

## The Erie Canal

- ❖ All water link between the Atlantic Ocean and the Great Lakes was created when it **opened in 1825**.
- ❖ **Cut travel time** from NYC to Buffalo from 20 to 8 days.
- ❖ **Cut cost of freight** from \$120/ton to \$5/ton, reducing the price of food and lumber in the US.
- ❖ **Made Rochester the largest US flour milling center.**
  - In 1820 it shipped 67,000 barrels of wheat flour; in 1826 it shipped 240,000 barrels.
- ❖ **Made New York City the largest US port.**
  - By 1840 NYC saw more tonnage than all other major US ports combined.

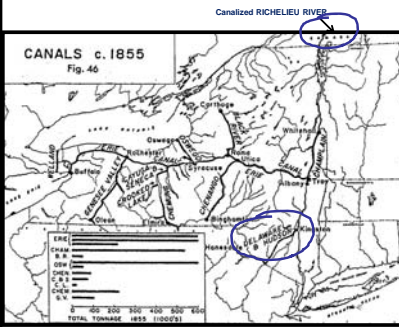
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## The Legacy of the Erie Canal

- ❖ **Instigated a state-wide and national canal-building mania.**
- ❖ **Became the focus of economic development.**
  - People poured into interior NYS because of the favorable economic situation (farming, lumbering and transport).
  - **Cities developed along its route** (1850 census saw 75% of NYS population living within 10 mi of it).
  - **It had to be enlarged several times** because of its success, to handle heavier cargo and larger barges.
- ❖ **Speeded the development of the railroads as a year-round long-haul mover of tonnage. Why?**

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## Canals of NYS in 1855



CANALS c. 1855  
Fig. 46

The success of the Erie Canal began the Canal Era in the US but **no other state had the combination of land-forms and water sources as did NYS.**


The Delaware and Hudson Canal was the first privately built canal in the US.

The Richelieu River was canalized to connect the St. Lawrence River with Lake Champlain.

The late 1850s saw the end of the Canal Era as the RR network grows.


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## Delaware & Hudson Canal System




**First canal privately financed in US. Built from 1825-29.**  
**Connected Pennsylvania coalfields with Hudson R. at Kingston, NY**  
 Consisted of a 108 mi long canal with 108 locks + 16 mi of gravity railroad  
 Eventually replaced by the Erie RR which brought coal directly to NYC

## Delaware & Hudson Canal



Of Pulleys and Ropes and Gear  
The Local History of the Delaware and Hudson Canal Company and the Westchester Coal Company

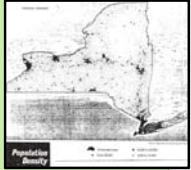


ANTHRACITE COAL ROUTE FROM CARBONATE TO NEW YORK CITY  
 DELAWARE AND HUDSON CANAL

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<http://www.nps.gov/udpe/photosmultimedia/The-Delaware-and-Hudson-Canal.htm>

## Importance of this Phase of Settlement

- Canal Era ends prior to Civil War as railroads take over long-haul transportation.
- ❖ End of period saw the imprint of the basic pattern of population distribution.
- **Focal points of higher population densities developed.**
- **Focal points became links in the modern transportation system.**  
 (Colonial turnpikes>> canals>> railroads>> paved roadways>>interstate highway system)
- ❖ **Greatly altered the natural environment.**



## Altered Landscapes

Originally, stream beds and wetlands (lakes/ marshes) were used as the rights of way. Now dry land private property was involved.

Water was diverted and impounded by farmers, canal operators and towns people.


Berms built to contain water in the canal and create a towpath interfered with natural drainage.

Feeder canals were needed to bring water to the main canal taking water from other areas.

Trees were cut for construction material.

Vegetation was cleared for service areas and roads.

Dams were needed maintain both water level and supply.



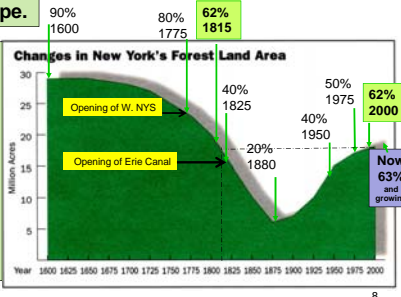
Air photo of current Lock E-7 at Visscher Ferry.

## NYS Forest Cover (percent by year)

❖ Canals and settlements accelerated changes in the tree-covered natural landscape.

Trees were cut down for farmland and roads as well as for construction material and fuel. *In some areas the price of wood for fuel soared because too much land was cleared for farming!*

People made comments about the "bleak and raw look to the land."



Year	Forest Land Area (Millions of Acres)
1600	90%
1775	80%
1815	62%
1825	40%
1880	20%
1950	40%
1975	50%
2000	62%

Now 63% and growing

## 15 Changing Landscapes and Changing Perceptions 1865-1900

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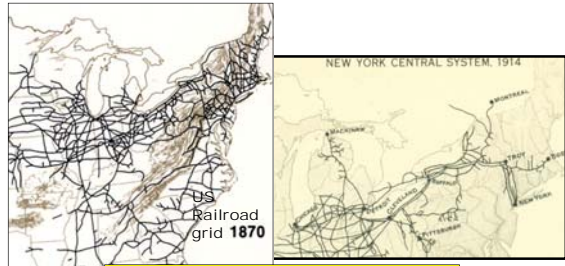
Spring 2018

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## Industrial New York 1865-1900 Summary

- ✓ Post-Civil War period sees urban-industrial growth.
- ✓ The axis of settlement across central NYS to Lake Erie fills in with towns and villages.
- ❖ New urban places emphasize manufacturing and trade, not agriculture.
- ✓ Railroads replace canals as the chief mover of people and goods.
- Urban places located along a rail line grow; others don't.

## Main Line Railroad Tracks of Eastern United States



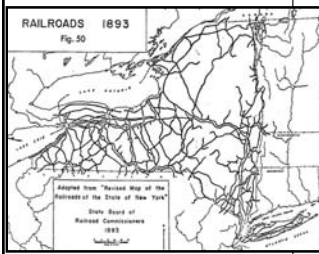
**LOCATION. LOCATION. LOCATION.**  
What two geographic (economic/strategic) aspects of NYS are evident on the 1870 map?

## Railroad Rights of Way

❖ Starting in the 1860s, railroads become the primary mover of people and goods.

What are their benefits?

- ✓ They are **less costly, faster** and could **carry more weight** than canal boats.
- ✓ They could be **built almost anywhere** and could run **in winter**.
- ✓ They **increased the mobility** of people and **interaction** between regions.
- ✓ They supported **tourism**.



From Thompson, Geography of New York State, 1960

### Perception and Peoples' Relationship to the Natural Environment

<p>☐ <b>Stradling</b></p> <ul style="list-style-type: none"> <li>▪ <b>Ch. 2:</b> Quote reflecting people's attitude: <b>Bring prosperity to the "waste of creation."</b></li> <li>▪ <b>Chapter 3</b> is subtitled: <b>"Romanticism, Tourism and the Power of Culture."</b></li> <li>▪ <b>Ch. 4</b> reflects on environmental degradation: <b>"Tainted and Unwholesome Atmospheres."</b></li> </ul> <p style="background-color: yellow; padding: 2px;">➤ These chapters cover the 19<sup>th</sup> century and begin to explore people's awareness that "progress" has had on the environment and eventually the need to preserve the state's natural assets.</p>	<p>☐ <b>Reitano</b></p> <ul style="list-style-type: none"> <li>▪ <b>Ch. 4 "The Empire State"</b> chronicles NYS's rise to prominence with the Erie Canal and landscape <u>appreciation</u> movement.</li> <li>▪ <b>Ch. 5 "The Maturing State"</b> looks at the beginnings of social/environmental awareness.</li> <li>▪ <b>Ch. 6 "The Booming State"</b> focuses on industrialization, rise of the wealthy, newly found leisure time and landscape <u>preservation</u> movement.</li> </ul>
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### Advent of Leisure Time and the Interaction with Nature

❖ **Starting in the mid-1800s people began to consider environmental beauty to be important.**

- Travel to "see nature" became a tourist activity.
- To the railroad companies in the 1870s, tourism and tourist destinations were vital to business. Railroad companies built hotels at destinations along their tracks.

➤ **NYS sites were popular destinations** (Niagara Falls, Finger Lakes, Thousand Islands, Adirondacks, Lake George, Saratoga, Catskills, Hudson Valley, eastern Long Island seashore and Coney Island).

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### Romanticism

❖ A style of art and literature developed in the late-1700s in Europe and became popular in America in the early-1800s.

- It idealized nature, featured peaceful pastoral scenes, looked for the coexistence of humans and nature, and bemoaned the disappearing wilderness.

❖ **Romantic writing style that included descriptions of idyllic settings was trendy.**

- The **genre of descriptive travel** was very popular as people wrote about their journeys and what they encountered.

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### Romanticism in the Arts

• **Enjoyment and appreciation of scenery was considered a cultural activity:** "upper class."

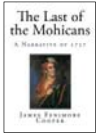
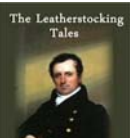
- It was something to be experience first-hand.
- But if unable to do so, reading about the travels of others and viewing painted landscapes was the next best thing.

❖ **Hudson River School of Painting**


- ✓ **Landscape artists** used the Hudson Valley, Catskills, Adirondacks as settings for their work.

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### Romanticism in the Arts

<ul style="list-style-type: none"> <li>• <b>Thomas Cole</b>, writer/painter who stressed the beauty and power of nature. Interactive tour of <b>Thomas Cole State Historic Site:</b> <a href="http://www.explorethomascole.org/tour">http://www.explorethomascole.org/tour</a></li> <li>• <b>Frederick Church</b>, painter in the Hudson River School who built <b>Olana</b>, a Mid East-style house overlooking the Hudson Valley from which he got his inspiration.             <ul style="list-style-type: none"> <li>• <a href="http://www.olana.org/">http://www.olana.org/</a></li> <li>• <a href="http://www.olana.org/digitaltour/">http://www.olana.org/digitaltour/</a></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>James Fennimore Cooper</b>, historical novelist who helped create the <b>special places of NY where tourists flocked.</b> "<i>Last of the Mohicans</i>," "<i>Leatherstocking series</i>" <a href="http://www.fenimoreartmuseum.org/">http://www.fenimoreartmuseum.org/</a></li> </ul> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p style="font-size: x-small;">The Last of the Mohicans A NOVEL IN THREE VOLUMES JAMES FENIMORE COOPER</p> </div> <div style="text-align: center;">  <p style="font-size: x-small;">The Leatherstocking Tales JAMES FENIMORE COOPER</p> </div> </div>
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### Hudson River School




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1. Morning in the Adirondacks by Gifford  
 2. Indian Vespers by Durand  
 3. Two Lakes and Mountain House in the Catskills by Cole  
 4. Niagara Falls by Church

<http://www.hudson-river-school.org>

### New York “Develops” mid- to late-1800s

The forests are cut down at an alarming rate and natural habitats are destroyed, first for farming then for the needs of manufacturing.

**New and growing manufacturing enterprises need raw materials and fuel.**

**Urban demand for paper and the need for fuel and building material increases.**

❖ **By the late 1870s, much of NYS was a tree-less landscape and paper mills in the Adirondacks had polluted nearby lakes and rivers.**

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### The Nature of Industrial New York

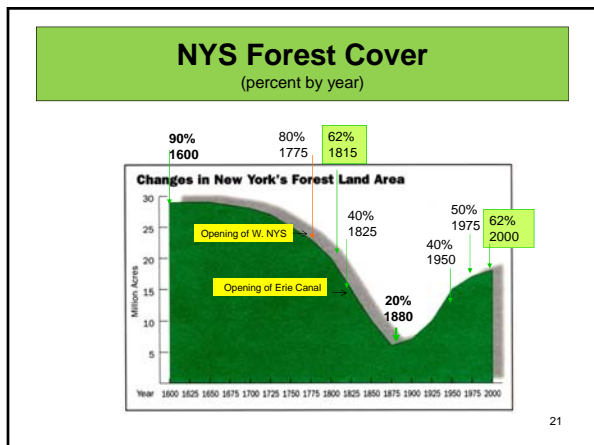
❖ **1870s industrialization needs workers.**

- People shift from the farm to the cities.
- **European immigration** – late 1800s. They bring their factory skills with them.
- **Industrial workers now require food and services.**
- **Cities grow.** Rural areas are depopulated.
- **Fewer farmers** yet agricultural production increases. WHY?

❖ **By 1900, NYS is a major industrial state.**

- Agriculture fades because of Midwest competition.
- Forest cover begins to rebound. **Why?**

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### 1880s Environmental Awareness

❖ In 1885 the **“forever wild” Article XIV** was voted into the Constitution of NYS. “The lands of the state ... constituting the forest preserve...shall be forever kept as wild forest lands.”

- **Forest preserves were established.**
- **State reservations (parks) were established.**
- **NYS's Bureau of Wildlife was established** (then called Fisheries, Game & Forest Commission) when wildlife populations were at one of the lowest points in history.

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### Nature of New York

We will return to settlement when we look at Urban NYS in the 1900s.

More on Conservation in Rural NYS.

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