

Three-fourths of the world's flowering plants depend on pollinators to reproduce.

Most fruit, vegetable, and seed crops—and other plants that provide fiber, medicines, and fuel—are pollinated by animals. Some scientists estimate that one out of every three bites of food we eat exists because of animal pollinators like bees, butterflies and moths, birds and bats, and beetles and other insects.



Animal Pollination

Pollinators visit flowers in their search for food (nectar and pollen). During a flower visit, a pollinator may accidentally brush against the flower's reproductive parts, unknowingly depositing pollen from a different flower. The plant then uses the pollen to produce a fruit or seed. Many plants cannot reproduce without pollen carried to them by foraging pollinators.



Did You Know?

A world without pollinators would be a world without apples, blueberries, strawberries, chocolate, almonds, melons, peaches, or pumpkins.

Pollinators Are in Trouble

Bees, bats, and other animal pollinators face many challenges in the modern world. Habitat loss, disease, parasites, and environmental contaminants have all contributed to the decline of many species of pollinators.



You Can Help!

Provide food and habitat for pollinators to help them thrive.

- Use pollinator-friendly plants in your landscape. Shrubs and trees such as dogwood, blueberry, cherry, plum, willow, and poplar provide pollen or nectar, or both, early in spring when food is scarce.
- Choose a mixture of plants for spring, summer, and fall. Different flower colors, shapes, and scents will attract a wide variety of pollinators.
- Reduce or eliminate pesticide use in your landscape, or incorporate plants that attract beneficial insects for pest control. If you use pesticides, use them sparingly and responsibly.
- Accept some plant damage on plants meant to provide habitat for butterfly and moth larvae.
- Provide clean water for pollinators with a shallow dish, bowl, or birdbath with half-submerged stones for perches.
- Leave dead tree trunks in your landscape for wood-nesting bees and beetles.
- Support land conservation in your community by helping to create and maintain community gardens and green spaces to ensure that pollinators have appropriate habitat.
- Learn more online or contact your local Cooperative Extension Service office (www.nifa.usda.gov/Extension/index.html) or U.S. Department of Agriculture's Natural Resources Conservation Service office (www.nrcs.usda.gov) for information about selecting plants for particular pollinators.



Did You Know?

The honey bee alone contributes to the production of many billions of dollars worth of crops in America every year.



You can provide food and habitat for pollinators to help them thrive.

Pollinators

Bee a Friend to



For more information,
visit farmers.gov/pollinators

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Types of Pollinators



Bees

Bees are the main pollinators for fruits and vegetables. There are over 4,000 species of bees native to North America. They nest underground, in twigs and debris, or in dead trees.

Butterflies & Moths

Nectar-seeking butterflies are daytime garden visitors, and moths are their nocturnal counterpart. These popular creatures pollinate many plants.



Birds & Bats

Hummingbirds are the most common avian pollinators in the continental United States. These tiny wonders prefer tubular flowers in bright, warm colors—especially red. Two species of bat are major pollinators in the Southwest.

Beetles & Other Insects

There are many thousands of beetle species—in fact, 40 percent of all insects are beetles! Flies and other insects are common flower visitors and pollinators.



Did You Know?

Midges are small flies. Two species of midge are the only known pollinators of cacao trees, which produce the beans from which chocolate is made.

You can provide food
and habitat for pollinators
to help them thrive.



United States Department of Agriculture

6 Ways

To Keep Your Water Clean:

- 1 Find out more about the watershed or groundwater source supplying your water.
- 2 Be alert to land uses or other activities that could threaten your water supply.
- 3 Never over-fertilize your lawn.
- 4 Regularly get your vehicle inspected for fluid leaks.
- 5 Pick up trash and cover trash bins to prevent litter from blowing into storm drains.
- 6 Find out if environmental and conservation issues are part of your school's curriculum.

YOUR HOMETOWN CLEAN WATER TOUR



You and everybody in your hometown depend on water.

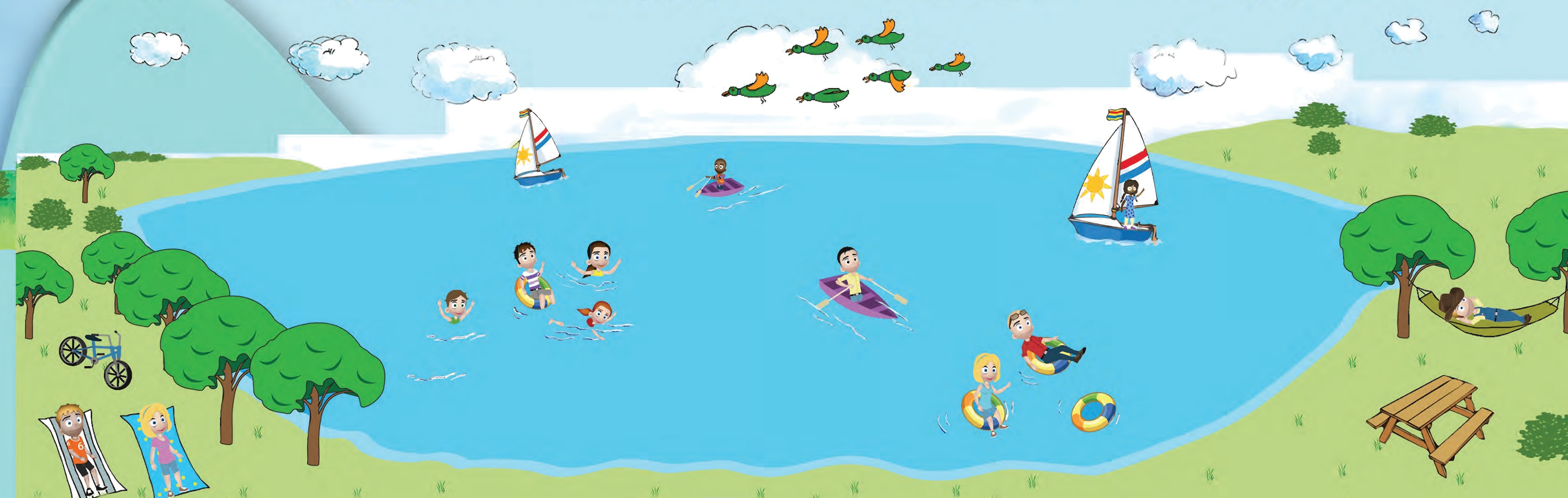
But water is like many other things that we depend on—we have to take care of it. How?

You're about to meet some mighty fine folks who'll show you.

But before you say your how-do-you-do's, let's find out how much you already know by taking a "H₂O IQ" quiz...

- 1 Leaving grass clippings on your lawn after you mow is a good, natural way to fertilize and minimize use of chemicals that could contaminate water. True or False
- 2 Attracting birds to your home is an excellent way to get rid of pesky insects and minimize use of pesticides that could enter your town's water supply. True or False
- 3 Spreading mulch on your garden keeps the soil moist and saves water. True or False
- 4 A dripping faucet can waste 20 gallons of water a day. True or False
- 5 Everyone lives in a watershed. True or False
- 6 Taking your used motor oil to an oil recycling center is better for your water than dumping the oil down a storm drain. True or False
- 7 A well-managed irrigation system uses water efficiently, saving farmers both water and money. True or False
- 8 When farmers plant seeds without plowing under the stalks and stems of their last crop, rain is less likely to wash the soil away. True or False
- 9 Cleaning junk and litter out of rivers and lakes improves habitat for fish and other aquatic life. True or False
- 10 Planting grass and trees on loose soil and on riverbanks can help keep the soil from washing away. True or False

If you answered "true" to each of the 10 statements, treat yourself to a great big glass of cold, clear water. But there's still plenty to learn. Get ready! It's time to meet the fine folks of Watertown!



Natural Resources Conservation Service

Visit our website at: www.nrcs.usda.gov
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Helping People Help the Land

Good Water is Good for Everyone.



That's why Everybody in Watertown does everything they can to keep their water clean. **How do they do it?** Here are some special people who will show you how.

The Whackers are wacky about their lawn—and clean water, too. That's why after they're through giving their lawn a terrific trim, they don't rake up the clippings. They let the clippings stay where they lay—that fertilizes the grass naturally. That way, they don't use fertilizers that could taint the town's water.



The Pipers aren't drips. They keep a tight handle on their faucets and spigots inside and outside their home. The Pipers know that a dripping faucet or spigot can waste 20 gallons of water a day—enough water for 900 showers a year!



Watertown's river and lake are clean now, but they used to be full of junk and litter. Now the folks of Watertown pick up trash whenever they see it and plant trees near the water's edge to keep soil from eroding. Now everyone agrees that the river and lake "shore" look pretty.

No-Till Bill doesn't till the soil on his farm. Instead of tilling (which is the same as plowing), he plants his seeds without plowing under the stalks and stems left over from his last crop. Since he doesn't disturb the soil, it's more likely to stay in place and less likely to be washed away by rain. As No-Till Bill tells his farming friends, "There's no thrill like no-till!"



The Finches are wild about birds. That's why they plant flowers and trees that make birds happy. And, in return, the birds put the bite on the nasty insects that drive the Finches buggy. Thanks to their bird buddies, the Finches don't have to use pesticides that could get into Watertown's water.



The Waders had a problem with the garden on the hill behind their house. When it rained, all the water ran off the hill and turned their game room into a massive mud puddle. So the Waders built terraces in their garden that let the water soak into the soil. Now they have a real nice hillside garden and they don't have to put on wading boots to play ping pong.



When it comes to conserving water, Farmer Phyllis keeps things under control. She's found a good irrigation system that doesn't waste water and keeps her crops happy and healthy, too. Says Farmer Phyllis, "It may sound corny, but efficient irrigation 'lettuce' run a farm that can't be 'beet.'"



Here's Major Mulcher working in his garden. He's not in the military, but he does use major amounts of mulch. He knows that mulch keeps the soil moist. Less water on his garden means more water for everybody in Watertown.



Carla believes in taking good care of her car. And she takes good care of Watertown's water, too. When she changes her oil, she doesn't dump her used oil down the drain. She takes her oil to the nearest oil recycling center. Carla thinks that you definitely "auto" try this yourself.



At Watertown Park, the grass and trees are eager to please. Their roots are always at work holding the soil in place. That way, the soil doesn't get washed away by rainwater and that helps keep the park green and growing.



Chuck the Duck rules the roost here at Watertown Wetland. He knows that people in Watertown do everything they can to keep his home clean. After all, wetlands filter out things that people don't want in their water. Chuck's wetland gives him a nice place to live and plenty of food to eat. No wonder Chuck thinks that caring for water really fills the bill!



People in Watertown know that everybody lives in a watershed. This means that all their water eventually flows down to the river and lake. That's why they do all they can to keep their water clean and pristine.



Everybody in Watertown hopes you had a good visit. And they hope you picked up some pointers that you can use to take good care of the water in your hometown. To learn more about your watershed, contact your local USDA Natural Resources Conservation Service office. You'll find us on the Internet at www.nrcs.usda.gov or in the telephone book under U.S. Government.





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CREATING A HEALTHY COUNTRY HOME

A rural property offers open space and opportunities for enjoyment. It is important to remember that your land is also a home to wildlife. Urbanization and other factors have greatly reduced the number of woodlands, pastures, rangelands, and prairies, making rural land stewardship crucial to the conservation of birds and other wildlife. How you manage your acreage affects the survival of these species, as well as your own quality of life.

BIRDS ON THE RANGE

Birds are good indicators of the ecological health of your property. You can protect the value and productivity of your land while providing food, shelter, and nesting sites for local birds. Overgrazing and improper weed management can result in degraded vegetation systems and lands that no longer provide for birds. A diverse mix of native cover and forage plants, as well as healthy streamside vegetation, will support game birds, resident and migratory songbirds, and grassland bird species, which are especially at risk.

Bird feeders allow for up close observation of some rural bird species. Keep track of the birds coming to your feeders and learn to identify the birds using other parts of your property to determine if your management choices are increasing the number and types of birds on your land. Birdhouses provide nest sites for additional birds that might inhabit your land, including birds of prey that can help keep the rodent population in check. For more information, visit www.audubonathome.org/countryhome.

BATS IN THE BARN

Bats are key to maintaining a healthy landscape, as they control insect populations with their nightly hunting for food. Some bats can eat up to 600 mosquitoes in an hour. You can entice a variety of bats to “hang around” by putting up a bat house on or around your home and retaining that old barn. For more information, visit www.audubonathome.org/bats.

BIG SKY BUTTERFLIES

Over 700 butterfly species help pollinate native plants in the United States. Since flowering plants are a key element of the broader landscape, why not establish a butterfly garden? Butterflies can be attracted by nectar-producing flowers, host plants for eggs and caterpillars, and a shallow dish of pebbles with water for drinking. For information about the common butterflies in your area and their favored plants, visit www.audubonathome.org/butterflies.

THE OTHER “B”

Most of the bees that pollinate native plants do not live together in hives. Many of these native solitary bees are declining, but you may be able to help them by building a bee box. Simply drill small holes into an untreated block of wood, or tie a bundle of dried stems together and place them outdoors. Solitary bees will lay their eggs in the holes, which then serve as a nursery. For more information on how to help these beneficial insects, visit www.audubonathome.org/solitarybees.

LIVING LIGHTLY ON THE LAND

Rotate crop fields and graze only as much livestock as the land will sustain. Resist the urge to create a traditional suburban landscape around your home. If a firebreak is needed, try to incorporate native plants and grasses into your design. Consult with your local NRCS office to identify native plants suited to the local soil conditions. Avoid using non-native plants and those that require frequent watering. Preserve native habitats whenever possible.

WILDLIFE SAFETY

Birds often drown in open livestock troughs if the water is too deep; provide a float or ramp that provides a way for them to climb out. Clean, fresh water is critical to your livestock, and frequent replacement of the water also prevents mosquito breeding. Consider minimizing fencing to allow native wildlife to move freely while containing your herd. Keep your domestic pets indoors or in a protected run to minimize their impact on native

wildlife and to keep them safe from natural predators such as coyotes.

WORKING WITH NEIGHBORS

Your property is part of a larger landscape that birds and other wildlife need to survive. Invite your neighbors to join you in managing your adjoining properties for native species. Form a local wildlife association and make a plan to provide food, shelter, and nesting sites to those species that most need your help. Keep track of how the birds and other wildlife respond to your efforts. For more information, visit www.audubonathome.org/neighborhood.

BEFORE YOU BUILD

If you are still planning construction of your country home, choose a building design and location that protects as much of the property as possible, minimize the amount of land cleared for the building site, and protect trees and shrubs from damage during construction. It is easier to protect existing habitat than to create new habitat later.

HEALTHY YARD PLEDGE

Create and maintain a healthy environment for you, your family, and local wildlife by pledging to:

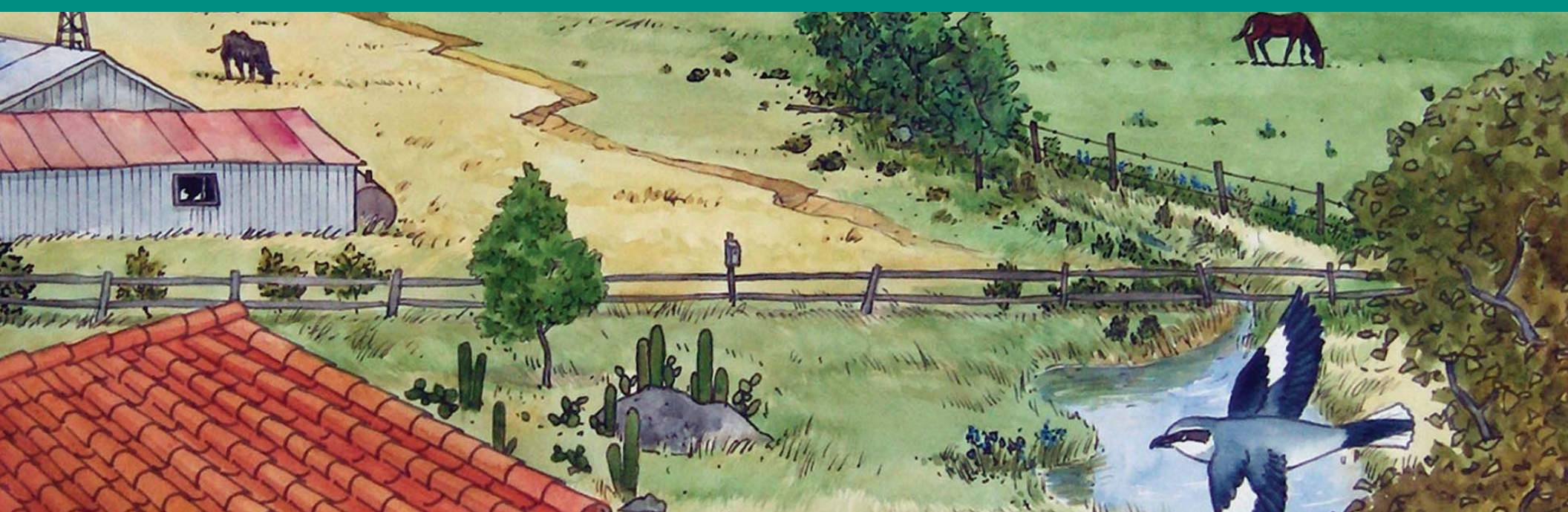
- ✓ Reduce pesticide use
- ✓ Conserve water
- ✓ Protect water quality
- ✓ Remove invasive exotic plants
- ✓ Plant native species
- ✓ Support wildlife on your property

Visit www.audubonathome.org/pledge to make the pledge online.

The **AUDUBON AT HOME** website contains information and downloadable resources to help you plan and develop your property in a wildlife-friendly way. You'll find regional resources and information about the birds, other wildlife, and native plants in your area. Visit www.audubonathome.org.

NRCS'S BACKYARD CONSERVATION website also shows ways to help the environment and to make your yard more attractive and enjoyable. Visit www.nrcs.usda.gov/feature/backyard.

AN INVITATION TO A HEALTHY COUNTRY HOME



Invite Birds, Bats, and Butterflies to YOUR COUNTRY HOME

- 1 Work with **NEIGHBORS** to encourage habitat protection across property lines.
- 2 Do not plant **INVASIVE PLANTS**. Deal with invasive weeds early and often, and restore grasslands with native forbs and wildflowers.
- 3 Screen **FENCELINES** with native shrubs to create additional habitat and wildlife corridors.
- 4 Monitor **WETLANDS**, including ponds and playas, for overall health, and manage runoff to prevent erosion and flooding.
- 5 Bats are common inhabitants of rural areas. A **BAT HOUSE** will provide a daytime roosting place for these aerial insect eaters.
- 6 Create a **BUTTERFLY GARDEN** by planting wildflowers and other plants to feed adult butterflies and caterpillars.
- 7 In the **YARD**, include items that will attract, protect, and support birds and other wildlife. Include bird feeders, a birdhouse, a source of clean water, and native plants for cover, food, and nesting. Keep cats indoors, and modify windows to prevent bird strikes.



For more information, visit www.audubonathome.org/countryhome • For individual copies of this poster, call 1-888-LANDCARE.

- 8 Manage **WOODLANDS** for the conservation of forest birds. Unless there is a significant threat of wildfire, leave brush and dead snags in place as nesting and feeding places for birds and insects.
- 9 Protect trees and other vegetation along streams with fencing to prevent overgrazing and erosion. The health of these **RIPARIAN AREAS** is key to the overall health of the land, because so many animal species depend on this type of habitat.
- 10 If you have livestock, rotate **GRAZING HERDS** to different pastures to promote sustainable forage growth. Pay attention to stocking densities to maintain healthy vegetation. Explore herd types to determine which best suits your property.
- 11 Maintain native **SHRUBLAND** or shrubby pastures for quail, grouse, and other game birds. Native prairies or meadows should be preserved for nesting grassland birds, such as meadowlarks and sparrows, as well as for hunting birds, such as hawks, owls, and falcons.

BIRDS TO HELP ON YOUR PROPERTY

With a large-acreage property or ranchette, you have a great opportunity to help birds, bats, butterflies, and other wildlife. Consider managing your land to provide food and shelter for five or six bird species that need the most support in your area. Keep a close watch to see how the birds respond to your efforts. To determine which species near you need the most help, and to find ways to help support them on your property, visit www.audubonathome.org/birdstohelp.

My target species

Action points



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CREATING A HEALTHY NEIGHBORHOOD

When you and your neighbors join together to create habitat for birds, bats, and butterflies, the impact of your individual efforts will be multiplied many times over. Your combined efforts can create a healthy refuge for wildlife and people by connecting isolated patches of habitat and by restoring the ecological integrity of your community.

COMMUNITY “BIRDSCAPES”

Birdscaping—providing food, water, protective cover, and nesting sites for birds—is a way to create a community that sustains human health and local bird populations. Birdscaping can help ensure the survival of the many species that winter, nest, migrate through, or live year-round in your area.

Native plants that provide nesting, cover, and foraging opportunities for birds help to replace natural habitats destroyed by development and to reconnect your community with surrounding natural landscapes. Consult with your local NRCS office to identify native plants suited to the local soil conditions.

If there are streams or wetlands in your neighborhood, vegetative buffers that protect water quality and reduce flooding can also provide habitat for native birds. Work with local water protection agencies to maintain streamside vegetation—for you and the birds. For more information on how to help birds in your neighborhood, visit www.audubonathome.org/neighborhood.

BAT TOWN

There are 47 bat species in the United States, and many help to control insect populations in urban, suburban, and rural communities. By providing roosting places for common crevice-dwelling bats, you are extending an invitation for bats to stay close to your neighborhood. Place a bat house at a height of at least 10 feet on a structure that faces the morning sun. For more information, visit www.audubonathome.org/bats.

IT’S A BUTTERFLY!

Butterflies are among the most striking and beautiful of our pollinators. To thrive, they need plants at every stage of their life:

- A recognizable plant on which to lay eggs
- A food source for caterpillars
- Plants for cover
- Nectar-producing flowers for the adults

Some butterfly species are declining due to pesticide use, habitat loss, or varying climate conditions. For more information about which species reside in or migrate through your community, and to learn which plants to provide for them, visit www.audubonathome.org/butterflies.

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WORKING TOGETHER

Homeowners and other residents, business owners, environmental organizations, parent-teacher groups, and municipal agencies can form a community or neighborhood wildlife association, or work within existing associations to protect local birds, butterflies, and other wild creatures. By working together, a strong coalition can create a sustainable community and improve public health through environmentally friendly planning, actions, and events.

With a neighborhood habitat group or wildlife association in place, work to create corridors of attractive, healthy, and useful habitat throughout the community. Connect adjacent properties by creating

habitat along roads and waterways, and around buildings. Imagine a bird’s-eye view of your community that includes ribbons of habitat intertwined with the existing structures, offering a welcoming place for your wild neighbors and allowing them to travel safely. For more information, visit www.audubonathome.org/workingtogether.

LIGHTS OUT

Too many lights at night can spell disaster for migrating birds. Large numbers of birds can be attracted by nighttime lights, become disoriented, and fly headlong into tall buildings or other obstacles. Follow the lead of proactive communities such as Chicago, and establish a citywide lights-out policy during migration. For more information, visit www.lightsout.audubon.org.

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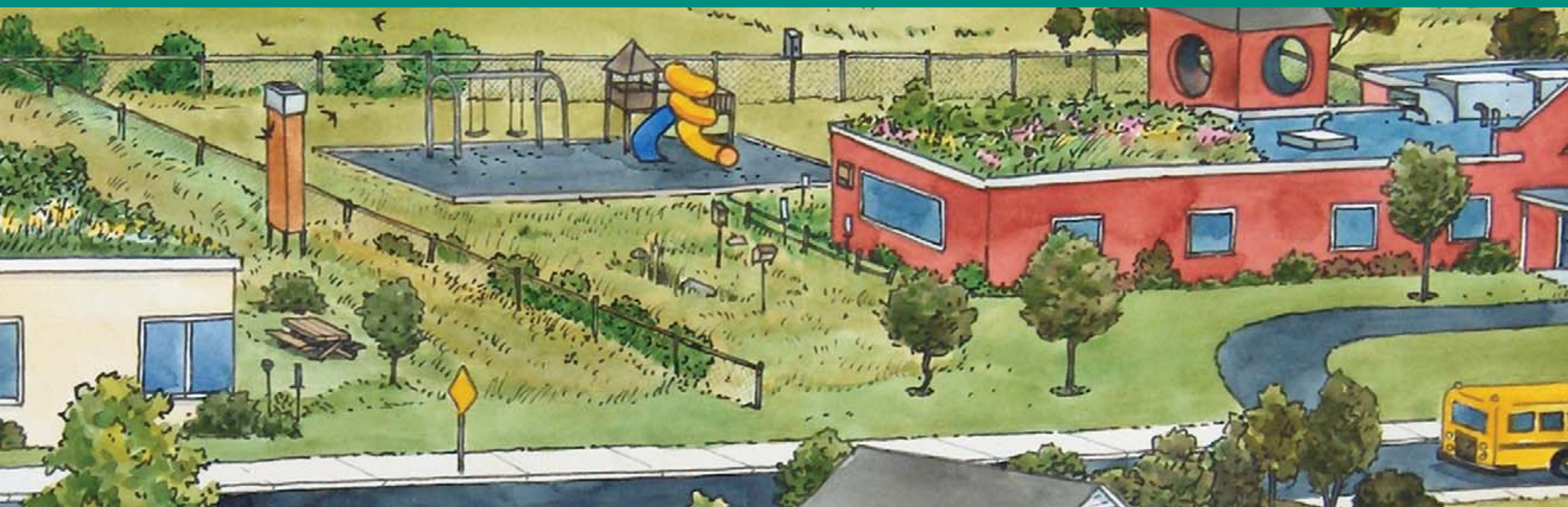
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AN INVITATION TO A HEALTHY NEIGHBORHOOD



Invite Birds, Bats, and Butterflies to YOUR NEIGHBORHOOD

1 Isolated patches of **NATURAL HABITAT** (woodlands, prairies, waterways, desert, etc.) can be restored and protected. Adjacent properties planted to mimic these areas can link isolated patches, and expand the neighborhood's ability to support birds and beneficial wildlife.

2 With the clearing of hollow trees and the capping of chimneys, Chimney Swifts are losing preferred places to nest and roost. Attractive **CHIMNEY SWIFT TOWERS** can house these high-flying insectivores and, when used to post information, can even serve as community nature kiosks.

3 **COMMERCIAL PROPERTIES** are often paved over or surrounded by expansive lawns—providing only limited opportunities for birds and other wildlife. By landscaping with native plants, these tracts of land can become vital contributors to a community's overall environmental health.

4 Wildlife-friendly practices can be implemented on a larger scale in a **SCHOOLYARD**. Incorporation of these elements reinforces similar residential efforts and generates teaching opportunities on school grounds.



For more information, visit www.audubonathome.org/neighborhood • For individual copies of this poster, call 1-888-LANDCARE.

5 Why not turn the barren roof space of neighborhood buildings into attractive green hilltops? **ROOFTOP GARDENS** save energy by insulating building interiors, reduce runoff, last longer than conventional roofs, and provide resources for birds, butterflies, and other beneficial insects.

6 Water **DETENTION BASINS** in housing and commercial developments can support wildlife while protecting water quality in rivers and streams.

7 A community-wide effort to keep **CATS** indoors will keep cats safe and healthy while protecting native birds.

8 Butterflies enhance neighborhoods with their beauty, and are also important in their role as pollinators. Plant gardens with **NATIVE WILDFLOWERS** to feed butterflies and to provide host plants for their eggs and caterpillars.

9 **RESIDENTIAL YARDS** are the ideal place for bird feeders, bird and bat houses, sources of water, and a habitat garden. Collisions with windows kill millions of birds each year; decorate the outside of windows so that birds can see and avoid them, or put up netting as a barrier.

BIRDS TO HELP IN YOUR NEIGHBORHOOD

In creating a habitat plan for your neighborhood, consider providing food, shelter, and nesting requirements for five or six bird species that need the most help in your part of the country. Together with your neighbors, keep track of how these birds respond to your efforts. To determine which species near you need the most help, and to find ways to support them in your neighborhood, visit www.audubonathome.org/birdstohelp.

My target species

Action points



U.S. DEPARTMENT OF AGRICULTURE

MIGHTY MICROBE'S MINI TALE

THE UNDERGROUND ADVENTURES OF SOIL'S SUPERHEROES



Color, Read, Create
Learn & Explore!!!



Natural Resources Conservation Service



MIGHTY MINI MICROBE'S TALE

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USDA

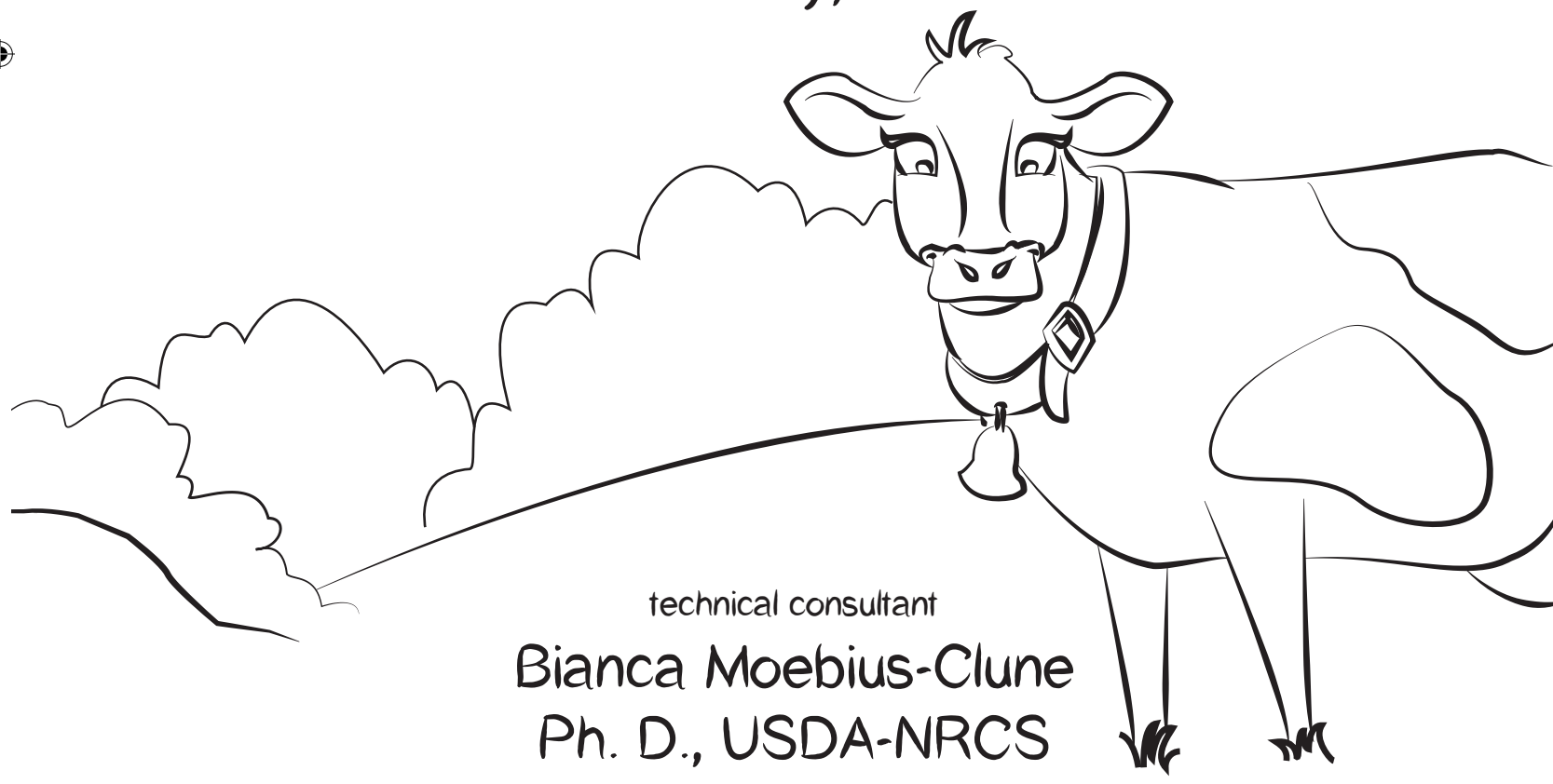
Natural Resources
Conservation Service

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Ron Nichols, NRCS

Illustrations by

Cat Bailey, NRCS



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Ph. D., USDA-NRCS



I realize you'll probably never meet me.

After all, my friends and I are far too small for you to see without a microscope.

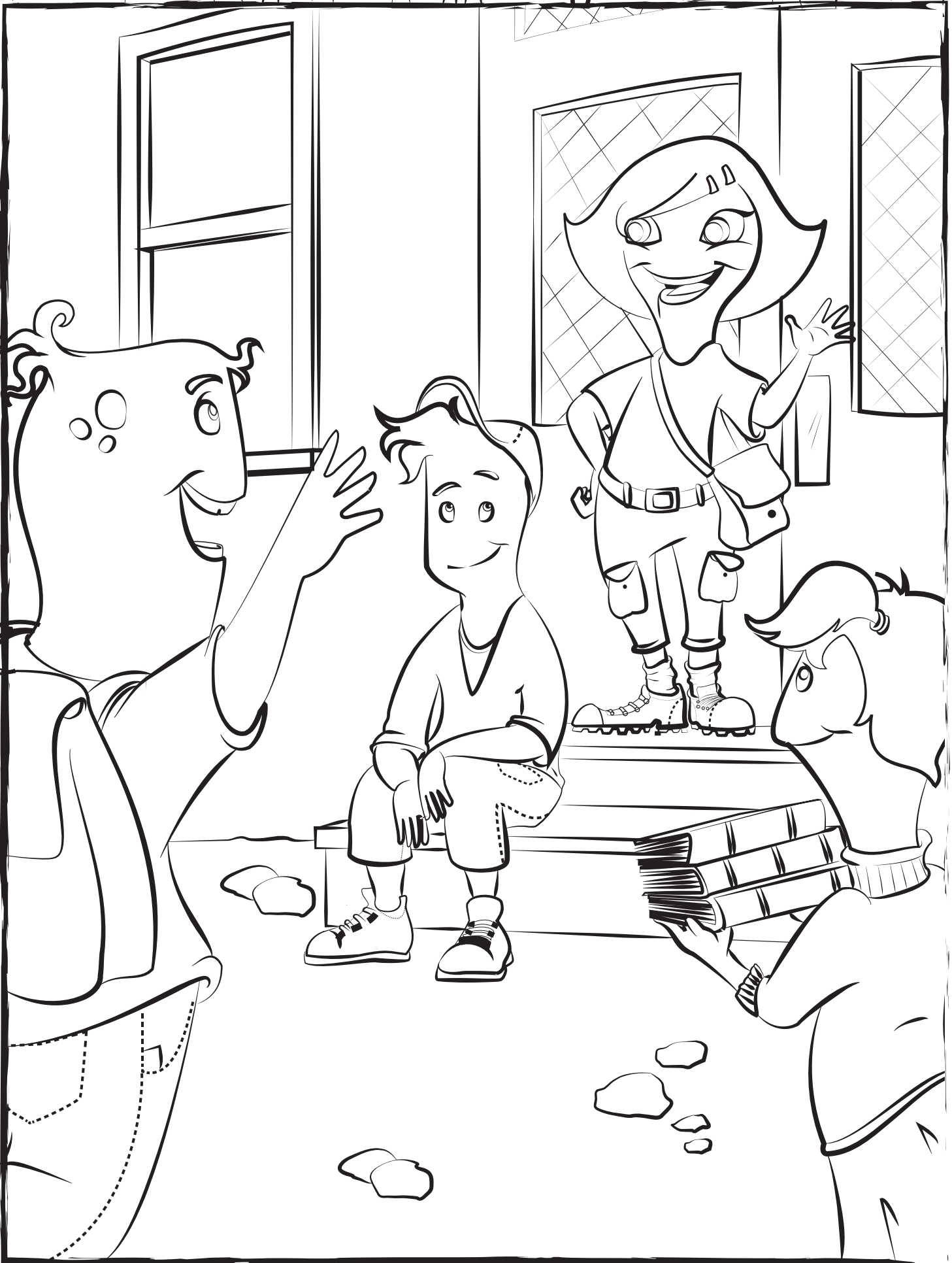
Plus, we live in a universe that is dark and hidden from view.

But just because you can't see us, doesn't mean we are not important.

Wait, where are my manners?
Allow me to introduce myself.



I'm Mini, a soil *microbe!*





Meet the Mighty Microbe



Though by the time this tale is through, you may want to call me "Mighty Mini" instead.

Why would I say such a thing? Well, believe it or not, without us, you probably wouldn't even be alive.

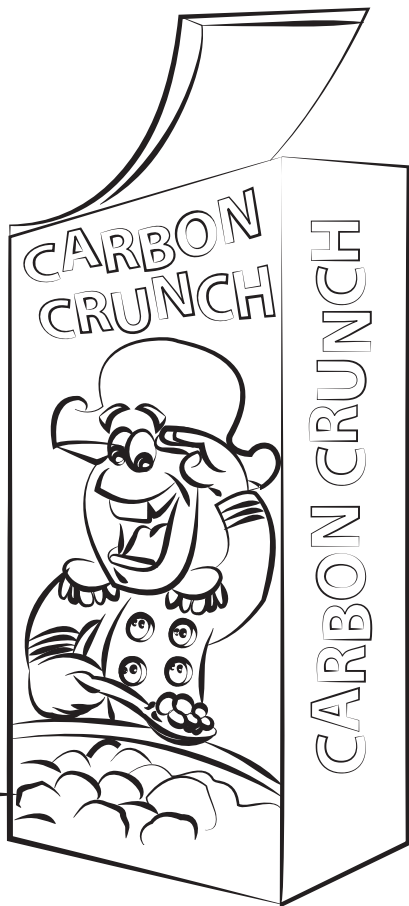
Super Soil Health Team!



Don't believe me? Let me explain by telling you some of the mighty amazing

things we soil microbes do to keep you healthy and alive.

We feed the plants....
...that feed you!



Every day, we eat the carbon that plants put in the ground and then give those plants many of the nutrients they need to grow big and strong and produce lots of healthy things for YOU to eat.

Dine in or carry out?
ROOTS RESTAURANT

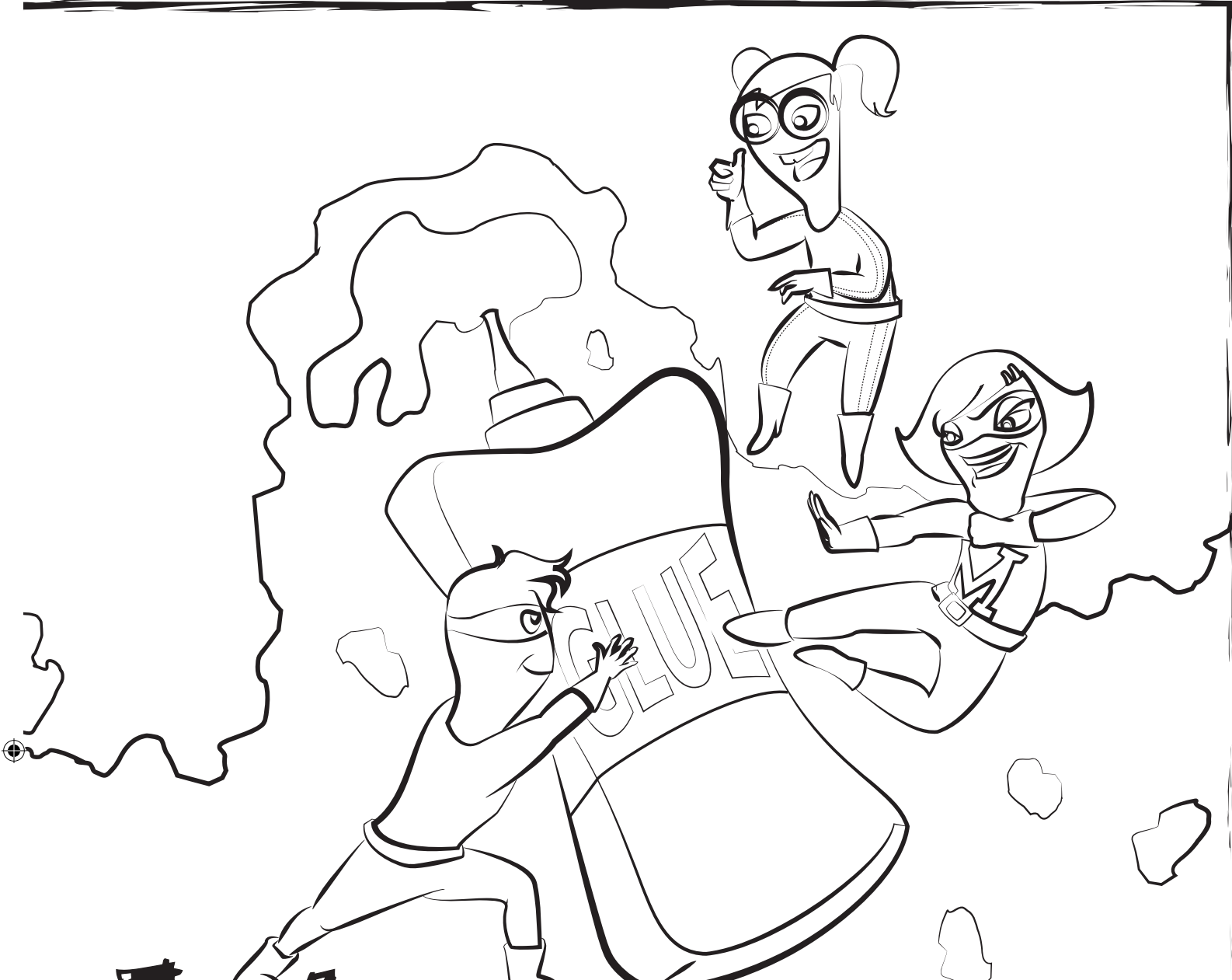


Plants love what we do for them so much that some actually ooze yummy things through their

roots for us to eat and to keep us near their roots where we can give them lots of good things in return.



Some of us even help plants fight off pests and diseases so our plant friends can stay healthy.



The mighty microbes also produce “soil glue” that holds the soil particles together — like cement holding together the bricks of a house. That way we help create pore spaces in the soil, like rooms and hallways that we all live in.

There’s also space for air and water in these pores. These pores in the soil are also important for when it rains — so water can get into the soil and fill up the spaces. It gets stored there for when the plants and creatures need water later.



we get a lot of our food from plant roots. So by planting cover crops (plants that aren't usually harvested), soil health farmers make sure we get fed throughout the

year. And the roots from these cover crops go deep into the soil to create more spaces for water to flow into and be stored when the rain comes, too.





Soil health farmers keep the ground covered all the time, which means our underground world is protected from the harsh rays of the sun. These covers keep our

home just the way we like it — cool and moist. Oh, did I mention that cover crops shelter our homes and keep the wind and rain from carrying off the soil?





The air you breathe!



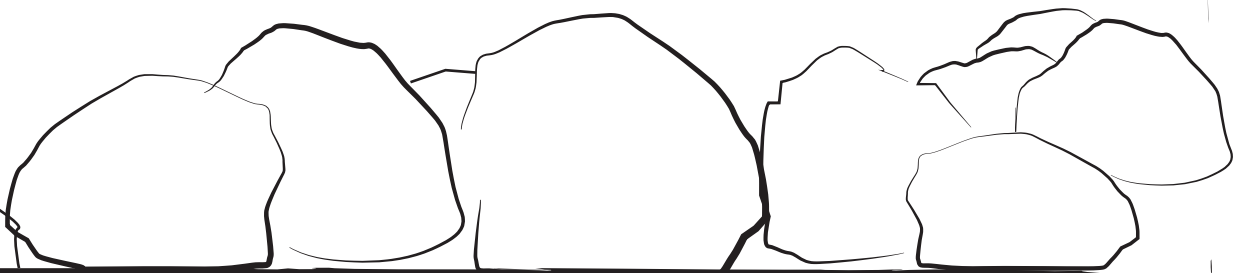
What we do to keep plants healthy

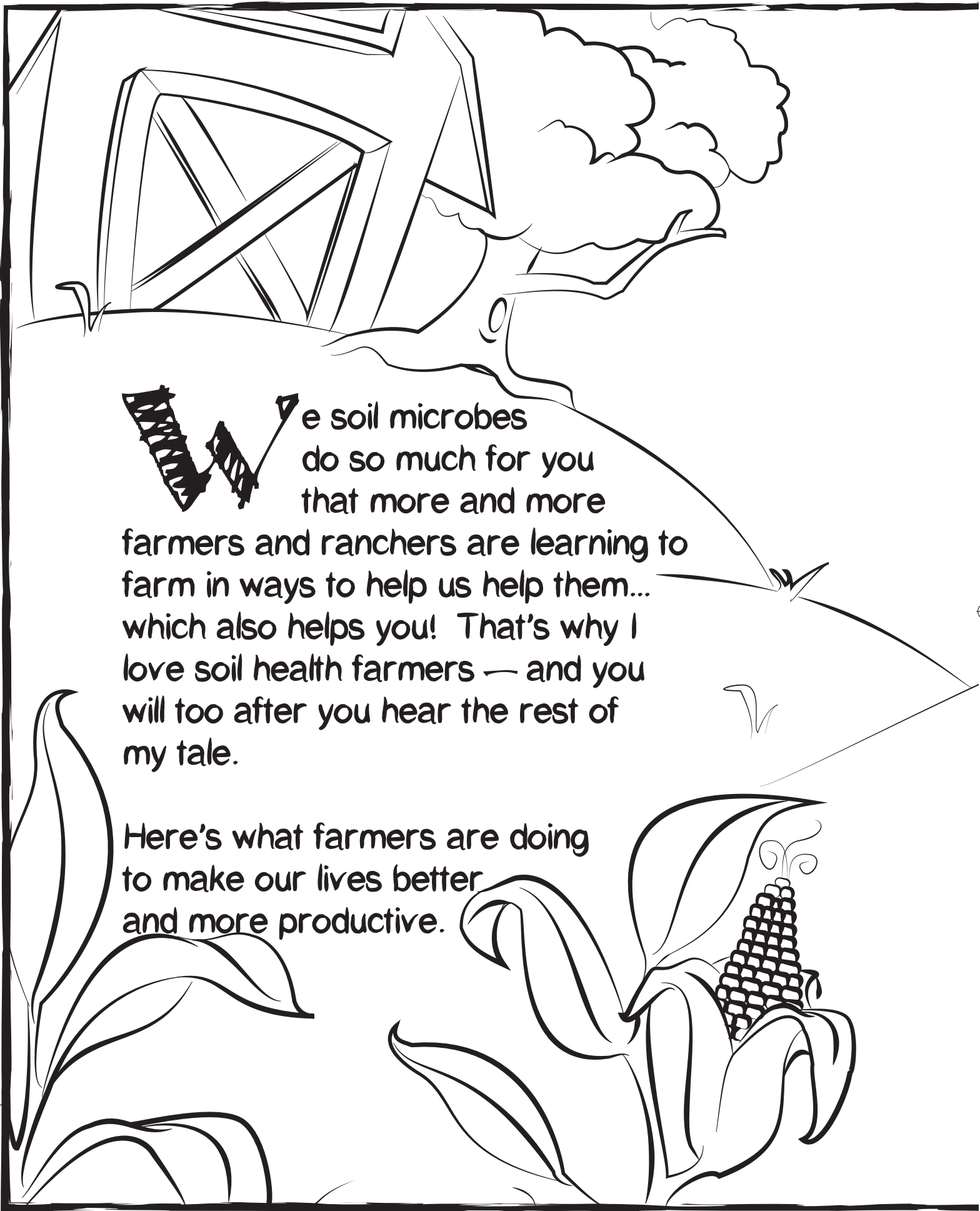
and happy helps them do what they are good at: Plants can use the energy of sunlight and carbon dioxide from the air and water from those pores in the soil and make yummy sugars! They also make oxygen that you and I need to breathe. That process is called photosynthesis. In a way, you might say that plants “breathe” in carbon dioxide and “breathe” out oxygen, which means we all have the air we need to breathe.

We're small in size...
...but **BIG** in numbers.



What we lack in size, we
make up for in numbers.
Can you believe that in
a teaspoonful of healthy soil, there
can be as many of us as there are
people on the whole planet?



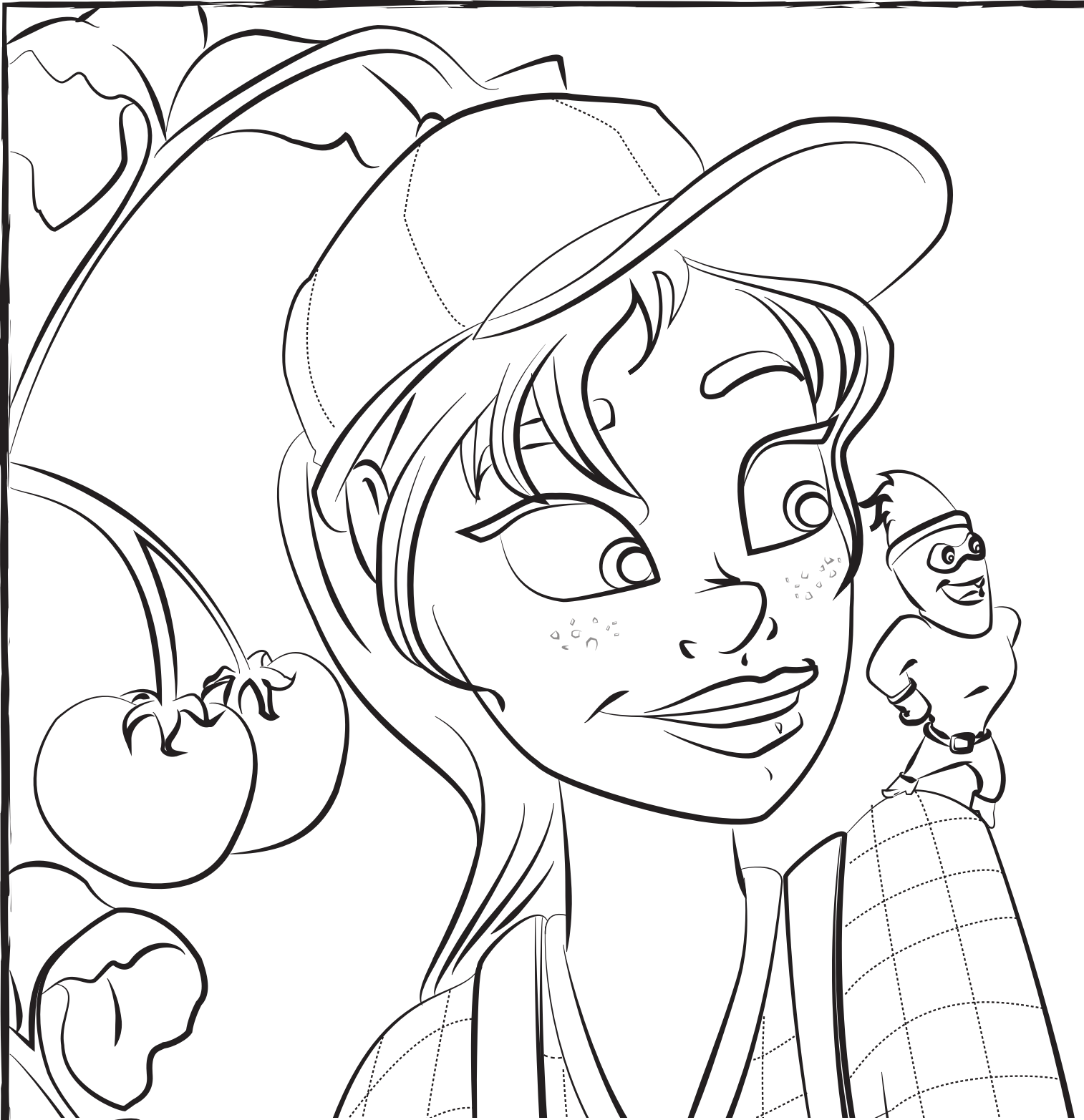


W e soil microbes do so much for you that more and more farmers and ranchers are learning to farm in ways to help us help them... which also helps you! That's why I love soil health farmers — and you will too after you hear the rest of my tale.

Here's what farmers are doing to make our lives better and more productive.



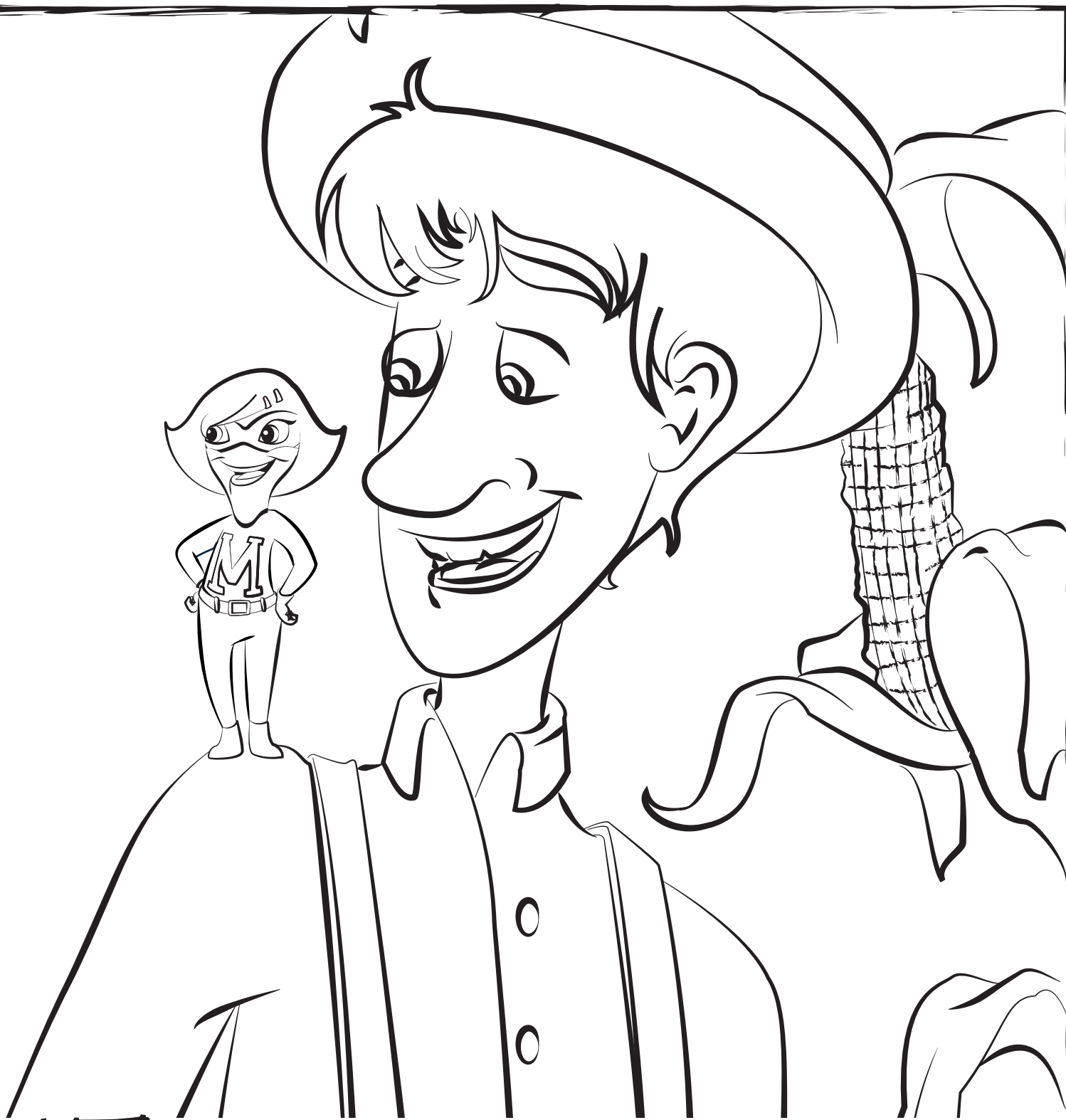




Not all farmers are soil health farmers, but more and more of them are farming to improve soil health — and the place

where I live. Soil health farmers don't treat us like dirt. They care for us by farming in ways that help us thrive.





These farmers know that we can help them make their farms better and help protect

their farms from disease, droughts, and floods. So of course they take care of us, wouldn't you?





DO NOT Disturb!!!



Soil
health
farmers
don't plow
our homes
and expose
our beautiful
dark world
to the harsh
rays of
the sun!





MIX it up!!!



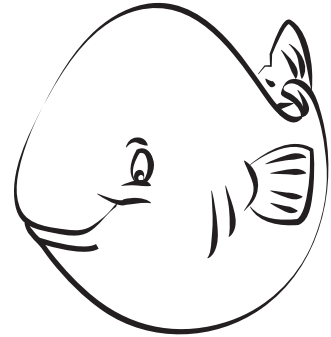
They often use animals and other carbon sources to feed us. So there are different plants and

animals in both our worlds — above and below the ground — and we get a tasty, healthy, balanced diet.

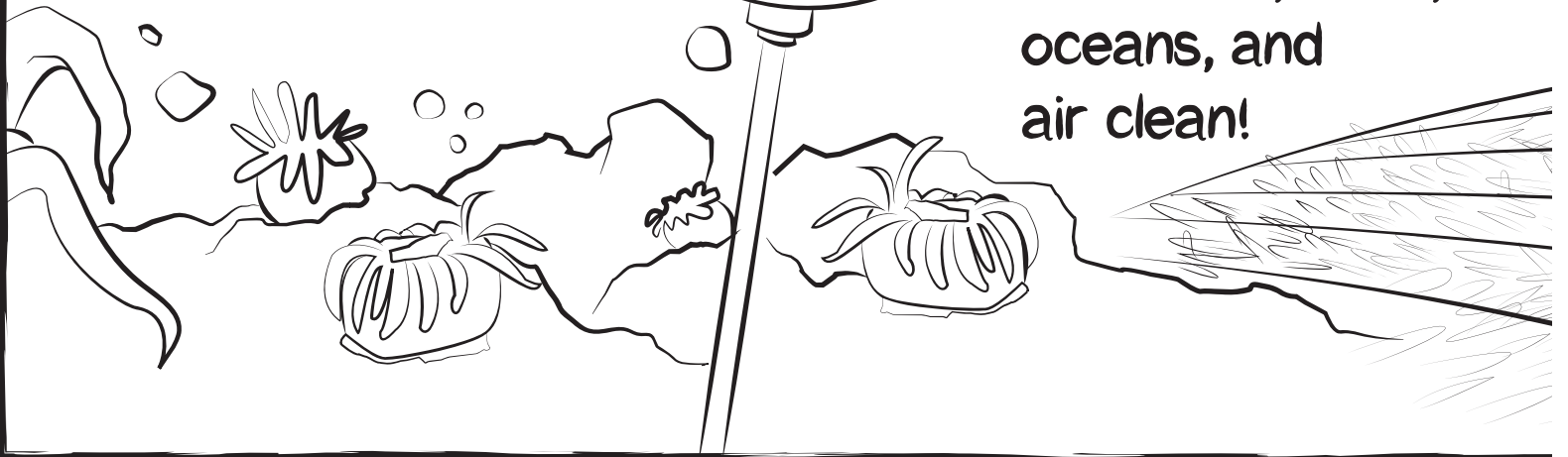




Here's what's



Farming in ways that protect my friends and me also helps keep our rivers, lakes, oceans, and air clean!

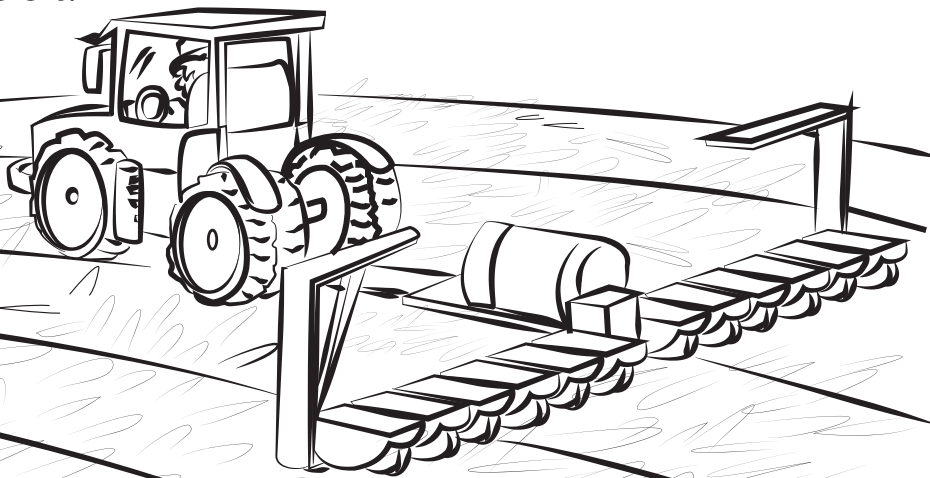




even cooler!!!



And because soil health farmers don't disturb the soil by plowing, they don't use nearly as much fuel to grow their crops either — which is also good for our planet.





Thank you!!!



The soil microbes may be small, but with a little help from our soil health farmers and friends, we can do some "mighty" important things for all the living things on planet Earth.



Thank you for letting me tell my tale. And be sure to thank our soil health farmers for taking care of us all!!!





A Note from the USDA Natural Resources Conservation Service...




We hope you enjoyed reading and learning about Mighty Mini Microbe's underground adventures as you colored. Although Mini and her band of superheroes are fictional illustrations, the story about what soil microbes do for us, and why we're working with farmers to protect them, is based on science.

For decades we've been learning about all of the wonderful things soil microbes do for our plants and for our planet. Today, we know how very important they are for us, and we also know how to help them thrive as farmers grow the food we need.

But there's still a lot to learn. Perhaps one day you will become a farmer, a conservationist, or a scientist who will help discover even more soil microbes and uncover other amazing things that our underground superheroes do for the soil — and for all of us.

USDA is an equal opportunity provider, employer, and lender.





In this learn-as-you-color, science-based
adventure tale, you'll discover how
Mighty Mini Microbe and her
band of superheroes (with a little help from
soil health farmers and friends) help take care
of plants, people, and planet Earth.

Teachers and students can also visit:
www.nrcs.usda.gov

to download Mighty Mini Microbes
fun activity pages to discover and
learn even more about Earth's
superheroes of the soil.



July 2022

ENDANGERED POLLINATORS



Of the many North American pollinator species in decline, some fall under special protection because they are in danger of becoming extinct. Learn how you can protect these vital animals and their critical habitat at www.pollinator.org.

Plusieurs espèces de pollinisateurs de l'Amérique du Nord sont en situation de déclin. Certaines d'entre elles sont donc placées sous protection spéciale afin de prévenir leur extinction. Découvrez les actions que vous pouvez poser afin de les aider en visitant www.pollinator.org.

De las muchas especies de polinizadores de Norte America, algunas pueden considerarse como especies bajo protección especial porque estan en peligro de extinguirse. Aprende como puedes proteger a estos animales y a sus habitats criticos en www.pollinator.org.

AND THEIR HABITATS

Art by Carol Schwartz

POLLINATOR PARTNERSHIP
 Smithsonian National Museum of Natural History
 U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT
GREIF PACKAGING SUCCESS TOGETHER™
 U.S. FISH & WILDLIFE SERVICE
EPR2 ELECTRIC POWER RESEARCH INSTITUTE
BAEYER
Crop Science SOCIETY OF AMERICA
syngenta
American Honey Producers Association
USDA United States Department of Agriculture
 Natural Resources Conservation Service
BLUE DIAMOND GROWERS
FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE
ABF American Beekeeping Federation
nosa finest yoghurt
BOEING
CYPRESS CREEK RENEWABLES
EEI Edison Electric INSTITUTE
USDA United States Department of Agriculture National Institute of Food and Agriculture
AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS Green Since 1899
BURT'S BEES NATURAL PRODUCTS CO.
USGS science for a changing world
NAPP National American Pollinator Protection Campaign
ShopRite
VALENT
UNITED STATES BOTANIC GARDEN
APHIS
DoD DEPARTMENT OF DEFENSE NATURAL RESOURCES
ShopRite
VALENT
UNITED STATES BOTANIC GARDEN



WINGS OF LIFE

Pollinating Butterflies & Moths

A diversity of butterflies and moths serve a critical role in pollinating native plants and contribute significantly to ecosystems and culture. Learn more at www.pollinator.org.

La diversidad de mariposas y polillas es crítica para la polinización de plantas nativas y contribuye significativamente a los ecosistemas y la cultura. Descubre más en www.pollinator.org.

La diversité des papillons et des papillons de nuit joue un rôle critique dans la pollinisation des plantes indigènes et contribue grandement aux écosystèmes et à la culture. Apprenez-en davantage en visitant www.pollinator.org.

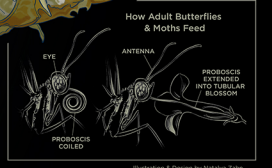


Illustration & Design by Natálya Zahn

POLLINATOR PARTNERSHIP | **BASF** | **Monarch Watch** | **syngenta** | **Earthwatch Institute** | **WILDLIFE HABITAT COUNCIL** | **USDA** | **MITSUI CHEMICALS AGRO, INC.** | **TOYOTA** | **sunday** | **EEI**

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UNITED STATES DEPARTMENT OF AGRICULTURE | **UNITED STATES BOTANIC GARDEN** | **THE SIMPLE GRAPE** | **UNITED STATES DEPARTMENT OF AGRICULTURE** | **Natural Resources Conservation Service**

