

For millennia, Lehigh Gap has been traversed by footpaths, wagon roads, a canal, three railroad lines, and a modern highway.

# Lehigh Gap

## A Transportation Corridor

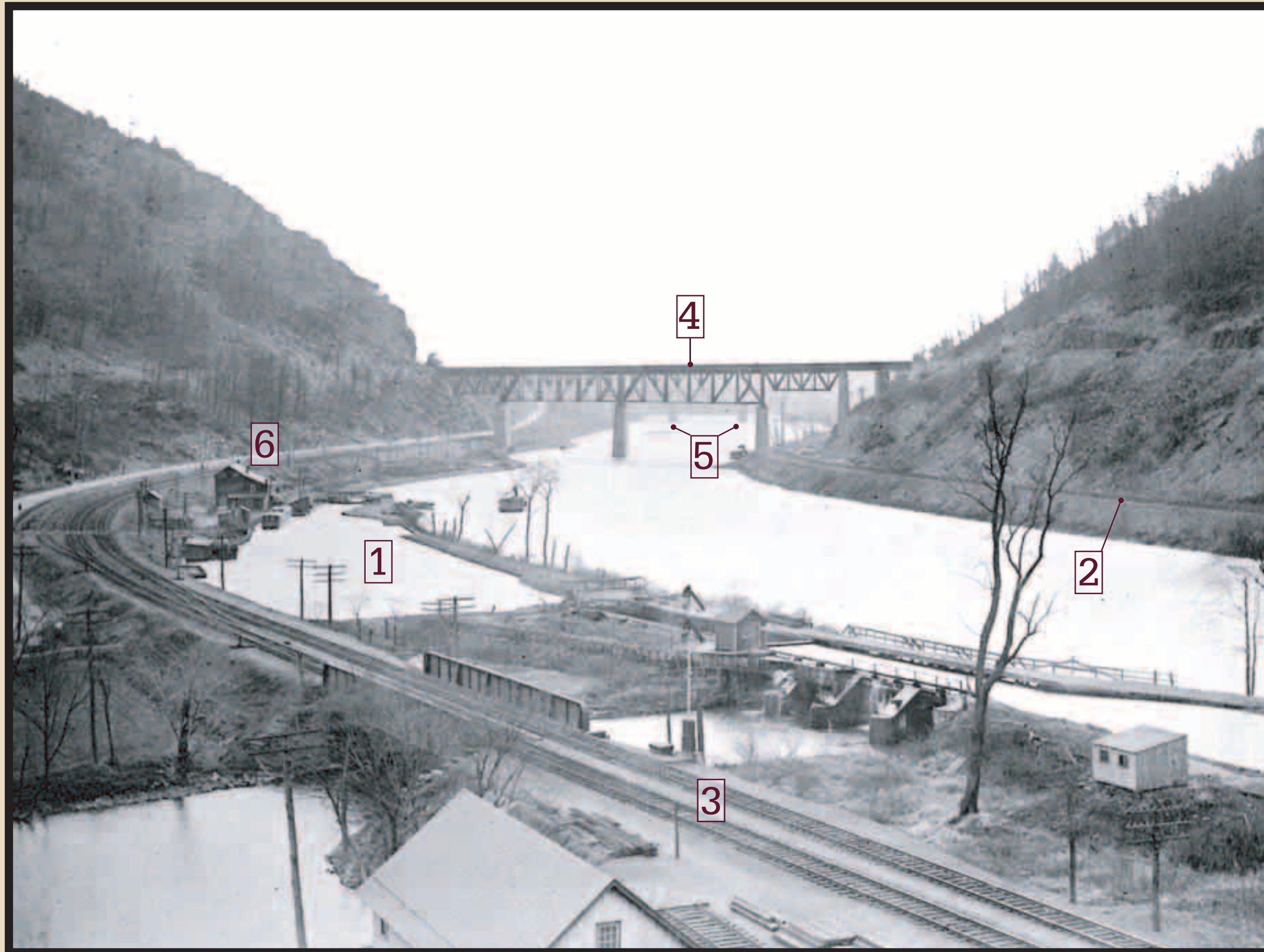


Photo courtesy of Dave Altrichter

Lehigh Gap as viewed from Palmerton, 1920s.

The **Industrial Revolution** required that anthracite (hard coal) be moved from mountain to market through Lehigh Gap.

Lehigh Coal and Navigation Company completed the **Lehigh Canal** (1) in 1829. Railroads brought a more efficient and year-round method of transporting coal. **Lehigh Valley Railroad** (2) was completed in 1855, followed soon by the **Lehigh & Susquehanna (Central of New Jersey)** in 1864 (3). **The Lehigh & New England Railroad** spanned the Gap in 1912 (4).

A **chain bridge** (5) constructed in 1826 allowed people and later vehicles to cross the Lehigh. The present Route 873 Bridge (not shown) was built in 1931. In 1962, the cantilevered 4-lane Route 248 was built to replace the winding 2-lane **Route 29** (6).

Indians moved through Lehigh Gap on the Nescopok Path.  
Moravian settlers in the mid 1700s expanded the path (calling it the Moravian Road) to connect Bethlehem and Gnadon Huetten (Lehighton)

Historical Passages  
through  
Lehigh Gap:

Walking Purchase 1737  
Ben Franklin 1756  
John James Audubon 1829

*Lehigh Gap combines natural and technological wonders*

# Bridging the Gap

## Lehigh & New England RR Bridge

The L&NE bridge spanned two active railroads, the canal towpath, a highway, and the Lehigh River.



Photo by David Augsburg

Above: Lehigh & New England RR Bridge from west side of Lehigh Gap (where you are standing) in 1961.  
Below: Aerial view of L&NE Bridge from the south circa 1965 after construction of PA 248.

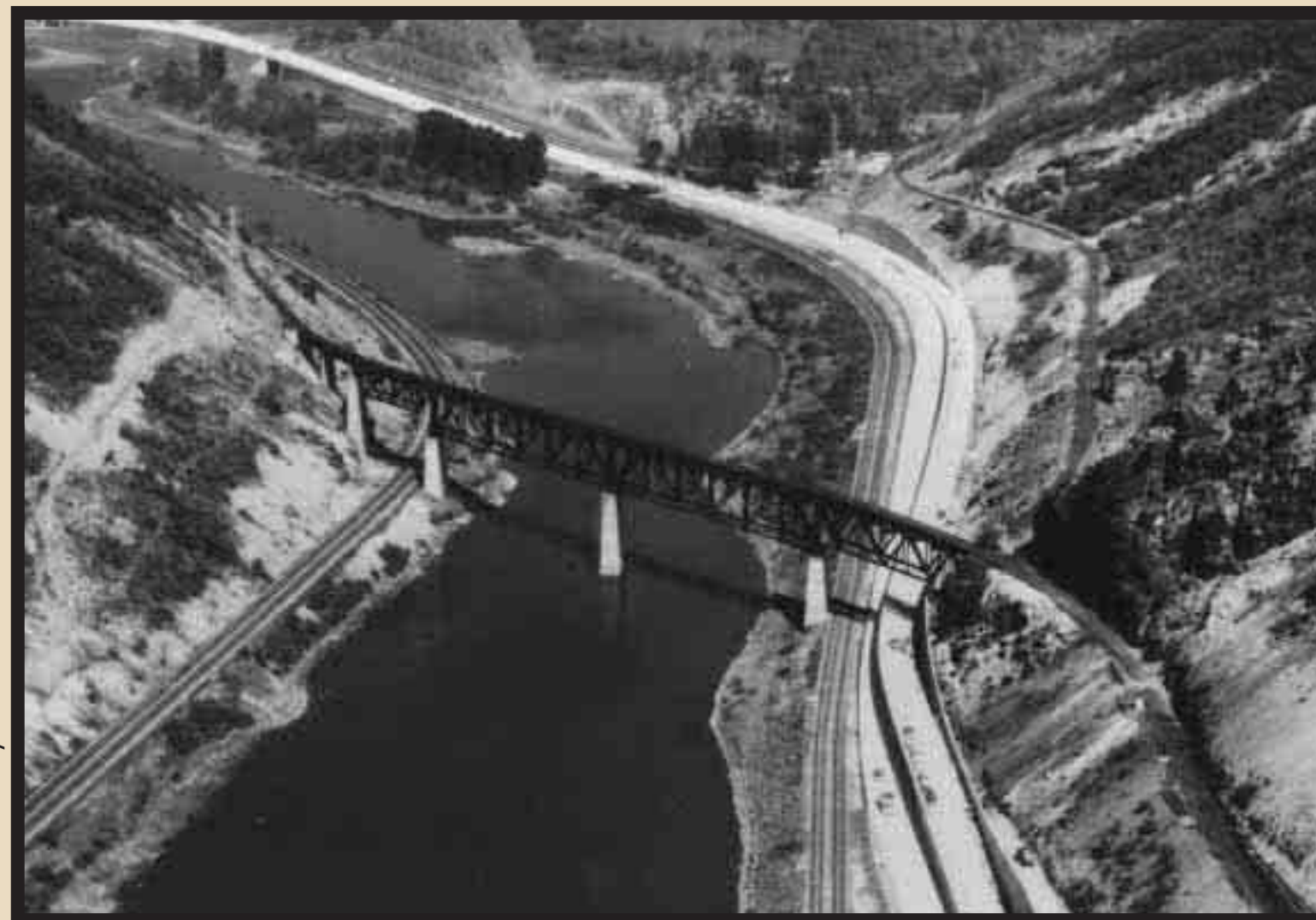


Photo courtesy of Dave Altrichter

**Rails to Trail:**  
This trail follows the right of way of the abandoned L&NE railroad northwest toward Tamaqua.

The L&NE Railroad ran from the coalfields near Tamaqua passing through Lehigh Gap, Danielsville, Pen Argyl, and then across New Jersey to a rail center in Maybrook, NY. From there, freight could be interchanged and sent on toward Boston. Along with coal, the L&NE also hauled cement and other freight. This line operated from 1912 to 1961.

### L&NE Bridge Quick Facts

- Bridge built 1911-1912
- Steel from American Bridge Co., a subsidiary of Bethlehem Steel Corp.
- Length - 1070'
- Height - 110'
- S-shaped curve (6 degrees)
- Cost reported as \$3 million
- 6 Concrete Piers - 20' x 50' at base (one still standing, one fallen, remainder were removed)
- Dismantled - 1967

1912 - 1967

# Crossroads at the Gap

*“The ideal mountain trail is one which has no end.”*  
Imer Adams, *Walking in the Clouds*, 1939



## Hike it! Bike it! Boat it!

Lehigh Gap is a crossroads for numerous recreational activities. The intersection of the Kittatinny Ridge and Lehigh River corridor provides opportunities for fishing, paddling, bird watching, hiking, biking, and nature photography. At this crossroads, the Lehigh Gap Nature Center's trails connect two historic trails, the Appalachian and D&L Trails.

### *The Hikers' High Way*

The Appalachian Trail, a foot path, follows the ridge on both sides of the Lehigh Gap, running 1,245 miles south to Georgia and 930 miles north to Maine. The members of two area hiking clubs blazed the Lehigh Gap section of the AT during the late 1920s and early 1930s. Currently, the Philadelphia Trail Club maintains this section, which features summit views, savanna habitat, and lush forests.

### *The Hawk Highway*

The Lehigh Gap is part of the Kittatinny Ridge, an “Important Bird Area” as designated by the National Audubon Society. The ridge serves as the Northeast’s primary corridor for migratory birds of prey, while the Lehigh River serves as a migratory flyway for waterfowl and other birds. The Lehigh Gap Nature Center is at the crossroads of these two corridors.

Ospreys, Baltimore Orioles, and Common Mergansers (above, left to right) can be seen at Lehigh Gap Nature Center.

## TRANSPLANTED

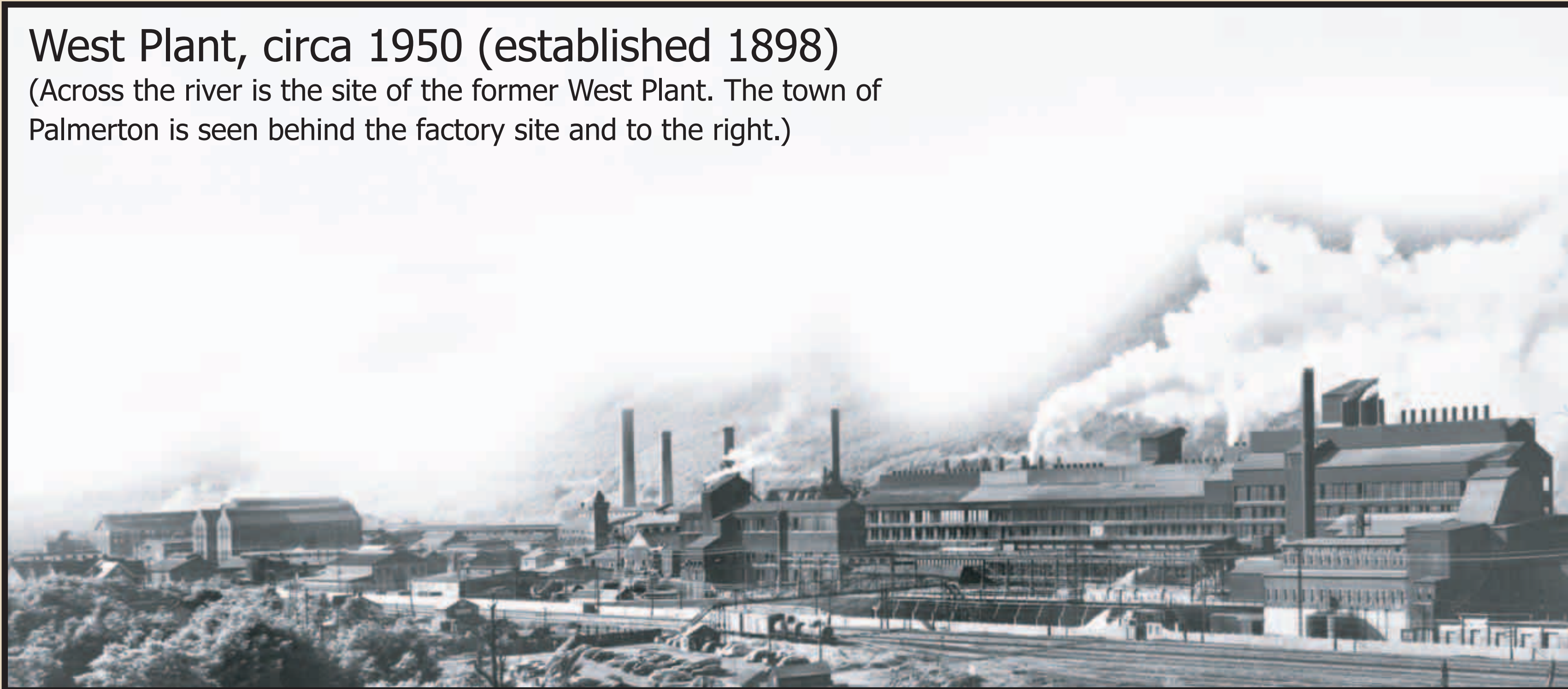
The Orthodox churches seen to your right in Palmerton are evidence of the many immigrants who came to work at the zinc company. Eastern Europeans, Portuguese, Mexicans and others blended in this multi-ethnic town.

# Smelting Pot New Jersey Zinc Company



## West Plant, circa 1950 (established 1898)

(Across the river is the site of the former West Plant. The town of Palmerton is seen behind the factory site and to the right.)



Zinc is used in die casting and in many products such as paint pigment, alkaline batteries, brass, tires, and pharmaceuticals.

Founded in Newark, New Jersey in 1848, the New Jersey Zinc Company purchased farmland north of Lehigh Gap in order to expand operations and be near the anthracite mines, canal, and railroads of the area. Coal was the fuel source used for extracting zinc from zinc ore, a process known as smelting. Some ore contained sulfur, which was the source of air pollution that killed vegetation

on the surrounding mountains. The pollution occurred at a time when adequate technology did not exist to control it.

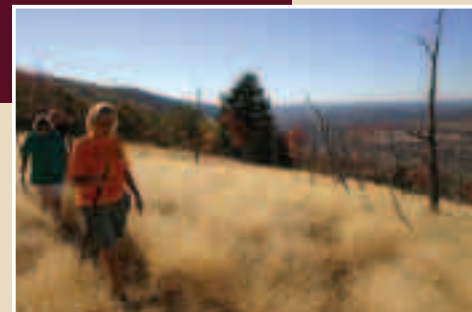
The NJ Zinc Company founded and built the town of Palmerton in 1898 and named it for company president Stephen S. Palmer. They also built the schools, library, water system, and hospital and provided employment for many in the community

1898-1980



# Lehigh Gap Nature Center

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## WHO WE ARE

Lehigh Gap Nature Center (LGNC) is a private, member-supported nature center dedicated to conservation, education, research, and outdoor recreation.

## WHAT WE DO

### Education

- Field trips and programs for school groups and colleges
- Reading programs, camps, clubs for students
- Teacher training programs
- Workshops for adults and families



### Conservation

- Protection of the Kittatinny Ridge
- Habitat restoration and enhancement at Lehigh Gap
- Management of our refuge to maximize native biodiversity

### Research

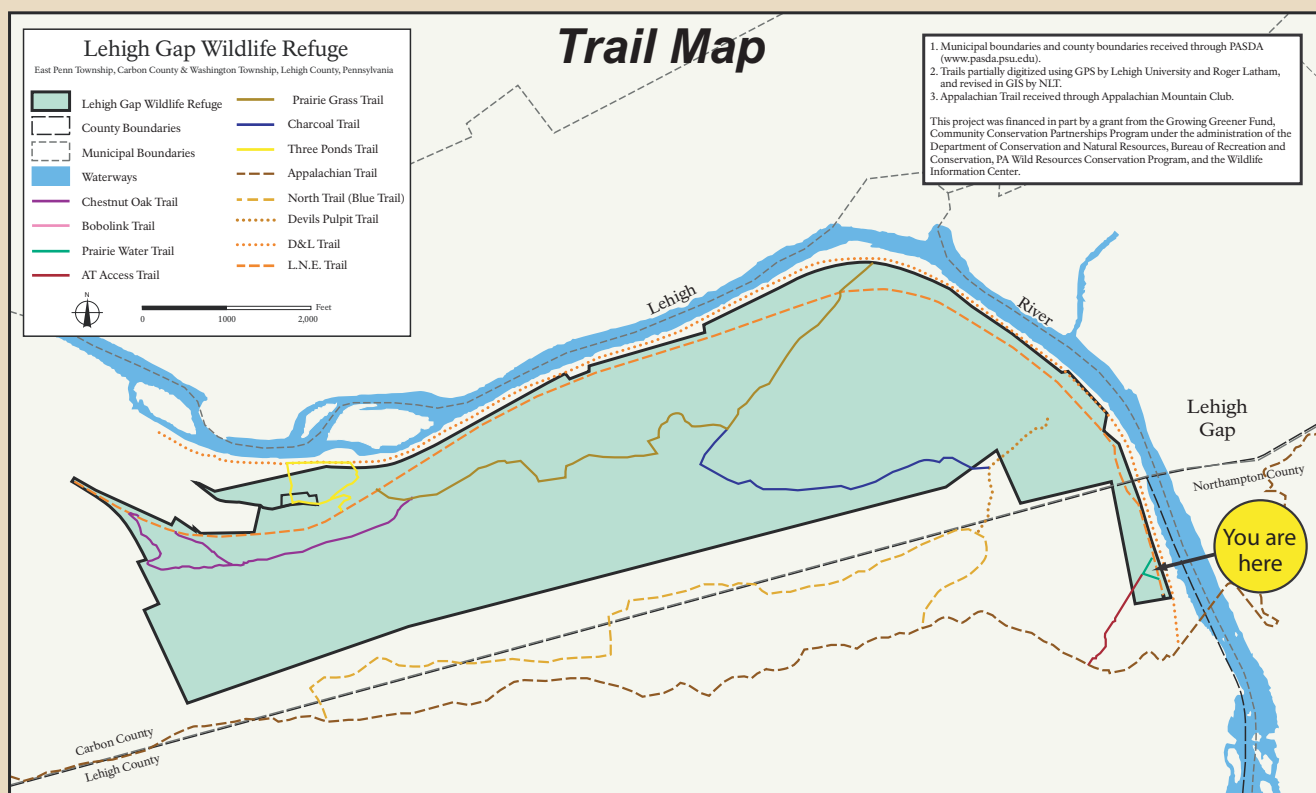
- Ecological research at LGNC with academic partners
- Hawk migration research at Bake Oven Knob
- Wildlife research conducted by citizen scientist volunteers
- College internships

## WHAT TO DO HERE

- Walk or hike the trails
- Go birding or observe wildlife
- Photograph plants, animals, and scenery
- Ride your bicycle (on rail trails only)
- Walk your dog (leashed, please)
- Kayak, canoe, tube or fish in the Lehigh River
- Participate in LGNC programs and events
- Relax on our decks, enjoy our gardens and ponds



Established 2003



Visitors Welcome Dawn to Dusk

# Superfund to Super Habitat

## Lehigh Gap Restoration Project

dcnr



### A Barren "Moonscape"

In the late 19th Century, the New Jersey Zinc Company moved to Pennsylvania to be near the coal and zinc ore of the region. Its two smelters operated in Palmerton from 1898 to 1980. The West Plant (left) was directly across the Lehigh River from the north slope of the mountain pictured below.

Air pollution from the smelters killed all the vegetation and left behind a barren mountainside contaminated by toxic levels of zinc, cadmium, and lead. Most people described it as a "moonscape" and had little hope of ever seeing Blue Mountain turn green again.

NJ Zinc Company West Plant  
circa 1950



October 2002



### A Thriving Habitat

The Palmerton area was declared a Superfund (toxic waste) site in 1983 by the U.S. Environmental Protection Agency. In 2002, a small nonprofit group called the Wildlife Information Center purchased more than 750 acres of land and established the Lehigh Gap Nature Center. About half of the land was part of the Superfund site (right).

The Center's goal was to revegetate this barren mountainside and create high quality wildlife habitat using native, warm-season, prairie grasses. Innovative methods used to plant these grasses included spreading a mix of seed, compost, lime and fertilizer with a tractor/spreader and later, with a crop duster airplane.

On the formerly barren mountainside the Nature Center staff succeeded in creating grassland habitat, which has become rare in Pennsylvania. Management of this habitat includes adding native wildflowers to create a diverse prairie, removing invasive species, and possibly using controlled fire to maintain the area as a grassland.



August 2008



Inset Photos, clockwise from top:  
and Vervain. All photos taken at  
Lehigh Gap Nature Center.

