, youth organization or environment club. Some of these activity books have teacher guides available to use with the publications for a small cost. Teacher guides have more background information, suggested activities, follow-up ideas, and in some cases, possible discussion questions.

Reading Level: Usually upper Primary Read Aloud Level: not appropriate Uses: All ages

AMAZING SOIL STORIES, Educators Guide; National Association of Conservation districts; www.nacdnet.org (then click on education link).

The teacher's guide to AMAZING SOIL STORIES activity book for students is designed to help teachers with discussions and hand-on activities. The small pamphlet includes background information and further activities for students.

ANCIENT FOREST, a coloring book; Anderson, Margaret, Field, Nancy, Stephenson, Karen, authors; Torvik, Sharon, illustrator; Dog Eared Publications; third printing, 2001.

More than a coloring book, each page is either an activity or thought provoking informational page. Recommended by Ranger Rick magazine, Jerry Franklin, a professor of Froestry at the U. of Washington, this book helps students and adults learn more about ancient forests and forests in general. Topics include "What is an ancient forest?", "Where can I find ancient forests?", "What is a nurse log?", "Who lives in the forest?", "Why are spotted owls having a hard time?", "How can a small mammal help a tree grow?", "How do ancient forests affect the ocean?" and "What can I do to save ancient forests?". Also includes information on forest fire and has balanced information about the forest industry. Contains stickers, games, mazes and puzzles in reproducible pen and ink drawings. Key or important words are in bold lettering but no glossary is included.

Reading Level: Upper Primary Read Aloud Level: Primary Uses: Primary - Middle School

BACKYARD STEWARDSHIP, OPERATION BACKYARD, SHARE THE WATER

& WATER AND ME; National Association of Conservation Districts.

These comic book type publications teach about various topics in a fun way. Full of activities that inform as well as entertain, they are inexpensive and good to use in a classroom, youth organization or environment club.

Reading Level: Usually upper Primary Read Aloud Level: not appropriate Uses: All ages

BIRDS NATURE ACTIVITY BOOK; Educational Games & Activities for Kids; Kavanaugh, James, author; Globe Pequot Press; c. 2002 (From the Publisher)

Each book features 64 pates of fun games and activities relating to nature study. The book contains more that 16 types of games that highlight a wide range of topics. Suitable for ages 5 and up. Kavanaugh has created over 100 activity books. It is part of the "Nature Activity Books" series.

DISCOVERING NATURE WITH YOUNG CHILDREN; Chalufour, Ingrid, and Worth, Karen, authors; St. Paul, NM: Readleaf Press, a division of Resources for Cahild Caring, Education Development Center, Inc.; c. 2003.

This is an encompassing book about teaching science to early learners with a step by step explanation of such useful concepts like taking the very young from open exploration to focused exploration. This book is also reality based in that it is based on the actual work of teachers in the field. Chapters focus on plants and animals and has extension activities. Observations, assessments, essential information how to involve families and a list of books and videos is included. An extended appendices has ideas for longer projects, a classroom environment checklist, how to document, observation and learning records, outcome charts and much more. Highly recommended for the early childhood educator.

Reading Level: adult Read Aloud level: na Uses: Adult

A DROP OF WATER; Wick, Walter, author, photographer; New York: Scholastic Press; c. 1997.

Called a book of science and wonder, all who see this book will be dazzled by the photography of water. Through photography, Wick illustrates all the properties of water in all its amazing states and evaporation, condensation, capillary action and surface tension are explained in the simple text. Simple experiments are not only given but photographed in progress. Three pages of end notes further explain the experiments and his techniques and inspiration for the book. Wick is the photographer for Scholastic's I SPY series.

Reading Level: upper primary Read Aloud Level: K & up Uses: All Ages

EARTH BOOK FOR KIDS: Activities to Heal the Environment; Schwartz, Linda, author; Armstrong, Beverly, illustrator; Learning Works Press; c. 1990.

Received good reviews from those who had actually purchased the book as to good clear definitions, "whys" and where to write sections.

Ingram

Filled with ideas for arts and crafts projects, experiments, and experiences that encourage children to enjoy and heal the environment, this book covers acid rain, endangered wildlife, pesticides, energy, recycling, pollution, landfills, rain forests, water conservation, and related topics.

Annotation

Creative ideas with easy-to-follow instructions show kids how to make their own paper, compare phosphate levels in detergents, test the effects of oil pollution, conduct a recycling survey, create a trash sculpture, redesign a package, chart a flush, measure acidity and make a difference in many other exciting ways.

From the Publisher

An Exciting Collection of Earth-Friendly Activities Created Especially for Kids! Earth Book for Kids offers children and their families a wide variety of ways to learn about the environment while having fun.

Between its covers are fascinating facts and creative ideas for activities to help kids become better acquainted with their environment and learn to care for the earth. This book is for

- Kids who want to take an active part in helping to save our planet;
- Parents who are making life-style changes to solve environmental problems;
- Classroom teachers who need practical activities to promote environmental awareness; and
- Youth group leaders who are guiding young people in their search for ways to help heal the earth.

EARTH DAY – HORRAY!; Murphy, Stuart, author; Andriani, Renee, illustrator; Publisher: HarperCollins; c. 2004.

Part the MathStart series and recommended for primary grades, this book is about counting cans, cans collected to be recycled because the school's Save The Planet Club decided to clean up Gilroy Park and plant some flowers to celebrate Earth Day. The book is a great way to teach math, even better way to stress ecology and simple ways we all can make a difference. End notes have suggested extra activities for parents and/or teachers and related books.

EARTH DAY: Keeping Our Planet Clean (Find Out About Holidays Series); Landau, Elaine, author; photography; Publisher: Enslow Publishers; c. 2002.

This book highlights the importance of what each of us can do to make Earth Day every day. Activities from small to large are included as well as a history of Earth Day. The book describes why it is important to take care of the planet now and doing one's part to take care of the earth. Recommended for primary grades up to possibly intermediate grades, the book also has a chapter on how to promote and participate in Earth Day activities.

EARTH DAY (On My Own Holidays Series); Lowery, Linda, author; Bergherr, Mary, illustrator; Publisher: Lerner Publications; revised edition – Jan. 2004.

This book outlines the history of Earth Day beginning in 1970. The large font and great illustrations make it easy and pleasant to read. The book highlights global problems concerning the earth and has suggested activities to call attentions to some of these problems and to make every day Earth Day. Also contains a list of where to write for more information. This book is recommended for upper primary.

ECOLOGY CRAFTS FOR KIDS, 50 Great Ways to Make Friends with Planet Earth; Needham, Bobbie, author; New York: Sterling Publications; 1998.

Written so it could be used independently by a 5 grader up, this book is also great for the younger crowd with adult help. The book begins with a statement about ecology and why it is important and a two page spread about reducing, reusing and recycling. The projects all come from reusing and recycling materials for the most part. Directions are simple and straight forward with great photos of kids actually completing the projects. Between projects are pages of more information and organizational contact information and "learn more about it" contacts.

Reading Level: Intermediate Read Aloud Level: n/a Uses: All ages

FUN WITH NATURE (MORE); Evert, Laura & others, authors; Garrow, Linda, illustrator; NorthWind Press; c. 2002.

From the Publisher

With the help of *More Fun with Nature*, children will enjoy taking nature walks and identifying over 125 of nature's gifts. Chapters include "Berries, Nuts and Seeds", "Birds, Nests and Eggs", "Rocks, Fossils and Arrowheads", "Seashells, Crabs and Sea Stars", and "Wildflowers, Blooms and Blossoms".

Beautifully detailed and true-to-life illustrations help the reader find out things like what it looks like, where to find I, what it eats, what eats it, and what it's used for. Includes 18 activities and 15 scrapbook pages for notes.

This is a perfect book for children ages 7 to 10.

Geology Rocks!: 50 Hands-On Activities to Explore the Earth (Kaleidoscope Kids Books (Tandem Library)) (School & Library Binding) by Cindy Blobaum (Author), Michael Kline (Illustrator) Publisher: Tandem Library (September 1999)

Grade 4-6-Geology's basics are explored in a lively fashion and are accompanied by a combination of familiar and not-so-familiar experiments and activities. Each chapter introduces a concept such as "the first rock group-Igneous 'Iggy,' Sedimentary 'Sed,' and Metamorphic 'Morph'!" Ways to find and places to observe these types of rock are suggested. Activities such as creating a sand sculpture or playing "Rock Tic-Tac-Toe" are included. Sidebars give additional information about geologists, language links ("blow your top" or "petrified"), famous formations, scientific controversies, and how to think like a scientist. The text is witty but conveys much factual material. The experiments can be done easily with household items and include safety precautions. Whether making the standard chemical volcano, catching falling stars, or creating a mini glacier, readers will find much of interest here. The book is illustrated with red-and-purple tinted cartoons and photographs. The experiments are similar to those found in Alan Anderson's Geology Crafts for Kids (Lark, 1996), but Blobaum's offering is presented in a much more informal format.

GOOD EARTH ART, Environmental Art for Kids. Kohl, Gainer. Over 200 practical, easy and open-ended art experiences provide a wealth of activities. Ideas include preparing earth paints, leaf bursts, cattail baskets, handmade paper, natural berry dye and wood scrap sculpture, to name a few. Perfect for classrooms, childcare centers, camps, scout groups, and resource centers.

HANDS-ON NATURE – Information for Exploring the Environment with Children; Lingelbach, Jenepher and Purcell, Lisa, authors; Sawyer, Susan, illustrator; Woodstock VT: Vermont Institute of Natural Science; c. 2000.

This book is divided into chapters about adaptations, habitats, cycles, designs of nature, and earth and sky and includes a "how to use this book" section, glossary. bibliography, suggested reading list for children and is indexed. Beginning each activity is information about the concept and activities include crafts, puppet plays, detailed drawings, opening questions, suggested open ended questions for discussions, and clear objectives and extensions. This book is highly recommended for the classroom teacher as a resource for discovering and learning about the environment.

Reading Level: adult Read Aloud level: na Uses: Adult

HOW TO PLANT A TREE: National Association of Conservation Districts: www.nacdnet.org (then click on education link).

These comic book type publications teach about various topics in a fun way. Full of activities that inform as well as entertain, they are inexpensive and good to use in a classroom, youth organization or environment club. Booklet gives step-by-step instructions for planting a tree in both illustration and text. Care for tree, choosing a spot and preparation for the tree are all included.

Reading Level: Usually upper Primary Read Aloud Level: not appropriate Uses: All ages

KEEPERS OF...SERIES (Titles include KEEPERS of the Night, the Animals, Life, Earth) Native American Stories Environmental Activities for Children. Caduto, Bruchac. The original Keepers featuring a fine collection of Native American stories and inspirational, interdisciplinary hands-on activities. Approach similar to subsequent Keepers, but stories and associated activities are different. Joseph Cornell writes "A sensitive and well-thought-out guide for helping children love and care for the Earth."

THE KIDS BOOK OF WEATHER FORECASTING: Breen, Mark & Friestad. Kathleen, authors; Kline, Michael, illustrator; Charlotte, VT: Williamson Publishing; c. 2000.

Written by Meteorologists Been & Friestad, this activity book is s full of information, activities and insight into the world of meteorology and the people who forecast the weather. Chapters include "Weather: It's Everybody's Business!" as well as ones on the atmosphere, the sun, wind, water, clouds, wild weather and how to finetune forecasts. Includes folklore and a list of resources (web addresses and postal addresses) and even songs (besides Rain, Rain Go Away). Written simply so a kid could use it but great for adults.

THE KIDS WILDLIFE BOOK; Shedd, Warner, author; B T Bound Publishing; c. 1999.

Part of the "Kids Can" series of activity books featuring black and white line illustrations and includes experiments, crafts and a few native American legends. Can be read by upper primary students but best used with adult supervision. Includes information and amusing facts about common U S and Canadian animals, amphibians

and birds. The book is divided up into sections about homes, food, sounds and life cycles.

LANDFILL LUNCH BOX; Riley, Karen, author, illustrator; Cathedral City, CA: City of Cathedral City, publishers; c. 2000.

Riley developed the book to demonstrate the integration of art and the environment by using reused and recycled materials as the basis for all activities. Although the activities (14 different ones) are not all new to the creative teacher, the resource recover tips might be. These tips remind you of trash or recyclable resources that might be available locally from printing business to senior centers and the grocery store. With each activity there is a factoid about trash. There is an explanation of the plastic recycle symbols, how long it takes for materials to degrade, glossary, California specific contact information and bibliography.

Reading Level: Intermediate Read Aloud level: na Uses: All ages

LEAF COLLECTING – BACKYARD EXPLORER KIT: 3 in 1 Collector's Kit; Beame, Rona, author; various illustrators (Workman Publishing); Workman Publishing Co., Inc., New York; c. 2004.

Plastic bag contains a book to create with blank pages with writing and activity prompts, a leaf and tree guide and string to put the book together. Guide is very simple with large print, clear, defined leaf shapes and lots of info about trees. The guide also contains many art and science activities with trees and leaves. Blank pages are inviting and instructions simple. Putting the book together helps children learn to observe the differences in leaf shapes and learn how to identify common trees.

Reading Level: Intermediate Read Aloud level: na Uses: All ages

LITTLE HANDS NATURE BOOK; Castaldo, Nancy F., author; Braren, Loretta T., illustrator; Charlotte VT: Williamson Publishing; c. 1997.

Designed for ages 2 – 6 (though more for the older group), the book is full of activities that range from simple awareness (feeling the bark of a tree) to making a weather calendar. Also has a "wise owl" box with more information or other very simple suggestions for activities (like the formula for calculating how far away a storm is (or the lightning strike). Safety matters are addressed in the beginning of the book. Most activities imply facilitation by the adult. Chapters include: Exploring The Outdoors, Weather Watch, Nature Detectives, Love A Tree, Starry Nights, Sun, Sand, and Shells; Cirtters; Seeds to Grow and Seeds to Blow; Flower Power; Our Feathered Friends and Snowy Days. Indexed

Reading Level: Intermediate Read Aloud level: na Uses: All ages

MATH IN THE GARDEN. Kreidler. Gardens are magical settings filled with aromas, colors, and patterns that excite the imagination and awaken the senses - why not capitalize on this to engage children in fun math exercises that complement their natural enthusiasm for what is going on outside? This engaging curriculum uses a mathematical lens to take children on an education-filled exploration of the garden. Dozens of hands-on activities hone math skills and promote inquiry, language arts, and

nutrition. All were developed to support mathematics and science standards and were extensively trial-tested by educators and youth leaders nationwide. Grades K-8.

Mammals Nature Activity Book: Educational Games & Activities for Kids of All Ages (Paperback) by <u>James Kavanagh</u> (Author)

Publisher: Waterford Press; 1.00 edition (November 1, 2002)

Each book features 64 pages of fun games and activities relating to nature study. Contents feature more than 16 types of games that highlight a wide range of topics. Suitable for ages 5 and up.

MY NATURE JOURNAL; Olmstead, Adrienne, author, illustrator; Lafayette, CA: Pajaro Publishing; c. 2000.

The spiral bound hard cover journal has blank pages with prompts to write and sketch. In between the blank pages are simple and concise informational pages relating to the prompts and simple activities. This journal for older primary and up combines writing with observation techniques, art, science and reading. Although a one user, one time book, this journal is geared for children and would make a great treasure to hold on to especially for the budding naturalist.

Reading Level: Intermediate Read Aloud level: na Uses: All ages

MONARCH MAGIC! Butterfly Activities and Nature Discoveries; Rosenblatt, Lynn, photographer; Williamson Publishing; c. 1998.

From School Library Journal

Grade 3-6-The first half of this colorful book focuses on the insect's life cycle, delineating each stage of its metamorphosis in a smooth blend of large-print text and snapshot-sized color photographs. The monarch's pattern of migration and the importance of its host plant, the milkweed, are also discussed. The second section gives step-by-step directions for a wealth of projects and activities such as rearing a monarch butterfly from either the egg or caterpillar stage; keeping a journal to track migration or chart growth; setting up a butterfly feeding station; constructing a pom-pom caterpillar; forming a club to promote monarch awareness; and joining an Internet group to track migration (Web sites are provided).

Nature-Oriented Activities (Paperback) by <u>Betty van der Smissen</u> (Author) **Publisher:** The Iowa State University Press (1977)

NATURE SMART – Awesome Projects to Make with the Help of Mother Nature; Diehn, Gwen, Krautwurst, Terry, and others, authors; various photographers; Toronto, Ontario, Canada: Main Street Book, New York, (Sterling Publishing); c. 2003.

This is just a fun book to flip through for anyone who likes crafts. Ideas just pop out. Photography shows real kids doing the crafts, complete step by step instructions and all from materials readily available and at very low or no cost. In between the crafts are informational pages concerning the crafts before and after such as information about fish adaptations near the fish printing craft, how do seeds travel with the seed mosaic craft. Crafts do take some thought to gather materials but encourage

conservation, recycling and reuse. Crafts range from simple to complex needing some adult help. This book is a great resource to help children look close at nature while gathering materials for projects and enjoying the beauty in nature and nature based crafts.

Reading Level: Intermediate Read Aloud level: na Uses: All ages

The Nature Specialist: A Complete Guide to Program and Activities (Paperback) by Lenore Hendler Miller (Author) Publisher: American Camping Association; Reprint edition (May 1986)

OLD-FASHIONED FARM LIFE, a coloring book; Cousins, Peter H. author; Smith, A. G., illustrator; New York: Dover Publications; 1990.

Published in association with the Henry Ford Museum & Greenfield Village in Dearborn, Michigan, the pen and ink drawings outline nineteenth -century activities and practices on a farm. The farm history is based on notes from about the 1880's. It was a commercial farm bit produced several corps and had many interprizes as to not be overly dependent on one source for income. In highlighting the differences in comparisons to our modern practices, it suggest the differences in thinking between the modern money-making farm business and the farmers of long ago sold off "surplus" not farmed for a "cash crop". This time shown is just before technology (machinery) changed the face of farming and farming practices. Shows the dependency on natural resources not only for monetary purposes but to sustain life.

Reading Level: Upper Primary Read Aloud Level: N/A Uses: All ages

"One Green Tree"; Created and produced by Custom Comic Services; League City, TX: National Association of Conservation Districts; c. 2002.

Using a comic book format, this booklet shows the relationship of trees and air, water and soil. It presents a simple explanation of photosynthesis, transpiration, parts of a tree, and the life cycle of trees. A inexpensive way to put information in the hands of young people.

Reading Level: Upper Primary Read Aloud Level: Kindergarten & up Uses: All ages

OPERATION BACKYARD; National Association of Conservation Districts; www.nacdnet.org (then click on education link).

These comic book type publications teach about various topics in a fun way. Full of activities that inform as well as entertain, they are inexpensive and good to use in a classroom, youth organization or environment club. Some of these activity books have teacher guides available to use with the publications for a small cost. Conservation begins at home and the activities in this booklet help children learn how to conserve resources in their own yards, school yards or parks.

Reading Level: Usually upper Primary Read Aloud Level: not appropriate Uses: All ages Water and Me – no words

Planet Patrol: A Kids' Action Guide to Earth Care (Paperback)

by Marybeth Lorbiecki (Author) Publisher: Two-Can Publishers (November 8, 2005)

Grade 4-7–Giving kids the idea that they have power to effect change is the basic premise of this work. Many of the Earth's environmental problems–climate change; deforestation; shrinking habitat; species extinction; water, air, noise, and light pollution—as well as global conflict and overpopulation are addressed. For each challenge, a success story is shared and an action tip is put forth to help readers do their small share to address the problem. Positive and upbeat with bright photos and illustrations and a direct tone, the message delivered is that if properly informed and motivated, individuals can help the challenges, however monumental, to be met. Many pertinent and informative Web sites are listed, but while the book states that Libraries carry books and movies on all the great topics in this book, no titles for further reading are offered.—

POP BOTTLE SCIENCE; Brunelle, Lynn, author; Meisel, Paul, illustrator; Workman Publishing, New York; c. 2004.

In the Pop Bottle container are the few pieces that are needed for experiments and the pop bottle is already cut to start immediately. 79 experiments and science projects are included in the small booklet. Organized into "What Do You Need?, What Do You Do?, and What's Going On?" sections, instructions are clear and the science explanations simple. Chapters include "Mysterious Molecules; Pushes and Pulls; Blasts, Bangs, Twists, and Other Reactions; Secrets of Earth and Space; Bottled Weather; Plants and Other Living Things; and Light, Sight, Hearing and Breathing. Great way to reuse and recycle and learn!

Reading Level: Intermediate Read Aloud level: na Uses: All ages

RECYCLED CRAFTS BOX; Martin, Laura C. author; Adams, Lisa and others illustrations, photos; North Adams, MA: Storey Kids Publishing; c. 2003.

Forty cheap crafts from junk is every teachers dream. This book also contains great information about recycling and reusing and just as important, active professional artists who create works from recycled materials.. Crafts are divided up into chapter about materials – paper, plastic, metal, and fabric. Although some crafts need lots of pre-planning and gathering, results will be worth it. Illustrated examples are definitely adult built but not too far from the possibilities of a child. Books includes resource list, glossary and is indexed.

Reading Level: Intermediate Read Aloud level: na Uses: All ages

SAVE WATER WITH THE CONSERVATION KIDS; National Association of Conservation Districts; www.nacdnet.org (then click on education link).

These comic book type publications teach about various topics in a fun way. Full of activities that inform as well as entertain, they are inexpensive and good to use in a classroom, youth organization or environment club. The color activity booklet helps younger children become aware of easy ways to save water and make wise choices about water resource.

Reading Level: Pre-School – 3rd Grade Read Aloud Level: not appropriate Uses: All ages

"Search for Soil"; Created and produced by Discovery Comics; Doylestown, PA: National Association of Conservation Districts; c. 2000.

Using a comic book format, this booklet shows that soils is the basis for all life. Soil layers, usefulness as an habitat, organisms living in the soil, soil profiles and erosion is just a small part of the useful and informative nature of this booklet. An inexpensive way to put information in the hands of young people.

Reading Level: Upper Primary Read Aloud Level: Kindergarten & up Uses: All ages

UNEARTHING GARDEN MYSTERIES; Talmage, Ellen, author; Curtis, Bruce, illustrator; Fulcrum Publishing; c. 2000

From The Critics

Children's Literature

A very friendly and fun science book for kids, this book takes the "boring" out of plants and shows the young scientist fun ways to explore the world of plants and soil. Talmage is an experienced horticulturist and brings her extensive knowledge and passion for the world of plants into the classroom with simple, doable, hands-on experiments. Each experiment is explained in two to three pages and takes the scientific process to a usable level. The book includes an introduction, a materials list, a step-by-step procedure section entitled, "What to do," observations, explanations and a conclusion. Photographs are abundant and help the young scientist to visualize the experiment. These twenty classroom-tested experiments should address the quirks of the most inquiring minds. A helpful bibliography, an extensive glossary and an index are included. This title is recommended for the elementary classroom or library where students can reproduce these easy-to-manage experiments for science extension or for the ever-popular science fair projects. 2000, Fulcrum Kids, \$17.95. Ages 9 to 12. Reviewer: Betsy Barnett

A VICTORY GARDEN KID'S BOOK; Waters, Marjorie, author; Ulrich, George, illustrator; New York: Houghton Mifflin Co.; c. 1988. Maybe Out of Print.

From School Library Journal

Grade 3 Up An excellent book for children who wish to make a good garden, and also for families who would like to garden together. This companion to the public television series The Victory Garden was written during the season of a certain Massachusetts garden, cared for by a few adults and 7 children, aged 3 to 13. The main garden (mostly vegetables) was 15 by 52; everyone worked at that. Attached to this large garden was a smaller plot in which each child had a bit of garden to plant and cultivate and in which to play. The step-by-step directions are thorough and clear, paying much attention to preparing healthy soil and planting easy-to-grow crops. No chemical fertilizers are recommended. The object of the book is to keep the beginning gardener working and hopeful through the harvest, and as satisfied as possible with the project. The book gives instruction on how to garden and information about 30 different fruits, vegetables, and flowers. The layout of the book and the illustrations enhance and extend the

information in the text. Beautiful color photographs portray everything from a boy taking a delighted whiff of a freshly picked eggplant to the whole garden being watered from a raised sprinkler. Drawings include sizes of vegetables ready to be picked, the best gardening equipment, and step-by-step directions for planting radish seeds. The combination of text and illustrations makes this an inviting, wonderful book for beginners. While Gambino's Easy to Grow Vegetables (Harvey House, 1975; o.p.) and Kirkus' The First Book of Gardening (Watts, 1956; o.p.) cover much of the same material, Waters' book is more thorough, clear, and encouraging. Carolyn Jenks, Oyster River Elementary School, Durham, N.H.

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WATER AND ME; National Association of Conservation Districts; www.nacdnet.org (then click on education link).

These comic book type publications teach about various topics in a fun way. Full of activities that inform as well as entertain, they are inexpensive and good to use in a classroom, youth organization or environment club. For use with grades K-3, readers learn about the water cycle and how water is used by all living things. This simple, clear activity book is a coloring book.

Reading Level: Primary Read Aloud Level: not appropriate Uses: All ages

MAGAZINES

BIRDS AND BLOOMS: Greendale, WI: Reiman Publications.

In publication since 1965 the magazine features no advertising and is a bimonthly at \$23.94 per subscription. Features include bird tales from readers, photo tours, outdoor classroom ideas and information about birds and plants. "Brings beautiful backyards from across America into your living room through vivid, full color photos. It's like a friendly chat over the back fence with your bird and flower loving neighbors." (from web statement)

HORTICULTURE; F & W Publications.

This bi-monthly magazine has been the authority on gardening through instruction and entertainment since 1904. Designed for the beginner as well as the experienced gardener it is a trusted source for information about gardening, plants, soil and plant study. Has garden design, buyer's guide and group travel opportunities. Has a web based subscription as well. Subscription is \$19.96.

KENTUCKY GARDENER; Ruston, L.A.: Team Advertising and Publishing Inc. Published monthly except January, August, and December, subscriptions are \$24.95. This informative magazine has regional reports by UK Extension Agents that answer questions and give general information pertinent to the area. Current issue features an article by Dr. Tom Barnes on wildflowers that is both beautiful and informative. Other articles are general how-to's and plant care. Contains advertising but not overwhelming. www.kentuckygardener.com

ODYSSEY: ADVENTURERS IN SCIENCE; St. Peterborough, NH: Published by Cobblestone Publishing Co.; Recommended for ages 8-14.

ODYSSEY is a magazine that focuses on astronomy and science. Each issue has a theme and usually contains 52 pages (color). Monthly features include monthly sky charts, web sites, science news, articles by leading scientists, and a q & a article. Also contains activities for home and the classroom. Indexed and has a circulation of 28,000. Recommended for schools and libraries (MAGAZINES FOR LIBRARIES, 9th edition (1997).

RANGER RICK; Published by National Wildlife Federation; Recommended for ages 7 & up. 12 issues per year.

Each monthly issue has facts and photos about animals while sharpening reading skills and a deeper appreciation for nature. The articles are written with reading skills in mind. Ranger Rick has outdoor adventure activities and more. Winner of Parent's Choice Gold Award in 1999.

SCIENCE NEWS; Washington, DC: Science Service, Inc. Recommended for middle and high school grades.

Each weekly issue contains brief articles about current topics and breaking news in science. Also contains one or two longer articles for more in depth information. Indexed. (MAGAZINES FOR LIBRARIES).

Scholastic SuperScience® for grades 3–6 inspires students to make scientific discoveries as they read fascinating news stories, engage in hands-on activities, learn about current science topics, and more!

WILD ANIMAL BABY; Published by the National Wildlife Federation; recommended for ages 1-4years. 10 issues per year.

YOUR BIG BACKYARD; Published by the National Wildlife Federation; recommended for ages 3-7 years. 12 issues per year.

Each issue contains activities, short, simple stories, games crafts and cooking recipes. "Draws preschoolers closer to nature and gets them ready to read" (from the publisher). Contains a center fold poster of the featured animal of the month.

ZOOBOOKS; Wildlife Education LTD; 12 issues per year.

Each monthly issue contains color illustrations, photos and diagrams of a featured animal. No advertisements are permitted. Contains interesting and factual information about the animal featured. The publication is written on a primary reading level with consideration for independent reading. "Both educational and entertaining" (from the publisher). Also contains interactive activity pages.

ZOOTLES Magazine; Wildlife Education LTD; 6 issues per yearJust like Zoobooks, Zootles is full of animal fun. And Zootles is written to be shared with young children, age 2-6: pre-readers and beginning readers.

PAMPHLETS/BOOKLETS

KENTUCKY BIRDS (pamphlet); James Kavanagh, author.

Kentucky Birds, An Introduction to Familiar Species, is a must-have, reference guide for beginners and experts alike. Whether you're on a nature hike or in your own backyard, you'll want to take along a copy of this indispensable guide. The Pocket Naturalist(tm) series is an introduction to common plants and animals and natural phenomena. Each pocket-sized, folding guide highlights up to 150 species and most feature a map highlighting prominent sanctuaries and outstanding natural attractions. Each is laminated for durability.

BIRD BASICS; C. 1996
EARTH'S BRIGHT FUTURE, C. 1999
IT ALL STARTS WITH SOIL' C. 2003
IT'S A WILD WORLD, C. 1998
NATURE PALS, C. 1996
SOIL STORY, C. 2003
TREE LAB, C. 2001
TREES AND ME, C. 2001
WATER CONNECTION
WATER, IN YOUR HANDS, C. 1990
WILDFLOWERS AND NATIVE PLANTS, C. 2000
WONDERS OF SOIL, C. 2004

National Association of Conservation Districts; www.nacdnet.org, (then click on education link.

All these comic book phamplets cover the title material in simple and engaging ideas. Very inexpensive but not always available (in print). Some booklets contain activities, others just basic science information. Story plots show real world situations and the idea that one person can make a difference. Activities show how to conserve natural resources at home, school and community.

Reading Level: Primary & Intermediate Read Aloud level: na Uses: All ages

TEACHER MATERIALS

ADVOCATE GUIDES

THE CLEAN WATER ACT, AN OWNER'S MANUAL; Don Elder, Gayle Killam, Paul Koberstein; A publication by the River Network (www.rivernet.org); 1999.

A manual to empower people who work to restore and protect rivers and streams, this handbook will give you the reasons for and behind the act that affects us all. Written in plain terms and very accessible, this guide can help those who need concrete examples and explanations to take community action for enforcement of the Clean Water Act.

ECOTOURISM IN APPALACHIA: Marketing the Mountains; Fritsch, Al and Johannsen, Kristin, authors; University of Kentucky Press, Lexington, KY; c. 2004.

Tourism is a \$3.6 trillion industry in America. This book defines "ecotourism" as "responsible travel to natural areas that respects the environment and sustains the well being of local people". The book proposes that tourism can help the economy and preserve the environment and can be done responsibly. The book argues the point that we can help tourist destinations improve and conserve and in some cases preserve the environment, culture and economy. Authors use other tourist destinations – Alaska, Hawaii – for comparison and examples. Fritsch is founder of Appalachia-Science in the Public Interest. This timely book address many issues facing Eastern Kentucky.

NOAH'S CHILDREN, Restoring the Ecology of Childood, Sara Stein; North Point Press; 2001.

Through essays and creative writing, Stein relays the many thresholds of child development and the interaction that could/should be happening with nature, the child and the reasoning behind the suggested simple activities. Although this could be used as a curriculum guide or a nature guide, this book also gives strong reasoning and evidence for environmental education, even of the very young.

CURRICULUM GUIDES

ANYTIME WEATHER EVERYWHERE; Mogil, H. Michael & Levine, Barbara G., authors; Rockville, MD: How The Weather Works, publisher; c. 1996.

A program of study designed for early childhood (Pre-K – 2nd grade) contains nearly a hundred activities and experiments and ideas for investigations, and demonstrations. Designed to create a two to four week unit if presented as a concentrated science lesson. Could be spread out by instructor for a longer presentation. Reproducible sheets are provided with list of objectives, materials needed, activity, challenges, background information and safety warnings. Some activities have suggested picture book titles to support or add to the information. The husband and wife team created this guide from a project in which a "traveling weather tub" was created for use by early childhood professions in Maryland and has been "field tested" and revised.

BATS: Cross-Curricular Theme Unit; Bernard, Robin, author; New York: Scholastic Professional Books; c. 1998.

Designed to present information about bats for grades 1-3, the booklet gives hands on activities and includes a poster. Reproducible sheets, background information, resource addresses, web sites and a book list are part of the publication. The activities uses the theme of bats across the curriculum.

BE A SOLID WASTE SURVIVIOR, A standards based, integrated curriculum for teaching solid waste issues in Kentucky; The Kentucky Environmental Education

Council, an agency of the Education Arts and Humanities Cabinet; www.state.ky.us/agencies/envred/.

This activity guide has solid information in the teacher fact sheets for the classroom teacher grades primary through middle grades (presented in divided sections). This information is important to any formal or non-formal environmental educator. Armed with the information, the book has developmentally appropriate activities to highlight the concepts of solid waste and environment protection. Activities are hands-on and fun as well. Activity pages are well outlined with the educational standards, materials list, questions and skills used. Project extensions, service project suggestions, web addresses and assessment questions are also given.

DISCOVERING THE NATURALIST INTELLIGENCE: SCIENCE IN THE SCHOOLYARD; Glock, Jenna, Susan Wertz, and Maggie Meyer, authors; Arizona; Zephyr Press; 1998.

Teacher activity guide to observing, collecting, predicting, analyzing, and communication: invaluable process skills are developed in lesson plans. Reproducible data sheets, detailed instructions, and field-tested activities make this for the schoolyard and beyond.

DIG IN!; Ireton, Shirley Watt, director; Olliver, Linda, art and design director; Arlington, Virginia: National Science Teachers Association with support from the Natural Resources Conservation Service, U.S. Department of Agriculture; c. 2001.

For use by teachers of elementary students kindergarten – fourth grade, this book of activities introduces all aspects of soil. The book states in the preface that it is hoped that this book will help students have a greater understanding of soil so that students "are informed decision-makers and conservers of our natural resources." Chapters include What Is Soil?, Who Uses Soil?, What Lives in Soil?, and Where Is Our Soil Going?. A glossary and resource lists are included. The book's activities use maps of learning goals as proposed by the American Association for the Advancement of Science. The maps are excerpted form Atlas of Science Literacy. Interdisciplinary Correlations are included. Each section begins with an information introduction to the teacher. Activities are well thought out and planned with approximate time for the activities, web links, materials needed, student objectives and evaluation suggestions. Some activities could be simplified for use in Pre-K or used in older grades with less introduction instruction.

EXPLORING THE FOREST; Stewart, Janis Wingate, Milligan, Melissa Hollis, major contributors; reproduced by "Teachers For the Forest", 1999; www.teachersfortheforest.org. Financial support for the development of the guide from USDA, Alabama Forest Resources, Alabama Forestry Commission, Alabama Wildlife Federation, American Forest and Paper Association and others.

A cross the curriculum activity guide has pre and post test for each section of activities. Although not stated, the guide is appropriate for 4th or 5th grades and up, although much depends on the reading level of the students. The guide is divided into three sections – all about trees, science, social studies, logging and habitat information; forest industry, management and business; and forestry issues such as land

management, legislation, endangered species and careers. Using the forest as a theme, all areas of the curriculum are included in the exercises – language arts, science, social studies, art and math. Additional activities are cited in Project Learning Tree. Although the charts do not include Kentucky, this guide would be very helpful to those teachers who like this approach to teaching. Teachers could also just use some of the activities. Graphics are clear and explanation sheets for students are clear and very informative. A glossary is included. Forty- three different activities make are included.

FOOD, LAND AND PEOPLE, Resources for Learning; Project Food, Land and People; c. 2000 (updated frequently); www.foodlandpeople.org.

To receive this activity book, those interested must take a 6 hour course through a certified facilitator in Project Learning Tree. The cost of the course is usually nominal and teachers usually receive CEU for participation. Contact local county extension offices, conservation districts, universities, and other environmental agencies for more information about the courses which are held across the state at various times. All activities are well tested in the classroom and other places. Most activities can be adapted for children of all ages and adults. Activities, which are across the curriculum, provides educational resources and approaches to learning that help students understand the interrelationship between agriculture and the environment. The program is supported by a broad base of pubic and private entities. Please see web site for more information and sample lesson plans.

KENTUCKY'S WONDERFUL COMMONWEALTH OF WATER; A standards based, integrated curriculum for teaching water quality issues in Kentucky; Published by The Kentucky Environmental Education Council & Eastern KY PRIDE.

LIFE IN A BUCKET OF SOIL; Silverstein, Alvin, Silverstein, Virginia, authors; Wrigley, Elsie, illustrator; Mineola, New York: Dover Publications, Inc.; c. 1972, revised 2000.

This book goes into detail about organisms found in soil. Earthworms, roundworms, snails and slugs, wood lice, centipedes and millipedes, springtails, spiders, mites, beetles and ants are each discussed in a complete chapter. Simple ways of studying some of these animals are suggested (earthworm, ant containers). The information is straight forward and extensive.

LITTER PREVENTION/RECYCLING ACTIVITY GUIDE FOR EDUCATORS; Ohio Department of Natural Resources Division of Recycling and Litter Prevention; c. 2000.

Thirty –two lesson plans for ages pre-school through third grade are included in this activity guide compiled and supported by the Keep Middletown (Ohio) Beautiful, Inc. non-profit organization. Each activity is literature based with activities (including patterns), follow-up activities and some with songs and games. Most books are obtainable through public libraries (some libraries will need to order through the library loan programs so pre-planning is important in using the materials) though some are older books and a few out of print. Although activities are not necessarily unique,

having them geared especially for younger students and all in one activity book is important. It is assumed ODNR received permission to use some activity sheets not created by staff. Some books included are BE A FRIEND TO TREES, GEROGE SHRINKS, BLUE BUG'S BRACH PARTY, THE PATCHWORK QUILT, RAIN, TRASH, WARTVILLE WIZARD, THE LORAX, GROWING VEGETABLE SOUP and many others. Activities by the ODNR are also included.

MAKING DISCOVERIES, Groundwater Activities for the Classroom and Community, Groundwater Foundation; 2000.

An activity guide that includes definitions, background information, quick list of needed materials and easy to follow step by step instructions. The activities are useful for all ages. Water terms and definitions are included at the beginning of the activity book. It is spiral bound for easier use.

OUTDOOR BIOLOGY INSTRUCTIONAL STRATEGIES (OBIS); Lawrence Hall of Science, University of California – Berkeley, CA; Nashua, NH: Delta Educational Publishers.

OBIS is a program of 97 activity folders to help students learn about the environment through the out of doors. Activities emphasize interactions of organisms with each other and the environment and include people. Activities include games, simulations, crafts, role playing, experiments and data analysis. Designed for the 10 – 15 year old student the activities help develop observation skills and to make intelligent decisions about their future in the environment. Created for use by the formal or non formal educator, each folder activity contains background information needed about the topic, materials needed, preparation instructions, reproducible sheet, and further activities. Can be used for younger or older groups with preparation as well as family units. Comes in a case for easy storage.

PROJECT LEARNING TREE; American Forest Foundation; c. 2001 (Fourth Edition). www.plt.org.

To receive this activity book, those interested must take a 6 hour course through a certified facilitator in Project Learning Tree. The cost of the course is usually nominal and teachers usually receive CEU for participation. Contact local county extension offices, conservation districts, universities, and other environmental agencies for more information about the courses which are held across the state at various times. All activities are well tested in the classroom and other places. Most activities can be adapted for children of all ages and adults (main book is geared for K – 8^{th} grade). The activities use the theme of a tree and all aspects of the forest as a basis for the activities. Has reproducible pages for students and well planned activities with step by step procedures. Appendices are well organized for quick access to activities. Check out the web site for more information and sample lesson plans. Also specialized classes are given for those who want a High School program. These programs are concerned with issues. Project Learning Tree believes in teaching "how to think, not what to think" and offers a very balanced program.

PROJECT WET; The Watercourse and the Coucil for Environmental Education, Montana State University; c. 1995; www.montana.edu/wwwwet.

To receive this activity book, those interested must take a 6 hour course through a certified facilitator in Project Wet. The cost of the course is usually nominal and teachers usually receive CEU for participation. Contact local county extension offices, conservation districts, universities, and other environmental agencies for more information about the courses which are held across the state at various times. All activities are well tested in the classroom and other places. Most activities can be adapted for children of all ages and adults. Includes activities to introduce participants to the world of water (science and facts) as well as environmental concerns. Has reproducible pages for students and well planned activities with step by step procedures. Appendices are well organized for quick access to activities. Check out the web site for more information and sample lesson plans.

PROJECT WILD; The Western Association of Fish and Wildlife Agencies and the Council for Environmental Education; c. 1992. www.projectwild.org.

To receive this activity book, those interested must take a 6 hour course through a certified facilitator in Project Wild. The cost of the course is usually nominal and teachers usually receive CEU for participation. Contact local county extension offices, conservation districts, universities, and other environmental agencies for more information about the courses which are held across the state at various times. . All activities are well tested in the classroom and other places. Most activities can be adapted for children of all ages and adults. Includes activities to introduce participants to the wonders of wildlife (science and facts) as well as environmental concerns. Has reproducible pages for students and well planned activities with step by step procedures. Appendices are well organized for quick access to activities. An additional class in Project Aquatic (organisms that live in the water) is also available. Check out the web site for more information and sample lesson plans.

THE SCIENCE OF LIFE: Bottone, Jr., Frank G., author; Chicago Press Review; 2001.

This activity book for budding biologists introduces kids to the five kingdoms of life through 25 engaging projects using materials commonly found around the house, yard, or classroom. Kids will learn how to conduct experiments using the scientific method in a carefully controlled environment. They'll make their own culture media and determine which is more effective at inhibiting the growth of bacteria: an antiseptic, a disinfectant, or plain soap and water. They will delight in collecting and comparing night-flying versus day-flying insects and learn how to clone a mushroom from a piece of its own tissue. Plenty of background information is provided, along with fun facts, a glossary, and wonderful Web sites to explore.

SCIENCE LITERACY CENTER; various editors; New York: Scholastic Inc.; c. 1999.

A science curriculum in kit form for Pre-K - K, this boxed set has an instruction book for the teacher, activity book, an instruction book for second language activities and 2-4 copies of small student books. Student books have bold photographs,

labeling text and follow up pages at the end with key words, other activities and discussion possibilities. Activities are cross the curriculum and teacher's book contains lists of related picture books, resources, center activities and reproducible pages. Could be used in first grade. Set A covers the following topics: Insects & Spiders, Animal Homes, Polar Region, Amazon Rainforest, Weather and Trees. Set B covers Animal Lifestyles, Energy and Forest, Machines and Tools, Birds, Deserts and Oceans.

A SENSE OF PLACE – Teaching Children about the Environment with Picture Books, activity guide created by presenters Carol Clouse and Robert Swanson. Participants receive the activity guide as part of the presentation. A list of picture books is followed by suggested activities. Some activities are gleaned and adapted from many other environmental programs such as PLT and other Project programs. Environmental quotes from many authors are at the beginning of each section and are inspiring. The booklet is divided into the following sections: The Wonder of the Place, Sensing our Place, Adapting to the Place, How Does the Place Work? Animals in the Place, Plants in the Place, A Place in History, and Protecting the Place. Most activities are ideal for primary but could also be adapted to lower and upper ages. Swanson is associated with Union College in Kentucky.

TEACHERS' WEATHER SOURCEBOOK; Konvicka, Tom, author; Englewood, CO: Teacher Ideas Press (www.lu.com/tip); c. 1999.

(From the preface)"The Source book stands as an equipping mechanism, a ready reference for factual information and an aid for facilitating the learning process." The book uses the idea that weather is studied for two very important reasons: weather affects almost all aspects of life and weather prompts us to make life-or-death decisions.

Besides background information, this book is designed for use with older students (grades 4-8) and has adaptations for elementary and secondary grades. The experiments are more sophisticated and may require a more formal lab setting. The book is divided into two parts – part one covering every aspect of atmospheric science and part two investigates the earth's climate system and atmospheric conditions such as storms, floods, drought and temperature extremes. Global issues are addressed such as air pollution, global warming, ozone loss and acid rain. In these areas, the emphasis is learning about the subject, cause and effect but not blame, balanced. Has science project ideas, websites and a large reference and resource section.

THE KIDS BOOK OF WEATHER FORECASTING; Breen, Mark & Friestad, Kathleen, authors; Kline, Michael, illustrator; Charlotte, VT: Williamson Publishing; c. 2000.

Written by Meteorologists Been & Friestad, this activity book is s full of information, activities and insight into the world of meteorology and the people who forecast the weather. Chapters include "Weather: It's Everybody's Business!" as well as ones on the atmosphere, the sun, wind, water, clouds, wild weather and how to fine-tune forecasts. Includes folklore and a list of resources (web addresses and postal addresses)

WADING INTO WETLANDS; National Wildlife Federation, Terrill-Breuer, Judith, editor; New York: McGraw-Hill; c. 1987 (1997 revised).

Part of the "Ranger Rick NatureScope" series, this activity book is full of information, activities, reproducible pages for students and essays on wetlands. The book is dedicated to inspiring children and helping them understand and appreciate nature (and the adults who use this book!). Included in the back pages are glossaries, contact information, other activity sources, and bibliography. In the update section, current issues are introduced. The guide's essays are very pro-wetlands and their importance.

WATERSHED SCIENCE FOR EDUCATORS, Karen Edelstein, Nancy Trautmann, and Marianne Krasny; Cornell University, Cornell Cooperative Extension; 1999.

Using observation and experiments, the guide connects biology, chemistry and earth science and other non-science disciplines to help students explore and monitor watersheds. A hands on approach, this guide is useful for the science teacher as well as the non-formal educator.

WEATHER BOOK, and Easy-To-Understand Guide to the USA's Weather; Williams, Jack, author; New York: Vintage Books for USA TODAY; c. 1992, revised 1997.

In the foreword of this book the author states that the book is designed as an introduction to today's science of weather and climate and to be used to help understand all the weather information that is presented today. It book is an extension of the USA TODAY'S Weather Page. Bright graphics are drawn by USA TODAY'S artists. The chapters are full of facts, charts, historical notes, up-close and personal interviews with top atmospheric scientists and almost more information that one ever wanted to know. Because of the newspaper connection, information is presented in an accurate and easy to understand and includes information about every state for national comparison and understanding how weather across the states affects other states. Also includes a chapter on the future of the earth – greenhouse effects and ozone, state-by-state records and glossary. For use by the teacher or upper elementary students, this book is good for reference and reports.

WEATHER; a MAILBOX activity booklet; Crump, Irving P. & McLaurin, Thad H., project managers; Greensboro, NC: The Education Center, Inc.; c. 2000.

This booklet contains activities for grades 1-3 that support the NSES standards are curriculum-based hands- on activities. It also contains reproducible sheets activity ideas, instructions, and ideas for learning about weather in across the board curriculum areas. MAILBOX is widely used for support activities and ideas by teachers and most activities are teacher suggested. Web sites and literature connections are given in some chapters. Chapters on Water Cycle, Clouds, Precipitation, Wind, Storms, Seasons and Weather Forecasting are presented. Activities are simple, inexpensive and investigative based.

WEATHER- Nasco Sciquest, Science Investigations for Intermediate Sudents; Pfeiffer, Carl, author; Fort Atkinson, WI: Nasco Science Co.; no copyright date.

This spiral bound book is found in a Weather Kit by Nasco Science Co. Each activity outlines ideas to be developed, what the investigations are and goals of that activity, instructions, materials needed and reproducible sheets for students. Experiments and activity sheets are sophisticated and require upper levels of understand in math and science. Chapters include study of the sun as an energy source, temperature, wind, air pressure, humidity forecasting and historical facts and a look to the future. Materials and experiments may require a more formal lab setting.

WEATHER, Teacher's Guide; National Science Resources Center – Science & Technology for Children; Washington D.C.: Smithsonian Institution, National Academy of Sciences; c. 1995.

(From the forward)"Since 1988 the National Science Resources Center has been developing Science and Technology for Children, an innovative hands-on science program for children in grades one through six. The 24 units of STC program, four for each grade level, are designed to provide all students with stimulating experiences in the life, earth, and physical sciences and technology while simultaneously developing their critical-thinking and problem-solving skills." Based on a "Focus-Explore-Reflect-Apply" learning cycle, WEATHER systematically leads students through all aspects of the subject. Beginning with a chapter on assessing what the students know to discussing today's weather forecasting, chapters are designed for the teacher to adapt the lessons to age level and knowledge. Background information is given for the teacher as well as reproducible sheets. Many hands-on activities are included and is truly an experience based program guided by the learning of the student. Individual student activity books are available but not mandatory.

WEATHER WISE – Creative Activities about the Environment; Eagan, Robynne & others, authors; Teaching & Learning Company; c. 1997.

From the publisher

Ten chapters of easy to understand hands-on learning about the weather that is across the curriculum including folk lore and art. Features in-door and out-door learning opportunities for grades 1-4.

WHO, ME LEAD A GROUP; Clarke, Jean Illsley, author; Parenting Press, Seattle, WA; c. 1998.

This book helps anyone lead a group by defining what a good meeting is, step by step instructions and strategies on how to be an effective group leader and how to handle people who want to take over meetings. Also includes information on group dynamics and group psychology. Contains work sheet for analyzing class activities, how to book presentations and simple evaluation forms.

WOW! THE WONDERS OF WETLANDS- An Educator's Guide; Kesselheim, Alan S. and others, authors; Saint Michaels, MD: Environmental concern, Inc.; Watercourse Organization; c. 1995. www.wetland.org. www.wetland.org

A guide for developing wetlands studies for grades k-12. Each activity is correlated to the National Science Education Standards and contains informational about skill level, materials needed, procedures and assessment techniques and opportunities. Features 50 activities for both in and out of doors. Glossary is cross referenced with activities. This well developed activity book and guide can also be taken as a teacher's course. For more information see above addresses

INTERACTIVE/INFORMATIONAL CD'S & WEB SITES

Bird Songs: Eastern/Central U.S.; Peterson's Field Guide Series; Houghton Mifflin Co.; New York, NY; c. 1990. An audio CD field guide to bird songs of the eastern and central United States.

KENTUCKY FORESTS FOREVER; Interactive Training Media, Inc., c. 2000. Teachers Guide to Program of Studies Core Content Assessment; Kentucky Department of Education, Kentucky Association of Environmental Education and the Daniel Boone National Forest;

The CD is very user friendly and gives information is usable bites. The CD is useful for individual study by students from primary to high school. The Teachers Guide uses activities from Project Learning Tree and Project Wild to help reinforce and further explain the information given on the CD. Guide includes pre and post test (with answers) and specific activities for specific sections of the CD. Project Learning Tree philosophy is to teach how to think, not what to think. Superficially, this is a pro forest industry publication but in reality it presents very balanced information.

CLASSROOM FEEDER WATCH; http://birds.cornell.edu/cfw

To participate: \$99 sponsorship fee which includes many supporting supplies and subscriptions to bird informational newsletters. All activities come from on-line services. From the web site:

What is Classroom FeederWatch?

Classroom FeederWatch is an exciting research and interdisciplinary education curriculum designed for students in grades 5-8. It's been developed by the Cornell Laboratory of Ornithology, with funding from the National Science Foundation. With Classroom FeederWatch, students learn how science and scientists work, and in the process become scientists themselves.

Classroom FeederWatch is not only a valuable teaching tool; it prepares students to fully participate in an annual feeder-bird survey conducted by ornithologists at the Lab. Thus students learn about science and truly contribute to our scientific understanding of the natural world. Students are strongly motivated to learn when they actively do science, and answer questions about relevant issues.

MAGAZINES

GREEN TEACHER, Education for Planet Earth; Niagara Falls, NY; published quarterly.

Supported by grants and donations as well as subscriptions, this non-profit organization is supported in part by the International Development Research Centre and the Government of Canada. Each issue is theme based on a variety of topics. Regular offerings include announcements, internet articles, reviews and resources. Articles are written by teachers and professionals in environmental work and highlight success stories and informational articles about activities. Articles are well researched and footnoted. During a year subscription, all ages and types of activities are highlighted as well as programs and activities done in other countries. Advertisements are supportive of environmental programs, kits, classes, and publications. A good source of information and inspiration for teachers of all grade levels who are interested in environmental studies, issues and concerns.

MUSIC (CD'S)

KENTUCKY WATERS: THE MUSIC OF DEBBIE TUGGLE; features the Great Ohio River Band; self published; no copy write date.

Kentucky singer Tuggle wrote all the songs featured on the CD except My Old Kentucky Home by Stephen Foster. Naming Kentucky rivers and creeks and the animals and plants that live near by, Tuggle vocals use simple melodies with guitar, banjo, bass, dobro, mandolin and keyboard to describe the state featuring the waterways. A Kentucky Arts Council approved artist, in residency programs the audience/classes help her create other songs about their particular area and local waterways. Songs include "The Clean Water Song", "Always a River", "Out at Otter Creek" and "Bad Branch Falls" (13 songs complete the CD).

RAIN IN THE COUNTRY; Sounds of the Earth Series; Sun, David, recorder; Isleworth, England: released by Oreade Music; c. 1997.

During the nearly 69 minutes of this recording, sounds of rain like outside your window or just off your porch start as a gentle pattering and changes into a heavy rain. Soothing, relaxing this recording could be used as background music for a presentation, inspiration for creative writing or to increase listening skills by identifying all the small sounds – drip and landing sounds. There is only the melodious sound of rain on this recording.

THUNDERSTORM; Echoes of Nature series; Santa Monica, CA: Delta Music Inc.; c. 1993.

Bird sounds begin the nature sounds recording. A light rain begins and then shortly a distant thunder sound is heard and continues to come closer ever increasing in sound until the storm starts to retreat and frogs and birds are heard singing again. Soothing, relaxing this recording could be used as background music for a presentation, inspiration for creative writing or to increase listening skills by identifying all the small sounds – drip and landing sounds or the thunder sounds. There are no musical instruments used in this recording.

NATURE GUIDES/ IDENTIFICATION GUIDES

Animal Tracker Series; Tessa, Paul, author; various illustrators/photographers; Crabtree Publishing; (original series) c. 1999; BT Bound, c. 1999.

BY LAKES AND RIVERS
IN FIELDS AND MEADOWS
IN THE WOODS AND FORESTS

Generally explores the living things in each particular habitat. Includes a glossary and is indexed. Borrows form DK's "EyeWitness" and "Closer Look" series but does not contain the depth of information. Easy to read text font and bold pictures makes it popular with low interest readers.

Reading Level: Primary Read Aloud Level: K & Up Uses: K – Middle

School

Editorial Reviews

From School Library Journal

Grade 2-5. About a dozen creatures from each habitat are examined in these two titles that focus on learning about animals by examining the evidence that they have left behind. Behaviors that result in footprints, teeth marks, holes, nests, hair and fur, and remnants of meals are explained so that readers will be able to track animals by looking, listening, and smelling. Large, colorful, detailed illustrations; attractive borders; bold clear print; and clean organization will draw children into these simple books. However, the tracks included are solid and flat black and would be difficult to match to those found on the ground. Sometimes both front and back prints are depicted, sometimes only one is shown; in either case, they are not usually identified and no explanation is given as to why some tracks are surrounded by dotted lines. There are no maps or any clear explanation of where these animals are likely to be found. For a clearer look at the wildlife in a particular habitat, choose the "Look Closer" series (DK). For information on tracking animals, Millicent Selsam's simple How to Be a Nature Detective (HarperCollins, 1995) or Betsy Bowen's elegant Tracks in the Wild (Little, Brown, 1993) are better choices. Susan Oliver, Tampa-Hillsborough Public Library System, FL

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ANIMAL TRACKS OF THE APPALACHIANS; Eder, Tamara, author; Renton, WA: Lone Pine Publishing; c. 2001.

This guide contains tips on tracking, maps, terms and measurement taking and a bibliography. Book is small and easy to carry with simple two page spread about mammals, birds, amphibians and reptiles. Each entry contains a black and white sketch of the animal, brief description including similar species and how to tell the difference between them, and sketches of the track. Includes general animals of Appalachian Mountain region. This book is very easy to use and is recommended for upper primary with reading help (but picture use is easy) to adult.

ANIMAL TRACKS OF KENTUCKY AND TENNESSEE; Eder, Tamara, author; Renton, WA: Lone Pine Publishing; c. 2002.

This guide contains tips on tracking, maps, terms and measurement taking and a bibliography. Book is small and easy to carry with simple two page spread about mammals, birds, amphibians and reptiles. Each entry contains a black and white sketch of the animal, brief description including similar species and how to tell the difference between them, and sketches of the track. Includes general animals of Kentucky and Tennessee areas. This book is very easy to use and is recommended for upper primary with reading help (but picture use is easy) to adult.

ANNUAL'S AND PERENNIAL'S; Sunset Publishing Corporation; c. 1993. Covers over one hundred annuals and one hundred forty perennials, with tips on planting and care.

Aquatic Insects of North America [ILLUSTRATED] (Spiral-bound)

by <u>Richard Merritt</u> (Author) **Publisher:** Kendall/Hunt Publishing Company; 3 edition (December 1, 1995)

While designed for the generalist working in the area of macrobenthic taxonomy, "An Introduction to the Aquatic Insects of North America" stands as one of the classics in its field. Nine orders of aquatic insects are classified, generally to the level of genus. Some information is provided about collection, preservation, phylogeny, ecology, respiration, and developmental biology in the introductory chapters. Each key to the individual Orders contains additional information specific to that Order. All of the keys are extensively referenced to illustrations. Each section is supported by an extensive bibliography. The section on the Diptera is subdivided to cover the major families individually. The spiral binding allows the book to lie flat while the user manipulates specimens under the microscope - an under-appreciated bonus. Some of the keys are a little buggy, but this is a 'must have' for aquatic entomologists of all levels of expertise.

BERRIES, NUTS AND SEEDS; Burns, Diane L., author; McGee, John F., illustrator: NorthWord Press: c. 1996.

BIRDS, NESTS AND EGGS; Boring, Mel, author; McGee, John F., illustrator; NorthWord Press: c. 1996.

CATERPILLARS, BUGS AND BUTTERFLIES; Boring, Mel, author; Garrow, Linda, illustrator; NorthWord Press; c. 1999.

FROGS, TOADS AND TURTLES; Burnes, Diane L., author; Garrow, Linda, illustrator; NorthWord Press; c. 1997.

ROCKS, FOSSILS AND ARROWHEADS; Evert, Laura, author; Garrow, Linda, illustrator; NorthWord Press; c. 2001.

SNAKES, SALAMANDERS AND LIZARDS; Burnes, Diane L. author; Garrow, Linda, illustrator; NorthWord Press; c. 1998.

TRACKS, SCATS AND SIGNS; Dendy, Leslie, author; Garrow, Linda, illustrator; NorthWord Press; c. 1998.

TREES, LEAVES AND BARK; Burns, Diane L., author; Garrow, Linda, illustrator; NorthWord Press; c. 1998.

WILDFLOWERS, BLOOMS, AND BLOSSOMS; Burns, Diane L., author; Garrow, Linda, illustrator; NorthWord Press; c. 1998.

Take-Along Guide Series: Minnetonka, Minnesota: Cowles Creative Publishing, Inc.; c. 1995 (original publishers).

These books are meant to be taken along with on walks and adventures (each approximately 8 ½" x 8 ½", backpack size). Simple illustrations and information about the title topic of animals, plants and insects are given in each book as well as advice about identifying what is seen in the specific habitat(s). Extended activities are suggested. End pages are blank to encourage nature study by the owner of the book through art or writing and a ruler is printed on the back cover. Most important a "Be Smart and Safe" section is at the beginning of the book for the novice nature observer. Helps encourage observation and exploration as well as respect for the environment. Though not all inclusive (use a more comprehensive guide for this), the popular or "most likely to see" plants, animals and insects are highlighted. There is enough information for small reports.

Reading Level: upper primary Read Aloud Level: Pre-K & up Uses: All ages With supervision

BIRDS OF KENTUCKY: Tekiela, Stan, author; various photographers; Cambridge, MN: Adventure Publishing; c. 2001.

This book features 112 species of birds found in Kentucky. Packed full of information, each bird has a color photograph in natural habitat and a full page of information about size; male, female, and juvenile identifying marks; nest, eggs, food, migration, and comparisons to family groups. Using a map of KY on each page. Tekiela shows regional migration patterns, summer and winter grounds, and common and scientific names of the birds. He describes trends, personal observations, naturalist information and male, female roles in chick rearing. He includes "gee-whiz" facts like the first reporting of a bird, first nest report, and new birds to our state.

BUILDING A BACKYARD BIRD HABITAT; Shalaway, Scott, author; Mechanicsburg, PA: Stackpole Books; c. 2000.

Shalaway has a PhD in wildlife ecology and presents easy to follow ways of creating a backyard habitat that attracts common and not so common yard and neighborhood birds. Using the concept of food, water, shelter, and space, he gives all the information necessary to be successful by meeting all the needs of birds. He gives a few pages of hints on identification by sound and sight, how to keep records and seasonal advice to help the birds. Author lives in West Virginia and hosts a radio show called "Nature Talk."

BUTTERFILES OF NORTH AMERICA (Kaufman Focus Guides); Brock, Jim P. & Kaufman, Kenn, authors, illustrators; New York: Houghton Mifflin Co.; c. 2003.

From Publishers Weekly

From its durable, flexible cover to its color-coordinated index, this field guide will serve as an excellent identification resource for experienced and novice lepidopterists.

Kaufman (Kingbird Highway) provides butterfly watchers with more than 2,200 digitally edited photographs and an easy-to-use species index-a format that defines the Kaufman Focus Guides. The photographs have been gleaned from scores of skilled nature photographers. Co-author Brock (Butterflies of Southeastern Arizona) brings more than 30 years of butterfly watching around the world to the informative, non-technical writing in the book. The readable capsule narratives are enhanced by the startling clear color images, which make identification of species much easier. The guide offers images of larval (caterpillar) stage butterflies along with details on feeding preferences of butterflies in their different stages of development. It also gives migratory information on these delicate and beautiful creatures. The book ranges geographically from the lower 48 states through Canada and Alaska, with maps provided for all butterflies depicted. These maps also indicate both common and rare species, along with seasonally occurring butterflies. This book will appeal to bird watchers, hikers, gardeners and outdoor enthusiasts.

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CREATING A BIRD-FRIENDLY BACKYARD HABITAT (T.F.H. Wild Birds Series); Edwards, Scott, author; various photographers; Neptune City, New Jersey: TFH Publishers, Inc.; c. 2000.

Book contains 75 color photos of birds and plants. In the chapters he explains about bird habitat, how to evaluate habitat, providing food, water, and shelter for the birds. Using the philosophy of working with Mother Nature, he gives information about planting to attract birds to your selected habitat. The book also contains a section on resources and is indexed.

THE CURIOUS NATURALIST; National Geographic Society; Washington D C: National Geographic Society; c. 1991.

This book looks at 9 North American ecosystems by describing habitats, some identification, and field projects. There are 356 full color photographs and illustrations. Full of National Geographic type essays form the likes of Diane Ackerman, and Ted Levin, the book suggest practical outdoor skills and naturalist techniques for identification of what is seen. Beginning with a backyard, the book moves on to woodlands, grasslands, deserts, mountains, water areas, sandy shores and wetlands and rocky shores. Each chapter describes what is happening and where and how to look, just like a naturalist. The book is good for young adult-to-adult usage.

DISCOVER NATURE IN WINTER, Things to Know and to Do; Lawlor, Elizabeth P., author; Archer, Pat, illustrator; Mechanicsburg, PA: Stackpole Books; c. 1998.

DISCOVER NATURE IN WATER AND WETLANDS; c. 2000.

Both a nature guide and activity book, this book takes the reader willing to go out in the cold something to do. There are 90 different activities and 150 drawings and suggests a "you make it kit" that requires a notebook, pencil, bug box, sandwich bags, ruler, pen knife and hand lens. The simple, nonintrusive activities are designed for the US and Canada but have to do more with how nature is changed by temperature not a bunch of snow activities. Winter wildlife, tracks, seeds, fruits, weeds, trees,

constellations and more are covered. Although classified as a juvenile book it can be used by all ages 4th grade and up and smaller with adult help. WATER AND WETLANDS follows the same basic form and studies the water cycle and properties of water, plants, creatures and habitat. This team has also produced other books – Discover Nature at the Sea Shore, Close to Home, and At Sundown. Lawlor, Ed. D., was a professor of Science Education, Archer a retired secondary-school art teacher.

FALL COLOR FINDER, TREE ID, (booklet); Bell, C. Ritchie, & Lindsey, Anne H., authors/illustrators; Laurel Hill Press; c. 1991.

Using color photographs, line drawings and an easy to use key guides, this booklet helps the reader to identify trees and shrubs in this pocket sized book for use in the eastern hardwood forests. Main characteristics of leaf arrangement, margins, shapes, color and other useful information are included. This book is good for use in upper primary grades through adult.

A FIELD GUIDE TO ANIMALS TRACKS (Peterson Field Guide Series); Murie, Olaus J., author, illustrator; New York: Houghton Mifflin Co.; c. 1954, 1975, second edition, reprint, 1998.

Although first printed in the fifties, this guide is still one of the best. Using pen and ink drawings, Murie, of the U.S. Fish and Wildlife Service and past head of The Wilderness Society, helps us study what we usually see in nature – that the animals were at least there at one time. Using tracks and scat to identify, readers can also learn about behavior and other information about the animals they just missed. Includes advice on making casts, reading and understand what is discovered, how to look and where. A fast key to tracks is included and the book is indexed. Portable, flexible, and has a sturdy binding with ruler on the inside cover.

A FIELD GUIDE TO THE BIRDS' NESTS: United States East of the Mississippi; Harrison, Hal H., author; Smith, Ned, illustrator; New York: Houghton Mifflin Co.; c. 1988.

A guide to identifying nests and eggs of birds found in the Eastern United States (includes 26 states). Information included is on breeding range and time of year, usual habitat chosen as well as nest construct and eggs. Book has 222 color photographs to aid in identification.

A FIELD GUIDE TO EASTERN FORESTS: North America; Kricher, John C., photographer; Morrison, Gordon, illustrator; National Audubon Society, National Wildlife Federation, Roger Tory Peterson Institute, editors; c. 1988, paper reprint, 1998.

This pocket sized book is a compact, complete overview of what might be seen in the Eastern Forests of North America. Common flora and fauna are described and illustrated. There are 53 full color pictures and an additional 80 photo illustrations. 27 types of forest east of the Rockies are highlighted with indicator species. Seasonal changes are described as well as old field succession. Filled with fun facts and answers to common and not so common questions. General in nature but a good guide for the forest. For more in-depth information, individual ID books can and should be used.

Freshwater Fishes of the Northeastern United States: A Field Guide (Hardcover) by Robert G. Werner (Author) Publisher: Syracuse University Press (April 2004)

This book is excellent for the identification of common freshwater fish in the Mid-Atlantic and the New England regions of the US. The fish pictures are excellent and descriptions are extremely helpful.

Gardening Wizardry for Kids by <u>L. Patricia Kite</u> (Author), **Publisher:** Barrons Juveniles; Bk&Acces edition (September 1995)

Gr. 3^-6. The gardening of the title refers to windowsill or kitchen gardens. Kite approaches the topic from a variety of angles, with snippets of history, crafts projects, and science experiments in her roundup. She includes projects that yield quick results as well as those that require time, and the projects with pill bugs and earthworms will be a hit with some kids. The illustrations are cheerful and plentiful; readily accessible materials are the rule; the text is clear; and the instructions are easy to follow. An attractive alternative to traditional gardening books for kids, this will appeal to both teachers and young gardeners.

Geology: An Introduction to Familiar Rocks, Minerals, Gemstones & Fossils (Pocket Naturalist - Waterford Press) (Paperback) by <u>James Kavanagh</u> (Author) Publisher: Waterford Press; 1.00 edition (January 1, 2001)

Book Description

The Pocket Naturalist card is a pocket-sized, folding card which provides simplified, easy-to-use introduction to familiar North American rocks, gems, minerals and fossils. Maps show distribution of important rocks and minerals. Every card is laminated so that it is waterproof and practical for use in the field.

A Guide to Common Freshwater Invertebrates of North America (Paperback) by <u>J. Reese Voshell</u> (Author) Publisher: McDonald and Woodward Publishing Company (April 19, 2002)

Popular interest in the observation and study of freshwater invertebrates is increasing. A Guide to Common Freshwater Invertebrates of North America meets the needs of this growing audience of naturalists, environmentalists, anglers, teachers, students, and others by providing substantive information in easy-to-understand, nontechnical language for many groups of invertebrates commonly found in the streams, lakes, ponds, and other freshwater environments of North America. The Guide is broad in scope, geographically and taxonomically, and it is written at a substantive yet easily accessible level that will appeal to both novices and those with more advanced knowledge of the subject. It also contains more than 100 specially commissioned color illustrations by the well-known scientific illustrator Amy Bartlett Wright that will greatly facilitate the easy and rapid identification of specimens.

A GUIDE TO THE WILDFLOWERS AND FERNS OF KENTUCKY; Wharton, Mary E. & Barbour, Roger W., authors, illustrators; Lexington, KY: University of Kentucky Press; c. 1971 with reprint in 1979.

Southern Living Magazine called this book "The definitive volume on wildflowers in Kentucky." There are 500 color photos and information about 700 ferns and wildflowers in KY and the surrounding states. Book clearly outlines the identifying marks to look for when identifying plants such as leaf structure, petal arrangement, stem formation and more. Photos show leaf and stem of plant as well as flower for easier identification. End notes include a systematic list of included families, suggested references and an index.

NATIONAL AUDUBON SOCIETY FIELD GUIDES; various authors, editors, illustrators and photographers; New York: Alfred A. Knopf; c. from 1970's on.

The field guide covers all aspects of identification. The beginning gives a specific look at the topic using sketches to label all parts used for identification. The second section divides the subject by color and shape and uses high quality close-up photographs to identify the subject. The next section includes a paragraph to further identify and describe the subject such as variations, habitat, calls, food, exact statistics such as size and Latin name. A glossary and index are included.

BUTTERFLIES

EASTERN BIRDS

EASTERN TREES - flowers, leaves, fruit and fall color are identified

EASTERN WILDFLOWERS – berries are identified

FISHES OF NORTH AMERICA

FOSSILS

INSECTS AND SPIDERS - caterpillars, water nymphs and larvae are included

REPTILES & AMPHIBIANS

ROCKS & MINERALS

MAMMALS

Reading Level: 6th grade Read Aloud: not appropriate Uses: All Ages

NATIONAL AUDUBON SOCIETY FIRST FIELD GUIDES; various authors, editors, illustrators and photographers; New York: Scholastic Trade; c. from 1990's on.

As in the larger field guides by the National Audubon Society, these outstanding books are a smaller version especially designed for the adolescent both in content and size. High quality photographs and designed with kids in mind, the book contains definitions of many terms used in the book and quick identification laminated field cards. The books are limited to 50 common species but related species are shown in thumbnail photographs which expands the number. The book also briefly discusses endangered or threatened species or habitats. The book is designed for those with little or no knowledge on the subject.

BIRDS
INSECTS
MOTHS
MUSHROOMS
REPTILES AND AMPHIBIANS
ROCKS AND MINERALS
TREES

WILDFLOWERS

Reading Level: Intermediate Read Aloud Level: not appropriate Uses:

All Ages

NATIONAL WILDLIFE FEDERATION FIELD GUIDES-ALL THAT PERTAIN TO THE EASTERN REGION

ORTHO'S ALL ABOUT THE EASIEST FLOWERS TO GROW (Ortho's All About Series): O'Sullivan, Penelope, Pavia, Jerry, editors; Ortho; Consumer Services-Columbus, OH: Ortho Books; c. 2001.

Clear, concise easy to use guide that gives information about easy flowers to grow and propagate. Contains USDA Plant Hardiness Zone Maps and chapters on easy gardening, how to group, plant, where to plant, fertilizing, watering and planting calendars. Contains 16 garden plans and 188 color photographs.

ORTHO'S ALL ABOUT ATTRACTING HUMMINGBIRDS/BUTTERFLIES

ORTHO'S ALL ABOUT PERENNIALS

ORTHO'S ALL ABOUT ANNUALS

ORTHO'S ALL ABOUT VINES

PETERSON'S FIELD GUIDES: ALL THAT PERTAIN TO EASTERN REGION

PETERSON'S FIELD GUIDES: EDIBLE WILD PLANTS: Eastern and Central North America; Peterson, Lee A., author; Peterson, Roger Tory, illustrator; various photographers; New York: Houghton Mifflin Co.; c. 1978, reprint 1999 (Not Updated or revised).

Sponsored by the National Wildlife Federation, the Roger Tory Peterson Institute and the National Audubon Society, this ID book identifies 370 plants and 37 poisonous plants and contains 400 drawings and 78 color photos. Shows plant flowering, habitat description and lists of plants by season, when to harvest, and how to prepare some of the plants for consumption. Includes a map, glossary and a section on conservation and conservation practices. The recommended reading list is dated. Durable binding that contains a ruler.

PETERSON FIELD GUIDE: EASTERN BIRDS (Large Print Edition); Peterson, Roger Tory, author, illustrator; various contributors; New York: Houghton Mifflin Co.; c. 1999 (fourth edition).

This large print version of the classic birding guide has been updated with new maps. Peterson died in 1996 so others helped revise but it is basically the same concentrating on birds of the Eastern United States, pointing out the differences and distinguishing marks in male, female and juvenile, and, silhouette and habitat maps. Although not as much information is given on the birds as in other guides, the sketches and paintings of the birds, maps and durability and portability of the guide as well as ease in use make this a classic for identification.

PETERSON'S FIELD GUIDES: EASTERN BUTTERFLIES and Butterfly with Sticker

PETERSON'S FIELD GUIDES: EASTERN TREES (Peterson Field Guide Series); Petrides, George A., author; Peterson, Roger Tory, editor; Wehr, Janet, illustrator; New York: Houghton Mifflin Co.; c. 1998 (revised).

This field guide contains the description of 455 trees, 48 color pictures and 11 black and white as well as 26 text drawings. Trees described are in Eastern North America (including the South and Midwest portions of the United States). There is great detail about the trees and reading level high and is more scientific than easier guides. One reviewer found it difficult to use because the information was many pages from the sketch or photograph of the tree and did not contain information to help identify during winter season. As with other Peterson Guides, it is a portable size, flexible and has a sturdy binding with ruler on the inside cover.

PETERSON'S FIRST FIELD GUIDES; various authors, Peterson, Roger Tory, authors; various illustrators; New York: Houghton Mifflin Co.; c. 1990's on.

Designed for the beginning naturalist, the books are organized to help find the topic of interest easily. The focus is on animals, plants and natural things most likely to be seen, especially by young people. It is a condensed and simplified version of the famous Peterson's Guides. Information includes male and female differences, migration, size, shape and color. Peterson illustrated many of the books.

Animal Tracks

Birds of North America, Peterson, Roger Tory

Butterflies and Moths, Opler, Paul A.

Caterpillars of North America, Wright, Amy Bartlett

Clouds and Weather, Day, John A.

Forest, Kricker, John c.

Freshwater Fish

Insects, White, Richard E.

Reptiles and Amphibians, Conant, Roger

Rocks and Minerals, Pough, Frederick

Trees, Eastern Region, Petredes, George A.

Trees and Shrubs

Wildflowers of North Eastern & North Central North America, Peterson, Roger T.

Venomous Animals and Poisonous Plants

PLANTS, an Eyewitness Book; Burnie, David, author; London: Dorling Kindersley (DK) Publishers; c. 2000.

The "Eyewitness" series gives a reader a sense of being right over the photographer's shoulder – up close and personal. In this book all aspects of a plant are covered – parts, propagation, life cycle, historical references, diseases and identification of major plants. Historical and social information is given in side bars. This series is wonderful for the reluctant reader or non-science person because the photographs draw you in and help you learn more about the topic. This series, though placed in the nature guide section, has a target audience of children. Photographs are informative even without the text for non or poor readers. (This information applies to all "Eyewitness Books".)

PLANT LIFE OF KENTUCKY: An Illustrated Guide to the Vascular Flora; Ronald L. Jones, Author; University Press of Kentucky; c. 2005

Ronald L. Jones has compiled detailed identification keys to families, genera, and species. The plant family descriptions contain information on wildlife and human uses, important weeds, poisonous plants, and medicinal herbs, and the species accounts provide scientific and common names, flowering periods, habitat, physiographic distribution, state and federal designations, and wetland ranking. A total of 179 families, 856 genera, and 2,600 species and infraspecific taxa are included, and nearly 2,000 line drawings illustrate the volume. The extensive introduction includes information on a variety of topics, including the history of the flora, vegetation types, and current conservation issues.

POCKET GUIDES: D K ESSENTIAL FACTS SERIES: New York & London: Dorling Kindersley (D K).

Described as a "pocket full of knowledge, these books are a reference library in pocket form covering the title subject. These books contain information in quick to read and interpret formats such as tables, charts, diagrams and fact boxes. Most contain a glossary, index and other supportive information. They use outstanding photographs and diagrams to illustrate the information. Most can be used as identification guides when in the field. Life cycles are expressed in the text only in general terms.

BIRDS; Taylor, Barbara, author; Senior, Helen, art editor; c. 1995. BUILDINGS; Wilkenson, Philip, author; Blackham, Heather, art editor; c. 1995. BUTTERFLIES & MOTHS; Taylor, Barbara, author; Brown, Alexandra, art editor; c. 1996.

DINOSAURS; Clark, Neil, Lindsay, William, authors; Cammings, Ann, Noble, Shulagh, art editors; c 1995.

DOGS; Taylor, David, author; Allis, Janet, art designer; c. 1997.

EARTH FACTS; Hall, Cathy & O'Hara, Scarlett, authors; Downing, Susan, art editor; c. 1995.

ESSENTIAL FACTS; Hetterington, Tim, Labi, Ester, Redfern Martin, project editors; revised 1998.

FOSSILS; Palmer, Douglas, author; Crouch, Sarah, art editor; c. 1996.

GEMSTONES; Loa, Emma, author; Watson Clair, designer; c. 1997

INSECTS; Mound, Laurence, Brooks, Stephen, authors; Cannings, Ann, art editor; c. 1995.

INVENTIONS; Davis, Eryl, author; Morley, Louise, art editor; c. 1995.

NATURE FACTS; O'Hara, Scarlett, author; Burton, Jacqui, art editor; c. 1997.

REPTILES: Lambert, Mark, author: Regardsoe, Mark, art editor: c. 1997.

ROCKS & MINERALS; Fuller, Sue, author; Clouting, Diane, art editor; c. 1995.

SHARKS; Pope, Joyce, author; Wilson, Martin, Burton, Jacqui, art editors; c. 1997

SKELETONS; Taylor, Barbara, author; Keenes, Thomas, art editor; c. 1998

SPACE FACTS; Stott, Carole, Twist, Clint, author; Brown, Alexandra, art editor; c. 1995

SCIENCE FACTS; Setford, Steve, author; Burton, Jacqui, Hibbert, Carlton, art designers; c. 1996.

TREES; Greenaway, Theresa, author Tetzlaff, Jane, Watson, Clair, art editors; c. 1995. WORLD ATLAS; Labi, Ester, Hibbert, Carlton, designers; c. 1995

POND AND BROOK: A GUIDE TO NATURE IN FRESHWATER ENVIRONMENTS; Caduto, Michael J., author; Thomson, Joan, illustrator; New York: Prentice-Hall; c. 1985; (London: University Press of New England; c. 1990, current printing).

Chapters in this extensive book explain water and cycles; ecology of freshwater and habits; studying still water environments, flowing water environments; and a chapter on current issues. Black and white photographs, pen and ink drawing help identify and explain all the flora and fauna in this special environment. Reading level of this book is on a high school to adult level.

POND AND RIVER, an Eyewitness Book; Parker, Steve, author; New York: Alfred A. Knopf; c. 1988.

Using photography and drawings and simple explanations this look at and look at again book is identification, explanation and historical information all in one bright and colorful format. Suitable for children as well as adults.

POND LIFE, an Eyewitness Closer Look Book; Taylor, Barbara, author; Greenway, Frank, photographer; New York: D K Publishing; c. 1992.

Using incredible photography and simple informative text, all "Closer Look" books are identification guides as well as "read more about it" books. Usually answers common questions that arise during nature walks. There is plenty of information for reports or to use as a take along guide. Quality binding and paper make the books last. Suitable for children as well as adults.

POND LIFE (A Golden Book Guide); Reid, George K. & others, authors; Kaecher, Sally D. & Dolan, Tom, illustrators; New York: St. Martins Press; reissue, revised & updated c. 2001.

Golden Book guides are classics in the industry for identification information in a concise and simple matter. This one has been in print for 20 years so copyright date is important for current information. This guide includes information about the chemical and physical characteristics of water, habitat, predator/prey, and descriptions of common animals found around and in the pond from algae and bacteria to one-celled animals to larger mammals. Three pages are included on observing and collecting. First created for older children, this guide is for all ages.

RIVER LIFE, an Eyewitness Closer Look Book; Taylor, Barbara, author; Greenway, Frank, photographer; New York: D K Publishing; c. 1998.

Using incredible photography and simple informative text, all "Closer Look" books are identification guides as well as "read more about it" books. Usually answers common questions that arise during nature walks. There is plenty of information for

reports or to use as a take along guide. Quality binding and paper make the books last. Suitable for children as well as adults. Glossary, index and scale drawings included.

SIBLEY'S BIRDING BASICS; Sibley, David Allen, author/illustrator; New York: Knopf; c. 2002.

Usable for beginners as well as the experienced birder, Sibley uses his artist's eye to relate information about birds- feathers, shape, color, size. He also gives advice on how, when, where to go birding as well as equipment and "how to look". His book is full of advice and recommendations from his experience birding. The book is recommended as a companion to his other bird books.

SIBLEY GUIDE TO BIRDS AND SIBLEY GUIDE TO BIRD LIFE AND BEHAVIOR; Sibley, David Allen, author, illustrator; New York: Knopf; c. 2000 & 2001. From Publishers Weekly

The bird-watching world knows Sibley best as an immensely talented painter. His thick, attractive and data-packed color guide offers nearly 7,000 images, along with range maps and detailed descriptions of songs, calls and voices, for all the birds North Americans might see. It's a more informative volume than Kenn Kaufman's forthcoming Birds of North America (Forecasts, Sept. 11) but less portable and harder for beginners to use. An introduction describes the key parts of major classes of birds to the mia and culmen of a gull's bill, the scapulars and coverts of passerines (songbirds). Sibley then moves on to hundreds of pages of birds in 42 categories, from Loons and Grebes to Silky Flycatchers and Bulbuls. A typical page has two columns, with one species in each: that species gets a color-coded range map, a description of its voice, and four to eight illustrative paintings. These multiple images of single species are the guide's most attractive feature; they let Sibley show some birds in several poses, as well as important seasonal and regional, juvenile and mature, breeding and non breeding, or male and female versions of the same bird. (Gulls, terns, and many other seabirds, in particular, change their patterns completely when breeding.) Sibley assists viewers by giving, on the same page, images of species that might be mistaken for one another Done column shows 13 kinds of thrushes. He also describes calls for every bird (not just the more common ones), and makes many more comparisons. If Kaufman's guide belongs in birders' coat pockets, Sibley's big, detailed book belongs on their desks; it's easy to imagine birders rushing to Sibley's guide to check details of plumage or to confirm an ID the smaller guide has helped them make.

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From Publishers Weekly

Not to be confused with standard field guides to birds, this far-reaching companion to last year's The Sibley Guide to Birds complements the best of those avian catalogues that birders take along on their quests for more species to add to their "life lists." Here, the editors have compiled essays from leading ornithologists on bird anatomy, ethnology and behavior to round out bird-watchers' knowledge. This National Audubon Society publication details the 80 families of birds found in North America, with hundreds of Sibley's acclaimed full-color paintings, maps, charts and illustrations. Topics range from the familiar migration, feeding, mating, nesting to the esoteric, including feather structure, eye configuration, DNA classification, evolution,

hybridization and much more. Readers will learn about bird respiration, metabolism, excretion, vocalizations, senses and intelligence, among other subjects. Although the information is as detailed as a textbook, the writing is jargon-free, light and accessible. Well conceived in structure and conducive to easy reference, the volume ends with a detailed glossary, professional biographies of its dozens of scholarly contributors and a convenient species checklist, based upon the American Ornithologists' Union guidelines. Whether one is a serious expeditionary birder or a casual backyard observer of avian life, this book is a must-have reference. 796 full-color paintings. Copyright 2001 Cahners Business Information, Inc.

SMITHSONIAN HANDBOOKS: ALL THAT PERTIAN TO EASTERN REGION

SMITHSONIAN HANDBOOK: ROCKS AND MINERALS; Pellant, Chris, author; Pellant, Helen, editor; Taylor, Harry, photographer; New York: DK Publishing; c. 2002

The size of the book makes it easy for rock hounds to carry this very informative and easy to use book. Over 600 excellent photographs about 500 examples of rocks and minerals in an "all in one" page that has photograph, characteristics, description and other information. Color bands are used for quick reference. Includes list and explanations of equipment, hardness tests with safety information, general safety information, good places to find rocks, glossary and great descriptions about the differences between types of rocks and crystal systems for minerals. The different organization from other guide books was reviewed as positive.

SMITHSONIAN BUG HUNTER

STOKES FIELD GUIDES: ALL THAT PERTAIN TO THE EASTERN REGION

TAYLOR'S GUIDE TO TREES: The Definitive, Easy-To-Use Guide to 200 of the Garden's Most Important Plants; Roth, Susan, author/photographer; various photographers; New York: Houghton Mifflin Co.; c. 2001.

The book contains information about 350 species of trees including shade, conifers, and ornamentals to plant in gardens and near homes. Information about planning, evaluating, and selecting trees as well as pruning, planting, and growing directions are included.

TAYLOR'S WEEKEND GARDENING GUIDE TO ATTRACTING BIRDS AND BUTTERFLIES: How to Plant a Backyard Habitat to Attract Hummingbirds and Other Winged Wildlife; Ellis, Barbara, author; various photographers; New York: Houghton Mifflin Co.; c. 1997.

This book addresses the issues of food, water, cover and nesting sites. There is a whole chapter on planting for hummingbirds and another on how to create a garden. Considered a "practical" guide, the book includes hardiness zone maps, a further or recommended reading list and is indexed.

TREES, an Eyewitness Book; Burnie, David, author; London: Dorling Kindersley (DK) Publishers; c. 1988.

As in other "Eyewitness" books, trees are explored through photography and drawings with explanations of all aspect of the tree life cycle. Also presented is information about bark, simple and compound leaves, needles, fruit, seeds, cones, autumn leaves, pollution, wood industry, tee car and management. Many trees are identified in this volume with historical references and accurate detailed drawings. Suitable for all children as well as adults.

TREE FINDER; (booklet), Watts, May T., author; FALL COLOR FINDER, TREE ID, (booklet); Bell, C. Ritchie, & Lindsey, Anne H., authors/illustrators; Laurel Hill Press; Nature Study Guides; c. 1991.

Using color photographs, line drawings and an easy to use key guides, this booklet helps the reader to identify trees and shrubs in this pocket sized book for use in the eastern hardwood forests. Main characteristics of leaf arrangement, margins, shapes, color and other useful information are included. This book is good for use in upper primary grades through adult. Inexpensive and very portable.

Also in series: Flower Finder: Watts, Mary. c. 1955
Bird Finder: Lederer, Roger J.. c. 1990

TREES AND SHRUBS OF Kentucky; Wharton, Mary E. and Barbour, Roger W., authors, illustrators; Lexington, KY: University of Kentucky Press; c. 1973 with a reprint in 1994.

This guide book has 260 full color photos and 1200 photos in all to identify 282 species of trees and shrubs found in Kentucky and the surrounding states. Beginning clearly illustrates and defines leaf structure, bark, bud, flower and fruit. Using those definitions to help identify the trees and shrubs, photos illustrate leaf, bark, bud, flower and fruit of the trees and shrubs. A useful and comprehensive guide.

Vascular Plants of Kentucky: An Annotated Checklist (Hardcover) by Edward T. Browne (Author), Raymond Athey (Author) Publisher: University Press of Kentucky (May 1992)

WEEDS OF KENTUCKY AND SURROUNDING STATES; Haragan, Patricia Dalton, author, illustrator; Lexington, KY: University of Kentucky Press; c. 1991. This guide book was reviewed by FOSTER'S BOTANICAL & HERB REVIEWS and states the book is "Valuable for readers in the states on Kentucky's perimeter. Excellent pen and inks accompany the text descriptions." In the book description it states that weeds make up a large component of the state's flora and vegetation. Haragan identifies 160 weeds found in crops, pastures, turf and along roadsides. An extensive reference book on weeds, descriptions include information on ecological, geographical and botanical information. Text also identifies native and non-native plants brought to KY.

WHAT THE RIVER REVEALS, Understand and Restoring Healthy Watersheds, Rapp, Valerie, author; Seattle, WA: The Mountaineers Press; c. 1997.

The Mountaineers Press; 1997. Although this book is written about the pacific Northwest the issues and solutions are insightful for us in the East and in Appalachia. Through the narrative, Rapp includes history, science and personal observation to show how easy it is to employ river conservation practices. The interconnectedness of watershed and river and life are illustrated.

WILDFLOWERS OF THE APPALACHIAN TRAIL; Adkins, Leonard M., author; Menasha Ridge Press; c. 1999.

Along with elegant, large-format photographs, this book contains information on flower color, bloom season, size, and range of nearly one hundred species. Citations to more than sixty additional species with respect to their distinguishing features are also included. Yet this is no ordinary field guide. Not only will you be able to identify a particular flower, you will also learn the story behind its name, the fascinating role it has played through history, and its value in folkloric as well as modern medicine. You will discover that Skunk Cabbage produces its own heat (often melting snow and ice around it) and that Bloodroot contains an anti-plaque agent used in toothpastes and mouthwashes.

WILDFLOWERS AND FERNS OF KENTUCKY; Thomas G. Barnes & S. Wilson Francis; University Press of Kentucky; c. 2004

Since Kentucky is situated at a biological crossroads in eastern North America, citizens and visitors to this beautiful state are likely to be greeted by an astonishing variety of wildflowers. This non-technical guide—featuring more than five hundred dazzling full-color photographs by award-winning photographer Thomas G. Barnes—is the state's new, indispensable guide to the most common species in the Commonwealth. With this book, readers will learn to identify and appreciate Kentucky wildflowers and ferns by matching photographs and leaf line drawings to the more than six hundred and fifty species of flowers covered in the book. Extremely practical and simple to use, the guide's color photographs and line drawings appear with plant descriptions for easy identification, and plants are grouped by flower color and blooming season. Each species listing includes the plant's common and scientific name, plant family, habitat, frequency, and distribution throughout Kentucky, with similar species listed in the notes. There is no other volume that covers the flora of Kentucky with such ease of identification. The first new statewide guide to appear in thirty years, with its combination of high quality photographs, illustrations, portability, and easy organization of information, Wildflowers and Ferns of Kentucky is an essential addition to the library or field pack of the wildflower enthusiast, naturalist, and anyone else who loves the outdoors.

WOODS, PONDS AND FIELDS: Adventures, Projects and Ideas for Exploring the World of Our Familiar Environments; Ellen, Doris, author; Rubenstein, Len, photographer;, Thames & Hudson; c. 1994.

Part of the "Real Kids Real Science Books" series, the activities were tested by the students at the Children' School of Science in Woods Hole, Massachusetts. The book provides an introduction to the eco systems as well as observation methods, field and rearing techniques. Part simple identification guide, this book also offers an

equipment source list and a glossary. (Publication date must be kept in mind for sources.) For use with students 4th grade and up.

PHAMPLETS/BOOKLETS

Booklets: (Children's)

"One Green Tree"; Created and produced by Custom Comic Services; League City, TX: National Association of Conservation Districts; c. 2002.

Using a comic book format, this booklet shows the relationship of trees and air, water and soil. It presents a simple explanation of photosynthesis, transpiration, parts of a tree, and the life cycle of trees. An inexpensive way to put information in the hands of young people.

Reading Level: Upper Primary Read Aloud Level: Kindergarten & up Uses:

All ages

"Search for Soil"; Created and produced by Discovery Comics; Doylestown, PA: National Association of Conservation Districts; c. 2000.

Using a comic book format, this booklet shows that soils is the basis for all life. Soil layers, usefulness as an habitat, organisms living in the soil, soil profiles and erosion is just a small part of the useful and informative nature of this booklet. An inexpensive way to put information in the hands of young people.

Reading Level: Upper Primary Read Aloud Level: Kindergarten & up Uses: All ages

THE LIVING WATERS, Educator's Guide; National Association of Conservation Districts; 1995.

A concise booklet that includes a history of soil and water stewardship, water facts, and follow-up questions to enhance discussions. The booklet is inexpensive enough to give to adults and young adults who need more information or to use as a group discussion tool.

VIDEOS

Agriculture for Children DVD Series: What is Agriculture?, Growing Our Food, From Farm to Table, & Where Food is Grown:

Children will enjoy following along as young hosts discover firsthand how agriculture provides us with the food we eat, clothing we wear and places we live. Learn about the exciting journey food takes as it makes its way from farms to our tables. See how crops are grown and harvested, prepared, packaged and transported to stores. Discover how technology has influenced all phases of food production from using machines to milk cows to harvesting wheat with combines. Visit orchards and rice fields to see the many different places food can be grown, and explore how climate and weather affect the

types of crops people grow and the kinds of animals they raise. Teacher's guides are included and are available online.

ALL ABOUT ANIMAL NEEDS: C. 2000; Closed Captioned available; Teacher's Guide available; running time 23 mins.

Students identify that animals have four basic needs: air, food, water, and shelter. They learn that different animals have different ways of fulfilling these needs. Explore the various ways that animals stay healthy and full of energy- from the water-loving camel to the navanax, who roams the ocean floor sucking up its food.

ALL ABOUT WATER (Ecosystems for Children Series); Schilessinger Science Library, c. 2001. Closed Captioned available; Teacher's Guide available; running time 23 minutes; Grades K – 4th recommendation.

Using a multicultural group of children, the video clearly explains the water ecosystem. Ecosystems are explained as well as the importance of water and terms are clearly explained. Freshwater and marine, combinations such as gulfs or bays are highlighted along with the animals that depend on the area. Video also includes a science experiment and a brief review at the end. School Library Journal states that the video is well paced, has excellent organization and is a valuable introduction to water ecosystems.

OTHER TITLES IN SERIES: ALL ABOUT FOOD CHAINS, c. 2000

ALL ABOUT ANIMAL LIFE CYCLES, c. 1999
ALL ABOUT FOREST ECOSYSTEMS, c. 2001
CHARACTERISTICS OF PLANTS, c. 2003
CONIFEROUS FORESTS, c. 2001
DECIDUOUS FORESTS, c. 2001
ECOSYSTEMS AND HABITATS, c. 2003
USING NATURAL RESOURCES, c. 2003
WATER CYCLE, c. 2003
WATER SUPPLY, c. 2003

ANIMAL GROUPS BEGINNING CLASSIFICATION: C. 2000; running time 15 minutes. Teacher's guide available.

This video helps children discover that animals can be classified into groups by characteristics they have in common. Learn about the traits that help distinguish each group of animals and how the traits help them to survive.

ANIMAL LIFECYCLES: c. 2002; running time 15 min.

Children learn that living things grow and change. They learn to compare animal parents and babies. They see that sometimes animal babies don't look like their parents. From tadpole to frog, egg to chicken, caterpillar to butterfly, and puppy to dog, students are introduced to the stages of animal lifecycles.

APPALACHIAN HARDWOOD FORESTS - A QUIET SUCCESS STORY.

This video produced with the help of the State of West Virginia Forestry Department, Westvaco, and Dan Parker is short and to the point giving much information about the history and replanting of the Appalachian Hardwoods. Though supported by industry, the video is full of fact and information (historical and current) and a good introduction to the Appalachian forest and wood industries.

Birds (Full Screen); c.1997; 30 minutes; libraryvideo.com

Students will explore the world of birds while learning how wildlife adapts to the environment in this live-action program, designed to support national education standards. Intended to teach children a hands-on approach to science, the program features a trip to a duck pond, a tour of a raptor recovery center and a look at the hobby of bird watching. Viewers will learn how birds' bodies are suited to their climate and habitat, the various foods that birds eat and how to identify birds by their appearance and calls. A teacher's guide is available online.

Butterflies (Full Screen); c.1997; 30 minutes; libraryvideo.com

Students will explore the world of butterflies while learning a hands-on approach to science in this live-action program, designed to support national education standards. The program covers the life cycle of a butterfly, from egg to cocoon to butterfly, and looks at the unusual ways in which a caterpillar uses its antennae, proboscis and feet. Viewers will learn how to make a butterfly mobile and visit a butterfly expert who explains the parts of a butterfly, how caterpillars use tricks to fool their enemies and how to tag a monarch. A teacher's guide is available online.

EYEWITTNESS: WEATHER; DK Studios; VHS format; c. 1996. Martin Sheen narrates this film that explores all atmospheric conditions.

Historical footage as well as tricks like showing a storm in slow through timelapse photography make this video good for most ages. Based on the very popular informational book series, like the book the film is full of facts and visual effects.

FARM ANIMALS: A FIRST LOOK; C. 2002. Teacher's Guide available; running time 15 mins.

The video depicts a working farm where students learn about cows, sheep, pigs, horses, chickens, ducks, goats, and even cats and dogs. A good introduction to farm animals, the video explains what the female, male, and baby of each species is called, and also relays some fun facts.

FARMING (Bill Nye the Science Guy); c.1999, 2004 Disney; running time 26 minutes. Farmer Bill (Bill Nye the Science Guy) discovers why farmers work their soil and finds out about the nutrients and elements that are needed for successful fams. In addition, Chris Ballew, of the rock group Presidents of the United States of America, sings a special version of the song "Peaches." This live-action, fast-paced program also

features comedy, music videos, interviews with real scientists and hands-on experiments to make the concepts presented understandable and fun.

GETTING TO KNOW SOIL: c. 1998; Teacher's Guide available; running time 23 mins.

Children learn all about soil in this engaging video when detective Terra Firma and his assistant dig below the surface to unearth the facts. Witness how soil is formed; the properties and uses of sand, clay, and loam soil, among other things.

GROUNDWATER GUARDIAN; Groundwater Guardian Foundation; www.groundwater.org

A grass roots effort to encourage communities to begin and enhance groundwater awareness and protection. The video introduces the community program, how to's and how to have your community become designated and a Groundwater Guardian community. Their motto is "Saving the world's groundwater one community at a time." For more information about the program investigate the web site above.

HABITATS OF THE WORLD; Discovery Channel School c. 1998 (TLC elementary school) No Review Uses 3-6

Home Sweet Home (Full Screen) DVD, c.1997, libraryvideo.com

Students will explore animal homes, including those of barn swallows, squirrels and wasps, in this live-action program, designed to support national education standards. Intended to teach children a hands-on approach to science, the program looks at how beavers and weaver birds build their homes, and explores the plants and animals that live in a pond neighborhood. Viewers will learn how animals use materials in nature to build homes, as well as how to collect the materials and build a nest. A teacher's guide is available online.

THE IMPORTANCE OF PLANTS: c. 2002; Teacher's Guide available; running time 15 mins.

Children see that plants are the basis of the food chain in every type of habitat. Discover that plants make their own food, using air, water, and sunlight. See and identify many different kinds of plant and the importance to all living creatures.

LANDFORMS #1: c. 1998; Teacher's Guide available; running time 26 mins. Viewers go along for a ride in a "traveling machine" to learn about the form and function of landforms. Appreciate the beauty and quality of the world's natural features and how communities are made unique by the landforms around them. Features include oceans, rivers, streams, mountains, hills, plains, valleys, plateaus, deserts, islands, and more.

LEARNING ABOUT NATURAL RESOURCES: c. 2003; Teacher's Guide available; running time 15 mins.

Students learn about three types of natural resources: inexhaustible, renewable, and nonrenewable. Then they learn to identify the earth's wide variety of natural resources- air, water, oil, coal, gas, forests/trees, soil, rocks, plants, and minerals. Finally, they will see how we use each of these natural resources in everyday life.

Magic School Bus Holiday Special (on recycling); c. 2002

Based on the books by Joanna Cole with illustrations by Bruce Degen, this animated holiday special features the voices of Lily Tomlin and special guest Dolly Parton. During a class trip to Murph's recycling plant, Wanda's toy soldier is accidentally turned into plastic pellets. Unable to get into the production of the Nutcracker ballet without her toy soldier, Wanda wishes for a world without recycling. Ms. Fizzle decides to show Wanda and the other children the importance of recycling by unrecycling everything in Walkerville.

PAPER (Backyard Safari Series); c. 1997; 30 minutes.

Students will learn how paper is made and recycled in this live-action program, designed to support national education standards. Intended to teach children a hands-on approach to science, the program explores what items are made of paper and visits a paper mill to show how paper is made from trees. Viewers will learn the importance of paper recycling and see how the process works, as well as learn how to make their own homemade paper from a few simple ingredients. A teacher's guide is available online.

PARTNERSHIPS FOR WATERSHEDS; Soil Conservation Service, U S Department of Agriculture; Partnership for Watershed Volunteer Organization.

Partnerships for Watersheds is a grassroots effort to address water quality and problem issues on a local level. The video (13 minutes) explains what a watershed is, mentions our watershed (Ohio Valley) and the introductory scenes look like our area. Basic scenes in the film demonstrate the how and where of non-point source pollution. The emphasis is how local residents effect and affect change and make the difference in water quality through "partnerships" The video takes several local areas and explains how through establishing partnerships water improvement plans and results were accomplished. This video is to be used for those who wish to establish this nation wide volunteer program in their community.

PLANT LIFECYCLES: c. 2002; Teacher's Guide available; running time 15 mins. With the help of a friendly scarecrow, students identify the basic needs of plants. They learn how seeds grow into plants and that the plant goes through changes called a lifecycle. They witness each step as seeds germinate and grow into flowering plants which produce seeds that eventually germinate and grow again.

PLANT PARTS AND THEIR USES: c. 2000; Teacher's Guide available; running time 15 mins.

Learn about each part of the plant (roots, stems, leaves, fruit, and seeds) and its purpose. Animations help students realize important concepts like photosynthesis, and water moving into the roots and stems. On-screen children ask important questions, correct common misconceptions, and identify the parts of plants we eat.

POLLUTION SOLUTIONS (Bill Nye the Science Guy); c.1996, Disney; running time 26 mins. Bill Nye the Science Guy explores solutions to the worldwide problem of pollution, from cleaning water to cleansing air, in this episode of the *Emmy Award*-winning *Disney Channel* series, featuring an interactive question-and-answer format and hands-on activities. In this episode, Bill demonstrates how important it is for all humans to prepare for the future by recycling, researching and developing innovative solutions to combat pollution. Designed to correlate with National Science Standards, the program includes a teacher's guide filled with suggestions for extension activities and classroom experiments.

POND ANIMALS: c. 1993; running time 30 mins.

Narrated from the point of view of a dragonfly, frog, duck, and salamander, the program follows pond animals from infancy to young adulthood. Watch these pond animals grow, share their adventures, and learn about their fascinating world.

Rocks and Minerals (Full Screen); c. 2000; 20 minutes; libraryvideo.com Featuring peer hosts, colorful graphics, animated sequences and detailed diagrams, this educational live-action program teaches children all about rocks and minerals. Featuring footage of various rock formations and a field trip to a quarry, the program covers the characteristics of different rocks and minerals as well as how rocks are formed and the layers of the Earth.

STORM SEWERS AND WHERE THEY GO (STORM SEWERS DON'T GO TO THE SEWER PLANT); National Association of Conservation Districts; CSR Productions; Delaware County Conservation District; Pennsylvania Department of EPA; Jolly, Bill, vocals; c. 1997.

This musical video, (10 minutes) through a rap song, shows watersheds, explains estuary, non-point source pollution and the individual impact on water. Mostly in an urban and suburban area, children are used as actors in this catchy video that explains storm sewers. The video is suitable for all ages and is very good to introduce water quality concepts, why it is important to have good water quality and what even one individual can do to improve water quality.

That's My Baby (Full Screen); c. 1997; 30 minutes; libraryvideo.com
Students will learn all about animal babies, including how they are born, learn to walk
and develop, in this live-action program, designed to support national education
standards. Intended to teach children a hands-on approach to science, the program
captures baby birds hatching out of their shells, watches a baby elephant walk within
minutes of birth and follows a group of puppies during their first eight weeks of life.
Viewers will learn how the needs of baby animals are similar to and different from
human babies, and watch youngsters take care of their baby pets. A teacher's guide is
available online.

Learn about our world and where we are. Discover the Earth is made up of land and water. Identify the seven continents and the four oceans. Compare the Earth to a map and a globe and understand the placement of the equator and the poles. See how the Earth moves around the Sun, creating day and night in different places at different times.

Trees (Full Screen); c. 1997; 30 minutes; libraryvideo.com

Students will explore the wonders of trees, including how trees grow from tiny seeds to towering giants, in this live-action program, designed to support national education standards. Intended to teach children a hands-on approach to science, the program examines the similarities of trees, such as roots, bark, branches and leaves, and differences, including how some trees bear fruit while other don't. Viewers will learn what types of animals make homes in trees and meet a horticulturist who explains how to care for trees. A teacher's guide is available online.

USES OF ROCKS AND MINERALS: c. 1999; Teacher's Guide available; running time 15 mins.

The rocks and minerals that form within the Earth are used to make many important materials. Witness how rocks are mined, processed, and then constructed into glass, cement, bricks, houses, roads, and other objects used in our everyday lives.

THE WATER CYCLE, Earth Science in Action; Schlessinger Science Library; Schlessinger Media; c. 2000.

A fun and informative series using "visitors" from another galaxy to explain the water cycle. 23 minutes, teachers's guide included.

Working Together (Full Screen); c.1997; 30 minutes; libraryvideo.com
Students will learn why humans, animals and insects work together in this live-action
program, designed to support national education standards. Intended to teach children
a hands-on approach to science, the program looks at how termites, ants and bees
work together to build and sustain colonies, and how people work together to organize
and accomplish big projects. Viewers will learn how to set up their own ant farm in a jar
and make beeswax candles. A teacher's guide is available online.

ADULT'S MATERIALS

ADVOCACY GUIDES/ISSUE INFORMATION - Adult Reading Level

AGENDA 21: The Earth Summit Strategy to Save Our Planet; Sitarz, Daniel, editor; Simon, Paul, contributor; Publisher: Earth Press; c. 1994.

This is an abridged edition of the 900-page plan of action created at the 1992 Earth Summit in Rio de Janeiro. The agreement was unanimously adopted by all countries in attendance at the UN Conference on Environment and Development. Considered a "sweeping blueprint" of action the subjects cover the quality of life, use of

natural resources, sustainable growth, waste treatment issues and more. The abridged addition is easy to read by the lay person.

CADILLAC DESERT: The American West and Its Disappearing Water; Reisner, Marc, author; New York: Penguin Press; c. 1993 (paper), 1987.

From Publishers Weekly

In this stunning work of history and investigative journalism, Reisner tells the story of conflicts over water policy in the West and the resulting damage to the land, wildlife and Indians. PW stated that this "timely and important book should be required reading for all citizens." Copyright 1987 Reed Business Information, Inc.

In an area such as our where we use damns to help with flood control, it is unimaginable to think about not having water and using damns to collect water for distribution. Since we are moving to a global economy, this information could translate not only for future options and thinking about the United States but also other aired lands such as the Middle East and parts of Africa. Other reviewers state this is an important book about the history of water in the west and is critical of the Bureau of Land Reclamation and the Army Corps of Engineers. Reviewers also state that Reisner tries to be balanced. All aspects of the economical impact of water and the lack of are covered as well as projections as to what could happen in the event of disasters. Most reviewers stated the importance of reading this book not only as information but to be aware of future consequences and questions that will arise in the future. Explanation of how the west obtained water and all the human population and industry thereafter is outlined. Used in many college cources.

Although published in 1987, reviewers stated that the information is still applicable. Reading Level: Adult

50 SIMPLE THINGS YOU CAN DO TO SAVE THE EARTH; Earthworks Group, author/illustrator; Publisher: Bathroom Readers Press (original), revised. c. 1989, revised 1995.

Like the book for children, this revised edition to commemorate the 25th anniversary of Earth Day that gives information about the latest research on global warming, ozone issues and endangered species. Interesting facts and figures are included and the list for simple things that can be done to help the environment. Suggestions are "easy to live with" and often save money as well. Additional information reference material is also included but copyright date must be taken into consideration.

FOOD AND WATER: THREATS, SHORTAGES AND SOLUTIONS; Tesar, Jenny E. & Cayne, Bernard S., (editor); ? : Facts on File, Inc.; c. 1992.

FROM RECLAMATION TO SUSTAINABILITY: Water, Agriculture and the Environment in the American West; MacDonnell, Lawrence J., author; Denver, Colorado: University Press of Colorado; c. 1999.

Editorial Reviews from Amazon.com

About the Author

Lawrence J. MacDonnell is a cofounder of Stewardship Initiatives, a nonprofit

organization working with community-based conservation partnerships in the West. He has worked as a lawyer and a policy consultant on a wide range of environmental and natural resources issues during his career. He was the first director of the Natural Resources Law Center at the University of Colorado School of Law from 1983 to 1994.

Book Description

From Reclamation to Sustainability tells the story of four places in the West-the Arkansas Valley and the Grand Valley of Colorado, the Truckee-Carson basins of California and Nevada, and the Yakima Basin in Washington-where development and use of water, primarily for irrigated agriculture, have been central to economic and social development. In these places (and many others), the reclamation vision that helped settle the West now competes with a vision of a sustainable West. All four regions tell of the essential role water has played in western agriculture and the importance of this agriculture for settlement of much of the West. They also exemplify the many difficulties of turning prairie and desert into productive croplands, and MacDonnell describes the sometimes extraordinary human commitment and effort that made this possible.

Now, however, western water resources have been developed beyond their sustainable capacity in an attempt to irrigate as much land as possible, and MacDonnell illustrates the consequences of this overdevelopment, including declining rural communities, dewatered streams incapable of supporting native species, and degraded water quality. He also provides examples of efforts to repair some of the damages and of the challenges involved in such restoration.

MacDonnell argues that sustainable use of the West's water resources depends on reducing the gap between diverted water and used water, restoring the functional ecological integrity of water sources, allowing uses of developed water to change, and effective collaborative public/private processes that help reconcile competing interests in water. He concludes that the manner in which the West moves toward sustainable use of its limited water resources-particularly as it affects irrigated agriculture-matters at least as much as achieving sustainable use. It matters because the choices we make will have important consequences for the future West.

Reading Level: Adult

GILA: The Life and Death of an American River; McNamee, Gregory, author; New York: Orion Publishers: c. 1994.

OUT OF PRINT but can be found used on Amazon.com. Black and white photographs (32).

From Publishers Weekly

Arizona's Gila River and its tributaries once formed the most important water system in the Southwest. Today, it has been bled dry; its wildlife and vegetation have been mostly destroyed and the lower river is on the EPA Superfund cleanup roster. McNamee (Named in Stone: An Arizona Anthology) reviews the geology and history of the Gila and chronicles its decline in a sad, familiar story of human impact on Western lands. Mining operations stripped mountains, diverted rivers and chewed up forests. Large-scale ranching, inappropriate agriculture, dams and profligate use of water have added to the river's demise. McNamee charges that Phoenix has the highest rate of water consumption in the nation, at one-fourth the cost of water in New York City; golf courses

use up to one million gallons a day. To restore the river, he calls for reforesting the highlands, appropriate agriculture, removal of the dams and new federal policies. This is important reading for environmentalists. Photos.

Copyright 1994 Reed Business Information, Inc.

From Library Journal

In this popular environmental history McNamee, the book columnist for Outside magazine, gives a well-crafted account of the birth, life, and death of one of the Southwest's major rivers. This chronological approach works well in tracing the development, decay, and ultimate desiccation of the Gila River. The work adds dimensions not found in earlier historical accounts of the river and demonstrates an environmental consciousness not found in Edwin Corle's Gila: River of the Southwest (1951), which was written at a time when conquering and subduing the wilderness was an acceptable approach. McNamee's book does share much the same passion for the river as does Ross Calvin's River of the Sun (1946), though McNamee's work spares the reader some of Calvin's florid prose. The lack of notes is offset by a lucid bibliographic essay. Highly recommended for general readers and undergraduates. - Daniel Liestman, Seattle Pacific Univ. Lib. Copyright 1994 Reed Business Information, Inc.

Reading Level: Adult

LAST OASIS: Facing Water Scarcity; Postel, Sandra & Starke, Linda, (editor); W.W. Norton & Company, Publisher; 2nd edition, c. 1997.

Part of the "Worldwatch Environmental Alert" Series From Book News, Inc.

Postel, vice president for research of the Worldwatch Institute, examines the worldwide limits-ecological, economic, and political<-; ->of water, and discloses existing methods to make water go further, decreasing the likelihood of both scarcity and conflict. Annotation copyright Book News, Inc. Portland, Or.-*This text refers to the Paperback edition.*

From <u>The WomanSource Catalog & Review: Tools for Connecting the Community</u> for Women; review by SH

Imagine America going to war over water. Don't think it will ever happen? Think again. Water scarcity is a real problem, one which is growing exponentially. The fact that water seems so readily available and inexpensive (the "illusion of plenty" as the author states it), and people's overuse and lack of respect towards this life-sustaining resource are only some of the causes for the water crisis. Sandra Postel has written a stunning account which discloses the atrocious amount of neglect and mismanagement of water. Fortunately, there are solutions which offer hope for restoring and sustaining our essential lifeline, all of which are economically and environmentally friendly. Last Oasis is a red flag to farmers, industry and families, warning us that if the alternatives are not enacted, we are, most assuredly, destined for a worldwide crisis.-This text refers to an out of print or unavailable edition of this title.

About the Author

Sandra Postel lives in Amherst, Massachusetts, where she directs the Global Water Policy Project and researches international water issues and strategies. She is a Pew

Fellow on Conservation and the Environment and a Senior Fellow of Worldwatch Institute, where she served six years as vice president for research. Also from Amazon.com:

Book Description

As we approach the twenty-first century, we are entering a new era-an era of water scarcity. We have taken for granted seemingly endless supplies of water flowing from reservoirs wells, and diversion projects; access to water has been key to food security, industrialization, and the growth of cities. In this book from the Worldwatch Institute, Sandra Postel explains that decades of profligacy and mismanagement of the world's water resources have produced signs of shortages and environmental destruction. She writes with authority and clarity of the limits-ecological, economic, and political-of this vital natural resource. She explores the potential for conflict over water between nations, and between urban and rural residents. And she offers a sensible way out of such struggles. Last Oasis makes clear that the technologies and know-how exist to increase the productivity of every liter of water. But citizens must first understand the issues and insist on policies, laws, and institutions that promote the sustainable use of water.

Other reviewers questioned the validity of the book since the 1997 publishing date. It is not current considering some of the projects and initiatives states as "pending" have been started or completed. But with this questioning, was a yes it is relevant because of the important research and information given. Re-published in 1997 in conjunction with the PBS series "Cadillac Desert".

Reading Level: Adult

NATURE'S SERVICES: Societal Dependence on Natural Ecosystems; Daily, Gretchen C., editor; Washington, D.C.: Island Press; 1997.

This book begins with giving all the contributors names and addresses. A scholarly book about ecosystems and our dependence (especially taken for granted) on those systems. Daily explains that "Ecosystem services are the conditions and processes through which natural ecosystems, and the species that make them up, sustain and fulfill human life. They maintain biodiversity and the production of ecosystem goods, such as seafood, forage, timber, biomass fuels, natural fiber and many pharmaceuticals, industrial products, and their precursors. The harvest and trade of these goods represent an important and familiar part of the human economy. In addition to the production of goods, ecosystem services are the actual life-support functions, such as cleansing, recycling, and the renewal, and they confer many intangible aesthetic and cultural benefits as well." We take for granted the purification of the air and water, detoxification and decomposition of wastes generating and renewing soil, pollination, pest control, seed dispersal, protection from ultraviolet rays, stabilization of climate, and beauty and stimulation for the human spirit. This book helps the reader to become aware and understand human's dependence on nature.

A SAND COUNTY ALMANAC and Sketches Here and There; Leopold, Aldo, author; Schwartz, Charles W., illustrator; New York: Oxford University Press; c. 1949, 1968 (paper); second edition 2000.

Usually given to participants of Project Leopold workshops, this book of essays originally published in 1949 is part observation, part ecology lesson and part philosophy. Many essays were previously published in much earlier in publications like *Outdoor America, Journal of Wildlife Management, Audubon and Journal of Forestry.* The essays, in monthly entries, depict a Wisconsin sand county country side. Leopold was the U. of Wisconsin chair of game management and was an advisor on conservation to the UN. He is credited with changing the way professionals looked at wildlife and forest management and important in the advancement of best management practices as well as the national park land management and conservation in general. Reading Level: Young Adult & up

OF WOODS AND WATERS: A Kentucky Outdoors Reader; Ron Ellis, editor; University Press of Kentucky; c. 2005.

Bringing together fiction, nonfiction, and poetry from many of the state's most famous writers, *Of Woods and Waters* is the first book of its kind to celebrate the Kentucky outdoors. It collects the authentic written and visual experiences of Wendell Berry, Bobbie Ann Mason, Barbara Kingsolver, Thomas D. Clark, Jesse Stuart, James Still, Harriette Arnow, Harry Caudill, Silas House, George Ella Lyon, and Robert Penn Warren, among others. A number of the pieces are original to this volume, which also includes art by Harlan Hubbard, Rick Hill, and Paul Sawyier. Featuring both established and emerging authors, *Of Woods and Waters* blends a range of writing styles and outdoor experiences to create a truly unique vision of Kentucky's land and life.

CURRICULUM GUIDES

Exploring Energy Waterwheels, Windmills, And Sunlight - ARIES; Astronomy-Based Physical Science; Grossman, Marvin C., Shapiro, Irwin I., Ward, R. Bruce, Black, Dana R., authors; Watertown, MA: Charlesbridge Publishing; c. 2001.

Published in conjunction with Harvard College and the Smithsonian Center for Astrophysics. www.charlesbridge.com

Workshops in the use of these publications are available and recommended. A sequential and cumulative construct of applied science, this teacher's curriculum with student's workbook explores energy from how we "use energy to get things done" to flowing water, wind energy and solar energy. Additional purchase of kit contains everything needed to complete all projects except readily available supplies (liter bottles, etc). Based on hands-on projects and intuitive and prediction skills, students learn a solid, concrete basis in physics and physical science. Recommended for students third and up but most third graders need additional guidance. Student's workbook contains lists of materials needed for projects, directions and challenging questions that utilize scientific writing skills. This program was developed under a grant form the National Science Foundation, Harvard and the Smithsonian. Advertising information stated modules were field tested and evaluated by teachers across the nation.

KEEPING A NATURE JOURNAL; Leslie, Clare Walker, & Roth, Charles, authors; Storey Books Publishers; 2000.

This book gives the basic information about how to keep a journal and why, how to look at nature and record it and encourages taking a moment to think about the environment. Leslie gives seasonal prompts to help the process and an overview of journaling styles. She also has chapters on sketching, teaching journaling to all ages and how to journal with school groups. There is a suggested reading list, list of resources and a suggested scale for teachers to help assess nature journaling skills. It is a lovely book and sturdy, made to be used and used often. Even Jane Goodall uses this book.

PAPER MAKING WITH PLANTS, Creative Recipes and Projects Using Herbs, Flowers, Grasses & Leaves; Hiebert, Helen, author; Pownal, Vermont: Storey Books; 1998.

If you ever loved making paper with the simple instructions given in PLT or other workshops and want to take it to the next levels, this is the book for you. Written for the lay person, it explains each term and processes fully. Illustrations of projects are clear and informative. Suggestions from other paper artists is included by Hiebert whose work has been featured in *House & Garden* and *Country Living* magazines and exhibited in New York galleries. She includes instructions on how to make you own equipment is contained in the beginning of the book as well as tips on setting up your work area and taking care of the equipment. The pages are well laid out and include a glossary, reading list and resource guide. Chapters included "Collecting Plant Fiber", "Getting Ready to Make Paper", "Processing Plant Fiber", "Making Paper", and "Recipes, Techniques, and Projects".

THE WORM CAFÉ, Payne, Binet, author; Bourgeois, Paul E., illustrator; Kalamazoo, Michigan: Flower Press; 1999.

The sub-title of the book is Mid-Scale Vermicomposting of Lunchroom Waste - A Manual for Schools, Small Businesses, and Community Groups.

This book supports project-based learning and encourages community interaction to learn about the environment. It is based on a project started in 1992 at the Laytonville Elementary in Mendocino County, California. The step by step book begins with a chapter on reduce, reuse and recycle and also includes a chapter on needs assessment, materials, choosing a location, creating the best environment for worms, worm anatomy, managing food-wast flow at school and harvesting. This book contains reproducible posters, forms (such as dear parents letter, audit sheet), lesson plan, work sheets with pre and post tests, annotated list of children's books and books for curriculum and teacher resources. Pen and ink and black and white photographs

INTERPRETATIVE GUIDES

illustrate the book.

ENVIRONMENTAL INTERPRETATIONS: A Practical Guide for People with Big Ideas & Small Budgets; Ham, Sam H., author; Golden, Colorado: Fulcrum Press (North American Press): 1992.

Often used as a textbook for college courses for Parks and Rec. majors, this book highlights who, what, when, where and most importantly, the why of presenting and interpreting nature. Ham, professor of Recreation and Tourism, in the College of Forestry, Wildlife and Range Sciences at the University of Idaho at the time of publication, also acknowledges that this is often done on little or no budget monies. In the eleven chapters he outlines guidelines; interpretive devices; adapting audiovisuals, photography and illustrations for use in presentations; and even the use of puppets. There are 29 case studies written by real people who needed to communicate some aspect of nature or the environment and just how they did it. He states, "Environmental interpretation involves translating the technical language of natural science or related field into terms and ideas that people who aren't scientists can readily understand." This handbook helps the reader gain all the skills necessary, after learning the scientific preparation, to present and interpret the environment.

INTERPRETATION FOR THE 21ST CENTURY: Fifteen Guiding Principles for Interpreting Nature and Culture; Beck, Larry, & Cable, Ted T., Ted, authors; Champaign, IL: Sagamore Publishers; 2nd edition, 2002.

Dr. Beck is on the faculty in the Department of Recreation, Parks and Tourism at San Diego State University with experience as an interpreter for the National Park Service. Dr. Cable is on the faculty in the Department of Horticulture, Forestry and Recreation Resources at Kansas State University and has experience as an interpreter for a Forest District. This book is considered THE handbook for interpreting nature and culture. The fifteen principles outlined include grabbing the audience, finding the story, bringing the past alive, using technology, finding support, composing presentations, interpreting beauty, and finding the passion to talk about a space over and over again. This is a straight forward, plain reading approach to interpretation.

THE INTERPRETER'S GUIDEBOOK: Techniques for Programs and Presentations.

INTERPRETING OUR HERITAGE; Tilden, Freeman, author; Chapel Hill: University of North Carolina Press; c. 1977.

Even though this book was first written in1957, this book is often quoted and used in teaching interpretation skills. The book presents fundamentals and the underlying philosophy of interpretation. This book helped define the roll of guides and interpreters in our state and national parks and historical monuments. He outlines six principles of interpretation in part one of the book highlighting acknowledging the visitor's interest, using materials and subjects at hand, creating story lines, sparking interest and addressing younger audiences. In part two of the book he helps the reader form the text of the presentation, how to make the past come alive, how to judge when enough is enough both in presentation and display, and other subjects.

PAMPHLETS/BOOKLETS

GOUND WATER AND SURFACE WATER: A Single Resource; U.S. Geological Survey Circular 1139; Winter, Thomas C., editor;

VIDEOS