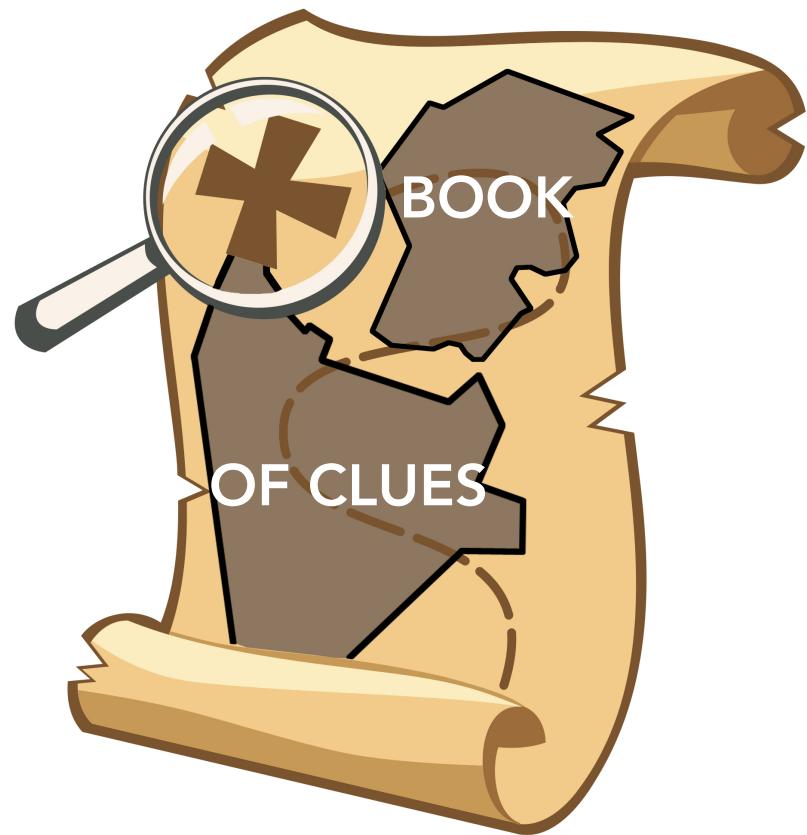




pH scale



Treasures of The Chathams



Scavenger Hunt

April 8 - 23, 2017

Treasure Hunter

Instructions



Welcome to the Treasures of the Chathams Scavenger Hunt, sponsored in collaboration between Great Swamp Watershed Association and Library of The Chathams! In your hands is your **Book of Clues** which lists the location of each of the 12 clues spread out throughout Chatham Township, Chatham Borough and beyond!

Here's how to use the Book:

- 1) First, decide which clues you are going to solve (you can complete them in any order you like). Hint: Several clues are hidden at the Library so you can do all these at once!
- 2) Drive or walk to the location of the clues. Each site might have several activities or clues to solve or accomplish. Follow the instructions and write your answers in the book.
- 3) For each clue you get 1 point. At many of the locations there will be a bonus activity. Each of these are worth 1 point.
- 4) When you have completed all the clues in the Book you want to try, either: (a) bring it to the Library for the final event, Sunday April 23, at 3 pm or (b) If you can't make it for the grand finale, drop your Book off at the Library, and you'll still be eligible for a prize.
- 5) At the final event there will be prizes for all completed clues, and special prizes for all completed bonus clues.

Notes

Thank you!

The Great Swamp Watershed Association would like to thank the following individuals and organizations for helping to put this event together.
Thank you for your insight and help:

Library of The Chathams
Chatham Historical Society
Chatham Township Historical Society
Chatham Environmental Commission
Chatham Township Environmental Commission
ECLC of New Jersey
Lynn Keffir
Jen Mathews
Jill Mills, Milton Avenue School
Morris County Park Commission,
Great Swamp Outdoor Education Center
Bill Stople
U.S. Fish and Wildlife Service,
Great Swamp National Wildlife Refuge
Martha Wells

Precautions

- Always make sure to look both ways before crossing the road.
- Always travel with a friend and or an adult for safety.
- Be respectful of private property at all times and avoid walking on to anyone's property unless you have been given permission by the owner.
- Please adhere to all Park Rules, especially within the Wilderness Area of the Great Swamp Refuge.
- Take your time and have fun, there is no rush to finish and you can visit as many or as few sites as you wish!

Take pictures during the scavenger hunt and share them with us!

Post them to Great Swamp Watershed Association's Facebook page, (facebook.com/greatswamp) or tag us on instagram @greatswampnj and we'll share them!

If you can't make it to the grand finale, drop your clue book off at the library (be sure to write your name and contact information on it) and you will be eligible for your prize.

Don't forget to like us on Facebook and follow us on Instagram @greatswampNJ. If you post a picture from the scavenger hunt and tag us, we'll share it!

Visit **GreatSwamp.org** for more fun upcoming events and activities!

Library of The Chathams

Library of The Chathams

214 Main Street, Chatham Township, NJ 07928

(973) 635-0603

There are restrooms at this location

www.chathamlibrary.org

Approximate time for clue hunting: 15 minutes

The first library in Chatham opened in 1870 in an upper room of the Chatham train station. In 1924, thanks to the dedication of Ralph and Charles Lum, the library was moved to its current location, the site of the old Fairview Hotel. Today, the library serves both Chatham Borough and Chatham Township as a community center as well as a learning and entertainment destination for patrons of all ages. Explore both the adult section and children's department to find the answers to these clues. (And if you need help, you can always ask one of the librarians!)

Clues:

1. In the reference section, there are many computers for adults to use.

One special computer is for medical research. Find this computer.

Above this computer and to the left is a painting of a plane. Read the description on the metal plate. What character in the board game, Clue: Master Detective, was based on Col. Amos L. Chalif?

2. There is a fireplace somewhere in the library. Above it is a mural. What does that mural say?

2. One mammal in particular is being attracted to feed on insects by the homes built high up on posts. Who is being welcomed with black houses?

3. Nature grows in a rainbow of colors! See if you can find something living in each of the following colors - what did you find?

Red: _____

Orange: _____

Yellow: _____

Green: _____

Blue: _____

Violet: _____

Black: _____

Brown : _____

White : _____



Kelley's Pond and Milton Avenue School

Milton Avenue School Parking Lot
16 Milton Avenue, Chatham, NJ 07928

Approximate time for clue hunting: 20-25 minutes

Milton Avenue School was built in 1948. The grounds cover 6 acres and adjoin the area the Borough uses for storing mulch and include the forested area around Kelley's pond. Kelley's pond is a man-made, but spring fed pond named after Borough fire Chief Kelley. The pond area is used for recreation and hiking. This includes an annual fishing derby organized by the fire department each year, and for ice skating in the winter when conditions allow. The pond is great habitat for many small macro-invertebrates (backboneless bugs) that live in and on the bottom of the pond surface. This hike will take you past the playgrounds to the outdoor classroom, through the trees and onto Kelley's pond.

The area around Kelley's pond is presently undergoing construction and improvements, so tread carefully! Please check if it is open for visits. If not, turnaround at the outdoor classroom and check back soon to see how great it looks when construction is complete!

Park in the school parking and walk behind the school building toward the playground across the playing field. Look for the path through the woods toward the outdoor classroom - this area is known as Brian's classroom - and continue to the pond.

Clues:

1. As you hike, look to see what animals might call this area home. A careful check will show you some animal nests high up in the trees made of leaves. What animal do you think made these nests?

Bonus: The room before you is the New Jersey Room, which holds a wealth of local history information about The Chathams, Morris County and New Jersey. Find the book in the window by Chatham author Ruth Pierson Churchill. What is the title of this book?

3. In the children's room, you will see decorations for our annual *Step Into a Story* program. If you are 18 or younger, fill out one of the entry slips on the desk for a chance to win a prize. What is the name of the book that Chatham has chosen for its *Step Into a Story* theme?

4. Find a bulletin board in the children's room that says "I'm Hooked on Reading". Below it is a globe with a dedication plate. Who is the globe in memory of?

5. At the other end of the children's room, you will find a cardboard cutout of a big red dog. What is he saying?

Bonus: What nursery rhyme is the mural directly to your right depicting?



Exploring the Library Grounds and Beyond!

Library of The Chathams - Grounds and Memorial Park

214 Main Street, Chatham Township, NJ 07928

(973) 635-0603

www.chathamlibrary.org

Approximate time for clue hunting: 15 minutes

Leaving the library by the main doors which head out to Main Street, there are lots of interesting things to see as you walk the grounds of the Library of the Chathams. These clues will help you explore the area around the library, and around Memorial Park.

Clues:

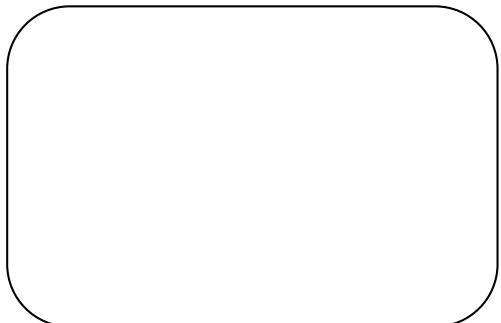
1. As you descend the steps look around for a rock which encloses the memorial time capsule. When will the time capsule be opened?

_____ How old would you be if you were there to see it? _____

If you were making a time capsule, what are three things that you would put inside it? _____

2. Turn right and walk along the path paralleling the front of the library toward a statue of a young girl. What colored shoes is she wearing?

3. There are many beautiful plants, shrubs, and trees in the gardens. Draw a close up of one of the plants that you find interesting.



4. What is the purpose of the Red Brick School House nowadays?

Now look around the entrance to the building.

5. Look near the black wrought iron railings at the entrance to the school house. What could you use to tell the time that is near the steps?

6. Who is memorialized on the plaque? _____

Bonus: Think what life must have been like if you had attended school at the Red Brick School House. There were certainly no laptops - what apart from paper might you have used to write on?



Red Brick School House

Red Brick School House

24 Southern Boulevard, Chatham, NJ 07928

The museum is open from 2-4 pm on the first Sunday of each month; tours for Scouts and other groups can be arranged with the Museum Director.
www.chathamtownshiphistoricalsociety.org

Approximate time for clue hunting: 10 minutes, unless the museum is open!

At the corner of Southern Boulevard and Fairmount Avenue is the beautiful Red Brick Schoolhouse. Pull into the one way lot and park. The building is likely to be closed, so check out the entrance and the information posted, and answer the clues below. Remind yourself to stop by from 2-4pm on the first Sunday of the month to catch the museum when it is open. It is filled with important local historical artefacts and exhibits put together by the Historical Society of the Township of Chatham- which was established to increase knowledge, awareness & preservation of Township history.

Check out the information close to the entrance to the building for the answer to the following questions.

Clues:

1. When was the schoolhouse built? _____
2. How many rural schools did Southern Boulevard School replace?

3. What other uses was the building put to in addition to being used as a school?

4 .Turn right, heading past the statue of the girl with the hoop towards the rear of the library. What game could you play to while away the time while you were sitting at the large picnic table? _____

5. Opposite the picnic bench, who is memorialized with their own tree?

6. Heading away from the picnic benches toward N. Passaic Avenue, there is a moving 9-11 Memorial Garden. Take a minute to stop and appreciate the water fountain and the memorial. What bird flies above the memorial garden, and how many birds are represented?

7. When was the garden dedicated? _____

Carefully walk across the parking lot from the memorial to the building for the Municipal Pool, and head to the sidewalk on North Passaic Avenue. You will spot a garden alongside the pool. This is a rain garden, and the black and white sign has lots of interesting information about just what rain gardens can do!

8. What is a rain garden? _____

9. What are some impervious surfaces from which the rain garden can collect the rain run off? _____

10. How much rain does the rain garden manage in a year? _____

Swamp Stop #1: Great Swamp Outdoor Education Center

Great Swamp Outdoor Education Center

247 Southern Boulevard, Chatham Township, NJ 07928
(973) 635-6629
www.morrisparks.net
Open daily 9am-4:30pm

Approximate time for clue hunting: 20 minutes, plus time for hiking

Morris County Park Commission's Great Swamp Outdoor Education Center (GSOEC) features hiking trails through 40 acres of swampland, marshes, meadows, and forest. The center hosts a variety of exhibits, including a collection of taxidermy animals, interactive exhibits, and live reptiles and insects. The friendly staff of Morris County naturalists are happy to answer any of your questions or fill you in on recent wildlife sightings. The GSOEC trails are open seven days a week, from dawn to dusk.

Clues:

Park in the lot, and head toward the red visitor kiosk. Look at the trail map in the kiosk.

1. What are the different colors of the trails at Morris Outdoor Education Center?

2. What is the longest trail on the property and how many miles is it?
_____ miles

3. Now head toward the ramp leading to the visitor center – Look down. Why do you have to step carefully as you approach the entrance to the visitor center?

Shepard Kollock Park

Shepard Kollock Park
16 Henderson Road, Chatham, NJ 07928

Approximate time for clue hunting: 10 minutes plus playground time!

Shepard Kollock Park is named after a gentleman with an interesting place in the region and nation's history! Mr. Kollock served in the American Revolution, and took part in some of the important battles including the battle of Monmouth, and the battle of Trenton. At General George Washington's suggestion, Mr. Kollock began to publish a newspaper to give updates on what was happening in the revolution. The first copy of *The New Jersey Journal* was printed in Chatham in 1779.

The park runs along the edge of the Passaic River and features a playground and recreation area. Park in the lot and wander the park, then seek out the boat ramp that leads right down to the edge of the river.

Clues:

These clues will help you learn more about the Passaic River.

1. Look carefully – which way does the river flow, right to left or left to right? If you are not sure, throw a leaf or stick into the river and watch which way it moves.

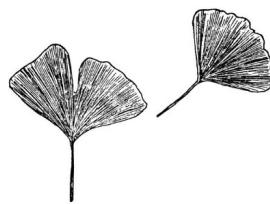
2. Using the piece of special pH paper that you were given with the clue booklet, carefully dip it into the water. What pH is the river water when compared to the colored chart on the back of the booklet?

3. If you look closely you may see some creatures that call the river home. Observing the river closely, look through the water's surface, on the surface itself and around the banks. Can you spot any living creatures? Describe what you see. What size is the creature compared to the ruler on the back of the book?

4. As you walk you may see a plant with very green leaves growing close to the ground. It has leaves that look a little like a head of lettuce! This is a plant called common mullein, and it is native to Europe. If you spot mullein leaves close to the trail, gently feel their surface. What do you think they feel like? _____



5. Continue around the loop past the pond and the meadows- there is lots to see! You will come to an avenue of large trees that are very unique- their fallen leaves look like delicate fans. These are the leaves of the Chinese Gingko tree. Can you spot any animal homes that have been built in the gingko trees? _____



Bonus: Use the special thin 'onion skin' paper and crayon provided to make a leaf rubbing of the veins and shapes of the fallen leaves you find on your hike. Put the leaf vein side up under the paper and rub with the edge of the crayon to make the best image.

Head on inside if the building is open and take a look around at all the great natural history exhibits. There is a map of the Great Swamp region, the trails, and many other interesting exhibits.

There are lots of interactive exhibits in the hallway that will help you learn more about the creatures you will see around the Swamp

4. What is the most dangerous animal in the swamp? _____
(Were you surprised by the answer?!?)

5. Take a look at the tracks board- draw one of the tracks that you see on the board- who made this track? As you seek out clues, you can see if you come across this track again!



Bonus: Head into the auditorium, and check out the many tanks with live specimens - what's one of the myths about turtles that you can learn from reading the signs by the box turtle tank exhibit?



Swamp Stop #2: Great Swamp National Wildlife Refuge

Great Swamp National Wildlife Refuge

Helen C Fenske Visitor Center

32 Pleasant Plains Road, Basking Ridge, NJ 07920

(973) 425-1222

Hours: 7 days a week 10am-4pm

There are restrooms at this location

Approximate time for clue hunting: 15 minutes, plus time for hiking!

Great Swamp National Wildlife Refuge (NWR), was established in 1960. It is one of more than 560 refuges throughout the United States. Some parts of the Great Swamp are located within Chatham Township, and the refuge is a valuable piece of open space for the region. Great Swamp NWR contains more than 7,768 acres of varied habitats, including swamps, wetlands and other valuable areas for wildlife. Trails and refuge open dawn to dusk.

Clues:

1. Go to the Visitor Center. Check out the Visitor Kiosk. On the back are represented the wingspans of several birds that visit or nest in Great Swamp. Spread your own wings and compare with these flying outlines. What bird wingspan do you match? Snap a photo of yourself as a hummingbird or an eagle.

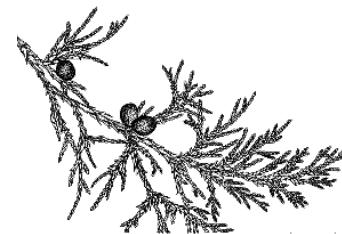
2. As you head to the door you will see a native plant garden planted at the entrance. Native plants are especially attractive for butterflies and bees. What are the names of two of the perennial plants growing in the garden:

arranged differs, depending on what type of tree it is. Some have their needle-like leaves in flat rows, some in clumps. Look closely as you walk and find an evergreen tree that has needles in bunches like the picture below. How many needles are in the clump? _____

2. Other evergreens have their needles arranged in rows or all around the twig. Look for a large evergreen tree with drooping branches and long cones that hang down. Does this tree's needles look like picture A or B below? What kind of tree is this? _____



A. Spruce Tree



B. Cedar Tree

3. Continue along the trail, as you hike, look down and check out the fallen leaves of some of the deciduous trees - many of the leaves you will see belong to oak trees. There are many kinds of oaks at Giralda Farms. They can be divided into two groups - red oaks and white oaks - based on what the edges of their leaves look like. Red oak family members have pointy 'pins' on the tips of their leaves, and white oaks have rounded fingers or lobes. See how many different kinds of oak leaf you can spot.



White Oak Family

#: _____



Red Oak Family

#: _____

Giralda Farms Preserve - Trees are Terrific!

Giralda Farms Preserve

Woodland Avenue, Chatham Township, NJ 07928

www.facebook.com/GiraldaOpening

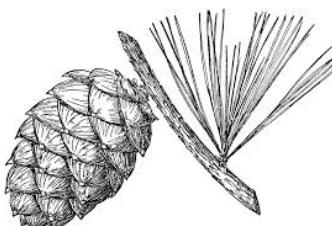
Approximate time for clue hunting: 30-45 minutes depending how much you explore!

Giralda Farms Preserve was first opened to the public on June 6, 2015. The property, which comprises 136 acres and features dog-friendly walking trails, is owned by Chatham Township and is managed by the Morris County Park Commission as part of Loantaka Brook Reservation. Giralda Farms was the name Geraldine Rockefeller Dodge gave to her country estate which existed on the land which is now preserved. You can still see some clues that this was once a wealthy estate- some of the trees are rare and were imported from other parts of the world and planted in the gardens of the estate- they are now giants, and form rows along what were the old paths and driveways of the estate.

You can park along the shoulder of the road on Woodland Avenue between St. Hubert's and Dodge Drive. Look for the pedestrian crosswalk; it connects to the trailhead which is at the break in the fenced section of the trail. The Giralda Farms Preserve's trails are flat and graveled - as you walk the loop trail you will test your tree identification and fine observation skills!!

Head past the entrance kiosk and keep straight.

Clues:



1. You will pass two types of trees as you hike – **Evergreens** and **Deciduous** trees. Evergreens are trees that have their leaves year round. Deciduous trees lose their leaves and grow new ones in spring. Most evergreens have needle like leaves, but the way the needles are

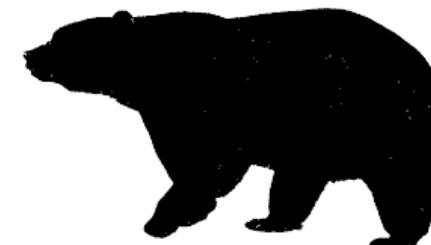
Bonus: If you visit when the Visitor Center is open, find the Magic Tree in the exhibit room: How many endangered Indiana bats are hiding under the bark in the magic tree? _____

Browse the exhibits inside the Visitor Center to uncover the answers to these two questions:

1. Beware of the fierce monsters that can cross your path while you are out treasure hunting... What state did the resident black bear that is lurking inside the visitor center hail from?

2. Name one upcoming event that will be happening at the refuge in the near future (Hint: There is plenty of information about upcoming events at the front desk!)

Did you know? The Eastern portion of the National Wildlife Refuge, comprised of 3,660 acres, is managed as a designated Wilderness Area. This land is intentionally managed in order to maintain its wild characteristics and to serve as an important habitat for wildlife. It was officially dedicated in 1968, making it the very first wilderness area within the Department of the Interior. It is the Wilderness portions of the refuge that are within Chatham Township's boundaries, but the refuge, because it is federal land, really belongs to all the people of the USA!



Swamp Stop #3: Great Swamp Watershed Association Conservation Management Area

Great Swamp Watershed Association Conservation Management Area
Tiger Lily Lane cul-de-sac, Harding NJ 07976
973-538-3500

Approximate time for clue hunting: 25 minutes gentle hike

Great Swamp Watershed Association's Conservation Management Area (CMA) is a protected, 53-acre habitat for local plants and wildlife. Since 2005, 30 acres of the site have been fenced to allow forest regeneration to take place without the browsing caused by deer. Inside the fence lie critical wetlands, vernal pools, floodplain forests, and the Silver Brook – a stream that flows into the Great Brook through Harding, and into the Great Swamp Refuge. Well marked trails meander through this habitat, including a raised boardwalk that allows access out over a marsh. Trails are open year round dawn to dusk. Come hike to observe wildlife, and see a forest regenerating into a healthy ecosystem.

Clues:

Park along the cul-de-sac. Find the CMA trail entrance and walk in toward the kiosk and seating area.

1. There are spring peepers, wood frogs, and chorus frogs breeding at this time of year, so listen out for their calls...While you do, seek out some more unusual (plastic) frogs that are lurking in this area! Hunt around the seating and kiosk area to see how many hidden frogs you can find. Count them, but leave them in place please! How many did you find?



How does your Garden Grow? ECLC Garden System

ECLC of New Jersey

21 Lum Avenue, Chatham, NJ 07928

Parking available weekends and after 4 pm M-F. Daytime parking is available the week of April 9th. Gardens are in the corner of the lot.

Approximate time for clue hunting: 10 minutes

ECLC offers "Education, Careers & Lifelong Community" to nearly 700 adults and children with special needs from 11 counties across New Jersey. With schools in Chatham and Ho-Ho-Kus, they enroll some 300 students, ages 5–21.

Since 2013, ECLC Staff and students grow a variety of fruits and vegetables from seeds. Through the garden, students learn about planting, weeding, watering, harvesting, and finally food preparation. Having a "farm to table" gardening system involving growing organic fruits and vegetables to be used for cooking healthy snacks and meals provides an innovative way to learn.

Clues:

1. Inside the garden plot are signs indicating the types of produce grown.
List 3 items ECLC students grow:

_____ _____ _____

2. How many tomato cages can you count? _____

- 3) Find the thermometer located on one of the posts. What temperature does it currently read? ____ F

Bonus: There is a green, octagonal shaped device near the building. What do you think this is used for?

Watchung Ridge Rediscovery

Fairmount Avenue to River Road and back!

Approximate time for clue hunting: 10 minutes

The Hills around this area are called the Watchung Mountains and there are three ridges in them. They are ancient basalt lava flows from volcanoes that were active at the beginning of the time of the dinosaurs. These ridges were important in guiding the flow of the Passaic River - known by the Native Americans who lived here long ago as the Fishawack. The river had to find its way around the ridges, and a look at a map will show that the Passaic takes a very circuitous route down to Newark Bay. The Watchung ridges are about 40 miles long from north to south. The ridges run more or less parallel to each other. The First ridge is the one nearest to New York City. The third ridge is nearest to Morristown.

Take a car ride along Fairmont Ave. from the center of Chatham Borough toward Southern Boulevard. Turn left onto Southern Boulevard toward River Road. Turn right along the bottom of the valley to stay on River Road - you are close to the Passaic River here. Look for it in through the trees. Turn right again onto Fairmount Avenue and continue back to the intersection with Southern Boulevard. You have now experienced the Watchung Ridges!

Clues:

1. Describe your journey in terms of up, along and downs - did you stay on top of the ridge, or travel up and down it?

2. If you were a raindrop of water falling onto the surface of River Road, in which body of water would you end up?

3. If you were a raindrop falling into Fairmount Avenue, near Southern Boulevard, to where would you end up rolling?

Now you will walk around the blue trail - head through the gate, across the bridge and onto the blue trail. Turn right. Along the trail are interpretive signs that show some of the plants and wildlife that call the conservation management area home. Walk around the blue trail and notice the interpretive signs that you pass.

2. What plant is labeled with a name that includes a kind of pet in its title?

3. What is the name of the hairy ropelike vine close to the stream?

4. What boy's name is contained within one of the plant's signs?

5. What kind of Oak tree can be found growing in the wet areas along the blue trail?

Bonus: When you get to the bridge that crosses the stream known as the Silver Brook, look down at the edges of the muddy banks close to the water. Many animals visit the stream to stop and drink- do you see any tracks? Draw any that you see. You can cross the bridge and continue your hike on the orange and red trail- they are all loops, but the more you hike the more that you will see!

The Chathams - Then and Now!

Fairmount Avenue Underpass (near train station and gazebo)

Fairmount Avenue, Chatham, NJ 07928

Approximate time for clue hunting: 10-15 minutes

From Main Street, head carefully on foot past the clock tower and gazebo to the railroad underpass on Fairmount avenue. On either side of the underpass walls amazing murals have been painted that showcase both the history and current activities occurring in the Chathams. The murals were commissioned by The Public Arts Council of Chatham Borough.

Clues:

These questions are all about the mural closest to the railway station:

1. What was the name given by the Lenni Lenape to the Passaic River?

2. Whereabouts would you find the liberty pole, and what major event was celebrated there? _____

3. If you came to visit the Chathams in the 1800s, where might you be able to get a room for \$3? _____

4. What was the tribe that lived in this area known as?

5. If you were a Chatham Wheelman, where were you permitted to ride your bicycle? _____

6. Which important person stayed at the Jacob Morrell House at 63 Main Street? _____

These questions are about the mural on the other side of the street closer to the clock:

7. To what good causes are the monies raised by the Fishawack Festival donated?

8. To what time do the hands of the town clock in the mural point?

9. In what year were the 4th July fireworks were first launched from Lum Field?

10. What famous variety of rose was Chatham famous for growing?

11. What color is the balloon that the girl is presenting to the man in the wheelchair?

12. What events might you be able to see if you passed by the gazebo at the right time?

13. How might you have travelled between Easton, PA, and Newark, NJ, during the 19th century?

14. What is helping the flowers in the community garden grow?

Bonus: If you were painting a mural of important events in your families' lives, what might you include? _____