

## **Chapter One -- Geography**

### Location

Seneca County, one of the smaller counties in New York State, is located in the Finger Lakes Region between Seneca Lake and Cayuga Lake. It is bounded on the north by Wayne county, on the south by Tompkins and Schuyler Counties, on the east by Cayuga County, and on the west by Yates and Ontario Counties.

Seneca County is located midway between Rochester (50 miles to the west) and Syracuse (40 miles to the east). It lies west of the center of the State, centrally distant 156 miles from Albany. It occupies the greater part of the land which lies between Seneca and Cayuga Lakes, and extends several miles north of Seneca Lake Outlet.

### Physical Features

#### 1. Size

The County is 33 miles long and varies from approximately 12 to 16 miles wide. This includes approximately 404.7 square miles. Subtracting Seneca and Cayuga Lakes, the County is about 330 square miles or 211,200 acres.

#### 2. Physiography

A high ridge enters the county from Tompkins and occupies nearly one-fourth of its surface. The summit of the extreme southern portion of this ridge in this county is 700 to 800 feet above Seneca Lake and 1,100 to 1,250 feet above tide. Toward the north it gradually declines to the level of Seneca Lake. The ridge is bordered in some places by steep declivities and in others by gradual slopes, and in the southern part of the county generally terminates in high bluffs on the shores of the lakes. At the foot of Seneca Lake the bluffs, on an average, are about 20 feet high; but toward the south they gradually rise to an elevation of 100 to 150 feet. At the foot of Cayuga Lake the shore is low and shelving; but in Romulus a bluff shore commences, which gradually increases in height until on the south border of the county it attains an elevation of 150 to 200 feet. From the summits of the bluffs to the central summit of the ridge, the land generally rises in beautiful, smooth, gradual slopes, broken in a few places by sharp declivities of a terrace-like formation. From Ovid toward the north the land abruptly descends about 200 feet, and then by gradual slopes to the level of Seneca River. The region immediately north of Seneca Lake Outlet and west of the Cayuga Lake Outlet is level, and some of it is marshy. In the northwest corner of the county is a great number of alluvial ridges, composed principally of gravel. These ridges extend in a north and south direction and are 30 to 50 feet high. Their declivities are generally very abrupt toward the north, east and west, but more gradual toward the south.

The principal stream is the Seneca River, forming the outlet of Seneca Lake. It has a course of about 14 miles between the two lakes, and in that distance falls 60 feet. The falls were principally at Waterloo and Seneca Falls, furnishing an excellent water-power at each place, but much the greater at the latter. (The completion of the Seneca-Cayuga Canal in 1818 began the demise of these waterfalls and rapids. The creation of the artificial Van Cleef Lake in 1915 as part of the extensive Barge Canal System renovation of the former Seneca-Cayuga Canal completely eliminated the rapids/waterfalls in Seneca Falls.) From Cayuga

Lake, the Seneca River flows northeast through a marshy region and forms a portion of the east boundary of the county. Clyde River, a tributary of the Seneca, flows through a portion of the marshy region in the northeast corner. The other streams are all small brooks and creeks, and for the most part are rapid torrents flowing in deep gulfs worn in the shaly rocks. They are frequently interrupted by waterfalls, are nearly dry in summer, and are subject to severe freshets.

Seneca Lake, the west border of which forms the greater part of the west boundary of the county, is 35 miles long and 1 to 4 miles broad. It is 216 feet above Lake Ontario and 447 feet above tide. It occupies a deep valley between the hills, and it varies in depth from 300 to 630 feet. Its shores are generally bold; and from their summits the land slopes gently and gracefully upward to a height of 200 to 700 feet above its surface, furnishing some of the most quiet and beautiful scenery in the State. This lake has seldom frozen over. Cayuga Lake occupies a parallel valley on the east border of the county and is 38 miles long and 1 to 3.5 miles wide. It is 60 feet below Seneca, and immediately adjoining to and lying along the course of its outlet is swampy. Further south the shores are bluff and the country is of the same general character as that bordering upon Seneca Lake. (source: *French's Gazetteer of 1860* with adaptations to reflect more recent developments)

### 3. Climate

Seneca County has a climate of the humid continental type. The flow of air is mainly continental. Cold Dry weather generally results when the flow is from the northwest or north, while warm, occasionally humid weather prevails when the flow is from the southwest or south.

The Atlantic Ocean has a secondary influence when occasional wind flows are from easterly directions. This is usually associated with cool, cloudy and damp weather.

Lake Ontario greatly influences the climate of the county. It has moderating influence on temperature which is diminished somewhat by distance in the southern and south-central parts.

The mean annual temperature is 48 degrees with summer highs ranging from the 70's to the low 90's and winter lows ranging from 0 to 15 degrees.

Annual precipitation is 32.3 inches, distributed relatively equally among the 12 months. Average snowfall is 60 to 65 inches per year.

### Land Use

Seneca County has historically been a rural agricultural area. Land use in the County, according to a 1977 LUNR Survey, was as follows:

- 46.5% Active Agriculture
- 6.6% Woodlands-Forests
- 8.9% Woodlands-Brushlands

- 2.9% Wetlands
- 19.3% Water
- 0.3% High Density Residential
- 0.3% Medium Density Residential
- 1.0% :Low Residential & Other
- 0.1% Commercial
- 0.1% Industrial
- 0.1% Extractive
- 5.0% Public & Semi-Public
- 1.0% Outdoor Recreation
- 0.6% Transportation
- 7.2% Inactive

This LUNR Survey was conducted by the Federal Government. LUNR stands for Land Use National/Natural Resources. It was a program where satellite images were interpreted to determine land use cover.

More current statistics on land use are not available. The Federal Government has not redone this program and neither the region nor the county has found it feasible to re-calculate the areas by hand. If tax rolls were to be used, the result would be greatly distorted information on primary land use of parcels of land. This is because, for example, a single house on a 10-acre parcel would lead to the entire parcel's being coded as "rural residential," and an 100-acre parcel that is half tilled fields and half woods would show as "agricultural."

### Population

The population of Seneca County grew at a rate of about 10% per decade from 1940 to 1970. Since 1970, the population of the County has been declining.

<u>Year</u>	<u>Population</u>	<u>% change from previous U.S. census</u>
1960	31,984	
1970	35,083	+9.7 %
1980	33,733	-3.8 %
1990	33,683	-0.14 %
2000	33,342	-1.0 %

### Transportation

The major transportation linkages with areas outside the County are the east-west New York State Thruway (I-90), and New York Routes 5 & 20 which runs east-west in the northern part of the County. The presence of Cayuga and Seneca Lakes as the eastern and western boundaries creates a barrier to east-west movement south of Waterloo and Seneca Falls.

Major north-south highways are New York Routes 96, 96-A, 414, and 89, which are only two-lane roads.

County, town and village roads total 570 miles and provide interval linkages and serve as connectors to the major routes.

Rail service is provided by the Finger Lakes Railway's Geneva to Auburn branch which serves Seneca Falls and Waterloo. Passenger rail service is available only in Syracuse or Rochester, although it is anticipated there will soon be a passenger-service stop in Lyons.

Air service in the County is found primarily at the Seneca Falls airport, which is a small general aviation field. Scheduled passenger and commercial services are available at the Rochester and Syracuse airports, and commuter service at the Ithaca airport.

Bus service is available through Greyhound from Ithaca to Geneva. In fall 2004, a new Seneca Transit Service began operation, providing regular routes Monday through Friday throughout the county, as well as dial-a-ride services with advance reservation.

The Seneca-Cayuga Canal, part of the New York State Barge Canal System which is administered by the New York State Thruway Authority, forms a water transportation route from Seneca Lake to Cayuga Lake to the Erie Canal.

### Economy

Historically, Seneca County's economic development has been hampered by its isolated position between Cayuga and Seneca Lakes. In the early 19<sup>th</sup> century, the village of Ovid was the center of commercial activity, serving the surrounding farm interests. Until 1817, Ovid was also the county seat. As transportation access to the east and west developed in the northern Seneca Falls-Waterloo corridor, however, Ovid and southern Seneca County became isolated from major transportation routes, a condition that exists to this day.

Transportation access for Waterloo arrived with the construction of the Seneca Turnpike. Shortly, Waterloo had become the dominant commercial center and also the principal county seat, although a duo system with Ovid was still maintained for many years. In 1825, the financially-distressed Bayard Company was forced to sell its land and mills, permitting the growth of Seneca Falls. Due to the availability of water power, mills of all kinds sprang up in Seneca Falls, and by 1831 it had outdistanced Waterloo as the economic center, a position it still holds today. While located 10 miles south of the Erie Canal, Seneca Falls and Waterloo gained access to the newly-available New York City markets via the Cayuga-Seneca Canal which fed into the Erie Canal starting in 1828. In 1841, transportation access was firmly established for Waterloo and Seneca Falls with the construction of the Auburn-Geneva-Rochester link of the New York Central Railroad. However, again the main transportation route passed north of Seneca County. Seneca County was connected to Buffalo and southern markets several years later when a line of the Lehigh Valley was constructed along the eastern shore of Seneca Lake.

Construction of the canal and railroads signaled a decline in the predominance of wheat growing in central New York because cheaper wheat from the Midwest could enter New York City markets. Thus, farmers diversified and began growing oats, corn, barley, hay and some fruits and raising hogs, sheep, and dairy cattle. These remain the principle agricultural activities.

In the mid-nineteenth century, the industrial revolution invaded the Seneca Falls-Waterloo area. The mills became larger and more diverse with knitting and woolen mills joining

the ranks. Other manufacturing included distilleries, yeast factories, drainage tile, steam engines and pumps. Throughout the 1970's and 1980's, Goulds Pumps and GTE Sylvania were the prominent manufacturing enterprises, employing about 75% of the manufacturing work force. The dominant position of the northern end of the county was further enhanced with the construction of the New York State Thruway, six miles north with an interchange midway between Seneca Falls and Waterloo.

Throughout the twentieth century, the agricultural sector became less significant economically. Where all land outside villages was once considered farmland, today only 56% is farmland. In addition, the number of rural residents living on working farms declined from 50% to 7% between 1920 and 1970.

In summary, Seneca County's economy has developed from a predominantly rural agricultural society to one where agriculture, while still playing a significant role, has been superseded by government as the major employer. In 1970, the major economic sectors measured by number employed were

- 28.6% manufacturing
- 4.7% agriculture
- 14.4% wholesale/retail trade
- 6.8% construction
- 2.8% transportation, communication & utilities
- 29.3% government
- 13.7% other

[This section was based extensively on a document prepared by Betty Auten, the Seneca County Historian for about 30 thirty years, sometime in the late 1970's.]