

Why Have All the Herons Gone?

Summary of Heronry Trouble

Before 1998, all was wonderful for the herons of Peltier Lake in Anoka county, Minnesota! Virtually every evening, Black-Crowned Night Herons squawked their “quarrck” sound and the Great Blue Herons echoed matching ancient calls.

Experts estimated a colony of about 1,100 great blue heron nests on the large island plopped in the shallows of north Peltier Lake (the grey of Figure 1). Human activity in the lake was south of the island so the herons preferred the island north end. Thick native aquatic plants and shallow waters discouraged almost everyone from entering the heron haven. (Heron only nest in colonies; they do not make single nests in back yards.)

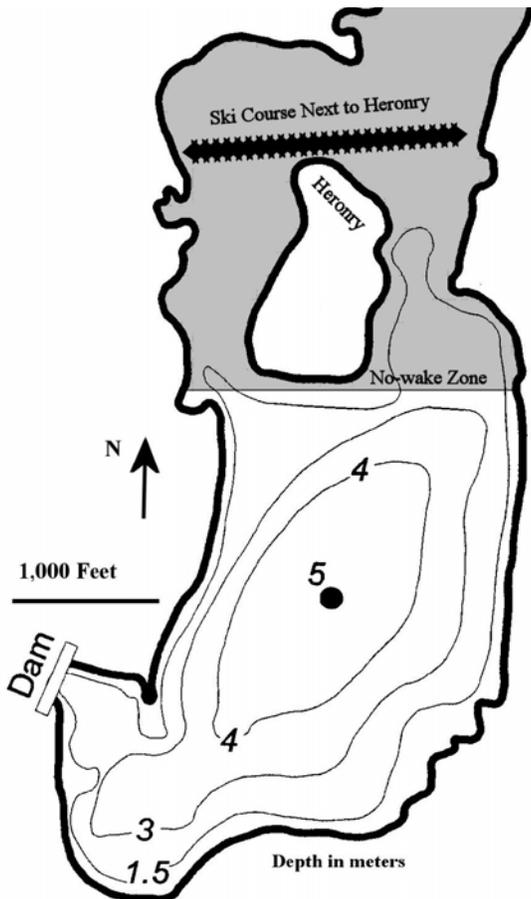


Figure 1. Peltier Lake, Heronry, and Ski Course.

Parks and the Lino Lakes Environmental Board cared! But what should have been a simple regulatory decision, turned into a political quagmire: it took four gut-wrenching years to enact permanent protection.

Out of many possible problems for the herons, what is a most likely scenario? Might it be that the ski course installed next to the heronry could have been an initial disturbance to the colony? Then, with numbers down substantially, predators such as raccoons and owls may have become a dominant influence. In explaining this to Art Hawkins, noted biologist hired by the DNR to study the herons, he said, “I think that your case is solid and that the coons were a secondary, not the primary factor in the demise of the colony.” This paper brings together heretofore disjoint and unavailable data. It examines a possible initial human disturbance.

However in 1998, a slalom water-ski course was installed right next to the heronry. The herons, who were no longer isolated, now found noisy inboard water-ski boats with high-flying walls of slalom water-ski spray – all in their “living room.” At the end of the year, there was great concern; some observers felt that heron numbers were down. (According to DNR data, estimates put numbers down about 50%. In addition, the treasured Black-Crowned Night Herons totally vanished).

I called a meeting with state experts from the DNR, county experts from Anoka Parks, city officials, law enforcement and people from the Peltier Lake Association including the slalom skiers. Experts explained the sensitive environment and an agreement was reached so that no more water skiing would be done north of the island.

A couple years later, it seemed the herons were abandoning their nests. The herons were in trouble. The next thing we knew, the ski course was again installed north of the island right next to the heronry and moving it was refused. Even if the ski course had nothing to do with the problems of the herons, observations show that beneficial aquatic plants were being damaged and lake water quality could be greatly affected. Disturbed sediments also looked like a problem.

It was clear that enactment of formal protections and ongoing enforcement of those regulations was the only hope for the herons and the lake. Hopefully, someone would enact and

enforce protection of wildlife and the environment.

Luckily, the DNR Department of Wildlife, Anoka County Parks and the Lino Lakes Environmental Board cared! But what should have been a simple regulatory decision, turned into a political quagmire: it took four gut-wrenching years to enact permanent protection.

Introduction of Detail

Years after initial heron nesting trouble, the DNR hired Andy Von Duyke to study and try to help the herons on Peltier Lake. He found raccoons seem to be preying on the few surviving great blue heron young possibly causing abandonment. This was revolutionary camera work! But does it answer what may have happened at the start of the trouble? Maybe not. There could have been an initial event or set of events or set of factors different from raccoon predation. Then, with a weakened or greatly reduced heronry, predators such as raccoons and owls could become a dominant force.

Consider the chart in Figure 2 taken from Minnesota DNR data. The very first time a slalom water-ski course was set right next to the heronry in 1998, numbers declined by 50%! But most alarming is the total disappearance of the black-crowned night herons that year – perhaps the smoking gun! With the ski course removed in 1999, numbers rebounded. But when the ski course was secretly put back in next to heronry, numbers plummeted again and this time with a deadly additional factor, abandonment. If the raccoons did it all, why would they attack in 1998 and wipe out all the black-crowned night herons, then carefully wait two years before resuming attacks? If raccoons caused the trouble in 1998 and reduced populations by 50%, why would the population increase the next year, then increase more the year after that? History with the raccoons indicates they come back year after year with the same or even increased ferocity. Raccoons doing it all doesn't seem to fit the data.

Information here attempts to put some order into the volumes of information on this topic. It offers possible explanations with behind the scenes detail and reasoning that matches the data.

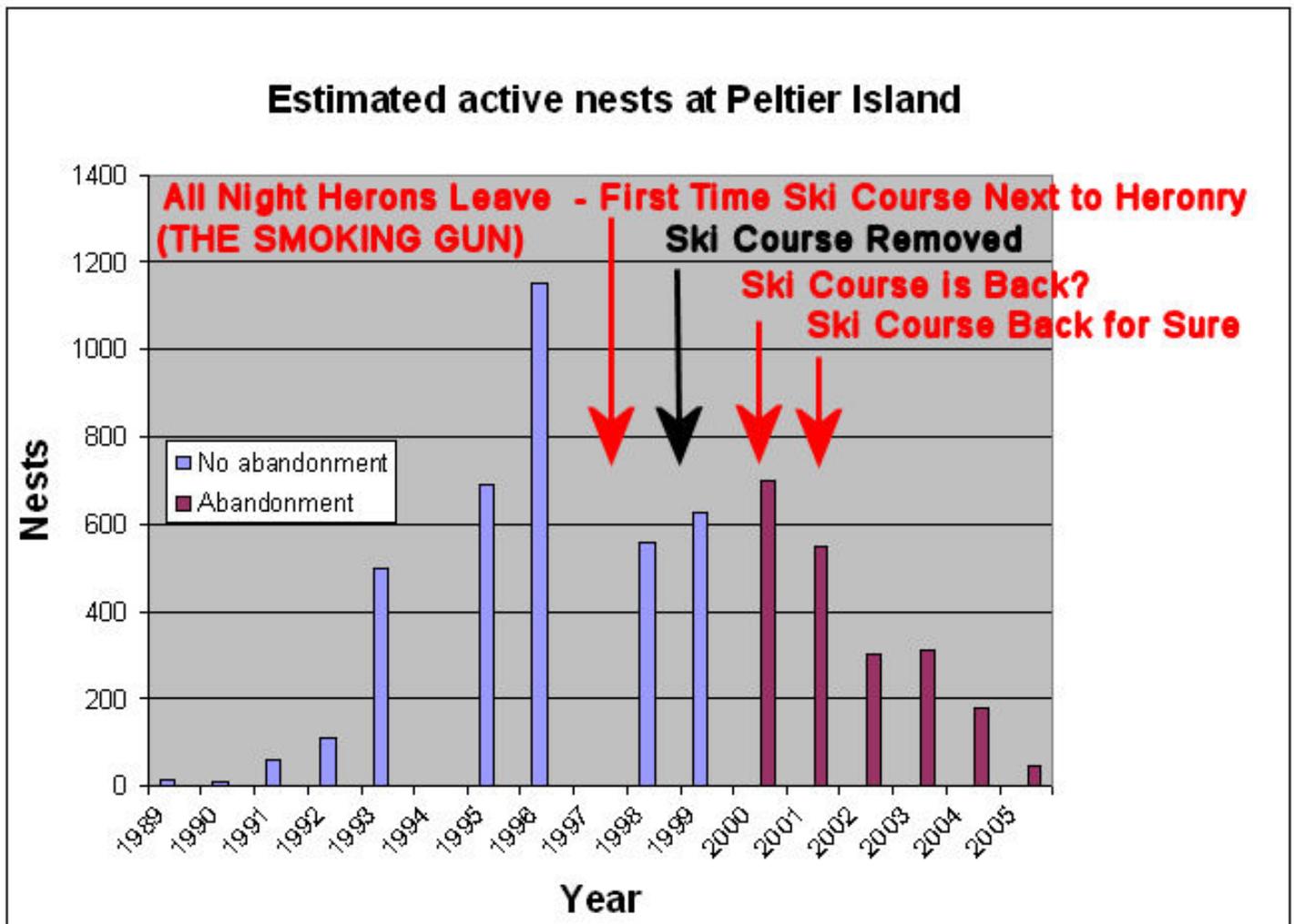


Figure 2. Heron Nest Counts from DNR, Peltier Lake Island

Details and Rough Chronology

Before 1998, all was wonderful! There were black-crowned night herons, great blue herons, and great egrets flying all over and nesting on the northern end of Peltier Island. The DNR estimated over 1,100 nests with 1,000 to 2,000 birds or more. In May, 1996, the DNR circled the island by boat and confirmed my observations of many nesting black-crowned night herons. I have lived on Peltier lake since 1979 and black-crowned night herons and great blue herons were everywhere all the time. The great blue herons stayed into September every year. The rough grey area in Figure 1 shows an area of Peltier Lake that is very shallow, only 3 or 4 feet deep, and it was filled with native beneficial aquatic plants (mostly coontail). This vegetation secured the fine silt sediments, kept the water in the north part of the lake relatively clear, and provided a fish nursery according to the Rice Creek Watershed District Aquatic Biologist. Some literature says that coontail floats on the surface but this coontail was always well secured in the sediments. According to the Anoka County Park Natural Resources Specialist, it was a high quality wetland containing numerous rare plants. The area west, east, and north of the island is essentially wilderness and almost nobody ventured there. Lake shore homes are only on the south and east part of the lake, essentially in the white area. Everybody respected the wildlife and sensitive environment up there. Boating activity was in the south deeper part of the lake so the herons "hid" from all the activity and nested on the extreme north end of the island as shown and they were all alone and undisturbed.

However in 1998, two families set up a slalom water-ski course right next to the heronry and began to damage the native protective vegetation. The isolation of the herons was now reversed. The herons now suddenly found very noisy powerful inboard professional type water-ski boats with high flying walls of slalom water-ski spray – all in their "living room!" At the end of the year, many people on the lake felt that heron numbers were down. (In fact, numbers were down 50% according to the DNR data, Figure 2.)

There was much concern! I am chairman of the Peltier Lake Association and have been very active in trying to improve the water quality of the lake and preserve the incredible wildlife existing there. I had already invested thousands of hours into improving and protecting the lake. I helped organize a meeting with state DNR officials, Anoka County Park experts, local city officials for Centerville and Lino Lakes, Water Patrol people and people from the Peltier Lake Association including the slalom skiers. In April, 1999, all these people and officials met and concluded with an agreement documented by Anoka Parks and written up in two Association newsletters that said no more water skiing would be done by the island. Experts explained how sensitive the area was and that high speed boating threatened environmental damage. The agreement was for the protection of the aquatic plants and the sensitive environment as well as the herons. The two slalom water ski families wanted the agreement to be informal, and so it was.

The ski course owner had often insisted the two professional Mastercraft type inboard ski boats the two families used did not disturb the bottom. He cited studies and other supposed data. I did not believe him. I am a private pilot and on May 2, 1999, I rented a small plane and flew over north Peltier Lake to see if I could see any evidence of the 1998 ski course activity. I did. It was clear as a bell. I was fortunate with the weather, the water was calm, the sun was out, and the bottom was visible. I found a straight line carved-out trench created by the ski course activity thousands of feet long. I was flying the plane and trying to take pictures at the same time and the pictures do not do justice to what I saw. But the pictures clearly show the damage done. In Figure 3, the straight line carved-out trench from the ski course runs from upper left to lower right as shown in the dashed box. The image has been lightened and contrast added to better show the trench cut out by the powerful boats. The image has not been altered in any other way. I estimate the area shown in the picture is about 200 feet long and the typical track taken by the boat in the ski course is about 2,000 feet long! It is basically shore to shore (Figure 1). Let that sink in! This is a major environmental impact. The course itself with the 22 buoys was 855 feet long and 150 feet wide but the track the boat takes for the turn around distance is much longer, on the order of 2,000 feet. Realize the practice is to run through this course quickly (34 mph) turn around and run through it again at very high speed, as fast as humanly possible, over and over and over again. The orientation of the propeller on the powerful inboard ski boats is angled down and a continuous slug of fast moving water gouges the bottom. The prop shaft on the powerful boats is angled down to make the boat rise up and out of the water. There is equal and opposite reaction going on there and the same force that raises the boat out of the water also forces water downward in a wash that trashed the sediments on the bottom. Think of the noise and power needed for a boat to make a trench like this! At idle, these boats are fairly quiet, but on opening the throttle, these powerful boats sound similar to a Harley Davidson motorcycle roaring off from a stop because when the boats lift from the water, the exhaust is basically exposed and is very loud, especially from the back of the boat. It would not be pretty to a black-crowned night heron, great egret, or great blue heron I would estimate. And think of the sediments that were thrown up into the water column in 1998 with this boat traffic. The water quality in the north part of the lake must have deteriorated substantially. Water quality alone and disturbance of possible fish habitat alone could be a cause that would impact the herons. I monitor the water quality of Peltier Lake for the Rice Creek

Watershed District but do not go behind the island because of its isolation. Little did I know that it was not at all in isolation in 1998. I finally spotted them back there late in the year. (Somebody else actually wrote the original letter of concern about this ski course.) What was the impact of suspended sediments? How were the fish affected? How were the plants affected? Did large numbers of birds flee at that time? Were the plants damaged in 1998? When were they actually back there? The implications are many.

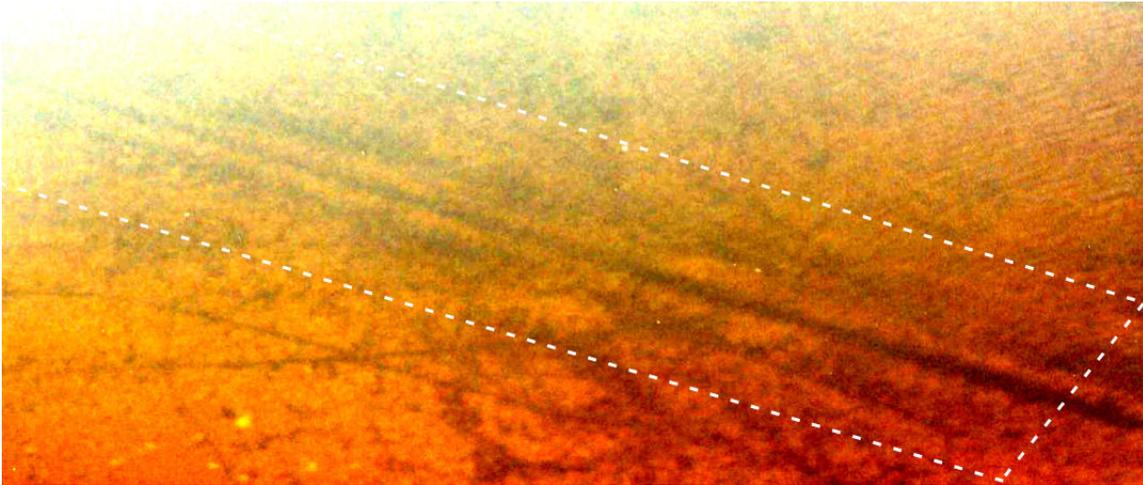


Figure 3. Trench Cut from 1998 Slalom Ski Course, May 2, 1999 Aerial Photo

It wasn't until a year or two later that I realized ALL the black-crowned night herons left that year in 1998! Art Hawkins, noted biologist and observer confirmed my observation with his own independent observation in a note saying, "In the spring of 1999 I started work for the DNR observing the heron rookery of Peltier Island and repeated my observation the next three springs. ... I... visited perhaps 20 times per year... In all that time, not once did I see a night heron! For whatever reason, the nesting colony of night herons had vanished."

To me, the disappearance of the black-crowned night herons in 1998 is the smoking gun! Why did all the black-crowned night herons leave in 1998? (I wish someone would study this.) This disappearance exactly coincides with the first use of the ski course right next to the heronry. An entire species was wiped out. I read that black-crowned night herons are more susceptible to disturbance because they roost during the day and forage at night (the opposite of great blue herons). The ski course next to the heronry is the only big thing that changed that I know of. Nothing else that I know of changed that much. The raccoons may have been increasing in numbers but would they have suddenly decided to consume only the black-crowned night herons and kick out 50% of everyone – all in a spike in one season? Would the raccoons have then let the colony grow for 2 years before attacking again? In my mind, the ski course is the most significant factor in things affecting the herons. I have very seldom done this, but whenever I drove my boat behind (north of) the island at high speed, the herons would fly away. I do not have a powerful inboard water ski boat, my boat is relatively quiet and had no water skiers. Imagine what the herons would think of a noisy powerful Mastercraft professional type water-ski boat towing a slalom water skier cutting walls of water to great heights. Remember the course traveled was roughly 2,000 feet long, about 160 feet wide and set right next to the herons. Before that, for decades, there had only been total silence, no people, and everything was surrounded by protective thick native coontail aquatic plants.

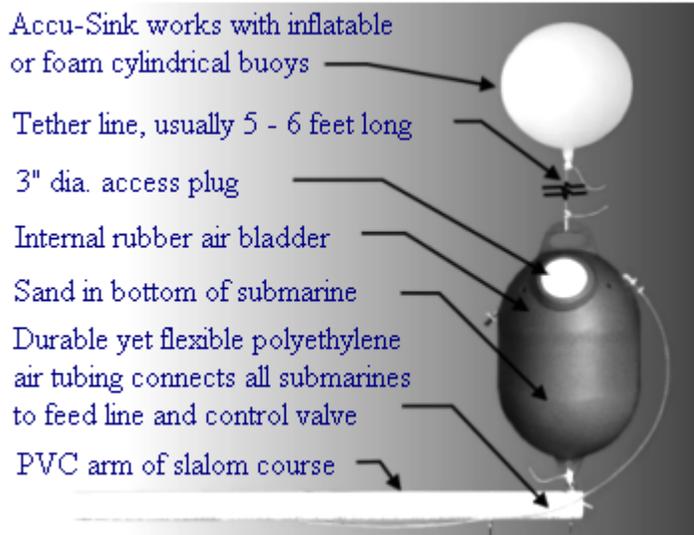
As far as is known, the agreement in April, 1999, left the great blue herons with relative peace for a year or two. The ski course was removed at the end of 1998. In 1999 and 2000, Figure 2 shows their numbers rebounding. I thought all was settled. The numbers rebounding because of the lack of a ski course makes sense. Again, why would raccoons hold off for 2 years?

I'll cover 2000 in bit, first some on 2001. All was not settled.



Figure 4. Ski Course & Destroyed Native Plants, July 8, 2001

Incredibly, on July 7, 6:15pm, 2001, I went behind the island and I caught the two slalom water-skiers behind the island with the slalom water-ski course all set up again and in heavy use (Figure 4). (For quite a while I had noticed that their heavy ski activity was missing and I didn't see their boat anywhere on the south part of the lake. I wondered where they might be. They were behind the island!) The ski course was rigged to sink when not in use so it could be hidden from view when they weren't using it. I asked them about the agreement. They said they didn't have anything to do with any agreement (they were the ones who wanted it informal – now I knew why). They then claimed the herons were fine. I looked around. There wasn't a single heron to be seen anywhere. I pointed this out to them. They cared nothing about the herons. They didn't even know the herons were missing. It is normally thick with herons behind the island. (The herons had basically already left.) Aquatic plants were destroyed by the ski course. I implored them not to destroy the vegetation. They said they could do anything they wanted. I asked them again to please move their ski course. They just said they could do anything they want. Basically, I should get lost. All I could do was leave. Figure 4 is a picture taken July 8, 2001. You can see where the vegetation was destroyed to make room for their slalom buoys from left to right in the bottom half of the picture. The ski course runs left to right and two buoys are visible. I estimate they had already caused the destruction of about 500,000 square feet of sensitive native vegetation. Behind them, is the remaining native



**Figure 5. Accu-Sink Slalom Ski Course System.
22 of These. 855 feet by 150 feet.**

vegetation, over 1,000,000 square feet of mostly coontail. (Later even that native vegetation disappeared. I estimate up to about 2,000,000 square feet of beneficial vegetation is now gone.) The owner later said to a newspaper, "...moving the slalom course isn't an option." Agreements obviously didn't mean a thing to these people. To think that I brought in state DNR officials, Anoka County park experts, city officials and others and it didn't mean a thing. The environment didn't matter. Only their ski course mattered. These two families were going to continue to use their slalom ski course no matter what it did to the environment. Even if somehow they were not disturbing the herons, they were ruining the lake by destroying native plants and putting sediments in suspension. (These two people were also on the Peltier Lake

Association board and knew all about permits for aquatic plants. The Association dealt with aquatic plant harvesting permits every year to deal with an exotic in the south part of the lake.) They knew the law. It didn't seem to mean a thing.

The ski course installed by these two families was a very specialized system called the Accu-Sink System (Figure 5). It is a ski course that sinks the buoys under the water when not in use so it won't be seen. The course is surfaced by using an

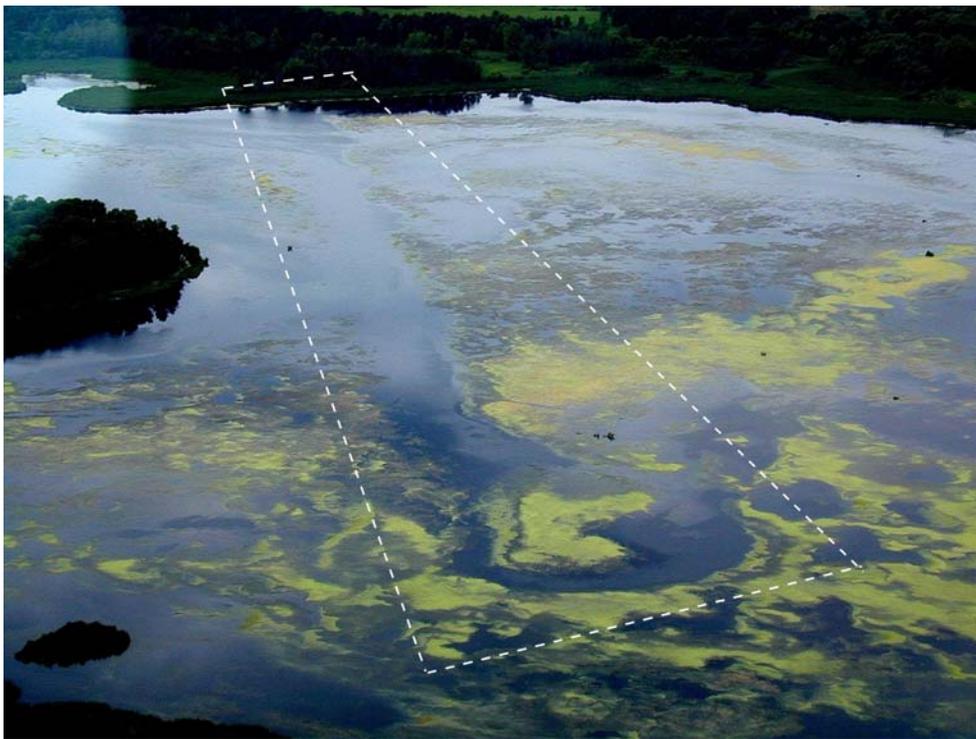


Figure 6. Aerial Photo of Aquatic Plant destruction, July 14, 2001.

air compressor which inflates bladders raising the 22 buoys to the surface. To sink the ski buoys, air is let out and counter weights pull the 22 ski buoys under water so it is hidden from view. This is a system of 22 ski buoys, 22 bladders, 22 counter weight devices, and perhaps 1,000 feet of PVC pipe and another 1,000 feet or more of air hose to control everything. This is a huge structure! Think of what the installation of this system alone might have done to the birds. Just in looking at this huge system, I believe they would have had to remove the plants in order to be able to install it. The coontail plants were very thick there and the piping and hoses and other equipment would not have set properly without removing the plants. I know Peltier Lake like the back of my hand. I have been everywhere in my canoe,

I know the contours of the lake, I know the plants and I know the water quality. I have made this lake my life's study since moving there in 1979. The coontail plants were thick and healthy before the ski course was there (probably a plant every square inch – as of 2005, it is still that way on the west side of the island because boats do not typically go there). And after the ski course, the plants were gone just where the 2,000 foot ski course track existed. I watched them go back

and forth in the track. They told me on July 7, 2001 that they were cleaning the plants out. They are obviously the people responsible for the destruction of those native aquatic plants.

I happened to know a flight instructor who agreed to take an aerial photo for me. Figure 6 shows the aquatic plant destruction from the ski course on July 14, 2001. I don't think the course had been in use for a week or so and the wind had blown some plants around a little. But you can clearly see the track of the course and even the counter clockwise turnaround in the bottom of the dashed line box. On the left, you can see the northern tip of the island where the heronry is. I estimate one of their ski buoys was about 100 feet from the island and heronry. Skiers, of course, ski beyond the buoy and would have been closer to the island than the buoy and they would be turning and cutting hard throwing up a wall of water perhaps 10 or even 20 feet in air.

Now, let me look back one year, to the year 2000. This was the year of the first heron abandonment. It is also very possible that these people had their ski course next to the heronry at that time. I didn't go back there to see so I have no proof. The area by the herons is so isolated that it takes extra effort to get back there. But there is evidence. There is a satellite image taken in Sep of 2000 showing extensive vegetation destruction and the

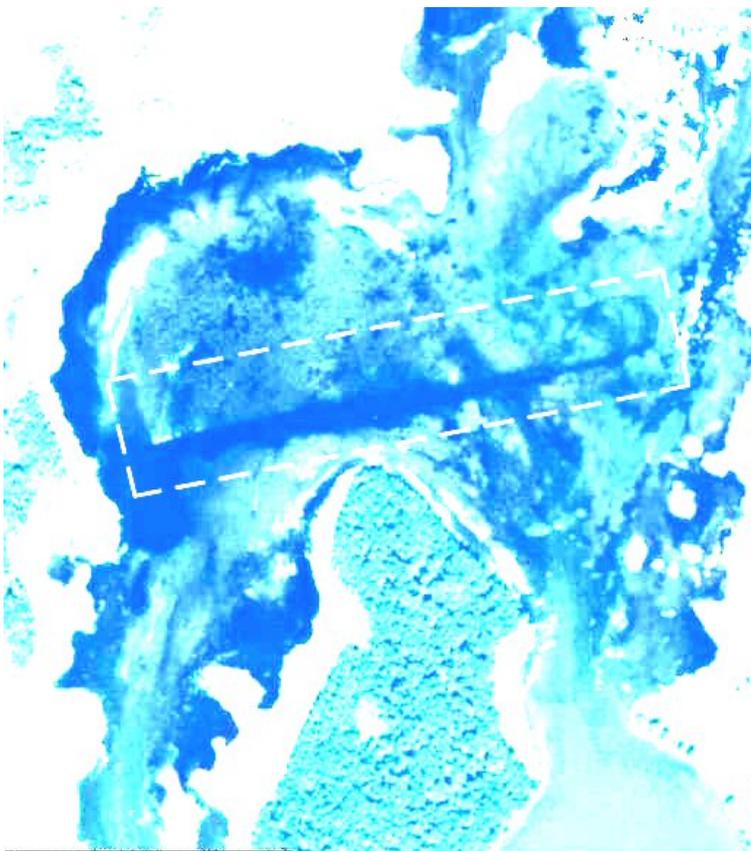


Figure 7. Satellite Image of Ski Course Track, Sep 2000

clear track of the ski course (Figure 7). Joan Galli of the DNR talked to the Mapquest web site who said the image I captured from their web site was taken in September of 2000. This image has been lightened to better see the ski course track. This image indicates heavy use of the ski course in 2000, the year of the first abandonment. Again, the counterclockwise turnaround on the west end of the course is clearly visible on the right side of the image. In retrospect, I recall a detail on aquatic plants in the main part of the lake. The south part of the lake basically has no native plants. (There is mostly the exotic curlyleaf pondweed which blooms in June but is totally gone by July end.) But the north part of the lake by the island had beneficial coontail plants. The area north and west of the island is the only place in the lake that had native coontail. The summer of 2000, I recall seeing floating coontail in the south part of the lake and it struck me odd. I have lived on the lake since 1979 and I watch it very carefully. I don't ever recall seeing that much coontail in previous years. It wasn't until the next year that I realized it was possible the coontail was cut out behind the island by a possible ski course in 2000. The plants in the track of the ski course already appear to be destroyed in 2000. Did they actually install the Accu-sink ski course in 2000? Was the ski course in heavy use at the time of the abandonment? Most likely, nobody will ever know for sure what happened in 2000.

These people are only interested in water skiing. They have been skiing with dry suits even before all the ice is off the lake (ice out is typically April 15). In 2004, the ski course owner set up his ski course on April 15, the day after ice out. There is and was great incentive to set up this course early and use it often, and they were intent on using it north of the island next to the heronry. You might be wondering why they wanted to setup this course in all this native vegetation. The reason is that the vegetation keeps the waves down and there weren't any other boats back there. They were all alone. That way they could ski in their course without wave interference. There was just them, the plants and the herons. (Soon there would be no herons or plants!)

Possible Scenarios:

Scenario #1. Could Raccoons do it all?

With all this information presented, consider Figure 2 again. Would raccoon attacks alone look like the numbers shown? Would the raccoons somehow grow in number to suddenly decimate a population of thousands of birds by 50% in such a spike in just one year (1998)? Wouldn't they have shown some preliminary affect first? Then, would the raccoons have completely stayed away and let the birds come back in numbers for 2 years in a row without doing anything? It seems unlikely. The third year (2000) and the years thereafter, it seems raccoons did attack in similar patterns. To carry out the pattern seen, the raccoons would have had to be a very disciplined group indeed with calendars and schedules to wait those 2 years. It seems unlikely that raccoons did it all.

Scenario #2. Combination of Events: Ski Course and Raccoons.

Or does this sequence better fit the events? Before 1998, herons from all over were finding Peltier Lake Island a true paradise and were rapidly increasing in numbers. It was quiet and isolated and food was abundant. However, in 1998, a slalom water-ski course is set right next to nesting black-crowned night herons, great blue herons and great egrets. There had never been anything so noisy or disturbing there before. Before 1998 there was nothing, now there was everything! The night herons roost in the daytime and are more vulnerable to noise than the others. The night herons abandon in 1998 for good and 50% of the other birds flee from the disturbance. A meeting is held and holds off the slalom skiers and their ski course for 2 years. The birds begin to rebound. Their numbers increase for 2 years in a row. But then, in 2000 or for sure in 2001, the ski course is secretly established again and heavy use begins. It is a huge apparatus and the setup itself may have caused disturbance. But this time, the herons have had it. Perhaps most of them leave right away and a small number remain who are now vulnerable to predators such as raccoons and owls.

Consider these clues: in May, 2002, before the no-wake zone was established, a number of herons had returned and many of us were watching them very carefully. The owner of the ski course went racing north of the island with his ski boat. The herons became agitated and all flew off their nests! The DNR was even called. Nobody had ever seen this before. It seemed like the herons had a "fear reaction" and fled with the sight and sound of the ski course owner's ski boat. Did the herons remember disturbances from that boat from the year before, or the years before that? (The herons have never flown off their nest from seeing my boat.) Here is another incident: On April 15, 2002, the day of ice out, a person living at the north end of the lake reported seeing a red and white boat at 8pm speeding to the north end of the island. They said the boat went back and forth north of the island with whooping and hollering. This is a time when the herons are most vulnerable, as I understand it. (The context of this time frame is that a temporary no-wake zone was in process but the buoys were not yet in place. There is a long story about that no-wake zone process.) The speeding boat with whooping and hollering in a place of known environmental sensitivity is a clear demonstration that there were people around who had absolutely no regard or interest in the herons at all. In fact, this act on April 15, 2002, is a clear act against the herons.

Humans were purposely disturbing them. Were they purposely trying to drive them away? What else might they have done that people didn't see?

From all this, I conclude the ski course was a definite thorn in the side of the herons. If only they could tell us.

Other Scenarios

Perhaps the raccoon predation was always there. But with a huge colony of thousands of birds, the colony may have been able to grow in size anyway. But now, with most of birds scared away, the raccoon predation becomes the dominant force and the birds are forced to abandon. Or perhaps there are multiple factors. The destruction of the aquatic plants and general environment around them may have caused problems in food gathering and again their numbers might be so small they become vulnerable to predators. There are many scenarios involving combinations of factors such as eagles, disease, food, water quality, seaplanes, mosquito control helicopters, and others. (From what I have heard, it appears the bald eagles have not been shown to be a significant factor. The nests of the bald eagles were examined by climbers more than once, and I haven't heard any evidence that herons were a significant prey of the eagles.)

Other Considerations

Wouldn't it be nice to know what really happened when? Then one might be able to better piece together the events. Unfortunately, I don't think it will ever be known. I tried to find out.

On July 7, 2001, at 6:15pm, I caught them behind the island with their secret ski course in heavy use. The agreement from April 1999 was very clear. State officials, County and city officials participated and helped shape the agreement with our Lake Association. I started talking to other Lake Association people about it and figured we could just work it through the Lake Association. I thought we could reiterate the agreement, the 2 families would remove their ski course and that would be that. However, the ski course families found out I was trying to work the issue through other Lake Association people. On July 10, 2001, around 9:05pm, 2 people came to my house. They each had a piece of paper in their hands and they began reading a well rehearsed prepared script. First one read, then the other. They said very emphatically that they were suing me. They read extensive legal terminology quoting numbers and sections and I don't know what. They said I can't win. The suit would come from numerous organizations. I better not do anything more concerning their ski activity. They also said the Lake Association was involved in numerous illegal actions. I took this to mean they were also suing the Lake Association. (Note: I took this all very seriously. I thought I was being sued. It wasn't until a year later that I realized the whole thing was pure intimidation and harassment to shut me up, to cover up their operation, and to isolate me from everyone else. I will say their tactic worked very well for them.) I finally interrupted them and said, hold it; you have a ski course behind the island, how long have you had it there? One said, "I'm not answering that." I asked, do you have it there right now? Again, the response was, "I'm not answering that." They then began reading from their script again. They had a lot to read. I finally closed the door on them. This was just incredible to me. I knew these people did not have a permit for the ski course. It was actually an illegal ski course. Here they had destroyed plants and had an illegal ski course behind the island that violated an agreement made in the presence of State DNR officials, County (Anoka Park) and city officials and others, the herons had abandoned their nests the year before and this year for the herons was in great question - and they were suing me?

Nobody will ever know what exactly was done. The slalom skiers aren't telling.

The stakes were now raised considerably. It was a very strange situation and I didn't know what to do. I took their statements very seriously. I went into total seclusion. Our daughter had just been involved in a fraudulently concocted lawsuit from a fender bender. It took 6 years and much anguish to expose it and send that person away without stealing our money. Now our family was faced with another potential 6 years of anguish and the possible loss of much money and much time. I immediately stopped talking to everyone. Any talk to anyone would get back to these people. They had succeeded in isolating me from everyone. So there was no way I could work the issue through the Lake Association. The only way to save the lake is if some other organization or entity would help and get these people out of the north part of the lake. I went to Anoka County Parks and thankfully, they began to help. It took 4 grueling years and much anguish to finally get them out of the sensitive part of the lake. I estimate I spent 500 to 1,000 hours of my time, real hours of time working the issue. I spent thousands of hours in anguish trying to figure out what to do over those 4 years. The whole process of establishing the no-wake zone to force these people out of the sensitive part of the lake is another story. But let me add one more detail to demonstrate the aggressiveness of the ski activity. There are 6 homes just south and east of the island. The first suggestion for placement of a no-wake zone to protect the island EXcluded their homes. They did not have to be in a no-wake zone. These people looked at the situation and decided they would be better off if their homes were IN the no-wake zone. That would keep the aggressive skiers away from their docks and property. And that is how the final line of the no-wake zone was drawn. The no-wake zone INcluded these homes so the skiers could not ski at high

speed right in front of their house. (I wish I could be in a similar no-wake zone as one of the ski families lives next to me.) These home owners didn't want the skiers next to their home. Here you have people (who are generally tolerant of other people), reacting to their ski activity – to block it out. I think the herons reacted even stronger in rejecting their ski activity!

Misinformation from the ski families has also been demonstrated. I was told over and over how their ski boats would not disturb the bottom. I have seen and photographed the carved-out trench thousands of feet long that these ski boats made in just one year of operation. They don't just disturb bottom, they trash it. People were told the ski boats improve the water quality north of the island because they aerate the water. This is absurd and goes against all the experts. The ski boats devastate the water quality by suspending huge amounts of sediment into the water column. On July 7, 2001, they told me they were cleaning it [the vegetation] all out so they could ski and so people could fish behind the island. They said the fishermen liked the clearing. What they were doing was killing the nursery for the fish and destroying the only water quality filter and sediment stabilizer the lake had. I don't think fishermen want the fish nursery of the lake destroyed. Environmental factors such as these were discussed in the April 1999 meeting, but it didn't mean a thing. To these people "environment" meant ski course. Birds and plants were impediments to their ski activity.

The two people involved were both on the board of the Peltier Lake Association and were centrally involved in the lake association obtaining harvesting permits from the DNR for removal of the exotic curlyleaf pondweed in the south part of the lake. They knew it was illegal to destroy plants without a permit. Yet they seem to have caused the permanent destruction of about 2,000,000 square feet of native beneficial aquatic plants. DNR literature states: "A person who illegally destroys plants can be cited and made to pay for the restoration of those plants." As far as I can tell, there has been no accountability and no justice.

This whole thing has boggled my mind. It is sad what has happened to Peltier Lake. I think I did everything right and I tried very hard to save the environment. I had basically dedicated my life to Peltier Lake. For 25 years, I spent thousands of hours working many issues to improve the lake, which has plenty of problems. But in just a couple years, it looks like Peltier Lake is now damaged. Roughly 2,000,000 square feet of native vegetation has been replaced by a nasty exotic called curlyleaf pondweed. And in 2005, I saw eurasian watermilfoil appear. The thousands of herons that once nested there are mostly gone and the few that remain may not make it. The black-crowned night herons (my personally most treasured creature of the area), was wiped out in one year and may never return.

I will say this, even if raccoons were somehow the cause of all the abandonments, these two families have still damaged native aquatic plants and destroyed fish and other wildlife habitat. It is especially offensive because they were told not to do it, they agreed not to do it, but they did it anyway, and then, when exposed, they demanded they be able to keep doing it, and they kept doing it. I have personally witnessed almost everything and I guarantee you that I have attended more meetings on this than anyone. I see sufficient cause to say the ski course could be the initial cause of the heron disturbance.

Other Deeper Concerns

Anoka County Parks is to be congratulated for responding and caring for the unique natural wonder that is Peltier Lake. The DNR and city of Lino Lakes Environmental Board also contributed greatly to stop the destruction. The Rice Creek Watershed District supported protection efforts. The city of Centerville supported protection right away. The city of Lino Lakes threw a curve into the mix. They said they would support protection, but only for three years. At the end of three years, the city would then by default, take away that protection (which would let the skiers return to their destruction). The no-wake zone had to be enacted in exactly the same way by both the city of Centerville and the city of Lino Lakes or the ordinance would become void. To accomplish this no-wake zone of protection took an unbelievable effort. The no-wake zone finally became permanent on May 24, 2004 (It was scheduled to expire on Sep 1, 2004.) Many other organizations and people from all over helped bring about the permanent protection. I deeply thank them all.

There are a couple deeper questions that should be asked. In 1998, the first time, why were these people even allowed to setup their ski course next to the sensitive heronry, in thick native aquatic plants, with easily loosened sediments only 3 or 4 feet deep? The Water Patrol gave them a permit. I contend this permit should have never been issued. Did the Water Patrol really know what it meant? Did he know this was right next to the second largest heronry in the metro area? Did he know it would cause the destruction of hundreds of thousands of square feet of native aquatic plants? Respectfully, I don't think this kind of decision should be made by the Water Patrol. I think this decision needs to be made by an environmental agency such as the DNR.

Then there was a big meeting. A Water Patrol official was present. State and County officials stated and wrote letters that a ski course should never go in there again.

Why then, did the Water Patrol disregard letters from the DNR, Anoka Parks and others that a water ski course should not be permitted behind the island? When the illegal water ski course was found by me on July 7, 2001, I called the Water Patrol about it. Yet I saw this water ski course continue its operation all summer. In checking the records of the Water Patrol, a permit was issued for the ski course behind the island on August 28, 2001. Why wasn't this water ski course shut down immediately on July 7? Were these people ever fined? And again, there were many letters against this water ski course from Anoka Parks and the DNR and others including me. Why was a permit issued on August 28, 2001?

I think there are some serious questions about the laws and processes that allow environmental destruction without consequence. I have seen no accountability or justice in these events. It took a super human effort to stop the destruction and it took 4 years to do it – perhaps too little too late. Protection of our resources has serious flaws.

I think procedures and accountability needs to change to prevent something like this from happening again in the State of Minnesota.

Conclusion

Of the many factors examined concerning the problems at the Peltier Lake Island heronry, two stand out: the installation of a slalom water-ski course in 1998 and again in 2000 or 2001, and the discovery of the raccoon predation. Although there could be other as yet undiscovered factors, it seems to make most sense that the ski course could have caused an original disturbance that greatly reduced the number of herons, and following that, raccoon predation could have then become a dominant factor. The herons only knew total silence and isolation before 1998, but then, with the sudden installation of a “next door” slalom water-ski course, they were suddenly thrust into noise and intense activity the likes of which they had never seen before. This sudden change could have greatly disturbed and affected the herons. Of most significance is the total disappearance of ALL the black-crowned night herons exactly the same time the ski course first went in. This, in my mind, is the “Smoking Gun.”

It is sad what has happened in Peltier Lake. Millions of square feet of native aquatic plants appear destroyed. Wildlife seems to have been severely impacted. Water quality was the worst. Protection of our resources seems flawed. It appears the actions of the Water Patrol seemed to be against resource protection. Why were permits issued that contradicted statements of other agencies? I hope changes occur that will prevent problems like this from happening again.

For more information see, WWW.PELTIERLAKE.ORG.

Wayne LeBlanc, May 2008

Follow-up

First are a couple responses from experts on a version of the paper above. After that, are a few other quotes and references.

Art Hawkins, noted biologist and DNR employee hired to watch the heronry, said of the heron paper: “Your enclosed report is a perfect example of personal dedication far beyond the call of duty. Only those of us singled out with “pure intimidation and harassment” know what it is like to stand up and be counted. I think that your case is solid and that the coons were a secondary, not the primary factor in the demise of the colony. As you did, you have to go back to the beginning to reach a logical conclusion... Coons must have been there in abundance all the time but the birds thrived, including night herons. Then something happened which you have documented in great detail... Certainly almost every heron colony must have a population of coons around it but they thrive despite the coons. There is no evidence that the same wasn't true at Peltier Lake until the human disturbance factor entered. But once the heron population was severely reduced, coons did make a difference. How this relationship plays out is a complicated story, I'm sure... I can't argue with the way you have figured it out. It makes sense to me and I have great admiration for the extreme dedication you have applied to this problem.”

Andy Von Duyke was hired to study the nesting herons on Peltier Island. He is in the Conservation Biology Graduate Program at the University of Minnesota. When he saw this heron report, he replied in part (the underlining is my emphasis): “Thanks for sending this report. You have definitely raised some good points. I must admit that the scale of this water-ski course was much greater than I realized. Here is some (not all) feedback after my first reading of your report: Just to reiterate our very brief conversation at MOU, I never meant to imply that raccoon predation was the sole factor. In fact, I have gone to extremes to qualify my answers to the public, the media, and others. It has been somewhat frustrating to me to see media reports of this study that fixate solely upon raccoon predation despite my efforts to provide a fairly nuanced and comprehensive assessment. My study, as you have mentioned, probably only shows a limited range of what has been occurring. It is limited by its short temporal scale. I do not have the data or background to comment on prior causes, which is why the water skiers and human disturbance were lacking in my presentation. Your mixed scenario is similar to thoughts I myself have had on how such a large colony could suffer such catastrophic and rapid declines. ... Joan Galli even shared some of her thoughts with me about a cascading scenario whereby each species is impacted by differing disturbances. ...It seems that each colony has a unique set of circumstances which need to be independently analyzed. It makes one's head hurt. Your report has helped me understand better the historical context in which my small study exists. ... As I mentioned before, I cannot really make any speculations on what happened in the past without data or experience to back it up. You have a long history and I agree after reading your report that the skiers had a truly significant negative impact on this lake which is a ... shame.”

To illustrate the attitude of the ski course owner, the March 2002 issue of the The Hugonian newspaper quoted him as saying, “...moving the slalom course isn't an option.” This statement came after an agreement was made not to ski there. The owner insisted the agreement be “informal.” This explains why. He apparently never had any intention of following the agreement. The owner insisted on putting his ski course in an area that results in damage to the lake.

In the March-April, 2004, issue of the DNR publication, Minnesota Conservation Volunteer magazine in an article called “Rookery Blues,” the ski course owner said, “I think it (the no-wake zone) should be moved [north of the island] . . . and it should only be April through July. It doesn't have to be the entire year.”

From the two statements above, the ski course owner clearly rejected the statements of all the experts who said damage would be done if he put his ski course north of the island. And even in 2004, three years after all the flap, the ski course owner is apparently wanting to put his ski course north of the island. I dearly hope government continues to protect the sensitive areas of Peltier Lake from those who would abuse it.

“Rookery Blues” is still available at :<http://www.dnr.state.mn.us/volunteer/marapr04/rookery.html>.

Web site is www.PeltierLake.Org.