History of Gillett Pond

Bob Low, December, 2013

Gillett Pond is known widely in the area, even the County, for the natural resource that it is and the year-round recreational opportunities it offers. It is the only still water body in Huntington and Richmond. What follows is some of the history of the pond that the writer has put together: how it is likely to have come into being and how it has been used and enjoyed ever since.

This writer is indebted to many in the area who have shared their ideas and experiences. These include Walter Poleman, whose 2001 Richmond Place presentations did so much to describe history and wildlife; Gale Lawrence with whom the author enjoyed Pond birding over many years; Tim Whalen, whose University of Vermont Thesis did much to elucidate events that led up to creation of the Pond; Amy Seidel, who has kept a naturalist's watch over the Pond for so many years; Wildlife tracker, Sue Morse; Sandy Fary, whose use of the Pond to educate her students and whose records have done so much to help us understand Pond ecology. Still others, including Ernie Buford, Aaron Worthley and Wally Jenkins.

The history of the Pond, in fact, begins long before it came into existence. It's Northeast – Southwest orientation remained a mystery for quite some time, not fitting the general orientation of land forms in the area. There now appears an explanation based on the Whalen Thesis and further explored in Walter Poleman's Place-Based Landscape Analysis. Turns out that the Winooski Valley was cut off by glaciers some 10,000 years ago right at Jonesville. Waters traveling down the "river" were diverted in a Southwesterly direction (Figure 1). That created the "cut" that would become the pond "basin". The waters thence flowed through Huntington Lower Village, out Hollow Brook and into what was at one time Lake Coleville, now Lake Champlain. Doubtless many readers are familiar with the resultant gravel pits of Hinesburg Sand & Gravel at the west end of Hollow Road.

Farms thrived in the fertile lands spreading north and south of the wetland area that came to be called Gillett's Pond as early as the late 1700's. Asa Gillett and his forebears no doubt trapped many mink and beaver in the deep wetland area between the two ridges that still rise steeply above Gillett Pond to the east and west. One can only speculate on how many tons of ice were harvested in winters to keep milk cold all through the hot summer months. Did these industrious early settlers build their vast array of stonewalls only on their higher land, or did they expand the natural beaver ponds to enrich their supply of ice and fish and waterfowl? The writer is unaware of any pictorial or other description of what the waterway looked like prior to the dam, though based on recent soundings and rock formations it was likely to have been constituted of stream-connected pools.

Circumstances surrounding construction of the dam are best summarized in Harriett Riggs' <u>Richmond Vermont: A History of More than 200 Years</u>. Richmond Light and Power used an old mill on the Huntington River at the Gorge, as a power-generating

plant for some eight years. Recognizing back-up generating potential, RLP built the Gillett Pond dam. RLP workers were charged with walking upstream from the generating plant in times of low water on the Huntington River to open the gates to the Dam. All this lasted but a few years, as the generating plant was shut down in 1910.

Rights to the dam were passed several times, including to Green Mountain Power, and in the mid-1950s to the Girl Scouts. The land surrounding the dam is not actually owned by the Girl Scouts, but the deed for that land to this day specifies that *"Flowage rights, including the right to erect and maintain a dam as set forth in Volume 4 at Page 232 of the Land Records of said town of Richmond"* remain. Indeed, any land ownership issue is separate from the vested rights to the dam.

Further vestiges of dam rights are found in the deed for landowners at the Huntington end of the Pond, where rights are reserved to raise and lower the water level in the pond.

By all accounts, this was quite a dam. <u>Figure 2</u> is of a postcard of the dam, postmarked Richmond, Vermont, 1959, showing its height and the superstructure governing water release. (The extension to the left of the superstructure was drawn in by the person writing the postcard so she could tell a story about diving off the structure.) All evidence indicates this is a picture of the dam, based on comments in the post-card, the Riggs book, and discussions with historians such as Pat Quinn, a lifelong resident of Jonesville; along with Winifred Doane who still lives part of the year in the big white house at the brow of Wes White Hill. Remnants of cement from the water control gate still can be found.

It is not entirely clear when the dam began to disassemble. Pat Quinn recalls that it took a big hit during the 1927 flood. Perhaps related, those familiar with the road passing by the dam and on to Huntington Lower Village may have recognized an old road bed uphill from the current road. The current road may well have been underwater when the dam was at its original height.

Discussion took place between the State and the Girl Scouts around 1960 regarding the possibility of restoring the Pond. Indeed, this writer has a copy of the draft engineering drawings prepared by the State, with an estimated repair cost of \$5440. Discussion was renewed in the 1970s, with no actions taken due to concern that the Pond would become officially accessible to the public.

Also in the 1960s an unauthorized breach was made in the dam which significantly lowered the water level in the Pond, a breach which over the years was partially "repaired" and "maintained" by the local beaver population. The second photo in Figure 2 shows the dam in 2007, in which current partial breeches are visible.

This author and family moved to Wes White Hill in 1971. We immediately became aware of Gillett Pond as a natural resource and as a place for, canoeing, skiing, skating, ice-fishing, winter walking and even ice-sailing. The remoteness of the Pond, especially

the northeasterly extension, provided exceptional and undisturbed wildlife habitat, no houses, buildings or other man-made intrusions around. Anyone who ventures to the far northern end of the pond still experiences this sense of pristine quietude and natural wonder.

Our understanding of the Pond as a natural resource has continued to grow. Annual records over the years have kept track of wildlife as varied as snapping turtles, otter, osprey and eagle, a partial list provided in Figure 3. For many years Gale Lawrence and this writer undertook a canoe-based bird count on Loon watch day in July, identifying upwards of 30 bird species. (No loons, of course, except for one Huntington Road loon rescue in which the yearling loon was moved to Gillett Pond to recover and fly off after a few days.) Our annual local bird count in the area is in the 90s, doubtless limited by our ability to identify closely-related bird species such as the warblers.

Such features as these have been recognized by the State. A key resource for those interested in natural resource biodiversity in Vermont is the State's BioFinder site: <u>http://biofinder.vermont.gov/</u>. It is reported that Gillett Pond is one of 100 "representative lakes/ponds" in Vermont and one of approximately 2 dozen "Mesotrophic, Low Alkalinity Ponds"; and that Gillett Pond ranks as "tier 1 / greatest" in a 6 category classification of "contribution to biodiversity" as determined by combination of numerous, weighted factors (including representative lakes/ponds, rare species, habitat blocks, wildlife road crossings, etc.).

Mentioned several times in the Richmond Town Plan, the Pond continues to have many "naturalist" visitors sponsored by the Conservation Commission, the Poleman Place-Based program, for the Girl Scouts, a Sue Morse Tracking session and many visits by school children principally from Camels Hump thanks to educators such as Sandy Fary. (As an example, see her summary in Figure 3.) Aaron Worthley and Wally Jenkins have developed an amphibian monitoring program focused on Huntington. No surprise that Gillett Pond is one of the hot spots.

The deluge that occurred earlier this year, on July 3, 2013, created a significant issue for the Pond. This writer noted 3 inches of rain in less than an hour within a few hundred yards of the dam, only to be outdone by the reported 5 or so inches that fell in Happy Hollow. The Huntington River rose just over 7 feet between 2PM and 5:30PM that day! This was recorded at Horseshoe bend just downstream from Huntington Lower Village as part of the annual summer Huntington River Study. This was such a highly localized storm that parts of Huntington and Richmond received little rain while at the same time the deluge overwhelmed many nearby roads and waterways and there being no other rain in the area.

A tremendous amount of water went into Gillett Pond. Enormous pressure was put on the dam (Figure 4) which lost some of the upper tier stonework but otherwise withstood the onslaught. Importantly, there were no additional breeches beyond those seen in the 1990s and 2000s (Figure 2). Indeed, the water level in the Pond was sufficient that water level was equal on both sides of the dam for a period. Culvert failure on Wes

White Hill Road at the Pond outflow stream was due to blockage by storm-tossed debris. Indeed, the dam appears to have provided a buffer to the enormous outflow, dampening effects down-stream and perhaps preventing additional costly repairs.

An outcome of the July storm has been Sate inspection. The State Engineer indicated the dam presently is classified as a "Low Hazard" dam because of the lack of structures downstream that would be damaged should the dam fail. Nonetheless, the State has told the Girl Scouts that the dam needs to be completely replaced or removed. No time frame has been established, but discussions have ensued.

For many, Gillett Pond remains a treasure for its natural beauty, its natural resources and the recreational opportunities it provides. Many people in Richmond, Huntington and further afield are of the mindset that the dam should be replaced and the Pond preserved. That would take the cooperation of many entities but would benefit all. A "Friends of Gillett Pond" network has been formed to coordinate efforts in the regard and a "Friends" web site established:

http://huntingtonvt.org/index.php?option=com_content&view=article&id=152&Itemid=200416

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Figure 1:

Ice age glaciers (dashed line) and the formation of Gillett Pond "basin" Modified from Whalen.



Figure 2

1959 Post Card: found by Brad Elliott



The dam in 2007 (photo - Low)



Figure 3

Water birds	First Arrival		Frequency
	Earliest	Latest	
Cormorant, Double Crest	25-Aug	25-Aug	Once
Duck Black	5-Feb	10-Oct	Regular
Duck Bufflehead	13-Apr	5-Nov	Occasional
Duck Mallard	11-Jan	13-Apr	Regular
Duck Ring Neck	27-Apr	27-Apr	Once
Duck Wood	5-Apr	6-May	Regular
Dunlin	10-Oct	10-Oct	Once
Eagle Bald	11-Jul	1-Sep	Rare
Goose Canada	12-Mar	14-Sep	Regular
Goose Snow	23-Apr	10-Dec	Occasional
Gull Ring Billed	15-Jan	12-Apr	Frequent
Heron Great Blue	3-Apr	20-May	Regular
Kingfisher	2-Apr	2-May	Regular
Loon*	14-May	22-Jun	Rare
Merganser Common	1-Mar	2-May	Regular
Merganser Hooded	1-Apr	30-Apr	Rare
Osprey	11-Apr	1-May	Frequent
Sandpiper Solitary	15-May	17-Jul	Regular
Sandpiper Spotted	1-May	2-Jun	Regular
Sparrow Swamp	30-Apr	17-Jul	Rare
Teal Green Winged	22-Apr	22-Apr	Once
Wren Marsh	10-Oct	10-Oct	Once

*Once on Pond as rescue result

Gillett Pond <u>Mammals</u> Bear: Infrequent, summer - fall Beaver: Summer, recently less frequent Coyote: winter Deer; Frequent, Year round Fisher Cat: Infrequent, year round Fox: Infrequent, spring - fall Mink; Infrequent, year round Moose: Infrequent summer months Muskrat: less frequent, spring - fall Otter: Occasional, year round Porcupine: Sporadic summer months Raccoon: Frequent, year round

<u>Fish</u> Bullhead Perch Northern pike Sunfish Other Snapping turtle Painted turtle frog sp

Figure 4

Water Flow approximately 2 hours after peak, July 3, 2013 (Photo – Low)



Sandy Fary: Summary of 2009 School field trip

Hi Bob,

I wanted to let you know we had a great time, albeit a little wet. I had a geologist with me that outlined all the geologic history of Vermont and Gillett Pond which provided a nice context from which to observe the pond. From the dam, we made our way down to the left to where the pond narrows quite a bit. There we observed thousands of eastern newts feasting on a plethora of macro invertebrates. Interestingly there were what I think were tubifex worms. We had a fun time watching them play peek-a-boo with the salamanders and our oars. Once we finally made it down toward the alder swamp (that is, after a capsizing event, and four excessively slow, serpentine paddlers), we ate lunch amidst the horsetail monoculture. That was particularly interesting since numerous segments that had come loose were floating about the surface or just below the surface. To many of my students, they mistook them for snakes, and thus would not step out of the canoe onto the hummocks. Two portages later, we made into the alder swamp, collected the rest of our data, and had Walter Poleman discus beaver influence on aquatic ecosystems. All in all, I didn't get nearly the amount of science content completed as I had set out to do, but the students reported it being the best trip yet this year (I can't understand why they didn't favor the waste water treatment plant or testing phosphorus levels in different types of scat!). Thanks for your maps and animal lists. I was able to include several components into my field guide.

FYI: This winter I'll do an extensive animal tracking unit. Typically I have some local trackers meet us at several different elevation sites and do a day of tracking. In March we have an overnight camping trip in Island Pond to do some winter ecology and animal tracking. Then this spring I'll be doing a more in-depth birding unit. My class will participate in the May bird count at Audubon, do a bird walk with Maeve Kim as well as Jim Shallow, and learn countless songs and birds. If you would like to do a walk or talk, let me know. I would love to involve you in any way if you're interested.

Take care, Sandy Fary

<u>Sources</u>

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Walter Poleman Pat Quinn Winifred Doane Sandy Fary Sue Morse Gale Lawrence Bill Minard Megs Keir Ernie Buford Aaron Worthley Wally Jenkins