Life Around The Lake Lake Hopatcong Games and Activities

It's great not to swim into trash

> Look how healthy our lake is!

Hope kids learn how to keep our lake Clean



The Lake Hopatcong Watershed

A lake is not just like a huge bucket of water. There's a lot more to it than that. The life of a lake includes hills, slopes, plants, trees, streams, rivers... pretty much every part of the land surrounding it. It's called a watershed. A watershed is an area of land that drains into a body of water. Watersheds come in all shapes and sizes. Some are as small as a backyard that drains into a pond, others are thousands of acres in size. No matter where you are, you are in a watershed! Lake Hopatcong is in the Middle Delaware–Musconetcong Watershed.

Lake Hopatcong is the largest of the more than 3,500 lakes, reservoirs and ponds in New Jersey! It drains into the Musconetcong River and has more types of game fish than any other lake or waterway within the state.

Let's take a look at Lake Hopatcong and its watershed by the numbers:

- **4** Towns that border Lake Hopatcong (Hopatcong, Jefferson, Mount Arlington and Roxbury).
- **9**: Length of Lake Hopatcong, in miles, a distance that would take about three hours to walk.
- **13:** Size, in pounds, of the largest rainbow trout ever caught in New Jersey at Lake Hopatcong—about as heavy as 1½ gallons of milk.
- **28:** Fish species found in a recent fishery study of Lake Hopatcong.
- **45:** Miles of shoreline on Lake Hopatcong—about the same distance as a drive from the lake to New York City.
- 46: Miles the Musconetcong River flows from Lake Hopatcong to the Delaware River, which is as long as about 810 football fields.

13,500: Acres in the Lake Hopatcong watershed—roughly the same size as Manhattan in New York City.

9,745,000,000:

The most water, in gallons, ever officially recorded in Lake Hopatcong, enough to fill nearly 15,000 Olympic-size swimming pools.

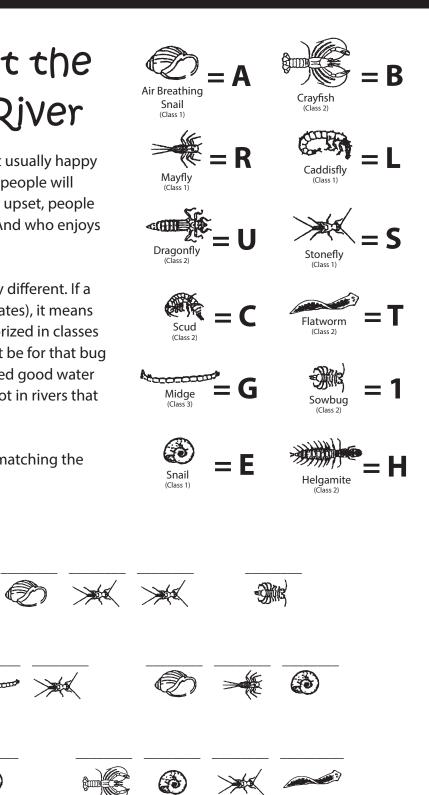
SECRET CODE

Learning About the Health of the River

When humans think of bugs, they are not usually happy thoughts. If we feel sick and have a fever, people will say we have a bug. If we feel frustrated or upset, people might want to know what's bugging us. And who enjoys having mosquitoes around?

For rivers, bugs can mean something very different. If a river has certain bugs (or macroinvertebrates), it means it is healthy, not sick. The bugs are categorized in classes that represent how healthy the river must be for that bug to survive there. It's simple! Bugs that need good water to live in will be found in healthy rivers, not in rivers that are unhealthy or polluted.

Figure out the secret message below by matching the bugs with the letters in the chart.



indication of a healthy river!

All Accounts >

SCAVENGER HUNT

Nature Discoveries

When you're out in nature, take the time to appreciate what you see, hear, smell and feel. How many of the items below did you notice on your nature hike? Add other items you found to the list and draw some of your favorites into the picture!

- □ Ladybug
- Animal footprint
- Bird feather
- Pinecone
- Acorn
- □ Spiderweb
- Bird's nest
- Wild mushroom
- Green moss
- U Worm
- Animal hole (in the ground)
- Insect bites in a leaf
- □ Stream/river
- Fallen branch
- Ferns

Museum Mix-Up

The Lake Hopatcong Museum archives have gotten all mixed-up! Use the clues to unscramble the words and help get the archives back in order.

The first people to live at Lake Hopatcong are called:

NEPLEA

This "road on water" helped move people and supplies:

SROMRI LAANC

This mineral was transported across the lake after leaving the mines:

RNIO ERO

During their vacations at the lake thousands of people stayed in:

SHELTO

The creative and productive inventor once lived in Lake Hopatcong:

NOHDSU XMAMI

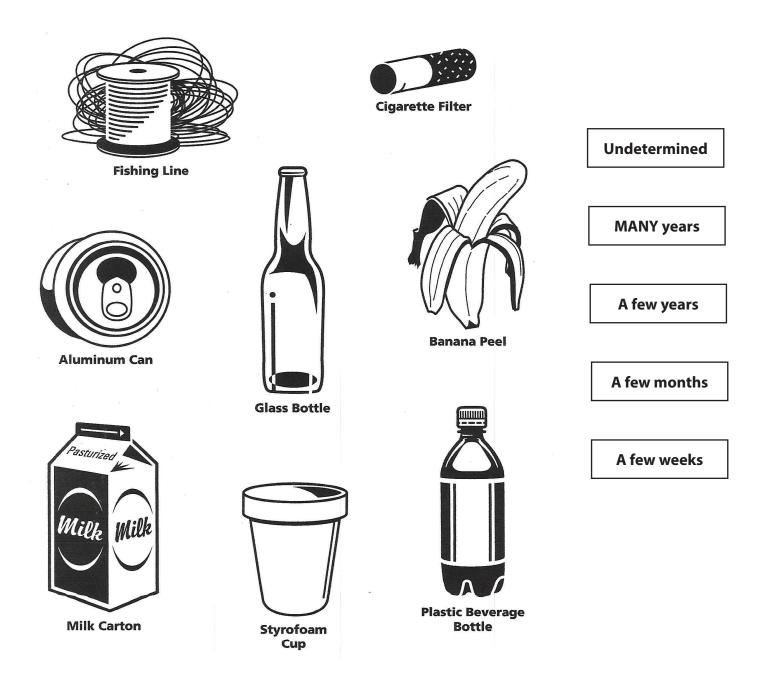
A piece of this favorite ride from Bertrand Island now lives in the museum:

UOLERSAC

How Long Will it Take?

It takes just a moment for an item to be carelessly discarded or blown by the wind into the woods or a lake, but it can take many, many years for that item to degrade. Test your knowledge about degradation times. Draw a line between each item (left) and its estimated degradation time (right). Degradation times can be used more than once.

How long will it take for these items to decompose?



No Excuses

Have you ever littered and thought you had a good reason for it?

When people litter, they sometimes think they have a good reason for it, but, there is NEVER a good excuse for littering. Take a look at the list of reasons people use for littering. Put a check mark next to the excuses you have heard people use when they litter.

If your friends and family use these excuses, remind them there are no good excuses for littering and ask them to throw their trash away in a trash can.

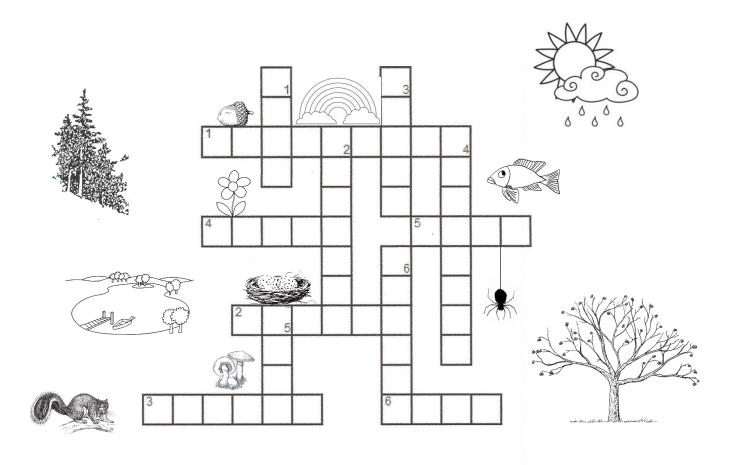
There's already trash there.	I only did it one time.	
Why shouldn't I?	Nobody told me not to.	
I don't want to mess up my backpack.	The trash can was just too yucky to touch.	
It's too hard to find a trash can.	It's so tiny, it won't matter.	
□ Mom would get upset if she knew	Bees were around the trash can.	
l ate a snack before dinner.	🗖 I saw an adult do it.	
Everyone else does it!	 I don't care about the forest. There wasn't a sign telling me not 	
Someone will pick it up for me.		
It's JUST a candy wrapper.	to litter.	
It's too heavy to carry.	It fell out of my pocket.	
Nobody saw me.	Nobody cares.	

Bald Eagle

Once nearly extinct in New Jersey due to the use of pesticides, the Bald Eagle has made an amazing come back in the Garden State over the past few years. Two nesting pairs of Bald Eagles have been confirmed living on Lake Hopatcong.

Nature Criss-Cross

Complete the crossword by filling in a word that fits each clue. The pictures are additional hints.



ACROSS

- 1. A fungus (plural) sometimes found on pizza
- 2. A plant that blooms
- 3. A small creature with 8 legs
- 4. An oval nut that is the fruit of an oak tree
- 5. A creature that lives in water and has fins
- 6. A tall plant that has a hard trunk, branches and leaves

DOWN

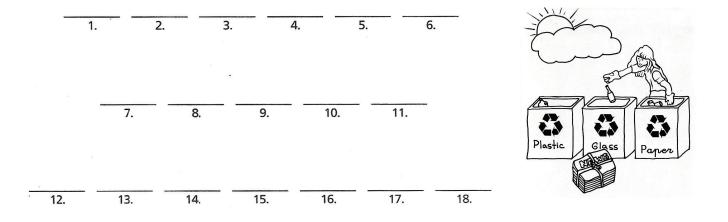
- 1. Where a bird lays its eggs
- 2. An arch of different colors you can sometimes see in the sky after it rains
- 3. A collection of tiny water droplets in the sky
- 4. A small animal with a bushy tail
- 5. A large inland body of water
- 6. A large area where trees grow close together

The Three Rs of Good Stewardship

Good stewards protect and promote a clean, safe environment through their own actions - making our planet a place where future generations of both humans and animals will thrive.

Hidden in the phrase below are the three most important words to remember if you want to be a good steward of your environment. Link the missing letters in the phrase (in order) to spell out these words.

Puthasing and rule using disposable products lik displayed containe displayed size of the second displ



Museum Madness

The Lake Hopatcong Historical Museum is a fun and interesting place to visit. Many people are very serious about the history of Lake Hopatcong and visit it to learn about what it was like many years ago. Sometimes, though, it's fun to just be silly. Without reading the story out loud, ask someone else to come up with words so you can fill in the blanks. Then read the whole story and make history hilarious!

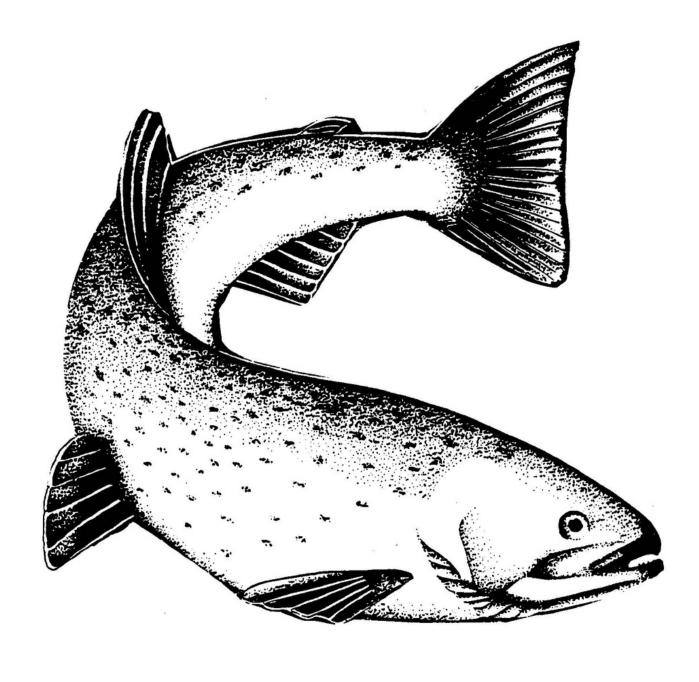
It was fun to visit the Lake Hopatcong Historical Museum

The museum is in a building that used to be the home of				
adjective		-	female teach	er's name
more than years ago. It is located number	near a pizza	oi a place	ח planet n	and ame
has many displays of old	anda	adjective	items that	are related to
historical Lake, whic male singer's last name	h is New Jersey	's most a	djective b	oody of water.
We learned that the lake is the source of the we drink every day. The lake used to be a liquid				
a very place years ago. M adjective	any famous	animals	visited it	and brought
a group of people	all used to	verb	_ in the lake ar	d explore the
nearby. It was also rom plural noun	antic so couple	espast t	ense verb	there a lot.
Some men even asked their girlfriends to	verb	_ them and g	ave them a _	adjective
to wear on their finger. The history of the lake is _	adjective	!		



Rainbow Trout

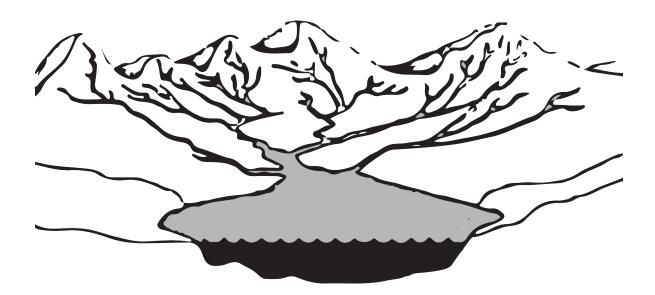
Rainbow trout are colorful fish. Their bodies are blue-green or yellow-green and have a rose-colored strip along each side. Their bellies are white and they have tiny black spots too.



Watershed Word Sleuth

Find and circle all the words hidden in the puzzle. The words may be placed horizontally, vertically or diagonally and may read forward or backward.

S D S D R A F R Х К M D Y N M Τ D Х У S υ R В RF ХD Ε Ρ MEU Q Н Ε ΗI Н V P O C С J E F ОН DF R N Ρ D υ 1 V J L S F А F ΧZ MS Ε D F V R Ρ L N V D 0 1 Ε ZAUI Т E 0 Ε ΜV ωN JL OBS Ε L Τ R S L R V A F υ R Y Ε Ε Y R Q L К Н Y ΤК BOEU J RS A Κ ΒE F S υ QN У U E T R OWINAKRB ΜK 1 R 1 Τ У 0 Ε КО RC 1 К D Y J N Ρ MMI G Т E B Y ΟΡ Ε N С Ο Х GΤ ΒV WD ΕV ΕL Μ T Т EAF A A S Y E S N G NUO J Ζ V M A К PWBGT FCBUHB Е L Y L A WO Η L Н ωL D MQE А GRPQRA ωz MX Τ A Y AA RGRFI ОVКХ Ζ Α υ 0 T Ζ Μ С F F Ε ΡL Т RΖ ΟEΒ ωı J В E V υ V WC ННΖХ QGNI F AA J Ζ A NW В S R A OUAOOXRD AI S Ρ WS TM Х L Ρ S AMZE S ОКМ M Т F E A Ζ Κ Н 1 WGZUGP MAER TSNWO D υ G Ζ DXSDNA L TEWRABXPONL ΑW WATERSHED ENVIRONMENT LAKE RIVER HEADWATERS CREEK RIDGE MOUNTAIN GEOGRAPHY BASIN RAINWATER DEVELOPMENT RUNOFF RESERVOIR UPSTREAM DOWNSTREAM WETLANDS POLLUTION



Macroinvertebrate Match-Up

Draw arrows to match each macroinvertebrate with the correct name. Then color them in!

Helgamite Crayfish Mayfly Stonefly **Flatworm** Caddisfly **Air Breathing Snail**

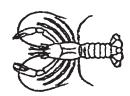
Midge











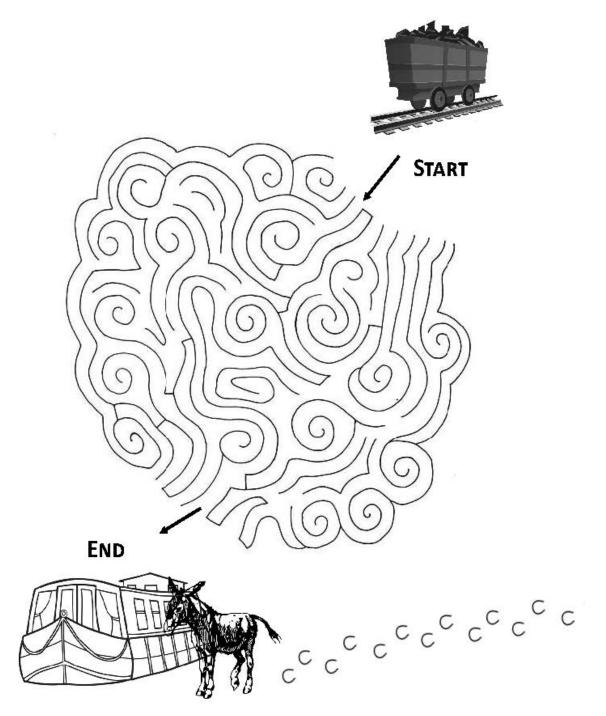






Help Get the Iron Ore to the Canal

Iron ore from the mines was transported across Lake Hopatcong. Can you steer this shipment across the lake to the Morris Canal?





Beat the Clock

Set a timer and see how many new words you can create in 5 minutes using the letters found in LAKE HOPATCONG. There are two "O"s and two "A"s in LAKE HOPATCONG so your new words can contain doubles of these letters. Challenge a friend and see who can find the most words in the time limit!

Example: CAP	9	20.
Example: POKE	<u>10.</u>	21.
Example: LATCH	<u>11.</u>	22
<u>1.</u>	<u>12.</u>	23.
2	<u>13.</u>	24.
3.	<u>14.</u>	25.
4	<u>15.</u>	26.
5	<u>16.</u>	27
<u>6.</u>	17	28.
7	18.	29.
<u>8.</u>	<u>19.</u>	<u>30.</u>



Answer Key:

Learning About the Health of the River (page 2)

CLASS 1 BUGS ARE THE BEST- indication of a healthy river!

Museum Mix-Up (page 4)

- Lenape
- Morris Canal
- Iron ore
- Hotels
- Hudson Maxim
- Carousel

How Long Will it Take? (page 5)

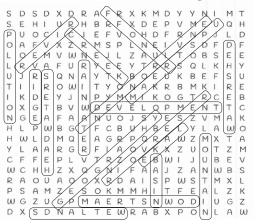
Glass bottle - Undetermined Fishing line - MANY years/Undetermined Plastic beverage bottle - MANY years/Undetermined Aluminum can - MANY years Styrofoam cup - MANY years/Undetermined Cigarette filter - MANY years Milk carton - A few months Banana peel - A few weeks

Nature Criss-Cross (page 8)

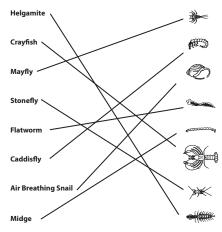
- AcrossDown1. Mushrooms1. Nest2. Flower2. Rainbow3. Spider3. Cloud4. Acorn4. Squirrel5. Fish5. Lake
- 6. Tree 6. Forest

The Three Rs of Good Stewardship (page 9) REDUCE REUSE RECYCLE

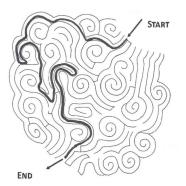
Watershed Word Sleuth (Page 12)



Macroinvertebrate Match-Up (page 13)



Help Get the Iron Ore to the Canal (page 14)







The Lake Hopatcong Foundation is dedicated to fostering and encouraging a vibrant and healthy Lake Hopatcong and its surrounding community.

Our mission is reflected in our projects and initiatives–in the areas of Environment, Education, Community Building, Historical Preservation, Public Safety, Recreation, Arts and Culture – all of which focus on improving the lake environment and experience.

As a nonprofit, membership donations are crucial in helping us to continue and expand our programming and initiatives from aquatic invasive species prevention to improved safety to educational field trips and more.

Please become a member today at LakeHopatcongFoundation.org.



The Lake Hopatcong Foundation

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