

Natural Features of Mount Ida
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The Mount Ida neighborhood is in the midst of a remarkable natural environment. Historical investigation and observational reconnaissance indicate that the Poesten Kill has shaped not only the landscape, but also the economy and the character of this once thriving section of the city of Troy. From its earliest 17th century settlements to the community that arose along its northern edge, water power transformed this natural treasure to one of America's earliest industrial centers.

In its present neglected state, few are aware of the history or beauty of the Poesten Kill Gorge, even though Congress Street passes within ten feet of it at one point. Its waters still generate electricity, and the ruins of its industrial past litter the steep walls of the gorge. The environs of the Poesten Kill provide a natural link between downtown Troy and Upper Congress Street via Prospect Park. This link has the potential to become a central element in revitalizing the Mount Ida neighborhood.

This section identifies the major natural features which help define the Upper Congress Street corridor. These features include Mount Ida, the Poesten Kill and its gorge, Prospect Park, and the terrain within the developed areas inside the project boundaries. It also briefly describes the geology and flora and fauna of the area. Strengths, weaknesses, opportunities and threats pertaining to natural elements will be discussed separately.

Information on the natural environment was gathered in one or more of the following ways:

- Direct observation, including walking along streets, hiking in the gorge, and viewing the area from both the north and south banks.
- Studying a variety of photographs, old and new, terrestrial and aerial.
- Reviewing maps and other graphic representations.
- Examining related documents, such as brochures, press releases, published materials, etc.

Geology and Topography

Over many millions of years, this area of present day New York State has been affected by countless geologic forces, some of which can be readily observed in and around Mount Ida. The most apparent geological features are usually glacial in origin, dating from the last period of ice retreat in New York between 8,000 to 15,000 years ago (known as the Wisconsinian Stage). Glacial melt created Lake Albany, which filled much of the present Hudson River Valley. Streams such as the Poesten Kill fed the lake with runoff, creating river deltas with glacial silt, like the western ridge of Mount Ida.

In addition to glacial geology, the rocks in this region were periodically stretched and compressed due to plate tectonics, that is, the forces of the earth's crust. These pressures created faults where layers of rocky plates collided. One major fault line reaches from Newfoundland to Alabama. This "thrust fault" consists of layers of older rock that has been heaved onto more recently formed rock layers. Known locally as the "Emmons Line," this fault can be seen in the gorge as a lighter colored layer of rock thrust diagonally through darker layers of shale and sandstone.

Geological events have left their marks all along Congress Street. From the west the street rises in a low grade from downtown Troy, becoming steeper before it flattens out again at the top of the hill near Pawling Avenue. During this rise, the street bears right, following both the topography and the general outline of Prospect Park, later curving left as the street and the upper rim of the gorge nearly converge. Along the southern edge of Upper Congress Street, the gorge rim drops steeply to the water below; to the north the slope continues upward, creating rocky ledges and outcroppings along the roadside. Houses cluster above the busy thoroughfare near the top of Mount Ida.

These changes in altitude are quite dramatic in such a short distance. Mount Ida reaches roughly 300 feet above sea level, and the highest falls of the Poesten Kill cascade 175 feet. The words "poesten kill" mean foaming water in Dutch, which well describes the effect of the water as it races over the stream's rapids.

Plant life

Many of the plants currently growing in and around Mount Ida are either cultivated species or those that have filled in after industries left the Poesten Kill. Virtually all of the trees in the gorge are second growth, and numerous small trees line inaccessible areas along the gorge rim or on rock ledges along the street. Other trees have been planted along the street, but in general the streetscape does not include a substantial tree population.

In fact, a number of plants in the gorge are actually invasive species. Oftentimes such flora is brought to a new environment as ornamental plants, while other times species arrive inadvertently. Some invasive plants that currently inhabit the gorge include:

- Asiatic bittersweet (*celastrus orbiculatus*)
- Norway maple (*acer platanoides*)

With no natural enemies, non-native species can have a devastating effect on local flora and fauna. They can take over whole habitats, out-competing native plants and destroying animal species that depend on particular plants for survival.

In the Mount Ida area, only one plant species has been identified as endangered. A flowering plant called navel cornflower (*valerianella umbilicata*) has not been seen here

in over one hundred years. It is currently listed as threatened or endangered in New York and four other eastern states.

Scenic sites along the northern bank

Starting at Prospect Park and moving east, we examined several sites to better understand the terrain and its relationship to the built environment. We selected points where there are natural overlooks into the gorge, likely areas for recreational use, and/or the potential for scenic vistas. With the exception of one overlook in Prospect Park, none of these areas have been utilized in this manner to date.

1. Prospect Park

The park as a whole is beyond the scope of this project, but it is an important feature of the Congress Street corridor, including the upper section addressed in this project. Framed by Mount Ida to the west, the park borders Congress Street on the north, then cuts behind a small neighborhood between Birch and Cypress streets. At its southeastern corner it is bounded by the Poesten Kill, but the park soon veers away from the water, following Hill Street back to the western perimeter of the hillside.

Once a jewel of Troy's park system, Prospect Park now lacks the amenities that once attracted people to enjoy its open spaces. Its scenic views are overgrown, the pool is closed, and the gates were locked for the winter. A planned trail system connecting the gorge to other parks and Troy's bike path stalled several years ago. However, this year the Friends of Prospect Park are celebrating the park's 100th anniversary.

The centennial is a great opportunity for redeveloping the park. Creating the right mix of programs and facilities would go a long way to meeting recreational needs, which could be just the catalyst needed to help redefine the community and lead it toward a meaningful revitalization.

2. Poesten Kill Gorge

Heading east along Congress Street, there is a small residential enclave formed by Cypress, Walnut, Birch, and Marshall streets. To the south of these homes, and along the edge of the gorge, is an open field measuring a couple of acres. Hidden from Congress Street by a ridge, this land is the terminus of Prospect Park. It also contains a large set of power lines.

At the end of Cypress Street is a gated road leading into a public service area (as identified on the 2007 Land Use map). This part of the gorge has a moderate slope down to water's edge, with an asphalt road weaving past a small, operating hydroelectric plant. The access road passes by several factory ruins, ending at a trail leading to the stream. Second growth trees and underbrush are gradually returning the former densely developed industrial site to a more natural setting, but evidence of previous human use abounds. Unidentified manufacturing artifacts jut out of the hillside or lay strewn through the area – a curious blend of natural and man-made formations.

3. North side of Congress Street

Since the land along the gorge continues to slope upward above its steep walls, the terrain along Congress Street is typically higher on the north side of the street. In some cases, such as the area around the 15th Street intersection, the north side is significantly higher, with retaining walls, rocky outcroppings, and long staircases providing access to the buildings above. Most of these areas along the street are too exposed or vertical for purposeful plantings, but wherever possible vegetation has found a home along the hillside.

4. Cookie Factory site

One of the newest businesses in the neighborhood is located on a deep lot in one of the few extant industrial sites along the corridor. The eastern boundary of this irregular lot drops dramatically, including a cliff that almost reaches the southeast corner of the structure. The southwestern grade is terraced by foundations of ruined factories, all of which are overgrown with trees and weeds.

According to the Troy Land Use map, there is a vacant parcel south of the Cookie Factory parking lot which is identified as “wild, forested, conservation lands, public parks.” Access to this area appears to be limited to hiking through other lots. It is sloped and heavily wooded, and may contain industrial remnants as well.

5. Former Farnham Firehouse site

Two contiguous vacant parcels afford the closest and most dramatic view of the upper Poesten Kill and the deep gorge it has eroded through solid rock. At one point the vertiginous cliff is a mere 10 feet from the curb, with only a guard rail and an historic iron fence separating passersby from a drop of roughly 100 feet. While the spectacular view is easily seen by pedestrians, the natural formations below are invisible to passing motorists, whose view is limited to houses along Linden Avenue on the opposite bank. This spot is a classic example of a site being hidden in plain view, particularly since much of it is overgrown with brush and small to medium sized trees growing out of the cliff wall.

Conclusion

The Congress Street corridor contains a unique cluster of natural resources. Its spacious park, relatively undeveloped gorge, and natural beauty provide opportunities for recreational activities unparalleled elsewhere in the city of Troy. These features could be a central part of the neighborhood’s revitalization, to the benefit of residents and visitors alike. It is truly a case where nature is right at the community’s back door.

Further questions

While we have looked at several aspects of the natural environment on Mount Ida, more questions remain. A few topics worth future investigation include.

- How stable is the north face of the gorge between the Church of the Ascension and the Cookie Factory at present? Will the upcoming DOT project conduct tests of the gorge to determine how stable it is (especially where it comes closest to the street)? Are any retaining walls planned?
- What sort of streetscape is planned by DOT? How will trees and other plantings fit into the overall design?
- Who owns the land between the church and the Cookie Factory? Is the land available for public use as a scenic overlook?
- What is the status of the earlier plan (and grant) for developing a trail system in Troy, including trails in and around the Poesten Kill?
- Are there any contaminated sites within the project area, particularly from earlier industrial operations?
- What grants and other funding sources are available for preserving the natural as well as the built environment? Is DOT's Environmental Group a possibility?

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Recommendations

The following recommendations relate primarily to the natural resources found in Mount Ida and the Poesten Kill Gorge. Since these assets are capable of playing a key role in the area's civic improvement, they should be addressed as part of a broader plan for community revitalization and economic development.

Prospect Park

Due to its 2007 centennial, Prospect Park improvements should be an immediate priority. Specific suggestions are listed below.

- Improve the entrance to the park with better signage and more naturalistic landscaping. The entrance ought to invite visitors in; it should not look like a barrier designed to keep people out.
- Areas like the tennis courts encourage people to use the park for both organized events and informal recreation. The city should work with local sports organizations to build more recreational facilities of this sort.
- Swimming pools are important summertime gathering places, and refurbishing the pool at Prospect Park would provide a needed form of recreation for neighborhood families. If pool restoration can't be done in the immediate future, construction of a wading pool, spray pool or other facility for children to enjoy during hot weather should be considered.
- A concession stand would be a great addition to the park. If the City is unable to operate one, it should investigate contracting with a private vendor, similar to the summertime courtyard café operated at the Troy Public Library.
- Organize more activities and special events in the park, and promote them widely. Food festivals, seasonal activities, and sporting events could all draw people to the city, and would provide opportunities for local vendors to showcase their products.
- Provide interpretive kiosks and markers to highlight the area's history and geology.
- Develop hiking trails through wooded areas. Connect the park to downtown and the gorge with directional and interpretive markers.
- The park has a natural southwest overlook that is obscured by tree growth. The area should be cleared out annually to maintain an accessible view of the Hudson River Valley at all times.

Poesten Kill Gorge

The gorge is a wonderful natural area, but public access to it is not encouraged. Steps should be taken to open this area to hikers, bird watchers, and others who want to enjoy the scenic beauty tucked away within the city.

- Identify and develop access routes into the gorge from both the north and south banks. Ideally, these should be part of a comprehensive trail system connecting the parks, Mount Ida, and downtown.
- Build a pedestrian bridge across the Kill to allow hikers to explore both parks and as much of the gorge as possible.
- Clearly delineate private property boundaries to avoid conflicts.
- Install directional and interpretive markers at appropriate points within the gorge.

Overlook Opportunities

In addition to enjoying the Poesten Kill from the gorge, there are many untapped opportunities for viewing it from above. A few sites are very promising for this purpose, such as:

- The lot between the Church of the Ascension and the Cookie Factory. This location offers a fabulous view of the gorge, and could be developed into a pocket park on land formerly occupied by the Farnham Firehouse. Since the church is currently unused, the park and building might be developed together into a cultural or community center.
- Terraced land between the Cookie Factory and the AAA lot. Behind the Cookie Factory parking lot are foundations of former factories terraced down the embankment. With proper access and fencing, this area could become a lovely spot to watch the Poesten Kill Falls to the southeast.
- An interpretive marker could highlight the role this site has played in the industrial history of Troy, including the Cookie Factory building itself.

Planning and organization

All of these recommendations require leadership and planning. Citizens must become involved to make sure their voices are heard. The City of Troy must also place a priority on this area to make improvements a reality. A few recommendations include:

- Get involved in planning. The best way is through a neighborhood organization, but individuals can act on their own as well. Many Troy neighborhood groups could provide assistance, such as the Pottery District, Little Italy, and Beman Park. Also, Troy Rehabilitation & Improvement Program (TRIP) is currently facilitating discussions about creating a city-wide system of community associations to help coordinate neighborhood efforts.
- Meet with city leaders to find out how natural features figure in to the city's Comprehensive Plan. Pressure legislators to develop these areas for public access and use.
- Learn more about the upcoming Department of Transportation (DOT) project and how it will affect parks and natural resources. Encourage the use of native plant species in all streetscaping.
- Look into funding sources (including DOT and the [NYS Environmental Protection Fund](#)) to construct attractive overlook sites, redesign the park entrance, and preserve existing natural resources.
- Join local groups, such as the Friends of Prospect Park, to help improve this natural and historic resource.

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Natural Features - Illustrations

1. thrust_fault_drawing.jpg

Sketch of a thrust fault showing how layers of the earth's crust were disrupted as tectonic plates were pushed together over long periods of time. Older layers of rock gradually slide on top of younger rock. (Illustration by T.A.Gobert, 2007)

2. congress_st_rocks.jpg

These rocks protrude from the hillside along the north side of Congress Street opposite the AAA building. The angled rock layers are a result of the thrust fault that runs roughly north-south through the region. Note the wild day lilies that have sprouted from the ledge in this early April photograph. (Photo by T.A.Gobert, 2007)

3. navel_cornsalad.jpg

Navel cornsalad (*valerianella umbilicata*) is an endangered plant that is native to most of the eastern seaboard of the United States and grows as far west as Illinois. It is threatened or endangered in five states, including New York. It once grew in the Poesten Kill, but has not been sighted in the area since 1906. (Photo courtesy of Steve Baskauf)

4-5. bittersweet1.jpg and bittersweet3.jpg

Asiatic bittersweet (*celastrus orbiculatus*) is a prolific grower which is replacing native American bittersweet in many areas of the country. Its ability to entwine itself around trees and shrubs can harm indigenous plants in several ways. The vines can strangle branches and stems, and the fast growing foliage can shade out lower-growing plants. As the vine reaches the tops of trees, it can make them top heavy, which leads to breakage and/or uprooting from high winds or heavy snow. (Photos courtesy of Chris Evans and James R. Allison, respectively)

6. prospect_park.jpg

Prospect Park is an 80 acre park overlooking the City of Troy. Designed by RPI's first Black graduate, Garnett Baltimore, the park is celebrating its centennial in 2007. While Prospect Park has great potential for many kinds of recreational activities, it is ripe for a makeover, as shown by a crumbling concrete wall along Congress Street. (Photo by Rich Montena, 2007).

7. 517_survey,1888.jpg

The Poesten Kill Gorge has been studied by students for over 150 years. This 1888 photo shows RPI students posing next to a wooden bridge during a summertime hydrographical survey. (Photo courtesy of the Archives and Special Collections Department, Rensselaer Polytechnic Institute)

8. gorge_15a.jpg

The Poesten Kill Gorge National Historic District was added to the National Register of Historic Places in 1976 due to the site's significance in early industrial development. While all of the factories that once existed in the gorge are now gone, a few industrial buildings still exist along Congress Street. This photograph shows factory ruins that were demolished when the Mount Ida hydroelectrical plant was developed in the 1980s. Most of the remaining ruins have been overtaken by second and third growth trees. (Photo courtesy of Russell Ziembra, 1982)

9. 20070211TerrainSurveyMontena096.jpg

Old trails wind through the Poesten Kill Gorge past remnants of industrial buildings and machinery. (Photo by Rich Montena, 2007)

10. 20070211TerrainSurveyMontena050b.jpg

Much of Congress Street is significantly higher on the north side of the street, while the south side either slopes gently or drops dramatically toward the Poesten Kill Gorge. (Photo by Rich Montena, 2007)

11. pawling_bridge.jpg

The Pawling Avenue Bridge over the Poesten Kill has been in use since 1875. The bridge carried trolley cars until the 1920s, when automobiles began to be widely available to American households. The bridge was later restored by Ryan-Biggs Associates, retaining the original rock-faced sides. (Photo by T.A.Gobert, 2007)

12. gorge_from_sw.jpg

This view from Poesten Kill Park, on the south side of the gorge, juxtaposes the natural beauty of the area with the architecture of Mount Ida in the background. The topography has lent itself to industry, recreation, community and home for generations of Trojans. (Photo by T.A.Gobert, 2007)

Natural Features Bibliography
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