

Stewards of the Water
Protecting Lake George

By Assembly Point Water Quality Coalition

2022

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Forward

This book is the collective effort of many people, the modern-day stewards of Lake George. It is part of a series disseminated by the Lake George Historical Association entitled, *Called by the Water*, the inspiration of Lisa Adamson. The Assembly Point Water Quality Coalition would like to thank the Touba Foundation for generously providing the funds to produce and publish this book. We appreciate the research advice of Tim Weidner, Director of the Chapman Museum and the use of the Museum's photos by Seneca Ray Stoddard. Thanks also go to Teri Podnorszki Rogers, Executive Director of the Warren County Historical Society, for her contributions. Eric Paul and Robert Fiorentino, the New York State Department of Environmental Conservation, provided scientific advice on DDT. We are grateful to Tom Ryan for illustrating our cover and chapters with his original watercolors based on actual people, places and events, to David Taylor for his aerial photography, to Judith Adamson for formatting the book, to Stan Cianfarano for his sage advice on publishing, and to Arlene Lotters and Tim Bechard for proofreading the entire book.

Admiring the beauty of Lake George and protecting its crystal waters is a long tradition past and present. This book brings together the stories of many of the lake stewards. Much has been written about some stewards such as Stoddard and Apperson. The contributions of others are not widely known. This book starts in the mid-1800s and ends with the present day. We hope that it will be an inspiration to care for the Lake to all who live on or near the Lake or only visit for the day.

While Seneca Ray Stoddard is best known for his photography, he was an early advocate for the "forever wild" concept in order to protect the wilderness that his photos immortalized. John S. Apperson showed unparalleled devotion to the Lake by rip-rapping badly eroded islands, evicting squatters, preventing the Tongue

Mountain parkway, and preserving Dome Island. The Narrows that we know today wouldn't exist in its present form without his efforts nor would Lake George be within the boundaries of the Adirondack Park.

Irving Langmuir was the first American industrial scientist to receive the Nobel Prize but he also created the Lake George Protective Association in 1944 and funded the purchase of Dome Island. Apperson and Langmuir both supported New York State's fight to win the right to regulate the level of the Lake's waters. The Loines Family of Bolton amassed 2,400 acres including two miles of shoreline in Northwest Bay. Over the years they put this land under the protection of New York State and the Lake George Land Conservancy. They also circumvented the efforts of Robert Moses to construct a parkway on the shores of Tongue Mountain.

Frank Leonbruno left his mark on Lake George's islands by working tirelessly during his four-decade career to preserve these special places. While at the Department of Environmental Conservation (DEC) Frank served as forest ranger, officer in charge of the Lake's state-owned islands, general park foreman and finally as supervisor of Lake George operations. Frank was also a contemporary of Apperson. Frank would see Apperson coming up the Lake in his boat, *Art. 7-Sec. 7* named for the "forever wild" amendment to the state constitution and think to himself, "Oh, no what does he want?" However, Frank came to understand Apperson and he took up his cause.

George E. Burdick, aquatic biologist, in the New York State Department of Conservation (now DEC), proved that DDT was responsible for fish kills and the failure of lake trout to reproduce. Consequently, as a result of the efforts of his research team, DDT was banned in the Lake George basin in 1963 and led to a state-wide ban (1971) and a national ban (1972).

Chapters 8, 9, and 10 are based on interviews with the modern-day stewards who are active in environmental organizations, towns and villages and various grass roots associations around the Lake. Their views, on the challenges and solutions for slowing the degradation of the Lake, are their views and not necessarily those of the Assembly Point Water Quality Coalition. In the words of some of the modern-day stewards, “Lake George water flows in my veins...I want to do my part to ensure that future generations inherit the clean Lake I grew up with. ...As a landscape architect I work with natural systems; we don’t try to fight nature....I’m a Pisces...I have always loved the water....I am someone who truly treasures clean water and a lifetime of swimming in Lake George....Many say they love the Lake, but fewer care for the Lake.... When you live on a lake, we are all neighbors. What happens on Assembly Point affects Cleverdale and vice versa. We can only make progress in protecting the Lake by working together.”

Chapter One

Seneca Ray Stoddard Forever Wild Advocate



Original watercolor by Tom Ryan based on Stoddard's Sloop Island

Seneca Ray Stoddard was a man of many talents: a prolific photographer, an accomplished cartographer, writer, entrepreneur, conservationist and activist. Born in 1844 in Wilton, NY he was named “Seneca” for his uncle who was in turn named for the Roman philosopher and statesman. At age 19 he was employed by a Troy firm, Eaton and Gilbert Car Works, to decorate railroad cars. In 1864 he moved to Glens Falls where he established a photography shop and specialized in landscape photography. He married a local Glens Falls girl, Helen Potter, in 1868 and settled on Elm St. His career took off after the Civil War. While some were drawn to explore the West, others were attracted to the little-known Adirondacks.

Stoddard immortalized Lake George and the Adirondacks in word and images and cashed in on the growing tourist trade. Stoddard was able to introduce the tourist to both the beauty and comforts of Lake

George, Lake Luzerne and Schroon Lake which were at his doorstep before moving on to the remote wilderness of the High Peaks. He formed close business contacts with the large lake hotels. It was a two-way street. He photographed the hotels for the much-needed publicity and they sold his guidebooks, albums, maps and photos. His guidebooks were the precursor of sorts to the *Trip Advisor*, which described the hotel amenities, prices and travel directions. What was unique about Stoddard was his ability to describe in words the scenic beauty he captured with his etchings and his camera. According to the *Philadelphia Photographer* (1877, p.256), he created a “want” in his readers to visit the scenes.

His description of Black Mountain as the “Monarch” of the Lake has never been surpassed.

A sentinel it seems, overlooking the whole Lake and the mountains around about; the first to welcome the rising sun, and at evening, glowing in the splendor of the dying day, while the valleys below are misty with the shadows of coming night (Stoddard, 1872, p.6).

A Prolific Photographer

During his lifetime Stoddard took over 10,000 photos. It is not known how he became a skilled landscape photographer. Some say he cultivated his craft while painting the decorative landscapes on train cars. But his photos of the region are exceptional for their artistry given his rudimentary equipment. Many photos are now archived in local museums such as the Adirondack Experience Museum (Blue Mt. Lake), the Chapman Museum (Glens Falls) and the Lake George Historical Association Museum. Worth mentioning are the photos of Sloop Island featured above, the Minne-Ha- Ha at Caldwell, the Narrows from 14 Mile Island, Black Mountain, the Narrows with Tongue Mountain and Twin Mountains, and Huletts Landing from Elephants Head.

He definitely had a keen eye, knew how to use light, and didn't mind lugging 50 pounds of heavy but fragile 19th century equipment and chemicals up mountain tops. In the 1870s the wet collodion negative process was used where nitric and sulfuric acid coated glass plates. Then the plates were sensitized to light by bathing them in a solution of silver nitrate. The plate, still wet, was placed in the camera for exposure and then the glass plates were developed in acid. This cumbersome process was replaced in the 1880s by a dry plate technique and the plates were available commercially (Horrell, 1999, pp.86-87). Much of the developing and reprinting was done on Elm St. in Glens Falls by an extended family crew supervised by his wife.

Stoddard was not afraid to experiment, and it paid off in some of his best works like "Game in the Adirondacks" (1889) where mountain men play cards by the campfire. Stoddard photographed at night which was rarely done. Most photographers preferred to set up rustic scenes in their studios or limit themselves to portraits. Photographing at night required using magnesium as a flash powder for lighting which was highly explosive. While photographing Washington Square Arch at night there was a misfire which sent him to the hospital.

Stoddard also created "moon" shots by setting his short exposures to the sun when it was nearest the horizon to create shadows that resembled moonlight as in Owls Head, Long Lake (1880s) or Little Tupper Lake (1888). According to Horrell some of Stoddard's photographs have been characterized as having some elements of luminism which enhanced his portrayal of the beauty of the Adirondack wilderness (Horrell, 1999, pp.108 and 112).

In 1870 Stoddard went north to the heart of the Adirondacks sketching Ausable Chasm, Blue Mountain Lake, Whiteface Mt., and Tahawas along the way. He returned in 1873 and travelled 300 miles in three weeks with his brother-in-law—this time taking photographs. In 1878 he gained more knowledge of the area when

he joined Verplanck Colvin's New York State Topographic Survey of the Adirondacks to map mountains and the source of the Hudson River. His assignment with Colvin nurtured his love of the High Peaks and his conservationist streak. He photographed famous Adirondack guides such as Old Mountain (Orson) Phelps of Mt. Marcy and Alvah Dunning. Old Mountain Phelps was considered the "real deal" Adirondack guide. Winslow Homer immortalized him in "Two Guides" which hangs in the Clark Museum in Williamstown, MA.

An Accomplished Map Maker

While Stoddard is best known for his photography, he was an accomplished map maker and created detailed maps and charts of Lake George and the Adirondacks to accompany his guidebooks. His experience surveying with Colvin probably helped. As a result of his trips north he produced a large wall map of the Adirondack Wilderness in 1880. The following year, he created a four-color map of Lake George, showing the names of property owners, locations of hotels and the lakeshore communities (Leonbruno, 1998, p.143). The map was revised a number of times. Between 1906 and 1908 Stoddard prepared a hydrographic chart of Lake George taking thousands of soundings for depth and identifying navigational obstructions. The chart, five feet in length, was published in sections for boaters and only completed in 1910 (Leonbruno, 1998, p.144). It wasn't until 1947 that the Lake George Power Squadron produced the first navigational map of the Lake using Stoddard's chart (Bryan, 2008, p.28).

Writer and Entrepreneur

Stoddard was an entrepreneur and used his art and prose to promote the local economy particularly the hotels. In his first guidebook, *Lake George: Illustrated*, in 1873 he entices the would-be-tourist to visit Lake George, the Holy Lake:

Wafted in on the wings of the soft summer wind came thoughts of the Holy Lake; and once again we breathe the air, heavy with the odor of pine and cedar, or fragrant with the breath of blossoming clover.... Wanderers are we in search of the beautiful, as with our backs to the dusty city, and our faces set toward the mountains we are borne swiftly along.

According to Horrell he was a marketer of the resort experience. His photographs of the hotels around Lake George provide a rich history of early tourism. Following the Civil War, people living in large, polluted cities, wanted to breathe clean air and so retreated to the wilderness. This desire spawned the need for hotels. Stoddard showed the tourists where to find both clean air and comfortable accommodations with his guidebooks of Lake George published every year from 1873 to 1914. The guidebooks listed the hotels, their rates, openings and closings, and transportation. While his guidebooks had no photos, they did contain his excellent etchings which illustrated both nature and the comforts to be had in the local hotels. His accompanying prose went beyond the facts as in his promotion of the East Lake George House,

...the quiet nature of the surroundings makes it a suitable resort for those inclined to rest, excellent lake fishing affords the best of sport...while the sweetest of country fare, with the determination on the part of the proprietor to leave nothing undone for the comfort of his guest, makes this a very desirable stopping place (Stoddard, 1873, p.181).

The Crosbyside Hotel also appeared in the 1873 guidebook as having

...an air of respectability—numbering among its guests Supreme Court judges, Japanese princes and escaped editors—with the balance of power retained on the world's side by a bevy of young ladies... (Gates, 2010, p.24).

The Crosbyside was purchased by Spencer Trask in 1903 for Mary Fuller to use as a retreat for working girls so that they would have the chance for an inexpensive summer vacation. She named it Wiawaka, an Indian word, for the eternal spirit of women. Stoddard described the Trout Pavilion in 1891 whose guest list included such notables as Horace Greely, Susan B. Anthony, Brigham Young, Ulysses S. Grant, William Waldorf Astor, Jay Gould, and Cornelius Vanderbilt (Gates, 2010, pp.33-34).

Besides the basic facts, like the *Trip Advisor*, his writing promoted excursions from Lake George to nearby scenic attractions.

The finest excursion trip now afforded is to the wonderful Ausable Chasm, the greatest natural curiosity in America, by way of Lakes George and Champlain, passing through the entire length of these two beautiful sheets of water by day light (Stoddard, 1873, p.175).

Stoddard's three-week trip to the High Peaks area in 1873 served as the basis for his guidebooks *The Adirondacks: Illustrated*, published from 1874 to 1914, which combined his graphic art with useful information about where to stay and what to visit. Combining a regional humor with a Mark Twain "flavor", Stoddard brought intelligence and wit to this guide of the Adirondacks for the novice and the seasoned tourist. He could spice the mundane, but necessary, information with anecdotes that captured the spirit of the native population of the North Country.

If one wanted to measure Stoddard's success as an entrepreneur one only has to count the number of guidebooks, albums and photos. His photos were marketed in New York City, Boston, Philadelphia, Montreal, Paris, and Berlin (Bauer, 1996). He sold 5,000 slides to the Museum of Natural History in New York for resale. His photos and articles were included in magazines such as *Harpers Weekly*. He exhibited his photos at the Philadelphia Centennial Exposition, the first World's Fair held in the United States in 1876. His artistry

was noted by the *Philadelphia Photographer* (1876) which declared that Stoddard “has courted Nature in all her moods, on Lake George and Champlain in the rugged and mysterious Ausable Chasm, and among the wilds of the celebrated Adirondacks, till he has furnished the finest photographic views of those regions that have ever been published.”

Conservationist and Activist

Over the years Stoddard recorded both the scenic beauty of the Adirondacks as well as its destruction at the hands of the timber industry including the lumber man, the charcoal man, and the wood pulp man. He was particularly concerned about the watershed of the Hudson River which was being despoiled of all that which “makes its possession a thing to be desired” (Stoddard, 1891). His concern surfaces in a journal article. In “Head Waters of the Hudson” he deplores the fact that “not one important lake has not been tampered with, dammed in the name of soulless utility...and the beautiful valley, once fair and sweet as Eden, has become a foul, malaria-breeding pit” (Stoddard, 1885, p.63). The article described the destructive logging of the Adirondack forests, its effects on the land, on the Hudson River and ultimately on water quality. He questioned the rights of individual exploiters over those of the public. He waxed eloquent in extolling the beauty and importance of the Adirondack landscape, above all, its waters.

There are waters clear as crystal, yellow as amber, brown as coffee, wide-spreading lakes that ripple softly on gold and silver sands....There are brooks that run down the brawling mountain steep; that dance over beds of rubies and opals. There are rivers that wind through dim aisles of arching green... (Stoddard, 1885, p.63).

For Stoddard it was not only a question of preserving the scenic value of the wilderness but also a question of health and preserving in “perpetuity...the life-giving aid and pure, never-failing water”.

According to Horrell, a highlight of Stoddard's career was his presentation before the New York State Assembly on February 25, 1892 (Horrell, 1999, p.64). His lecture gave impetus to the efforts of the New York State Forest Commission to create the Adirondack Park. He captivated his audience with 225 hand-tinted lantern slides which traced the course of the Hudson River from its source on Mt. Marcy to the Atlantic focusing both on the beauty of the region and the abuses he had seen.

The Albany press gave his lecture a glowing review.

The Assembly chamber last evening.... (was the site) of one of the best illustrated lectures ever given in the city...every available seat was taken....The fame of Prof. Stoddard and his wonderful collection...of Adirondack scenery having preceded him...the purpose of showing...that great and beautiful natural park (was to awaken the people) to the idea of protecting the forest... (Albany Evening Journal, February 26, 1892, p.26).

The *Troy Daily Times* article, "The Adirondacks—A Fine Exhibition of Views", February 26, 1892, reported that "Without question the exhibition was the most valuable of any of the kind ever given to the public." Stoddard went on to give the lecture in many larger cities of New York State. The *Glens Falls Daily Times* on May 10, 1892 said, "if the lecture as delivered last evening, with the accompanying illustrations, could be attended generally throughout the State, it would do more in two months' time to correct the abuses of the Adirondacks than all the surveys and commissions of the past twenty years."

In fact, it took the New York State Assemblymen only three months to create the Adirondack Park in May 1892 and then later in 1894 to add the "Forever Wild" Article XIV to the state constitution. New York is the only State to protect a forest preserve under its state constitution. Ironically, Lake George was only made part of the Park in 1931. But the fight to preserve "forever wild" continued.

In a letter to the New York Governor, Charles Evans Hughes, also from Glens Falls, Stoddard declared,

...there is no more vital question before the public today than of sanitation essential to which a pure water supply, which is itself dependent on the preservation of the forests... surely the state has the power to save from defilement and threatened destruction the people's pleasure ground, the country's sanatorium, the State's laboratory for the distillation of pure water...see to it that the unborn millions are not defrauded of their rightful inheritance in God's mountains of the North (Stoddard, 1907a, pp.11-12).

Stoddard was incensed by the proposed Malby-Merritt amendment which attempted to substitute “shall not” for “shall” in the forever wild article of the constitution so it would read “...land...constituting the Forest Preserve as now fixed by law **shall not** be forever kept as wild forest lands.” The industrialists of the day such as those in the Forestry, Water Storage and Manufacturing Association were pushing for a water storage project in the Adirondacks which they said would curb flooding from the Hudson River and generate hydropower. Incidentally, the Association was a subsidiary of the International Paper Company. Stoddard countered that the floods were the direct result of mountains being denuded so that the water *descends so quickly simply because in their semi-stripped conditions the mountains cannot retain the water as of old...* (Stoddard, 1907b, p.7).

Stoddard's conservationist views came through strongly in his short-lived journal, *Northern Monthly*. While the journal didn't survive long (1906-1908) it did raise awareness of environmental issues. Besides the “Rape of the Mountains”, Stoddard wrote, “The Question of Pure Water: Shall We Safeguard the Sources of the Hudson”, (September 1906) and “Adirondack Storage Reservoirs” (November 1906). Stoddard asserted the public domain was being despoiled and the rights of coming generations jeopardized for

private gain. In 1907, Stoddard spelled out his creed for saving the Hudson in “The Eternal Question” in the *Northern Monthly*, p.6.

1. The State should control the Hudson River watershed in the interest of preserving drinking water for the cities.
2. Storage reservoirs should be outside the State Park and given no opportunity to destroy forest lands through the construction of dams.
3. Prohibit the cutting of trees on land drained by the Hudson River above 1000 feet.

In his later years Stoddard travelled to Alaska, the Holy Land, and Russia documenting his trips and lecturing. He died in April 1917 and is buried in the Pine View Cemetery in Glens Falls. The *Glens Falls Times*, April 26, 1917 obituary, “S.R. Stoddard at Journey’s End” noted his many achievements,

... (he) toiled for the Adirondack region; the great north woods; called attention to their glories by camera, in poetry and song, on the lecture platform and in guide books and by maps he sang their praises.

But Stoddard’s work was forgotten and worse. Howard Mason reported he saw Stoddard’s glass negatives hauled away by a local florist to be cleaned and used to replace broken panes on his greenhouse (Magee, 1976). So Stoddard passed into obscurity until Maitland Desormo wrote a pivotal book in 1972 based on the extensive collection of photos that he had purchased from Stoddard’s family. Desormo later resold the photos to various museums around the State.

If Stoddard had lived to the present day he would see a radical change in the shape and pace of tourism on Lake George. Gone are the old hotels, most burned down, some were rebuilt and burned down again. Remnants of the Crosbyside can be found at Wiawaka.

Now tourists are accommodated in a string of motels cheek by jowl starting at the end of Canada Street and stretching to Bolton.

As many as three million tourists visit Lake George area during the year. The shoreline is dotted with old camps and mega homes. Such intense development threatens the watershed and the water quality of Lake George but that is the subject of another chapter. On the positive side Stoddard would see a number of organizations devoted to protecting the resources of the Lake George such as the Lake George Park Commission, the Lake George Waterkeeper, the Lake George Land Conservancy and the Lake George Association as well as a number of local grass roots groups.

Chapter Two

John S. Apperson Dean of Conservationists



Original watercolor by Tom Ryan, Skate-sailing on Lake George

The Man

Telling the story of John S. Apperson’s life-long campaign to defend Lake George is no small task! For a man who was once described as an “amateur conservationist,” he wielded enormous power and influence, both at Lake George and in the greater Adirondack Park. Apperson was born in Smyth County, Virginia in 1879. His love of Lake George and the Adirondacks began in 1900 when he moved to Schenectady. At General Electric, his talent for organizing complex engineering projects, led him to become the second in command of its Power and Mining Engineering Department.

His real passion, though, was for outdoor recreation, and he earned a reputation as an expert in hiking, camping, skiing and skate-

sailing. He described the exhilaration he felt when skate-sailing, “Resting on the wind with a skate-sail and seeing things fly by without dust, noise or vibration is even more fascinating than skiing.” He adopted one special place, the islands in the Narrows of Lake George, and concentrated his passion and his energy on protecting the islands and the Lake from all threats (such as fluctuating water levels from the International Paper Company’s dam at Ticonderoga—the subject of Chapter Four).

Apperson took the lead in a long list of crusades: preserving the western and eastern shorelines of the Narrows, stopping excessive logging, removing squatters from the islands, prohibiting the long-term leasing of island campsites, and preventing a parkway on the shoreline of Tongue Mountain. He made friends with everyone who had power and influence. He stirred up plenty of controversy, too, and made enemies among politicians, state officials, developers, and many of those with commercial interests. He built a political lobby and fought various attempts to undermine the protections of the New York Constitution’s “forever wild” clause (known as Article 14, Section 1.)

Saving the Islands

In 1903, the International Paper Company erected eight-inch flash boards on top of its dam at the northern outlet of Lake George, causing considerably higher water levels than had ever been recorded. The fluctuating water levels began to cause damage to the islands and shorelines of the Lake, and people soon took notice. George O. Knapp, founder of Union Carbide and its CEO, owned about ten miles of shoreline on the east side of the Lake near Shelving Rock. He began investigating the problem, and by 1910, presented his findings to the Lake George Association. An editorial in the *Lake George Mirror* was published in August that year, calling attention to the problem. Praising Mr. Knapp for his research and gathering of information, and encouraging the Lake George Association to call a meeting to address this important issue, the reporter said:

If there exists any right to control the waters of the lake, which we doubt, then it should be vested in the shore owners of the lake, for their exclusive convenience and comfort, and if a control obtains to their detriment and danger—and we believe such a control does exist—then more fools are they for meekly enduring the situation of a variation of more than four feet in the lake level during the season. This is one of the many things that an association formed for the benefit of the lake should do—not in September—but in the early part of the season. The association has had in its possession for about a year voluminous data on this subject, gathered at great expense by Mr. George O. Knapp, and thus far they have made little progress—in fact, so far as we have been able to learn by inquiry, they have taken no action.

Apperson did not own property on Lake George until about 1920. He spent his weekends and vacations on the Dollar Islands, bringing friends from Schenectady to enjoy camping, canoeing and skate-sailing. Their enthusiastic pursuit of recreation, in all seasons, eventually turned into an ambitious project: to rip-rap the shores of islands. He persuaded his friends to haul rocks to build protective walls to prevent damage caused by high water. The following clipping from the *Knickerbocker Press*, described his efforts.

New York State is spending \$10,000 this summer to protect the shores of some of its islands on Lake George against the wash of the waters and thereby preserve their beauty. J.S. Apperson is responsible for getting the State to work on the preservation of the islands. He labored alone for years with a few friends to check the ravages of waves on islands near his camp on Dollar Island, but it was slow work and at last state aid was called for. Mr. Apperson loves Lake George so much that he camps there winter and summer every day he can get away. In the summer he fishes and swims and enjoys boating, and in the winter he hunts and "sail skates" around the lake. A number of years ago Mr. Apperson noticed that the wash of the waves on the shores of many islands was wearing them away, resulting in the

uprooting of many beautiful trees and shrubbery. He went to work himself to check the ravages of the water. The first island that received his attention was the one on which he has a camp, Dollar Island. In a short time Dollar Island was patched up, and a hole, which had been worked through in one place was filled with rocks and now is covered with vegetation.

Mr. Apperson's first efforts were so successful that he extended his campaign. Dozens of places on beautiful islands have been saved as a result. Last summer Mr. Apperson succeeded in getting the Delaware and Hudson, which operates a steamboat line on the lake, to take up the work and the company sent a gang of men and had the shores of several islands rip-rapped.

The legislature wasn't much interested in Lake George islands when the plan to appropriate \$10,000 to rip-rap their shores was broached. Then Mr. Apperson produced some photographs that told the whole story. He showed one island where a huge tree bearing the sign "State Land" had been undermined and uprooted. The legislature was convinced and the appropriation went through without objection and was approved by the Governor (Knickerbocker Press, 1917, p.12).

It is interesting to note that Apperson had written to Seneca Ray Stoddard the year before to enquire if he could help locate photos of the Lake George islands taken fifteen or twenty years ago. As Stoddard was on his death bed, it is assumed that this request went unanswered. However, some photos existed in Stoddard's Lake George albums. Apperson did use Stoddard's map of Lake George. In a sense, he continued Stoddard's struggle to defend the concept of "forever wild".

Apperson followed closely any news about the Lake George Association and hoped it would take effective legal action to force the International Paper Company to better manage the lake's water levels. Local associations were also concerned as evidenced by a resolution from the Hamlet Association at Huletts Landing:

RESOLVED - *That the Hamlet Association in meeting assembled does hereby make earnest request to the Lake George Association that this matter be carefully investigated, and if it be found to be true that any mills are drawing off the waters of the lake below their natural level, that the State authorities be petitioned to interfere, or that such action be taken by the Association in conjunction with the steamboat company and other parties interested as will tend to stop this injury to the lake and to those who dwell near it, and to this end the Hamlet Association so far as it is able, pledges its help and support.*

Apperson also reached out to Warwick Carpenter, Secretary of the New York State Conservation Commission, the forerunner of the current Department of Environmental Conservation. On April 18, 1916 Apperson wrote:

The rapid washing away of the islands in Lake George grows more noticeable each year, and I certainly was glad that your friendly effort to interest the Delaware & Hudson steamship company was successful as indicated in your letter of the 31st. The trees, which cannot stand for another season without some protection, should be rescued first. Some are lone trees on small, unnamed islands, yet much admired by many people and are essential to this wonderful scenery. My prints show such trees in the Narrows near Pearl Point, and I might mention Three Siren Islands and similar places in the Mother Bunch group...

The conservation work done by my friends would make too long a letter, but you might like to know that three hundred and eleven people from twelve nations and twenty-seven different states, have visited a certain state island, and each helped to save the place, some staying only a few hours and carrying only one stone, others brought several, and some contributed several boat loads each day during their two week vacation...

However, this process is too slow and should be more general. It is too late now in some instances and there is ample proof that

a more systematic and persistent effort is required to preserve the most attractive features of this Lake.

Removing Squatters

Only a few islands on Lake George are privately owned. All of the others belong to the people of the State. By 1910, when Apperson was exploring these islands and repairing their shores, he noticed certain islands where individuals had laid claim to a favorite spot, building platforms, and cabins. The “squatters” stayed there for weeks or even months at a time, to the exclusion of others. Apperson tried to promote camping for everyone. He alerted state officials to these abuses and supplied evidence of illegal occupancy. Some 700 such cases were disposed of in a few years’ time. Eventually, the State set up a system to manage camping on the islands (now managed through Reserve America) and in 1922 created a corps of rangers to regulate the facilities. Jay Taylor was head ranger. Over several decades, Apperson and Taylor caught a backlash from angry squatters and were threatened repeatedly.

Ending the Leasing of Campsites

Parallel to the physical removal of squatters from the islands, Apperson campaigned against the long-term leasing of the islands. This would have denied public access for generations to come. Mr. Hornaday of the New York Zoological Park commended Apperson on his success in a letter in 1915.

I congratulate you most heartily on having won your fight against the leasing of campsites in the Adirondacks. That victory is wholly yours. If you had not started the campaign, and kept it up in the masterful manner, which you did, beyond all question there would have gone into the Constitution something providing for the leasing of camp grounds. The people who hereafter will enjoy the freedom of the campsites of the Adirondacks, unhampered and unafraid of restrictions and limitations that might be imposed by those who are exploiting

the Adirondacks for commercial purposes, will need to thank you for the freedom that they will enjoy.

In due course of time, when the constitution is made up without any leasing provision, you can then rest from your labors, and enjoy the contemplation of the laurels that you have so splendidly won. This is not flattery; and it is not saying any too much. Knowing the circumstances as I do, I am able to speak with absolute certainty of being correct. I shall duly record the fact that the leasing of campsites was prevented by the far-sightedness, good generalship and love-of-the-open in the Adirondacks of J. S. Apperson of Schenectady, New York.

Land Preservation

While Apperson and George Knapp worried about rising lake levels, Apperson was at cross-hairs with Knapp's son, William. William, interested in making as much money from logging as possible, influenced General Electric to fire Apperson in 1922. While it was true that General Electric was shifting away from power and mining, it appears that the more telling reason for his dismissal was Knapp's criticism of Apperson's environmental activities. Irving Langmuir, Nobel laureate, came to the rescue and found Apperson another position six months later within GE. Eventually, Apperson successfully lobbied the State for the acquisition of the Knapp estate.

In the early 20th century, many people felt that Lake George should be protected from logging and commercial development. Apperson worked against the power broker, Robert Moses, to prevent the construction of the Tongue Mountain Parkway along the shoreline of Tongue Mountain. Apperson himself bought land on Tongue Mountain in 1918 where he built a rough shelter to store his boats. He convinced the State to put up \$75,000 to buy additional land on Tongue Mountain, thus preserving the western side of the Narrows.

Some consider the creation of the Forest Preserve Association of New York State in 1934 as one of Apperson's most notable

accomplishments. He and a group of like-minded persons launched this watchdog group to defend New York's 1894 constitutional concept of "forever wild" which was under continual attack. Some like Gifford Pinchot thought that "forever wild" was a sentimental horror. Thousands of attacks against the "forever wild" concept were launched over the years by mining groups, logging groups, and recreational groups. Only 20 of these attacks were successful, notably the Gore and Whiteface ski areas.

As part of the Forest Preserve Association, Apperson saw many of his projects come to fruition over the course of 20 years. Apperson announced in 1942 that:

After many years of effort, the western half of this masterpiece of nature (Tongue Mountain) was acquired by the State in 1924. This acquisition comprised 10 miles of shore, 13,000 acres land and one large island. The State appropriated funds in 1941 to acquire the eastern half of the Narrows, including Paradise Bay shore land, Elephant, Black, Erebus, Sleeping Beauty and Shelving Rock Mountains as well as numerous bays and natural scenic points along this rugged shore.

Apperson was influential in getting Franklin Delano Roosevelt (FDR) to include Lake George in the blue line of the Adirondack Park in 1931. For years Apperson was concerned about the future of Dome Island. For Apperson, Dome Island was the centerpiece of the famous lake scenery. During the 1930s he saw many white markers on the trees on Dome Island. He found that the island was to be sold for \$4,500. The new owner intended to put campsites on it. In 1939, he saw no other alternative than to buy the island to prevent it from being developed. As he didn't have the money, he asked Langmuir for a loan which covered half of the expense. Apperson cared for the beautiful tree-covered, perfectly symmetrical island, but he was concerned about how it could be kept safe for future generations. His solution was to donate the island to the Nature Conservancy in 1956 for scientific and educational

purposes. As a relatively undisturbed piece of wilderness, the island is a natural laboratory for the study of the region's ecosystem.

Networking

Apperson accomplished his amazing work in preserving Lake George through his memberships in a number of organizations. They didn't always work out as hoped like his membership in the Lake George Association. Apperson resigned his membership when the Lake George Association became a co-defendant in the lawsuit, *People of the State of New York v. Systems Properties*, on the side of the paper mill. The President, W.B. Woodbury, lost no time in responding, "I can safely say that 99% of our membership will welcome this action, which in view of your strange activities over the years, is much belated!" Many people were angry and Apperson was worried that someone might set fire to his camp. Speaker Heck was told that unless Apperson and Langmuir stopped their efforts to ameliorate erratic water levels, their camps would be burned down.

Apperson's boundless enthusiasm for the out-of-doors, led him to become friends with an array of people, from "Old Dan Wadsworth," who lived in a cabin near North Creek, to FDR, an up-and-coming politician. Apperson met Old Dan in 1908, when hiking in the mountains. In 1921, he met FDR, and scores of other prominent canoeing enthusiasts, at a regatta for the American Canoe Association. It was held at Apperson's camp in Huddle Bay. He also made friends with wealthy landowners of an older generation such as William K. Bixby, George Foster Peabody, and George O. Knapp. His friends also included some progressive society women including Mary and Hilda Loines (subjects of Chapter Five), Ethel Dreier, and Eleanor Roosevelt.

He became a sort of pied piper around Schenectady, inviting men and women to join him on excursions into the high peaks and promoting winter sports during the off-season. They spent week nights in his boarding house manufacturing sleeping bags, skate sails and tents. These hiking and camping enthusiasts became known as the "Schenectady Force" and they tackled various causes.

Eventually, Apperson had built such a large network of loyal friends, in all the right places, that he had control over a powerful political lobby. By 1938, these friends and connections made it possible for 55 organizations to sponsor a pamphlet declaring their support for maintaining the “forever wild” clause of the constitution. This resulted in a successful vote taken at the Constitutional Convention.

Apperson was a founding member of the Adirondack Mountain Club. He was among the 200 prominent persons who were invited to be charter members. They remembered him as the heart of the effort to preserve the Adirondack forests. He devoted amazing energy and skill to their restoration and preservation. He drafted a bill in 1923 to create a Lake George State Park which would have added a major part of the wild country of Lake George to the state park system. He had great and detailed knowledge of past misuse of the Forest Preserve and could discern new threats to the Preserve no matter how well disguised. According to Warwick Carpenter, Secretary of the Conservation Commission, Apperson’s lucid thinking and unrelenting effort were the most important factors in land acquisition. David Newhouse, Adirondack Mountain Club, noted that Apperson always tried to stay behind the scenes, and for that reason, very few people knew how much he did for forest conservation.

The following tributes were paid to Apperson after his death in 1963:

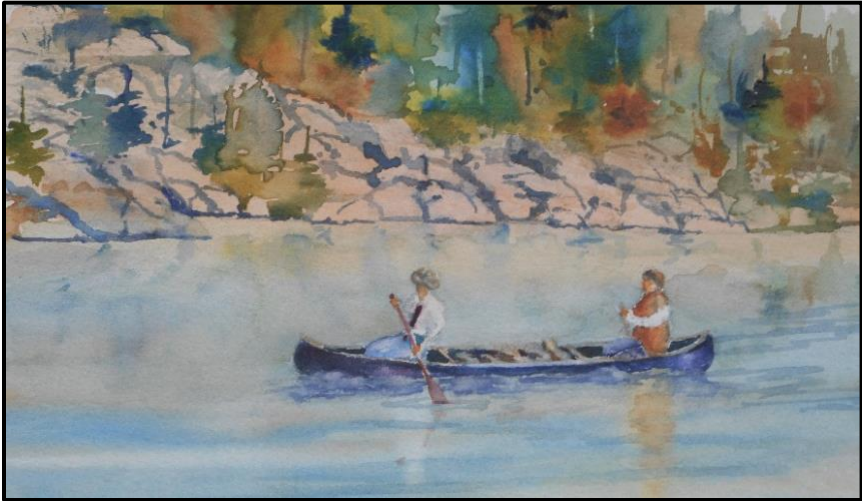
He was a man dedicated to one purpose: the protection of the Forest Preserve as written in Article 14, Section 1 of the New York State Constitution. It was his work, his goal, his ambition and his life, to preserve the wild beauty of our State. We, who have known him and have been in day-to-day contact with him, have been fortunate for we were able to learn much from his keen mind, his uncanny perception, his method of building up the facts to the solution of a problem, his sensible approach to the adversary that was better equipped (LeMaire, 1963).

Mr. Sidney S. Buckley, US Soil and Conservation Service said, “We have lost a great amateur Conservationist.” Barney Fowler, Albany *Times-Union* columnist wrote, “He was the dean of the implacable conservationists, the man who wanted the woods as God made them. Throughout his entire life he made his power felt.”

A lifelong bachelor, Apperson, said “Lake George is my wife and its islands are my children.” Despite his devotion and well-deserved praise, many of Apperson’s accomplishments have remained hidden from view until now. His devoted friends saved about 44 cubic feet of his papers, films and photographs making it possible to study the details of his busy life. Readers who would like to know more can visit the Apperson Collection housed at the Kelly Adirondack Center at Union College in Schenectady. The author of this chapter has transcribed over 1,000 letters onto her website, www.adirondackactivism.com.

Chapter Three

Irving Langmuir Lake George's Nobel Laureate



Original watercolor by Tom Ryan, Marion and Irving Rip-rapping

Irving Langmuir's connection to Lake George began only a year after having joined the General Electric Research Laboratory in 1909 in nearby Schenectady. Langmuir deepened his fondness for exploring and enjoying nature while working on his PhD in Germany. He climbed the Zugspitze (Germany's highest peak), walked from Göttingen to Brocken (about 52 miles), and taught himself downhill skiing after ordering a pair of "Norwegian snow shoes" from Munich. Naturally, Langmuir would seek out kindred spirits for enjoying his favorite outdoor pastimes: hiking, mountain climbing, and skiing.

One such person was John Apperson. A General Electric colleague and senior engineer in the Power and Mining Engineering

Department, Apperson harbored similar outdoor interests, along with a passion for environmental conservation. Although interested in all the Adirondacks, Apperson's camp in Huddle Bay on Lake George functioned as home base. Langmuir soon became a regular guest there and began cultivating "a love affair with the lake."

Saw Apperson about taking a trip up to *his country*," wrote Langmuir in a diary entry of September 23, 1910. Langmuir and another friend made their voyage to Lake George the very next day. And, although Langmuir, a naturally rapid-striding hiker, was in excellent condition, he later complained in his diary that Apperson went too fast and had to keep coming back for them. Even so, a life-long friendship and eagerness to advocate for environmental causes developed between the two. Just two years later, for example, they would climb Mt. Marcy (New York's highest peak) in the winter—an unheard-of accomplishment.

Samples from Langmuir's diary:

1916: *Apperson came in evening. He wants to start agitation to get the Federal Government to make the Adirondacks a National Park.*

1923: *Mr. Coffin (Charles A. Coffin—first President of General Electric) called me in to talk re: Lake George & Apperson. Mr. W. J. Knapp had previously seen Mr. Coffin to stop Apperson. I spoke for some time & convinced Mr. Coffin that our cause (conservation on Lake George) was a good thing.*

Also in 1923 a political meeting yielded a substantial environmental win for the lake. A plan to build a state highway along the Tongue Mt. shoreline had alarmed Apperson greatly. He sprang into action and coaxed New York State's Governor Al Smith to visit Bolton Landing and go on a boat ride. The ulterior motive for "kidnapping" the Governor was of course to showcase the fragility of the area and have the Governor witness it firsthand. George Foster Peabody, a

wealthy local philanthropist, wrote that he “hopes Gov. Smith will take the trip quietly, rather than in the midst of a crowd of officials.”

Cruising by the shoreline of Tongue Mt., Apperson, Langmuir, and W. K. Bixby emphasized the delicacy of the shoreline with its steep gradient and thin soils. Langmuir even shot film footage of the visit. Smith was soon convinced that building a new road in that location would cause severe erosion, disrupt wildlife, and destroy pristine views. The Governor saw to it that the plan was amended to build the road *behind* the mountain.

As game as Langmuir was for a political cause, science always came first. It is said that when Langmuir was at work, he was at play—and when he was at play, he was at work. Thus, on his “days off” at Lake George, Langmuir’s insatiable curiosity drove him to watch the weather around the Lake, record copious measurements, and scribble notes. Observations led to thought experiments, which led to experimental design, which led to data collection and analysis in an endless feedback loop. A typical diary entry read:

We measure temp. of Lake. 46° at 174’ depth between Dome Island and Buck Mountain. 66° at surface. ...made up sounding line to measure depth of lake through ice. Built 2 sounding devices: one with steel wire; one with silk line. Bathythermograph data and soundings.

Langmuir’s bond to Lake George grew stronger over the years. In 1912, he married Marion Mersereau, a woman who shared his outdoor interests and love for the Lake. One of the earliest photos of the couple shows them paddling a canoe filled with rocks. Under Apperson’s direction, the rocks would be placed around the shoreline of an island in order to mitigate erosion from high water levels—a process known as “rip-rapping.” About 68 islands were buffered over the next three decades.

During this period the Langmuir family became friends with another Schenectady household—the Summerhayes family. Both Irving Langmuir and Harry Summerhayes, Sr. worked at General Electric (GE) and were even neighbors on the same street (Stratford Road). Winter sports and recreating on Lake George were shared interests, so family paths often crossed. Summers for both families were often spent camping on the state islands located in the Narrows, particularly the Dollar Islands, Juanita, and Ranger. The families frequently stayed nearly all summer—with the patriarchs returning to Schenectady during the week to work at GE.

In 1925, Langmuir bought a cabin in Turtle Bay on Tongue Mt. as birthday present for Marion, but members of the Summerhayes extended family were still campers on the state islands. A 1926 camping permit showed that Summerhayes, Sr. had booked Juanita Island for his family from June 12th to September 26th.

While Apperson and Langmuir applauded the use of those state-owned islands for camping, they both were irked by the somewhat sloppy enforcement of rules prohibiting construction of permanent structures on the sites. Substantial cabins were erected, which could lead squatters to claim ownership of the properties. When such cabins began to proliferate, Apperson, Langmuir, and friends took action. During cold winters (with thick ice), Apperson either dismantled the structures himself or had them dragged off their foundations and towed to the shore by truck.

Playing the environmental vigilante occasionally got Apperson into trouble however, particularly after removing a structure that belonged to a GE executive. Apperson was to be fired as a result, but Langmuir intervened, saying: “If Apperson goes, I go.” Langmuir’s company clout ensured that neither was terminated.

Boat travel to the Narrows or Tongue Mt. from F. R. Smith & Sons Marina in Bolton Landing always took the Langmuir and Summerhayes families past Crown Island, which was private. The

island was owned by Nora Stanford Wells, niece of Leland Stanford, founder of Stanford University in California. When a “For Sale” sign appeared on Crown Island in 1930, the Summerhayes family was interested. Being in the midst of the Great Depression, money was tight, yet inquiries were made. Beyond the means of the Summerhayes clan, neighbor Irving Langmuir was asked if he wished to participate in the purchase.

After brief negotiations, the island was sold for a mere \$20,000—far below the original asking price. Half of the island went to the Langmuir family, and the other half was divided up among branches of the Summerhayes family. At last, the two Schenectady families had established permanent summer roots on Lake George. Family and friend connections on Crown Island were further fused when Langmuir’s daughter Barbara married Summerhayes’ son Harry, Jr. some eight years later. Your author is the son of Barbara and Harry.

Langmuir was always paying attention to events in his surroundings and wondering about their causes: Perhaps my most deeply rooted hobby is to understand the mechanism of simple and familiar natural phenomena.” A good example was Langmuir’s fascination with the interaction of wind and water as revealed in observations he made during a 1927 trans-Atlantic trip on an ocean liner. “Dead calm. Sea glassy. Lots of Flying Fish. Long strings of bunches of seaweed in parallel lines in direction of the wind. I conclude the lines mark the places of max. surface currents and are due to meeting of transverse currents. Vertical down meeting under seaweed.”

Langmuir dubbed these colliding and descending currents that resulted in helical vortices, “windrows”, but modern oceanographic texts refer to them as Langmuir Circulations. Somewhat controlled experiments continued on Lake George, often roping in friends and relatives as assistants. Light bulbs, umbrellas, and strips of colored cloth were all employed at different times as floating indicators to track the motion of the lake’s surface. Langmuir was so busy with

other endeavors, though, he would not end up publishing his results until 1938.

Langmuir didn't just look down into the water however—he also looked up at the sky. Vincent Schaefer, Langmuir's lab assistant at GE and discoverer of cloud seeding, wrote: “Based on his Crown Island camp and using motorboat, ice skates, or skis, depending on the nature of the lake surface, Langmuir would measure the temperature of the air and water, the wind velocity and other pertinent atmospheric and water conditions during all types of weather....”

In 1932 Irving Langmuir was awarded the Nobel Prize in Chemistry for his pioneering work in surface chemistry. The prize represented the acknowledgement for an entire body of work, including development of the gas-filled incandescent light bulb, submarine sonar, octet atomic theory, and non-reflecting coatings on eyeglasses.

Soon Langmuir teamed up with Apperson again, this time for the purchase of Dome Island. Never developed, the island had passed through several private owners since the State sold it in 1855. Dome Island had been on Apperson's radar for decades—he had actually helped rip-rapping an eroded section of the island long before he bought it. Apperson had written in 1917: “(The owners of Dome Island) were concerned about the commercial value only and no interest was shown in preserving the natural beauty.” The appearance of white flags on the island in 1939, marking proposed separate lots, served as a red flag to Apperson that sale of the island was imminent. Rumors of construction of a hotel circulated as well.

Lacking sufficient funds to purchase the island solely, Apperson immediately called on Langmuir for assistance. Langmuir willingly loaned Apperson half of the \$4,500 purchase price, and the deal was done before the end of the year. Dome Island was now safely under

Apperson's wing and protected from development for decades to come.

As years passed, Apperson wondered who should eventually become the keeper of Dome Island. With no heirs, he considered various trustworthy conservation organizations and eventually chose the northeastern New York chapter of The Nature Conservancy. Knowing that maintenance of the island going forward would be costly, Apperson asked Langmuir to head a committee to raise money for the effort. Langmuir wrote: "(John Apperson), who has maintained this island in its natural state for fifteen years, has very generously agreed to give it to The Nature Conservancy, providing adequate funds are raised for its maintenance and preservation in its natural condition." The transfer was completed in 1956 with about \$20,000 raised, which has grown over the years to fund both stewardship and scientific study of the island.

Another long-standing environmental issue for Lake George was the drastic variation in its water level. The problem stretched as far back as a 1798 survey, when a dam constructed in Ticonderoga at the northern outlet of the Lake was thought to be causing severe fluctuations in lake level. The issue attracted and held the attention of Langmuir and Apperson for nearly five decades. For example, 1919 saw very high water, which caused severe erosion to shorelines and islands, while 1941 saw very low water, forcing boat owners to drag their boats through mud to and from their docks. The International Paper Company, which constructed its dam in 1903, was using the water flow to generate hydroelectric power at that time, ignoring water levels "upstream" on Lake George. The long legal battle fought over lake levels is the subject of Chapter Four.

Frustration with political opposition to maintain reasonable water levels on Lake George, which included the Lake George Association (LGA), culminated in September of 1944 with the formation of the Lake George Protective Association (LGPA), which Langmuir

would head as its President. Its top priority was “to protect Lake George, its islands, watersheds, and mainland shore, including the outlet of Lake George, and the purity of their water; and to aid in the establishing and maintaining reasonable water levels in Lake George....”

1944: *Meeting of... Lake George Protective Association (LGPA), of which I am the President. Now 100 members. We retain Counsel to prevent legislation or to prepare injunction if bill passes to intervene on the side of the State in the suit against the Paper Co.*

Even the passionate Apperson sought to keep discussions civil and objective, however. He wrote in 1948:

For several years four personalities have appeared in the forefront of this struggle and again it looks like a fight to the finish, but very definitely not a personal fight between individuals as whispered around for propaganda purposes. The four personalities include a prominent lawyer, a real estate man, a noted scientist (Langmuir), and a conservationist (Apperson).

The lawyer and the real estate man often attend meetings and social functions. They know the influential people. The scientist and the conservationist are year-round outdoor men, interested in knowing, enjoying, and preserving the attractive features of Lake George.

Targets of legal action by the members of the LGPA for negligence in maintaining the lake level included counties, towns, the village of Ticonderoga, and even the Lake George Association. The LGA is the very first lake conservation organization in the United States. Formed by sixteen fishermen in 1885, the LGA’s first project was to finance and implement a program that restocked the lake with species of fish that they enjoyed catching. Yet the organization seemed to turn a blind eye to lake level fluctuations, perhaps because of connections between the president of the LGA and the paper

industry. The Lake George Association has since evolved into an organization advocating for local environmental protection based on scientific study.

Still, back in 1951, the controversy festered.

1951 (LGPA): *...the lake was again held above the limit of 4.0 feet (according to the Roger's Rock Gage) continuously for 33 days this spring, yet the claim is made by some leaders of the Lake George Association that the regulation of the lake was satisfactory.*

The legal issue was definitively resolved in 1957. Responsibility for maintaining lake levels within a certain range now rests with the Lake George Park Commission, a state agency.

Although Langmuir passed away later that same year at age 76, his legacy lives on. Your author (Langmuir's grandson), volunteered in summers as a water tester for the Darrin Fresh Water Institute in Bolton Landing, a field station for Rensselaer Polytechnic Institute in Troy, NY. For thirty years, he measured water temperature and transparency weekly in three different sites. Now these data (and much more) are collected from remote sensors in and around the Lake, thanks to the Jefferson Project. The Jefferson Project is a collaborative effort of The Fund for Lake George, the Rensselaer Polytechnic Institute, and IBM.

The Fund for Lake George (now merged with the Lake George Association) gives the Langmuir Award annually for Excellence in Development and Stewardship. This annual award is given "to recognize design and implementation of Low Impact Development measures that will preserve water quality and the natural environment of the Lake George Watershed. Low Impact Development is an approach to site design and development that minimizes disturbance and maximizes the use of natural drainage

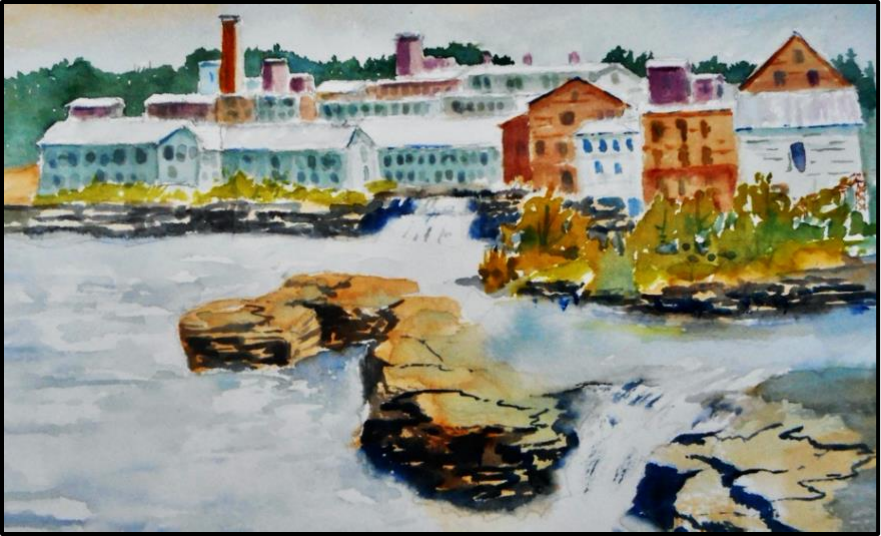
ways and features, such as undisturbed soils and native vegetation, to mitigate the negative impacts from land use.”

That goal reflects what Langmuir and Apperson were striving to achieve on Lake George for most of their lives.

Crown Island became a research venue once again in the summer of 2021. At your author’s invitation, a small group of scientists and graduate students from Atmospheric Sciences Research Center (which Vincent Schaefer founded in 1965) at the State University of New York at Albany came to the island and constructed a temporary field station. The team, headed by Dr. Jeff Freedman, set up instruments that measured temperature, humidity, wind velocity, and CO₂ concentrations for more than a week. The results will be analyzed in hopes of understanding atmospheric dynamics better, which would ultimately improve offshore windmill designs. Langmuir would approve.

Chapter Four

The People v. The International Paper Company



Original watercolor by Tom Ryan, International Paper Company, based on a photo by Seneca Ray Stoddard

Lake George, the Queen of American lakes, shares with Helen of Troy, the distinction of having been the subject of strife among men (Lake George: Complete Report, 1945, xiii).

Before launching into the longest legal battle involving the waters of Lake George, suffice it to say that the State was up against a formidable opponent. The International Paper Company is the largest paper company in the world. It employs over 50,000 people and serves 25,000 customers in 150 countries. Net sales were \$22 billion in 2019. It is also a large private land holder in New York State and employs between 600 and 900 people at its facility in Ticonderoga. In February 1942 the People of the State of New York brought a lawsuit against System Properties, Inc., a domestic

corporation, which had leased Dam A on the Lake George outlet to the International Paper Company (IPC) in Ticonderoga. While IPC operated Dam A, System Properties, Inc., (SPI) was the owner.

The legal battles dragged on until 1957 because as the first trial court noted, “all parties have divergent interests and each seeks various forms of relief.” In November 1942 Langmuir, Apperson, Starbuck, Bacon, Reynolds, Melish and Witherell were allowed to be plaintiff-intervenors. Their main demand was the removal of Dam A. Joining System Properties, Inc., as the defendant-intervenors were the Lake George Association, three counties, seven towns, and the Village of Ticonderoga. They joined because they believed that the removal of the dam would cause damage to properties, reduce their value, and reduce taxes. The Village of Ticonderoga also alleged damage to the business welfare of inhabitants. The Supreme Court of New York State delivered its judgment in 1947; this was modified by the Appellate Court in 1953. The final judgment was delivered by the Appeals Court in 1957. This was a long and tortuous case in which both the defendants and the plaintiffs won victories of a sort.

The Outlet of Lake George

Lake George flows north and empties into Lake Champlain through an outlet now popularly known by its French name as the La Chute River. At the time of the court case, water from Lake George first flowed into the Ticonderoga River through a natural stone dam, then after 3/4 of a mile over the Upper Falls into Ticonderoga Creek, and after another 1 1/4 miles over the Lower Falls and after another 1 1/2 miles into Ticonderoga Bay. There were six waterfalls in all. Between the Upper Falls and Lower Falls five dams were built, facilitated by the fact that there is 221-foot drop in the course of 3 1/2 miles; a larger drop than Niagara Falls (176 feet).

The dam being contested, Dam A, was located at the Upper Falls of the Lake George outlet. Predecessor dams at the Upper Falls had existed since 1798. Dam A was rebuilt in 1903 by IPC and conveyed

to SPI 1932. SPI then leased it back to IPC. The effect of Dam A is to hold back the waters of Lake George, in effect, creating a huge reservoir. The lawyers for the defendant argued that the plaintiffs were disturbing a situation that had existed for over 140 years. The natural stone dam predated the five man-made dams and had for centuries prevented Lake George from emptying out into Lake Champlain. This natural stone dam was blasted by unknown persons in the 1850s to widen the channel for log driving. The 1942 lawsuit was not the first time that “nuisance” prosecutions were brought against the dams. They were unsuccessfully contested by lawsuits in 1828-29 and in 1847-49.

The Lawsuit

The State of New York charged that SPI/IPC had constructed a dam in the bed of the Lake George outlet and had usurped the sovereign prerogative of the State and most importantly had gained complete control over the waters of Lake George, flooding state land and interrupting navigation, all for its private commercial gain. The State questioned SPI’s right to interfere with the natural level of the Lake by ponding back its waters thereby creating a mill pond.

SPI, as defendant, asserted its right to maintain a dam and to fluctuate water levels of Lake George because it had acquired the rights to the bed of the Ticonderoga River. However, these privileges had never been granted to SPI by statute, patent, or grant by the State. The plaintiffs contended that Lake George is a public body of water and so the State is vested with inalienable sovereign and proprietary title and is bound to retain absolute and exclusive control in the public interest. The plaintiffs asked the judge to find:

- The waters of Lake George and the Ticonderoga River are public navigable waters owned by the State;
- The State as sovereign and proprietary owner of the bed and waters of Lake George and the Ticonderoga River has the

right to the use and the flow of these waters which it holds in trust for all;

- The State possesses the power to control the use of these waters;
- Neither the defendant nor the predecessors acquired title to the bed of the outlet of Lake George;
- The dam is an encroachment on the lands of New York State; it is a public nuisance which obstructs navigation and appropriates the waters of the entire Lake for private commercial purpose;
- Ponding is a trespass on state-owned lands and islands;
- The defendant be enjoined from encroaching on the bed of navigable waters;
- The defendant be enjoined from interfering with water levels;
- The defendant remove the dam.

(Brief for the Plaintiffs, *People of the State of New York*, 1942, pp.6-7).

At the opening of the first trial, the Attorney General for New York withdrew all prayers/demands and asked only for a declaratory judgment that the State is the owner of the bed of Lake George, the Ticonderoga River, and the outlet and that the State has the paramount right to control the use of the waters of Lake George and the Ticonderoga River and to regulate the water level of the Lake. It dropped its other demands mainly because of the uproar from the three counties, seven towns and the Village of Ticonderoga. However, the plaintiff-intervenors continued to demand that Dam A be removed.

Arguments of the Defendants

SPI encumbered the court record with voluminous excerpts from ancient documents to claim its right to the bed of Lake George. It started with the Stoughton Patent granted by King George III in

1764 and subsequent owners up to the 1940s. Furthermore, SPI's lawyers claimed it had acquired ownership in fee of Dam A by its long-continued and adverse possession and occupancy as well as the prescriptive right to fluctuate levels of the Lake. The water level of Lake George has been measured since 1913 by the Rogers Rock Gage (RRG). SPI stated that between 1913 and 1942 the spring high water level measured 4 feet on the RRG and the winter level between 1 and 2 feet. They alleged this caused no damage to shores, islands, trees, docks or other property or the beauty of the Lake. The shores and islands had for hundreds of years adapted to the present levels. SPI further asserted that:

- The maintenance and operation of Dam A benefited navigation;
- The economic prosperity of the Village and Town of Ticonderoga depended on the IPC paper mill;
- SPI and its predecessors had occupied the dam site for 140 years;
- The right to operate the dam was crystallized in the Gentlemen's Agreement of 1935;
- SPI had acquired, by prescriptive and adverse use for 100 years, the right to fluctuate the levels of Lake George;
- There was no substantial damage to the interest of the State from flooding.

(Brief on Behalf of the Defendant, 1946, System Properties, Inc., pp.18-20)

Because of years of erratic water levels since 1906, a Gentlemen's Agreement was entered into in 1935 between System, the NY State Conservation Department, and the Lake George Association. It was never formally executed, but SPI promised to hold the water levels between 4 feet and 2.5 feet between 15 June and 15 September. After September 15 there was *no limit* on SPI/IPC's drawdown. During this period between June and September if the water level fell below 2.5 feet, System agreed not to withdraw water from the

Lake for hydropower purposes. 1941 was a year of exceptionally low water. In fact, it was the worst low water in the history of Lake George even with adequate rainfall from September 1940 to February 1941.

Despite the Gentlemen's Agreement, IPC continued to draw water when on July 1 the level was 2.3 feet at Rogers Rock Gage; on September 15, 1.4 feet and after September a mere 0.8 feet. The drawdown caused the appearance of mud flats, interfered with navigation and made the water inaccessible to riparian owners. This is probably what sparked the court case against SPI although water levels had been erratic since 1906.

Arguments of the Plaintiffs

Among the evidence that the plaintiffs presented was the fact that Dam A raised the water level in 1936 to 5.09 feet and lowered it to 0.72 feet in 1941. The erratic levels, but especially the high water levels, flooded state-owned islands and shorelines, causing the erosion of land and the destruction of trees. The islands were particularly vulnerable because the soil cover on them was thin. As a result, rip-rapping the islands started in 1917 and between then and 1945 68 islands were rip-rapped. According to the 1919 Conservation Department report,

High water in Lake George, caused by the dam at the outlet of the Lake, has resulted in extensive damage each spring for many years even to the extent of threatening the loss of many of the most beautiful islands... (Brief for the Plaintiffs, 1942, p.61).

Willow Island, Cooks Island, Manhattan Island, Arrow Island, and Prisoners Island (large enough for a prison stockade) were destroyed or severely eroded. Even Picnic Island, St. Sacrament and Big Burnt were partly under water or had receding shorelines. A total of 21 islands had been damaged. Property owners and areas such as the Bixbys, the Ehlers, Greene Island, Trout House, Basin Bay,

Diamond Point and Silver Bay reported docks under water. The plaintiffs charged that the extremes of high and low water resulted from the selfish control and the use of the Lake as a reservoir for the purposes of generating power for private gain (Brief for the Plaintiffs, 1942, p.78).

The lawyers for the defendant, LeBoeuf and Lamb, vilified Langmuir and Apperson, declaring that they were “self- appointed advocates of their own violent views” because they sought the destruction of the dam. Therefore, it was appropriate to ignore the “jaundiced testimony” of Langmuir and Apperson. They said “Apperson is so infatuated with his crusade to return the Lake to aboriginal conditions that he cannot be considered a dispassionate and accurate witness. His whole course of conduct is that of an extremist”... (Brief on behalf of the Defendant, 1946, p.62). They pointed to the fact that all the counties and towns were allied with SPI and supported the “past successful method of lake regulation”.

Arguments of the Defendant-intervenors

The Lake George Association (LGA), an organization dedicated to protecting Lake George, joined the case on the side of SPI and IPC. The LGA membership had been concerned as early as 1907 about the drawing down of the water level by IPC so that they passed the following resolution:

Resolved: That the officers of this Association be and hereby authorized to take such action as may be necessary to abate this nuisance... (Lake George: Complete Report, 1945, p.140).

The LGA entered the lawsuit supposedly on behalf of *all* property owners along the shore, insisting that there was “unanimity of all who best know the facts.” Those who “best knew the lake” were the LGA members particularly its Committee on Water Levels. Yet 70 members of the LGA attempted to intervene with different counsel (Reply Brief for Plaintiffs, Irving Langmuir et al, p.10). The

President of the LGA, Colonel W.B. Woodbury, and the LGA counsel, Charles Tuttle, were witnesses for the defendant. They both testified that they saw no change in the levels of the Lake in their 66 years and 35 years respectively on the Lake. Furthermore, the effect on the lake levels of the dam was relatively “uniform” (Brief on behalf of the Defendant, 1946, pp.66-67).

The LGA’s historic position, confirmed by resolutions, was that the appropriate range in lake levels was between 4 and 2.5 feet. Tuttle said that the Gentlemen’s Agreement “shows that the owners of the dam can so operate its facilities to keep the level within the range except when drought is so abnormal that there is not even an inflow sufficient to preserve the minimum level although no water is passing over the dam” (Reply Brief for the Plaintiffs, p.7). This was proven not to be the case in 1941 when SPI ignored the agreement when the water level fell below 2.5 and they continued to withdraw water.

State agencies were also not always on the side of Lake George or the Attorney General as shown from the testimony of Superintendent Mulholland of Camps and Trails in the Division of Lands and Forests in the NY State Conservation Department (forerunner of the Department of Environmental Conservation). It seems he found it difficult to admit to the damage done on his watch and so said the erosion caused no impairment of the “use” of state islands and no change in shoreline conditions. He alleged that wind and boat swells caused erosion (Brief on behalf of the Defendant, 1946, p.89).

Opinion of the Court in 1947

The court said that only the river beds of the Hudson and Mohawk were vested in the Crown and hence in the State. Moreover, in the letters of conveyance to Philip Schuyler, the State gave up its sovereign title to the bed of the Ticonderoga River. The court decided that while the original Stoughton Patent from the Crown

included lands under water, SPI and its predecessors in title had also established their right to the bed of the Ticonderoga River by continuous open and adverse possession for over 140 years.

The court declared that the drop in water levels in 1941 was due to unusual climatic conditions and not due to the irresponsible operation of Dam A (Casetext, *People v. System Properties, Inc.*, Sept. 4, 1947). It based its opinion on a study of water levels from 1914-1942 which showed that in 10 years out of 30 years the water levels were above and below the limits set in the Gentlemen's Agreement. This study was undertaken by a legislative committee at the request of the LGA. The study found that in 73% of the time, Lake George water levels were within the agreed limits during the 29-year period. However, on 1036 days the water levels were higher than 4 feet and on 389 days lower than 2.5 feet.

The study, which was technical in nature, did go out of its remit to disparage the efforts of Apperson. The study authors were particularly displeased by Apperson's pamphlet, *Lake George a Mill Pond*, and even more displeased by his photos of eroded islands and flooded docks. They were particularly displeased when Apperson failed to comply with a subpoena to explain his views. Apperson probably surmised that they wanted to see beforehand the evidence he would present to the court. Advance notice would give them the opportunity to discredit whatever he might present.

The legislative study had to admit that the unusual low water of 1941 could have been avoided if the waste gates at Dam A had been closed. The waste gates were left open in anticipation of the usual spring runoff which did not occur. IPC could have postponed their opening instead of allowing an outflow of about 500 cubic feet per second during February and March. The study concluded that this error in judgment adversely affected the water levels (*Lake George: Complete Report*, 1945, pp.108-110).

While the court decided that the low water level of 1941 was not due to irresponsible behavior by IPC, the legislative study did state that it was due to IPC's bad judgment and could have been corrected. The court then decided on its own that the most advantageous levels were between 4 and 2.5 feet. It was satisfied that SPI could maintain these levels. However, after 15 September to 15 June, the court ruled that System could raise or lower levels to satisfy its economic requirements. Thus, SPI and the defendant-intervenors were the clear winners in the first court battle. This was not the end of the story because the trial court's ruling was appealed and in turn the decision of the appellate court was also appealed and the matter only brought to a conclusion by the Court of Appeals in 1957, some 15 years after the first lawsuit was brought.

Arguments in the First Appeal

The Attorney General appealed the 1947 judgement. In reviewing the trial court's ruling, he said it was clear that the previous trial court had recognized certain facts and had assigned to itself certain powers:

- The previous trial court agreed that Dam A did change the water levels of the Lake and affected navigation but that the effect had been of a relatively uniform character (Brief for the Defendant, 1946, p.77);
- The previous trial court recognized that the State had the power to regulate the water level but it limited this power to protect navigation and not to other public interests such as the protection of state land;
- The previous trial court had in effect decided it could act for the State and set the permitted water levels during the summer months, thus the previous court chose to impose its own permanent solution.

The Appellate Court in reviewing all the arguments reversed the trial court's decisions and concluded in 1953 that:

- The State is the owner of the bed of Lake George and has the power to regulate the use of waters and determine the level of the Lake; it has the right to control, license, and forbid the maintenance and operation of any obstruction in the outlet of the Lake.
- The sovereign power of the State is not limited to the regulation of navigation but extends to every form of public interest.
- No prescriptive right can be acquired against the sovereign power of the State to regulate and control the use of navigable waters; it cannot be barred by passage of time or inaction; SPI does not have flowage easement against all interests in the Lake.

However, neither the Lake George Association nor the Langmuir group were completely satisfied with the appellate court's decisions. The Lake George Association was disappointed that the appellate court had eliminated the trial court's determination of the optimum water levels of Lake George. The Langmuir group objected to the appellate court's decision that they had lost their right to prevent flooding because of the lapse of time and that they had no right to a mandatory injunction against the dam.

Arguments of the State to the Court of Appeals

Jacob Javits, the Attorney General, argued that the sovereign power of the State is vested in the legislature and *not* in the courts. Therefore, the original trial court did not have the power to decide on the most advantageous water levels. This could only be done by legislation.

Decision by the Court of Appeals

While both the trial court in 1947 and the appeals court in 1957 agreed that the bed of the Ticonderoga River belonged to SPI, the appeals court ruled that the Stoughton grant excluded all lands under

water but that adverse possession had been established by SPI and its predecessors. Therefore, the land under Dam A did belong to SPI's successors, the Dartmouth Trustees. However, there was a caveat. The State has the right to control structures in tributaries or outlets that are non-navigable *if* the structures affect navigable waters. The power of the State is not limited to navigation but extends to every form of regulation in the public interest including the regulation of the use of the Lake for recreation and water power (Casetext, *People v. System Properties, INC.*, Feb. 28, 1957).

Thus, in the end the state legislature won the right to regulate the water levels of Lake George and Langmuir and Apperson lost their demand to remove the dam and IPC retained Dam A. While not all parties were content with the decision, the right of the State to control of the water levels of Lake George was assured.

Why did the counties and towns join with the International Paper Company?

As stated earlier the three counties and seven towns and one village did not want the dam removed for fear that it would hurt property values and tax revenues. The Village of Ticonderoga feared damage to business interests in that, the economic prosperity of the Village and Town depended on the IPC paper mill. IPC employed over 600 persons, paid their wages, bought its raw materials locally and paid taxes.

The IPC for its part claimed that the mill was a marginal operation. If it could not generate low cost power from Dam A, then it would close. In fact, IPC was already buying additional power from New York Power and Light for the mill besides that generated by its power plants along the Ticonderoga River because its operations were profitable and would be into the next century. In addition, IPC's operations benefited from good process water and skilled labor. The aim of the propaganda was to scare the people of Ticonderoga into believing that their jobs and welfare required them

to back the IPC no matter what the damage to Lake George (Reply Brief for the Plaintiffs, pp.14-15).

The town supervisors were convinced that if Dam A were removed the low water of 1941 would be repeated. The plaintiff-intervenors countered “What nonsense to ask that the dam which produced the low water of 1941 be retained to prevent its reoccurrence.” However, the impact of plaintiff-intervenors’ solution was questionable in that they wanted the channel of the old natural stone dam to be filled in so that it acted as a natural barrier as it had for centuries. The LGA’s Committee on Water Levels, relying on engineering testimony, believed that the restoration of the channels would be utterly useless as a means of regulating water levels (*Lake George: Complete Report*, 1945, p.157). But Langmuir et al did have a point, it was only through the blasting of the channel that IPC was able to draw down the water level as low as it did in 1941 using Dam A (Brief for the Plaintiffs, 1942, p.55).

The Outcome

It seems almost all parties’ interests were accommodated except that of Langmuir and Apperson. In the final opinion SPI was judged to own the Ticonderoga River bed by adverse possession, and the Dam A was not removed. However, it was found that the State has sovereign or reserve power, paramount and not subject or subordinate to any prescriptive right of the dam operator. Therefore, the State could control and regulate the waters and water level of Lake George by regulating the use and levels of the Ticonderoga River and that of the operation of Dam A in the public interest not only to produce water power but also in relation to recreational and other uses of Lake George.

The question of the appropriate water level remained under the control of the legislature and not the court. In the study of water levels, the legislative committee suggested in 1945 that the NY State Conservation Department should **not** have the responsibility to

administer the rules on water levels. They felt that the Conservation Department, as custodian of state islands, represented a special interest that might be divergent from the other interests of those affected by water levels. The legislature decided in 1957 under Section 38 of the New York Navigation Law that the outlet facilities must be operated to maintain the water level of Lake George at or about 3.5 feet on the Rogers Rock Gage. The Lake George Park Commission, as a state agency, has been given the responsibility to monitor water levels and take action to maintain this level in the public interest. The creation and work of the Lake George Park Commission are the subjects of a later chapter.

Fifteen Years of Legal Strife

Action	Date
Complaint by Plaintiffs	Feb. 16, 1942
System Properties answer	Sept. 14, 1942
LGA intervenes	Oct. 31, 1942
Langmuir et al joins	Nov. 30, 1942
Joint reply Langmuir et al	Jan. 3, 1943
Towns intervene	April 18, 1945
Trial court	June 11-July 19, 1945
Trial court decision	Dec. 4, 1947
Appellate court decision	March 12, 1953
Court of appeals decision	Feb. 28, 1957

Chapter Five

The Loines Family A Woman's Touch in Lake Conservation



Original watercolor by Tom Ryan, Quarterdeck, Northwest Bay

The turn-of-the 20th century marked a time in Lake George history that highlighted its reputation as a mecca for the middle and moneyed classes of upstate and downstate New York, and elsewhere, who came here to enjoy the majestic beauty of the “Queen of American Lakes.”

By the late 18th century, the Lake George region—and what would become Warren County—attracted tourists from around America as well as Europe. Adventures in the wilderness and mountains were a coveted treat and led to the beginnings of the tourism industry for which this area has long been famous. Sightseeing, leisure-based travel, camping, hiking, mountain vacations, and water recreation became possible with advances in transportation, especially with the

invention of the railroad, for which construction in Warren County began in 1831.

Artists, painters, and writers also came, awed by the splendor and majesty of Lake George and the Adirondack Mountains. By the mid-to-late 19th century, landscape painting dominated the art world, and dramatic and visually appealing scenes of the Lake and the Adirondacks flourished.

The “Great Camps” began to be built, and genteel pursuits such as hunting, fishing, and guide boat excursions became the obsession of a growing middle class and wealthy elite. The demand for hotels, summer homes, guides, water sports, and outdoor recreation blossomed. The allure of the blue waters of Lake George and the magnificent landscape surrounding it drew people who would grow to love the Lake and the land—and fight fiercely for both.

Noteworthy among the visitors to Lake George who would come to call the Lake “home” were the Loines family, who in 1899 built their summer place “Quarterdeck” on the west shore in Bolton, part of an exclusive stretch of shoreline that has been nicknamed “Millionaire’s Row.” Over several generations, Mary and Stephen Loines of Brooklyn, and their four children, Russell, Hilda, Elma, and Sylvia and their descendants, would love and enjoy their summer home. After the deaths of Stephen and son Russell, Mary and her daughters would go on to demonstrate true stewardship of their landholdings and their lake shore—showing that a women’s touch was a powerful force in conservation. Their vision and fortitude have left a lasting legacy of environmental stewardship on Lake George. Fascinating and influential, the ladies of the Loines family were early leaders in the fight to preserve its beauty and purity.

The Matriarch

Mary Hillard Loines was a remarkable woman—reformer, women’s rights advocate, and intellectual. Born into a shipping family in England in 1844, Mary (at age three) sailed with her parents John and Harriet (Low) Hillard, originally of Boston and Salem, Massachusetts, respectively, to America and settled in Brooklyn. From a young age, Mary was reform minded. She became an abolitionist and a teacher of former slaves after the Civil War; she supported the Tuskegee Institute throughout her life. She was one of the founders of the Consumer’s League in New York City and was involved in prison reform. She was an active suffragist for over fifty years. She served as secretary of the Brooklyn Equal Rights Association (BERA), and, in 1869, was a delegate to the first convention of the American Woman Suffrage Association. She was one of the founders of the Brooklyn Woman Suffrage Association, serving as its corresponding secretary for four years and as president for nineteen years. She was member of the New York State Woman Suffrage Party’s Legislative Committee for seven years and its chairwoman from 1898 to 1904. Mary was chosen as a member of a group of NY State suffrage party members to meet with President Theodore Roosevelt to discuss “votes for women.”

Mary and Stephen, who was employed by the maritime insurance firm Johnson and Higgins, were popular in Brooklyn society. They had three daughters, Hilda, Sylvia, and Elma (all who followed in the footsteps of their mother as liberal-minded feminists) and a son, Russell, who died young (age 40), leaving a wife and two daughters.

A busy mother of four, Mary was also an influential civic leader in Brooklyn. She wrote the Forward for *The Directory of Women in Civic, Economic, and Educational Affairs in Brooklyn To-Day, 1929-1930*, and her portrait graces the interior page. Showing her respect for women leaders, she lauded the “foresight and deep-thinking individuals” who worked to make Brooklyn the “mighty city” that it was in that year. Also in this directory, Mary authored an article,

“When Suffrage Came to Brooklyn.” She chronicled the history of the women’s suffrage movement, tracing its genesis from the Fifteenth Amendment. She put forth the tenets of BERA, describing its mission to “promote the legal, industrial, and political rights of all American citizens, especially suffrage, without distinction of race, or sex” (Gay, 2009).

As a summer resident in Bolton, Mary continued her fervent women’s rights advocacy. She was a leading voice in encouraging female taxpayers to participate in school district funding decisions and distributed flyers on this issue in Warren County in 1906. She went on to be a founding member of the NY State League of Women Voters following the ratification of the Nineteenth Amendment in 1920. Her stature as a prominent women’s rights leader was celebrated in 1931 when her name was included on the honor roll of suffrage leaders erected at the New York State Capitol building in Albany.

Mary continued to spend her summers at the Quarterdeck on Northwest Bay until her later years, fighting for the protection of the many thousands of acres she and her beloved husband had amassed between 1898 and 1908. Wife, mother, reformer, and conservationist, she lived to the age of 99, passing away at her Winter Park, Florida home. With her strong attachment to the summer place she so loved and cared for, Mary would forever leave her mark on Lake George.

Early Years on Northwest Bay

When the Loines family came to Lake George in 1895, the lay of the land around the Lake looked much different than it does today. The shoreline featured large meadows and open vistas, interspersed with apple orchards and old rambling farms. All in all, it was quite primitive, pure, and just the kind of unspoiled summer wilderness environment the cultured and well-educated Mary and Stephen had in mind for their family. Four miles north of Bolton on Northwest

Bay, they purchased land and, over the next decade, built three dwellings: a sprawling house which they named “Quarterdeck” (built in 1899), a more modest two-story dwelling called “Fo’c’sle” (built in 1904 on the foundation of the former Walker Farm), and the whimsical “Crow’s Nest” (built in 1908) which was equipped with a telescope for the astronomy-lovers in the scientifically-minded family, especially father Stephen and daughter Elma (Rogal, 2006a). With their intellectual and refined tastes, the Loines family filled their summer home with books—which were their preferred mode of enjoyment along with the seasonal recreation that the blue waters of Lake George had to offer.

A stark departure from the Loines’ urban life in Brooklyn, and altogether different from their other seasonal homes in Martha’s Vineyard and Nantucket (and later, Winter Park, Florida), their summer getaway in Northwest Bay became their beloved annual tradition for generations. The rhythm of days and nights spent in their magnificent lakeside compound engendered a profound sense of awe and wonder in all of them, along with a genuine appreciation for the land and the shoreline that was theirs to care for and to honor. These were centered people, Quaker and Unitarian in their religious grounding, aware of their immense guardianship at Lake George, and philosophical in their approach to their way of life there. This sense of responsibility would flow through Mary and Stephen and on down to all their children—Russell, Hilda, Sylvia, and Elma.

Russell Loines, the eldest, was a Harvard-educated lawyer who specialized in marine law. He loved literature, learning, and writing poetry. He fell in love with Katharine Conger, a neighbor in Bolton, proposing to her on the shores of the Lake. They had two daughters, Barbara and Margaret (also called Margot). A bout with malaria as a young adult left him with fragile health. He enjoyed a successful career, though, which, sadly was cut short when he fell ill with pneumonia and died in 1922 at age 40. Sister Elma and several of Russell’s closest friends collaborated on a book in tribute to him (Loines, 1927).

Hilda, the eldest daughter, was a Bryn Mawr College graduate and renowned horticulturist. She was a founder of the Brooklyn Botanical Gardens and made important contributions to the field of botany. She was a sought-after lecturer. She became a close confidante of John Apperson, as did her mother and her sister Sylvia, supporting his conservation efforts and his plans for the Lake George Shore Association. She and “Appy” had a lively correspondence in which she referred to herself as his “first lieutenant”. In a letter from 1921, Hilda writes with concern to him of a petition by some of the neighbors encouraging the construction of a road from Bolton to Ticonderoga, saying she “hoped the road question will be satisfactorily settled and the petition withdrawn so that we will not be continually vexed by it,” and commenting “My brother wrote us to give no definite reply about a right of way without consulting him and his lawyer, but simply to say we would take the matter under consideration” (Brown, 2013).

After Russell’s untimely death in 1922, Mary relied even more greatly on Apperson for advice and intervention in pushing for her land donation to the State to re-route what would become ‘9N’ away from the Lake in order to prevent deleterious effects to the shoreline and water quality. The ‘Age of the Automobile’ was about to collide with mounting conservation efforts—at a time when women environmentalists were eager to use the power and influence of their newly-earned franchise.

Hilda was also instrumental in influencing other like-minded women of the New York City area who summered in Lake George to join in the advocacy of the Lake, its shoreline, and water quality. One of the most notable women to take a leadership role in this fight was Ethel Dreier, mother of Ted Dreier, Apperson’s fellow General Electric engineer (and later husband of Russell’s daughter Barbara). Mrs. Dreier was President of the New York City Women’s Club and took up the mantle many miles south to advocate for environmental conservation in the northern part of the state.

Sylvia, the middle daughter, was a sports enthusiast, eagerly enjoying Lake George in all seasons—boating, hiking, camping, skiing, and skate-sailing—often in the company of her nieces, Barbara and Margot, who affectionately called her “Aunt Silly.” She also was a frequent companion of Apperson, who is believed to have proposed to her in 1923. Her mother Mary, who had relied heavily upon Apperson to advise and intercede for her when she began her quest to donate land to the State to reengineer the planned Route 9N away from the Lake George shoreline and over Tongue Mountain, was believed to have been in favor of the rumored romance and engagement between John and Sylvia. Sylvia was herself an ardent conservationist of the Lake she so loved. She enthusiastically joined Appy in fighting against a proposed amusement park in Basin Bay, one among a number of his serious legal and environmental battles to save the Lake.

The Apperson-Loines nuptials were not to be, however. In 1928, Sylvia wed William Dalton, another Apperson friend and fellow GE engineer, of Scotia, recently widowed and the father of five teenage boys. This union led to the immersion of the Daltons into the Loines’ summer paradise. While Sylvia was a devoted stepmother to William’s five sons, the energy of the large brood and their constant entourage of friends and love interests changed the quiet character of the place, and tension resulted.

William Dalton was inclined to build and develop on the site to accommodate more friends and guests with even more fun-filled pursuits, but this did not sit well with his friend Apperson, who considered the Dalton’s raucous and indulgent summer pursuits and planned enhancements to be potentially threatening to the land, shoreline, and Lake. The Dalton family had owned a prosperous lumberyard in Albany since the early 1800’s, and their perspectives on clear-cutting, tree removal, and construction were philosophically opposed to that of Apperson—and the rest of the Loines family. The halcyon years of fun and frolic at the Lake were to come to a point of conflict and fracture over these competing

mindsets. The once rosy relationship between Mary and Apperson, and Sylvia and Apperson, soured as the blended family navigated their new relationships.

The youngest Loines daughter Elma was of the same accomplished and smart stock as her two older sisters and her mother. A Bryn Mawr College graduate like Hilda, she was a talented writer and poet. It was she who coordinated the compilation and publishing of the book about her brother Russell after his death. Elma was also a visionary musician, founding the Master School of Music in Brooklyn, which became Julliard School of Music. As the only surviving Loines by the early 1980's, Elma was the one who donated the remaining family lands to The Nature Conservancy, spearheading the movement to move them into an eternally protected trust.

The Loines Family, John Apperson, and Lake Conservation

The Loines family owned 2,400 acres, including two miles of Lake George shoreline, in the Northwest Bay inlet for almost 100 years, starting in 1895. Like John Apperson and his GE engineer buddy Ted Dreier, and “Millionaire’s Row” magnates William Bixby and George Foster Peabody, Mary Loines was deeply committed to the preservation of Lake George and its forest preserve. The sentiment that had led to the creation of the Lake George Association in 1885 and the state legislation authorizing the “forever wild” provision of the New York State Constitution in 1894 was evidence of a growing public appreciation for the pristine wilderness and dangers to it by humans and their drive for progress in the modern era. This arena also attracted a new segment of citizen voters—women. They had become enfranchised in New York State in 1917 and in the United States in 1920—and their power and influence in matters of reform, including the environment, would only increase as the 20th century rolled on.

Certainly, there was no one who fought harder for Lake George conservation than the remarkable John Apperson. He rallied friends, GE co-workers, neighbors in Schenectady and Lake George to assist him in his grand cause. Organizing working weekends to rip-rap the shoreline with large rocks to prevent erosion, speaking vociferously to local and state officials about the damaging effects of development around the Lake, and tirelessly working to influence legislation, Apperson was a fierce advocate for the Lake. He earned many allies, and he earned some foes. His passion for his cause was paramount in his interaction within his circle of associates, and relations often became complicated. Throughout her years at Northwest Bay, Mary Loines was firmly and philosophically allied with the precepts of Apperson's vision for the conservation of Lake George, and she enlisted him often as she herself made bold moves to contribute to preservation (Rogal, 2006b).

Mary Loines, along with Dreier, Bixby, and Peabody, also joined Apperson in advocating for the creation of a Lake George Park to preserve the wilderness, end clear-cutting by lumber companies and loggers, and stop the floating of logs down the Narrows to Northwest Bay. They had a keen sense of concern about the Northwest Bay area as a target for development. Mary, vigilantly followed the rumors about the proposed state highway to be built along the lakeside from Lake George Village, to Hague, and on to Ticonderoga. She feared the idyllic life at the Quarterdeck compound would potentially be threatened, and she decided to push as much land on the Tongue Mountain peninsula, including her own family's holdings, into state hands for future protection.

Apperson had long been voicing his concerns about over-development and the building of structures that were incongruous to the balance of environment and human occupation on the Lake. Many dramas, controversies, and conflicts ensued during the early decades of the 20th century over the building of new homes and camps for summer residents which were at odds with the call for

preservation of the land and water of Lake George (Brown, unpublished manuscript).

The Route 9N Controversy

In 1923, Robert Moses, a New York State Commissioner known for playing hardball in wielding immense power over the state parks' program, took an eager interest in the Tongue Mountain Parkway project. He quickly became a thorn in the sides of John Apperson and Mary Loines. The highway project was to be a major advancement in north-south transportation through the Lake George region, which certainly would be an economic boon and encourage tourism—albeit with some downsides, in the opinion of the preservation-minded Apperson-Loines coalition. The road, State Route 9N, was originally to be constructed by carving out land along the lakeside on a route that had once been an old Native American trail.

Apperson and Loines wanted the highway to be built away from the Lake so as to prevent damage to the shoreline and potential hazards to the water quality. Apperson, savvy in character, concocted what he hoped would be a winning strategy, going right to the top of the New York State government to make his point. He invited Governor Al Smith to travel north for a trip to view Lake George's scenic beauty, organizing a motorcade for him and Highway Commissioner Colonel Fred Green from the Fort William Henry Hotel in Lake George Village to Bolton, followed by a boat ride through the Narrows with William Bixby. He succeeded in convincing the Governor and the Highway Commissioner that it was best to re-route the proposed highway away from the Lake and further up on Tongue Mountain (on lands donated by Mary Loines) in order to protect the current and future health of the Lake and adjacent forest preserve (Gates, 2016).

Robert Moses was unhappy about his plans being circumvented, however. While giving lip service to the altered construction route,

he tried to push forward his own agenda, causing great consternation to Mary—and her children—who worried about the stress the political fight was placing on their aging mother.

On August 29, 1923, Moses wrote to Mary Loines about the proposed project and her donation of land. He thanked her for the “fifteen acres” on the Tongue Mountain peninsula and reiterated his agreement for the road to be built “somewhere near the present military road.” He wrote it is “not practical to have a road around the front of Tongue Mountain,” and “not desirable to have a bridge across the Loines’ property across the creek at the end of Northwest Bay.” He went on to say Col. Green suggested a two-mile scenic road over Tongue Mountain with panoramic views, a gravel road, and foot paths. He mentioned George Foster Peabody’s gift of lands for the project as well. He stated his support for state parks and conservation. He also announced the Governor’s support for the new Route 9N plan. While the letter seemed to have indicated his willingness to accept the changes, Moses’ tone was likely masking a fundamental opposition to altering his original proposal. Mary Loines would make sure that Moses kept to the precise terms of the land grant—a fight that would take its toll on her, and that would infuriate her daughters and Apperson. Moses was vocal in his opinion that both William Bixby and Mary Loines were obstructionists.

Construction on Route 9N began in 1926. Mary and her daughters Hilda, Sylvia, and Elma paid close attention to the progress of the project, seeking a delicate balance between their love for their summer paradise and their mission to preserve and protect the Tongue Mountain peninsula and lake shoreline that they had for so long been stewards. Mary especially, the woman who had over her lifetime been a fighter for good causes—abolition, reform, women’s suffrage, and the preservation of her beloved Lake George—remained a formidable figure even in her later years. And, in the spirit of their mother, the Loines’ daughters never lost sight of their principal role in using their land for the highest and best purpose.

Protective as always of her mother, eldest daughter Hilda wrote to Apperson on June 9, 1927: “Use your influence to keep the conservation people from bothering mother this summer. The state road has turned us upside down” (Brown, unpublished manuscript).

Mary and her daughters demonstrated great vision and environmental stewardship at a time when women, newly empowered with the vote, were cutting their teeth on exerting power, leadership, and influence in America. Their tenacious work in gifting their land to the State to assure its ultimate protection was testament to their belief that the mission of a state park system was to protect private owners as well as to offer a haven to the public to recreate and enjoy nature. Hilda, Sylvia, and Elma would live out this call to action instilled in them by their remarkable mother and carry out the legacy for land and water conservation that she designed.

Loines Family Land Donations

Chronology of Land Donations

1916 Mary puts a large number of acres on Tongue Mountain under protection of NY State

1924 Mary donates 15 acres of Lot #127 to NY State for the rerouting of 9N

1965 Hilda, Sylvia, and Elma convey Lots #122 and #127 to the Eastern NY Nature Conservancy

1982 Elma conveys the parcels on her own behalf to The Nature Conservancy.

2000 Stewart Reid and his wife sell 1,307 acres they had purchased in the mid-80s from the Loines to the Lake George Land Conservancy

2004 The Nature Conservancy conveys to the Lake George Land Conservancy Lots #122 and #127

With the eternal preservation of the natural environment on Northwest Bay in mind, Mary made her first move in 1916, putting a large number of acres of her family's property on Tongue Mountain under the protection of NY State. She made her second move in 1924, offering 15 acres of Lot #127 (inclusive of gardens, structures, and tennis courts) to the State for the rerouting of 9N.

In a deed dated November 2, 1965, Hilda, Sylvia, and Elma conveyed two parcels of land (Lots #122 and #127) in the Northwest Bay Tract to the Eastern New York Nature Conservancy for the price of \$1.00. The purpose of this conveyance was to perpetuate the wild beauty of this area and maintain the natural forest and marsh conditions unimpaired and to establish a sanctuary for all forms of native plant, animal, and bird life. The conveyance was made subject to the following conditions:

- There shall be no cutting of trees or shrubs or removal of fallen trees, or other interference with natural processes except as incident to the prevention or repair of shore erosion.
- Camping and picnicking shall not be permitted in view of the serious fire hazard and the difficulty of maintaining sanitary and slightly conditions in keeping with the main objectives.
- No docks or artificial structures shall be erected on the portion of this tract between the Tongue Mountain Road (State Highway 9N) and the Northwest Bay Creek except signs or notices essential to its protection. On that portion of the tract west of said Tongue Mountain Road nature trails may be made and an inconspicuous building in harmony with the surroundings may be erected for educational and scientific purposes.

As the sole surviving sibling, Elma conveyed the parcels on her own behalf to The Nature Conservancy in 1982. A year later, she died. Hilda had died in 1969, Sylvia in 1974.

Stewart Reid and his wife purchased the Quarterdeck and some of the Loines' landholdings on the west side of 9N in the mid-1980's, eventually selling 1,307 acres to the Lake George Land Conservancy in 2000. It includes the nature trail system now known as the Pole Hill Preserve.

On June 7, 2004, The Nature Conservancy conveyed to the Lake George Land Conservancy (LGLC) Lots #122 and #127, formerly the property of Mary H. Loines in the so-called Northwest Bay Tract. The transaction was completed for the sum of \$1.00. The conveyance was subject to any and all covenants, conditions, restrictions, easements, and rights-of-way of record affecting said premises. Additionally, no bridge was to be constructed over the Northwest Bay inlet. Furthermore, the conveyance of the land was made subject to the express condition and limitation that the premises conveyed shall forever be held as nature preserve for scientific, educational, and aesthetic purposes, and shall be kept entirely in their natural state, excepting only such fences, foot trails, improvements, and property maintenance activities as may be appropriate to effectuate the foregoing purposes without impacting the essential natural character of the premises (Deed 2004).

The Loines Preserve Management Plan was put into place in 2004 under the direction of the LGLC, whose mission is "to preserve the world-renowned water quality of Lake George and the rare plants and animals within the Lake's 150,000-acre watershed by permanently protecting natural lands through conservation easement and fee acquisition. The marker reads: "This 37-acre Preserve was given to The Nature Conservancy in 1965 by Hilda and Elma Loines and Sylvia Loines Dalton. After 40 years of stewardship, The Nature Conservancy transferred the Preserve to the Lake George Land Conservancy in 2004."

The same three conditions outlined in the 1965 conveyance from the Loines family to The Nature Conservancy still stand: no cutting of trees or shrubs; no camping or picnicking, and no building of docks

or artificial structures. Likewise, the original deed restriction—no building of a bridge over Northwest Bay Inlet—is enforced. The comprehensive Management Plan also includes recommendations regarding educational, scientific, and recreational uses.

The vast protected area included in the Loines Preserve was augmented and strengthened in 2017 with the LGLC’s purchase of a 159-acre adjacent parcel, including Wing Pond, from Clarence Linder. Linder, whose family were summer residents of Northwest Bay starting in the 1950’s with their rental of Fo’cs’le, was a longtime friend of the Loines family and was predisposed to contribute to the spirit of preservation of the beautiful landscape both families had enjoyed over many decades. The parcel was mostly undeveloped in the 20th century as it was farmland. It was the final piece of the puzzle, so to speak, in sealing all the Loines’ landholdings for future protection. Wing Pond, adjacent to 43 acres of beech, maple, and pine forest purchased by the LGLC in 2001 and 1,307 acres bought in 2000 (the largest acquisition made to that date by the LGLC), are now part of what is called the “Pole Hill Preserve Nature Trail” (Hall, 2017).

Anthony F. Hall, eloquently sums up the great significance of this protected tract of land on the shores of the “Queen of American Lakes”:

No land conservation effort on Lake George’s west shore has contributed more to the preservation of the Lake’s water quality than the acquisition of Loines Properties by New York and the land conservancies over the past one hundred years... Northwest Bay Brook is alive with herons, mergansers and beavers thanks, in part, to the Loines sisters’ donations of land in the 1960’s.... In fact with the conservation of Wing Pond and the adjacent 40 acre parcel, a continuous wildlife corridor extends along Northwest Bay and westward into the Adirondacks.... The woodlands that Stephen and Mary Loines purchased for 75 cents an acre are now worth hundreds,

perhaps thousands, of dollars per acre. We are all beneficiaries of that wise investment (Hall, 2017).

The Loines Legacy

The foresight of Mary Hillard Loines and her daughters Hilda, Sylvia, and Elma to place their family's landholdings into the hands of NY State and nature conservancies to protect it and to assure that generations of new families would love, and learn from it, was a gift. It was a present to the future—and to those of us who revere Lake George and its 32-miles of blue waters and awe-inspiring landscape. As true women of the modern era, they understood the inherent tension between development and the environment, and they sought to do their part in taking steps to demonstrate that conservation was a responsibility for those who lived on the Lake and enjoyed its immense beauty.

Each of the Loines' women was a distinguished individual: Mary—the suffragist, abolitionist, reformer, and conservationist; Hilda—the horticulturist and activist; Sylvia—the sportswoman and ally of Apperson; and Elma—the musician and writer. What they all had in common was their passion for the Quarterdeck compound on Northwest Bay, the Tongue Mountain peninsula, the Lake George shoreline, and the forest preserve adjacent to it. They carried their love of the Lake deep inside them for all the years of their lives.

With the environmental and artistic majesty of Lake George now under threat in the 21st century, the stewardship of the Loines' women stands as a shining example of how much of an impact citizens and residents can have in saving our natural wonders. Exerting their power and influence as women of the modern era, they parlayed their intellect, wisdom, and advocacy all the way to the top levels of the local and state governments in order to protect the water and forest preserve of Lake George.

Landowners around Lake George today bear a serious responsibility for the parcels they inhabit and enjoy. It is incumbent upon them to be well-versed in town codes and the regulations of the Adirondack Park Agency and the Lake George Park Commission. These codes and regulations, when enforced, ensure that development will not adversely damage the watershed that protects Lake George. Knowing and following the rules is a minimum duty of those who call Lake George “home” now so that it will be our paradise for years to come. Maintaining the investment of time, heart, and spirit made by the Loines family—along with the intrepid John Apperson and his many allies—is a responsibility that lives on today.

What would Mary, Hilda, Sylvia, and Elma do—if they were alive today—to assure the health and sustainability of our beloved Lake George? We have much to learn from the example they set one hundred years ago as we manage the challenges of saving our Lake in the current century. Their far-reaching influence and vision have left a mark on the greater Lake George region. A drive along 9N, a boat ride in Northwest Bay, a glimpse of the wondrous Quarterdeck estate, or a hike on the Pole Hill Preserve Nature Trails are all living reminders of the love the women of the Loines family had for our Lake. May our conservation efforts carry on what these remarkable ladies achieved a century ago.

Chapter Six

Frank Leonbruno Island Ranger



Original watercolor by Tom Ryan, Glen Island

“The key word is luck. That’s the story of my life,” Frank Leonbruno once said, adding that he’d frequently found himself in the right place at the right time. But it was not only Frank who was lucky. The people who knew him felt that they were the lucky ones for having had him in their lives. Frank left his mark on so many individuals—the boys in his scout troop, the campers on the Lake George islands, his colleagues at work, the towns people of Bolton and his countless friends. Frank also left his mark on Lake George, working tirelessly during his four-decade career with New York State’s Department of Environmental Conservation (DEC) to preserve this special place for generations to come. And even after he retired, he continued his advocacy for Lake George, working with others on many projects to protect the Lake and its islands.

Civilian Conservation Corps

Frank arrived in Bolton from Whitehall in 1935 to begin his service with the Civilian Conservation Corps (CCC). The camp was located along Route 9N, just south of where the road begins its winding ascent over Tongue Mountain. Bolton Town Historian Ted Caldwell, who knew Frank well, said that Frank admitted that he'd been living on the edge of poverty and running with a tough crowd before signing up with the CCC. His first assignments were gypsy moth control and wandering the forests looking for trees diseased from blister rust, two tasks that he found boring. "Finally he found his niche and moved to the kitchen, where he served as first cook, second cook, and finally mess sergeant," Caldwell wrote in his history of the CCC camp. Frank remained with the CCC until 1941, overseeing the closure and dismantling of the Bolton camp at the end.

But this was only the start of Frank's long career of service. After completing his work for the CCC, he was hired as a laborer and campsite caretaker for the DEC, which at that time was called the New York State Conservation Department. He worked for the DEC on Lake George for the next forty years, serving as a forest ranger from 1944-1954, officer in charge of the Lake's state-owned islands from 1954-1963 and general park foreman from 1963-1973. In 1973, he was appointed supervisor of Lake George operations, a position he held until his retirement in 1983.

Island Ranger

In his 1998 book, *Lake George Reflections*, Frank examines the State's increasing involvement in managing Lake George's public lands over the past century. For this chapter, I have used his extensive research to paint a picture of that evolution. In his book, Frank also shares stories about the islands and the campers. He tells us the history of specific islands as well as many personal tales about his interactions with the people he met on the Lake over the years. What comes through loud and clear in every chapter of the book is

Frank's intense love for Lake George and his life-long commitment to protecting and preserving it for current and future generations.

During the decades that Frank worked for the DEC, he and his family moved from their home in Bolton to the ranger station on Glen Island in April of each year, arriving shortly after the ice went out and remaining on the island until October. The first year, Frank lived with his wife Betty and their baby daughter Gail in a 12' x 14' tent on a platform, before moving into more permanent quarters the next year. Their daughter Janie was born five years later. Although it wasn't always easy keeping track of toddlers on this small island, Frank said he wouldn't have traded that life for anything.

“While some people might think that living on an island less than .25 acres in size would be very dull,” Frank wrote, “my years on Glen Island proved to be anything but that. I had the chance to observe nature in a way I never could have done at my home on the mainland.” Each spring, he and his family delighted in watching the large- and small-mouth bass spawning and the turtles laying their eggs in the same place as the year before.

Throughout the season, campers came to Glen Island, with its post office and commissary, for their mail and provisions. And many of them stopped by to say hello to Frank, whom they knew from their camping stays in prior years. As Elsa Steinback, author and artist from Bolton Landing and Shelving Rock, wrote in her foreword to Frank's book, “Perhaps Frank's role can best be described as that of host, devoted to the care of his beloved islands and to the well-being of their many occupants... Frank took the time to get to know the campers. Over the years, he developed lifelong friendships and enjoyed watching more than one generation of several families gratefully appreciate his exceptionally competent oversight of their favorite vacation spots.”

Frank's daughter Janie (Weller) remembers fondly her years growing up on Glen Island. “I spent every summer out there from the time I was an infant until I was 14, when I started working summers in Bolton and staying with my grandmother,” she said.

Until she and her sister Gail learned to swim, they would wear life jackets all day, she said. During the months when there was school, Frank would drive them to Green Island in the boat, dropping them off and picking up the workers to bring them to Glen Island. At the end of the day, he brought the workers back to Green Island and picked up his daughters.

Janie remembers making close friends with the children of many of the campers who returned each year. “It was really a great life,” she said. “Gail and I were also very fortunate to be able to spend so much time with our father.” They often accompanied him on his trips out on the Lake while their mother stayed on Glen Island, where she served as the postmistress. “Dad taught us so much, such as what berries we could eat, particularly the blueberries. And he also taught us to watch out for poison ivy. I think I’m immune to it to this day because I was near it so much! We learned about which fish were good for eating and which weren’t. We always had a lot of perch, and Mom would make a fish fry when we had caught enough.”

Scout Leader

Bill Gates, retired teacher, Lake George steamboat captain and author of 11 local history books, grew up in Bolton Landing. He first got to know Frank through Janie, who was in his class at Bolton Central School. “Frank was absolutely wonderful with the youth in town,” Bill said. “He would flood his front lawn every winter and make a skating rink for us.” Frank was also Bill’s Explorer Scout leader. “He instilled in us a focus on conservation—for the Lake, the mountains and nature,” he said. Frank and his teenage charges would head out to Uncas Island in small outboards in the spring, as soon as the ice went out. They would take their gear and provisions and set up camp for three or four usually very frigid days. Frank taught them about the Lake, showed them how to identify animal tracks and imparted to them skills they would need to survive in the wilderness. “With his background as a CCC camp guy, Frank’s skills and experience went far beyond those of any normal scout leader,” Bill said. He also remembers Frank as a regular early-

morning patron in the Bill Gates Diner (owned by Bill's parents) during the off-season. When it was mainly just locals in the diner, the talk generally turned to politics, Bill recalled. And Frank was at the center of those discussions, often talking about conservation and the actions that needed to be taken to protect the Lake.

Talk to nearly anyone in Bolton today who knew Frank, and they will tell you that he was a true gentleman, a man with tremendous integrity, respected by all. And they will also tell you that he had a remarkable ability to navigate through the complexities of politics and bureaucracy in order to accomplish what he felt needed to get done. One good example of this was his commitment to protecting his beloved islands from erosion, a commitment he shared with John Apperson.

Conservationist

When Frank first encountered John Apperson, he was somewhat apprehensive. After all, Apperson was an environmental activist, focused on getting the State to do more to protect the Lake and its islands—and Frank, as a DEC employee, represented the state's operations and policies. According to one long-time Bolton resident, Frank would see Apperson coming up the Lake in his boat named *Art.7-Sec.7* (the original designation of the “forever wild” amendment to the state constitution) and think to himself, “Oh, no. What does he want? He's going to give me trouble about something.”

It didn't take long, however, for Frank to understand that Apperson's efforts to protect the islands was indeed the right approach, and he himself took up the cause. They did this through rip-rapping, which entails building a barrier of jagged rocks along a shoreline to prevent erosion from wave action. Since islands do not have loose, jagged rocks anywhere close by, these needed to be brought in from other locations. Today, the State frowns on moving rocks within the Lake George Park, which means that getting permission to rip-rap any of the islands has become exceedingly difficult. When a group in Bolton applied recently for a permit to

rip-rap Dome Island, they were told that they could only do 12 yards. Even though Dome Island (see chapter on Apperson) has been rip-rapped in the past, the ice push generally wreaks havoc with the rocks, and they need to be put back in place each spring. But today it is even difficult to get permission to retrieve the rocks from the bottom of the Lake around an island and rebuild the riprap.

Once Frank understood that he and Apperson were on the same page in terms of protecting the Lake and that they could work together toward a common purpose, he looked forward to seeing Apperson's boat coming up the Lake. For many years, Frank assigned a crew to work full-time each summer on rip-rapping. Curt Truax, who worked for Frank for many years on various tasks such as putting in and taking out island docks, building privies and maintaining the state's boats, was sometimes part of that crew. He remembers that they would drive to areas on the mainland where rocks were being blasted, load up the ones of the appropriate size and bring them back to Bolton, where they loaded them onto a barge for transport to the islands. Rip-rapping might be frowned upon by the State, but his men were simply 'repairing the shoreline.' And who could be against that?

Working the System

Frank was a master at knowing how to work within the system to get things done—sometimes this meant using the right terminology and sometimes it meant finding ways to keep the decision-makers happy. From 1941-1983, he ensured that politicians and other special guests could come to Lake George and enjoy a camping experience without having to schlep gear and supplies out to an island campsite. Frank reserved Hermit Island solely for that purpose. DEC commissioners, legislators, judges and even Governor Dewey's sons took advantage of Frank's island hospitality.

Curt Truax recalled that the crew would set up two large tents on platforms on Hermit each spring. The kitchen tent had a gas refrigerator and stove and even a sink with its own water supply

pumped in. The sleeping tent had rollaway beds and linens upon request. Lawn chairs were set up outside. Throughout the season, Frank would keep close watch over the island to ensure that no intruders tried to settle in when the campsite was unoccupied. “Dignitaries the world over enjoy perks, and those visiting Lake George were no exception,” Frank wrote in *Lake George Reflections*. “This was particularly true when the dignitaries were in a position of being able to benefit Lake George, either through political or business channels. Many decisions affecting Lake George were made on this special island. If trees could talk, I’m sure that the words of Hermit would have some interesting stories to relate.”

Town Supervisor

Frank not only knew how to keep politicians happy, but also he became an astute politician himself. Despite being a life-long Democrat in an overwhelmingly Republican stronghold, he was elected as a Town Councilman and then Bolton Town Supervisor, serving in that role from 1978-1987. “Bolton is a small town. Everyone knew Frank, and they trusted him,” Bill Gates said. Voters cast their ballots for him because of his strong values, his ability to get things done and his unwavering commitment to recognizing and serving the needs of their Town and the Lake. Party affiliation was simply less important than electing the right man to the job.

Balancing Preservation and Recreation

Lake George has close to 200 islands, some of which are private, but the vast majority of which are owned by the State. The number of islands has varied over time and will continue to change due to erosion. High water levels, rain, ice push and waves from heavy winds and boat traffic have washed away the soil and vegetation on many islands. In the 20th century alone, according to Frank’s book. Willow, Manhattan, Ranger Island Shoal, Arrow and several unnamed islands were lost to erosion. In other cases, erosion caused land to be split off from the mainland, creating a new island, or split some islands in two. “Regardless of whether they number 172, 176

or 178, each and every one of the Lake George islands is special to me as well as to thousands of other people,” Frank wrote. “And I sincerely hope that action will be taken before one single island more is lost to erosion.”

“(Frank) stresses that an equilibrium must be attained between the legitimate requirements of recreational users and the need to preserve the islands,” Elsa Steinback wrote in her foreword to *Lake George Reflections*. “This was his constant goal throughout his years of public service, a goal in which he was often frustrated but which he never abandoned. It is to be hoped that in the future, the delicate but so necessary balance between man and nature will continue to be in the hands of someone as caring as Frank Leonbruno!”

During his career with DEC, Frank saw, and oversaw, tremendous changes—not only in the state’s management of the islands but also in the nature of the campers. Today, the State is responsible for docks, fireplaces, picnic tables and outhouse facilities on 44 camping islands and eight islands that are designated for day use only. Long before Frank started his career with the DEC, campers could stay on the islands for as long as they wanted. Some—for instance Colonel William Mann on Waltonian Island—even built homes on state land, which they were later forced to remove. Many others established semi-permanent quarters on ‘their’ islands, building tent platforms and remaining there for the entire summer. By the time that Frank began his career with the DEC, campers were limited to stays of just six weeks, though there was no charge for their stay.

Post World War II Surge

In the years after World War II, with gas no longer rationed and veterans having returned home from their service, camping on Lake George enjoyed a surge in popularity. In response, the State appropriated funds for campsite development and renovation of existing facilities. Starting in 1952, campers were charged 50 cents per night or \$3 per week, and by the late 1950s, camping permits

were issued for a maximum of four weeks. As the number of campers grew, the concept of allowing them to bury their trash on the islands was no longer viable, and the State started picking up garbage from the islands. The State also began upgrading the sanitary facilities in order to protect the islands and the Lake. They installed tank privies in locations where pit privies or composting toilets were not suitable due to the thin layer of soil or because the ground was clay or rock.

As the years passed, campers' stays grew shorter as lifestyles changed. The construction of the interstate highway system in the 1950s, and later, relatively low-cost airline fares made it easier for families to travel further afield on vacation. So the State began limiting camping permits to two weeks. By the end of Frank's tenure in 1983, the average camper stayed for a few days rather than weeks, a trend that was of growing concern to Frank. He felt that campers who stayed longer generally showed more respect for the Lake and felt a sense of stewardship for 'their' islands.

"The Lake George islands and all public lands in the Adirondack Park are protected as forever wild by the New York State Constitution," Peter A.A. Berle, former DEC Commissioner wrote in *Lake George Reflections*. "As such, they will forever enrich the lives of those who celebrate natural beauty. But even wild lands require loving stewardship. Frank Leonbruno provided that for over four decades. His work enriched the lives of thousands of folk, who learned to share his view that Lake George is one of the most beautiful bodies of water on earth."

Herb Scott worked as a ranger with Frank from 1964-1984. "Frank was well-liked," Herb said. "He loved the islands and was always looking for ways to make improvements." Some of these included building lean-tos on Speaker Heck Island and Black Mountain Point as well as building tent platforms in areas that were marshy." Herb, as well as Frank's long-time friend Dusty Rhodes, remembered Frank as a hard worker who expected the same from others. He was very good natured but had no patience with anyone who wasn't

doing their job. “When Frank put his hands in his pockets, jingled the coins and hitched up his pants, you knew that he was angry,” Dusty said.

Lisa V. Earl, the ranger who currently oversees Lake George operations for DEC from Glen Island, said that the state’s financial commitment to maintaining the public lands has waned considerably in recent times. Money for staffing and materials has been reduced. Just the routine maintenance such as putting in and taking out docks for all the campsites each year keeps the limited staff busy. They also often have to pick up garbage from sites, despite the fact that campers are supposed to carry out what they carry in. Other important maintenance tasks, such as repairing fireplaces or even fixing outhouse roofs, are neglected due to the lack of resources. As part of its Campsite Restoration Project, the State has put some protective measures in place, such as declaring certain sites off limits for a few years at a time to allow the compacted soil and the trees to rejuvenate. These are then re-opened, and others are closed. Although this helps somewhat, Lisa feels that the State needs to do much more to adequately maintain the islands and be a good steward of the public lands. Despite the challenges, she said she is very proud to be carrying on Frank’s important work of protecting and preserving the islands.

Frank’s Legacy

Mark Frost, founder, publisher and editor of *The Chronicle Newspaper* in Glens Falls, remembers Frank as “a significant—and underappreciated—force for Lake George protection and recreation. He knew he rubbed some higher ups the wrong way, but he was so single-minded, determined and genuine in his commitment to Lake George that he was effective in getting what he wanted, whether they liked him or not.”

Frank passed away in 2003, but his legacy is still very much alive. The DEC administrative headquarters on Green Island, built during his tenure, was renamed in his honor when he retired from DEC in 1983. Frank served for seven years on the Board of Directors of the

Lake George Association (LGA), a lake-protection organization founded in 1885 that is today stronger and more active than ever. The LGA administers an Islands Restoration Fund, originally funded with *Lake George Reflections* royalties donated by Frank and a match from another donor. One of the islands that was of great concern to Frank was Rush Island, which he felt was in dire need of protection lest it disappear. Today, a group of private citizens has taken up the cause and is restoring and rebuilding Rush Island. There is still much work to be done to preserve and protect Frank's beloved islands. We all have a role to play in being stewards of the Lake.

The author wishes to thank the following people for sharing their memories of Frank and providing other information for this chapter: Janie Weller, Henry Caldwell, Ted Caldwell, Lisa V. Earl, Mark Frost, Bill Gates, Dusty Rhodes, Herb Scott, and Curt Truax.

Chapter Seven

Saving the Lake Trout from DDT



Original watercolor by Tom Ryan, Leaping Trout

The heroes of this Chapter are the past scientists of the NY State Conservation Department now the Department of Environmental Conservation (DEC) who won national recognition for their battle against DDT. Their research and writing saved the lake trout in Lake George, as well as fish and birds in NY State and in the Nation from the effects of DDT. DDT is a colorless, tasteless, odorless chemical compound whose insecticidal action was discovered in 1939 by a Swiss scientist. In 1940 it was patented by a Swiss company, J.R.Geigy AG. DDT became one of the most significant and controversial chemicals of the 20th century. It was widely used in World War II to limit the spread of malaria and typhus, thus saving the lives of thousands of US troops. For every man killed in battle, malaria could kill eight.

Even Winston Churchill had this to say about DDT:

We have discovered many preventives against tropical diseases and often against the onslaught of insects of all kinds, from lice to mosquitoes and back again. The excellent DDT powder which had been fully experimented with and found to yield astonishing results will henceforth be used on a great scale by the British forces in Burma and by the American and Australian forces in the Pacific and India in all theatres (Churchill, 1944).

DDT became a symbol of the nation's war industry. The government launched a campaign showing a woman spraying DDT with the caption, "Shoot to kill." WWII erased any dilemmas about the dangers of DDT. After 1945 it was aggressively promoted by both government and industry as an agricultural and household pesticide. The *Saturday Evening Post* ran an article, "How Magic Is DDT" in 1945.



From the Science History Institute

Ads declared "DDT is good for me!" It would take thirty years to ban or restrict its use but only after about 1.3 billion pounds had been sprayed on US crops, lawns, pets and homes.

Rachel Carson raised the alarm on the environmental impacts of DDT in her book, *Silent Spring* (1962). She claimed the DDT not only caused cancer but also threatened wildlife. Her book stimulated public concern and started the environmental movement. The

Environmental Defense Fund (1967) was founded to enact a ban on DDT. The US Food and Drug Administration had an ambivalent attitude. It expressed concern over the possible hazards of DDT as early as 1944 noting that it could kill fish and birds that fed on insects killed by DDT. The US Department of Health reported that DDT was a pervasive ecological problem and was found in many states, in Pacific-run salmon and in penguins in Polar Regions. At the same time the World Health Organization established that the human tolerance level for DDT was 7 parts per million. But no one could have possibly known at that time what, if any, level was 'safe' over the long run (Davis, 1971, p.3). As a result of Carson's book, President Kennedy ordered his Science Advisory Committee to investigate Carson's claims. The Committee vindicated her claims and recommended the phase out of DDT.

Role of the NY State Conservation Department

In the 1950s, lake trout were severely threatened by DDT. The eggs of the lake trout, which had been used extensively as brood stock for other Adirondack lakes, did not reach maturity. From 1944 to 1955 abnormal development caused large numbers of fry (newly hatched fish) to die. In 1956 when the Lake George fish hatchery lost all of the fry from nearly 350,000 eggs removed from lake trout, DDT was suspected as the culprit. Fry were also lost in large numbers between 1957 and 1962 (Dean, 1963-64, p.6).

Starting in 1951 about 10,000 pounds of DDT had been sprayed yearly to control the gypsy moth, mosquitos and biting flies in the Lake George watershed. The planes even sprayed directly on the Lake. The smell and taste of the DDT and kerosene were distinctive. Anglers and fishing guides on Lake George such as Cecil Lamb, the Finkles, et al., suspected that DDT was responsible for the declining numbers of lake trout. Following heavy spraying and rainstorms in 1957, divers found huge quantities of adult lake trout dead on the bottom of Lake George (Leonbruno, 1998, pp.218-219).

Careful studies in the 1960s by the Conservation Department revealed that DDT stopped the reproduction of lake trout in Lake

George and in several other heavily contaminated lakes in the Adirondacks. Although trout eggs contained 3 parts per million of DDT little or no mortality occurred in the egg stage. There are four distinct stages in the lifecycle of lake trout: egg stage, larval stage, fry stage (small fish that feed on plankton) and adult stage (fish that spawn). In the larval stage they feed off the attached yolk sac which contains fat; the yolk sac provides their nutrition, it is their “lunch box”. When this yolk sac almost disappears, the larvae metamorphose into fry or newly hatched fish. The fry, however, were highly sensitive to even small dosages of DDT and were killed at the time of the final absorption of the yolk sac, just when they were ready to feed on their own. At levels of DDT of 3 parts per million in fry, few fry survived and at 5 parts per million, none survived (*Ecological Effects of Pesticides*, 1971).

Conservationist scientists maintained regular pesticide residue checks in upstate waters and recorded findings of DDT residue in fish between 1960 and 1974. George E. Burdick, an aquatic biologist, and his colleagues at the Conservation Department did the early research which illuminated the mechanisms of DDT poisoning. They showed that the reduced hatch of eggs of lake trout in Lake George was due to DDT. In the maturation of eggs, the female draws on fat reserves containing DDT which is transferred to the eggs and acts on the embryo as it metabolizes the source of food in the yolk sac (Burdick, et al., 1964, pp.127-135). The Conservation Department showed that the DDT stored in the fat of yolk sac, when utilized by the fry was toxic enough to kill.

The research of the Conservation Department on the effect of pollutants on fish life was stepped up in part by Governor Rockefeller’s water pollution abatement program (Burdick, 1965, p.15). Concentrations in excess of 350 parts per million were found in the eggs and nearly 850 parts per million in the fatty tissue of the mature lake trout (Dean, 1963-64, p.7). Studies also revealed that the fish the trout preyed upon for food, cisco and lake whitefish, also had very high concentrations of DDT. These studies determined not only why the fry died but also why DDT eventually killed even the

adult fish. DDT is a bio-accumulator—a relatively small dosage applied to land or water is retained in each step of the food chain. While the water may have had only 0.35 parts per billion of DDT, algae gathered up to 1000 times more, plankton even more and lake trout still more. The final concentrations were thus as much as 350 parts per million (Leonbruno, 1998, p.219).

Burdick's findings were immediately picked up by the local press such as the *New York Times* and the *Conservationist*. The *New York Times* ran the article, "Wood, Field and Stream: Poisoning of Lake George Trout Laid to Pesticides Applied to Watersheds", May 13, 1964. It declared, "If a clear-cut example is needed of what can happen when DDT is heavily applied to watershed areas, Lake George is a good one." It opined that "Perhaps future generations will be aghast at the careless and casual ways this generation uses biocides without full investigation of their effects on life forms other than the insects they are designed to destroy." The Conservation Department banned the use of DDT in the Lake George basin in 1963 and on lands under its jurisdiction in 1964.

Unfortunately, the problem did not disappear with the ban. Virtually no natural lake trout reproduction occurred for almost ten years. The DDT was still in the sediments and in the food chain, so it took years before DDT broke down and was eliminated. While lake trout were stocked from strains that did not have high concentrations of DDT, their forage, that is, ciscoes and lake whitefish were not stocked. Glen Island Ranger Leonbruno (see Chapter Six) actually observed hundreds of ciscoes belly up on the surface and on one sandy beach one could actually shovel them up. It took until the 1990s for the cisco population to return to the levels of the 1950s. The forage base was ultimately too small to support the remaining lake trout and the stocked fish and their growth rates suffered for years (Leonbruno, 1998, p.220).

In 1970 the Conservation Department merged with select programs of health, agriculture and markets and became the Department of Environmental Conservation. Aquatic biologists at the newly

merged department continued their research on the long-term effects of DDT on lake trout. By 1974 they determined that the losses of 5-15 percent of the fry during the critical swim-up period were normal. However, they also found that DDT levels in adult female trout were still high with many carrying residues in excess of what the US Food and Drug Administration recommended. They recommended continued monitoring of Lake George (Dean, et al., 1974, pp.188-191).

The State Ban

Despite the ban in the Lake George watershed, it took NY State and the Nation almost another decade to restrict the use of DDT statewide and nationwide. In 1971 the new Department of Environmental Conservation (DEC) banned DDT statewide that is, on private as well as public property. Today the DEC regulates pesticides and is responsible for compliance and enforcement of the Environmental Conservation Law. Pesticides must be registered with the DEC before they are sold, distributed or used. DDT appears in many foods but it was believed that its toxicity to man appeared to be minimized by the fact that the compound does not accumulate in active tissues or organs because it is metabolized, excreted or stored in fat. In the last form it is inactive (unlike in fish) except when starvation or other influences cause mobilization of the fat, with delivery of stored DDT into the blood stream (*The Conservationist*, 1969, p.33).

Nationwide Restrictions

Between 1963 and 1969 no less than four government committees recommended phasing out DDT. During 1964 the US Government held hearings in which the Secretary of Interior Udall gave testimony on the effects of DDT using the research of Burdick of the Conservation Department. Basing his testimony in part on the Lake George evidence, Secretary of Interior Udall, made a plea for tighter regulations at a Senate hearing. He gave extensive examples of the presence of pesticides in fish and wildlife. He declared that:

NY State studies initiated in 1956 have demonstrated conclusively that the failure of lake trout to reproduce in many lakes is caused by DDT. DDT of this magnitude (3 parts per million) have been found in most samples from Lake George and from other lakes in New York.

He provided additional examples of DDT in land-locked salmon, wild black ducks, deer and elk, commercial fish and shellfish. He noted that the high residue levels accumulated and remained throughout the food chain. He concluded by asking, “Can we afford to use these persistent toxic chemicals if we cannot control the movement of their residues after use? From my point of view, the answer is an unequivocal, No” (Udall, 1964). Nevertheless, it took many years for the use of DDT to be restricted in a significant way.

President Johnson signed into law legislation which merely closed a loophole allowing pesticides to be sold **before** being tested. The use of DDT in the US declined in the 1970s from its peak in 1959 due to growing insect resistance and government restrictions. By 1972 nineteen species of mosquitos capable of transmitting malaria were resistant to DDT. The main reason given for the nearly ten-year federal delay in banning DDT was the lack of a federal regulatory body.

With the creation of the Environmental Protection Agency (EPA) in 1970 by President Nixon, five environmental hazards including air and water pollution, solid waste disposal, radiation and pesticides could be regulated. This gave the United States one, independent agency versus 15 units to deal with environmental problems. This was a monumental shift away from the stance of the Department of Agriculture and chemical industry which had promoted the use of DDT and vilified Carson as a “hysterical woman” who would bring all to the brink of starvation. In 1972, ten years after *Silent Spring*, the EPA cancelled most crop uses of DDT although it could still be used, for example, to suppress fleas carrying the bubonic plague or typhus or to suppress rabid bats or the pea leaf weevil or the Douglas fir tussock.

It would take the world even longer to act. The Stockholm Convention on Persistent Organic Pollution (POPs), adopted in 2001, is a global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods and bio-accumulate in ecosystems. It requires countries to eliminate or reduce the release of 30 POPs—the forever chemicals—into the environment. To date 184 countries are parties to the Convention. It bans DDT for all uses except for malaria control until alternatives are developed. The World Health Organization still supports its indoor use in Africa where malaria is a major problem. Ironically, the United States signed the Convention but has not ratified it.

In its day, 2 kilos of DDT, if deployed could have killed 74 million bees. In contrast 10 kilos of the latest insecticide agents known as neonicotinoids can kill 2.5 billion bees. They have been banned in some countries but globally farmers still apply 400,000 tons of these chemicals to crops annually. What we must remember is that nature—insects, flowers, plants, trees, birds, mammals and the Lake are a single system.

Chapter Eight

Institutional Stewards



Original watercolor by Tom Ryan, Jefferson Project Sensor Platform

Lake George is fortunate to have a number of non-governmental organizations and a state agency which act as environmental stewards. Some date back to 1885 while others were created in the 21st century. The Lake George Association (1885), the former Fund for Lake George (1980), the Lake George Park Commission (1988), the Lake George Land Conservancy (1988) and the Lake George Waterkeeper (2002) have either the legislative mandate or the mission to preserve and protect Lake George. Their remit is the entire Lake whereas the Town Stewards (Chapter Nine) are responsible for well- defined geographic areas. This Chapter provides a brief background on each organization’s activities and concludes with person- to- person interviews with their current leaders.

Overview of the Lake George Association

The Lake George Association (LGA) has the unique distinction of being the very first conservation organization in the United States. It was formed in 1885 by 16 fisherman whose mission was to protect the fish. Their first project was to restock the Lake with the species they loved to catch. In its early days, the LGA fought against pollution from farms and steamboats which regularly dumped ash, sewage and garbage in the Lake. It was also a pioneer of boating safety and placed the first navigational markers in 1909. However, it wasn't always consistent in its efforts to protect the Lake as Chapter Four describes. Its President, Colonel Woodbury, sided with the International Paper Company (IPC) in its 15-year fight (1942-1957) to regulate water levels. The LGA and IPC lost that battle and today lake levels are regulated by the Lake George Park Commission, a state agency.

From the 1960s onward, it has undertaken noteworthy efforts to preserve the Lake such as bringing to pass the first ban on phosphate detergents in New York, joining the battle against aquatic invasive species and storm water runoff as well as educating the public about threats to water quality. In 2021 the LGA reinvented itself by taking under its wing both the Fund for Lake George and the Lake George Waterkeeper. For the purposes of clarity this Chapter will first present the recent activities of the LGA prior to the merger in the interview with its former President. This will be followed by separate interviews with the former Executive Director of the Fund for Lake George, now the President of the LGA, and with the Lake George Waterkeeper. The separation is helpful because their activities are both far-reaching and complex.

Walt Lender, Senior Program Executive and former President, LGA

The Fund for Lake George (now merged with the LGA)

The Fund is dedicated to the protection of Lake George and its nine surrounding communities. It implements a science-based approach to protect water quality. It pursues its mission through its support for long-term scientific research such as the Jefferson Project and through its sponsorship of the Lake George Waterkeeper. The Jefferson Project is a collaborative effort of IBM Global Research, Rensselaer Polytechnic Institute and the Fund. It works to understand, anticipate and respond to the pressures of climate change, road salt, invasive species and nutrient loading and storm water runoff as these impact water quality. The Jefferson Project maintains over 50 sensor platforms with more than 500 sensors around the Lake. Among other things, these platforms monitor deep water conditions, water temperature, Ph factors and salt levels. The Jefferson Project uses Deep Thunder, an IBM hyper-local weather forecasting capability, which provides 72 hour forecasts each day. Deep Thunder links precipitation runoff and lake circulation models to predict how road salt moves through the Lake.

Eric Siy, President of the LGA and former Executive Director of the Fund for Lake George

The Lake George Waterkeeper (sponsored by the Fund and now part of the LGA)

The mission of the Lake George Waterkeeper is to defend the natural resources of Lake George and its watershed by promoting compliance with existing laws, supporting scientific research, and upholding sound engineering principles. The Waterkeeper documents changes in water quality across the watershed by monitoring chemical, physical, and biological conditions of the streams that feed the Lake. He also studies underwater changes, including algal growth and other possible indicators of declining ecosystem health. The Waterkeeper's research has helped inform

and guide the development of a number of protection programs including the road salt reduction initiative, the safe septic systems program and the low impact development certification system (should we say more about LID?). Documenting algae found in near-shore areas has helped to identify pollutant sources and has fueled two water quality projects: the Dunhams Bay septic system replacement program and a remedial septic action plan for the Town of Lake George.

Chris Navitsky, the Lake George Waterkeeper

Lake George Land Conservancy

For 33 years the Lake George Land Conservancy (LGLC) has protected the land that protects the Lake, *forever*. It preserves the natural, scenic, historical and recreational resources of the Lake George Park. It does its job by focusing on one of the most cost-effective methods of protecting the Lake: land conservation. It has an active program of land purchases in strategic areas which it then often transfers to New York State. Among its purchases in 2019-2021 are Bradley's Lookout (62 acres), Fairy Brook Corridor (25 acres), Twin Pines (212 acres), Foster Brook (25 acres), Huletts Landing Uplands (112 acres), and Warner Bay Wetland (13 acres). Some of its most strategic recreational purchases include Pinnacle Mt. (transferred to the Town of Bolton), Cat Mt., Thomas Mt. and Anthony's Nose. Chapter Five details its purchases in Northwest Bay from the Loines family. This acquisition is now part of the Poll Hill Pond and Forest Preserve (1300 acres).

Jamie Brown, former Executive Director of the Lake George Land Conservancy

Lake George Park Commission

The Lake George Park was established in 1961 because the Lake and its basin were so distinctive in natural qualities and scenic beauty that it is deserving of special protection. It encompasses 300 square miles. Several studies in the 1980s concluded that the Lake was threatened by overdevelopment, uncontrolled dock and marina expansions and storm water runoff. The NY Legislature decided that it was in the public interest to regulate the use of the Lake in order to preserve its natural beauty and pure water supplies. Consequently, the Legislature established, within the Department of Environmental Conservation, the Lake George Park Commission (LGPC) in 1988 (NY State Environmental Conservation Law, Article 43).

The LGPC is an independent state agency and is guided by the Commissioner of the Department of Environmental Conservation, ex-officio and nine commissioners who are appointed by the Governor from Essex, Warren and Washington counties with the advice and consent of the NY Senate. The mandate of the LGPC under the Environmental Conservation Law, Article 43 is “the preservation and conservation of pure water supplies and other natural resources.” Furthermore, it has the power to study, monitor and inspect for pollution from any source within the Lake George Park. It fulfills its mandate through regulations which promote waste water management, control storm water runoff, provide stream corridor protection, restrict land use, and regulate sewage disposal. It facilitates reasonable public access to the Lake without overcrowding or safety hazards by permitting and registering boats, docks and marinas.

However, it is limited in its ability to carry out its many tasks because it does not receive NY State general fund dollars (tax dollars) and is primarily funded by user fees for boat and dock registrations which comprise 90% of its budget. This weakness has raised the concern of one town steward, Mayor Blais: “My number

one priority is that the Lake George Park Commission should be adequately funded and staffed as it is the proper enforcement body for the Lake” (Chapter Nine).

Dave Wick, Executive Director of the LGPC

Plus 5 Pages

Chapter Nine

Town Stewards



Original watercolor by Tom Ryan of the Lake George Village Court House

This chapter is largely based on interviews with the Mayor of Lake George Village and the Supervisors of the Towns of Bolton, Lake George, and Queensbury. They are the front line protecting the Lake. They have the power and the responsibility to see that town codes are strengthened and enforced to ensure a clean and healthy environment. Collectively, they have undertaken initiatives to preserve the Lake, ranging from septic inspections to reducing road salt to combatting invasives. However, they have to achieve a balance between promoting the local economy and at the same time safeguarding the land and water upon which that economy depends. Here they tell their stories.

Robert Blais, Mayor of Lake George Village

Mayor Blais has the unique distinction of being the longest serving elected mayor in the nation—since 1971 for a total of 50 years. He also has the unique distinction of having survived COVID-19 at the age of 84. While battling the virus, he was fortunate in having a first-class office staff to carry on the day-to-day business of running the Village. The Village has grown and thrived under his leadership. Although he believes in term limits, he sees the advantage of his long tenure. He has seen the Village grow into a major tourist destination, yet a place where respect for the Lake, which is the lifeblood of the community, thrives.

Mayor Blais witnessed some of the most momentous events and some of the most tragic. On the evening of August 23, 1958 Mayor Blais recalls “It was a spectacle never to be seen again in my lifetime...Hundreds of tiny lights from over 200 boats slowly descended upon the southern shore....Thousands lined Beach Road, the rooftops of shoreline motels and restaurants”...all to see Diane Struble become the first woman to swim the entire length of Lake George. Mayor Blais attests, “It was the largest crowd I have ever witnessed in the history of Lake George.” On October 2, 2005 one of the worst inland commercial boat disasters in New York State occurred on Mayor Blais’ watch. The *Ethan Allen* of Shoreline Cruises capsized off Cramer Point, drowning 20 elderly passengers (Blais, 2014, pp.107-108; 163-164).

During his tenure he has dealt with many issues common to all villages. He is proud that the streets are spotless and are dotted with reminders that the drinking water comes from the Lake. The Village is working with the Town of Lake George to ensure the highest water quality by updating the municipal wastewater system. The Village has installed vortex structures at most, if not all, drainage points into the Lake. They reduce trash from going into the Lake and “Keep the Queen Clean.” The Village and Town created the

Westbrook Wetlands at the site of the old Gaslight Village to trap sediment from entering the Lake. By working with other Town Supervisors, a mandatory boat inspection program was initiated and a salt reduction program, equipped with new brining equipment and live-edge plows, was launched.

Mayor Blais's concerns go beyond the Village and go farther than the southern basin. He has a number of important priorities. Number one is that the Lake George Park Commission should be adequately funded and staffed as it is the proper enforcement body for the Lake. It is important that there be one set of regulations throughout the entire nine towns and village with no opting out. Septic inspections should occur every three years and a minimum fee should be charged. He believes the merging of the Lake George Association and the Fund for Lake George is good because it will cut competition for funds and members and reinforce programs. The challenge is to create more public-private partnerships. Above all, public education is necessary. Lastly, there must be a continuous effort to lobby Albany for funding to combat invasives and promote programs to protect the Lake.

Ron Conover, Supervisor of the Town of Bolton

Ron Conover, formerly from central New York, has been the Supervisor of the Town of Bolton since 2009. He met his wife—a Bolton girl—at college. They now live near the Lake on Cotton Point. Concerned about changing water quality, he joined the S.A.V.E. partnership (Stop Aquatic Invasives from Entering Lake George) with other supervisors to stop aquatic invaders via a mandatory boat inspection program “Arrive Clean, Drained and Dry.” Bolton has also taken the first step in terms of town septic regulations for those properties not connected to the town sewer system. Among the recent initiatives Supervisor Conover listed is the septic inspection law upon property transfer which covers the entire Town not just the waterfront properties. In addition, the Town

Board passed a resolution supporting a lake-wide septic inspection program under the aegis of the Lake George Park Commission. The Town sewer treatment plant has been upgraded and uses innovative technologies including bioreactors. The Town now requires the installation of enhanced treatment units (ETUs) when individual septic systems need to be replaced. They have also put in motion new regulations to handle the septic impact of short term rental properties.

In other areas the Town is also making progress particularly in salt reduction. The salt loading (chloride) in the Lake is up 204% since the 1980s. The Town is protecting habitats while at the same time promoting tourism through its ambitious trails program with state-of-the-art hiking destinations such as the Pinnacle Mt. Preserve. Lastly, the Town is experimenting with new techniques to contain storm water runoff.

Supervisor Conover also attested to the fact that at times it is difficult to reconcile competing interests in the Town while protecting the Lake. He acknowledged that, “the ship of state is not a sports car.” Given the different interests and sides, a deliberative process is needed. “I try to keep one idea foremost, that everyone is entitled to clean water. It is not responsible to compromise on that, but I have to listen carefully to all the different needs. My goal is to enable people to do what they need to do as far as new projects but still ensure a healthy environment. I don’t see it as a balancing act but helping people accomplish what they want while still raising the bar. It’s all about benchmarks. While we have achieved much of what is good for the Lake, there is still more to do. We have come a long way in terms of new systems; where there used to be cinder block leach pits, now we have ETUs. This has “gotta be good for the Lake.”

Regarding the “state of the Lake” Supervisor Conover repeated, “We can always do better.” Nevertheless, he believes that

developments over the last decade have been very positive. There is much greater engagement by organizations, town governments and residents. “The grass roots organizations and people like Carol Collins and Kathy Bozony, for whom I have the highest regard, play an important part. Citizens can have a great impact on our regulations. Bob Blais, John Strough and Dennis Dickenson have my strongest respect. I give much credit to the Lake George Park Commission and town leaders who are willing to press ahead for a lake-wide septic management program.”

Dennis Dickenson, Supervisor of the Town of Lake George

Supervisor Dickenson is a native of Lake George and has guided the Town since 2012. He is a busy man who wears many hats as well as plaid shirts and work pants. He is a man of action. Since the Town of Lake George surrounds the Village of Lake George, he cooperates closely with Mayor Blais. Supervisor Dickenson’s responsibilities encompass the parks and beaches, the water and wastewater systems as well as the roads. All these affect water quality. He recognizes that the Lake is the livelihood of the surrounding area. In his words, “The Lake needs to be respected and protected.”

Among the Town’s many activities which protect the Lake is the boat inspection program at the Million Dollar Beach which controls the spread of invasive species. At least 16,000 boats were registered to operate on the Lake in 2021. Boat inspections are mandatory not optional, and they didn’t happen easily. Frustrated at the slow progress in Albany to come up with a state-wide system, authorities in Lake George took the matter into their own hands and instituted boat inspections making the Lake the first in the State to require them. Inspections are now state-wide. Another concern is the impact of storm water coming off the roads. Here the Town came up with an innovative solution of installing pervious pavements to absorb some of this runoff near the shoreline. Likewise salt

reduction has been an exceptional success. The need to maintain safe winter roads while protecting water quality is a challenge. The Town met this challenge with brining to eliminate excessive salt use. This system along with computerized plows that are adapted to the road surface conditions and live-edge plow blades that “caress” the surface of uneven asphalt, have cut the use of salt in half.

The latest challenge is preventing pollutants from entering the Lake via septic systems. The Town’s Septic Initiative requires the individual septic systems to be identified and inspected. If found to be inadequate, they are required to be updated. The Town, in coordination with the planning and zoning boards, and using USDA data identifies soil types in order to select the most appropriate enhanced treatment unit depending on the topography of the property.

John Strough, Supervisor of the Town of Queensbury

John has been the Supervisor of the Town of Queensbury since 2014. The Town includes about 10% of the Lake George shoreline, but he gives 110% to protecting it. During his tenure the Town has undertaken numerous initiatives to preserve water quality such as passing the shoreline fertilizer restriction law, developing a shoreline buffer design standard, constructing better storm water infiltration systems on roads, working with the property owners of Dunhams Bay to create a wastewater disposal district and, of course, enacting the first mandatory septic inspections upon property transfer in the Lake George basin.

During his interview, John explained that in the two years since the septic program was adopted, Queensbury has inspected 101 systems and found 80 percent needed some level of repair or replacement. The Town Highway Department has made progress by using saline solutions and reducing road salt. But in his opinion more could be done by using porous pavements instead of the old impermeable

asphalt. He felt that each of these initiatives were the maximum that could be achieved at the time. Now that there is even stronger support for preserving water quality, he hopes more can be done. Regarding the low impact development principles which could strengthen town codes, he believed these will become reality once everyone is brought on board. John said, "It takes time."

As for future initiatives, John mentioned that the Town is going to revise its comprehensive land use plan which dates back to 2007 and should be updated every 10 years. "We are putting out requests for proposals now. The land use plan should lay down rules for the waterfront zones and be reflected in our zoning codes. There are issues we need to address like: stricter standards for shoreline clearing and clear cutting beside streams and water bodies; mandating more protective shoreline buffer and seawall standards; and increasing permeable area requirements."

John also discussed the Town's active participation in drafting a new Lake George Watershed Action Plan. "We are also members of the new Lake George Partnership which consists of some of the towns around the Lake. We need to get more towns involved."

John felt that the biggest threat facing Lake George is the nutrients entering the Lake either through storm water runoff or septic seepage which are causing the exponential growth of algae and even harmful algal blooms (HABs). "I believe HABs is the canary in the coal mine. What if this pea soup green bacteria is the precursor of things to come? How will future blooms impact our ecology, economy, tax revenues and property values? We need to reverse the decline of the Lake."

"I am very happy to see the Lake George Park Commission (LGPC) moving forward on septic inspections. The septic program should include design standards for those properties within 500 feet of the Lake. We need to mandate risk assessments for lakeside properties."

They should be using ETUs (enhanced treatment units) instead of the same old septic systems. We could probably learn something from the NY City watershed's septic design standards and inspection program.”

John echoed Mayor Blais' opinion that the LGPC needs to be better funded to carry out all its tasks. John pointed out that the Towns have pitched in with funding for boat inspections to curb invasive species, but he felt that the State needs to step in with funding for a septic inspection and management program. He hoped the LGPC would come up with a funding plan that the Towns can take to the Governor. “Now is the time for NY State to take a more aggressive approach. We need New York to fulfill its statutory responsibility and implement a mandatory, uniform, septic system inspection and maintenance program in every lakeside community. It is not often you hear a local official asking for more state intervention, but it's not often that something as important as Lake George is at stake. We need to act before the canary succumbs.”

John asserted that grass roots groups are an essential part of the ecosystem in protecting the Lake. “They can provide inspiration for environmental improvements. For example, it was the vision of some of Rockhurst's residents, who recognized that the density and location of their on-site septic systems pose a very serious threat to the adjacent lake's well-being, and, therefore, put forth the need for a community septic system. Queensbury's shoreline includes two other narrow glacial moraine peninsulas (Assembly Point and Cleverdale). They should follow Rockhurst's model and develop community septic systems that have on-site enhanced wastewater treatment and off-site secondary treatment.”

John noted that a portion of Assembly Point Road sits precariously beside the shoreline. “This situation dumps untreated storm water from adjacent properties directly into the Lake, an environmentally unhealthy situation. One solution would be to reroute this portion of

the road towards the center of the peninsula, away from the Lake, and reroute all those driveways that currently slope towards the Lake. Decades ago a plan was developed but it met with opposition. That was then, I would hope that now, as many of us have come to the realization that we need to act, and act now, to protect our Lake, everyone would support the road's re-location. Once relocated, the road's old location would make a good storm water treatment area and a very nice walkway for all to enjoy.”

Chapter Ten

Modern Day Grass Roots Stewards

“We don’t inherit the earth from our ancestors; we borrow it from our children”

–Native American



Original watercolor by Tom Ryan, From Pristine to Green?

The following interviews highlight the work and memories of eight current grass roots advocates, our modern day stewards. They share their history with the Lake, comment on their own water quality work and offer ideas for the next steps to protect the Lake. Many of the issues that challenge the integrity of water quality of Lake George are contained in their personal stories.

As Chris Navitsky, our Lake George Waterkeeper, says “Lake George is not going to do better until we do better.” To do better means that we need more people, including our officials and agencies, acknowledging and speaking out about the practices that are causing water quality degradation.

Grass roots advocates are often the conscience and the spark for change and remediation; officials listen to their constituents, but when there is often only a handful of people requesting action their voices are lost. The need for citizen involvement around the Lake George watershed, the country and the world is perhaps more heightened than ever before because ecosystems are increasingly threatened by overdevelopment and policies favoring private property rights over environmental rights.

In early 2021 a Lake George grass roots coalition of approximately four different area groups spent a half year researching and discussing a draft request for a lake-wide septic inspection program which they submitted to the Governor of New York State. His response came back though the Lake George Park Commission (LGPC) which asserted that more scientific evidence was needed to justify the creation of a septic inspection program. The team then lobbied DEC officials, state representatives and town supervisors to support their request. This resulted in the LGPC moving to create a special committee to work on a septic inspection proposal.

This is one successful example of effective grass roots action. Today one of the greatest challenges to Lake George may prove to be the threat of harmful algal blooms (HABs). To prevent a crisis all hands must be on deck to move policy and action fast enough to prevent the otherwise inevitable outcome for an extremely compromised Lake.

The stories of these grass roots advocates provide a measure of inspiration and support pathways to citizen action needed to effectively address water quality issues now and in the years to come.

Al Rider, Hague Water Quality Awareness Committee

Lake George water flows in my veins. I was weaned on Lake George; I have been coming to Lake George all my life; my family

goes back almost 150 years here. I am fortunate to have restored a painting of Paradise Bay done by my grandmother in about 1894. It is Hudson River style with a beautiful gold leaf frame. I cherish this painting. I was born in Albany and spent summers on Assembly Point. I attended SUNY Hudson Valley and worked for MTV Networks in New York City as a Director of Engineering. I built a home in Hague and retired there with my wife Brenda.

Many of us hold Lake George in reverence.

When I retired here the pristine Lake I knew from childhood was shockingly changed due to massive population growth, increased storm water/septic runoff and invasive species entering the Lake. One time I was going to meet a friend on the islands, and he told me to bring a wire brush to scrape the algae off the rocks before walking on them! As a kid I used to go barefoot on the rocks and rarely had an issue when walking into the water but now I was stunned by the overall sliminess of the rocks. We have also noticed a tremendous increase in algae on our boats. In the Lake George of my youth my boat would have come out cleaner at the end of the season than when launched in the spring. Now our boats and our docks are disgusting within a few weeks. On a *Keep the Queen Clean* day in 2007 I walked north to the former “Dock and Dine” beach. I had spent many hours snorkeling there as a kid when the sand was clean and golden, and the water clarity was amazing. Now the muck was pervasive, making it nearly impossible to walk.

Creating the Hague Water Quality Awareness Committee as an action group in 2013 was the brainchild of environmental consultant Kathy Bozony who sees the potential power in organizing citizens for action. She inspired the formation of our group and those at Assembly Point, Cleverdale/Rockhurst, Diamond Point and Dunhams Bay, all of which remain active. Creating and distributing “Adirondack Lawn” signs in 2013 is a successful awareness initiative. You can still see signs posted today. The message speaks

to reclaiming Adirondack simplicity and naturalness, challenging a manicured gentrification and the use of fertilizer and pesticides.

We have events to raise awareness in Hague. We built a big Adirondack Lawn sign banner for our award-winning Memorial Day Parade float. We host water quality talks with many expert speakers on variety of water quality issues including the Lake George Park Commission's successful Aquatic Invasive Species campaign. We have created a "Lake Stewardship" informational brochure which includes a recipe for a safe weed killer. Mike Strutz of our HWQAC continues to write a monthly article for the Hague Chronicle about water quality issues. Grass roots, municipal, and state agency involvement are all necessary. There are a variety of issues to deal with and more seem to occur each year. The coordination of state and municipal authorities with local groups is imperative for the future of the Lake.

Educating our real estate agents and our service people and landscapers is a challenge and this is where grass roots could be really useful. Grass roots efforts are needed to promote environmental laws to *Keep the Queen Clean*. Education is needed to promote proper storm water control and septic practices that will keep runoff from entering the Lake. A coordinated effort by everyone who spends time on Lake George for either business or leisure is needed to protect the Lake for future generations. We are happy that the Lake George Park Commission has begun efforts to address the extremely important issue of lake-wide mandatory septic inspections.

Ginger Henry Kuenzel, Hague Water Quality Awareness Committee

I was born in the hospital in Ticonderoga and have lived in Hague ever since—sometimes year-round and sometimes seasonally. I have deep roots: My great grandfather came to Hague after selling Green Island in Bolton in 1883. And even though I lived in Germany

from 1974-1995, I came to Hague every summer with my family. Lake George brings generations of families together. I wanted my sons to have the childhood experiences that I had and to develop the same love and respect for the Lake and our roots. My professional background is in journalism and corporate communications, which has served me well in my grass roots efforts and my work with the town government.

My memories of my idyllic childhood here are a huge factor. I want to do my part to ensure that future generations inherit the clean Lake I grew up with. Stewards of Lake George have also inspired me, including Frank Leonbruno of Bolton, who devoted his entire adult life to conservation and preservation of Lake George. Kathy Bozony is also an influence, encouraging several of us to create the Hague Water Quality Awareness Committee. So many people are working so hard to preserve Lake George, and I am proud to be among them.

Everyone has a role to play in preventing water quality degradation including grass roots organizations, big environmental agencies, and municipal governments. State and federal entities set policy and provide funds. The towns also play a key role. The sewer is a good example. I served on the Hague Town Board and still serve on the town's Sewer Advisory Committee. Federal and state grants helped build the sewer system, but users pay substantial annual fees. When users complain about costs, we take the time to address every question and concern in addition to regular communications about the system and its status. When people feel that those in power are listening, they are more accepting. Residents tell me that ever since the Town started communicating more frequently and openly about the state of the sewer system and how the money is being spent, they no longer have objections to the sewer fees. They also know that they can always get answers to any questions they have about the sewer. Town Boards need to listen and to respond to residents, but residents also need to be involved and to speak up—not only with complaints but with ideas and solutions. It needs to be a partnership.

Grass roots movements can be an important catalyst. Our campaign for lake-wide mandatory septic inspections raised awareness among residents, towns, the media and the Lake George Park Commission (LGPC), which eventually established an ad hoc committee to address the issue. Town governments around the Lake, at the urging of our grass roots group, passed resolutions showing their support for having the LGPC take on this issue. This is a great example of how a grass roots movement of residents can work together with town governments and state entities to achieve a common goal—protecting the Lake.

Changing people's mindsets—whether we're talking about residents or government officials—requires patience. I remember when we had a dump in Hague where we could dump any kind of trash any time—all for free. At some point, state and federal environmental regulators implemented stricter controls. The Town had to close that dump and open a sanitary landfill elsewhere. It was only open on certain days, and people suddenly had to pay to get rid of their trash. Furthermore, certain substances were prohibited. I've learned that people always complain about change, but eventually become accustomed to a new way of doing things. There's a delicate balance, of course, between waiting for people to accept change and keeping things moving forward.

My motivation to serve on the Hague Board is related to my concerns for water quality. I feel I am more effective working at the local level, where I know the people and understand their needs and concerns. When on the Town Board, we passed a law requiring all boats at our town launch to be inspected to be sure that they are free of invasive species. This meant hiring attendants—with funding assistance from the Lake George Association (LGA)—and locking the gate when the launch was unattended. There was strong pushback from some residents, who wanted to be able to launch their boats at any time day or night. A fellow Town Board member and I offered a compromise: Any resident who wanted to launch when the gate was locked could call one of us. We would come to the launch,

check the boat and open the gate. It was a great example of how thoughtful dialog and compromise can lead to a solution. Today, people are accustomed to the boat launch only being open when an attendant is on duty. Many still don't like it, but at some point, the days when it was unmanned will be just a distant memory—like the changes in trash disposal.

Carol Collins, Ph.D., Co-director, Assembly Point Water Quality Coalition

You could say our family was the result of a love affair on the Lake. My Mom and Dad met on Lake George, she in a rowboat and he in an old wooden boat. After they were married, they bought a camp on Assembly Point in 1958 where I spent my summers with the local kids catching turtles, frogs, and catfish in the wetlands. I probably owe my interest in lakes to my Mom who shared her fascination of nature with everyone around her.

As an undergraduate at the University of Vermont, Lake Champlain provided a backdrop to learn more about limnology and the watershed impacts. I continued my studies at Rensselaer Polytechnic Institute where I was fortunate to collaborate with a diverse group of biologists, mathematicians, hydrologists, engineers, and geologists. We were at the forefront in developing a multi-dimensional mathematical model of lakes and reservoirs. My major focus was on algal blooms. I conducted laboratory experiments designed to understand the complex relationship of light intensity, temperature and nutrient interactions on algal growth. Seeking answers to why and when algal blooms occurred, I used this information to develop algal growth algorithms that relate these factors to nutrient loading and lake hydrodynamics.

Many say they love the Lake, but fewer care for the Lake. The Lake is changing at a rate faster than would occur under natural conditions. The accelerated pace is directly related to the rapid and intense development of the watershed that releases nutrients into the

Lake. The assimilative capacity of the Lake (how much pollution the Lake can handle) is likely at its tipping point. Nutrients from land development, building too close to stream corridors, and inadequate wastewater treatment are overwhelming the Lake. We can measure this by the decline in water quality.

While most residents support regulations to protect the Lake there are some who oppose such protections. Fortunately, most residents feel a sense of obligation or recognize it is a privilege to protect the Lake. Unfortunately, policy and regulations lag behind our ability to protect the Lake.

Residents, environmental groups, scientists and many of our local officials advocate for change. These officials are now often in the lead in efforts to protect the Lake. They recognize the links between environmental protection, the local economy and the health of the community. Too often though, planning and zoning boards are confronted with variance requests to over-build, increase impervious area or use suboptimal septic systems. One planning board member recently asked during a meeting if the applicants had even looked at the town codes before submitting their site plans!

We need to assist the planning and zoning boards to enforce town codes which protect the Lake. For all intents and purposes, our town boards hold the future of the Lake and water quality in their hands. In this respect, that is why I co-founded the Assembly Point Water Quality Coalition and the Lake George Waterkeeper with others who saw the need for education and action at the grass roots level.

Site plan review should be a place to improve permit applications so that every effort is made to protect the Lake. Planning and zoning boards have the chance to modify development and reduce water quality degradation. When you live on a Lake, we are all neighbors. What happens on Assembly Point affects Cleverdale and vice versa. We can only make progress in protecting the Lake by working

together. We need to have more informed residents who will speak up at town meetings on local issues and plans that threaten the Lake.

Lisa Adamson, Outreach, Assembly Point Water Quality Coalition

My grandmother, Ernestine Fowler, acquired a tract of lake front property in 1917. It was ten miles from Glens Falls, where she had been born, raised and in turn raised her four children. The family went to the Lake every summer, a couple of goats tied to the back of their car for fresh milk to help my father's anemia. By the time her children were grown with families of their own, my grandmother split the land and gave each 130 feet of magnificent lake front property. I am the last of the family living on one of the original lots created by my grandmother.

Ernestine can also be credited with another wise decision. The interior lots on the northern end of Assembly Point held no interest for buyers during the 1930s and were not developed. They were placed in a membership corporation called "Otyokwa", Mohawk for "a place of assembly" in 1939. This avoided a sale to General Electric to build holiday homes for their management staff.

After spending my childhood summers at the Lake, I returned to live full time on Assembly Point in 2006. I started walking the Point with neighbors and we noticed conditions that were contributing to the decline in water quality. I volunteered at the Fund for Lake George. With the support of the Fund I applied for and won a sizable FEMA grant to create water quality awareness committees around the Lake or a "ring of protection". Unfortunately, the execution of the grant was not what I had envisioned. Environmentally conscious neighbors suggested that we form a 501 c 3 non-profit organization to undertake projects directly and independently from large organizations such as the Fund, and the Assembly Point Water Quality Coalition was born.

Grass roots organizations can do a lot in terms of raising the awareness of Lake residents on the causes of the decline in water quality and helping residents mitigate this decline by installing buffers and using low impact development techniques. But this is not enough, lake-wide regulations are needed. Queensbury and Bolton have been the leaders in enacting septic inspections upon property transfer. But town by town action will not protect the Lake; we need lake-wide action. The only entity capable of this is the Lake George Park Commission.

I have learned a lot though grass roots activism. It is important to recognize that our voices matter. Our elected officials do listen to us because we vote. A town board member told me that residents must be “in our faces” to alert them to lake conditions even though we aren’t all engineers or scientists. The Lake is in my front yard and I’m not backing off. Loving the Lake means fighting for its protection. We are lucky to have a lake-friendly town supervisor in John Strough. He has created a number participatory workshops for grass roots organizers to share opinions and information with officials. He has been responsive and some of our proposals have actually been adopted in town codes.

In conversations with neighbors and colleagues I have noted the success that other lakes have had in protecting water quality through regulation and investment such as Lake Tahoe and Lake Annecy, France. Lake Annecy is very similar to Lake George in terms of its geological formation. In the 1940’s-50’s it was being degraded by municipal sewerage and garbage. It was literally the “poubelle” or dustbin of the surrounding towns. The Mayor of Annecy and the Chief Surgeon of the local hospital rose to the occasion and saved the lake which was on the point of death or eutrophication. Nitrates, phosphates and organic material were feeding algae which were sucking the oxygen out of the lake. A coalition was formed among the towns which made up greater Annecy and it obtained financing to build a waste water collection network and a garbage disposal facility. These local leaders met the challenges head on. The Town

Archive of Annecy recalls this action as “un bel exemple d’initiative écologique pionniere”—a beautiful example of a pioneering ecological initiative. Lake Annecy today is the cleanest lake in Europe. As such, Lake Annecy stands as an international reference point for good water resource management.

Rosemary Pusateri, Chair, Lake Stewardship Group of Cleverdale

My earliest childhood memories are of summers with my family at Lake George, our camp within walking distance of a public beach. My environmental ethic was molded at Lake George.

I clearly remember as a student at Vassar College the exact moment during the first Earth Day when the conviction came to me that protecting the environment would be my life’s work. I requested an independent major in environmental studies, but it was not allowed by Vassar College back then. My Vassar degree is in geology; with what turned out to be a correlate (more than a minor) of environmental studies. I later did graduate work both in earth science at Dartmouth and in environmental science at Rutgers.

For decades, my calling, not my paying career, has been protecting and remediating the environment. With the turn of the century, becoming a year-round lakeshore resident, I decided to focus my energy, education and experience almost totally on Lake George because I love the Lake. I could see, literally, the degradation in water quality and clarity.

For several years, I volunteered as an individual, working with all three lake organizations. I served on the board of directors of the Lake George Land Conservancy (LGLC) and serve now on its Advisory Board and Conservation Committee. The LGLC protects the land that protects the Lake. When Kathy Bozony, who then worked for The Fund for Lake George, encouraged the creation of Water Quality Awareness Committees, she invited me to a meeting

at the Sans Souci to discuss forming such a group in Cleverdale and Rockhurst.

About an hour before that meeting on March 8, 2012 (I know the date because it was the day before our granddaughter was born), an idea came to me (that's the only way I can describe it) to create a petition asking for fertilizer regulation around the Lake. My petition got a page full of signatures at that meeting. That meeting was followed by many more meetings, as several of us formed what we decided to call the Lake Stewardship Group of Cleverdale and Rockhurst. Concurrently, I worked hard with the help of colleagues and friends, to get signatures on my fertilizer petition. I presented the petition with 600 signatures, all tied in a red and green satin ribbon, to the Lake George Park Commission (LGPC) at their December 2012 meeting.

In 2021, the inclusion of fertilizer regulations in the long-overdue storm water and stream corridor regulations enacted by the LGPC gives me great satisfaction. That it took nine years really illustrates the frustration of working with the LGPC. Fortunately, along the way, our Town of Queensbury and a couple other municipalities adopted fertilizer regulations.

Since 2012, I have been active in the Lake Stewardship Group of Cleverdale—the 'and Rockhurst' was dropped along the way. Somehow most of my efforts involve meetings and writing rather than in-the-lake work. I enjoy working in the Lake—on *Keep the Queen Clean* days organized by The Fund, on the LGPC annual Asian clam surveys, and on Asian clam collection days. Asian clam collection days in Sandy Bay were initiated by the Lake George Association; we now organize several days, collecting thousands of those invasives and raising awareness.

Starting 2020, concerned about the risk of new aquatic invasive species, I observe at one DEC boat launch, encouraging volunteer

observers, and collating and reporting results every spring and fall. This effort helps tighten the Mandatory Boat Inspection Program.

Not as enjoyable are many hours I work to send out lake-protective messages. For several years, I wrote our Lake Stewardship of Cleverdale newsletter, with an email list of about 200 names. Now chairing our Steering Committee, somebody else publishes the newsletter including content I write. I have written an Op Ed about Asian clams for the *Lake George Mirror* along with many letters, press releases and announcements.

Along with the fertilizer petition and one-on-one education of boaters in Sandy Bay, I estimate we have reached well over a thousand people. It is gratifying to see people become lake-protective as they learn. Education cannot reach or change the mindset of everybody! Lake-wide mandates, with enforcement, are necessary to protect our precious and fragile Lake.

I continue to work with the Lake Stewardship Group of Cleverdale because much more is needed to protect our Lake. Our Group is an effective platform, though sometimes I speak and write as myself. It is daunting and frustrating work, as water quality continues to decline and threats to the Lake are ignored by state and some local governments (but not by our Town of Queensbury) as well as LGPC, and sometimes even the lake organizations. Fortunately, working with like-minded people is a joy and together we accomplish more than individually.

Barbara and Len Simms, Dunhams Bay Association

Our interest in sailing brought us to Lake George in the 1970's, but it was Kathy Bozony's underwater photography that led to our interest in water quality. Kathy presented her Lake George photographs at the annual Dunhams Bay Association meeting in the summer of 2011 and came back in 2012 to show pictures of algal blooms observed off the shore of more than 50% of the properties

around Dunhams Bay. Our Water Quality Awareness Committee was formed that summer.

During the winter of 2013 the committee alerted Dunhams Bay homeowners to the existence of algal blooms off their waterfront property. Algae testing, formerly done by The Fund for Lake George, indicated the presence of organic pollution which is an indication of septic system failure. The committee also completed a review of septic systems based on Town records and found that 79% of bay properties were marginally documented or totally undocumented.

With those two facts in mind, we held public information meetings and circulated a petition requesting that the Town of Queensbury investigate possible septic solutions. In December of 2014, Dunhams Bay officially became the North Queensbury Wastewater Disposal District #1 with the Town's approval. Dunhams Bay became a New York State recognized Responsible Management Entity. The principal benefit of having this designation is that we now qualify for state, federal, and not-for-profit funding.

There are sixty parcels in our district. Twelve homeowners had updated their systems before the district was formed. Twenty-four systems have been replaced since 2014, many benefiting from grants from The Fund for Lake George. We currently have 56% of our homes with new or newer septic systems.

Creating a septic district was proposed by town officials to other areas on the Lake, but the concept was quickly shelved when there was little interest and outright opposition by some. The grass roots efforts of the residents of Dunhams Bay made all the difference. Town officials were supportive and worked diligently to make our District happen. In addition, The Fund for Lake George was invaluable in the formation and success of our district. Their grant program provided a financial incentive for our District homeowners

and to date they have paid out over \$150,000 to homeowners for septic upgrades.

Our District has an Advisory Board, made up of Dunhams Bay residents and we advise the Town on septic concerns and district administration. Our ultimate goal is to motivate the remaining homeowners to upgrade their inadequate septic systems. To that end the Town is working toward waterfront septic inspections with compliance procedures and protocols.

Len and I completed the background research and pushed the initiative along, but only with the support and interest of the Dunhams Bay residents, the Town of Queensbury officers, and The Fund for Lake George, our work succeeded. Barbara and Len were recently recognized for their efforts in rallying their neighbors behind the septic initiative in “Profiles in Protection” a booklet of The Fund for Lake George. Their vital leadership and partnership makes the protection of Lake George possible.

Pam Golde, Secretary-Treasurer of Otyokwa, Assembly Point

My family bought our house on Assembly Point in 1960. As a landscape architect I work with natural systems and solutions; we don't try to fight nature. We read the land—how water drains to and from where, how a structure will work within a landscape, what the storm drainage needs to be before and after project development and how to respect riparian water rights—(you are not allowed to impact the water rights of adjoining properties i.e., increase or decrease water amounts).

It is important to know the soil conditions. Do you have permeable or slow draining soils, acidic or basic and which plants do they naturally support? What is your soil's organic matter content and micro nutrients needed to support plant growth as well as its ability to support stable manmade surfacing? Other important considerations are tree canopy and solar and wind orientation.

Understanding your construction project and how it will affect the land and the carrying capacity of the land is critical. How to maintain materials—both manmade and natural and when to use a pesticide/herbicide/fertilizer is also essential. Too much organic treatment can be as bad as too much synthetic treatment. I recall that my father used very few chemicals on the lawn or within plant beds; we kept our driveway in a gravel state and still do; he tried to protect the natural vegetation on our property until Mother Nature won out on the aging birches, and except for three, we have lost them all.

Growing up at the north end of Assembly Point I remember the old timers like Mr. Schmidinger, Scrubby Beals, Lillian Adamson, the Cleverdale Masons—as well as Scotty McLaughlin, who were all concerned about water quality. I remember the DDT sprayings and the planes overhead that sprayed our properties for mosquito control to the detriment of our fish population. Many issues we are dealing with today in the 21st century were never a real concern for most people back then in the 1970's. My dad, Charlie and Bob Adamson tried to install a system to pump septic off Assembly Point. John Salvadore, who weekly lobbied the Queensbury Town Boards to do the right thing until his recent death, offered his land behind the Dunhams Bay Lodge for the septic system. Back then there was not enough local support for a central septic system, neither among the residents nor town officials. Back then it would have been affordable unlike today.

I think the greatest issues degrading the Lake today are storm water runoff, septic pollution as well as the use of road salt. Add to these issues climate change. The Lake George watershed had a central sewer system planned in the late 60's and 70's that would have been a major improvement to the current individual systems we have today. We need that now—a lake-wide septic system.

These days when my husband, Bob, and I row the shoreline we note the removal of waterfront buffers and other plant material on properties and their replacement by emerald green lawns. Water

clarity is impacted by weed growth and the recent fish die-off results from the fact that the water is too warm. When we were kids the Lake did not get warm to comfortably swim in until August. Now June is tolerable. I think residents are not sufficiently aware of the state of the Lake nor do I think they really care until it affects their pocketbook or them personally. The big positive is that we have eagles and loons back!

If you have money and clout in a town, you can get what you want done via the variance process which allows you to legally violate town rules. Fertilizing lawns within 50 feet of the Lake along with the overuse of irrigation/sprinkler systems continues because towns have very weak enforcement mechanisms. The use of certain plant materials such as perennials are great in the summer but do nothing in the spring when there is a fair amount of surface flow. Waterfront vegetative buffers (a closed swale) keeps lawn nutrients from entering the Lake during heavy downpours and in the winter when the frozen ground does not absorb water. The use of native plants, while advisable, can be a problem when you have an overabundance of animals which devastate them. There used to be a lot of bunch berry and princess pine in our woods—no longer, the deer have destroyed them. We plant native material on our property i.e., serviceberry, witch hazel, clethra, ninebark, viburnum and the deer ravage them unless we spray and fence them.

As an officer of the Otyokwa Association on Assembly Point, I have been working on deer culling for the last five years. There is hope that together with DEC wildlife biologists and other urban experts we can better contain the deer population.

Kathy Bozony, Diver and Environmental Consultant to Non-profit and Municipal Organizations

I'm a Pisces ... I have always loved the water. After 25 years working in healthcare finance, I attended Paul Smiths College to earn a degree in environmental science (2004). I have been

employed both by the Lake George environmental not-for-profits and by two municipalities as an environmental consultant. Then and now, I realize that I am someone who truly treasures clean water, and a lifetime of swimming in Lake George. I have worked towards preservation as an employee, an activist, and a consultant.

Residents who live in close proximity to a waterbody need to know what impacts they have on water quality. So many are far removed from anything but a “lovely view”. I had the opportunity to work as a liaison between an environmental not-for-profit and resident homeowner association in 2011-2013 (among many such relationships). We need that type of interaction in each municipality, someone who can advise homeowners how to best manage their properties for maximum lake health, sharing advise on septic systems, shoreline buffers and natural storm water infiltration techniques, such as rain gardens. There should be a bigger push to require such interactions, as that information is truly lacking with many homeowners (although an organization such as the Lake George Association (LGA) has been working for over 136 years on these same issues!). We evidently need to approach lake preservation and restoration more aggressively. The huge question that we need to answer is why we have not been successful in preserving water quality and lake health.

Without municipalities getting involved and adopting programs for residents to participate in, it is a slow process to encourage one person at a time to understand the impacts of their individual land use and development. But, one on one is important, and it is how you build grass roots momentum. We did that when I was working at The Fund for Lake George and decided to create a “ring of protection around the Lake” as we developed water quality committees in each community. One by one, people got inspired. The initiative was recognized by FEMA, which awarded a grant to promote this kind of activism. Residents stay engaged with some groups continuing to promote awareness and clean lake initiatives, including a long-time goal to create a mandatory lake-

wide septic inspection program. While there is state funding, it is usually for localized water projects and not for lake-wide initiatives and this piecemeal approach does not stop water quality decline.

Protection of Lake George is failing or falling short because of continued land use and development with no oversight. The fact is there is no lake-wide septic regulation and no oversight to ensure adequate wastewater treatment for homes, motels and businesses, as well as lack of enforcement on vegetation removal that would otherwise control, infiltrate and treat storm water runoff. This lack of enforcement and oversight is having an irreversible negative impact on water quality.

My work photographing algae informs scientists, officials and the public. I feel the photos of algal blooms tell a story and encourage others to take interest in the negative impacts from pollution. Swimmers understand the importance of water clarity and firm, sandy bottoms vs. sinking your feet into mucky, decomposed algae. The beauty of algae in a photo is impressive, but an oligotrophic Lake George should have no visible algae.

Since 2008, I have spent countless hours every summer snorkeling and photographing the algae in Lake George. I have snorkeled with many people around the Lake from Dunhams Bay to Red Rock to Echo Bay to Bolton, where I documented massive algal blooms. In 2016 I took several political candidates snorkeling along with the reporters. The Assembly Point Water Quality Coalition received a grant from the Lake Champlain Basin Program, where I had the opportunity to work several seasons documenting algal blooms around Assembly Point. Algae samples were microscopically analyzed using the Palmer Pollution Index (PPI). We found that a number of these samples had scores high enough to indicate organic pollution, possibly from failing septic systems.

Todd DeGarmo at the Crandall Library Folklife Center sponsored an exhibition of my photos, enlarged to poster size to create the

maximum visual impact. The photos are artistic, educational, and alarming. Laura Von Rosk at Lake George Arts Project facilitated a virtual display of these same photos during the 2020 summer season.

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