



Weston Junior Ranger Notebook

Explore wild places

Complete fun challenges

*Earn your Junior
Ranger pin*



Your Name:

Your Age:



Hey there, Ranger



Welcome to the Weston Junior Ranger Program, which helps kids and families get to know the beautiful wild places – called conservation lands – in Weston. As you complete this notebook, you will:

Explore some of Weston’s 2,000 acres of conservation land and nearly 100 miles of trails.

Learn about the natural world right here in Weston’s forest, fields, wetlands, and neighborhoods.

Protect these amazing places by speaking up for nature and becoming a steward of the land.

Junior Rangers are typically between the ages of 5 to 12, but anyone can join in the fun. **If you are 8 or younger**, complete each of the pages with a spotted salamander:



If you are 9 or older (or you just want more), give yourself an extra challenge by **also** completing the pages marked with a luna moth:



When you have completed this notebook, ask a parent to snap a photo of the pledge page at the end of this notebook and send it into westonjuniorrangers@gmail.com. We will send you your Junior Ranger certificate and pin in the mail.

We hope this notebook will be the beginning of a wonderful adventure for you – a discovery of the incredible conservation lands that surround you here in Weston!



Get Prepared



1

A great explorer always prepares for adventure.

What do you need to take with you for a day on the trails?



A comfortable backpack



Plenty of water



Snacks



Map and cell phone



A small first aid kit



Bug spray & sunscreen



A plastic bag to tote out any trash you find (thanks!)

(If you checked all of the above, you got it!)

Remember to respect Weston's conservation lands and carry out what you carry in, including wrappers, bottles, and the dog poop bag (if you've brought your canine friend with you). Go the extra mile and also carry out any trash you find that has been left behind by others.



Poison Ivy & Ticks



2

Two things you might encounter on Weston's trails which will not be your favorites are **poison ivy** and **ticks**.



Poison ivy has three leaves and a hint of red in the middle. The leaves are green except in early spring and late fall, when they turn red. It can grow on the ground, as a shrub, or as a climbing vine. Many people get an itchy rash a few days after touching any part of a poison ivy plant. Fun fact: poison ivy is a native plant, and the birds actually like to eat its berries. To each their own!

Can you remember this saying?

"Leaves of three, let it be."



Ticks often hide in long grasses or other tall vegetation. When ticks bite, they can transmit diseases that can make people sick. When you get home from your walk, check your whole body for ticks, take a shower, and throw your clothes in the wash.



A great explorer should always have a great map on hand. Fortunately, you have many map options in Weston.

MapsOnline

MapsOnline is Weston's free online interactive map. If you have a mobile device with you when you hike, load MapsOnline and press "zoom" and "follow" near the bottom of the screen. A blue circle will show you where you are on the trails.

You can find MapsOnline here:

www.mapsonline.net/westonma/trails.html.



SCAN ME

Paper Maps

You can buy a paper map for \$10 on Weston Forest and Trail Association's website (www.westonforesttrail.org) by visiting the Conservation Commission's office in Weston Town Hall. It can be fun to use a highlighter on a printed map and mark off all the trails you hike in Weston. Who knows, maybe one day you will find that you have hiked them all!



SCAN ME

AllTrails

Many people like using AllTrails, an app that shows trails everywhere. If you want see how Weston's trails connect with neighboring towns' trails, check it out: www.alltrails.com.



SCAN ME

Now, do you have a map?

Hit the Trail



4

Head out and hit the trail! Notice the natural world all around you.

Can you find any of the items below?

Circle what you can find.



Acorn



Leaf



Pinecone



Fern



Bird



Ant



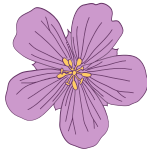
Butterfly



Squirrel



Mossy rock



Flower



Frog



Water

What other interesting things do you see?

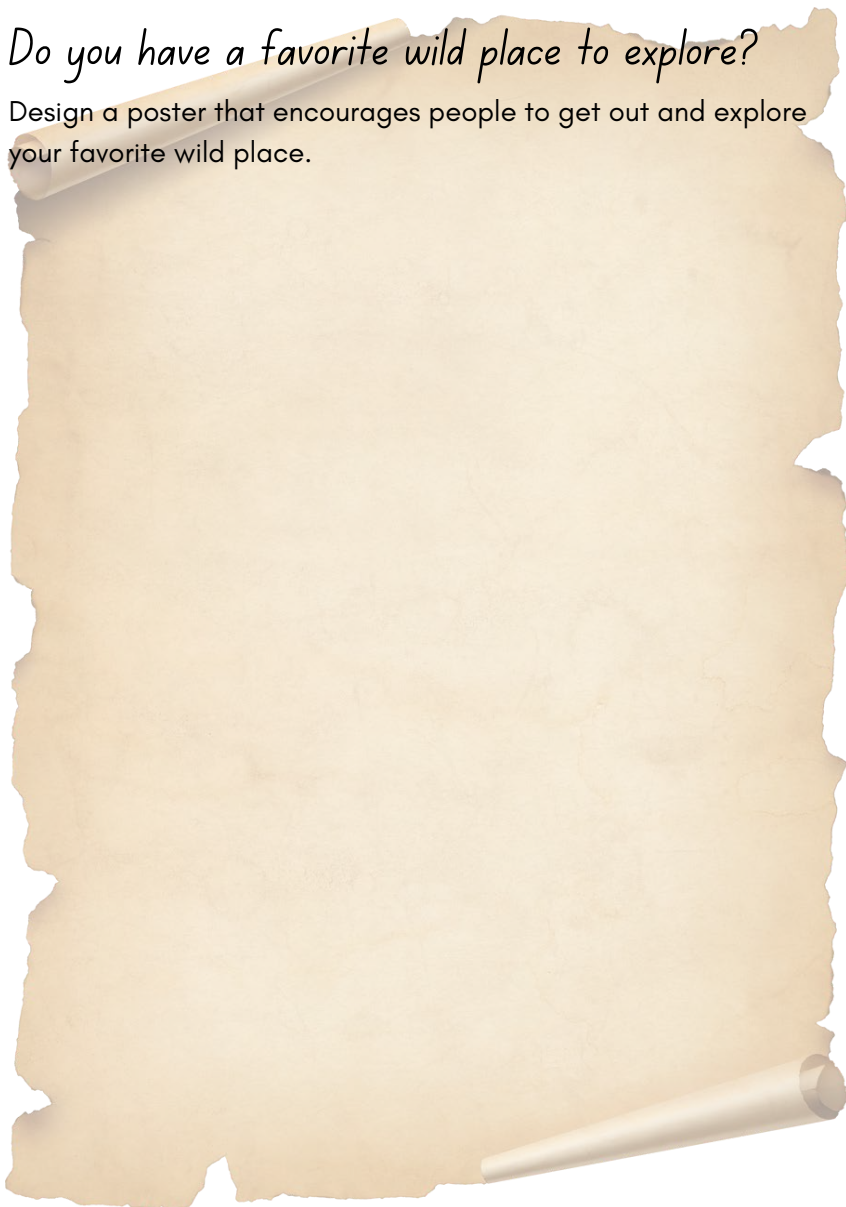
Write or draw them here (use extra paper if you need to!)

Conservation Land 5

Did you know that Weston has more than 2,000 acres of conservation land and nearly 100 miles of trails? We are lucky to have so many places to explore forests, fields, and wetlands right here in town.

Do you have a favorite wild place to explore?

Design a poster that encourages people to get out and explore your favorite wild place.





Weston's forests are home to many kinds of trees. Trees that have flowers and that drop all of their leaves in the fall are called **deciduous** trees. Maples, birches, oaks and other deciduous trees give us our fall colors - reds, yellows, and oranges.

Trees that have cones and needles are called **coniferous** trees. Coniferous trees do drop their needles, but not all at once in the fall, so they have green needles all year long. Pines, hemlocks, firs, and spruces are all conifers.



Coniferous and deciduous trees, together in the fall.

Which trees are deciduous and coniferous?

Draw a line from each tree species to the type of tree it is.

Deciduous

Coniferous

Red maple White pine Paper birch Black oak Hemlock

Oak Trees



7

Oak trees are especially important in our forests because they provide food and shelter for lots of creatures, big and small. Luckily, we have many of them in Weston!

There are 2 main kinds of oak trees in our forests - red oaks and white oaks. What difference do you notice between the red oak and white oak leaves?



White oak leaf



Red oak leaf

See how the red oak leaf looks sharp at the tips, and the white oak leaf looks round? There's a great way to remember the difference: sharp leaves could give you a scratch (not really!), so they are red oaks. White oaks are soft like white clouds.

Can you find an oak leaf?

Is it round or sharp?

Round

Sharp

That means it came from a

_____ oak!





Pine trees are the most common coniferous trees in Weston's forests. On pine trees, the needles are attached to the branches in bundles. You can count the number of needles in a bundle to help figure out what kind of pine tree it is.



Can you find a pine needle bundle?

Count the needles to find out what kind of pine tree it came from. You may need to count 3-4 bundles to be sure, because sometimes a needle or 2 has fallen out.

My pine has _____ needles,

which means it is a _____ pine.

(Hint: White pines are the most common pines in Weston.)

What other interesting observations can you make about Weston's trees?

Can you find ...

woodpecker holes?

fairy doors?

a dryad house?



In ancient Greek mythology, tree fairies are called dryads. Do you believe they really exist?





Our conservation lands provide homes to many kinds of animals, but these creatures are really good at hiding, so you may not see many. Look for clues of wildlife instead, such as tracks, pellets, burrows, and even scat (a fancy word for wildlife poop!)

Can you match the animal with a clue that helps us know it has been nearby?



*Soft white eggs in the dirt
(or torn shells)*



*Nibbled bits of
pine cones*



*Pellets of fur,
feathers, and bones*



*Scat with pointy ends, the
size of a small dog's*



*Tracks with
2-toed hooves*



*Egg masses in vernal
pools in the spring*

*Great horned
owl*



*Snapping
turtle*



*White-tailed
deer*



*Spotted
salamander*



Red fox



*Red
squirrel*



Listen Like an Owl 10

Find a place to pause and listen to the sounds around you.

What do you hear?

Draw something that you heard. If you don't know, imagine!



Did you know Weston's most common owl is the barred owl? Owls are great listeners and can hear people coming from far away. You are very lucky if you see one! If you don't, you might hear one off in the distance. It makes a call like it's saying "who cooks for you?"



Five Senses



Animals rely on their senses to survive. Take a few minutes to observe the land around you by using all of your senses.

What do you see, hear, feel, smell, and taste?

What do you wonder about this place?



I see:



I hear:



I feel:



I smell:



I taste:



I wonder:





Lichens and fungi might look like plants, but they aren't!



Fungi (singular = fungus, what many of us call mushrooms) are decomposers that grow in many places, including where you can't see them, like in the soil beneath your feet. If you see fungi on a tree, it probably means the tree is dying or already dead. Other fungi grow up from the woodland floor and look just like fairy cups!



Lichens are a mix of fungi and other tiny organisms working together to survive. They don't have roots, and they like to hang out on trees and rocks. Sometimes they grow near mosses (which are actually plants!)

Can you spy any lichens or fungi?

Naming Fun(gi)



13

If you find a fungus or a lichen, what is it like?

Circle the words you think best describe it.

Squiggly

Slimy



Slippery

Bumpy

Stinky

Shiny



Cruchy

Wiggly

Smooshy

Squishy

Crinkly

Scratchy

Wobbly

What else? Write down your own words:

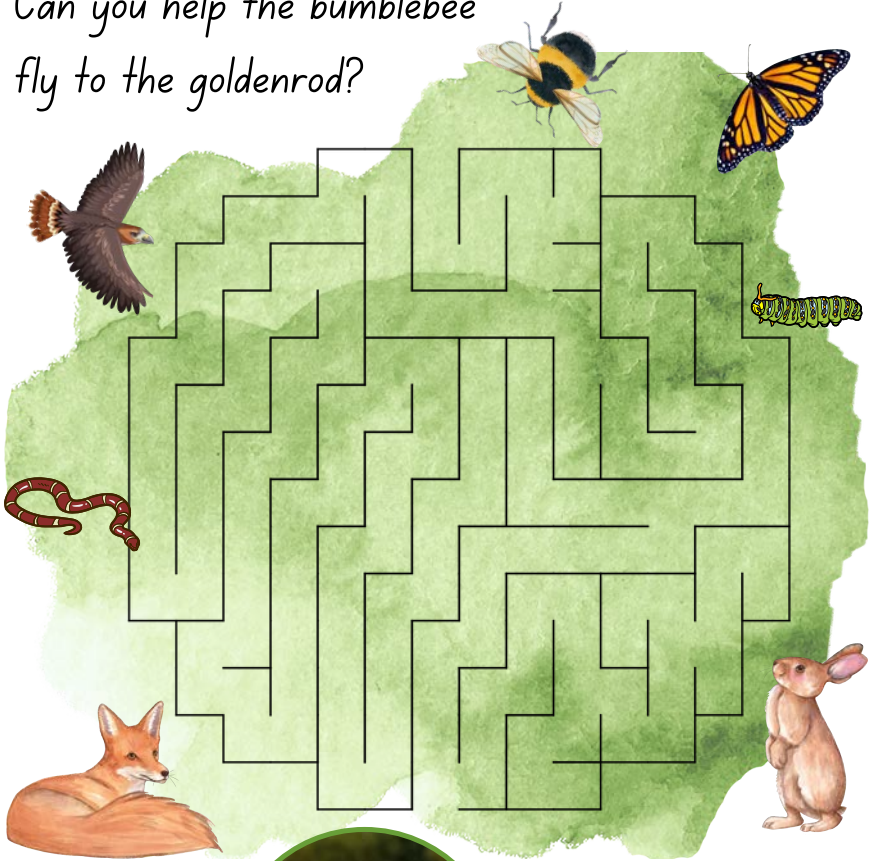
If you could make up a name for your fungus or lichen, what would you call it?

My lichen or fungus name is:



On Weston's conservation lands, most of our fields grow tall throughout the spring, summer, and fall, providing food and shelter for many creatures. Bumblebees sip nectar from flowers, rabbits scurry through the grass, foxes hunt, caterpillars munch, red-tailed hawks soar overhead, and snake sun themselves on rocks.

Can you help the bumblebee fly to the goldenrod?



Did you know that goldenrods and other asters are important fall food sources for bees as they gather energy to make it through the winter?



Do you see any water nearby? Ponds, streams, rivers, swamps, and vernal pools are just some of the **wetland habitats** you may meet on Weston's conservation land. In wetlands, the land is covered by water. Wetlands help to clean our water, provide homes for plants and animals, and control flooding, so they are really important!



Q I D N R C W R S N
O Z R U M A X R S E
T F A E C T E F V M
U X G I I T T R A O
R O O H W A L O A C
T Z N E A I I G A I
L P F R T L L Z W D
E O L O E A Y H J M
H B Y N R A P I K P
D G O H V A T S L T

Wetland Word Search

Can you find these wetland words?

- dragonfly
- cattail
- water
- turtle
- heron
- frog
- toad
- lily



Humans have lived on and traveled through the conservation lands in Weston for thousands of years. For a long time, indigenous people knew this land as a mostly forested place. When colonists arrived in the 1600's, they started to clear the forest for farming. Weston then became an important stop on the Post Road out of Boston. In the late 1800s and early 1900s, the town was a popular place for wealthy Bostonians to build estates where they could get away from the hot city in the summer.



Stone walls in the forest are usually a sign that the land was once a farm. The size of the stones gives you a clue about the type of farm. If the stones in the wall are big, the wall probably surrounded a pasture for livestock, like sheep. If the stones are small, the wall probably surrounded a cultivated field where grains or vegetables were grown, such as oats, corn, beans, or pumpkins.

Can you find a stone wall?

Are the stones big or small?

Big Small

That means the wall probably was around a

cultivated pasture field.

(Circle one)



Bonus challenge: Can you track down these signs of the past?

- A very large stone wall (called Louisa's Wall) at the Case Estates
- An old furniture factory at Sears Land and Melone Homestead
- An old chimney in Nolte Town Forest



Weston's **trail markers** were designed in 1980 by Tom Selldorf, Weston Forest and Trail Association Trustee Emeritus. You will see them marking the way down the trail. Sometimes you'll see them on their sides or upside down.

Can you guess what these trail markers mean?







Many of the trees in our conservation lands are more than 100 years old. When a tree falls across a trail, we cut it with a chainsaw to clear it. You can tell how old a tree is by **counting the rings** on the cut trunk, near the bottom of the tree. Each ring = one year of life.

Can you find a fallen tree and count the rings?

How old was the tree?

 years.

Ranger Tip

Don't be sad about fallen trees - they make great habitat for wildlife.

Invasive plants are non-native plants that disrupt ecosystems. Invasive plants have been brought here by people from other places, on purpose and by mistake. When invasive species spread, they crowd out the native plants. **Native plant** species have been growing here for thousands of years. Native plants provide food and shelter for wildlife, and they help ecosystems to stay healthy.

Can you match the photo to the invasive species?

Write the correct letter down next to the matching description.



- _____ **Japanese knotweed** can be mistaken for bamboo.
- _____ **Garlic mustard** has small white flowers and toothed leaves.
- _____ **Purple loosestrife** has purple flowers and grows in wetlands.
- _____ **Oriental bittersweet** is a vine with orange and red berries.

Bonus Challenge

Animals, including insects, can be invasive, too. See if you can learn more about these invasive pests in Massachusetts:

- Emerald ash borer
- Spotted lanternfly
- Asian long-horned beetle





Being a conservation steward means taking care of nature, wherever you are. Weston Forest and Trail Association members are stewards for conservation land in Weston. We hope that you, as a Junior Ranger, will help us take care of conservation land, too.

Read through the six suggestions of things that you can do as a steward of conservation land.

Can you fill in the blanks with words from the bank?

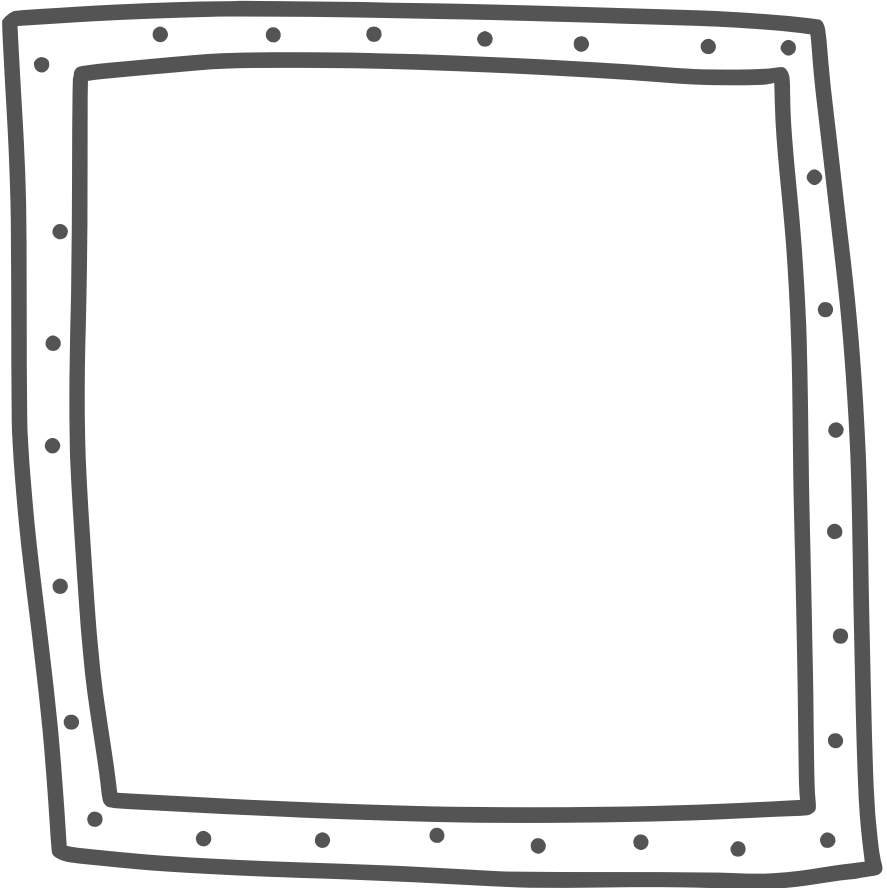
LITTER DOG BIKE TREE OUT VOLUNTEER

- 1 When you hit the trails, bring a bag and gloves with you to pick up _____ and then throw it away at home.
- 2 Always carry _____ what you carry in.
- 3 If you are walking a _____, make sure to scoop its poop and throw it in a trash can.
- 4 Don't ride your _____ on trails when they are muddy.
- 5 If you find a fallen _____ blocking a trail, ask your parents to send the trail location and a photo to westonforesttrail@gmail.com (or to message us on Facebook).
- 6 _____ at a Stewardship Saturday event to help build trails, manage invasive species, and more. To sign-up, email conservation@westonma.gov.

All kinds of people like to spend time in nature while doing all kinds of things. Hiking, running, playing, biking, bird-watching, studying plants, tracking wildlife, snowshoeing, horseback riding, drawing, sitting quietly - these are just a few of the ways people enjoy Weston's conservation lands.

What do you love about spending time in nature?

Draw a picture of yourself doing what you love in nature, or write something about it.



Take the Pledge



Congrats! You have completed your Junior Ranger notebook. We hope you had fun exploring. As your last task, say the Junior Ranger pledge out loud (and proud!). Then sign and date it, take a photo, and send it with your address to westonjuniorrangers@gmail.com. We will send you your Junior Ranger certificate and pin.

Junior Ranger Pledge

As a Weston Junior Ranger, I promise to keep exploring, learning about, and caring for the conservation land in Weston. I promise to share what I learn with my friends and family. I promise to inspire others to help preserve, protect, and appreciate nature everywhere.

Signed: _____

Date: _____





Questions? Comments?

Contact us at:

Weston Forest and Trail Association

P.O. Box 665

Weston, MA 02493

www.westonforesttrail.org

westonforesttrail@gmail.com

If you enjoyed this program, consider donating to Weston Forest and Trail Association, a 501.c.3 charitable organization. All contributions are tax deductible.

Donate at www.westonforesttrail.org/join-us.

Gifts of any amount are welcome.