Environmental History of the Town of Chazy

1720: Fur Trade smuggling taking place in the area (Sullivan and Martin 1970).

1763: First settler, Jean LaFrambois, built first orchard and cider mill in Chazy (Perkins 1973).

1794: Seth Graves built 1st sawmill in Chazy Township on Little Chazy River (Sullivan and Martin 1970).

1797: As Douglas was operating an ashery at Chazy Landing (possibly the first). For several years, such asheries would compose a major industry in Chazy, where many settlers began burning timber for the production of crude ash. This was then sent to asheries where it could be converted to purer quality potash in a kiln. This potash, popular in England, was used for everything from cleaning wool to manufacturing glass, soap, and even explosives. (Sullivan and Martin 1970).

1798: In a letter from Pliny Moore his to friend Joseph Scott, Moore wrote about agriculture in the town of Champlain (Which at that time encompassed present day Chazy): "the land produces excellent wheat rye Indian corn oats peas flax & almost any kind of vegetable..." (Sullivan and Martin 1970).

1800: John Bugby built the first sawmill on Tracy Brook (Perkins 1973).

1804: The state legislature officially established the town of Chazy when it was separated from the Town of Champlain (Perkins 1973)

1813: Settlers began sending logs down the Little Chazy river. Pine, spruce, hemlock, oak, and maple were the principal trees being lumbered at this time, with the most important being the truly massive pines which grew in Chazy at the time (Sullivan and Martin 1970).

1820: Clement Miner (grandfather of William Henry jr.) bought 144 acres for a farm. On this land he developed meadow, pasture and orchards. This farm would eventually become William H. Miner jr.'s Heart's Delight Farm (Dubrul 1978).

1862: October 22: Birth of William H. Miner jr. (Dubrul 1978).

1825-1830: Wolves were abundant in the Chazy area (Sullivan and Martin 1970).

1835: Wolf hunting became a common practice for the protection of livestock and people (Sullivan and Martin 1970).

1843: Potash from mineral salts was developed in Germany, resulting in a quick decline in the market for potash from the burning of timber (Sullivan and Martin 1970).

1850: Chazy's once booming potash industry was essentially finished (Sullivan and Martin 1970).

1903: L.A. Childs and W.H. Flint established Chazy Lumber Company near the town's railroad station (Sullivan and Martin 1970).

1903: W.H. and Alice Miner moved back to the family farm in Chazy and began developing the then 144 acres (Dubrul 1978).

1905: The Chazy Landing Auto Ferry began operation (Pratt 2014).

1907: Electricity was generated from the Wilson Family saw mill (Sullivan and Martin 1970).

1907: Miner began development for electrical power on Tracy Brooke (Sullivan and Martin 1070).

1909: Second development on Little Chazy River to supply electricity to Heart's Delight farm (Sullivan and Martin 1970).

1909: Miner reforested land under a NYS conservation program (Sullivan and Martin 1970).

1909: W.H. Miner purchased land from five neighboring farms and expanded his farm to 5,000 acres (Dubrul 1978).

1910: Under the direction of W.H. Miner, construction began on the Million Dollar Dam. This project consisted of the dam plus an adjoining powerhouse with 3 turbine units (Sullivan and Martin 1970).

1911: Heart's Delight Farm purchased two antelope, one buffalo, and an Indian sacred cow, along with more conventional herds of Durham cattle and red deer (elk) (Sullivan and Martin 1970).

1914: The Million Dollar dam began operation (Sullivan and Martin 1970).

1915: The Million Dollar dam had serious structural issues; water kept seeping through the stone which made up one side of the dam, and the addition of tar did not help. In January 1915, the entire project was abandoned as a failure (Sullivan and Martin 1970).

1914-15: Second plant on the Little Chazy river built in Suckortown; this was known as Fordham's Mill Plant. A powerhouse was built in conjunction with the dam, and this supplied light to the village (Sullivan and Martin 1970).

1917 or '18: W.H. Miner had several hundred miles of drain tile laid throughout his land. This drainage system collects excess surface flow from agricultural fields and empties it into the lake (Sullivan and Martin 1970).

1918: Heart's Delight Farm at this time covered 12,000 acres of land. 4,000 of these acres were "tillable," 2,000 were used for pastureland, and 6,000 consisted of woodland (R. Dutil, personal communication, March 3 2016).

1923: A 1500 ft. by 35 ft. concrete dam transformed McGregor Pond into Minor Lake (Sullivan and Martin 1970).

1930: Miner farm had expanded to encompass 13,000 acres (Dubrul 1978).

1937: Leroy Brown submitted a check for \$2071.75 for sewage services; rock formations in chazy village made it easy to pollute public water so the idea was abandoned (Sullivan and Martin 1970).

1946: Federal survey for breeding grounds for ducks (Sullivan and Martin 1970).

1953: The Miner foundation sold 650 acres of land for \$37,573 to New York State as a Game Management Area (Meekin 1978).

1957; May 8: William H. Miner Agricultural Research Institute was established. Miner had two main goals for this institution: (1) to provide training to Chazy youth so as to better the standard of living in the area, and (2) to stimulate experimental research for the economic advancement of agriculture in Clinton County (Dubrul 1978).

1957: The failed Million Dollar Dam was "blown up" (partially) (Sullivan and Martin 1970).

1966: Miner Institute became a satellite campus of SUNY Plattsburgh (Dubrul 1978).

1970: An additional 750 acres of land were added to Lake Alice Wildlife Management; acquired by New York DEC from the William H. Miner Foundation (Lake Alice [date unknown]).

1970: Miner Institute and SUNY Plattsburgh collaborated to form the environmental science program. The Miner Center Environmental Program was opened to students two years later, in 1972 (Dubrul 1978).

1970: Miner Institute began a collaboration with the Cornell University Agricultural School of Life Sciences. Together, these institutions launched a dairy research program with the aim of putting local farmers in touch with the latest knowledge and technology to maximize dairy yield while ensuring livestock welfare and minimizing environmental impact (Dubrul 1978).

1973: Overfishing had led the New York State Department of Environmental Conservation, the Vermont Department of Fish and Wildlife and the United States Fish and Wildlife Service to form the Lake Champlain Fish and Wildlife Management Cooperative to restore salmon and lake trout in Lake Champlain as well as prevent lamprey infestation in connecting Chazy rivers (Sea Lamprey [date unknown]).

1974: A student study found that an aerosol pesticide regularly used on Miner farm, pyrethrin-piperonyl butoxide, had the potential to be both allergenic and carcinogenic. This study made suggestions to stop all use of this pesticide, decrease pesticide use in general, and make greater use of non-aerosol ani-pest methods such as traps and fly tape (Fifield 1974).

1976: At this time there were 2 game farms, 37 commercial dairy farms, 1 poultry farm, 2 aquatic agricultural farms and 68 other active farms in Chazy (Begbie 1976).

1985: Lake Champlain restoration project abandoned and adjusted to tackle Lamprey problem (Sea Lamprey [date unknown]).

1995: Studies on manure application found that incorporation of manure decreased risk of fecal coliform and phosphorus transport through tile drainage (Geohring 2013).

1999: The Advanced Dairy Management Program was established at Miner Institute. This program (which continues to this day) aims to train college ag. students to meet the ever changing challenges of the dairy industry (2014-15 Annual Report 2015).

2010: Tile drainage control structures were installed in an 18 acre alfalfa field at Miner Farm, as part of a study exploring the impacts of such structures on solid nutrient retention. Previous studies had shown that such measures could result in retention of up to 50% of the nitrogen which previously would have been lost as runoff (Northern NY Collaboration 2010).

2014: Miner Institute was awarded a \$330,000 grant from the USDA Natural Resource Conservation Service and the Lake Champlain Basin Program for further study on surface runoff and tile drainage (Miner Institute gets Grant 2014).

2014: About 100 acres of tile drainage was installed in crop fields at Miner Farm (2014-15 Annual Report 2015).

2016: Studies indicate that tile drainage may contribute more to Phosphorous runoff than previously believed. Further study is planned (Klaiber 2016).

Summary:

In 1804, the Town of Chazy was officially established in Clinton County, New York (Perkins 1973). Hunting and trapping were the main means of making a living in the earliest years. It was around this time, however, that white settlers began the long history of agriculture in Chazy, which would continue to transform the landscape and ecology of the town through the present day. Early farming was small-scale and disorganized, and both crops and livestock were generally of fairly poor quality. Cows and sheep wandered freely around the town, going where they wished and eating what they pleased. As time went on and more settlers began to move into the region, industry in the form of sawmills and asheries began to spring up (Sullivan and Martin 1970). These practices, both of which directly resulted in heavy logging, combined with the hunting and trapping, transformation of land for agriculture, and free-roaming livestock to steadily create a land very different from what it originally started off as. In 1820, a family moved into Chazy which would further transform the town and shape its future for years to come. That year, Clement Miner acquired a 144 acre plot of land on which he developed a modest farm. Clement would eventually become the grandfather of William H. Miner jr., who was orphaned at a young age and grew up on the 144 acre farm under the care of his aunt and uncle. After reaching adulthood, Miner was the epitome of the self-made man, moving to Chicago and making millions following his patenting of railcar draft gears (Dubrul 1978). Miner eventually moved back to the farm of his youth; he gave it the name "Heart's Delight Farm," and set out to develop it into the largest and most technologically agricultural endeavor the region had ever seen. This development included a series of seven dams that helped redefine the hydrology of the town while providing electricity not only to the farm but also to parts of the town including the school and hospital. One of these dams, the colossal and famous Million

Dollar Dam, had been deemed a large failure. Another of Miner's highly influential developments was the installation of tile drainage throughout his croplands (Sullivan and Martin 1970). This drainage system, which collects excess water and transports it to the little Chazy River and eventually Lake Champlain, is today a subject of debate regarding its impact on lake and river phosphorous and nitrate levels (Klaiber 2013). The legacy of William H. Miner lives on today through the William H. Miner Agricultural Research Institute (Dubrul 1978). Established in 1957, these facilities provide the land and tools needed for the latest research in agricultural advancement in a world of growing environmental awareness. The actions and authority William H. Miner had taken during his lifetime in Chazy had sent the small town spiraling into a new age and much of that influence can be found in present day.

References:

- Begbie DC. 1976. Preservation of Agriculture land in the Town of Chazy. Located at: James A. FitzPatrick Library at Miner Institute, Chazy, NY.
- Dubrul P. 1978. Miner Center: Its History of Establishment, current Perspectives and Environmental Impact. Located at: James A. FitzPatrick Library at Miner Institute, Chazy, NY.
- Farm Report. 2016 March. Chazy, NY: The William H. Miner Agricultural Research Institute.
- Fifield C. 1974. Use of Aerosol Pesticides at Miner Center. Located at: James A. FitzPatrick Library at Miner Institute, Chazy, NY.
- Geohring, L. 2013. Historical and Current Drainage Research in NNY. Slides presented at: 2013 Tile Drainage Conference.
- Klaiber L. 2016. Phosphorous and Tile Drainage, Part I: What do we know? *The William H. Miner Agricultural Research Institute Farm Report March 2016*: 10.
- Lake Alice Wildlife Management Area [Internet]. Date unknown [Cited 8 March 2016]. New York State Department of Environmental Conservation. Available from: http://www.dec.ny.gov/outdoor/24410.html
- Meekin J. 1978. Lake Alice Study. Located at: James A. FitzPatrick Library at Miner Institute, Chazy, NY.
- Miner Institute gets Grant to Study Drainage [Internet]. 23 Jan. 2014 [Cited 9 March 2016].

 Press Republican. Available from:

 http://www.pressrepublican.com/news/local_news/miner-institute-gets-grant-to-study-drainage/article_3b2b3eda-be8b-5a5a-b1bd-3249a48950ee.html
- Northern NY Collaboration Enhancing On-Farm Water Quality Control [Internet]. 22 April 2010 [Cited 9 March 2016]. New York Ag. Connection. Available from: http://www.newyorkagconnection.com/story-state.php?Id=316&yr=2010
- Perkins P. 1973. History of Chazy. Chazy, NY. Located at: James A. FitzPatrick Library at Miner Institute, Chazy, NY.
- Pratt A. 2014. Postcard History Series: Clinton County. Charleston, SC: Arcadia Publishing.
- Sea Lamprey Control [Internet]. New York State Department of Environmental Conservation;

[cited 9 March 2016]. Available from: http://www.dec.ny.gov/animals/7240.html

- Sullivan NJB, Martin DK. 1970. A History of the Town of Chazy, Clinton County, New York. Burlington, VT: George Little Press.
- 2014-15 Annual Report. 2015. Chazy, NY: The William H. Miner Agricultural Research Institute.