

The Year Without a Summer



Presented by:
Dr. John "Jack" Berkley - SUNY Fredonia Geosciences Professor
Jason Sample - Chautauqua County Historical Society Trustee
 Chautauqua County Historical Society Annual Meeting
 Saturday April 17, 2016

What was "The Year Without a Summer"?

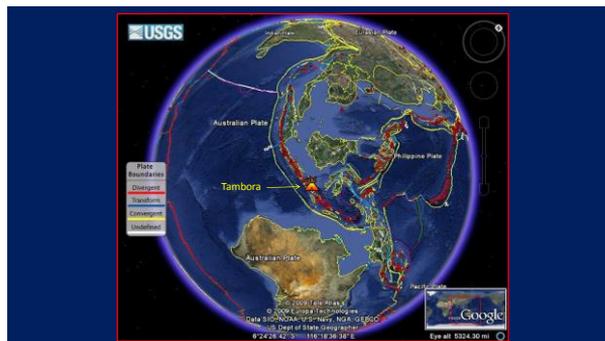
Also known as **The Cold Season**, **Eighteen Hundred and Froze to Death**, and the **Poverty Year**, the Year Without a Summer Took place in 1816 and was due to severe climate abnormalities that resulted in average global temperatures to decreasing by .7 to 1.3 °F.

This resulted in major food shortages across the Northern Hemisphere, including much of Europe as well as in New England and New York State.

PART 1

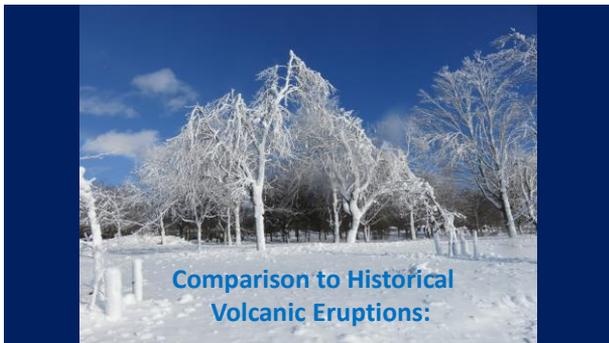
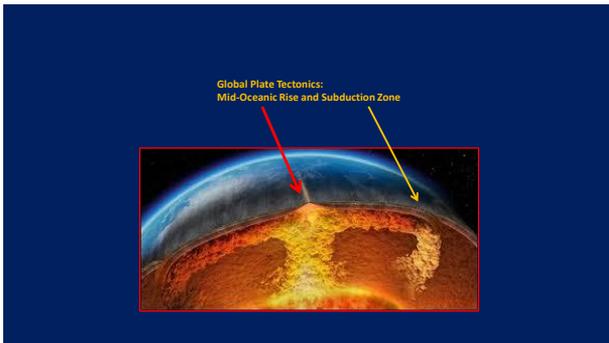
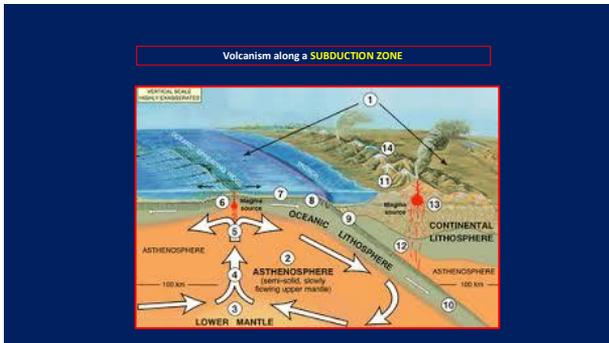
Tambora: "1816 and Froze To Death"

One of the most powerful volcanos in
 Human History,
 and its
 Effect on the NE USA

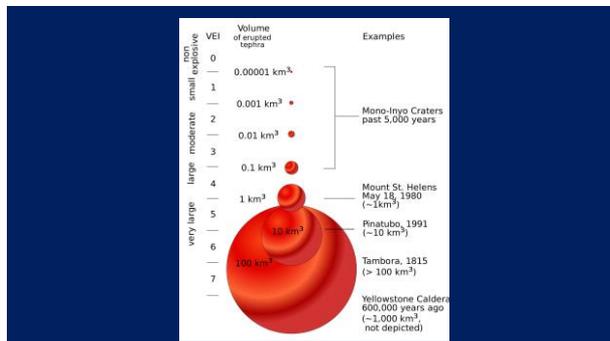


World Volcanic Activity





ERUPTION / year	LOCATION	Column Height	Explosive Index
Pinatubo	Philippines	49 km	6
Huaynaputina	Peru	46 km	6
Tambora	Dutch East-Indies	43 km	7
Hatepe	New Zealand	37 km	7
Baekdu	China/N Korea	36 km	6-7
Krakatau	Dutch East-Indies	36 km	6
Santa Maria	Guatemala	34 km	6
Novarupta	Alaska USA	32 km	6
Vesuvius	Italy	30 km	5
Mt. St. Helens	Washington USA	19 km	5



Volcanism Effects on the ATMOSPHERIC COOLING:

INSULATION: short-term cooling due to solar radiation reflection;

SO₂ is responsible for global cooling:

It bonds with WATER to make **SULFURIC ACID**, which is exceptionally good at reflecting solar radiation --- Other aerosols and particulates (dust) also contribute

Effects

- 1816 normal spring, followed by cold weather
- American newspapers reported unusually cool weather in June
- Thomas Jefferson reported crop failures
- Gloomy weather inspired writing of "Frankenstein"

Specifically ...

- Snow fell on Mt. Washington, NH in JUNE
- Southern Canada also saw snow in June
- New England had frost and crop failures in July

Starvation, bankruptcy, and fear of future such weather conditions led to A mass WESTERN MIGRATION to parts WEST --- mainly to Ohio, Indiana, and Illinois.

Westward Migration -- post 1816



While 1816 was NOT the coldest year on record; the cold *did* correspond to the growing season,

And that -- as they say -- was the last straw!

PART 2

Impact of the Year without a Summer

"It will ever be remembered by the present generation that the year 1816 was a year in which there was no Summer."

- *Newspaper in England, 1816*

Impact in Europe & Asia

The Season in Europe.—A letter from Dublin to a gentleman in New-York, dated the 8th of May, says:—"The spring is the latest ever known, or at least now remembered, here. Very few of the trees are in bloom, and there is very little vegetation of any kind." Accounts from England and France agree in representing a similar backwardness in the season.—*Col.*

Geneva Gazette
July 17, 1816

"Crop failures and food shortages were so widespread that rioting and looting became common in the United Kingdom and France."

- Jamie McLeod, "The Year Without a Summer"
FarmersAlmanac.com

Impact in Europe & Asia

- Created the last wide-scale famine of Europe with thousands dying from hunger (1816 and 1817).
- Peasants of Yunnan in China sucked on white clay.
- Famine-friendly diseases from India to Italy.
- Summer tourists traveling in France mistook beggars crowding the roads for armies on the march.

Impact in North America

- Many residents of **New England** and **Canadian Maritimes** froze to death, starved, or suffered from severe malnutrition as storms—bringing a foot or more of snow—hit hard during May and June.
- Many others from the region pulled up their stakes and moved to **Western New York** and the **Midwest**, where the cold was less severe.
- 1816 produced the only recorded instance of **ZERO TREE GROWTH**, deducible from the missing ring in the oak trees of the Northeast.

Impact on New England & New York

Impact on New England & New York

BRIDGEPORT :
WEDNESDAY, June 12, 1816.

The Weather.—The remarkable change of weather, from extreme heat to cold, was as great here as the following paragraphs describes it to have been at the eastward; all kinds of vegetation has suffered, and some plants been entirely destroyed by the cold and frost.

The Republican Farmer - June 1816
Bridgeport, Conn.

Impact on New England & New York

- **Albany, May 14, 1816** - Ground covered with snow. The same at Buffalo.
- **Jamestown, June 6, 1816** - There was a snow storm, which loaded the tree-tops heavily with snow. (*Young's History* - p 332)
- **Buffalo, June 11, 1816** - Dry and cold, fires and overcoats necessary.
- **Geneva, June 12, 1816** - Considerable snow. It is very cold.
- **Onondaga, June 12, 1816** - Snow, and 13th ice a quarter inch thick.
- - On the 6th and 7th snow fell on the mountains to th**Middlebury (Vt.) June 12, 1816** e depth of two or three inches.
- **Quebec, June 12, 1816** - From the 6th to the 9th it snowed every day, and the ground froze. Fifteen miles south of the St. Lawrence drifts of snow are two feet deep.
- **Montreal, July 10, 1816** - On Sunday snow fell at the Cedars.

- Foote Papers, Vol 4 - page 92

Impact on New England & New York

- **Erie (Pa), July 20, 1816** - On the 6th we had snow and frost in this vicinity.
- **Montreal, July 20, 1816** - Flour has lately been sold at \$18; now \$20 is asked.
- **Chambersburg (PA), July 30, 1816** - Frost has appeared every month this year, and on the 17th snow fell in Somerset County
- **Buffalo, Aug. 20, 1816** - The last sale of flour in this village was \$15 per barrel. Last evening we believe there was not a barrel of breadstuffs for sale in this place.
- **Springfield (Mass), Sept 12, 1816** - Snow fell yesterday two or three inches in depth, and the Vermont mountains have been covered with snow for some days.
- **Canandaigua, Oct. 1, 1816** - Much corn in this part of the country destroyed by frost.
- **Buffalo, Oct. 1, 1816** - Frosts for several successive nights. About half of the Indian corn is probably destroyed. Beans and most other kinds of vegetables affected by frost are swept down.

- Foote Papers, Vol 4 - page 92

Pierce on the Weather: 1816

- **January 1816** was mild, so much so as to render fires almost needless in sitting rooms. December, the month immediately preceding, was very cold.
- **February 1816** was not very cold; with the exception of a few days, it was mild, like its predecessor.
- **March 1816** was cold and boisterous, the first half of it; the remainder was mild. A great freshet on the Ohio and Kentucky rivers caused great loss of property.

Pierce on the Weather: 1816

- **April 1816** began warm, and grew colder as the month advanced, and ended with snow and ice, with a temperature more like Winter than Spring.
- **May 1816** was more remarkable for frowns than smiles. Buds and fruits were frozen. Ice formed half an inch in thickness. Corn killed, and the fields again and again replanted, until deemed too late.
- **June 1816** was the coldest ever known in this latitude. Frost, ice and snow were common - almost every green herb killed. Fruit nearly all destroyed. Snow fell to the depth of 10 inches in Vermont, several inches in Maine. And it fell to the depth of three inches in the interior of New York. It also fell in Massachusetts.

Pierce on the Weather: 1816

- **July 1816** was accompanied by Frost and Ice, n the morning after the fourth, ice formed of the thickness of common window glass throughout New England, New York and some parts of Pennsylvania. Indian Corn nearly all killed. Some favorably situated fields escaped. This was true of some of the hill farms in Massachusetts.
- **August 1816** was more cheerless, if possible, than the summer months already passed. Ice was formed half an inch in thickness. Indian corn was so frozen that the greater part of it was cut down and dried for fodder. Almost every green thing was destroyed, both in the United States and Europe. Papers received from England said "It will ever be remembered by the present generation that the year 1816 was a year in which there was no Summer."
- **September 1816** furnished about two weeks of the mildest weather of the season. Soon after the middle, it became very cold and frosty. Ice forming a quarter of an inch in thickness.

Pierce on the Weather: 1816

- **October 1816** produced more than its usual share of cold weather; frost and ice common.
 - **November 1816** was cold and blustering - snow fell so as to make sleighing.
 - **December 1816** was mild and comfortable.
- Recap:** Frost and ice were common in every month of the year. Very little vegetation matured in the Eastern and Middle states. The Sun's rays to be destitute of heat throughout the summer, all nature was clad in a sable hue, and men exhibited no little anxiety concerning the future of this life.

Diary of Reverend Thomas Robbins

East Windsor, Connecticut - 1816

- **March 2, 1816** - Robbins planted peas.
 - **March 9, 1816** - "Quite warm."
 - **March 12, 1816** - "Cold and wet."
 - **March 14, 1816** - The ground was "considerably frozen."
- He would not attempt to replant peas until the end of April.

- ConnecticutHistory.org

Diary of Reverend Thomas Robbins

East Windsor, Connecticut - 1816

- **April 1816** - Robbins cleared his asparagus beds, "but the weather is so cold that vegetation does not appear to advance at all."
- **May 1816** - The fruit trees bloomed but three weeks into the month several great frosts occurred, threatening the fruit and ruining planted crops.
- **June 1816** - Cold winds blow so much so that "**most people that are out wear great coats**" and "**a steady fire is required.**"
- **June 9, 1816** - "The cold and wind still continue. The last three days have been extraordinary. It is said that there was snow at the northward last Thursday."
- July, August, and September brought a contrary mix of snow, drought, and oppressive heat.

- ConnecticutHistory.org

Diary of Reverend Thomas Robbins

East Windsor, Connecticut - 1816

- **August 22, 1816** - Robbins arose to find frost on the ground.
- **August 23, 1816** - "The ground gets no relief from its drought"
- **August 24, 1816** - It was "warm" but "things grow very little."
- **August 25, 1816** - "Had a very moderate and very refreshing rain."
- **August 28, 1816** - "This morning there was considerable frost. **It is a melancholy time. There was a fast here yesterday on account of the season.**"

- ConnecticutHistory.org

Diary of Reverend Thomas Robbins

East Windsor, Connecticut - 1816

- **September 5** - "I presume no person living has known so poor a crop of corn in New England, at this season, as now."
- **End of September** - Frost had killed much of the corn crop.

"Farmers had little wheat and corn to take to market. Animals had little to eat. Prices for staples such as flour and meat rose for consumers and the drought caused forest fires, filling the skies with smoke."

- ConnecticutHistory.org

Year Without a Summer in Geneva, NY

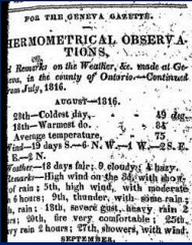
Year Without a Summer in Geneva, NY

Winter in June!—During the past week, the weather has been extremely cold for the season, and we have experienced several severe frosts, which have nearly destroyed the gardens and done much injury to the crops of grain. On Thursday morning a considerable quantity of SNOW fell. Such unseasonable weather has never been known in this country by the oldest inhabitants. The prevalent winds during this period of cold, have been from north to west, and have at times been violent.

Geneva Gazette
June 12, 1816

Thermometric Observations in Geneva, NY

"And remarks on the weather made by a Gentleman residing in Geneva"



Geneva Gazette

August 21, 1816 & January 15, 1817

NOTES

- Snow Squalls in May
- "Winter weather" in June
- "Spots in the sun" in July
- "Fire Comfortable" in July & Aug.
- September - "very soggy, attended with frost, which destroyed the greatest part of the Indian corn in the county, together with the vines of cucumbers, melons, pumpkins"

Geneva, NY Temperature Comparison

MONTH	1816 AVERAGE HIGH	ALL TIME AVERAGE HIGH (www.USClimateData.com)	(+/-)
JANUARY	38	31	+7
FEBRUARY	31	33	-2
MARCH	39	41	-2
APRIL	52	55	-3
MAY	63	67	-4
JUNE	70	76	-6
JULY	75	80	-5
AUGUST	75	78	-3
SEPTEMBER	66	71	-5
OCTOBER	61	59	+2
NOVEMBER	46	47	-1
DECEMBER	37	36	+1

Documenting the Year Without a Summer in Western New York

Year Without a Summer in Western New York

- Western New York was still very much a wilderness
- Most of the detailed information on that summer comes from accounts in New England
- No local newspapers, but there were first-hand accounts from early settlers
- Repercussions were widespread.

"The overall harvest was half of what it normally should be and only half was edible, leaving people and livestock only a quarter of the crop yield to consume. Crop prices rose while livestock prices dropped as farmers sold off livestock they could not feed. The prices remained in this pattern throughout 1817 and did not return to normal until after 1820."

- Niagara County Historical Society

Impact of 1816 on Chautauqua County



"After the War came the cold season of 1816, in which crops were almost a failure. The privations and sufferings of most of the settlers were very great."

- Zattu Cushing Memoir
(Foote Papers, Vol. 6)

Who were the Early Settlers?



"The first settlers of Chautauqua were many of them people in middle life, and came here with large families. Many of them were native of the old New England states, but came here after a sojourn of several years in Vermont and the central counties of the state."

- Abner Hazeltine
Historical Address - July 4, 1876

The County Before 1816

- The whole vote of the county in 1807 was 69.
- In 1810 the entire population had increased to 2,381.
- **War of 1812** - Chautauqua County during the war improved but little being a border county and exposed to the enemy.
- Chautauqua County's population in 1814 was 4,259.
- **Feb 11, 1815** – U.S. receives word that a treaty of peace was concluded in Ghent between the United States and Great Britain and the **War of 1812 was over**.
- Jamestown (AKA Prendergast Mills and The Rapids) had 13 families

Food Production in 1816

Food Production in 1816



"The summer of 1816 was known throughout the country as the 'cold season' and many of the new settlers suffered severely. The corn crop, then the most important of any in the country, was largely cut off."

— *Abner Hazeltine*
Historical Address – July 4, 1876

Food Production in 1816



Many families were months without bread... A man who has since become wealthy, passed his house carrying not more than a peck or half bushel of corn on his back to mill saw another man passing with a bushel or more and said 'You have a good supply.' The man replied 'I should have, if it was all mine, but when I get home it is to be divided among three families.'"

— *Zattu Cushing Memoir*
(Foote Papers, Vol. 6)

Food Production in 1816

"The first six months of 1817 was called the Starving Season. **Flour was \$18 a barrel, potatoes \$1.50 bushel** and other articles were equally priced and difficult to obtain. The price of labor was 60 to 70 cents a day. Those skilled in the rifle helped to provide for their families with venison and other wild meat but many, until the harvest of 1817, subsisted wholly upon **fish, milk, greens and leeks**. Leeks seemed to be especially plentiful in the early pioneer period."

— *Foote Paper, Vol. 4*

"There is no proof that any of the people actually starved to death, but there can be no doubt that the weakening from long privation caused many a premature death."

— *History of the City of Buffalo and Erie County, NY – Vol 1 (1884)*

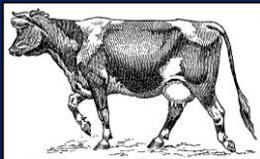
Food Production in 1816



"In the cold season of 1816 a man whose family was destitute was in the judge Cushing's barn, and they discovered a barrel full of corn which has been overlooked. The man said, 'You must give me some of that.' He replied, 'Take it all. Your family needs it more than mine.'"

— *Zattu Cushing Memoir*
(Foote Papers, Vol. 6)

Food Production in 1816



"The cattle subsisted on the herbage of the woods, full seven months in the year and were thrifty and healthy. The milk of the cows, during three or four months was highly tinctured with leeks, and the butter would hardly pass for no. 1 under the test of the butter buyers of the present day. During the period of 'leeky' butter, it was customary for the good housekeeper to play within the reach of all at the table during the time of their staved meals, a few chives, garlics, or onions. After taking a mouthful of either of one of these, the milk became sweet and the butter would pass for 'gilt edge.'"

- D.H. Witte
(Footnote Papers - Vol. 6, Page 136)

Food Production in 1816 Corn & Flour Prices

Corn Prices

- 1813 Fall - 12.5 cents/bushel in Dunkirk
- 1816 July - \$1.50/bushel in Troy NY
- 1816 July - \$2/bushel in Norfolk, VA
- 1816 Fall - \$1.50/bushel in Jamestown
- 1817 Spring - \$4-5/bushel in New England and New York State
- 1826 Summer - \$0.69-.78 in New York State

Flour Prices

- 1813 - \$8.50/barrel in New York
- 1813 - \$4.50/barrel in Richmond, VA
- 1816 June - \$9/barrel in Montreal
- 1816 July - \$18-20/barrel in Montreal
- 1816 July - \$11/barrel in Troy, NY
- 1816 Aug - \$15/barrel in Jamestown/Buffalo
- 1816 Fall - \$14/barrel in Baltimore
- 1816 Dec - \$10/barrel in Baltimore
- 1817 Spring - \$18/barrel in Jamestown
- 1826 - \$5-\$5.25/barrel in New York

Anecdotal Accounts of 1816 Weather

Independence Day 1816

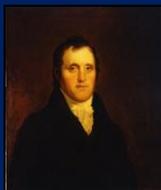
A noteworthy celebration of independence in the **Town of Ellicott**, was held at **Stephen Frank's**, (now in Busti) **July 4, 1816**.

"The day was pleasant, but cool. The roads were bad, and there were no pleasure carriages in the country. The married men, if they had horses, carried their wives behind them on horseback. Some of the young people went in the same manner, and many went oft foot.

"Before morning the weather was uncomfortably cold and those who returned home the latter part of the night, especially the ladies in white dresses, complained much of the severity of the cold. The grass was frozen stiff, and the ground quite hard. All the more tender vegetation was badly injured. The corn was all destroyed, except where the early morning fog saved it."

- Young's History of Chautauqua County - pp 331-332

Gov. Tompkins' Reaction to 1816



"Within our own borders everything is tranquil and happy... Although some of the productions of the earth have not been so abundant the past season as they usually are, a bountiful store, fully sufficient, with prudent foresight, to supply all the necessaries and comforts of life, is still left us.

This, and the general healthfulness of the season, call forth warm emotions of gratitude to the Great Dispenser of every good."

- NY Gov. Daniel D. Tompkins
Speech to the State Legislature
November 5, 1816

President Madison's Reaction to 1816



"Our attention cannot be withheld from the effect produced by the peculiar seasons, which have very generally impaired the annual gifts of the earth and threaten scarcity in particular districts.

Such, however, is the variety of soil, of climates, and of products within our extensive limits, that the aggregate resources for subsistence are more than sufficient for the aggregate wants."

- President James Madison
President's Message to Congress
December 3, 1816

Native American Reaction to the Cold Summer

"At one time during the summer the Indians tried to produce a change in the weather by a pagan sacrifices. Major Jack Berry, Red Jacket's interpreter, said that to avert the cold weather his countrymen burnt a white dog and a deer, and held a grand pow-wow under the direction of the medicine men – but the next morning there was harder frost than ever before."



- History of the City of Buffalo and Erie County, NY – Vol 1 (1884)

Abner Dingley and his Diary

Abner Dingley and his Diary

Abner Dingley (July 23, 1761 - Feb 2, 1831)

- Early Settler in Gerry who came to Chautauqua Co. in Spring 1816 (age 54).
- Originally from Duxbury, Mass.
- "A navigator of the ocean" who lost his ship was confiscated during the Napoleonic Wars of the cost of France. After returning to Duxbury he decided he and his family would move west.
- Kept a diary detailing his trip from Duxbury to Chautauqua County and also his first 6.5 years in Gerry.

Abner Dingley and his Diary

Dingley's diary was transcribed by great granddaughter Emily Dingley and donated to the Chautauqua County Historical Society.

From the diary we know he was...

- Devoutly religious
- Educated
- Educated in medicine
- Frequently called on by his neighbors and other settlers
- Planning to build a home and then send for his family after
- Often depressed and/or ill throughout 1816
- Staying with either Sinclear or a "Mr. Patterson" (Hugh Patterson) until December.

Abner Dingley and his Diary

- **Saturday June 1, 1816** – "At Buffalo. View Brown's encamping ground pass toward Black Rock. O the horror of my mind on this view. O the stupidity and ignorance of Man."
- **Wednesday June 5, 1816** – Leaves Pomfret and arrives at 10 a.m. in Gerry. Meets with Major Sinclear.

Abner Dingley and his Diary

- **Sunday June 16, 1816** – "Depressed in my spirits."
- **Sunday June 23, 1816** – "Attend the wife of John Vanderwarker(?). Applied Medicine. \$4-0-- Very difficult case. Van W. is a scoundrel of the lowest order."
- **Friday July 5, 1816** - This day is wet and rainy.
- **Monday July 8, 1816** - Very low in spirits.
- **Thursday July 11, 1816** - Am very low in spirits but supported by the Grace of my God.
- **Friday July 12, 1816** - My spirits not so low, but still depressed.

Abner Dingley and his Diary

- **Tuesday July 16, 1816** - This day my spirits are below. O if I try to cultivate and cherish the most endearing friendship it is consider an imposition, for I have been imposed on in some of my medicine to that degree that if I practice I am either a fool or a rascal. Done. Done - except in some cases to my dearest benefactors to whom I would sacrifice my life.

Abner Dingley and his Diary

- **Friday July 19, 1816** - Proceed in my feeble attempts for improving my land. I am very much indisposed in body and mind.
- **Sunday July 21, 1826** - Wet and rainy.
- **Tuesday July 23, 1826** [Birthday] - Make some small improvements on my land but the greater part spent in contemplation of the anniversary of my birth.

Abner Dingley and his Diary

- **Saturday July 27, 1816** - Most part very rainy.
- **Saturday August 3, 1816** - Heavy showers in the evening. Called on to set Capt. Winsor's dislocated shoulder.
- **Tuesday August 6, 1816** - Attend the wife of Hon. Judge Cushing... White and Snow.
- **Thursday August 15, 1816** - Altercating words with [name obliterated], whom I consider as much beneath the Gentleman or the Christian as the ant is in magnitude to the Elephant!
- **August 19-24, 1816** - Attends to the wife of Ezra Anderson, who dies Aug. 24.
- **Sunday September 15, 1816** - The last night very much indisposed with the nervous colic. Remain very unwell this morning.

Abner Dingley and his Diary

- **Wednesday September 18, 1816** - Between the hours of 4 and 5 p.m. a man by the name of **John Love** came to the house of Mr. Patterson and without any apparent provocation, Love struck Patterson seven times with an unlawful weapon.
 "Between the hours of 7 and 9 p.m. having retired to bed, I was called on by **William Gilmore** to get up and visit Mr. Patterson. I declined. He came a second time with a request purporting that Patterson was in pain... I replied I was very unwilling to be disturbed after I went to bed on account of any fracas amongst men. I was applied to the third time. I rose from bed and visited Mr. Patterson... There are some fears that a litigation in law will follow."

Abner Dingley and his Diary

Much of the remaining September and throughout October spent harvesting, digging potatoes, burning, building a cellar and lots of chopping wood.

- **Saturday September 21, 1816** - Hard frost this morning..
- **Thursday October 31, 1816** - Afternoon snow storm.
- **Friday November 1, 1816** - A stormy day. Do very little.
- **Monday November 11, 1816** - Very Snowy.
- **Tuesday November 12, 1816** - Snow 9 inches deep.
- **Thursday December 26, 1816** - Finally moves into his new home.
- **Wednesday January 1, 1817** - Very moderate and warm this morning.

Much of the diary details his work, which included making ash, making maple sugar, planting and harvesting.

Impact of 1816 on County's Development

Impact of 1816 on County's Development

"The consequence (of 1816) was...

- Nearly as many removed from southern Chautauqua County as came into it.
- The emigration to Indiana, Ohio, and Western Virginia was very large.
- **Stephen Frank, Esq.**, the pioneer of 'Frank Settlement' and the largest farmer in this vicinity, was among those who left.

Year-by-Year Deed Books from Chautauqua County Clerk's Records Office

*Most deeds were 1 to 1.5 pages and many were recorded later

YEAR	PAGE COUNT	ESTIMATED DEED COUNT	YEAR	PAGE COUNT	ESTIMATED DEED COUNT
1812	32	21-32 (26.5)	1820	139	92-139 (115.5)
1813	51	34-51 (42.5)	1821	174	116-174 (145)
1814	71	47-71 (59)	1822	150	100-150 (125)
1815	113	75-113 (94)	1823	218	145-218 (181.5)
1816	119	79-119 (99)	1824	203	135-203 (169)
1817	139	92-139 (115.5)	1825	188	125-188 (156.5)
1818	172	114-172 (143)	1826	195	130-195 (162.5)
1819	113	75-113 (94)			

Land Transactions in Chautauqua Co. (Holland Land Company)

From "Western New York Land Transactions, 1804-1824"

War of 1812 – Year Without a Summer – Panic of 1819

YEAR	ORIGINAL DEEDS	RENEWED DEEDS	YEAR	ORIGINAL DEEDS	RENEWED DEEDS
1803	4	0	1814	108	10
1804	16	0	1815	240	36
1805	42	0	1816	283	49
1806	56	0	1817	264	48
1807	39	0	1818	117	53
1808	44	0	1819	72	299
1809	191	0	1820	22	134
1810	271	0	1821	156	192
1811	199	0	1822	189	118*
1812	52	0	1823	311	97*
1813	46	14	1824	317	49*

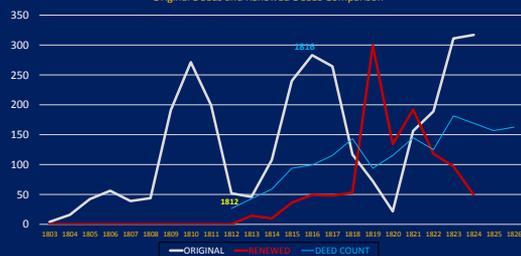
Original Deeds – First purchase of land

Renewed Deeds – Purchase renew for an additional time, but usually a higher rate

*Data may be incomplete

Land Transactions in Chautauqua Co.

Original Deeds and Renewed Deeds Comparison



Impact of 1816 on County's Development

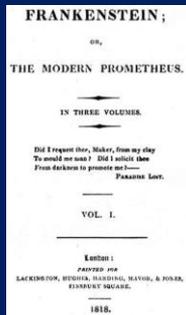
The large emigrations were also due to "the restlessness of American people, and are strictly characteristic. Our people have always shown a manifest tendency to press to the frontier and form new settlements."

- Abner Hazeltine
Historical Address – July 4, 1876

After 1816 the tide of emigration flowed in with wonderful rapidity from the poor and enterprising of Eastern communities. A poor man, by paying \$5 down, could get an article of a farm, and a long pay day, and might hope to ultimately secure a home.

Chautauqua County's population in 1814 was 4,250 and in 1821 it had increased to 12,550, thus tripling in seven years.

Impact on Art and Culture



"Frankenstein" by Mary Shelley

Published in 1818



"Lancaster Sands" by English Oil Painter Joseph Mallard William Turner, 1816

Housed in the Birmingham Museum and Art Gallery

"Darkness" by Lord Byron

*I had a dream, which was not all a dream.
The bright sun was extinguish'd, and the stars
Did wander darkling in the eternal space,
Rayless, and pathless, and the icy earth
Swung blind and blackening in the moonless air;
Morn came, and went—and came, and brought no day,
And men forgot their passions in the dread
Of this their desolation; and all hearts
Were chill'd into a selfish prayer for light. (1-9)*

*The brows of men by the despairing light
Wore an unearthly aspect, as by fits
The flashes fell upon them; some lay down
And hid their eyes and wept; and some did rest
Their chins upon their clenched hands, and smiled;
And others hurried to and fro, and fed
Their funeral piles with fuel, and looked up
With mad disquietude on the dull sky,
The pall of a past world; and then again
With curses cast them down upon the dust,
And gnash'd their teeth and howl'd. (22-32)*

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