Table of Contents

Synthesis of Essays - page 2

Individual Essays

- History of the Trials & Wayside Exhibits- page 4 (Giuliana Coccia)
- Features of the Trails & Itinerary- page 14 (Casey Herasimtschuk)
- Highway Markers & Google Earth Map- page 21 (Brian Carbone)
- Tourism Development & Lesson Plans- page 24 (Abby Ritson)

Bibliography - page 24
Synthesis Essay

Founded in 1683, Orange County was one of the original counties of New York under the authority of the Duke of York. Today, it is home to over 370,000 occupants. Located in the Hudson River Valley, Orange County has many picturesque hiking trails that feature the natural beauty of the area and represent the industrialization in the 19th century. The mines and railways along several of the trails give tourists a sense of the rich industrial history of the area.

Orange County’s hiking trails give hikers the opportunity to learn about and explore some of the history that unfolded there because each trail contains some form of history, whether it is history about the park, where the trail is located, or about a feature that the trail passes through. Bear Mountain-Harriman State Park, Black Rock Forest, Monroe and Goshen, and the Hudson Highlands Nature Museum Outdoor Discovery Center are several areas in Orange County that have interesting histories. Some historic features that the trails pass through include famous iron ore mines, which were the earliest industrial productions in Orange County, the Erie Railroad, and building structures that were re-created or preserved due to their importance to the county. No matter the hiking trail, there is always history that can be learned.

Trails, as with all historic sites, need to provide information to visitors regarding where to go, how to get there, why the location is significant, etc. Often, this is done by a combination of pamphlets, maps, signs, and more. Of the most fundamental sort of sign are the trailheads and highway markers. These signs serve a key purpose by drawing the attention of individuals from a distance and allowing them to find key locations without the need to orient themselves with a map. Creating these signs, however, is more complex than meets the eye—many important design
concepts are kept in mind when producing these signs to have them be as functional and aesthetically pleasing as possible.

The features of Orange County hiking trails are notable and attract many people to these areas. As stated earlier, there are many beautiful historical features that make these trails unique and interesting. These features, specifically speak of the industrial history and picturesque beauty of the Hudson River Valley. There are also many picturesque features that add to the landscape such as lakes, ponds, faunas and ferns, to name a few, and even some animal species that add to the wonderful features of this area.

The organization that provides the highest quality of information and support hiking trails specifically in Orange County is the New York - New Jersey Trail Conference. The website provides its visitors with a trial locater map, which allows its visitors to handpick various features they would like to have in a trail, such as length and difficulty. The New York - New Jersey Trail Conference also has ‘visual blogs’ for their visitors to read and provides information about upcoming hiking events sponsored by volunteer organizations. In addition, the trail conference has a Twitter account that users can follow to keep up to date with hiking trails in the New York and New Jersey area (not particularly Orange County, however). Orange County does not have a Facebook page or Instagram particularly for Orange County hiking trails, which is disappointing.

Orange County has a plethora of picturesque hiking trails that are filled with history and important features. It is up to organizations to advertise and support hiking for both residents and tourists so that more people can enjoy the beautiful Hudson Valley and learn about its historic roots.
History - Giuliana Coccia

Founded in 1683, Orange County was one of the original counties of New York under British law. Although Henry Hudson was the first to sail to this area, the county was created under the authority of the Duke of York. As years passed, Orange County became the home of many people, parks, and landmarks. Orange County’s hiking trails give hikers the opportunity to learn about and explore some of the history that unfolded there because each trail contains some form of history, whether it is history about the park, where the trail is located, or about a feature that the trail passes through.

One of the major parks in Orange County, and the second-largest park in the parks system, is Harriman State Park. Established in 1900 under the Palisades Interstate Park Commission, this state park “covers 46,181 acres of forested mountainous terrain within the Hudson Highlands region in Orange and Rockland Counties.” Harriman State Park connects to another important park in both Orange and Rockland County, which is Bear Mountain State Park. This park has over 5,000 acres in mountains on the west bank of the Hudson River. In 1910, Bear Mountain-Harriman State Park was established. In this adjoining park, there are many hiking trails. Three trails in particular that contain historic sites are the Iron Mines Loop #2, the Green Pond/Boston Mine Longer Loop, and the Silvermine Lake Loop.

The Iron Mines Loop #2 “climbs to viewpoints from the summit of Black Rock Mountain and passes the historic Hogencamp, Pine Swamp, Surebridge, and Boston Mine.” Back in the 1700s in Orange County, the iron industry was the earliest important industrial production. Today, there are remains of certain historic mines. One mine that this loop passes is the Hogencamp Mine, where iron ore was mined from 1870 to 1885. While passing through,
there are still remnants of what used to be a village that was built to house workers who were working at the Hogencamp Mine.


Another historic mine on this loop is the **Pine Swamp Mine**, which opened around 1830. The iron ore that was mined there went to the Greenwood furnaces, which were nearby in Arden, NY. Greenwood made artillery barrels that were heavily used during the Civil War. Unfortunately, Pine Swamp was abandoned in the 1880s.

_Pine Swamp Mine:_ “Pine Swamp Mine,” [http://www.abandonedmines.net/pineswamp.htm](http://www.abandonedmines.net/pineswamp.htm)

The **Surebridge Mine**, which is also on this trail, was important and active during the **Civil War** period. Finally, this loop passes through the **Boston Mine**, which closed in 1880 and is now filled with water on the Northern end.

The Green Pond/Boston Mine Longer Loop, located in the Bear Mountain-Harriman State Park, also passes through the historic Boston Mine.

Boston Mine: YouTube, https://www.youtube.com/watch?v=ZXXo6XKu0M4

The Silvermine Lake Loop goes around the Silvermine Lake, and contains the William Brien Memorial Shelter. Before 1934, when the Silvermine Lake was created, “the road followed the edge of what was then known as the Bockey Swamp.” When the lake filled with water, the road submerged and, today, the old road emerges from the lake.
The last historic site on this trail is the **William Brien Memorial Shelter**, which was built in 1933 by the **Civilian Conservation Corps**, and was originally named the “Letterlock Shelter.” It was later renamed in memory of the first president of the New York Ramblers Hiking Club.

Another important park in Orange County is **Black Rock Forest**. This forest’s history dates back to around the time of the American Revolution, when the Continental Army used Continental Road (the bisector of the forest) to travel across the mountains from West Point to New Windsor and Newburgh. In 1918, this forest was set aside for experimentation in forest management and demonstration of forestry methods by Dr. Ernest Stillman. Now owned by the Black Rock Forest Consortium, the mission of these owners is to promote scientific research and to preserve the ecosystem of the forest. One loop that is located in Black Rock Forest is the...
Sutherland Pond/Scenic Trail/Eagle Cliff Loop. Not only does this park hold great history, but it also leads hikers to another historic site: Chatfield Stone House. This stone house was built in 1834 and is located on Continental Road. Chatfield Stone House was a family owned farmhouse that was passed from generation to generation, then sold multiple times. In 1913, the house was destroyed by fire, but was rebuilt by the Black Rock Forest employees in 1932. Today, the Stone House is a site for education groups to visit and serves as an overnight lodging facility.


A third major park in Orange County is the Hudson Highlands Nature Museum Outdoor Discovery Center. Formerly a showcase dairy and horse farm in the 1900s, named Kenridge Farm, the park today is a privately run, not-for-profit space whose mission is to introduce children and adults to the outdoors. A hiking loop located in this park is the Highlands Quest Trail. This trail passes through a historic stone foundation that is located on a property that was owned by a wealthy farmer in the 1720s, and the foundation was owned by one of the farmer’s tenants. This loop trail also passes through a collapsed iron ore mine that was used in the 1800s.
http://hhnaturemuseum.org/index.php/grasshopper-grovenature-play

One major trail in Orange Country passes through many parks and historic sites: the Heritage Trail, which is also known as the Orange County Rail-Trail. From start to end, this trail goes from Monroe to Goshen, NY, or vice versa wherever you start first. The places and parks that hikers pass during the course of this trail are what makes the Heritage Trail historic and a great hike. This trail goes along the path of the Erie Railroad, the first long long railroad in the county. Completed in 1851, this railroad ran through New York City, Buffalo, Chicago, southern counties in New York, and Lake Erie. Although this railroad had several bankruptcies, it was still successful for the industrialization of Orange County.

The Erie Railroad: Pennsylvania Photos, “The Erie Railroad,”
Another historic feature on this trail is while passing through **Crane Park**. In one corner of the park, there is an old **Saber Fighter Jet**. These aircrafts were constructed during the 1940s, a few years before the Korean War. This jet was considered one of the best aircrafts of this time because of its design and its impact on the war. 

![Old Saber Fighter Jet](https://www.pinterest.com/pin/268456827760993703/)

A few other interesting and old features that are seen on this trail are a cemetery, a train station, and the old Camp LaGuardia. As previously mentioned, this trail goes through different parks and starts in one village and ends in another. During this trek, Chester is a village that this trail passes through. Before reaching this village, there will be a cemetery that dates back to the nineteenth century. Once in Chester, there is a restored stone-facade train station that is now the **Chester Depot Museum**. Another landmark of this trail is the old Camp LaGuardia, which was a homeless shelter in New York City. Currently, this development is being restored. The Heritage Trail allows the hikers to not only enjoy a great hike, but to also learn about the history of Orange County.

Orange County has one of the richest historic backgrounds in New York. Containing various state parks and villages, such as Bear Mountain-Harriman State Park, Black Rock Forest...
State Park, Hudson Highlands Nature Museum Outdoor Discovery Center, and the Villages of Monroe and Goshen. There are many trails that hikers can explore and find landmarks to learn about the wonderful history of Orange County.

Footnotes

   http://www.co.orange.ny.us/filestorage/124/1338/A_Short_History_of_Orange_County.pdf


5. New York-New Jersey Trail Conference, “Iron Mines Loop #2 (Southwest) in Harriman-Bear Mountain State Parks,
   http://www.nynjtc.org/hike/iron-mines-loop-2-southwest-harrimanbear-mountain-state-parks

   http://www.nynjtc.org/hike/iron-mines-loop-1-east-harrimanbear-mountain-state-parks
7. Worden, Darian, “Holes in the Ground,”

8. New York-New Jersey Trail Conference, “Iron Mines Loop #2 (Southwest in Harriman-Bear Mountain State Parks,
   http://www.nynjtc.org/hike/iron-mines-loop-2-southwest-harrimanbear-mountain-state-parks

   http://www.nynjtc.org/hike/silvermine-lake-loop


    http://www.nynjtc.org/park/black-rock-forest


    http://blackrockforest.org/research/plan-your-visit/stone-house-campground


e-museum


17. Encyclopedia Britannica, “Erie Railroad Company,”
  http://www.britannica.com/topic/Erie-Railroad-Company

18. and 20. Trail Link, “Heritage Trail (aka Orange Heritage Trail),”

  https://en.wikipedia.org/wiki/North_American_F-86_Sabre

20. Trail Link, “Heritage Trail (aka Orange Heritage Trail),”

The Hiking Trails of Orange County, NY are great places to visit, with many features that not only contribute to the beauty of the area, but also the historic importance, specifically the industrial significance of the Hudson River Valley. These trails feature many picturesque features including lakes, and wooded areas, and beautiful remnants of old mines, villages, and homes that once stood.

Harriman State Park has many hiking areas that have unique features such as mines and lakes. The Green Pond/ Boston Mine Loop includes an old road built by Edward Harriman himself in the 1890’s, an old wire fence once used to hold elk brought from Yellowstone National Park, and many bodies of water. Throughout your hike you will pass the Stahahe
Brook with cascades and an outlet stream of Island Pond with more cascading waterfalls. There is also a rock ledge, which overlooks Green pond, which is one of the few ponds in the park not enlarged by the construction of dams. You will also reach the entrance of the **Boston Mine**, which is cut into the hillside, and at the end of the hike there are young hemlocks and pines growing in an area which was damaged by a wildfire (1).

![Entrance to the Boston Mine](http://www.taconichiking.com/resources/harriman22.jpg)

*Entrance to the Boston Mine*

![Green Pond](http://blog.micahbrubin.com/tag/green-pondboston-mine-longer-loop-from-elk-pen/)

*Green Pond*

The **Iron Mines Loop**, also in Harriman, features many streams, a hemlock grove, and another area scarred by a recent fire. The trail contains the **highest spot** in the park, at an
elevation of 1,382 feet at Hogencamp Mountain and the Bald Rocks shelter made of granite slabs. The trail continues on an old mining road known as Crooked Road where there are remnants of Hogencamp Mine, and the ruins of old stone houses which made of the village of miners. You will also pass the Pine Swamp, the Surebridge Swamp, and ruins of old mines in both of those areas (2). The Silvermine Trail features Silvermine Lake, created in 1934 and Bockey Swamp road. There is also a stone shelter, and on Silvermine Road there are areas where the original stone subsurface is still visible (3).

![Great Blue Heron and Wood Ducks at Silvermine Lake.](https://upload.wikimedia.org/wikipedia/commons/d/d8/Silvermine_Heron_Mallards.jpg)

Storm King Mountain and Black Rock Forest also contain many hiking trails with notable features. The Sutherland Pond/ Eagle Cliff Loop has views over the Shawangunk and Catskill Mountains, and panoramic views with Sutherland Pond directly below. There is an old abandoned mine, visible as a large cut into the hillside. You will pass Sutherland Pond, the only natural pond in Black Rock Forest, and other ponds such as Wilkins Pond and Jim’s Pond. There is a huge rock outcrop with visible glacial striations, and at Spy Rock you will be
at the highest point in Black Rock Forest at 1,416 feet. Near the end of the hike is the Chatfield Stone House, Arthur’s Pond, and a stone chimney, which is the remnants of a cabin that once stood (4). The Highlands Quest Trail at the Hudson Highlands Nature Museum is another trail in the Storm King and Black Rock Forest. It is on an old carriage road where various faunas and fern are visible, including a stand of tulip trees. There are ruins of houses, a stone fence, and an abandoned iron mine, which date back to the 1800’s. There are magnetic tailings containing small amounts of iron on the ground. There is also a large boulder dropped by the Lourentide Ice Sheet Glacier 18,000 years ago. The hike showcases various woodland habitats, and Muskrat Pond, which is a habitat for Great Blue Herons and Wood Ducks, and you may also see water lilies and blue flag irises in the spring and summer (6).

![Storm King Mountain Highway Marker](https://upload.wikimedia.org/wikipedia/commons/9/9b/Storm_King_Marker.JPG)

**Storm King Mountain Highway Marker**

The Rail Trail, or Heritage Trail, which was once the route of the Erie Railroad in Orange County also has many historic and beautiful features. When you first begin. The trail continues with a trestle bridge, where old tracks are still visible on a bridge parallel to it. As you continue there is a cemetery to the right which dates back to the 1800’s, and then there is
another trestle bridge. You will continue over a few more bridges and see old tracks on the ground with an old rail car and 2 flatcars to the left. Then there is a railroad trestle which you pass under, pass open fields, and then pass the *Chester Railroad Depot*, which serves as a museum. Next you will pass through a rock cut with thick stone block walls, cross a stream and continue until you reach route 17. If you continue the trail to Goshen you will also see the **Old Goshen Train Station**, which is now the police station. This trail showcases the impact *industrialization* had on the Hudson River Valley, and how things have changed with new innovations (5).

![Old 1800's cemetery on the Rail Trail](http://www.traillink.com/imagehandler.ashx?id=76129&t=640)

As you can see, Orange County has many hiking trails with features that showcase the beauty, and history of the area. With many types of natural features, these trails offer things from waterfalls, to ponds, to glacial rocks. There are also many historical features including the many abandoned mines in the area. Orange County is a great area to go hiking, because the features among these trails are some that are worth seeing.
View of the Hudson from Storm King Mountain
(http://www.scenichudson.org/ourwork)

Guidebook Pages-Casey Herasimtschuk:
Highlands Quest Trail:

Family Friendly Highlands Quest Trail at the Hudson Highlands Nature Museum

**Historic Description:**
The Black Rock Forest region began in the late 19th century when the St. John family began to purchase tracts of land in the Hudson Highlands. Dr. Ernest G. St. John created a Black Rock Forest in 1918 with these lands, designating it an area for nature research and demonstration. Native Americans were the first to settle in the area, practicing hunting and using fire as forest management. Europeans began to settle in the late 1800s until the 1900s, developing much of the land into homesteads, farms, orchards, and velvet-grazing areas, and many for novices. The Hudson Highlands Nature Museum was established in 1919 and is a presenter for nature education in the Hudson River Valley.

**The Site:**
The Highlands Quest Trail at the Hudson Highlands Nature Museum features historic industrial and residential features that shaped the Hudson River Valley throughout the years. The Museum also features discovery quests—unique, interactive ways to teach kids of all ages about the environment. A publication specific to a quest is available at the visitor's center for $5.00 and can be shared in one of five levels: The Pond Quest, Field Quests, Wind Quest, Wildlife Quests, and more.

**Directions:**
**From Millstone and West**
Take I-95 to Exit 18, continue south on I-95 to Exit 18, take exit onto NY-18 to the north. Take NY-18 to the north, exit onto NY-18 to the south, and continue on NY-18. Take NY-18 to the north, exit onto NY-18 to the south, and continue on NY-18.

**From Millstone and South**
Take I-95 to the north, exit onto I-95 to the north, continue on I-95 to the north, and continue on I-95 to the north.

**From Millstone and East**
Take I-95 to the north, exit onto I-95 to the north, continue on I-95 to the north, and continue on I-95 to the north.

**From Millstone and North**
Take I-95 to the north, exit onto I-95 to the north, continue on I-95 to the north, and continue on I-95 to the north.
Sutherland Pond/Eagle Cliff Loop

Iron Mines Loop

Green Pond/Boston Mine Loop

The Heritage Trail (Orange County Rail Trail)

**Sutherland Pond/Eagle Cliff Loop**

**Description:**
Sutherland Pond/Eagle Cliff Loop is a delightful trail for hikers, offering a gentle path through the woods. The loop starts at Sutherland Pond, offering a serene start to the journey. The trail then winds its way through the scenic Eagle Cliff, providing breathtaking views of the surrounding landscape. The loop is approximately 4.5 miles long and takes about 2 hours to complete. It's a perfect destination for nature lovers and those looking for a peaceful walk.

**History:**
Sutherland Pond was formed in the late 19th century when a dam was constructed to create a reservoir for the needs of the city. The pond is surrounded by dense forest, enhancing its natural beauty. The trail is maintained by the local parks department, ensuring a well-preserved and safe environment for hikers.

**The Heritage Trail (Orange County Rail Trail)**

**Description:**
The Heritage Trail is a 50-mile multi-use trail that follows the former Delaware, Lackawanna and Western Railroad line. The trail offers a mix of urban and rural scenery, with sections through historic neighborhoods and preserved natural areas. It's a great option for cyclists, runners, and walkers who want to enjoy the beauty of Orange County.

**History:**
The trail was once a vital part of the transportation network, connecting towns and cities along the Delaware River. With the decline of the railroad industry, the trail was repurposed as a recreational asset, providing a unique opportunity to explore the history and natural beauty of the area.

**Iron Mines Loop**

**Description:**
Iron Mines Loop is a challenging trail that takes hikers through the heart of the Catskill Mountains. The trail is approximately 6 miles long and includes climbs up to 1,000 feet. It's ideal for experienced hikers looking for a more rigorous challenge.

**History:**
Iron Mines Loop is located in the heart of the Catskill Mountains, known for its rich history of iron mining. The area was once a hub of industrial activity, with numerous iron mines operating in the 19th century. The trail offers a glimpse into the past, with ruins and markers that tell the story of this once-thriving industry.

**Green Pond/Boston Mine Loop**

**Description:**
Green Pond/Boston Mine Loop is a 3.5-mile trail that meanders through a mix of forest and open fields. The loop starts at Green Pond, offering a refreshing start to the journey. The trail then winds its way through the Boston Mine area, providing glimpses of the mining history of the region. The loop is suitable for families and beginners.

**History:**
Green Pond/Boston Mine Loop is located near the site of the former Boston Mine, which was active in the late 19th century. The mine produced significant amounts of iron ore, contributing to the industrial growth of the area. Today, the site is a reminder of the region's mining heritage, offering a chance to explore the past through the lens of the present.
**Itinerary - Casey Hersamtschuk:**

**Day 1/night 1**

**Directions from the George Washington Bridge:**

1. **Route 9W to Route 9:**
   - Take Route 9W to the west and exit at Route 9A towards the Palisades Parkway.
   - Continue on Route 9A for approximately 2 miles.
   - Take the exit towards the Palisades Interstate Parkway (路线1:15 miles).

2. **Interstate 80 to Route 3:**
   - Take Route 3 to the west and exit at Route 3 (约10 miles).

3. **95 north to Route 9:**
   - Take Route 9 to the west and exit at Route 9 (约10 miles).

**Actual Time: 5:30 am**

**Highlands-Queens Trail**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00 am</td>
<td>Board train at the New York City train station</td>
</tr>
<tr>
<td>8:00 am</td>
<td>Arrive at the Highlands-Queens Trailhead</td>
</tr>
</tbody>
</table>

**Description:**

The Highands-Queens Trail is a popular hiking trail in New York State. It is a great way to experience the natural beauty of the area.

**Suggested Punds-Eagle Cliff Loop**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 am</td>
<td>Hike along the Punds-Eagle Cliff Loop Trail</td>
</tr>
</tbody>
</table>

**Day 2/night 2**

**Directions to the Bear Mountain Bridge:**

1. **Route 9A to Route 9:**
   - Take Route 9A to the west and exit at Route 9 (约10 miles).

2. **Route 9 to Route 3:**
   - Take Route 3 to the west and exit at Route 3 (约10 miles).

**Actual Time: 4:00 pm**

**Chappaqua Stone House**

The Chappaqua Stone House is a historic site located in Chappaqua, New York. It is a great place to learn about the history of the area.

**Suggested Attractions:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:30 pm</td>
<td>Visit the Chappaqua Stone House</td>
</tr>
</tbody>
</table>

**Day 3/night 3**

**Directions to the Harriman State Park:**

1. **Route 9A to Route 3:**
   - Take Route 3 to the west and exit at Route 3 (约10 miles).

2. **Route 3 to Route 9:**
   - Take Route 9 to the west and exit at Route 9 (约10 miles).

**Actual Time: 2:00 pm**

**Iron Mans Trail**

The Iron Mans Trail is a popular hiking trail in New York State. It is a great way to experience the natural beauty of the area.

**Suggested Punds-Eagle Cliff Loop**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00 pm</td>
<td>Hike along the Iron Mans Trail</td>
</tr>
</tbody>
</table>

**Day 4/night 4**

**Directions to the Bear Mountain Bridge:**

1. **Route 9A to Route 3:**
   - Take Route 3 to the west and exit at Route 3 (约10 miles).

2. **Route 3 to Route 9:**
   - Take Route 9 to the west and exit at Route 9 (约10 miles).

**Actual Time: 3:00 pm**

**Chappaqua Stone House**

The Chappaqua Stone House is a historic site located in Chappaqua, New York. It is a great place to learn about the history of the area.

**Suggested Attractions:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00 pm</td>
<td>Visit the Chappaqua Stone House</td>
</tr>
</tbody>
</table>

**Day 5/night 5**

**Directions to the George Washington Bridge:**

1. **Route 9A to Route 9:**
   - Take Route 9A to the west and exit at Route 9 (约10 miles).

2. **Route 9 to Route 3:**
   - Take Route 3 to the west and exit at Route 3 (约10 miles).

**Actual Time: 5:00 pm**

**Highlands-Queens Trail**

The Highlands-Queens Trail is a popular hiking trail in New York State. It is a great way to experience the natural beauty of the area.

**Suggested Punds-Eagle Cliff Loop**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00 pm</td>
<td>Hike along the Highlands-Queens Trail</td>
</tr>
</tbody>
</table>

**Day 6/night 6**

**Directions to the Bear Mountain Bridge:**

1. **Route 9A to Route 3:**
   - Take Route 3 to the west and exit at Route 3 (约10 miles).

2. **Route 3 to Route 9:**
   - Take Route 9 to the west and exit at Route 9 (约10 miles).

**Actual Time: 3:00 pm**

**Chappaqua Stone House**

The Chappaqua Stone House is a historic site located in Chappaqua, New York. It is a great place to learn about the history of the area.

**Suggested Attractions:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00 pm</td>
<td>Visit the Chappaqua Stone House</td>
</tr>
</tbody>
</table>
Bibliography:


   http://nynjtc.org/hike/silvermine-lake-loop

5. Chazin, Daniel. "Sutherland Pond/Scenic Trail/Eagle Cliff Loop from Mine Hill Road."
   http://www.nynjtc.org/hike/sutherland-pondscenic-traileagle-cliff-loop-mine-hill-road

   Railroad-Company


http://www.dennistonbb.com/index.htm


    http://www.thenewcontinentalhotel.com

    http://www.theepochtimes.com/n3/1716265-push-for-heritage-trail-extension-continues


Pictures:
16. https://s-media-cache-ak0.pinimg.com/736x/d0/b5/42/d0b542163af811ae24c770138fc4e1a4.jpg


20. https://upload.wikimedia.org/wikipedia/commons/9/9b/Storm_King_Marker.JPG


Trailheads & Highway Markers - Brian Carbone

Trailheads
Highway Markers

<table>
<thead>
<tr>
<th>Highway</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Pond</td>
<td>45 mi</td>
</tr>
<tr>
<td>Iron Mines</td>
<td>15 mi</td>
</tr>
<tr>
<td>Eagle Cliff</td>
<td>300 mi</td>
</tr>
<tr>
<td>Silvermine</td>
<td>35 mi</td>
</tr>
<tr>
<td>H.L. Quest</td>
<td>125 mi</td>
</tr>
<tr>
<td>Heritage</td>
<td>10 mi</td>
</tr>
</tbody>
</table>

The images above and on the previous page incorporate modern, minimal-depth design and simplicity into functional pieces of art. Most importantly is the message or purpose of the sign—signs are meant to inform (most importantly) and to have an aesthetically pleasing orientation, such that viewers are not disoriented or confused as to where the most important information is located. Thankfully, for these signs, worrying about focusing attention on specific elements is not as important; the signs serve a singular purpose. For the trailhead signs, the purpose is to inform people that the trail begins at that particular location. For the highway markers, the purpose is to inform of the distance between a driver’s current location and the trail.

For all of the trailhead signs, a vibrant multicolor gradient was used to distinguish the sign from its surroundings via the border, as well as to draw attention toward the word “TRAILHEAD,” signifying that the trail begins here. Above the word “trailhead” is the name or location of the trail in brevity, using different text sizes to distinguish between information of varying preciseness. The images below the word “trailhead” are an interpretation of the significance of the location. The symbolic images may not present representations of what will be seen on the trail, but they symbolize entities that imparted their influence at some point in time by constituting the original naming mechanism. For example, the Iron Mines Loop has silhouettes of miners (however goofy they may appear). The colors used were influenced, in part, by the theme of the trail as well. For example, the mines exhibit darker backgrounds whereas the pond and cliff portray lighter backgrounds reminiscent of the outdoors.
A similar design approach was used for the highway markers. For all text, capital letters were used, as reading while driving is easier with when a sign exhibits capital letters. The distance is a larger font size than the location, as this is the most important information. The contrast between the light text and the solid, dark background makes for easy reading as well. The images on the signs and the variations in color make each sign easily distinguished from one another. The symbols in coordination with the colors make for rapid recognition—a dark grey sign with bright red on top is only the iron mines, for example, just as the eagle symbol is representative of Eagle Cliff, etc.

One of the most important aspects of these signs is that the baseline design elements are consistent. The sign “frame” so to speak does not change shape or size—merely color. The images are always silhouettes. This concept is a practice that should be carried out in New York, as it would ensure that no matter where an individual is, they could recognize a highway marker or trailhead sign without question. It also provides a sense of continuity and connection between the sites. For the same reason that collectibles often resemble each other by sharing a frame, tag, symbol, etc., visiting trails would elicit similar emotions as collecting. If an individual visits one, they may feel obligated to visit the others as well. As a memorandum, a trailhead replica on a poster-type material could be sold at each site.
Google Maps application of Highway Route Markers

The following link provides an interactive map with highway marker pins at the destinations, as well as the ability to obtain full directions from any location to the destination.

> Google Map Link

A manager of a Maps page, such as this one, can create it such that anyone can view the pre-made trail map and obtain directions to specified locations. The link can be provided to website visitors without risk of anyone modifying its contents. The map has plenty of features, allowing for a very detailed interactive experience if desired. The area of a region can be defined such that people can even see the portion of land set aside for the destination. Unfortunately, Google Maps does not have the trails defined as roads so one cannot really see the trail path itself without a map specifically made to showcase the trail. It is possible, however, that maps can be distributed at the site itself or on an online archive.
Tourism Development & Lesson Plan – Abby Ritson

There are several picturesque hiking trails in Orange County, New York that are worth exploring. The best tourism development organization specifically supporting hiking in the Hudson Valley and Orange County in particular is the New York – New Jersey Trail Conference because it not only provides factual information about the trails, but also keeps the tourists and residents informed about the hiking community.

When I Google searched “Orange County, NY hiking trails,” several hits came up, but the information was very broad. I had a hard time finding information on hiking trails specifically in Orange County. The first result from my Google search was an article from the Hudson Valley Magazine titled “The Best Hiking Trails and Paths in the Hudson Valley, New York.” It was located in the travel section, which I thought was suitting. A large reason tourists come to the Hudson Valley is to see the landscape and learn about its colonial history. I was able to find a hotlink specifically about the Appalachian Trail in Orange County but realized that it was from 2011 and was pretty outdated. I do have to say that the Hudson Valley Magazine website does a good job with educating residents and tourists about events and historical sites that they should check out. However, it was not the best source to promote the hiking trails specifically in Orange County.
After doing some more research, I found another website called “Hudson Valley Attractions,” and it was helpful because it had a ‘explore a county’ option. Under Orange County subpage, there was a sub link for hiking and walking trails. However, I was unable to open the link because of pop-ups on my computer as well as numerous advertisements. The website was not very organized and did not have as large of a focus on hiking that one would need if they were planning a hiking trip.

The best site that put a large emphasis on hiking in Orange County is the New York – New Jersey Trail Conference. I found it helpful that they provided a “site user’s guide” on the left hand side, which provides an overview of what the site has to offer for visitors. As you can see, along the top of the home page there are several tabs.
The “Go Hiking” tab leads you to information about parks and specific hikes and provides information about the many hiking clubs there are. My favorite feature under the “Go Hiking” tab is the hike finder map. Here you can filter by proximity, difficulty, length and special features such as biking, public transportation, handicap access, and waterfalls.

The “Be Informed” tab leads to hiking blogs, which I thought was a great addition to the site. Under this tab, you can find hiking news, blogs on various trails, and a frequently asked questions section. It provides safety tips and things to know before you go hiking, as well as park information and a quarterly newsletter.

Finally, I found the “Our Community” tab to be very beneficial for the public. It not only includes a trail calendar, but also public forums and my personal favorite, a feature called “Trails to Great Photos,” which is a “visual tour of New York and New Jersey parks and trails through the eyes of its photographs” (New York - New Jersey Trail Conference). Because social media is continuing to grow, I thought it was very important that the New York – New Jersey Trail
Conference added a twitter feed to their site. I would suggest that they move it to their home page, because it is pretty hidden and it took me a while to find it.

In conclusion, while I think that social media is the most convenient and quickest way to reach people, I think that tourists who are looking specifically for hiking in Orange County are going to use the Internet to find information about trails. Therefore, I think it is a great strategy to have a social media, such as the Twitter feed, highlighted on the New York – New Jersey Trail Conference website.

Lesson Plans - Abby Ritson

Highlands Quest Trail

● Background
  ○ The Highlands Quest Trail is a perfect place to bring a class. It is part of the Hudson Highlands Nature Museum Outdoor Discovery Center and provides “specially created guidebooks at the Outdoor Discovery Center” which can be purchased for $5. This should be incorporated in the price of the trip.

● Standards
  ○ CCSS.ELA-LITERACY.W.5.3.E- Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.
  ○ 21st century skills used: collaboration, synthesizing

● Objective
  ○ Through completing the guidebook, students will be able to determine the key picturesque features found along the trail and the “hidden message” for the trail.

● Materials
  ○ Guidebook for each students
  ○ Pens/Pencils

● Activity
  ○ I will have the students break off into pairs. They will be both be given a guidebook and will work together to find the “hidden message” of each section of the hike. As you can see below, the guidebook pages are very interactive and includes illustrations, riddle poems, field notes and has the students stop at different learning stations along the trail.
Hilltop trees must be strong
To endure wind and snow the winter long.
Learn the forest fabric that nature weaves
Identify them by their __ __ __ __ __ __

Red Oak
Chestnut Oak
Shadbush

Circle the upland trees you see here.
If you do not find all of these trees here, look for them along your quest.

Trees of our hilltops are adapted to dry, rocky soil. Chestnut oak is named because of the similarity between its leaves and the American chestnut, a nearly extinct species once the dominant tree in our eastern forests. It is adapted to fire with thick bark that can withstand a moderate blaze.

Northern red oak is a large tree, commonly found on high ground in our region. Its bark grooves are said to resemble ski trails. Shadbush or Juneberry is an understory tree with white flowers that bloom in March and April, at the same time that Shadfish (herring) make their annual breeding runs up the Hudson River.
• Reflection:
  ○ After completion of the trail and guidebook, students would then in groups summarized what they learned. Then, they would be asked to share with the class.

source: http://hhnaturemuseum.org/index.php/hiking-trails

Sutherland Pond & Eagle Cliff
• Background
  ○ The Sutherland Pond is a part of the Black Forest Park. It is a loop hike that “climbs to several panoramic viewpoints, passes two ponds and follows Continental Road past the historic Chatfield Stone House.” It is perfect example of the picturesque beauty of the Hudson River Valley.

• Standards
  ○ CCSS.ELA-LITERACY.SL.5.2.A - Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.

• Objective
  ○ Students will be able to accurately describe the nature elements surrounding them.

• Materials:
  ○ Journals for each student
  ○ Pens/Pencils/Markers

• Activity
  ○ The teacher should introduce the idea of being connected to and appreciating nature. They students should understand that the Hudson River Valley has rich history of nature and has ties to many naturalists, people who dedicate their lives to the appreciation of the natural world. The teacher should introduce John Burrough’s and Walt Whitman’s style observation style of writing and read some excerpts of their writings.
    ■ “Natural history is a matter of observation; it is a harvest which you gather when and where you find it growing. Birds and squirrels and flowers are not always in season, but philosophy we have always with us. It is a crop which we can grow and reap at all times and in all places and it has its own value and brings its own satisfaction.” - John Burroughs
“One summer day, while I was walking along the country road on the farm where I was born, a section of the stone wall opposite me, and not more than three or four yards distant, suddenly fell down. Amid the general stillness and immobility about me the effect was quite startling. ... It was the sudden summing up of half a century or more of atomic changes in the material of the wall. A grain or two of sand yielded to the pressure of long years, and gravity did the rest.” - John Burroughs (http://todayinsci.com/B/Burroughs_John/BurroughsJohn-Quotations.htm)

The students will be asked to stop periodically throughout the hike to take in the natural beauty and compose their own unique naturalistic observations.

**Reflection**
- At the conclusion of the hike, the students will be asked to share one of their observations with the class. The students should comment if their observation made them see nature in a different way. The teacher should ask prompting questions, like “What can we take away from our observations and the naturalist movement?” and “What do you think naturalists such as Walt Whitman and John Burroughs were trying to imply through their writing?”

**Iron Mines**

**Background**
- Mines have been a major industry in the Hudson River Valley beginning around the time of the Civil War. In fact, according to the U.S. Department of the Interior, 17% of the world’s iron was mined from the Hudson Highlands area during the peak of the iron mining industry in the early 1900s. (http://3dparks.wr.usgs.gov/nyc/parks/loc8.htm)

**Standards**
- Students will be able to identify different rocks based off of characteristics.

**Objective**
- Students will know the 3 basics types of rocks and understand the history of mining iron in the Hudson River Valley.

**Materials**
- Each team will be given a camera borrowed from the school’s library
- Each students will get a copy of this handout:
- Activity
  ○ Students will take pictures of the different types of rocks they see along the hike and classify which type it is.
- Reflection
  ○ The teacher will explain that iron was the main mineral that was mined along this trail.
    ■ What was iron used for then? (how did it fuel the economy?)
      ○ “Stoves, gun parts, cannons, and machinery were among key early uses for iron. Iron also played a crucial role in the development of railroads.”
        (http://www.encyclopedia.com/topic/Iron_industry.aspx)
  ■ Iron is which type of rock?
    ○ sedimentary
Iron Ore
What Is Iron Ore, How Does It Form and What Is It Used For?

What is Iron Ore?

Earth's most important iron ore deposits are found in sedimentary rocks. They formed from chemical reactions that combined iron and oxygen in marine and fresh waters. The two most important minerals in these deposits are iron oxides: hematite (Fe2O3) and magnetite (Fe3O4). These iron ores have been mined to produce almost every iron and steel object that we use today - from paper clips to automobiles to the steel beams in skyscrapers.

How Does Iron Ore Form?

Nearly all of Earth's major iron ore deposits are in rocks that formed over 1.8 billion years ago. At that time Earth's oceans contained abundant dissolved iron and almost no dissolved oxygen. The iron ore deposits began forming when the first organisms capable of photosynthesis began releasing oxygen into the waters. This oxygen immediately combined with the abundant dissolved iron to produce hematite or magnetite. These minerals deposited on the sea floor in great abundance, forming what are now known as the "banded iron formations." The rocks are "banded" because the iron minerals deposited in alternating bands with silicas and sometimes shale. The banding might have resulted from seasonal changes in organism activity.

Taken from: http://geology.com/rocks/iron-ore.shtml
Green Pond & Boston Mines Trail

- **Background**
  - The Green Pond & Boston Mine is part of the Harriman-Bear State Park in Orange County. It features lakes, ponds, and waterfalls as well as an old mine from the 1800s.

- **Standards**
  - No specific common core standards addressed, but the lesson fosters 21st century skills, such as creativity (which students don’t generally have an opportunity to use in the traditional classroom)! Students also have to orally support and explain their painting.

- **Objective**
  - Students will paint a watercolor that resembles elements of the Hudson River Valley. They will be able to defend how their painting represents key features of the Hudson River Valley.

- **Materials**
  - Watercolor pallets
  - Plastic cups
  - Water bottles
  - Paper
  - Paintbrushes

- **Activity**
  - The class will be stopped along the hike and will be asked to paint a watercolor. They should let the nature inspire them and to be as creative and open as possible. Their painting should be detailed and reflects their best effort.

- **Reflection**
  - The teacher will ask each student to share what they drew and why. In addition, they could ask:
    - What did you chose to incorporate in your painting?
    - What did you chose to leave out from your painting? Why?
    - What features in your painting represent the Hudson River Valley?
Orange Heritage Trail / Rail Trail

● Background
  ○ The Orange Heritage trail has a lot of history to offer. The trail is along the old Erie Railroad, which is not operating anymore. It suffered from financial and legal troubles, but was still significant to the industrial history of the Hudson River Valley. It went bankrupt several times and changed ownership each time. Originally, the railroad connected New York City with Lake Erie, but towards the end of its existence, it went all the way to Pennsylvania. As well as having Erie Railroad’s tracks, the Heritage Trail also features an old cemetery dating back to the 1800s, farmland, corn and wheat fields, Chester Depot (a restored stone-facade train station), and an Old Saber fighter jet.

● Standards
  ○ CCSS.ELA-LITERACY.SL5.1B - Follow agreed-upon rules for discussions and carry out assigned roles.
  ○ CCSS.ELA-LITERACY.SL5.1C - Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.

● Objective
  ○ Students will successfully complete a “picture” scavenger hunt and will participate in a class discussion about the meaning behind the items they found in their hike.

● Materials
  ○ Each team will use a camera borrowed from the school’s media center
  ○ Handout of the list of items students should find and take a picture of:
    ■ Old cemetery (dating back to the 1800s)
    ■ Farmland
    ■ Corn field
    ■ Wheat field
    ■ Chester Depot (restored stone-facade train station)
    ■ Old Saber fighter jet
    ■ Erie Railroad train tracks

● Activity
  ○ The teacher should go over the information in the ‘Background’ section as an overview of the trail.
  ○ The students will be broken down into teams of 4 and, without straying too far from the group, find and take pictures of the following features. There must be at least three people in each picture (switching the photographer). They should also take the time to read all information that might be next to the artifacts (such as the
Old Saber fighter jet or the cemetery), as this information will be useful for the class discussion.

- Reflection
  - Once the class is all back together, the teacher should lead a discussion on the significance of the artifacts and features the students took pictures of.
    - How were trains important in the Hudson River Valley during the Industrial Revolution?
    - What did the corn and wheat fields tell you about the agriculture of the Hudson River Valley?
    - What was the significance of the Old Saber fighter jet?

References:


Bibliography

Black Rock Forest Consortium, “Stone House & Campground,”
http://blackrockforest.org/research/plan-your-visit/stone-house-campground

- Used to find further history of the Chatfield Stone House

Booth, Malcolm, “A Short History of Orange Co, NY,”
http://www.co.orange.ny.us/filestorage/124/1338/A_Short_History_of_Orange_County.pdf

- Used this to find history of Orange County


- Used to find information about caterer in Newburgh N.Y.


- Description of features of the Green Pond/Boston Mine Trail.

Chazin, Daniel. "Iron Mines Loop #2 (Southwest) in Harriman-Bear Mountain State Parks."

http://nynjtc.org/hike/iron-mines-loop-2-southwest-harrimanbear-mountain-state-parks

- Description of features of the Iron Mines Trail including mines, roads, and swamps.

http://nynjtc.org/hike/silvermine-lake-loop

- Description of Silvermine Lake and trail.

http://www.nynjtc.org/hike/sutherland-pondscenic-traileagle-cliff-loop-mine-hill-road
● Description of the Sutherland Pond/ Eagle Cliff Loop, with information about ponds, elevations, and mine features.


● Used to find history of William Brien Memorial Shelter.


● Used to find information about the Erie Railroad for the Rail Trail History.


● Examples of John Burrough’s naturalistic observations.


● Found statistic on the amount of iron produced in the Hudson Highlands during its peak in the early 1900s.


● Used to find directions from one site to another.


● Used to find contact and site information for Harriman State Park.


● Used the guidebook found here for the Highlands Quest Trail field trip and used to find information for guidebook pages and itinerary.

- Used to find tourist information for hiking in Orange County.


  [http://geology.com/rocks/iron-ore.shtml](http://geology.com/rocks/iron-ore.shtml)

- Used to gain supplementary information for the Iron Mines field trip.

Maher, Neil, “Site #12: The Chatfield Property,”


- Used to research the history of the Chatfield Stone House.


- Used to find lodging information for the Goldsmith Denniston House.


- Used the trial locater map, FAQs about hiking, blogs and other information for tourists.


[http://www.nynjtc.org/park/black-rock-forest](http://www.nynjtc.org/park/black-rock-forest)

- Used to gather history of Black Rock Forest

New York-New Jersey Trail Conference, “Family Friendly Highlands Quest Trail at Hudson Highlands Nature Museum,”

- Used this to find historic features on the highlands Quest Trail.


- Used to gather information about the Hudson Highlands Nature Museum Outdoor Discovery Center.

New York-New Jersey Trail Conference, “Iron Mines Loop #1 (East) in Harriman-Bear Mountain State Park”,

http://www.nynjtc.org/hike/iron-mines-loop-1-east-harrimanbear-mountain-state-parks

- Used this to find history of Hogencamp Mine.

New York-New Jersey Trail Conference, “Iron Mines Loop #2 (Southwest) in Harriman-Bear Mountain State Parks,

http://www.nynjtc.org/hike/iron-mines-loop-2-southwest-harrimanbear-mountain-state-parks

- Used to find what historic features Iron Mines Loop #2 contained, and to gather history of the Boston Mine.

New York-New Jersey Trail Conference, “Silvermine Lake Loop,”

http://www.nynjtc.org/hike/silvermine-lake-loop

- Used this to find the history of the Silvermine Lake.

New York State Office of Parks, Recreation, and Historic Preservation, “Harriman State Park,”

• Used to find general information about Harriman Park.


[http://blackrockforest.org/files/blackrock/content/Chatfield%20Property%20-%20Site%202012.pdf](http://blackrockforest.org/files/blackrock/content/Chatfield%20Property%20-%20Site%202012.pdf)

• Used to find information about the Chatfield Stone House.


• Used to find tourist information for hiking in Orange County.


[http://www.thenewcontinentalhotel.com](http://www.thenewcontinentalhotel.com)

• Used to find information about the New Continental Hotel and Restaurant.


• Used this website to research the history of Harriman State Park.


• Used to find the picture of the Rail trail.


• Used to find accommodation ideas.
Weir, Georgette. "Family Friendly Highlands Quest Trail at Hudson Highlands Nature Museum."


- Used to describe features such as ponds, wildlife, and vegetation at the Highlands Quest Trail.

Worden, Darian, “Holes in the Ground,”


- Used this to find history of Pine Swamp Mine.


- Used to find information about Harriman Square Deli.


- Used to find information for the Highland Falls Deli and Grocery.