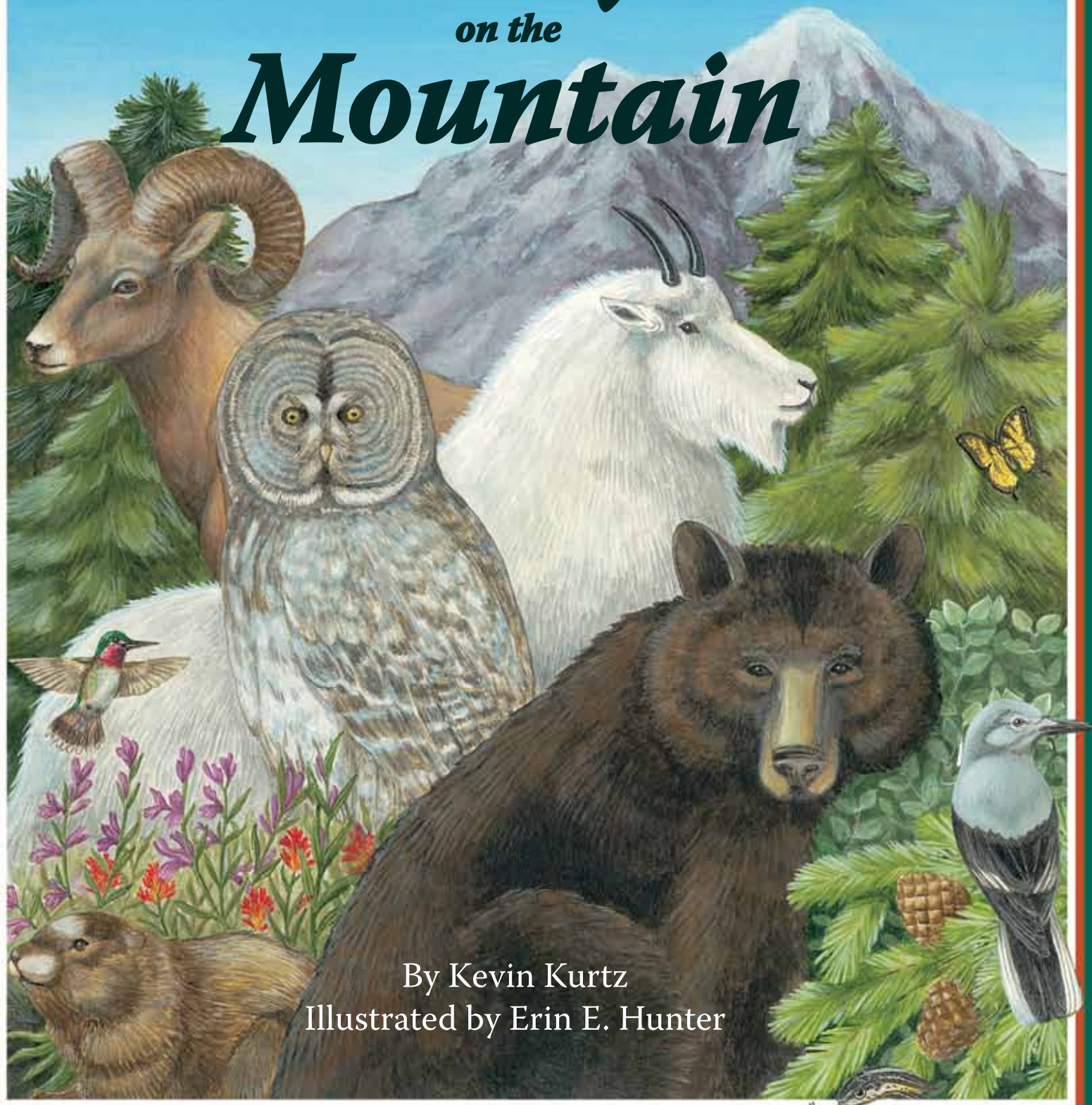


A Day *on the* *Mountain*



By Kevin Kurtz
Illustrated by Erin E. Hunter

A Day on the *Mountain*

Come spend *A Day on the Mountain*, the follow up to Kevin Kurtz's award-winning first book, *A Day in the Salt Marsh*. Rhyming verse and vibrant illustrations take readers up a mountain from the forested bottom to the snow-covered top. While climbing, they witness the changing habitats, and meet the plants and animals that live there.

Animals in the book include:

Black bears	Great Gray Owl
Garter snake	Clark's nutcracker
Bighorn sheep	Hummingbird
Yellow-bellied marmot	Mountain goats
Salamander	Snow fleas

Free online resources and support for the book at www.ArbordalePublishing.com include:

- For Creative Minds as seen in the book (in English & Spanish):
 - Mountain Ecosystems
 - Mountain to Arctic Pole Map Comparison
 - Above or Below the Tree Line?
 - Match the Animals
- Teaching Activities:
 - Reading Questions
 - Language Arts
 - Science
 - Math
 - Geography
 - Coloring Pages
- Interactive Quizzes: Reading Comprehension, For Creative Minds, and Math Word Problems
- English and Spanish Audiobooks
- Related Websites
- Aligned to State Standards (searchable database)
- Accelerated Reader and Reading Counts Quizzes
- Lexile and Fountas & Pinnell Reading Levels

eBooks with Auto-Flip, Auto-Read, and selectable English and Spanish text and audio available for purchase online.

Thanks to Kathy Brown, East District Naturalist, Rocky Mountain National Park, for verifying the accuracy of the information in this book.



Kevin Kurtz has combined his love of writing and nature in his two books, *A Day on the Mountain* and *A Day in the Salt Marsh*. Kevin has worked as an environmental educator and curriculum writer for organizations such as the South Carolina Aquarium, the Center for Birds of Prey, the South Carolina Department of Natural Resources, and the Science Factory Children's Museum. He lives in Charleston, South Carolina where he continues writing and visiting schools to teach children about the wonders of nature.

Erin Hunter specializes in entomological and botanical illustration. Her portfolio includes print and online design projects for clients ranging from Sally Ride Science to culinary groups. Erin has taught botanical illustration and field sketching at UC Santa Cruz and interned as an illustrator at the California Academy of Sciences and the Smithsonian Institute's National Museum of Natural History. She lives with her husband on California's Monterey Peninsula. When not sketching and painting, she tends to flowers, fruit trees, and vegetables in her backyard garden. *A Day on the Mountain* is her first fully illustrated book.

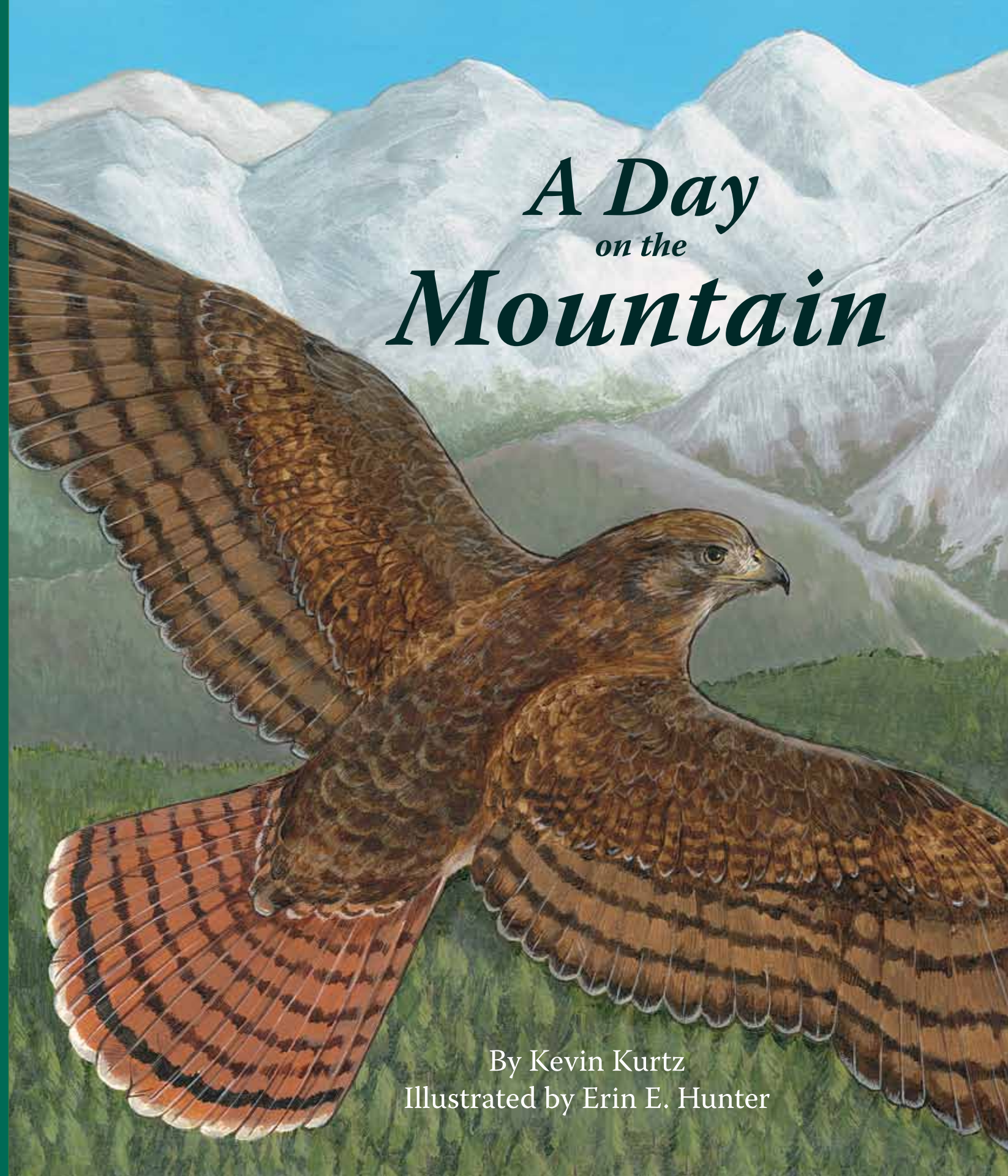


Kevin Kurtz



Erin E. Hunter

A Day on the *Mountain*



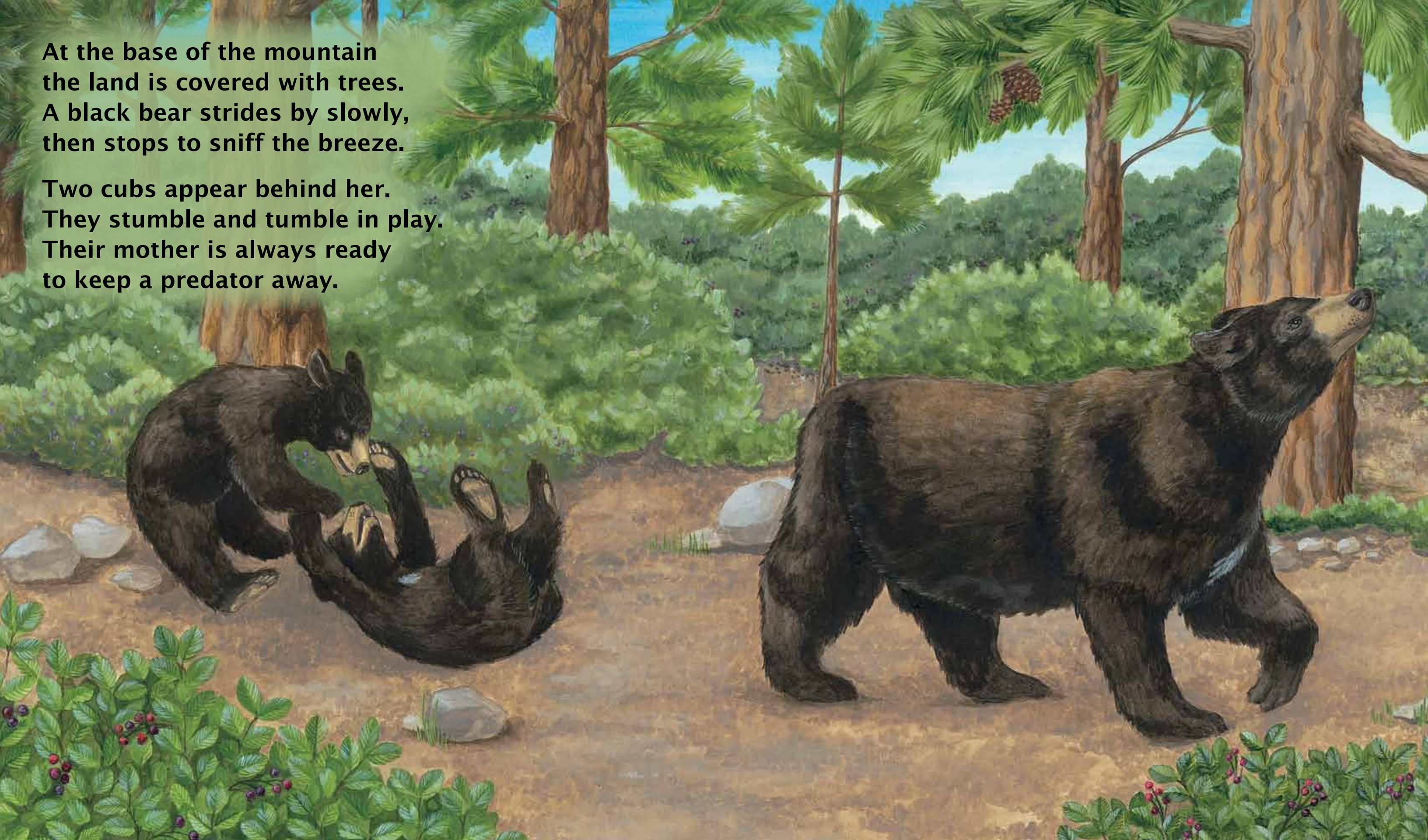
By Kevin Kurtz
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**Hiking up a mountain
from the forest to the snow,
the plants and animals are different
the higher up you go.**



**At the base of the mountain
the land is covered with trees.
A black bear strides by slowly,
then stops to sniff the breeze.**

**Two cubs appear behind her.
They stumble and tumble in play.
Their mother is always ready
to keep a predator away.**





Keep hiking up the mountain, and it may be hard to see, but a single Great Gray Owl perches in a tree.

It looks like it is coughing—a pellet drops from its beak. It's the leftover hair and bones of a vole it ate this week.



One thousand more feet above sea level,
on the ground where needles lie,
a garter snake is molting.
Can you see its cloudy eye?

Its skin snags on a twig
and slowly starts to shed.
The snake slithers from its skin.
Just look at its shiny head!



For Creative Minds

The For Creative Minds educational section may be photocopied or printed from our website by the owner of this book for educational, non-commercial uses. Cross-curricular teaching activities, interactive quizzes, and more are available online. Go to www.ArbordalePublishing.com and click on the book's cover to explore all the links.

Mountain Ecosystems

A plant or animal's *habitat* is where it lives and can get food. The habitat is part of an *ecosystem* where many different plants and animals interact. Ecosystems include living and non-living things (like soil and rocks).

Ecosystems change with the height above sea level (*elevation*) and the distance from the equator. The climate gets colder and harsher the higher you climb or the closer you are to the poles.

North Pole / Arctic



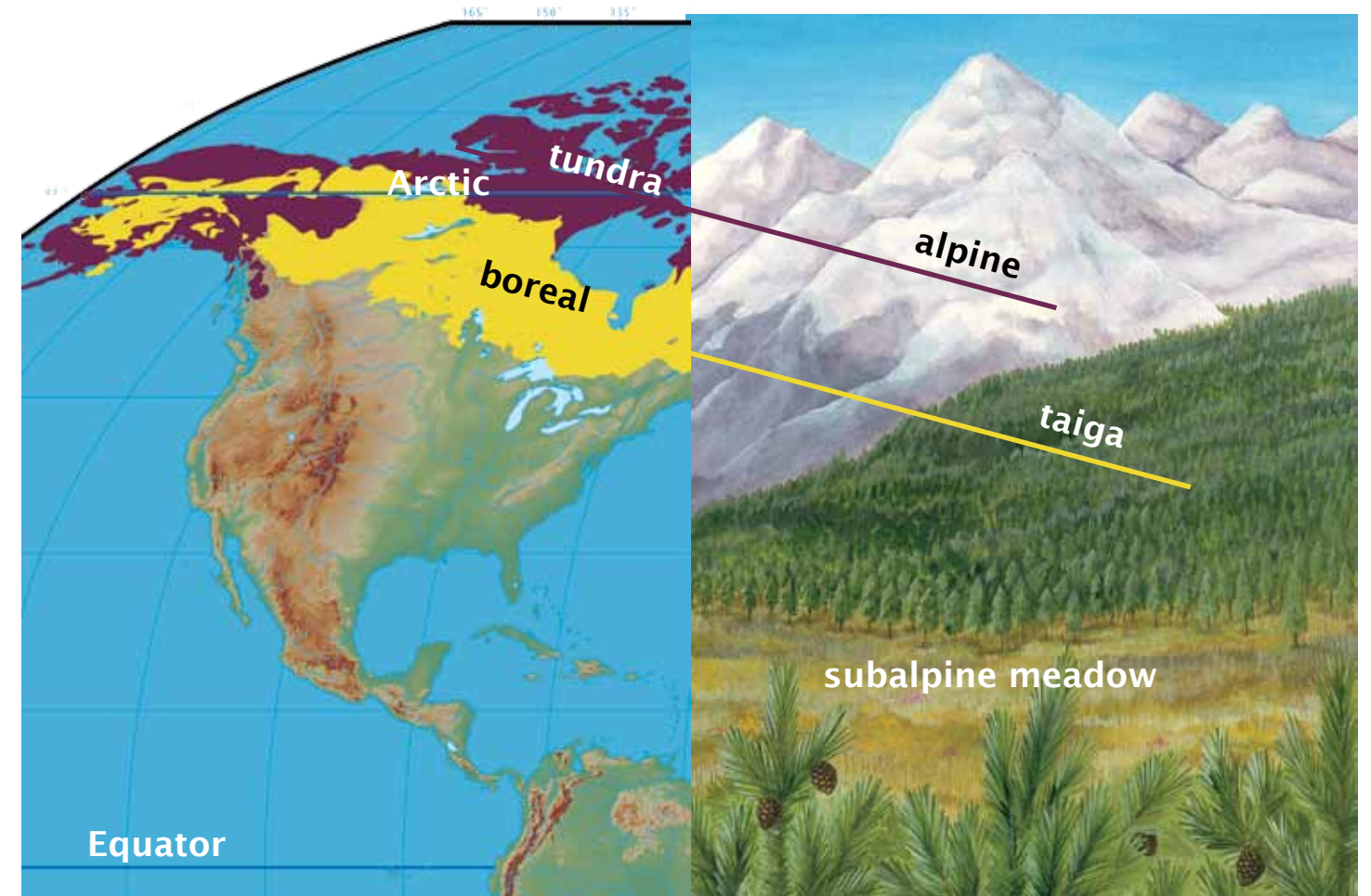
South Pole / Antarctica

8500 ft. / 2590.8 m
8000 ft. / 2438.4 m
7500 ft. / 2286.0 m
7000 ft. / 2133.6 m
6500 ft. / 1981.2 m
6000 ft. / 1828.8 m
5500 ft. / 1676.4 m
4500 ft. / 1371.6 m
4000 ft. / 1219.2 m
3500 ft. / 1066.8 m
3000 ft. / 914.4 m
2000 ft. / 609.6 m
1500 ft. / 457.2 m
1000 ft. / 304.8 m
500 ft. / 152.4 m
Nivel del Mar

The *alpine* or *tundra* ecosystems are treeless areas high on mountains or in the Polar Regions. Because of the strong winds and cold temperatures, both ecosystems are snow or ice-covered with low-growing lichens, mosses, and stunted shrubs. Plants and animals living in these areas are well adapted to cold, harsh climates. Trees cannot survive here; the line where trees stop growing is called the *tree line*.

Subalpine ecosystems are mountain ecosystems found below the tree line, including both *boreal* (sometimes called *taiga*) forests and grassy meadows. This ecosystem is similar to forests in the Sub-Arctic. (Sub means under, beneath, or less than, as in subtraction.) The subalpine climate is still cold but not as harsh as the alpine or tundra climates. The wind, especially at the tree line, is still a strong force, causing some trees to bend into strange shapes, or have leaves only on one side (the side away from the wind). The *conifer* trees that grow here keep their needle-like leaves year round and drop pinecones. Winters are long and harsh with a very short "summer" growing season.

The lower-elevation mountain ecosystems depend on where in the world they are. They might be deserts, river valleys, meadows, or forests. There are snow-capped mountains close to the equator that have tropical rainforests at lower elevations!



Above or Below the Tree Line?

Which of these would you most likely find above the tree line?



Bears, foxes, mice, birds and humans are just a few of the many animals that love eating wild berries.

Lichens look like moss but are algae and fungus combined. Deer, mountain goats, and reindeer eat it.



Conifers provide food (pinecones) and shelter (year-round leaves) for a wide variety of animals.

Wildflowers grow without any help from humans. Bees and hummingbirds rely on the pollen.



Answer: lichens

Match the Animals

Match the animal to its description. Use the animal-class color-coding to help. Answers are upside down on the next page.

1

These **mammals** are not always black. They can be brown or even a reddish-brown. Fruits and nuts are among their favorite foods but they will also eat insects, fish, and small mammals. They will even eat garbage! These animals can be found in forests and mountain ecosystems up to the tree line.

garter snake



Thamnophis sirtalis

2

These **birds-of-prey** live in the boreal forests and high taiga mountain ecosystems of the Western U.S. They are the largest animal of their kind in North America. They can hunt and capture food under snow using their sharp hearing. Like all other animals of this type, they throw up pellets of undigested food consisting of animal bones and fur.

bighorn sheep



Ovis canadensis

3

These **reptiles** are found in backyards, meadows, and mountain forests. They eat earthworms, insects, frogs, lizards, and mice. Like other snakes, they shed their scaly skin as they grow. They hibernate during the winter, often coiling with others of their same kind for body warmth.

Clark's nutcracker



Nucifraga columbiana

4

Found high in the mountain pine forests during the summer, these **birds** use their long beak to open pinecones to get the seeds. Using a special pouch, they can carry up to 150 seeds and bury them for later. By doing this, the birds help to spread pine seeds for new trees to grow. They also eat insects, small mammals, and meat from already dead animals (carrion).

black bears



Ursus americanus

5

Easily recognized by their curly horns, these **mammals** graze grasses from deserts to high mountain meadows and migrate up and down the mountains depending on the season. The rams (males) fight each other with their horns. The winner gets the girl!

Great Gray owl



Strix nebulosa

long-toed salamander



Ambystoma macrodactylum

broad-tailed hummingbird



Selasphorus platycercus

mountain goat



Oreamnos americanus

snow flea



Hypogastrura nivicola

yellow-bellied marmot



Marmota flaviventris

There are many different species of this tiny **bird** found in ecosystems all over the world. The broad-tailed variety lives high in the subalpine meadows of the Rocky Mountains and down into Mexico. By drinking nectar, they help to pollinate flowers.

Related to squirrels and woodchucks, these yellow-bellied **mammals** live social groups called colonies in alpine meadows. Depending on the altitude of their burrows, they generally hibernate from fall to spring. The young are born in the late spring/early summer when there are a lot of grasses and plants to eat.

These high-elevation **amphibians** need to live near streams, ponds, or lakes. The female lays eggs in the water. After hatching, the larvae breathe with gills and swim. As they grow up, they develop lungs for breathing air and move onto land.

The white, shaggy fur helps these **mammals** to blend into the snow and rocks above the tree line where they live. Native to the northern Rocky and Cascade Mountains, they were introduced to the southern Rocky Mountains where they compete with the native bighorn sheep for food (grasses, lichen, moss, or twigs).

These teeny, tiny **insects** jump around like fleas but are not related to fleas you might find on dogs or cats. You can find them at any time of the year but they are more easily seen against the white snow. They come out on warm, sunny days to eat detritus (dead, decaying plants and animals).

1. black bear, 2. Great Gray Owl, 3. garter snake, 4. Clark's Nutcracker, 5. bighorn sheep, 6. broad-tailed hummingbird, 7. Yellow-bellied marmot, 8. snow flea, 9. mountain goat, 10. snow fleas

6

7

8

9

10

To my sister Debbie, thanks for making me climb all those mountains—KK
For Elliot—EEH

Thanks to Kathy Brown, East District Naturalist, Rocky Mountain National Park, for verifying the accuracy of the information in this book.

Publisher's Cataloging-In-Publication Data

Kurtz, Kevin. A day on the mountain / by Kevin Kurtz ; illustrated by Erin E. Hunter.

p. : col. ill. ; cm.

Sequel to: A day in the salt marsh.

Summary: Rhyming verses take children up a mountain to explore how animals and habitats change as they travel higher and higher above sea level. Includes "For Creative Minds" educational section.

Interest age level: 004-009.

Interest grade level: P-4.

ISBN: 978-1-60718-073-9 (hardcover)

ISBN: 978-1-60718-689-2 (pbk.)

ISBN: 978-1-60718-098-2 (downloadable English eBook)

ISBN: 978-1-60718-109-5 (downloadable Spanish eBook)

ISBN: 978-1-60718-297-9 (Interactive, web-based English/Spanish eBook)

1. Mountain ecology--Juvenile literature. 2. Mountain animals--Juvenile literature. 3. Mountains--Juvenile literature. 4. Mountain ecology. 5. Mountain animals. I. Hunter, Erin E. II. Title.

QH541.5.M65 K9 2010

577.53

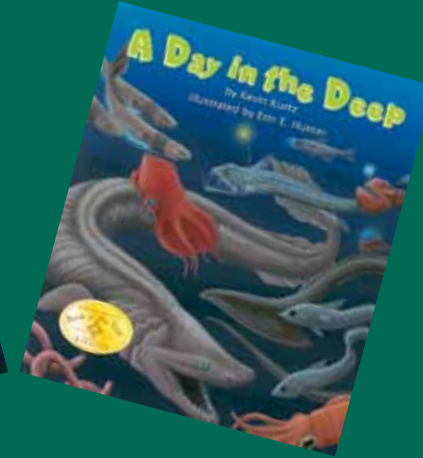
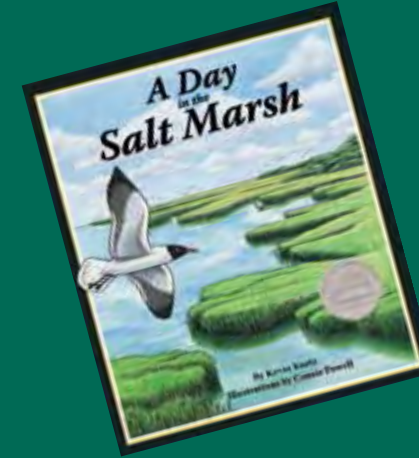
2010921905

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formerly Sylvan Dell Publishing
Mt. Pleasant, SC 29464
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