

# SQUAM LOOKOUT

THE OFFICIAL NEWSLETTER OF THE SQUAM LAKES CONSERVATION SOCIETY

VOL. XIII, No. 1

*"Squam's Land Trust"*

WINTER 2004

## WONDER

What a wonder it is to observe otters scurrying between a thread of open water and the frozen lake, or a pair of bald eagles soaring within full view. That it could happen right outside your office window is a wonder, too. Only at Squam, I remind myself, only at Squam. Now six months into my work here, I find myself full of wonder.

I wonder whether those eagles will produce another eaglet this year and where might the three bears I saw on Coolidge Farm Road have hunkered down. I now wonder about the conservation value of every undeveloped lot I see. I wonder about how our predecessors viewed these forests and shorelines, and how folks a hundred years from now will appreciate the same simple wonders. I wonder about how deeply nature penetrates our being and about how important it is to have quiet places. Mostly, I wonder about the future of Squam.

Recently, Chris Devine of the SLA, Tom Curren of the LRCT, and I had yet another productive session laying out the framework for a strategic mapping project identifying the highest priorities for conservation. We are committed to working together to conserve Squam now before a tidal wave of development engulfs yet another New Hampshire lake community.



*Coolidge Farm Road*

*Photo by Warren Lake*



*Photo by Eric Morse*

*Chris Devine, Roger Larochelle, Tom Curren*

Our partnership is stronger than ever, as evidenced by the successful conclusion of three important projects. First, together with the SLA and 45 donors, SLCS purchased the Harrison property in Piper Cove. By the time the warblers return, the decrepit cabins will be history and all the lands of Mill Brook restored. Meanwhile, the most significant potential development on the shores of Squam was averted. The 191-acre lot on Bean Cove, known as Pine Hill, could have been an 80-unit cluster development. Instead, the LRCT now owns the biggest lot and we're in position to hold a conservation easement on most of the parcel. Lastly, Bill and Joyce Sullivan donated a conservation easement on their shorefront 4-acre lot near Shadbrush Cove, with the SLA as the reverter. All told, hundreds of Squam acres are being conserved, and considerably more on tap for this year.

The wonders of Squam are many, but they are not necessarily forever. With your help and with a focused plan, we now have the opportunity to ensure that the wonders of Squam will pass to the next generations. How privileged we are to shape the legacy of Squam. I wonder, how will each of us respond to the challenge?

Within the space of just a few short months, the Squam Lakes Conservation Society, the Squam Lakes Association, and the Lakes Region Conservation Trust have succeeded in protecting three key parcels in the Squam Lakes watershed. SLCS's **Strategic Plan** earmarked "collaboration with related organizations" as one of its strategic objectives - the results so far are impressive!

## Piper Cove



If you have ever visited the SLA Resource Center, you may have noticed the property right next door - the one with the decaying rental cabins. What you probably didn't notice was the 675 feet of lakefront out back and the extensive wetlands where tens of thousands of fish spawn each spring.

The "Harrison property" is one of the last unprotected portions of one of Squam's most important wetlands. Its location in a commercially zoned section of Holderness make it ripe for development. The Harrisons received several bids on the property, and prospective developers had discussed lake access from this property via boardwalks across the wetlands.

In an unprecedented strategic partnering, the SLCS and SLA succeeded in raising the money to purchase this 3.1 acre parcel. Forty-five SLCS donors and the SLA accomplished this in just a few short months! With the purchase of the Harrison parcel, the entire Piper Cove shoreline is now protected - the SLA Resource Center, the two SLCS fee properties (Mill Brook and Berry Mill), and the lowlands of Cromwell Point.

## The Sullivan Easement

**William and Joyce Sullivan** have donated a conservation easement to SLCS on a four acre parcel on Laurel Lane in Holderness. As added protection, they have designated the SLA as backup easement holder. The property, which was once being considered for a public boat ramp, has 100 feet of shorefront.

The conservation easement is noteworthy for its restrictive treatment of the shoreline. In addition to its prohibition of docks or other buildings on the shoreline, the deed states that the property cannot be utilized by anyone to qualify for a state mooring permit. There are currently no structures on the property, and it will be maintained in its natural state.

## Pine Hill

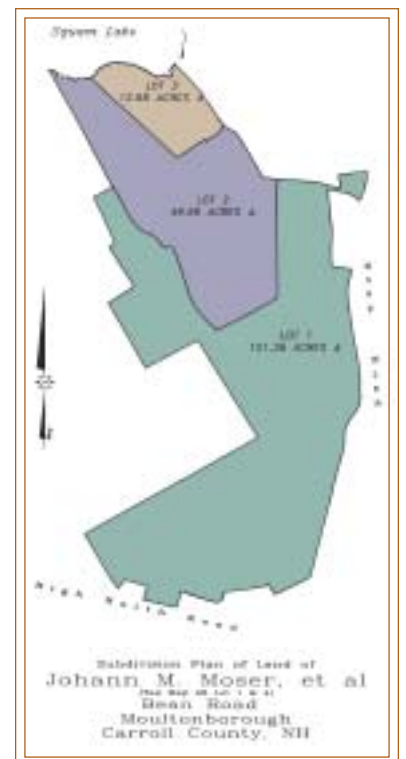
The purchase of the 191 acre Pine Hill Farm in Moultonborough for \$6.25 million marks the most expensive land deal on Squam Lake. More importantly, instead of an 80-unit cluster subdivision, the land will now be protected by three conservation-minded owners, the largest being the Lakes Region Conservation Trust with 121 acres. SLCS will hold an easement on all but five of the LRCT acres.

"Many people contributed to the success of this team effort," states Bill Copeland, a resident of Bean Cove. "We got this done in less than six months, despite many obstacles. We simply couldn't stand by as an intense cluster development proposal was on the table. It would have effected the whole lake and ecosystem."

Bill continues, "We can't thank the SLA, LRCT, and SLCS enough for all you've done to further our efforts to preserve and protect the Cove. We had a complicated situation that needed a quick and intelligent solution, and that's what we got. It's a pleasure to work with such organizations." Mr. Copeland is one of the prime movers of the Pine Hill Project. He and his wife, Susan, were in the news two years ago when their house in Bean Cove burned to the ground just prior to completion. They have since rebuilt.

Pine Hill represents one of the last intact family farmsteads on the lake. It includes 1,300 feet of shoreline in Bean Cove; 25 acres of pastures; 95 acres of old-growth woodlands that stretch to the top of Pine Hill; and stunning views of Red Hill, Rattlesnake Mountain, the Squam Range and Squam Lake.

For decades, boaters have navigated Squam and Lake Winnepesaukee using the majestic tall pine on the height of land, thus the name Pine Hill. It was once part of the old Plymouth Stage Coach route, prompting Joseph Sturtevant, an early owner, to open a tavern for travelers around 1830. John Greenleaf Whittier, among other notable poets, was a frequent guest. The tavern and a circa 1790 Cape are being studied for their historic value. We're planning on holding our 2004 Annual Meeting in the barn on August 14<sup>th</sup>.



# THE WAY IT WAS

“Our Days at Harvard Engineering Camp, Squam Lakes, Summer 1939”

by **Gunther Rudenberg**

*Scarborough, Maine*

Each summer, The Harvard Engineering School ran a course in surveying and design on the shores of Squam Lake, as part of the undergraduate curriculum in civil engineering. The course included instruction in mechanical drafting, which I thought might be useful to a future engineer even in other engineering fields. I attended during the summer of 1939, just before the start of World War II on September 3.

We lived in 4-man platform tents that kept rain out of our space while providing lots of fresh air and mosquitoes. We each had enough space for a trunk or footlocker and a cupboard for our belongings. Each morning we took a quick dip in the lake along which our tents were spaced, then got dressed and ready for breakfast in the large central dining hall.

On the second floor over the hall was a large room used for classes, equipped with a drafting table for each camper. Our instructor was Professor Haertlein, Professor of Civil Engineering at the Harvard School of Engineering, assisted by one or two graduate student assistants who stayed with us during the summer. The course work during the eight weeks covered elements of mechanical drafting, surveying land of varying topography, and roadbed design.

After a lunch of salad and sandwiches, our afternoons were spent putting our classroom instruction to practical use. We hurried to finish by the end of the afternoon before the mosquitoes attacked. Then there was time for another swim before we returned to the dining hall for a plentiful supper appropriate to a group of hungry young men who had spent all afternoon outdoors. By the end of the course we all were deeply tanned. During the few rainy days we had instruction indoors or worked on our drawings and maps.

Evenings were spent in conversation and listening to the mournful wail of the loons on Squam Lake. Many times we went back to the drafting room after dinner



*The Harvard Engineering Camp set this tripod on top of East Rattlesnake for the triangulation of their 1904 map. The tripod stood for 45 years. Do you recognize the women in this 1943 photo?*

to finish some calculations or to work on our maps and transfer notes taken in our field notebooks during the day.

Once we had noticed a skunk coming from the woods to visit us. He soon left without any incident. Thereafter, a daring resident in the next tent put out a graham cracker in a saucer filled with whiskey. This resulted in nightly visits, though our nocturnal visitor never sprayed.

In the beginning we surveyed the hills and woods of the camp area, and in subsequent drafting classes each of us would draw a map of the area we had so carefully surveyed with our instruments. We drew contours to show the height of the hills or depth of a gully, and marked any other topographical features. We learned how to use a telescopic level and rod for determining the contours of the area. We generally worked in pairs, alternating the task of the “Rodman” who went ahead with the graduated pole vertically on the ground, and the “Levelman”, who squinted through the level’s telescope to read the height mark on the rod. At that time we also measured the distance with a long tape measure, and magnetic bearing or angle to the rod. All this, or course, after we had carefully leveled our instrument with a multitude of interacting screws and set the graduated circle to North with a magnetic compass. Later we moved to a more elaborate sur-

veying instrument, the Transit. This allowed measuring the angle between two directions or the lines of sight of two distant objects, with an elevation scale to measure the angle of height, or azimuth, to these landmarks, allowing for much more precise measurements. Now we had to use trigonometry to calculate the measurements for our maps. A real test of this practical work was the so-called closure. We not only measured the center path of our road or railroad, but also then continued to measure back along another route, back to our starting point. After calculating measurements and drawing the results on each of our maps, we were shocked to see that the endpoint showed up separated from the identical starting point by a few inches on our maps, or even many feet, due to the slight inaccuracies of our many intermediate calculations. If the “error of closure” was too great, we might have to remeasure the entire project.

Another task I remember was to smooth the level of the road by cutting (on our map) the tops of some hills and using the soil so obtained to fill in the low spots. The object of this was not only to smooth the road or railroad and avoid steep grades, but also to end up with a zero balance of the soil moved, so we would, on paper, neither have to buy extra fill or get rid of surplus from an excavation.

*(continued on page 4)*

## Squam Lakes Conservation Society

“Squam’s Land Trust”



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*An original of this map of Squam Lake produced in 1903/1904 by the Harvard Engineering Camp, using the tripod pictured on page three, is available for viewing at the SLCS offices in Holderness. Please drop by to view it. Call us if you are interested in a reproduction.*

*(continued from page 3)*

We should remember that in 1939 there were neither computers for trigonometric calculations, laser instruments for measuring long distances, satellite GPS positions instruments to determine an accurate position on land, nor computers to create the maps and drawings. All measurements and calculations had to be performed manually. As students, only slide rules – “Granddad, what’s that?” – and tables of logarithms were our daily assistants. Our tools were pencils, pens and ink, rulers, and drafting instruments.

Though I continued in college to stay with my main interests of physics and electronics, I did get to use the skills acquired that summer some 12 years later. Joan and I had bought a lot near the ocean in Beverly, Massachusetts, and were designing our house with the help of an architect. To place the house on the slope among several large maple trees requires that I obtain a detailed map of our plot and mark the trees and slope contours in relation to the road so that our architect could proceed to draw the site plan. So back to Harvard’s Engineering School and Professor Haertlein, who

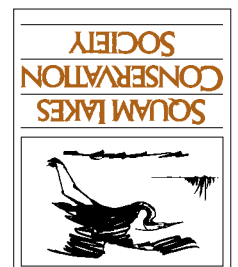


lent me a transit, rod and tape from his Engineering School inventory. With Joan holding the rod at designated places, we surveyed the lot, located the ideal spot for our house-to-be, delivered the map I drew to our architect, and then to our builder. In this way, the design of our dream house was aided by skills learned on the shores of what much later was called “Golden Pond.”

### RETURN SERVICE REQUESTED

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