

## Some Recollections on Shelburne Pond

..... H. W. Vogelmann.....

You ask which natural area I like best and I guess it would be Shelburne Pond. I have visited and evaluated more than one hundred bogs, marshes, old age forests and other natural areas, many of which are truly impressive. Yet Shelburne Pond stands out among all the others I have come to know. In part I enjoy the pond's rich array of habitats. It has cattail marshes, alder swamps, a sphagnum bog, limestone cliffs, pine forests, maple woods and lots more. But perhaps I like it best because I know it best. One always appreciates those things we know the most about. Also the pond is where spring first arrives in this corner of Vermont. It is on the slopes of a south facing hill among the limestone ledges and outcrops where blood roots, hepaticas and spring beauties make their first appearance after Vermont's long winter has ended. These first signs of life lift the spirit and herald the better days that lie ahead. When we see them we know we have survived another winter.

Whether Shelburne Pond is a pond or a lake depends on whether you are a Vermonter or a flatlander. Vermonters are conservative folks and call 'ponds' what everyone else in the country call 'lakes'. In any event it is an impressive body of water, irregularly oval in shape, about one mile long and about one third of a mile across at its widest point. It is shallow, mostly about 10 feet deep but a 25 foot trough runs parallel to the ledges on the eastern shore. The pond bottom is an organic brown ooze that in places is more than 50 feet deep and the decaying matter releases tannins that color the water so you cannot see the bottom. A narrow band of white cedars rim the rocky shores and on the eastern shore gray-white limestone ledges form walls which drop vertically into the water. Shallow caves have been carved into the soft limestone ledges where the waves beat against them. The cliff brake fern and red flowered columbines grow on narrow shelves or in cracks in the ledges. It is an exposed dry and harsh environment but somehow they manage to survive and are all the more conspicuous for the lack of other plants that cannot share the same habitat.

When I first came to Vermont I visited the pond and was immediately struck by its natural beauty. It had a wild almost pristine quality that was unique for a pond so close to Burlington, Vermont's largest and fast growing city. It lay only 10 miles south of the city and remarkably had escaped the camp developments that usually clutter lake shorelines. There are no houses around the pond and only one small camp is hidden in a pine woods. This was a kind of Thoreau's Walden...quiet, beautiful and a wonderful place to escape from the rest of the world.

Plant and animal life abound at Shelburne Pond. They thrive in the marshes, bogs and forests around the edges where the many kinds



of habitats makes possible a diverse flora and fauna. There are limestone cliffs and rocky outcrops, wet shady corners, and all kinds of nooks that make for one of the richest assemblages of plants and animals that one could find in New England. And what is more, Shelburne Pond has some of the biggest northern pike you ever saw.

Fishing is one of my favorite pastimes. In fact I have spent much of my life doing just that. It reminds me of the old saying that "the Gods do not subtract from the span of time allotted to man the time spent fishing". I think I am living that part of my life now. One of my most memorable fishing experiences occurred on the pond one summer day. While paddling my canoe along the edge of a cattail marsh I was trailing a spinner and hoping for a great northern to strike. I passed by a large floating log that was partly stuck into a floating clump of cattails. Realizing I had never seen that log before I drew closer to examine it. It was about 10 feet long and two feet wide and very uniform along the sides. It suddenly struck me that it was not just an old log but perhaps the bottom of an Indian dugout canoe. Reaching into the water I felt underneath the log to see if there was a cavity inside and was thrilled to find my hand passing over a rough hewn surface. There it was, an ancient canoe in near perfect condition..almost as good a catch as that big northern pike I was looking for. How it arrived at that site I do not know except it had probably lain upside down on the pond bottom for centuries and finally bubbles of marsh gas accumulated in the hollowed out part and raised it to the surface.

The canoe was a great find and one of the special surprises you get when you visit the pond often. I reported the find to the state archeologist who did nothing about it and there it remained half stuck in the cattails. Later some students in the Field Naturalist Program at the University of Vermont pulled it ashore to take pictures and make measurements. It was in remarkably good condition and probably one of the best, if not the very best, Indian canoes known from this area. It was carbon-14 dated at about 400 years old.

What do you do with a 400 year old Indian canoe? The biggest problem was not where to display it but how to preserve it. When old water-logged canoes dry they crack and fall apart unless they are treated in a special way which is costly. So the answer to keep it in good shape was to resink it. And so it was done....bags of sand were placed in the cavity to weigh it down and now it sits on the bottom of the pond from where it came. A map drawn from careful triangulation measurements shows where it lies and will allow it to be resurrected when the time is right.

Clearly Shelburne Pond was a popular place long before white man arrived. Indian artifacts are scattered along the pond borders and when fishing is poor I often pull ashore and poke along the



eroding banks and old cow paths to see what I can find. There are always chips of quartz and flint and frequently there is a broken arrowhead... sometimes a whole one. Once I found two perfect awls shaped from the bone of a deer. A rich find of artifacts was unearthed near the pond outlet by the local archeological society which uncovered numerous arrowheads, spear points, hammerstones, pot sherds, and other signs of ancient Indian settlements. Their studies revealed an occupancy of the pond for at least 5,000 years.

Although at first look Shelburne Pond appears wild and unspoiled, a closer look shows that until very recently it was heavily used, especially the shorelines which were lumbered and grazed. Nearby fields were cultivated and the agricultural runoff from farming activities has taken its toll on the water quality. Today the old fields and cow pastures are growing to cedar woods and a cellar hole on the island on the western shore is now covered with maples and ashes. The relentless forces of plant succession are slowly remaking the pond into what it was like in presettlement times. As man's workings become more obscured, the pond becomes wilder and wilder and better and better.

Years ago, when I first joined the faculty of the University of Vermont as a young botanist, I was impressed with the botanical richness of the pond. It was a short 20 minute drive from campus and a great place to take students. Over the years hundreds of my students have visited the pond and all have enjoyed its natural beauty and abundant wildlife. The pond environs have been studied and studied and studied. We have collected an enormous amount of information about the past history of the pond and its ecology. It is probably the most studied pond in the state. We have probed its depths and taken cores from the bottom to examine fossil pollen grains. From these studies we have retraced the history of the climate and vegetation since the last glacier. Transects through the marshes have recorded the changes in the vegetation as the marsh slowly creeps out onto the open water. First come the cattails, then the alders and finally the red maples. It is estimated that in another 700 years the entire pond will be covered with a swamp forest. Quadrats laid out in the abandoned pastures over the years reveal relentless plant succession from old fields to forest cover. Gradually native trees and shrubs are replacing the foreign plants and weeds which had once occupied the disturbed land. It has been a rewarding experience studying the pond and we have learned much about the workings of the natural world.

I always enjoyed taking students from my Plant Communities class to Shelburne Pond. The classes were small, usually about 10 to 12 students and just the right size to keep under control when doing field work. In winter we always visited an island near the western shore where I had the students lay out quadrats in a young stand of hardwoods. We did this in January or early February when the temperatures were often well below freezing. I always warned the students about dressing warmly telling them this is Vermont and at this time of year they should expect snow and cold weather. But there were always some who showed up wearing sneakers! Others came



with no hats. They darn near froze to death and I became cold just watching them. It was fun to watch them work and learn the procedures one uses to measure the vegetation. I would study them and observe who were the leaders and who were the followers. In short order each would find his or her place in the hierarchy and that place never changed throughout the semester. Some worked well under stress and other just about died. Most tried to be brave and on the coldest days they really were. I was struck by the apparent differences in body temperatures. Some were definitely more inclined to be cold and others seemed to stay warm naturally. I think cold tolerance is probably genetical rather than psychological although it may be both.

When the field work was done, the tapes reeled in and the stakes pulled out of the snow we would head back to shore. Students usually showed relief and chattered enthusiastically. They had survived another class and somehow the experience and challenge made them stand a bit taller. Perhaps it even built character or maybe I just want to think so. What they did not know was that I was just as cold as they were.

On one occasion we arrived at the frozen pond. The ice was two feet thick and strong enough to support a freight train. I drove the van with the students to the edge of the pond and suggested we drive across the ice to the island. The frightened look on their faces suggested otherwise and so I parked the van and we hiked a mile over the ice to reach the island. It was cold and as the day progressed the temperature dropped further and a wind came up. The kids looked half frozen. I jogged back to the van and drove back to the island. When the field work was done you never saw such a happy bunch jump into the van. There was much shouting and laughter as we drove back across the ice to shore and no one seemed the least concerned about falling through.

There are cliffs on the west shore not far from the island that are really special. The limestone walls in places reach to about 50 feet. A coarse talus of rocks that have broken away from the ledges are strewn at the base. Trees above the cliffs shade the cliff faces and boulder field below. It is within this narrow moist microenvironment that borders the ledges that one finds a host of colorful wild flowers such as red and white trilliums, squirrel corn, dutchmans breeches, wild ginger and blue cohosh. On some of the limestone outcrops there are walking ferns and spleenworts. It is fun to clamber over the boulders along the base of the ledges to see what one can find. It is botany at its very best.

Partly hidden by rocks and shrubbery is a small cave with a narrow passage into the interior of the cliff that only a very skinny person can pass through. I was always intrigued with the smokey walls at the cave entrance which I imagine were from Indian fires years ago. Indeed not far from the cave I have chips of flint and quartz and even broken arrowheads.

Fishing at the pond has given me the opportunity to observe



plants growing along the shoreline and observe the birds and animals. I have found neat corners along the rocky shores and even made some discoveries about fishing holes. There is one such hole at the mouth of one of the bays and lies a short distance from a rock ledge. In early May the perch spawn there and if you know exactly where to drop a worm you can catch the biggest yellow perch you ever saw. These fish reach 13 to 14 inches in length and weigh over a pound. In Lake Champlain you are lucky to catch a 12 inch perch, eight to 10 inches are more common. This perch hole is something special. All summer you cannot catch a perch much bigger than a minnow but in May the big ones come out of nowhere to lay their eggs or whatever else a perch does in that spot. The location is precise.... the hole is no greater than 10 feet across and if you cast a worm even one foot outside that circle you never get a bite. But when your worm hits the hole you immediately catch a big one, and another and another.. as fast as they can be pulled in. It is as if there is a giant perch factory at the bottom of the pond that turns out a never ending supply of fish.

There is something about the wild beauty of the pond that brings out the best in people. One day I was fishing near the boat access area when a beat up car drove up pulling a small beat up boat. There were four scruffy young men who got out of the car who looked like they had just escaped from prison. I thought "my God, what is this place coming to". Such unsavory characters could not be up to any good. They crowded into the boat which should have held no more than three at best and pulled from shore. The boat silently glided toward me and I noticed it was driven by a small electric motor. As it passed I called out "you have a great motor there" to which the motor operator replied " yeah, and it don't pollute neither".

Shelburne Pond was such a special place that I worried it was only a matter of time before it would be developed. It is just a short distance from Burlington and the city was growing fast. Houses were springing up in all sorts of places and Shelburne Pond would be a real plum to a developer. I hoped the town would take strong zoning measures to protect the area but the planning process dragged on and we were running out of time. It was clear that we needed to take action before it was too late. Even one house on the pond would destroy the integrity of the site.

At the time I was chairman of the Vermont Chapter of The Nature Conservancy and suggested to our members that the pond become a priority acquisition. There were about 17 landowners and I thought we could begin to acquire the more key parcels before the developers arrived. It was a great project and there was a lot of enthusiasm. Contributions came in, mostly in the \$25 to \$100 range but there were a few of \$1000. Then a large tract came on the market which was slated for development. The parcel overlooked the pond and it was important that we buy the land to protect the shoreline and adjacent wildlife area. The seller wanted \$50,000. We had some money but not nearly enough. This was in the early 1970's and \$50,000 was a lot of money to raise. To our good



fortune a wonderful wealthy gentleman from Manchester heard of our plight and sent \$50,000 to buy the property. It was a great boost and The Nature Conservancy was on its way. But there was a long way to go to acquire all the land needed.

I kept in touch with our wealthy benefactor in Manchester and from time to time I visited him to keep him informed of our progress. He was Laurence Achilles, an heir to the Kodak fortune. Mr. Achilles was around 90 years old and his health was fragile. When my wife and I would visit him at his beautiful home he was always a gracious host. A cook prepared a special lunch and the table was set in an elegant fashion. Achilles was a perfect gentleman..right out of the 19th century. His manners were impeccable. When a woman came into the room he would rise from his chair even though it was difficult. He was just a wonderful, kind person who cared about people and the environment. Some of his 19th century views carried over into his business dealings which he considered were a man's activity. When he wanted to discuss with me about the financing of the pond project he would excuse himself and take me to his office leaving my wife behind in the living room to look at the paintings.

Achilles was concerned that we were not moving fast enough to keep ahead of the developers. I explained that people were giving all they could but they did not have the resources to make it go. Achilles looked worried and asked how much money it would take to buy all the land we needed. I said probably about \$270,000 to which he said "whew".

We live on a farm and at that period I raised black angus cattle... a cow - calf operation that was costly but kept me sane from the daily pressure of teaching and dealing with difficult faculty. It was a spring day, shortly after my visit with Mr. Achilles, that I was behind the barn shoveling out the winters accumulation of manure. I was standing knee deep in the stuff when my wife came along saying the Mr. Achilles was on the phone and wanted to know how much it would take to buy the rest of the land around the pond. I said tell him \$270,000 and off she went. Half an hour later I was still shoveling out the stuff when my wife came back and said Mr. Achilles just called to say his lawyer would send the check right away!

Now what to do..some 17 landowners and how could you reach them all and persuade them to sell. I then made one of the biggest mistakes in my life. I thought the easiest and quickest way would be to hire a real estate agent to visit each one and make an offer. How naive can you be. The realtor was a nice friendly fellow but his white shirt, tie and suit coat turned off the natives. They became suspicious about someone wanting to buy their land and they had never heard of The Nature Conservancy. and so no sale..not one! We lost valuable time and it took years to win over the landowners and begin to protect the pond. Little by little and piece by piece lands have been acquired and now we have over 500 acres under protection. Over 3/4 of the pond shores are now part of a nature

preserve that is under the direction of the University of Vermont.'

After Mr. Achilles made his generous gift I offered to show him the pond but I worried his health might not allow it. However he was determined to see it and made arrangements to have his daughter and a nurse accompany him to the pond. I met the group at a predetermined stop on the main highway and escorted them over a dirt road to the pond. Mr. Achilles has slept most of the three hour drive from Manchester on a bed made up in the station wagon. He looked excited and refreshed when I met him.

It was one of those glorious September days...a clear blue sky and a mild, gentle breeze. The pond never looked better. Waiting at the boat launch were two new university research boats with a captain's chair ready for Mr. Achilles. When he saw it all he beamed and said it was more than he expected. He said "Hub, you call this a pond but its really a lake". Achilles was gently eased into the captain's chair, holding tightly onto his binoculars that were hung around his neck. The nurse and daughter brought out a big basket of fried chicken, cheese and wine and these were loaded into the boat..and off we went. Never had the pond looked more beautiful. Gulls were flying and so were the ducks. I said "Mr. Achilles, there goes a duck" and he grabbed at his binoculars but by the time he got them to his eyes it was gone. It didn't make any difference...he was in his glory. We passed a small fishing boat and he waived enthusiastically and gave a big hello. It was his pond and his day.

We cruised slowly along the shore for an hour and finally dropped anchor in a small bay with a limestone ledge as a backdrop. The two boats were tied together and we opened the basket and had our chicken, cheese and wine. Mr. Achilles never stopped smiling. Later he said it was one of the happiest days in his life. He said it meant so much to him that his gift could give pleasure to so many people and for future generations to come. Shelburne Pond is now designated as The H. Laurence Achilles Natural Area.