My Experiences on the Great Lakes By Alan Grinsfelder 3/10/2017 wertyuiopasdfghjklzxcvbnmqwertyuio I started my research on The Great Lakes by reading books, magazine articles, and scanning the internet, while looking at detailed maps of the Lakes. I made a list of 30 different topics about the lakes -- their sizes, shipwrecks, pollution, ghost tales, canals, lighthouses and more.

When I discussed this with my wife, Maureen, she said that this would most certainly put you all to sleep and wisely suggested that I develop a tale of adventure. She said I like to tell stories -- some true and some "alternate facts". The best way to explore the Great Lakes is, of course, by boat so I'll invite you to "come aboard," and we'll start our voyage in Canada, specifically the port city of Gaspe, Quebec, in the Gulf of St. Lawrence. Let's see how far we can go. From the St. Lawrence Seaway to the western end of Lake Superior at Hibbing, Minnesota, is 1900 miles, but that is not our final destination.

It's slow going at first. Sailing up the St Lawrence River, we are going against the tide and have to navigate around the thousand islands. Nearly all the fresh water from the Great Lakes flows through this river into the Atlantic Ocean. The first big stop on our boat trip is Quebec City. It is a great town with a lot of interesting sites, and years ago I stayed there with 2 of my young sons. We had been fishing further north in the Laurentide Park area.

Back on our voyage, our ship reaches Montreal, another great town and site of Montreal Expo, the 1967 World's Fair. We are following in the wake of Samuel Champlain, who in 1615 traveled west from Fort Quebec looking for a way to reach the Orient and its riches. Much to Champlain's dismay, he found himself surrounded by the waters of the Great Lakes and denied his vision of access to Cathay. However, there were some in his entourage who seized the opportunity to interact with the natives of the area, resulting in the opening of a new enterprise. Fur trading produced pelts that were very popular and in demand in Europe. Trading posts and forts sprang up in the region as more and more people headed west looking for opportunities.

There were territorial conflicts between the French, British, Indians and Americans which eventually was settled by and after the War of 1812 The outcome was the establishment of a border between the Canadians and United States still in effect today that included both land and The Great Lakes.

After 750 miles on the St. Lawrence Seaway, our boat will enter the eastern end of Lake Ontario at Kingston. They say there are 1800 islands on the river, but I only. counted 1798. Lake Ontario is the smallest of the five Great Lakes in water surface area, (7340sq.mi.) right behind Lake Erie (9906sq. mi.), but we don't need to worry about

running aground. Ontario is deeper than its neighbor and has more water volume (393 cu. mi. vs. 116 cu. mi.).It is the second deepest of the Great Lakes behind only Lake Superior.

The biggest cities on Lake Ontario are Toronto, Canada and Rochester, New York. Their accessibility to the Atlantic Ocean by the St. Lawrence River has enabled them to be important ports of commerce and industry. At one time Lake Ontario, because of its depth and cold water temperature, was filled with salmon, trout and whitefish; but with pollution from factories and mills and farmland chemical runoff, many of the original species have disappeared. Attempts have been made by both Canadian and New York wild life groups to replant trout, salmon and whitefish in the lake, but pollution from the Niagara River's 250 waste sites including the Love Canal area still lets waste flow through Lake Ontario on its way to the sea and restricts fish survival.

Toronto is a great place to visit with younger people. There are several ethnic neighborhoods with interesting shops and restaurants. The waterfront offers many tourist attractions, and there is also a fantastic science center, which amused our four sons for an entire day.

When my two oldest boys were tweens, they spent some summers at a canoeing and tripping camp north of Toronto in Algonquin Provincial Park. It isn't hard to imagine Samuel Champlain's men meeting tribes of Algonquins in these parts.

The next part of our lake travels takes us to the connection between Lake Ontario and Lake Erie. Here, the water levels between the two lakes drop 325 feet going from west to east. The 27 mile long Niagara River is the natural connecting link between the two Lakes, but do you hear that ROAR? The Niagara Falls were for many years an obstacle for boats traveling between the lakes. In the 1600's small boats had to portage or seek narrow waterways around the Falls' escarpment. The Niagara Falls are the second largest falls in the world. They are a huge tourist attraction, drawing over 8 million visitors a year to the United States side. There are three falls. The American Falls and Bridal Veil Falls on the American side, and Horseshoe Falls on the Canadian side. Some parts of the Falls drop over 200 feet. Power plants have been built along the Niagara River to provide electricity to a large portion of northwestern New York and Ontario, Canada.

Well, unless we are brave enough to try going over the Falls, we'll have to find another way to continue our journey.

In the 1700s small canals had been built to help small commercial boats travel up and down the Niagara River. In 1824 the Welland Canal Company was formed to build a large canal system with locks to move large freighters up into all the Great Lakes. This canal is several miles west of the Niagara River. It has 8 locks and is 27 miles long. These have been rebuilt several times over the years for repairs, fires, sabotage and improvements to their length, width, and depth to accommodate larger freighters. The locks are usually closed in the winter because of ice flows and for repairs. It is slow going for boats to travel through the locks from one lake to another.

After our 11 hour passage through the Welland Canal, our boat arrives in Lake Erie. I can't pass up a short stop at Buffalo, New York where I have a son, his wife, and four grandchildren. They live in a small suburb called East Aurora southeast of downtown Buffalo. The town is known for being the home of the Roycroft School where the early craft movement of the United States flourished. I recommend a trip to Buffalo and E. Aurora. They have many interesting sites to see, as well as the Falls.

Re-boarding our ship, we'll head west on Lake Erie.

Lake Erie is the southernmost and oldest of the Great Lakes. As the glaciers receded northward thousands of years ago, water from the glacial melt left behind in its basin formed the lake.

It is the fourth largest of the Great Lakes in surface area but the smallest in water volume. Its average depth is 62 feet, which makes it the shallowest and warmest of the Lakes. This fact coupled with the number of large industrial cities on the Lake (Detroit, Toledo, Cleveland, Erie and Buffalo). make it the most polluted of the Great Lakes. Water warmth and pollution destroyed the salmon, trout and other predator fish, but left room for the smaller less aggressive ones such as walleye and perch. In the early spring, thousands of recreational fisherman charter boats for the day to go after the walleye. Many of them go out of Port Clinton. I have done this a few times, and it's an amazing experience. When I had a good captain who really worked the spots, I was successful. Erie is considered one of best walleye fishing lakes in the U.S.

In 1969 it was reported that pollution on Lake Erie caused the lake to burn. This wasn't completely true, but it made a good story. Burning wastes in the Cuyahoga River near Cleveland floated down into the lake. Since that time, a massive cleanup effort has purged a lot of the contaminants from Lake Erie.

The southern shore of Lake Erie was once inhabited by a tribe of Iroquois called the "Erielhonan" or the "long-tails." Referencing the shape of the lake, early French writers called it Lac du Chat, Lake of the Cat, reflecting the Lake's violent and dangerous nature like a panther or wildcat.

Continuing further west we approach Sandusky and then Port Clinton, bringing into view in the distance Kelley's Island, Catawba Island, and Put-in-Bay--all popular tourist stops in the summertime.

Next we sight the Toledo harbor, where the Maumee River empties into Maumee Bay and Lake Erie. Many years ago travelers could go from Fort Wayne to Albany, NY by the Maumee River that led into Lake Erie at Toledo. Then on to Buffalo and Tonawanda, NY and into the Erie Canal (built in 1817 and operated until 1870) which ended up at the Hudson River. The canal has been rebuilt and still operates under the name "The New York State Barge Canal." For many years this was a major route for commerce, trade and settlers heading west.

Now we will veer north toward to the Detroit River. There are stories of numerous shipwrecks in Lake Erie. The shallowness of the Lake and the high winds from storms caused many a careless boat to end up on the bottom. The graveyards of these boats has been a draw for today's scuba divers, and I have heard stories from my architectural partner who belongs to the Fort Wayne Dive Club and takes periodic trips to both Lakes Erie and Huron to explore the wrecks.

A trip up the Detroit River offers views of both Canada and the United States. We can see both Detroit and Windsor as we pass under the Ambassador Bridge which connects the two cities.

We pass through Lake St. Clair and then go up the St. Clair River into the outlet of Lake Huron. Its 23,000 square miles of surface area make it the second biggest of the Great Lakes and the fourth largest freshwater lake on earth. Its elevation is 10 feet higher than Lake Erie at 581 feet above sea level.. Bay City and Port Huron are the only two big American cities on this lake, and the Canadian side has Manitoulin Island, one of biggest islands in the world on a freshwater lake. Past Manitoulin is the Georgian Bay, an arm of Lake Huron. Georgian Bay is larger than Lake Ontario and almost as large as Lake Erie. Drummond Island part of the US, is just west of Manitoulin, and is a favorite spot for vacationers, many of whom have cabins there. The fishing in this area is great for bass and walleye, as several Fort Wayne fishermen will tell you.

To the north of both Manitoulin and Drummond Islands is the North Channel. This was the route used by

Champlain when he was exploring and trying to find a route that would lead west to the Orient. Much to his initial disappointment, he found Lake Superior.

To get into Lake Superior in Champlain's day (1600's), the voyagers traveled up the St. Mary's River in canoes until they came to the rapids, which rose 21 feet from Huron to Superior. They had to bypass these rapids by portaging around them. It wasn't until the mid 1800's that canals and locks were built to help ships cross from one lake to the other..

The construction of the Soo Locks are a set of four parallel locks, some of which enable large freighters to travel between Superior and Huron. These locks were completed in 1855 and are located on the St. Mary's River and bypass the river's rapids that fall 21 feet. About 10,000 ships pass through these locks in a year, even though they are closed for a few months in the winter because of ice buildup and their need for inspection and repairs. The locks' real name is Sault Ste. Marie and are named after the two cities in Ontario and Michigan on either side of the river.

There is an exhibit hall by the locks where you can see displays and learn about the lock history and see models of lock construction

The U.S. locks are a part of a 1.6 mile canal originally called the St. Mary's Falls Canal. The current arrangement of the four locks runs east to west. The MacArthur Lock was built in 1943. It is 800 feet long, 80 feet wide, and 29.5 feet deep. It is large enough to handle "salties," ocean going vessels. Next is the Poe Lock completed in 1896. It was rebuilt in 1968 to handle larger ships. It is 1200 feet long, 110 feet wide, and 32 feet deep. It is the only lock that can handle the large lake freighters used on the upper lakes. The 3rd one, the Davis Lock; built in 1914 is used less frequently and handles light freighters, tour boats, and small craft. The fourth is the Sabin Lock, built in 1914, and no longer used. There is a small lock operated on the Canadian side of the Soo used for recreational and tour boats. Major shipping uses the U.S. locks.

Another interesting side tour in the area on the Canadian side of the "Soo" is a ½ day train ride that takes passengers and freight up into the forested areas along Lake Superior. It is a breathtaking event seeing the fall colors, and in the winter this ride called "the ice train" is spectacular.

As we travel west from the Soo, we enter Whitefish Bay, a large bay on the eastern end of the southern shore of Lake Superior. It is located between Whitefish Point in Michigan and the St. Mary's River at Sault Ste. Marie on the southeast. There are lighthouses at the entry to and in the middle of the bay. to aide ships and avoid shipwrecks. Before the lighthouses were built, this was known as The Shipwreck Coast. Shipwrecks in the Bay were caused by fogs, treacherously bad weather and heavy traffic in a limited area. The majority of the shipwrecks were near the tip of the entrance into the bay by Whitefish Point and an area just northeast of the "Soo." We can visit a Shipwreck Museum and the Whitefish Point lighthouse. Today the lighthouse is used as a B and B and during certain hours opens to tourists. The exhibits at the museum are professionally done and very informative. The bell salvaged from the legendary Edmond Fitzgerald is on display there. One can go down to the beach near the lighthouse and get a close up view of the freighters as they turn the corner of the bay and head out into Lake Superior. This beach and surrounding area is a popular place for rock collectors and bird watching. This point of land is a natural corridor for birds on their migratory route.

Just 14 miles west of Whitefish Point is Crisp Point and its lighthouse. (I had a log cabin 3/8 of a mile there from 1986-2013.) The lighthouse has been decommissioned by the coast guard and was sold to a family from Ohio. They in turn formed a historical lighthouse society and turned it over to the County. The society maintains it and keeps it open in the summer for visitors. The view from the top of the lighthouse is vast on clear days, and at nights you can see the freighters out on the lake lit up like carnival merry-go-rounds. The night sky is incredible.

I met a man in Newberry, Michigan named Tom Singleton, who grew up at the Crisp Point lighthouse. His father was the lighthouse keeper. He showed me pictures of the buildings that used to be there. He told me about the life-saving stations along the lake, where men lived and went out into the lake in large rowboats to rescue people from foundering ships. Most of the lighthouses on the Great Lakes have been decommissioned and either torn down or sold. Ships now use GPS and satellites for guidance.

Back in the old days, the story goes, before lighthouses, there were people on the lakes that preyed on the boats and their cargoes. At night these gangs would light bonfires at certain locations along the shores. Boats traveling on the lakes at night would assume they were warnings of treacherous reefs or shallows and steer around them only to hit reefs and underwater rocks. These wrecked and splintered boats would wash ashore, and the gangs would descend upon them to salvage the cargoes. This was one of the factors that led to the building of lighthouses.

As our boat travels westward on the Lake, the next point of interest to appear is the Pictured Rocks National Lakeshore just west of the town of Grand Marais. It extends along the shore for 42 miles between Grand Marais and Munising, Michigan. The park gets its name from the colorful sandstone cliffs, some of which are up to 200 feet above the lake level. These colorful rocks have been naturally sculptured into caves, arches, and formations that

resemble turrets, and human profiles. There are tour boats at nearby harbors that offer rides out and around the shoreline to get good views of the rocks.

These cliffs are composed of very old rock elements (500 M. years). The red color is from iron, black and white from manganese, yellow- brown from limonite, and pink-green from copper. Marks on the face of these cliffs come from groundwater leaching out of the rock that create streaks of colors.

Traveling further west we encounter picturesque views of the Keweenaw Peninsula which juts out into Lake Superior. This area gets huge amounts of snow and gale winds in the winter. There were large deposits of copper in this area and the early Indians (5000 BC) mined it for making ornaments and utensils.

Traveling west of this peninsula along the shoreline of Wisconsin, we can see the Apostle islands in the distance. Beyond that are the cities of Superior, Wisconsin and Duluth, Minnesota. These two are connected over the bay by a skyline bridge and their protected harbors are the terminus points where lake freighters unload and pick up cargo. Taconite comes from the Mesabi iron range northwest of Duluth in the area of Virginia, MN. Coal, limestone, and grains are also picked up here for shipment back east or to Chicago.

After a stop-over for the night in Duluth, the next day we make a reservation to take the ferry to Isle Royale National Park. A limited number of people are allowed to be on this Island, and it is necessary to make boat reservations in advance. Cars are not allowed in the park. Isle Royale is the largest island in Lake Superior. The park covers 894 square miles with 209 sq. mi. above water. This includes a number of (400+) smaller islands. Thousands of years ago the island contained large deposits of copper that were mined by the natives. In the 1840s a state geologist set off a copper boom in the state and

modern copper mines were opened on the island. Evidence of this mining can be seen on hikes around the island from the exposed open pits and trenches.

There are several shipwrecks within the Park's waters caused by the area's harsh weather and treacherous underwater topography. At each end of the park are campgrounds that have restrooms and a camp store for backpackers and hikers who wish to stay overnight

Isle Royale is known for its wolf and moose populations, which are closely studied. One question that remains today is how did the moose and wolves get on the island? Recently some of these animals have been transported down to the southern shores of Lake Superior, and I have heard wolf howls at night when I was at my cabin in the late fall Moose have been spotted in the area near Whitefish Point.

And how can I describe wild life on The Great Lakes without telling you a bear story? My wife and I learned about bears in the UP the hard way. We arrived at our Lake Superior cabin late at night, unloaded our car and moved our supplies inside, leaving our latched metal Coleman cooler on the back steps. About an hour later we heard a crash outside, and when I looked out the window with my flashlight I saw the cooler tipped over. Thinking it was a raccoon, I went out to set it upright and put the food back in. My wife was holding a flashlight, when she spotted a bear coming around the corner of the cabin looking for seconds. I tried to shout to scare it off but I hyperventilated. Thankfully the bear was nearly as scared as I was and retreated into the woods. I hurriedly carried all the food and cooler inside and tightly shut the door. We had a sleepless night as the bear kept circling the cabin. It wanted that food. Banging pots and

pans did not scare it away for long. Thank goodness for our chamber pot because there was no way either one of us was going to go out that night to use the outhouse. When daylight arrived, the bear had moved on looking somewhere else for its next meal. In Luce County where the cabin is located over 600 black bear were killed in bear hunting season that year.

I used to fish on the Two Hearted River ten miles west of my cabin. It is a beautiful winding river that is great for canoeing in the warmer months and has spawning beds for salmon and trout that make good fishing in the spring and fall. This is where Ernest Hemingway fished as a boy.

Another major attraction in this area are the lower and upper Tahquamenon Falls State Park. These are the second largest falls east of the Mississippi River after Niagara Falls. They are worth a trip, and the Park lodge has a restaurant and micro brewery where one can relax and be refreshed.

Returning to our voyage, we'll turn around and head back east to the "Soo," toward our cabin and the Crisp Point Lighthouse. After passing through the "Soo" we'll sail down the St. Marys River and head west towards the Straits of Mackinac sometimes pronounced Mackinaw. Mackinaw Island is currently a small resort located at the eastern end of the Straits on Lake Huron. It was an Indian settlement named "Mitchimakinak" meaning Big Turtle, before French exploration in the 17th century. It was an important outpost for the fur trade and a strategic fort during the War of 1812. Today it is listed as a National Historic Landmark. Currently people arrive at the island by boats from Macinac City or St. Ignace. Cars are not allowed on the island. Winter ice on Lake Huron closes the Island from late November to April.

Our boat travels through the Straits of Mackinaw, connecting two of the Great Lakes, Michigan and Huron.

The Straits are 5 miles wide, spanned by the magnificent Mackinaw Bridge. It is a major shipping lane that delivers iron from the mines in Minnesota to the Gary, Indiana steel mills, and materials to Chicago, Milwaukee, and Green Bay.

The Mackinaw Bridge is a five mile long suspension structure. It opened to traffic on November first, 1957. It offers a beautiful view of the two lakes as you cross over it. In the fall high winds cause the traffic to be delayed and/or stopped. When I first crossed it in 1986 the toll was \$1.50 per car. Today it is \$4.00. These fares cover the operation and maintenance of the bridge. There are many bridges that cross over the Great Lakes at different places. A few of these include the Ambassador between Detroit and Windsor, Peace Bridge between Buffalo and Fort Erie, Canada, and the Thousand Island Bridge over the St. Lawrence River.

Lake Michigan is at the same sea level (581) as Lake Huron. Most of its water flows into Lake Huron and the two are approximately the same size. Michigan is smaller in surface area but deeper and larger in volume of water than Huron. The western land of Michigan along the Lake has proper fertility and soil, along with a conducive lake effect climate to be a major grower and supplier in the Midwest of fruits that include, grapes, cherries, peaches, apples, pears, and plums. There are many wineries in the Leelanau County area. Wine and wine tourism is about a 300 million dollar industry for the state. Most of the grapes grown here go to the making of grape juice and jellies.

The shores of Lake Michigan are well suited for summer vacationing. There are many resorts and vacation homes at Traverse City, Charlevoix, Leland, Petoskey, Harbor Springs, Beaver Island, the Manitou Islands, Sleeping Bear Dunes, Ludington, Pentwater, Grand Haven, Saugatuck, and many more. The Boyne and Cadillac Mountain areas offer excellent skiing in the winter.

Many people, myself included, have traveled into western Michigan to fish the rivers (Manistee, Pere Marquette, and St. Joe)that flow into Lake Michigan. The salmon and lake trout head up these streams in the fall to spawn and provide excitement for lots of recreational fisherman. In the spring the southern end of the Lake warms up and the small bait fish here attract the big ones for good catches.

After waving to our friends, the Clarks, Goldners, and Lewises, as we sail by Pentwater, we'll head across the Lake toward Chicago. Hopefully we are in time to catch the start of the Chicago to Mackinaw sailboat race, a premiere yearly event.

Part of Lake Michigan flows into the Chicago River. It was not always this way. Pollution of Lake Michigan caused a change.. In an attempt to clean up Lake Michigan and make the water safe to drink for people in the area, now the Chicago River flows west and ties into the Mississippi which flows down to New Orleans and the Gulf of Mexico. Lake Michigan has the most people living within its watershed - 10,000,000 + of any of the other Great Lakes. Lake Superior and Lake Huron has the fewest.

Our voyage, which began in Canada on the St. Lawrence Seaway has reached the beautiful Chicago Lakeshore. We could continue to the Milwaukee waterfront, or we could even wend our way to the mighty Mississippi and follow it -- if not to Cathay as Champlain had hoped -- at least to New Orleans for some jambalaya and jazz!

Two things I want to leave you with are: a ghost story about Crisp Point Michigan on Lake Superior and a poem.

The ghost story deals with the outhouse by our cabin. One day one of our members, Ken was out at the outhouse and standing over the toilet. When he was finished he looked down into the tank and as he did his glasses resting loosely on top of his head fell in. The pit was pretty full so the glasses remained. Several years later Ken passed away. To this very day if you should use the outhouse at night you may see him looking up at you with his glasses on.

Here is a poem that was given to me by Quester Joan Goldner titled "Dear Lake"

Today I heard that you will be dead Soon or already dead.
I lead my life quite simply. I have no car, TV and I do not read the paper.
Still I hear sad news like this and My feelings change.
The other day, I heard the Salmon is in Danger.
I like it when it is cooked right, tender and so delicious, gives me pleasure

in my life.

I feel my life get narrower and narrower.

I do not know what I can do for you

I do not speak for you

I do not protest, but I show in my

life and things all around the news I got

today.

My life is simple but gets narrower

and narrower.

Please take care of yourself,

Sincerely

Well folks, this is the end of the Great Lakes tale, and quoting Garrison Keillor "Where all the women are strong, the men are good looking and children above average".

## Bibliography

Ashworth, William, "The Late Great Lakes," 1986, Wayne State University Press. Detroit, MI

Bowen, Dana Thomas, "Memories of the Lakes," 1946, Dana Thomas Bowen publisher, Daytona Beach, FL.

Dennis, Jerry, "The Living Great Lakes," 2003, Thomas Dunne Books, New York, NY

Hatcher, Harlan & Walter, Erich, "A Pictorial History of the Great Lakes," 1963, American Legacy Press, New York, NY

Mason, Ronald, "Great Lakes Archaeology," 1981, Academic Press, Inc. New York, NY

Spring, Barbara, "The Dynamic Great Lakes," 2001, America House Book Publishers, Baltimore, MD