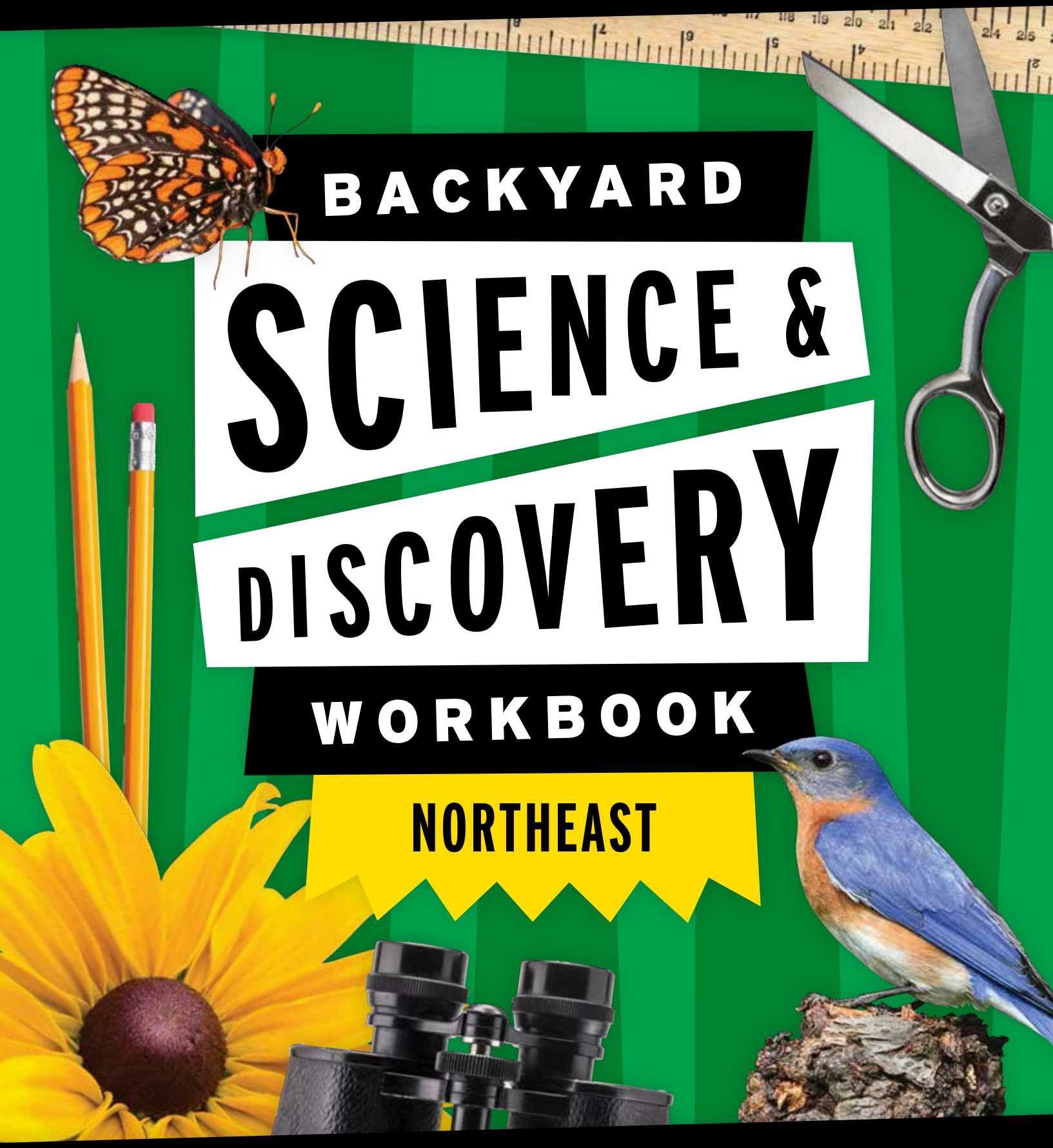
FUN ACTIVITIES & EXPERIMENTS THAT GET KIDS OUTDOORS

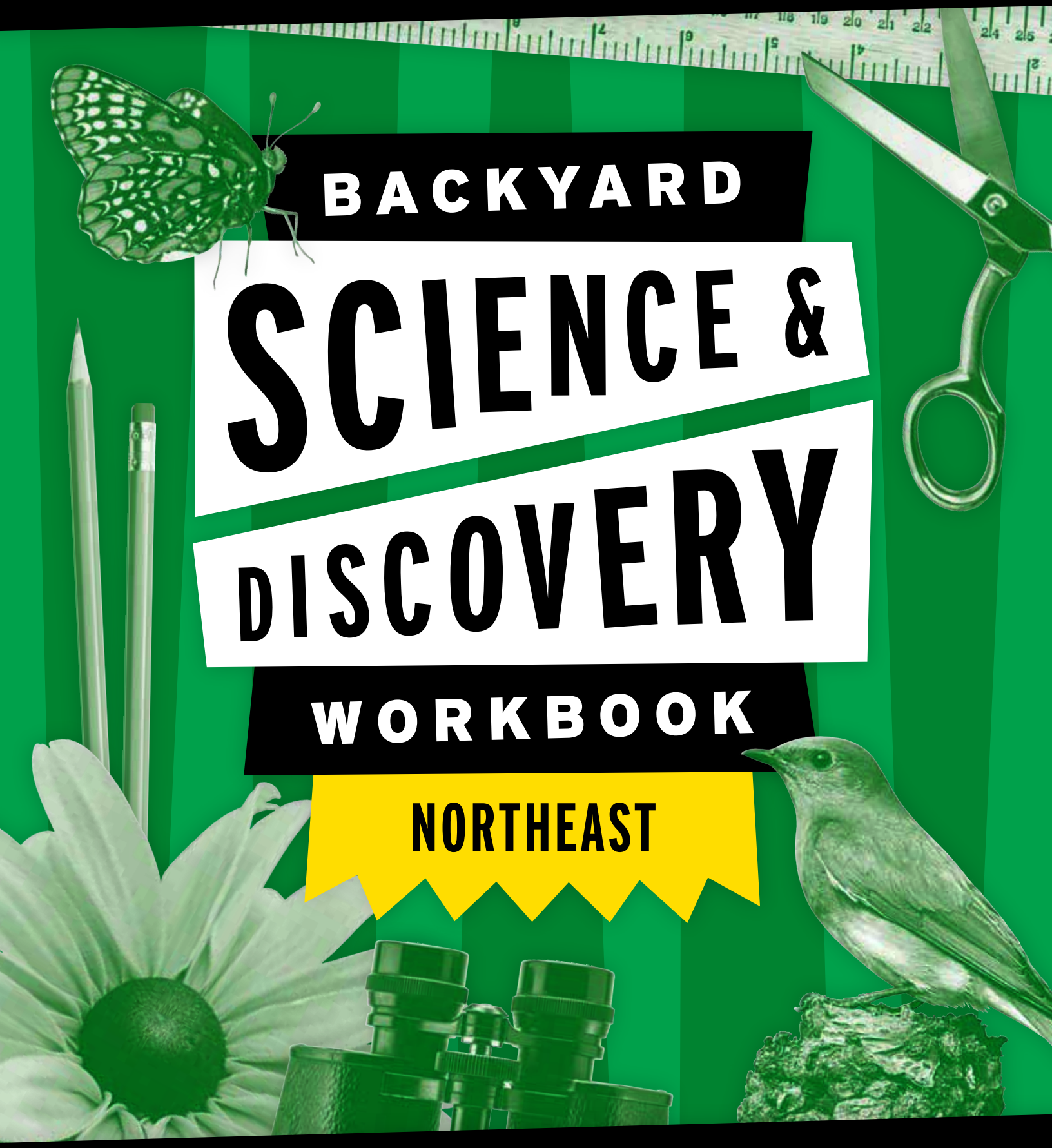


BACKYARD SCIENCE & DISCOVERY WORKBOOK

NORTHEAST

SUSAN D. SCHENCK

SUSAN D. SCHENCK



BACKYARD SCIENCE & DISCOVERY WORKBOOK

NORTHEAST

ADVENTURE PUBLICATIONS

TABLE OF CONTENTS

ABOUT THIS BOOK

The Northeast is a wonderful, fascinating place. With 11 states and a vast range of habitats, plants, animals, and fungi, it has an amazing amount to observe and discover. Over the past 10 years, I've been lucky enough to explore the U.S. with students and friends, as a teacher, environmental educator, and naturalist. The natural communities of the Northeast have a special place in my heart, and I'm excited to be able to share them with you!

In this book, I want to fuel kids' curiosity for the natural world and get them outside observing nature in the Northeast. I hope that this workbook helps them learn to love and protect our natural spaces. This book can be a child's starting point for their own outdoor questions and discoveries. Once you start looking, there's so much to appreciate and observe, even in a nearby park or backyard!

I love what I do at work because it's what I do at home. When I'm not working, I'm usually outside: hiking, painting in my nature journal, learning new wildflowers, and volunteering for youth nature organizations.

This book features **23 hands-on science projects**, such as raising native caterpillars, making mushroom spore prints, and attracting moths and other insects with an ultraviolet light; **more than 20 simple, fun introductions** to the region's habitats, birds, seasons, and rocks and minerals; and more than **a dozen fun activities** to help you make hypotheses, observe nature, and learn about the world around you.

That's the fun part: you really never know what you're going to find on any given day. It's a little like a treasure hunt, and if you keep good records and share what you find, your observations can even help scientists learn more about the world, or even help you start off a career as a scientist.

So get outside, have fun, and share your discoveries!

Susan D. Schenck

GEOGRAPHY OF THE NORTHEAST

Covering areas known as New England and the Mid-Atlantic, the Northeast spans a huge area and includes 11 states. Practice your geography and label the states below. Bonus points if you can name the state capitals of each one.

Answers on page 158!

Connecticut (CT) _____

Delaware (DE) _____

Maine (ME) _____

Maryland (MD) _____

Massachusetts (MA) _____

New Hampshire (NH) _____

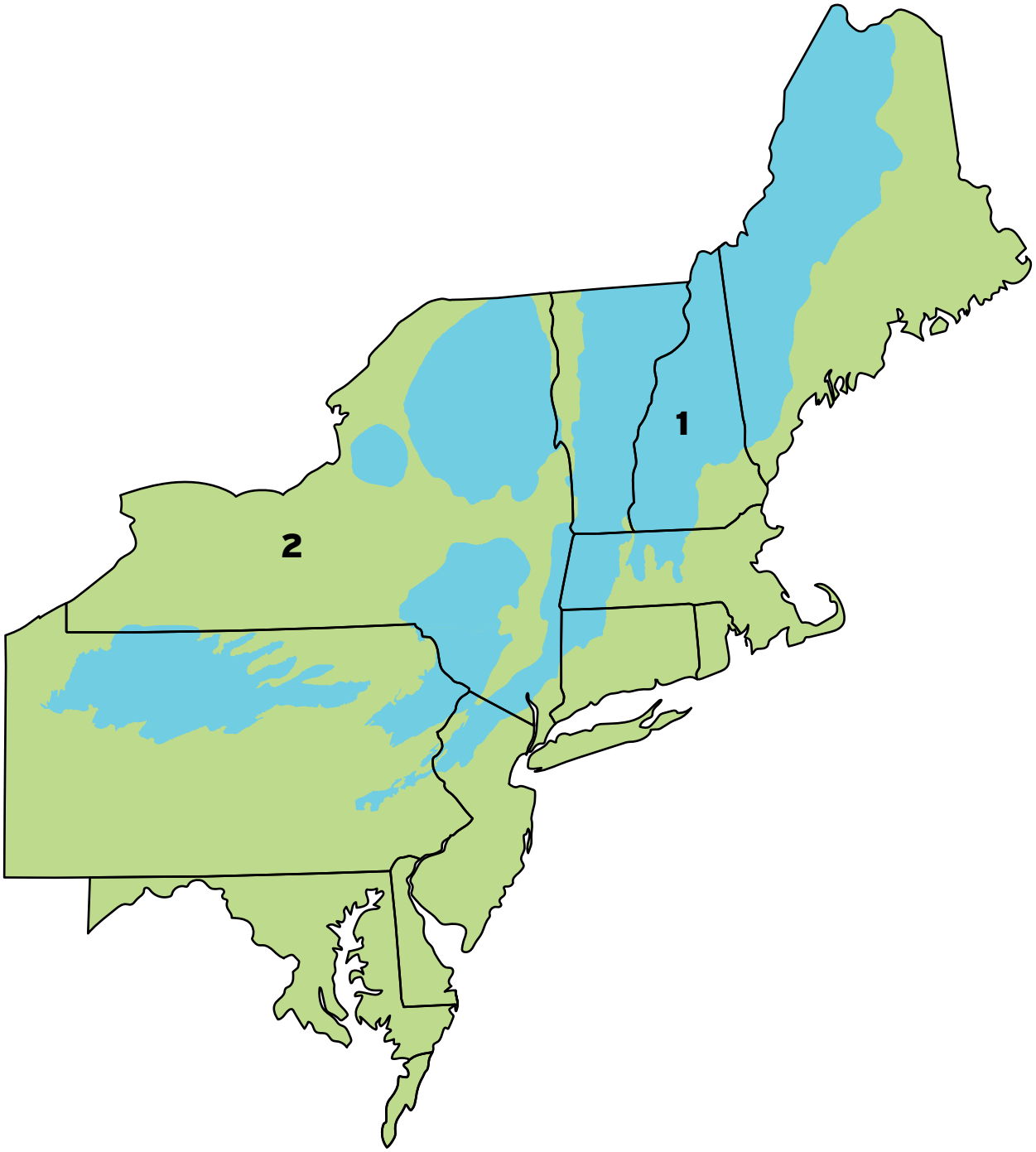
New Jersey (NJ) _____

New York (NY) _____

Pennsylvania (PA) _____

Rhode Island (RI) _____

Vermont (VT) _____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2

GET TO KNOW THE NORTHEAST'S BIOMES

The best way to get to know your Northeastern state—and your backyard—is by understanding the natural neighborhood it belongs to: its biome. A **biome** is a community of animals and plants that live in a specific kind of climate and environment.

You may have heard of some biomes before—like grasslands, forests, tundra, and so on.

The Northeast is home to two different biomes. (Numbers below correspond to the numbers on the map on the left.)

1. Coniferous Forests

2. Temperate Forests

You might be thinking, "Hey! Wait a minute, there are beaches in the Northeast!" And you're right. Beaches aren't their own biomes, though. For the most part, they're considered **ecosystems** instead of biomes. We'll go over the differences between a biome and an ecosystem later on in this section.

QUICK QUIZ

What kind of plant do both types of biomes have in common?

(**Hint:** *Forests have lots of them.)*

_____

NORTHERN CONIFEROUS FORESTS

Coniferous forests are found in northern parts of the Northeast, where it's often cold and snowy in the winter. Coniferous forests, as their name suggests, have more conifer trees than the other biomes nearby.

A **conifer** is a tree that is **coniferous,** or has cones.

Another way to figure out if a tree is coniferous is by looking at the green parts coming off the branches. Conifers have needles or scaly structures coming out of the branches instead of leaves. Most conifers are **evergreen**, which means they don't lose their needles in the fall, but some conifers, like the Eastern Larch, are **deciduous,** meaning they do lose their needles seasonally. (When it comes to trees that aren't conifers, *deciduous* means they lose their leaves instead.)

QUICK QUIZ

Which of the following trees is evergreen?

A. Eastern Larch

B. Red Pine

C. Sugar Maple

D. American Beech

Answer on page 158!

1. Make a list of the evergreen trees near you.

_____

_____

_____

_____

2. What deciduous trees (trees that lose their needles or leaves) are nearby?

_____

_____

_____

_____

TEMPERATE FORESTS

The word **temperate** means "mild" or "moderate." In temperate forests, there are long periods over the summer where the weather is warm. These forests mostly have deciduous trees (trees that lose their leaves in the fall), such as oaks, beeches, and maples. Conifers can grow (or be planted) in temperate forests, although there aren't as many of them. Temperate forests are home to familiar animals, such as raccoons, woodpeckers, and White-Tailed Deer, but they also have thousands upon thousands of species of insects, fungi, and other plants.

QUICK QUIZ

There are many different kinds of trees in the Northeast's deciduous forests. Oaks, hickories, maples, and Tulip Poplars are common.

A tip for identifying trees: Observe the leaf edges. How would you describe them? Smooth? Bumpy? Lots of lobes ("fingers")? No lobes at all?

Can you identify each tree's leaves?

1. _____ 2. _____ 3. _____ 4. _____

Answers on page 158!

1. How many different deciduous trees can you find near you?

_____

_____

_____

2. Which one is your favorite? Why?

_____

_____

_____

BEACHES & SALT MARSHES: IMPORTANT ECOSYSTEMS

I mentioned earlier that beaches are considered an ecosystem and not a biome. An **ecosystem** is all the interactions between living things (plants, animals, etc.) and non-living things (rocks, sand, etc.) in an area. Many different ecosystems make up a single biome. For example, in the temperate forest biome, you can have smaller ecosystems, such as a beach, or an area with a lot of maple trees, or a meadow in the middle of the forest, but all of these ecosystems are still part of the temperate forest biome. The whole area has similar groups of animals and plants living together in a specific kind of climate and environment.

Beaches are a pretty common ecosystem in the Northeast. All of the states in the Northeast have either ocean coastlines or lakeshores.

There are two main types of ocean beaches in the Northeast: rocky beaches, made up of big rocks, and sandy beaches, made of sand. In general, rocky beaches are found along the northern coast and gradually change to sandy beaches the farther south you travel. Rocky beaches are home to animals such as hermit crabs and sea anemones. Shorebirds are more likely to be found on sandy beaches.

Salt marshes are areas where fresh water from streams and rivers flows into the salt water in the ocean. These

slow-moving areas make great spots for fish and other ocean creatures like crabs to lay their eggs. Birds (who like to eat the young fish) also build their nests in salt marshes.

In fact, a **threatened** bird called the Piping Plover builds its nest on sandy beaches in the Northeast. Piping Plovers are considered threatened because if more disappear, they would be endangered. Luckily, we can help. Can you guess some things that kids and adults are already doing to help Piping Plovers?

QUICK QUIZ

What might be helping Piping Plovers come back to the Northeast?

A. Kids staying out of the dunes and playing in the sand near the water instead

B. Government organizations protecting nests with roped-off areas

C. Families walking their dogs on a leash when they're on the beach

D. All of these things

Answer on page 158!

What other animals in your state are endangered or have been threatened?

_____

_____

_____

_____

THEN VS. NOW

The northeastern United States of today looks very different than it did 400 years ago. Back then, most of the land was covered by trees and contained vast areas of connected natural habitat, not a bunch of cities and natural areas like we have today. Huge hemlocks and pines grew in the forest, mixed in with a few pockets of grassland. Elk, bison, and mountain lions were common. Many Indigenous peoples moved seasonally in the region, some helping the local plant and wild-animal populations thrive by selectively burning the forest. On the coast, there were no boardwalks or modern cities.

European settlers began moving in during the 1600s, and this put the ecosystems in the Northeast under a lot of stress. Through the constant pressure on their natural resources, the biomes and ecosystems that Indigenous peoples depended on were severely harmed or outright destroyed. Nearly all forested areas in northeastern states like Pennsylvania were clear-cut. Only a few stands of virgin (untouched) remain, though third- and fourth-growth forests with a different combination of trees have grown in their place.

These intentional changes upended the ecosystems of the region, reducing or eliminating populations of the animals and plants that were important (or essential)

to the traditional lifestyles of the Indigenous peoples of the Northeast. Americans are now beginning the hard work of coming together to repair relationships between Indigenous and European cultures, as well as mending our relationship with the natural world.

QUICK QUIZ

An animal that used to be common in an area but now is absent from it altogether is said to be **extirpated.** (*Extirpated* is different from *extinct*, because extirpated organisms can still live in other areas.) Which animals used to be common in the Northeast but are now rare or extirpated?

A. Mountain Lion

B. Wolves

C. Elk

D. Woodland Bison

E. All of them

Answer on page 158!

Elk were once found in the Northeast.

STATE SYMBOLS

Another good way to get to know the region is by learning your state's official symbols. From the state bird and flower, which you might know already, to lesser-known categories—such as state amphibian, gemstone, and even fossil—these well-known symbols are usually selected because they have a long history with the state. Of course, not every state has symbols for the same categories. Some states have a lot of symbols—even a state soil!—but others have just a handful. Still, they're a good way to learn about your state and its environment.

QUICK QUIZ

Some states use symbols that are **native** to their area. This means the plants, animals, and so on are found naturally living and growing in the area. Sometimes, state symbols are **nonnative** (not naturally found in that place). In the following list of six state symbols, only one is native to the northeastern United States. Which are they?

A. Honeybee (state insect of New Jersey, Vermont, and Maine)

B. White-Tailed Deer (state animal of Pennsylvania and New Hampshire)

C. Rhode Island Red Chicken (state bird of Rhode Island)

D. Peach Blossom (state flower of Delaware)

E. Lilac (state flower of New Hampshire and state bush of New York)

F. European Mantis (state insect of Connecticut)

Answer on page 158!

MARYLAND

Rockfish/Striped Bass

Fish

Diamondback Terrapin

Reptile

Black-Eyed Susan

Flower

White Oak

Tree

Baltimore Oriole

Bird

Baltimore Checkerspot

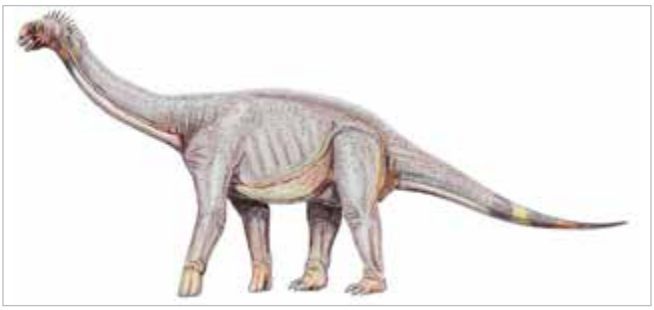
Insect

Maryland Blue Crab

Crustacean

Patuxent River Stone

Gem



Astrodon johnstoni

Dinosaur

Ecphora

(Ecphora gardnerae gardnerae)

Fossil Shell

STATE SYMBOLS

DELAWARE

Peach Blossom

Flower

American Holly

Tree

Sillimanite

Stone

Blue Hen

Bird

Belemnite

Fossil

Gray Fox

Wildlife Animal

Weakfish

Fish

Ladybug

Insect

Tiger Swallowtail

Butterfly

Channeled Whelk

Shell

Horseshoe Crab

Marine (Saltwater) Animal

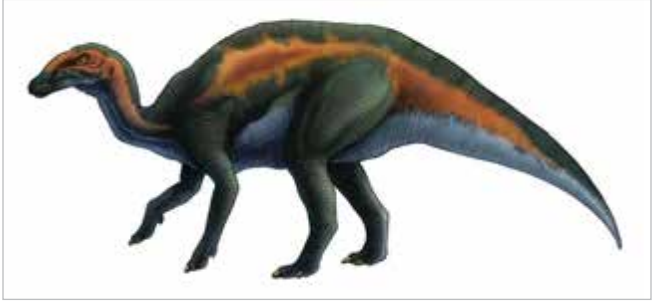
NEW JERSEY

American Goldfinch

Bird

Violet

Flower



Hadrosaurus foulkii

Dinosaur

Red Oak

Tree

Bog Turtle

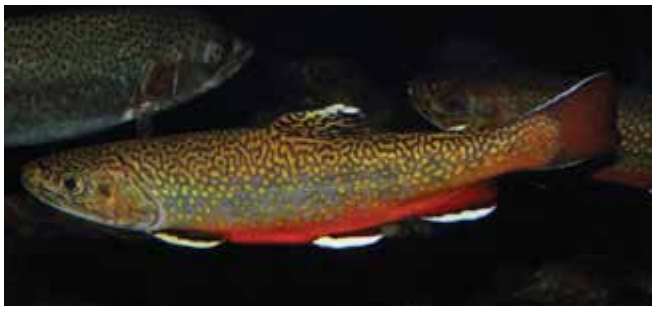
Reptile

Honeybee

Insect

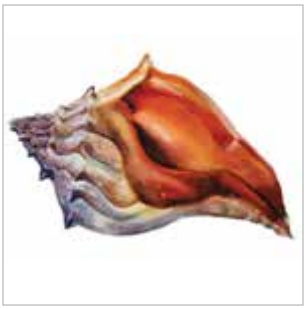
Horse

Animal



Brook Trout

Fish



Knobbed Whelk

Shell

STATE SYMBOLS

NEW YORK

Eastern Bluebird

Bird

Rose

Flower

Sugar Maple

Tree

Garnet

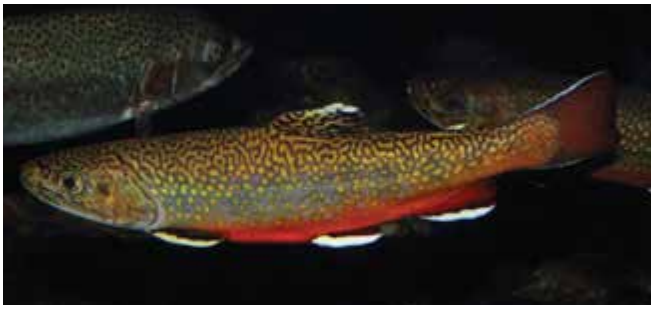
Gem

Eurypterus remipes

Fossil

Beaver

Animal



Brook Trout

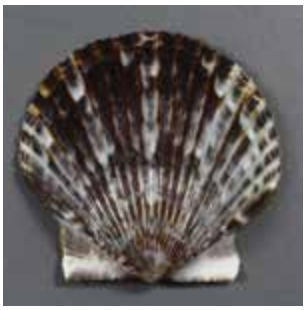
Fish

Ladybug

Insect

Snapping Turtle

Reptile



Bay Scallop

Shell

Lilac

Bush

PENNSYLVANIA

Ruffed Grouse

Bird

Mountain Laurel

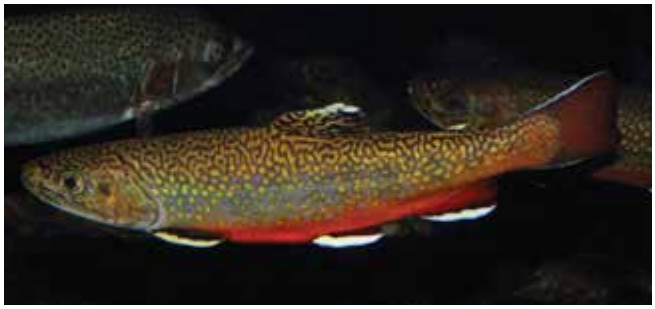
Flower

Eastern Hemlock

Tree

White-Tailed Deer

Animal



Brook Trout

Fish

Firefly

Insect

Eastern Hellbender

Amphibian

STATE SYMBOLS

RHODE ISLAND

Rhode Island Red

Bird

Violet

Flower

Red Maple

Tree

Cumberlandite

Rock

Bowenite

Mineral

Striped Bass

Fish

Quahaug/Quahog

Shell

MASSACHUSETTS

Black-Capped Chickadee

Bird

Mayflower/ Ground Laurel/ Trailing Arbutus

Flower

American Elm

Tree

Roxbury Puddingstone

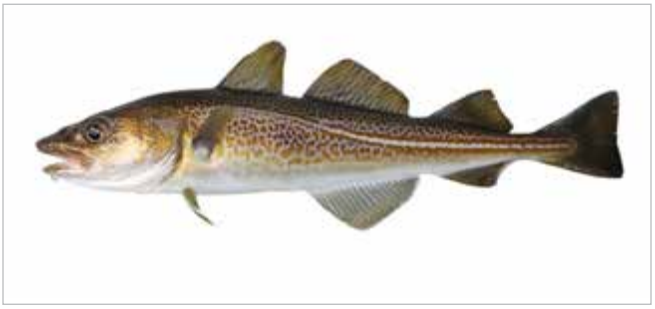
Rock

Rhodonite

Gemstone

Babingtonite

Mineral



Cod

Fish

Dinosaur Tracks

Fossil

Two-Spotted Lady Beetle

Insect

New England Neptune

Shell

Garter Snake

Reptile

STATE SYMBOLS

CONNECTICUT

American Robin

Bird

Mountain Laurel

Flower

Almandine Garnet

Mineral

Eubrontes

Fossil

Sperm Whale

Animal

European Mantis

Insect

American Shad

Fish

Eastern Oyster

Shellfish

VERMONT

Hermit Thrush

Bird

Red Clover

Flower

Sugar Maple

Tree

Granite, Marble, and Slate

Rock

Talc

Mineral

Grossular Garnet

Gem

Monarch

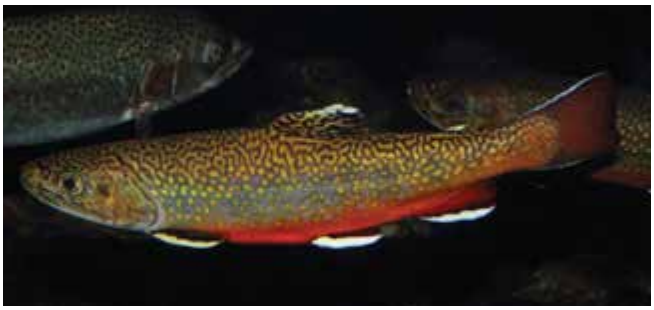
Butterfly

Northern Leopard Frog

Amphibian

Morgan Horse

Animal



Brook Trout

Cold Water Fish

Honeybee

Insect

STATE SYMBOLS

NEW HAMPSHIRE

Purple Finch

Bird

Purple Lilac

Flower

White Birch/ Paper Birch

Tree

Granite

Rock

Beryl

Mineral

Smoky Quartz

Gem

White-Tailed Deer

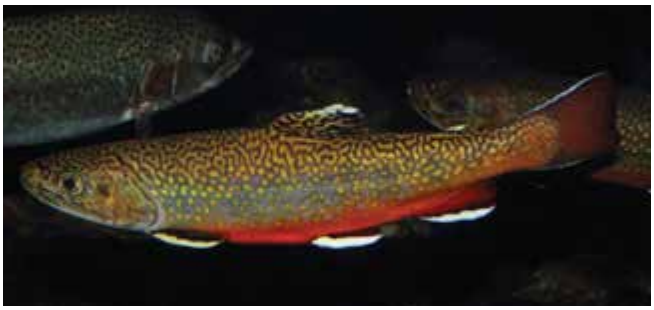
Animal

Ladybug

Insect

Karner Blue

Butterfly



Brook Trout

Freshwater Game Fish

Pink Lady's Slipper

Wildflower

MAINE

Black-Capped Chickadee

Bird

White Pine Cone and Tassel

Flower

White Pine

Tree

Tourmaline

Mineral

Pertica quadrifaria

Fossil

Moose

Animal

Landlocked Salmon

Fish

Honeybee

Insect

Lobster

Crustacean

Wintergreen

Herb

Wild Blueberry

Berry

INTRODUCED VS. INVASIVE

Over the course of settlement of the Northeast, many plants and animals were **introduced** to the region. Some of these, such as peaches or horses, were introduced on purpose. Even though they are **nonnative**, they haven't been a problem. Other plants and animals reacted differently to their new home—once they got here, they spread quickly, often finding an environment with few predators. These species then became **invasive**, spreading uncontrollably and hurting native animals and plants. This term can apply to organisms (living things) that were introduced on purpose, or on accident.

A few familiar, but invasive, species:

Garlic Mustard

Earthworms
(in much of the Northeast)

Bush Honeysuckle

Oriental Bittersweet

Purple Loosestrife

House Sparrow

European Starling

Asian Shore Crab

QUICK QUIZ

Which of the following animals is an introduced species in the Northeast?

A. Black-Capped Chickadee

B. Sugar Maple Tree

C. Cow

D. Monarch Butterfly

Answer on page 158!

Can you think of other introduced species in your area?
Hint: Most farm animals aren't from here! The same is true for many weeds.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

GETTING TO KNOW YOUR WEATHER

What's the **climate** like where you live? A region's climate is the long-term patterns in the **weather**. Weather is the day-to-day observations of temperature, rainfall or snowfall, cloud cover, and the like.

For example, if you live in a place that typically gets hot, muggy summers, and icy, slushy winters, that's your **climate**. If a hot summer day was 85 degrees and sunny, with a light breeze, that's your weather.

So, what is your climate like? Hot in the summer? Cooler in the summer? Snowy in the winter? Hardly any snow in the winter?

You probably know what a hot, sticky summer day is like, but what's the warmest you remember? Ninety degrees Fahrenheit, maybe 100°F? (**°F** is an abbreviation, or a shortcut, for writing the words "degrees Fahrenheit.")

What do you think the highest temperature ever recorded anywhere in your state was? (**Note:** It probably didn't reach this temperature in the place you live, but it did happen somewhere in your state.)

MAKE A HYPOTHESIS

Hypothesis: An "educated guess," based on things you already know.

1. Highest maximum temperature in my state?

My hypothesis/guess:

_____

2. You've felt cold, too, maybe shivering at the bus stop or walking to school. So what do you think the coldest temperature recorded anywhere in your state is?

My hypothesis/guess:

_____

_____

3. And do you like building snow forts or having snowball fights? Me too! But what do you think the maximum amount of snow on the ground—anywhere in your state—was? Six inches? A foot? More?

My hypothesis/guess:

_____

_____

A FEW NORTHEAST WEATHER RECORDS

STATE NAME	HIGHEST TEMP (°F)	LOWEST TEMP (°F)	DEEPEST SNOW (INCHES)
Maryland	**109°** (1936)	**-40°** (1912)	**54"** (1993)
Delaware	**110°** (1930)	**-17°** (1893)	**25"** (2003)
New Jersey	**110°** (1936)	**-34°** (1904)	**52"** (1961)
New York	**108°** (1926)	**-52°** (1979)	**119"** (1943)
Pennsylvania	**111°** (1936)	**-42°** (1904)	**60"** (1958)
Rhode Island	**104°** (1975)	**-28°** (1942)	**42"** (1978)
Massachusetts	**107°** (1975)	**-35°** (1981)	**62"** (1996)
Connecticut	**106°** (1995)	**-32°** (1961)	**55"** (1961)
Vermont	**107°** (1912)	**-50°** (1933)	**149"** (1969)
New Hampshire	**106°** (1911)	**-50°** (1885)	**164"** (1969)
Maine	**105°** (1911)	**-50°** (2009)	**84"** (1969)

Data: ncdc.noaa.gov/extremes/scec/records

IS THE SUN SETTING EARLIER?!

In winter, you've probably noticed how it gets darker earlier. That happens because the earth is tilted on its axis, so certain parts of the planet get more daylight in some seasons than in others. If you've traveled to the north or to the south of where you live, you've probably noticed that the amount of daylight varies with **latitude,** or how far north or south you are of the equator. The time the sun sets (and rises) also varies with **longitude,** or how far east or west you are of the prime meridian.

MAKE A HYPOTHESIS

1. What month do you think has the shortest day of the year in the Northeast?

_____

2. Which month has the longest day of the year in the Northeast?

_____

3. On the shortest day of the year where you live, what time is sunset?

_____

RECORD YOUR ACTIVITIES, DISCOVERIES & FINDS HERE

If you find something neat, make a sketch to the right to help you remember details so you can compare your drawing to a field guide or another reference later.

RECOMMENDED READING

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GLOSSARY

Biome A community of animals and plants that live in a specific kind of climate and environment.

Birder Someone who enjoys observing birds.

Chemical Element One of the 92 naturally occurring chemicals such as oxygen, carbon, etc., that make up all matter on Earth.

Classification What scientists do when they group the life forms they study into different categories based on many different characteristics and traits.

Climate Long-term patterns in the weather.

Commodities Farm products, such as corn and soybeans, that are sold worldwide.

Conglomerate A rock that is made up of a bunch of different rocks stuck together.

Conifer A tree that produces seeds by cones; most conifers, but not all, are **evergreen** (see below).

Ecosystem All the interactions between living and nonliving things within a particular area.

Evergreen A tree that doesn't lose its leaves but instead stays green all winter.

Extirpated Another word for animals being wiped out from their original habitat.

Glaciers Huge rivers of ice that once covered much of the Northeast, creating a lot of the topography (landscapes) we see (or don't see) today.

Hypothesis A guess based on information you already know.

Ice age One of many periods in Earth's history of prolonged cold and glacial activity. The last ice age ended around 10,000 years ago.

Igneous Describes a rock formed by a volcano or lava cooling on the earth's surface.

GLOSSARY

Introduced Brought to an area instead of occurring there naturally (example: cows in the U.S.).

Invasive Describes introduced species (see above) that outcompete native animals, harming the ecosystem.

Invertebrates Animals without backbones.

Killing Frost When temperatures reach around 28 degrees Fahrenheit, it gets cold enough to freeze the water in some plants, killing the ones that are sensitive to cold.

Latitude How far north or south a person or place is of the equator; the equator is at a latitude of 0 degrees, and the North Pole is 90 degrees North.

Longitude How far east or west a person or place is of the prime meridian, which is at a longitude of 0 degrees.

Metamorphic Describes a rock that has changed under intense heat and/or pressure.

Metamorphosis The process that causes some animals to change body plans completely from young to adult.

Mineral An individual element or combination of elements that is consistent throughout and that has solidified, or crystallized.

Mohs Hardness Scale The relative scale of mineral hardness, from the softest (talc, 1) to the hardest (diamond, 10).

Mutualistic Beneficial for every organism in a relationship.

Native Describes an animal, plant, or other organism that is found naturally in an area.

Nonnative Describes an animal, plant, or other organism that isn't naturally found in an area. Note that not all nonnative species are invasive (see page 28).

Organism A living creature: plant, animal, fungus, microbe, etc.

Parasite A life form that feeds on or otherwise depends on another life form.

Plankton Microscopic aquatic plants and animals.

Phenology The study of the seasons and other natural cycles over time.

Rock A combination of two or more minerals.

Saprobes Mushrooms that feed on dead or dying material (often wood or plant parts).

Scientific Name Because there are so many different plants and animals and other life forms, scientists give each one an official scientific name, usually derived from Latin or Greek and put in *italic text* to make it stand out. Scientific names have two parts: a **genus name,** which is like an organism's last name and which it shares with others, and a **species name,** which is like its first name. So if you want to talk to a scientist about the American Robin, *Turdus migratorius* (yep, that's its real scientific name) is how scientists all around the world would recognize it.

Sedimentary Describes a rock that forms as particles of soil and minerals accumulate in layers over long periods of time.

Summer Solstice The longest day of the year, when Earth is pointed most directly at the sun; in the northern hemisphere, the summer solstice occurs in late June.

Temperate Describes an environment where there are long periods (summer!) where the weather is warm.

Threatened On its way to becoming extinct.

Toxic Poisonous.

Vascular Tissue Specialized plant parts that carry nutrients that plants need, such as water and sugar.

Weather The day-to-day observations of temperature, rainfall and snowfall, cloud cover, etc.

Winter Solstice The shortest day of the year, when Earth is pointed farthest away from the sun; in the northern hemisphere, the winter solstice occurs in late December.

Wrack Line The line of plant and pebble debris created by the high tide.

QUICK QUIZ ANSWERS

Page 5: Connecticut: Hartford; Delaware: Dover; Maine: Augusta; Maryland: Annapolis; Massachusetts: Boston; New Hampshire: Concord; New Jersey: Trenton; New York: Albany; Pennsylvania: Harrisburg; Rhode Island: Providence; Vermont: Montpelier

Page 7: Trees!

Page 9: B. Red Pine

Page 11: 1. Oak, 2. Sugar Maple, 3. Hickory, 4. Tulip Poplar

Page 13: D. All of these things

Page 15: E. All of them

Page 16: B. White-Tailed Deer (state animal of Pennsylvania and New Hampshire)

Page 29: C. Cow

Page 51: A. Soybeans, B. Corn, C. Cranberries, D. Blueberries, E. Potatoes

Page 53: C. Mountain Laurel

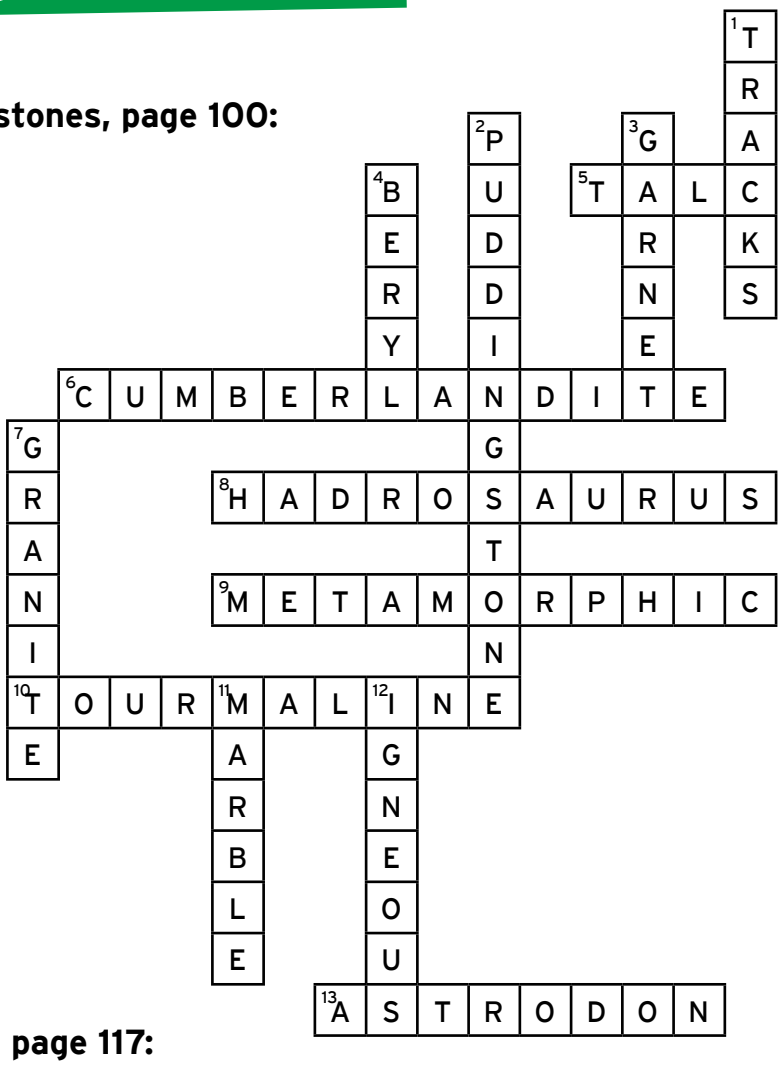
Page 94: B. Belemnite and E. *Hadrosaurus foulkii*

Page 107: Dog-Day Cicada, Painted Skimmer, and Monarch Butterfly

Page 112: The third insect is a bee. The first one is a Hoverfly, and the second one is an Ornate Snipe Fly.

CROSSWORD ANSWERS

Geology & Gemstones, page 100:



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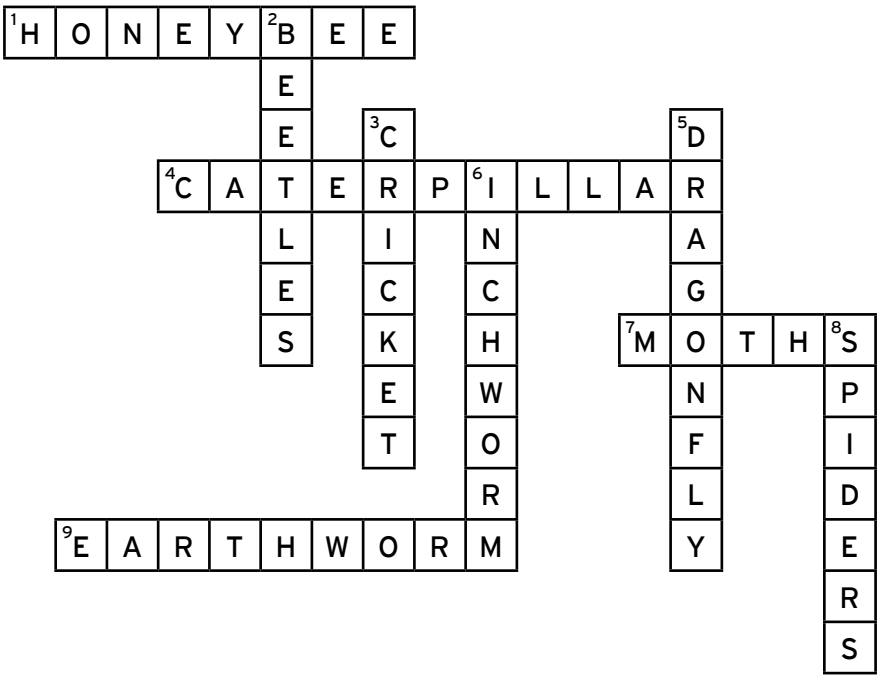

ABOUT THE AUTHOR

Susan D. Schenck is a naturalist, educator, and artist. After earning an undergraduate degree in biology, Susan taught at several residential outdoor schools throughout the U.S., including earning an environmental education teaching certificate while teaching in northern Minnesota. She recently moved to Pennsylvania from Rhode Island, where she taught classes at Casey Farm and co-founded the Ocean State Bird Club's Youth Birders Initiative. Susan loves exploring all the different ecosystems with her students!

At the time of this writing, Susan and her husband, Matt, call northwestern Pennsylvania home. Susan enjoys birding and keeping a nature journal, and she's currently training for a century (100-mile) bike ride.

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DEDICATION

This book is for all you curious kids out there.
Keep exploring!

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Page 92 (Charlotte Whale) From "On a skeleton of a whale in the provincial museum, Halifax, Nova Scotia; with notes on the fossil cetacea of North America," by George H. Perkins, in *Proceedings of the Nova Scotian Institute of Science* 12 (1910): 1906–1910.

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Saum:** 21 (Eastern Hemlock); **Bradley Van Reenan:** 44 (Garter Snake); **Breck P. Kent:** *Eurypterus remipes* on pp. 20 and 88, grossular garnet on pp. 25 and 87, marble on p. 91; **Brian A. Wolf:** Baltimore Oriole on pp. 17 and 65; **Brian Lasenby:** 26 (White Birch); **brizmaker:** 79; **BW Folsom:** 22 (Quahog); **CampSmoke:** 106 (millipede); **CEW:** 69; **Cheryl Thomas:** 45 (Monarch Butterfly); **Chris Alcock:** 45 (cicada); **Christian Musat:** 20 (beaver); **Claire Anna Jones:** 111 (Squash Bee); **Claire Prendergast:** 12 (left); **Clara Bastian:** 29 (cow); **ClubhouseArts:** 11 (Sugar Maple leaves); **Colin D. 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Ennis:** 105 (grasshopper); **dibrova:** 23 (American Elm); **divedog:** 54 (Eel Grass); **Dotted Yeti:** *Eubrontes giganteus* on pp. 24 and 88; **dwcreations:** 102 (Cecropia Moth); **Ed Connor:** 30; **Edward Fielding:** Sugar Maple on pp. 9 and 29; **ehrlif:** 52 (trillium); **Eileen Kumpf:** 112 (Flower Fly); **Elliotte Rusty Harold:** 54 (American Beach Grass), 111 (Carpenter Bee), bumblebee on pp. 111 and 112; **Eric Isselee:** 24 (European Mantis); **Erik Agar:** 104 (Ebony Jewelwing), 112 (Bee Fly); **Esposito Photography:** 35; **Flower_Garden:** 52 (Mayapple); **Formatoriginal:** 132 (Blue Mussels); **FotoCat99:** 47 (Poison Ivy); **FotoLot:** 123 (False Morel); **fotolotos:** 39 (lilacs); **Frank Reiser:** Asian Shore Crab on pp. 28 and 133; **Frank DeBonis:** Ghost Pipe on pp. 46 and 53; **Frode Jacobsen:** 103 (Carrion Beetle); **galitsin:** 106 (worm); **galsand:** 138; **Garrett Gibson:** 28 (European Starling); **GenOne360:** 132 (horseshoe crab); **Geoffrey Kuchera:** 18 (Gray Fox); **Gerry Bishop:** 77 (top), 124 (Raspberry Slime Mold), 131 (Knobbed Whelk); **Gilbert S. Grant:** oysters on pp. 24 and 132; **Gnilenkov Aleksey:** 103 (Robber Fly); **godi photo:** 124 (Wolf's Milk Slime); **Gregg Williams:** American Goldfinch on pp. 19 and 62; **Grigorii Pisotsckii:** 25 (Red Clover), 122 (Birch Polypore); **guentermanaus:** 52 (Joe-Pye Weed); **Henri Koskinen:** garnet on pp. 20, 24, and 87, 122 (Milk-White Toothed Polypore), 123 (Bear's Head Tooth); **Henrik Larsson:** 104 (Yellow Jacket), 121 (Witch's Hat); **HHelene:** 132 (Soft-Shell Clam); **Holly Damann:** 18 (American Holly); **Ibe van Oort:** sillimanite and belemnite on pp. 18 and 84; **Ihor Hvozdetskyi:** 106 (Goldenrod Crab Spider); **Imran Ashraf:** 52 (columbine); **Inachis Projekt:** 134 (top middle); **IrinaK:** 133 (Hermit Crab); **Isabel Eve:** 103 (Broad-Necked Root Borer); **Iva Villi:** 27 (Wintergreen); **J. C. McConnell Morphart Creation:** Ecphora on pp. 17 and 85; **jadimages:** 52 (Pink Lady's Slipper); **James Griffiths Photo:** Maine high point on pp. 58 and 61; **Jamie Oakley:** 33; **Jarous:** 18 (horseshoe crab; **Jason Kostansek:** 44 (Canada Geese); **JayL:** Mountain Laurel on pp. 21 and 24; **Jeff Holcombe:** 52 (Starflower), 54 (Saltmarch Cordgrass); **Jillian Cain Photography:** 78 (osprey nest); **João Virissimo:** Channeled Whelk on pp. 18 and 131; **Joel Trick:** 77 (Monarch Butterfly); **Jolanda Aalbers:** 23 (Two-Spotted Lady Beetle), 121 (Laccaria); **Jovana Kuzmanovic:** 106 (centipede); **Julia Zavalishina:** 121 (Red Fly Agaric); **K. Steve Cope:** 14 (top); **Karel Bock:** 42 (Skunk Cabbage); **Kazu Inoue:** 54 (Beach Pea); **Kichigin:** 123 (puffball spores); **KrimKate:** 82 (rhodonite); **Kristi Blokhin:** 78 (Downy Woodpecker); **Kristina Postnikova:** 51 (potato field); **lecsposure:** 137; **Lee Ellsworth:** 52 (Canada Mayflower); **Lia Caldas:** 134 (top left); **Liene Kozachenko:** 123 (False Truffles); **Lijuan Guo:** 51 (cranberry bog); **Lisa Kolbenschlag:** horse on pp. 19 and 25; **Lost Mountain Studio:** 131 (Moon Snail); **Luka Hercigonja:** 47 (Goldenrod); **lunamarina:** Blue Hen on pp. 18 and 64; **Lynn Gedeon:** 43 (trillium); **M Rose:** Brook Trout on pp. 19, 20, 21, 25, and 26; **M. Schuppich:** 53 (Queen Anne's Lace); **M. E. Parker:** 133 (Ghost Crab); **Marc Bruxelle:** 49 (maple sap bucket; **Marc Goldman:** 28 (House Sparrow); **Margaret M Stewart:** 49 (Black Bear); **Martin Fowler:** 28 (Garlic Mustard); **Matt Jeppson:** 102 (Giant Silk Caterpillar); **Matthew R. McClure:** Bay Scallop on pp. 20 and 132; **Mazur Travel:** 39 (red apples); **McCarthy's PhotoWorks:** 98; **Melinda Fawver:** 11 (oak), 23 (Eastern Garter Snake), 105 (Northern Bush Katydid); **Michael G. Mill:** Black-Capped Chickadee on pp. 23, 27 and 63; **Michael S. Moncrief:** 124 (Dog Vomit Slime Mold); **Michael Siluk:** 116; **Michael Tatman:** 42 (Red-Winged Blackbird); **michal812:** 82 (granite); **Michiel de Wit:** 25 (Northern Leopard Frog); **Mike Truchon:** 52 (Dutchman's Breeches);

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SAFETY NOTE

Nature is wonderful and amazing, and it's certainly nothing to be afraid of, especially if you use common sense and take precautions.

This guide is intended for backyards and green spaces in the Northeast. These places should be pretty safe by definition, but make sure to have an adult with you when you're outside to supervise the activities in this book. And when you're outside, don't reach where you can't see, and be aware of potentially dangerous animals like bees, wasps, venomous spiders or snakes, and bothersome plants such as poison ivy or poison sumac or oak. There really aren't all that many of these creatures or plants, but if you know they can be found in your area, or if you have allergies (to bees, for instance), it's important to simply be aware that they may be out there.

The best way to stay safe is to keep your distance from wild animals, avoid handling wildlife, and take photos or draw sketches instead. Also, wear gloves, the right clothing for the weather, and sunscreen (as needed), and pay attention to the weather and any potentially unsafe surroundings. *Remember:* You're responsible for your safety.

A quick note about the internet: In this guide, sometimes we suggest going online to learn more about a topic or to contribute information in some way. If you're under 13 years old, please check in with an adult first to make sure it's OK.

An especially important note: Don't use this book to help you identify which wild plants, berries, fruits, or mushrooms are safe to eat. Please leave these for the birds, critters, and bugs out there.

Edited by Brett Ortler

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Fun Activities and Experiments That Get Kids Outdoors

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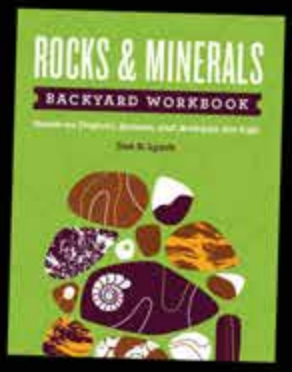

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