

Green Island and Its Lighthouses
The History of Green Island, Ohio

by

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This history was originally assembled in a much shorter version in 2006 for Elizabeth C., a fourth grader in Red Oak Elementary School, Oklahoma City, OK. She was a participant in Moore Public Schools' Gifted and Talented "S.E.A.R.C.H." Program (Students Experiencing Appropriate Research & Creative Happenings). In 2006 they were studying "Lighthouses" ...history, geography, design, etc. It gave me an opportunity to summarize Green Island lighthouse history for her and publish a couple of rare Green Island lighthouse postcards that very few people have seen before.

Her school was interested because Oklahoma has the East Wharf Lighthouse, the most inland working lighthouse in the United States It is at Lake Hefner in Oklahoma City.

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1. 1807 – Pierpont Edwards annexes (buys) Green Island, “Island No. 5”

Pierpont Edwards (April 8, 1750-April 5, 1826) acquired portions of the *Western Reserve* land including Green Island and was a delegate to the American Continental Congress. He has been described as “a brilliant but erratic member of the Connecticut bar, tolerant in religious matters and bitterly hated by stern Calvinists, a man whose personal morality resembled greatly that of Aaron Burr.” Edwards was also the founder of the Toleration party in Connecticut.

Born in Northampton, Massachusetts as the 11th and youngest child of the Rev. Jonathan Edwards, Pierpont Edwards graduated from Princeton College in 1768, at the age of 18. He served in the Continental Army during the Revolutionary War, and thereafter was a member of the Connecticut Convention held in January 1788, a convention that ratified the Constitution of the United States.

In addition to serving as a delegate to the Continental Congress from Connecticut, 1787-88, Edwards served as United States Attorney for 17 years until, in 1806, President Thomas Jefferson appointed him as United States District Judge for the District of Connecticut. After the treason of Benedict Arnold he became administrator of that officer’s estate.

He was a member of the Connecticut House of Representatives, 1789-90, a judge of United States District Court for Connecticut, 1806 and a delegate to the Connecticut state constitutional convention, 1818.

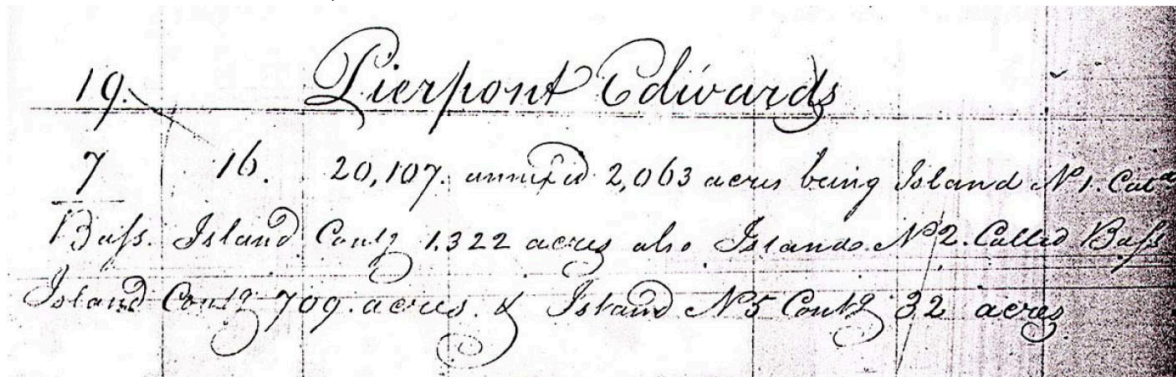
A handwritten record on a grid background. The name "Pierpont Edwards" is written in large cursive at the top. Below it, the text reads: "19. 7 16. 20,107. annexed 2,063 acres being Island No. 1. Call'd Bass Island Contg 1,322 acres also Island No. 2. Call'd Bass Island Contg 709. acres. & Island No. 5 Contg 32 acres".

Figure 1: Record of Pierpont Edwards' Purchase of Islands, 1807

According to the above record, Pierpont Edwards “annexed 2,063 acres being Island No. 1, called Bass Island (South Bass Island), containing 1,322 acres also Islands No. 2 called Bass Island (Middle Bass Island, which included Sugar Island at that time) containing 709 acres and Island No. 5 (Green Island) containing 32 acres”. The main part of his 20,107 acres above consisted, as noted, of Town No. 7, Range 16, which was Avon, Ohio.

Edwards never set foot on the islands himself, so far as we know. His caretakers drove off the French-Canadians by 1811. They also cleared 300 acres of South Bass Island and began raising sheep and hogs, as well as growing corn and wheat.

2. 1819-21 - Visits by Major Joseph Delafield, His Surveying Crews and Others

Green Island, Ohio, one of fourteen islands that make up Ohio's Bass Islands Archipelago in western Lake Erie, first made a name for itself in 1820 when it was still called Moss Island. Major Joseph Delafield, an American Agent of the International Boundary Commission which was surveying the U.S.-Canada border for the first time, was visiting the island when he reported celestite crystals there. They had actually been discovered the year before, 1819, by one of his topographers, Major Louis G. de Russy. Also known as strontium (called "strontian" at the time), these crystals occurred naturally in the cliffs along the east side of the island. Green Island was soon the main American source for the element. For a number of years after Major Delafield's visit, the island was called "Strontian Island," and all the strontium was mined fairly quickly. Exactly when the name changed to Green Island is uncertain, but it was probably between 1840 and 1860.

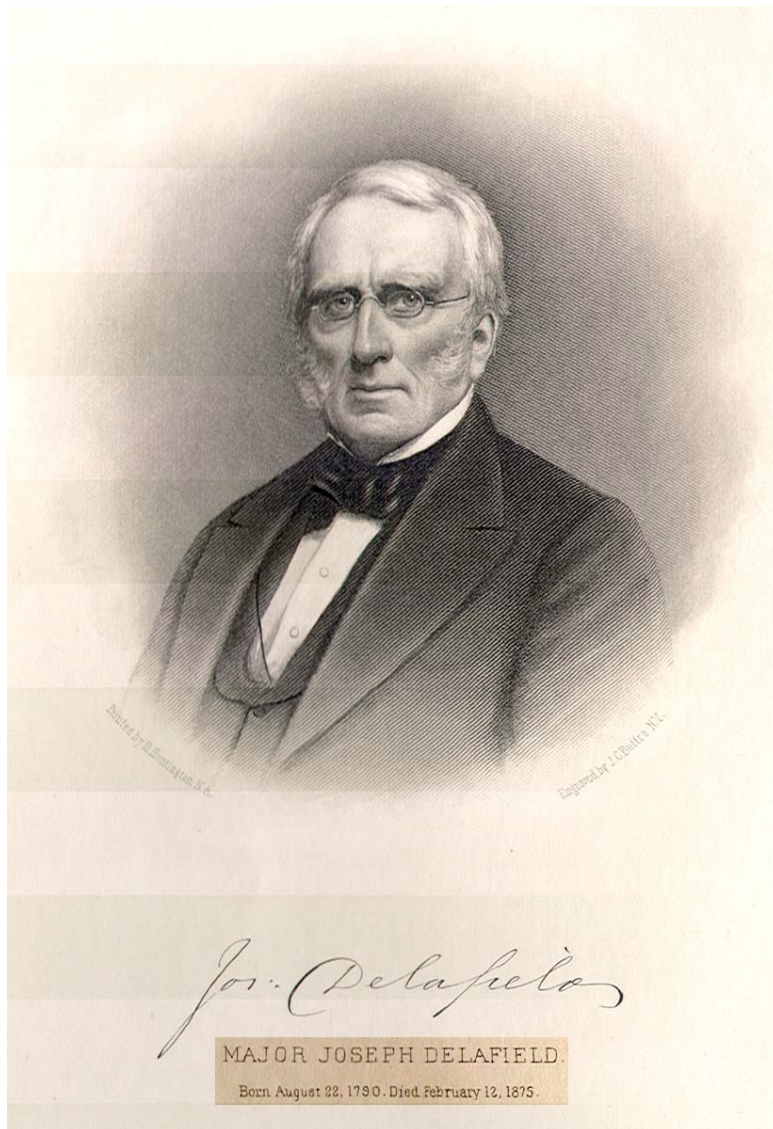


Figure 2: Major Joseph Delafield, who first visited Green Island (Moss Island) on Oct. 18, 1820¹

¹ Image from ***The Unfortified Boundary***, a private reprinting of Major Delafield's diary in 1943.

Major Delafield visited Green Island for the first time on Oct. 18, 1820. He returned briefly on May 15, 1821 and again for a longer day trip on July 20, 1821. On that day, his group took out all the strontium crystals they could carry, the largest of which weighed about 7 pounds. Strontium was used to make fireworks, among other things.

For many years, the island was the principle American source of specimens of celestite for mineralogical collections throughout the world. Green Island and Crystal Cave on Put-in-Bay had the only known strontium deposits on the Lake Erie Islands in the nineteenth century. Delafield mentions that his surveyor had also found strontium on Catawba Island in 1819, but they couldn't locate it again in 1820. (Strontium was also found on Grosse Ile, MI.)

Text from *The Unfortified Boundary*, Major Delafield's Diary, 1820

Tuesday, October 17. Enter Lake Erie with a head wind and remain beating about between Miami Bay⁷⁴ and Canada shore until dark.

Wednesday, October 18. At day break find ourselves about eight miles from Put-in-Bay⁷⁵, having passed a very uncomfortable night from a heavy head wind and sea and the vessel making bad work at beating.

At sun rise Messrs Bird, Stevenson, DeRussy and myself set off in The Lady to go in search of a locality of strontian on the main shore, that Mr. DeRussy had discovered the last season, and from which were obtained some beautiful chrystals. The vessel was becalmed so that we were enabled to leave her. Land on the main shore opposite Moss Island⁷⁸, and find a place corresponding with Mr. DeRussy's description of the locality, but after a diligent search are obliged to leave there without discovering the strontian, much to the disappointment of us all. On our return however we land on the side of Moss Island and discover a vast mine of this rare & beautiful mineral. It is scattered in almost all the rocks on this side of the island, but about the centre where the rock is about 30 ft. high, and half-way up the rock, is a solid stratum of strontian in chrystals, which stratum is three feet thick. Its depth we could form no estimate of, but the vein seemed to be parallel with superincumbent (i.e. horizontal) rocks. In working a little in this mine you come to cavities, and these cavities are filled with splendid chrystals all of them translucent & some of them beautifully transparent and iridescent. They were of no uniform shape or size. The chrystals would weigh from half a pound to four pounds, and we found broken pieces of chrystals that must have weighed entire much more. My largest chrystal is six inches long and three and a half wide. Some are in tables and some in prisms, but their variety too great to attempt a description hastily. The strontian is massive, in groupes of chrystals, in detached chrystals and fibrous. Is white blue and now and then tinged with green, and sometimes a little yellow appears upon the white that is transparent. We brought away several large masses of the great vein, where it runs into the fibrous variety. One of these masses weighed about 70 weight, and with proper tools there would have been no difficulty in obtaining a ton weight in one mass. These large masses however were not sufficiently compact to support their great weight. My specimens will show every variety and size of this interesting mineral. The discovery of this mine of strontian amply compensated for our day's labor and our previous disappointment. We returned to the vessel with a heavy load, and found her at anchor amongst the Bass Islands in a calm. Altho' we had made so fortunate a discovery and enriched ourselves with good specimens, upon reflection I felt chagrined that opportunity had not offered for more minute research. It was upon our return

to the vessel in the afternoon, after a fruitless search throughout the morning on the main shore, for the lost mine, that we touch'd at Moss Island. We landed upon the spot where huge chrystals and huge masses of strontian hung over us in all directions. Our first sight was sufficient, and some time was spent, before the best was discovered, and in truth so little time was left us, that of the best we can say nothing. There are still cavities filled with beautiful chrystals of unknown dimensions that we only know are there. Of what we brought away and saw immediately around us, we can alone speak. There still remain virgin charms for the mineralogist at Moss Island, and my own appetite is only increased for another gust the next time I may cross Lake Erie. On our arrival at the vessel we took the small boats on board, and lay in readiness to improve the first wind that offered for Black Rock.

Thursday, October 19. Get under way from the Bass Islands with a strong, fair wind at day break, that continues to increase throughout the day. Run on our course at the rate of ten miles an hour.

**Correspondence in The American Journal of Science, and Arts, 3 Letters
Vol. IV - 1822**

Major Delafield and Dr. Bigsby, &c.

Notices of the Sulphate of Strontian of Lake Erie and Detroit River.

Extract of a letter to the Editor from Major Delafield.

New-York, November 12th, 1821.

Dear Sir,

I have the pleasure to present you two specimens of the Sulphate of Strontian, from Strontian Island, Lake Erie. The one, a large crystal¹ of the bluish white variety, in parts transparent and iridescent, and having its termination perfect. The other the foliated and fibrous variety. I also send you its gangue, or a piece of the lime stone, in which the Strontian is found.

Is not this lime stone like the lime stone used in the masonry of the canal of this State as a water-proof cement ? I take for granted you have seen the stone thus used. The lime stone of the west end of Lake Erie, and the Detroit River, is generally like the specimen forwarded. I have made no experiments, but their external characters are so very similar, that the suggestion readily occurs. When the Lake Erie lime stone is not impregnated with Strontian, its specific gravity seems to agree with the water-proof cement lime stone in question.

The Sulphate of Strontian is from a small Island near the well known Put-in-Bay Island, Lake Erie, and from a locality first noticed by myself and party in 1820. Circumstances then required, that no delay should happen to my voyage through the Lake, and we left this interesting discovery, without opportunity to explore to my satisfaction, its extent or character. Some one of the party had, however, noticed every variety ; and we respectively procured exceedingly fine specimens. This visit has enabled the gentlemen who accompanied me, to give a just description of the locality as far as it was then known, and the accounts that have met my eye are substantially correct.

¹ Five inches in diameter in its extreme dimensions and two thick. -Ed
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During the past summer I revisited the place, and had leisure to explore it. The vein is in a perpendicular cliff of lime stone, about fifty feet high, and mid way between its base and summit. The vein as now exposed, commences with a thickness of four feet, extends about fifty feet, nearly parallel to the surface of the Lake, and terminates at a thickness of one foot. Where it begins it consists of the compact crystallized variety, but the direction of the crystals is so irregular, and their combination so close and diversified, that distinct crystals cannot be obtained. The vein terminates in the foliated and fibrous variety, of which the accompanying specimen is a part.

In the massive end of the vein was a small opening that led to a cavity filled with distinct crystals. I enlarged it sufficiently to admit light, and obtain its contents. The cavity was of about three feet diameter and circular. Its arch was beautifully jetted with pendent crystals differing in size and lustre.

From all other parts of the cavity they were detached. I found them mixed with some dirt, and in a greater quantity than it would seem could have been required to cover the circumference of the cavity. They varied in weight from six ounces to six pounds ; in transparency from the perfectly transparent, to the opaque ; in lustre from the dull to the resplendent ; in colour from the snow white to the dark blue and greenish blue.

The tabular crystals of six sides with summit of four sides prevail, and are the most transparent.

The specimens² I send you, will, I believe, shew this mineral in all its varieties as there found, and give I trust, a satisfactory view of its form, colour, lustre, and cleavage.

I hope they may reach you in safety, and prove of some Interest. Be pleased to accept them with my most respectful remembrances, and believe me

Your very obedient servant,

JAS. DELAFIELD.

To B. Silliman, Esq.

Extract of a letter addressed to the Editor, from Dr. John J. Bigsby, M. D. of the British Medical Staff.

Four miles from Put-in-Bay harbour at the upper end of Lake Erie, and at a similar distance from the nearest mainland, stands a solitary islet, oblong, with precipitous sides of about sixty feet high. It may be a third of a mile in length, and lies nearly north and south.

At the south end it is tolerably well wooded ; but scantily at the other.

The rock of which it consists is Limestone, of a pale greyish straw colour. It is soft, of an earthy conchoidal fracture, having a granular structure. I do not recollect its stratification at this isle, but in the neighbouring districts it is placed in thick horizontal slabs, little prone to

² Prof. Douglass discovered this mineral upon the same Island in 1819 ; but did not, I think, notice the great vein. The Sulphate of Strontian is found in all parts of this Island, and others of the Basse Islands ; on the neighbouring main shore ; and on some of the Islands in the Detroit River.

J. D.

slatiness.

About the middle of the east side, and in the face of the cliff is a mass of Sulphate of Strontian, about four yards by three in extent, ramifying every where, but most plentifully in the horizontal direction. It is in the form of promiscuously aggregated bundles of crystals united laterally, of a white or bluish white colour, imperfectly transparent and from one to four inches long. Although the confused manner of their crystallization has obscured their figure, yet the compressed six sided prism is to be distinctly traced. Drusy cavities are numerous in the mass. Here the crystals are perfect and of enormous size. Major Delafield, (agent under the 6th and 7th Art. Treaty of Ghent,) met with one weighing six pounds.

Professor Douglass has described them mineralogically.

Foliated Celestine also occurs on the island of Celeron and Grosse isle at the mouth of the Detroit river, where it appears to have combined in some places with the lime stone, increasing the specific gravity of the latter.

This lime stone prevails over a considerable district of country—it is found at Sandusky, lines the shores of the Lake, nearest the bed of Strontian just described, and flooring the river Detroit near Amherstburgh is discovered in the interior on both sides of that river, and is quarried for building. Excepting on the south and south-east, it is surrounded by alluvial country of some hundred miles radius.

It is curious to observe that the foreign matters in this rock are deposited in fields or districts, and to a certain extent do not intermix. I observed no organic remains on Moss island—no Strontian on the adjacent main, but multitudes of imbedded shells, orthoceratites (small) and a beautiful form of trilobite—together with various madrepores wrought in lime stone, especially a stellular radiated species. There is not a single shell in the Strontian deposits of Grosse isle—and neither shell nor Strontian in the floor of the contiguous river, while the extensive quarries two miles behind Amherstburgh produce an immense variety of organic remains, animal and vegetable, without a vestige of the rare crystallizations of Grosse Isle.³

JOHN J. BIGSBY, M.D.

Geological Remarks on the Lake regions; from a letter of December 6, 1821, addressed to the Editor by Major Delafield.

Professor Buckland's notice of my present of mineral from the North, through your correspondent, is the only knowledge I have of those specimens having been received. His analogy concerning the lime stones of certain latitudes, is founded on a partial view of facts, and is not altogether satisfactory. The transition lime stone appears in Lake Huron, but I had not considered the shell lime stone to be transition. In truth, in the space of sixty miles you sail from secondary to transition and to primitive formations in the north end of Lake Huron. The organic remains of the limestone of Lake Huron are I believe, peculiar. Orthoceratites of such size and variety, I have not found described in books. Trilobites are numerous, and partake of the characteristic of the remains of that region, which is that of prodigious size. The shores are *covered principally* with rolled rocks out of place, of very

³ The mineralogical sketch of Moss Island is to be considered as only my personal observations. In a studied description of that district, I should embody the remarks of Douglass and Bird.

many varieties. Green stone amygdaloids, jasper, and other varieties of trap ; breccia, epidote, and others abound. Several of my specimens are pronounced to be of volcanic origin, which if true, is the first occurrence of such appearances to my knowledge east of the Mississippi.

Dr. Bigsby is engaged in the description of the Lake minerals and geology ; and has it in his power to impart much information to those who wish to pursue the analogy between American and European Geology. I do not doubt his exertions will prove of interest and value.

Perhaps your friend, who forwarded Mr. Buckland's letter, would like to know that the Trilobite is found in the Lake Huron lime stone.

Text from Schoolcraft's "Narrative journal of travels from Detroit northwest..."

The following text is from "NARRATIVE JOURNAL OF TRAVELS THROUGH THE NORTHWESTERN REGIONS OF THE UNITED STATES EXTENDING FROM DETROIT THROUGH THE GREAT CHAIN OF AMERICAN LAKES, TO THE SOURCES OF THE MISSISSIPPI RIVER." Performed as a Member of the Expedition under Governor Cass in the Year 1820. By Henry R. Schoolcraft. Published 1821.

On the third of May, I returned to Buffalo, and found the lake rapidly discharging its ice, which had been recently broken up by the wind. On the sixth, I embarked on board the Steam-Boat, which left Black Rock at nine in the morning, and reached Detroit on the eighth at twelve at night. We were favoured with clear weather, and a part of the time with a fair wind. The Boat is large, uniting in its construction a great degree of strength, convenience, and elegance, and is propelled by a powerful and well cast engine, on the Fultonian plan, and one of the best pieces of workmanship of the original called the "Walk-in-the-Water," J. Rodgers, master. This boat performed her first trip in 1818, eleven years after the first introduction of Steam-Boats upon the Hudson, and 139 years after the first vessel (larger than an Indian Canoe) was built upon Lake Erie. See page 33. 48 foundry.*

The accommodations of the boat are all that could be wished, and nothing occurred to interrupt the delight, which a passage at this season, affords. The distance is computed at three hundred miles; the time we employed in the voyage was sixty-two hours, which gives an average rate of travelling of five miles per hour. The first two miles after leaving Black Rock, a very heavy rapid is encountered, in ascending which, the assistance of oxen is required. It terminates a short distance below the mouth of Buffalo creek, and immediately opposite the village of Buffalo, where we find ourselves on the level of the waters of Lake Erie five hundred and sixty feet above the tide waters of the Hudson river. † In passing through Lake Erie, the Boat touches at the town of Erie, in Pennsylvania, at the mouth of Grande River, and at the towns of Cleaveland and Portland, in Ohio, the latter situated on Sandusky Bay. On coming out of this Bay, we passed a large and well wooded island, which bears the name of Cunningham, and immediately came in sight of the rocky cluster of the Put-in-Bay or Bass Islands.

"The Bass islands form a group of seven, lying about three miles from part of the Sandusky peninsula, and, as I have already observed, seven or eight miles northwest of Cunningham's island. Put-in-bay, is formed by a curve of the largest and most southern of the Bass groups, having two entrances, one from the east and the other from the west.

The bay is very finely land-locked. The second large island of the group, stretching from east to west across the widest part at half a mile distant, and one of the smaller islands lying opposite each channel. The three main islands do not differ much in extent, though that in which is Put-in-bay is the largest. All are uninhabited, and covered with a dense forest. I had no means to determine their area with certainty, but judged the three main islands to average about one and a half miles long, and half a mile wide, and may cover from 2,500 to 3000 acres taken collectively, resting upon a solid mass of achistose rock in great part limestone. From here limestone, for the purpose of making lime, is carried as far as Detroit and Cleaveland. The soil is excellent, and would admit a settlement of thirty or forty families. But every object of utility to which the Bass islands could be applied, yields to the importance of Put-in-bay. This fine haven admits entrance and anchorage of vessels of any supposable draught, safe from all winds. It must become, from its position and depth of water, an object of great national value. No harbour in Lake Erie, or in its connecting waters, except in Erie straits, can in any respect compare with it; its occupation as a naval and commercial station one day take place.”—Darby's Tour to Detroit, p. 185, 186.

In one of the smallest of these Islands, called Moss Island, a large quantity of crystalized sulphat of Strontian, has recently been discovered.

Having received several specimens of this mineral, from Mr. Wm. A. Bird, of Troy, one of which is the fragment of a crystal weighing two pounds, I wrote to him for some account of its locality and geognostic position, and shall here, although without having solicited his permission, make an extract from the reply, with which he favoured me.

“On our return down the lake last fall, (1820) we were becalmed near the Islands in Lake Erie—I took a boat and accompanied by Maj. Delafield, Mr. A. Stevenson, and Mr. De Russy (who was to be our guide) went in search of the Strontian to the main shore, where Mr. De Russy says, it was found in the summer of 1819. After an unsuccessful search of an hour, we gave it up and determined to return to our vessel—on our way we stopped at Moss Island, when immediately on landing, we found the mineral in question,—I wandered a little from the others, and found the large bed of which I spoke to you. We there procured large quantities, and some large crystals.

“This Strontian was found on the south side of Moss Island, in a horizontal vein of three feet in thickness, and from 40 to 50 feet in length. I had no means of judging its depth into the rock. The base of the Island is wholly compact limestone in which shells scarcely, if ever appear. The commissioner (Gen. P. B. Porter, acting under the treaty of Ghent, H. R. S.) has given his permission, and I shall name this Island on the maps, “Strontian Island,” by which name I presume it will hereafter be known.

The same substance had been found upon another part of this island (as appears from Eaton's Geology, p. 234.) by the gentlemen attached to the boundary commission, during the preceding year, but not in the surprising quantity above stated. Professor Douglass, of West Point, and myself, have also noticed it upon Grosse Isle, in Detroit river, in the month of May, 1820, but found no crystals of more than a few ounces in weight. We found it lining concavities in a horizontal stratum of compact limestone destitute of organic remains. This locality is a stone quarry, which has been opened on the lands of Miss A. M'Comb of Detroit, and from which a great proportion of the building stone of that city is brought.

This catalog wasn't published until 1825, but the information is from the earlier visits.

ERIE LAKE.

Sulphate of Strontian, at the S. W. extremity of the lake, on Moss Island, near Put-in-Bay, and nearly 1 m. W. from the South Bass island; it occurs both massive, and in 6 sided or rhomboidal prisms, more or less transparent, in *Compact Limestone*, containing shells. (C.) *Sulphate of Strontian* occurs in a vein, in a perpendicular cliff of limestone, about 50 feet high, and midway between its base and summit; it commences with a thickness of 4 feet, extends about 50 feet, nearly parallel to the surface of the lake, and terminates at a thickness of 1 foot. Where it begins, it consists of the compact crystallized variety, but distinct crystals cannot be obtained. The vein terminates in the foliated and fibrous variety. A quantity of distinct crystals were found in a cavity in the massive end of the vein. (Sil. 4.279.) This locality is at the upper end of lake Erie, 4 m. from Put-in-Bay harbour, and 4 m. from the nearest main land, on a solitary, oblong island, with precipitous sides of about 60 feet high; the S. end covered with trees. About the middle of the E. side, in the face of the cliff, limestone, the strontian occurs in a mass, about 4 yards by 3 in extent, ramifying every where, but more plentiful in the horizontal direction; in promiscuously aggregated bundles of crystals united laterally, from 1 to 4 inches long. Drusy cavities are numerous in the mass; here the crystals are perfect, and of enormous size; one weighed 6 lb. *Foliated Celestine* also occurs on the island of Celeron and Grosse isle, at the mouth of Detroit river, where it appears to have combined in some places with the limestone. (Sil. 4.281.)

3. 1822-1851 - The Alfred P. Edwards Era

The next recorded history of Green Island starts in 1822 as the sloop A. P. Edwards touches the shore of South Bass Island. The island's only resident, a French Canadian named Ben Napier, stepped forward to greet the new arrivals, and to order them off his land. Alfred P. Edwards, after traveling all the way from Cleveland to look after the property, having just inherited it from his deceased brother, was not amused with Ben Napier's claims of ownership, and was rather abrupt as he ordered Ben off the island. It appeared as though it was a stand-off. Ben Napier filed for ownership of the islands, and it would take the Court in Norwalk, Ohio, to finally establish that Judge Edwards had rightly inherited the islands from his brother Ogden Edwards.

With the Court's ruling in his favor, Judge Edwards had firmly established control and through a series of agents, began to develop the islands. Believing that he had sold off most of the profitable timber and other resources, Judge Edwards no longer had an interest in Bass Islands and wanted to sell them as quickly as possible. At the same time, the U.S. Government wanted to erect a lighthouse on the southwest corner of South Bass Island, and for this purpose they needed twenty acres; Judge Edwards, of course, wanted to sell the entire island and had no interest in selling individual parcels. As a result, there was almost no new development on the island for about 20 years except for a combination dwelling and boarding house, known as "The White House", on the site of the later Put-in-Bay House. They were at an impasse until it was suggested that the lighthouse could just as well be placed on the south shore of Green Island. Financial arrangements were completed and a lighthouse with living quarters was soon operational.

In 1851, the U.S. government purchased Green Island from Alfred P. Edwards.

4. 1854 - The First Green Island Lighthouse

The first Green Island lighthouse was built in 1854 and burned in 1864. Here's a photo of it in 1858 from the National Archives. The somewhat colorful story of its burning is below.



Figure 3: The First Green Island Lighthouse in 1858

An Eventful Night – Thrilling Story of the Burning of Green Island Light House in 1864²

"That cold New Year's night," is the way the old folks put it when they refer to the time wherein occurred the events here narrated. The night was that of the outgoing of '63 and the incoming of '64, and is remembered as the coldest ever known in this country. Among the islands, exposed as they are to the fierce blasts which sweep Lake Erie, this particular cold snap was especially noted.

² From ***Sketches and Stories of the Lake Erie Islands, Souvenir Edition***, Theresa Thorndale, Register Press, 1898

December 31, 1863, was mild as an April day. Heavy rains had fallen, filling ditches and lowlands with water, while the lake was entirely free from ice. With the cessation of the rain, however, a gale sprang up from the Northwest which steadily increased in violence. As darkness fell and night advanced, the sea rose in its strength and swept the shores with a deafening roar. The gale became terrific in force and its breath cut like daggers, so that pedestrians along the island roads could scarcely face it. Within a few hours the mercury dropped from 60 degrees above to 25 degrees below zero.

At Doller's Hall on Put-in-Bay, a party of young people had assembled to dance "the old year out, and the new in," but owing to the extreme cold they had deserted the dancing floor and had formed a gathering around the stove. Suddenly the group was startled by a glimmer which shot up over the tree-tops, faintly illuminating the windows of the hall.

"It's the moon rising," suggested one. But no, there was no moon, and in a moment a bright flame arose, mounting higher and higher, while the sky was a lurid glare of light. A few moments later came the news:

"Green Island light-house is on fire!"

This intelligence struck a chill to the hearts of all who realized its import to the isolated keeper and his family on that bitter night; for in the wild storm raging without, the boiling sea and the midnight darkness, no human aid could reach them.

While at Put-in-Bay the alarm was spreading, Colonel Drake, the light-keeper at Green Island, and his family were gathered in the sitting-room of the cottage which flanked the tower, and formed a part of the structure. The hour was late. They were watching the old year out. No apprehension of danger came to them until above the roar of the wind they heard the crackling of flames. A moment later the whole upper portion of the building was discovered to be all ablaze.

With characteristic coolness Colonel Drake attired himself in boots, hat, and overcoat before making any attempt to fight the fire, but seized with consternation his wife and daughter rushed at once from the house - the latter bareheaded, barearmed, and with feet protected only by thin stockings and slippers.

By means of a ladder Colonel Drake mounted to the roof with a pail of water. Miss Drake caught up a pail in each hand, and filling them from the lake, passed them to her mother by whom they were carried up the ladder to the burning roof where the keeper was making a brave effort to stay the flames.

Over thirty pails of water were in this manner transferred to the roof, but though they worked with the energy of despair the fire steadily gained and colonel Drake was forced to beat a retreat down the ladder.

The family now turned their attention to the saving of their valuables, some of which were secured, but already the interior of the house was burning and smoke met them at the door in stifling volumes. A sudden thought of his family's precarious condition almost turned the brain of Colonel Drake. Unless he could succeed in saving a bed or two with which to protect them from the intense cold, they must inevitably perish, since no assistance could reach them from adjacent islands until the sea went down. He darted into the burning structure. Tongues of flame licked his face, singed hair and beard, and the smoke blinded and choked him. With a desperate bound he gained the door of an adjacent room. The flames had already communicated to this apartment, but the bed was still untouched. Upon it was a tick filled with feathers and another with straw. Hastily rolling them into a comforter, he shouldered the bundle and succeeded narrowly in making an exit from his perilous situation.

The scene now presented was one of the wildest grandeur. Blown by the howling blast, the fire surged, and roared, and by its vivid light could be seen line after line of white breasted waves rushing tumultuously shoreward, and breaking with a thundering sound at the base of the tower. Clouds of blinding surf mounted thirty feet into the air and showered upon the steps, freezing as it fell, and forming a glaring pavement of ice upon the very threshold of the burning structure. Wind and sea, fire and darkness had united, and seemed to vie each with each other in painting a picture of savage sublimity.

To the houseless family the situation was one of horror. Under strong, nervous pressure Miss Drake had exhibited unwonted endurance, but when nothing more could be done, strength deserted her and she sank into an almost insensible condition. An examination revealed the fact that her ears, arms and legs were frozen stiff. The bed was removed to an out-house which remained standing, and with father and mother the girl was tucked carefully between the ticks, and thus through the remaining hours of the night they endeavored to keep each other warm.

Pitt Drake, son of the light-keeper, was at Put-in- Bay, having formed one of the party assembled at Doller's Hall. Frenzied with apprehension concerning the fate of his kindred, the young man could hardly be restrained during the night from setting out by boat for Green Island - an undertaking which could have resulted only in his being drowned.

With the dawn of New Year's day came a lull in the storm. The unprecedented cold had thickened the waters of the channel with slush ice and frozen drift, and although a heavy sea was still rolling a few miles beyond, the channel between the two islands was becoming rapidly crusted with thin ice.

Pitt Drake was now determined to hazard a passage to Green Island, two miles distant, and in the enterprise was re-inforced by a number of hardy and courageous men. Two cutters were procured, together with ropes, pike poles and several long planks. The ice was not sufficiently strong to bear men and cutters, and the way was bridged with planks which were projected forward and each as it was passed over was taken up to be again placed in position. Several times the shifting and sinking of these planks threatened disaster, but the party reached their destination without serious mishap.

With a feeling of dread Pitt Drake now approached the smoldering ruins of the light house. No signs of life were visible; the little island seemed empty and deserted.

Had the family perished in the flames, or had they suffered the slower agony of death by freezing?

While with a beating heart he sought for a solution of this problem, a shout was heard from the outbuilding - the only one which the island now contained. The unfortunates had been discovered, and in a moment young Drake had clasped the hands of his kindred and was shedding tears of gladness and relief unspeakable. The family was removed to Put-in-Bay - by means of the cutters employed - where they were taken in and cared for at the nearest habitation. They were all more or less prostrated and medical aid was summoned for Miss Drake whose sufferings from the exposure of the previous night were terrible. Col. Drake also suffered both from the cold and from burns received.

The Drake family subsequently removed to the mainland. Thirty-five years have passed since the occurrence here recorded. Green Island lighthouse was substantially rebuilt at a later date by the U. S. government, but the old residents of neighboring islands have never forgotten the night when the original structure went up in flame and smoke.

**Account of the fire from the Sandusky Daily Commercial Register
January 5, 1864**

GREEN ISLAND LIGHT-HOUSE BURNED - The Light-House on Green Island was burned between 7 and 8 o'clock on Friday evening last.

The light was a recent one, being built in 1854 from an original appropriation of \$5,000 made in 1851. It has been repaired and improved from time to time - some additions having been made last fall. The light was a "flash light" with a costly French mirror, and was very important to lake navigation. The structure was somewhat like the one on Cedar Point, being a light tower and dwelling conjoined. The light was kept by Col. Chas. F. Drake, formerly of this city, who is a severe sufferer - he having saved only two beds, a marine clock and some small articles.

The loss to the government will be from \$6,000 to \$8,000.

5. 1860 – Lightkeeper Compensation

The following page is from the *Blue Book or Register of Officers and agents, Civil, Military and Naval in the Service of the United States; Corrected to November, 1862* with data from the Census of 1860. Green Island is near the bottom, and Charles F. Drake's annual compensation as keeper is listed as \$350.

TREASURY DEPARTMENT—LIGHT-HOUSES, ETC.			57
Where Located.	Superintendents.	Keepers.	Compensation.
New Dungeness.....	C. C. Phillips.....	H. H. Blake.....	\$800
		W. S. Blake, asst..	500
Blunt's Island.....	".....	Albert Milton.....	600
		James Burry.....	500
Whidby's Island.....	".....	W. Robinson.....	600
		W. P. Robinson, asst	500.
Lake Lights.			
Split Rock.....	G. W. Goff.....	Wm. S. Flack.....	350
Cumberland Head.....	".....	George Cannon....	350
White Hall Stake Lights	".....	J. Bascom.....	200
No. 1, opposite Chapman's Dock.....	".....	Thos. Wolsey, asst.	100
Nos. 2 and 3, south of Quoddy's Dock and Steam Mill Point.....	".....	Wm. Snoddy, asst..	150
Nos. 4, 5, and 6, Head of Two Channels, Maple Bend, and lower end of Two Channels.....	".....	D. B. Barnett, asst..	200
Nos. 7 and 8, opposite Belder's wharf, and above Pulpit Point.....	".....	Calvin Belden, asst.	150
No. 9, lower end of Four Channels and Narrows.....	".....	Oliver Haile.....	100
Point au Roche.....	".....	E. F. Chamberlain..	350
Crown Point.....	".....	J. W. Chambers...	350
Juniper Island.....	Wm. Clapp.....	George Collamer...	350
Burlington Pier.....	".....	Geo. W. Beckwith..	150
Isle au Mott.....	".....	John D. Reynolds..	200
Windmill Point.....	".....	Clarinda Mott.....	350
Ogdensburg.....	D. M. Chapin.....	Salmon Smith.....	350
Cross Over Island.....	".....	J. C. Hill.....	350
Sunken Rock.....	J. W. Ingalls.....	Henry Campbell...	350
Rock Island.....	".....	S. C. Spaulding....	350
Tibbett's Point.....	".....	Wm. Collins, 2d....	350
Galloo Island.....	C. W. Inglehart..	Theop. Stevens....	400
Horse Island.....	".....	J. McFarlane.....	350
Stony Point.....	".....	Wiley G. Nichols...	350
Oswego.....	J. B. Higgins.....	Jacob M. Jacobs...	400
Big Sodus and Beacon.....	".....	Jesse Lyman.....	470
Genesee and Beacon.....	P. M. Crandail...	John Stephenson..	350
		Henry Newcomb...	240
Niagara Fort.....	F. Spalding.....	Edward Giddings..	350
Black Rock Pier.....	Christian Metz...	J. Brecktel.....	120
Horseshoe Reef.....	".....	W. Bates.....	450
		J. A. Phillips, asst.	300
Buffalo.....	".....	Edward Lee.....	400
Dunkirk.....	".....	Henry Severance..	450
Presque Isle.....	Thomas Wilkins..	John Goolding....	350
Presque Isle Beacons and Range.....	".....	Geo. K. Bone.....	400
Conneaut.....	C. J. Ballard.....	E. Capron.....	350
Ashtabula.....	".....	W. D. Camp.....	350
Grand River and Beacon.....	".....	James McAdams...	400
Cleveland.....	".....	Wm. H. Taylor.....	400
Black River.....	".....	Henry Ludman....	350
Vermillion.....	John Young.....	W. B. Andrews...	150
Huron.....	".....	W. B. Shirley....	350
Cedar Point and Range.....	".....	J. McKinney.....	350
Sandusky.....	".....	Thomas Dyer.....	350
Green Island.....	".....	Charles F. Drake...	350
West Sister.....	A. Stephen.....	Michael Miller....	350
Turtle Island.....	".....	Andrew Harrison..	350
		M. Coonahan.....	100
Monroe.....	N. G. Isabel.....	Jos. Guyons.....	350
Gibraltar.....	".....	John M. Alford....	350
Mamajuda.....	".....	Oliver Colburn...	350
Grassy Island.....	".....	P. S. Penel.....	350

Figure 4: Lightkeeper Compensation in 1860

6. 1865 – The Second Green Island Lighthouse

By July 1865, a new, two-story lighthouse had been built on Green Island. The square tower and its adjoining keeper's house were made of limestone. The ruins of this lighthouse still stand today.

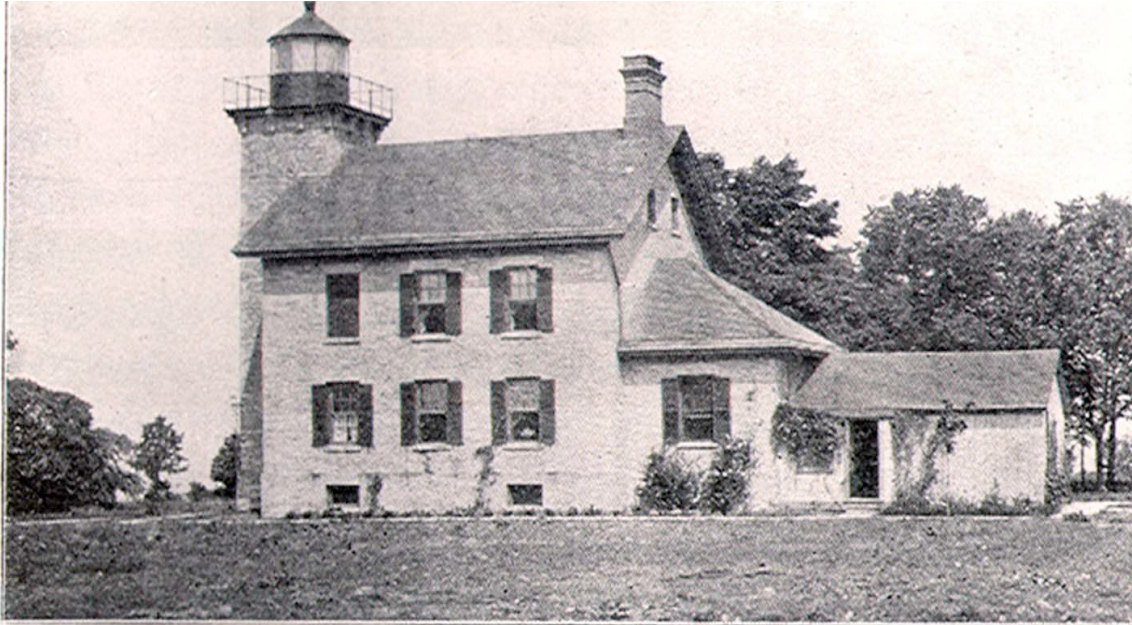


Figure 5: Green Island Lighthouse, around 1912. Taken by lighthouse keeper George Ferguson³

A 1913 story by Lydia Ryall, reprinted in my 2004 history of the Lake Erie Islands⁴, is excerpted in the following:

Hibernating at Green Island may be found another employee of “Uncle Sam,” George Ferguson, who has held the position of lighthouse keeper there since June, 1905, a faithful wife having been his only companion during that period.

Mr. Ferguson, the present keeper, has been in the government service for a period of fourteen years. Having served three years at the Ashtabula Life Saving station, he was appointed, in 1901, assistant keeper of Detroit River light.

A year later he was promoted to keeper of “Black River” light at Lorain, Ohio. After serving there two years, he transferred to Green Island, where he has been employed for the past eight years.

Mr. Ferguson and wife have rendered assistance to several small launches, and sail boats, while at Green Island, bringing them ashore, and caring for them until, Mr. Ferguson could fix up their boats, and send them on their several ways. In recent years, Mr. Ferguson has suffered much from ill health and his plucky little wife thinks nothing of jumping into a boat and pulling across a mile of open water, through all kinds of weather, for a doctor. Latterly, however, they have arranged a code of flag signals with the Put-in-Bay light keeper. When assistance is required, they signal from the tower. At night, lights are used instead of flags.

³ **Lake Erie Islands: Sketches and Stories**, Michael Gora, editor, Trafford Publishing, 2004

⁴ Ibid.

Mr. Gibeaut held the position of keeper on Green Island for several years, having many adventures; but Mr. Ferguson's immediate successor was owner of a splendid team of Italian greyhounds, and with a sled of ample size made daily trips across the ice to Put-in-Bay, carrying his children to and from school. The dogs were provided with a light but fancy set of harness and made the run with remarkable swiftness.

Mrs. John K'Burg, of Catawba Island, daughter of Mr. and Mrs. Gregoier, and granddaughter of Col. Drake, is now the only one living of the six persons who were at Green Island the night of the (1864) fire. Though but a little child at that time, she retains a vivid remembrance of the events of that awful night.



Figure 6: 1904 photo from the Coast Guard Archives



Figure 7: 1885 photo from the Coast Guard Archives



Figure 8: Green Island Lighthouse, Around 1920



Figure 9: Green Island Lighthouse, A Second Photo from Around 1920⁵



Figure 10: Leaving Green Island by boat

⁵ Image from the author's personal collection

7. Postcard photos from the Lighthouse Keepers

The two postcards shown below are from my private collection, and have never been published elsewhere. They are the only historic postcards of Green Island I am aware of. The first (Figures 11 and 12) was clearly written by Bertha Ferguson, wife of the lighthouse keeper, George Ferguson. It is addressed to a relative of Charles Duggan, who was the lighthouse keeper at the South Bass Island lighthouse at the time. The postmark is unclear, but it is probably from 1912-14.



Figure 11: Postcard Picture of the Green Island Lighthouse, around 1912-14⁴



Figure 12: Back of the Postcard in Figure 11, written by Bertha Ferguson, the lighthouse keeper's wife

⁴ Postcard from the author's personal collection.
Copyright © 2006-2020 by Michael Gora, Middle Bass Island, Ohio

The 1913 article above mentions that the Fergusons used light signals to communicate with South Bass Island via the South bass Island lighthouse keeper, Charles Duggan. Mr. Duggan was born in 1866 at Sacketts Harbor, near Watertown, NY and was married there to Bertha Graham. The wives of both lighthouse keepers were named Bertha.

The above card makes it clear that Bertha Ferguson was also close to the Duggan family.



Figure 13: Postcard of Green Island, sent in 1907⁷



Figure 14: Enlargement of the center of the image in Figure 13

⁷ Ibid.



Figure 15: Back of the Postcard in Fig. 13, showing this is a Christmas card from Green Island in 1907

The 1907 card is a Christmas card that was probably written by the Green Island lighthouse keeper, George Ferguson. The card is signed “Green Isld.” Postmarked December 24, 1907, it is addressed to Capt. & Mrs. J. Fox of Put-in-Bay. Instead of writing “Put-in-Bay” in the address, the Fergusons simply wrote “City”.

Capt. Fox was the master of the Steamer Olcott at the time. The Olcott was formerly the Steamer Lakeside. Heavily strengthened, she was built of steel and was one of the few Lake Erie ships built for the double purpose of being an excursion steamer in the summer and icebreaker in winter and early spring.

A small barn was erected for the keeper's livestock, which included a 3-acre partially wooded fenced in pasture. An inspector was impressed in a 1916 visit to the island because, “the chickens were confined, and there were apparently no other animals to clean out the underbrush.”

In 1926, the U. S. Lighthouse Service abandoned the residence after it had been in service for 61 years. The light was active until 1939, when the Coast Guard replaced it with an automated light on top of a skeletal tower. That light is still in service today, and is shown in Figure 22. It is on a 67 ft (20.5 m) square cylindrical steel skeletal tower (focal plane 80 ft (24 m); white flash every 2.5 s).

The old lighthouse building abandoned in 1926 was gutted by fire set by vandals at some point, but the shell still exists. The building is on the *Lighthouse Digest* Doomsday List, meaning that there is no hope for preservation of the building.

8. The Lighthouse Keepers' Official USLHE Boat

Here's a photo of an early Green Island, OH lighthouse keeper's USLHE boat, from USLHE archives. The property sticker from the U.S. Light House Establishment was affixed to many items, especially inside of the books of the traveling libraries that went from lighthouse to lighthouse. Lighthouse was two words at that time and not hyphenated. Both of these photos will be in the revised history.



Figure 16: The Green Island Lighthouse Keeper's Official USLHE Boat

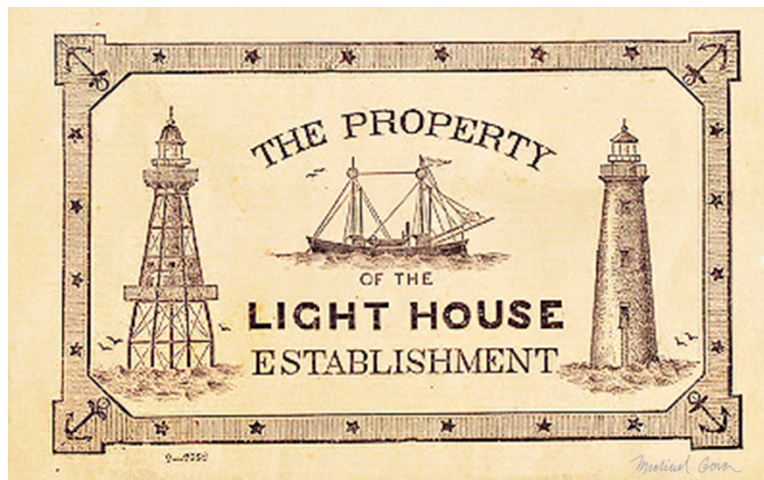


Figure 17: USLHE Property Sticker

9. Additional Photos



Figure 18: If you see this picture, it's NOT the Green Island, OH lighthouse⁸



Figure 19: The Green Island Lighthouse in January, 1963⁹

⁸ Image courtesy of the U.S. Coast Guard, from <http://www.uscg.mil/history/weblighthouses/LHWI.asp>. While this image had long been called one of the Green Island, OH lighthouse by the USCG, there had always been considerable doubt about its authenticity and the USCG finally made a correction. The picture is actually of Green Island, WI in Green Bay off Marinette, five miles southeast of the mouth of the Menominee River.



Figure 20: Green Island from the Southwest, July, 2003, Showing the Light Tower¹⁰

At some point, Green Island came under the jurisdiction of the U.S. Fish and Wildlife Service, and is today managed by the Ohio Division of Wildlife as a wildlife refuge. Unfortunately, the south shore of the island has recently become overrun with cormorants in large numbers. They are visible in the tops of trees in Figure 21 below.



Figure 21: S. Shore of Green Island, July, 2003, showing denuded trees with cormorants on them¹¹

⁹ The picture was taken before an abundance of vegetation had grown up around it and prior to the house being gutted by a fire started by vandals. Photo by Harold J. Germann from the collection of Ronald L. Stuckey, Professor Emeritus of Botany, Ohio State University.

¹⁰ Picture by the author.



Figure 22: 1954 Aerial View showing the old lighthouse and new light tower

In the summer of 2005, Beau Sedivy and Nate Hahn made an excursion to Green Island and took a number of pictures. The following pictures (Figures 23-31) were contributed by them.



Figure 23: 2005 Aerial View of Green Island, Summer

¹¹ Ibid.



Figure 24: Green Island - The Walkway to the Old Lighthouse, 2005

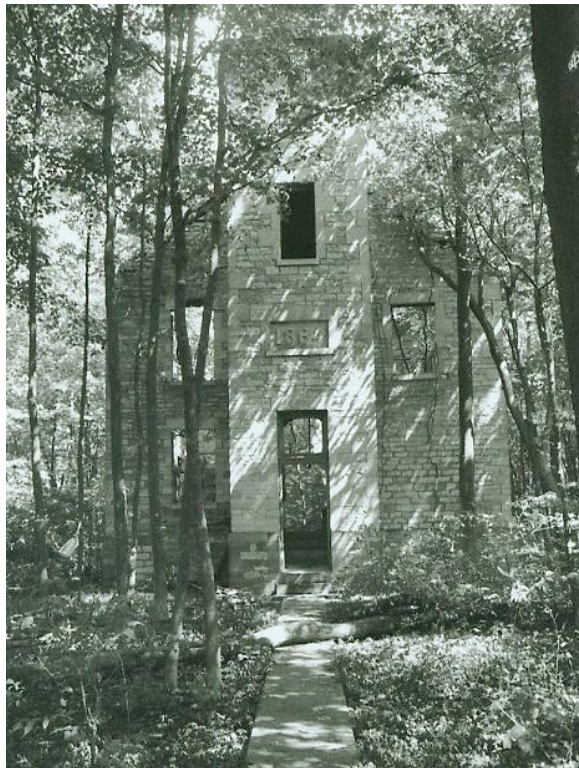


Figure 25: The Front of the Lighthouse

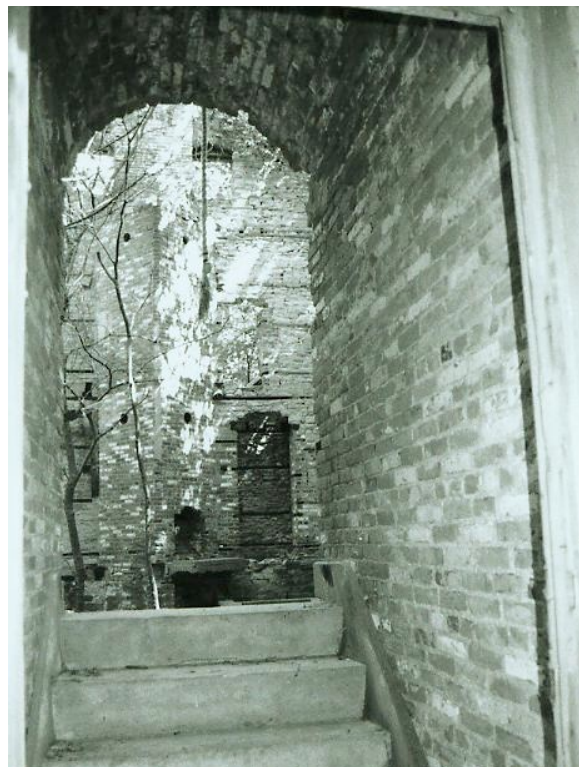


Figure 26: : Inside the Front Entrance

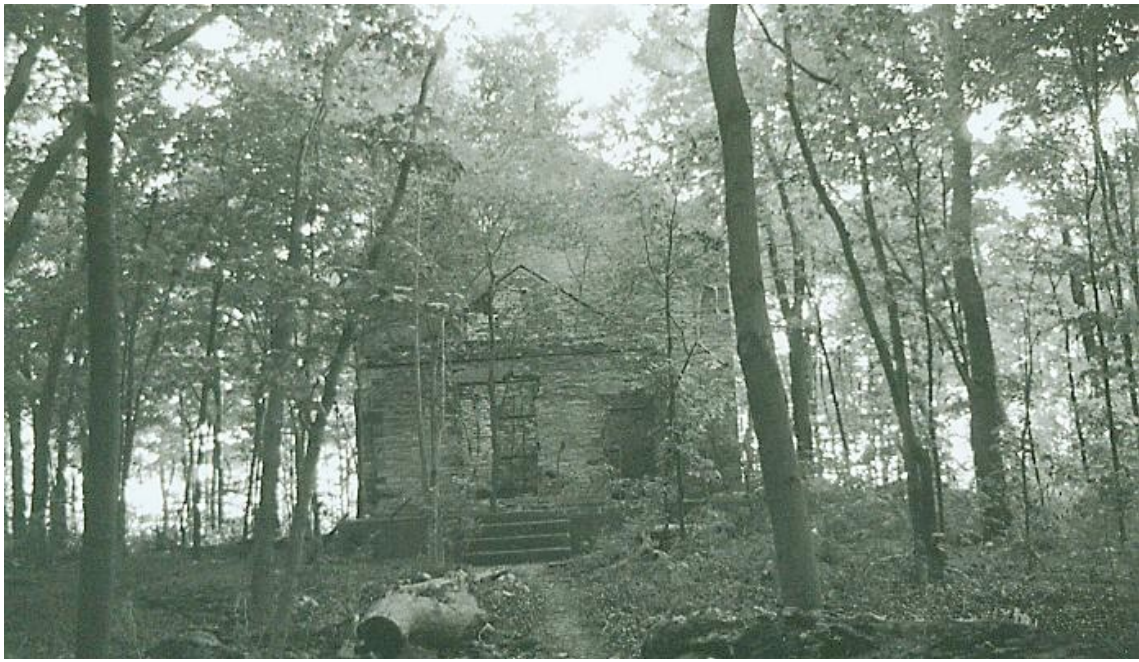


Figure 27: The Rear of the Lighthouse



Figure 28: The Year the Lighthouse Was Built, 1864, is Still Visible

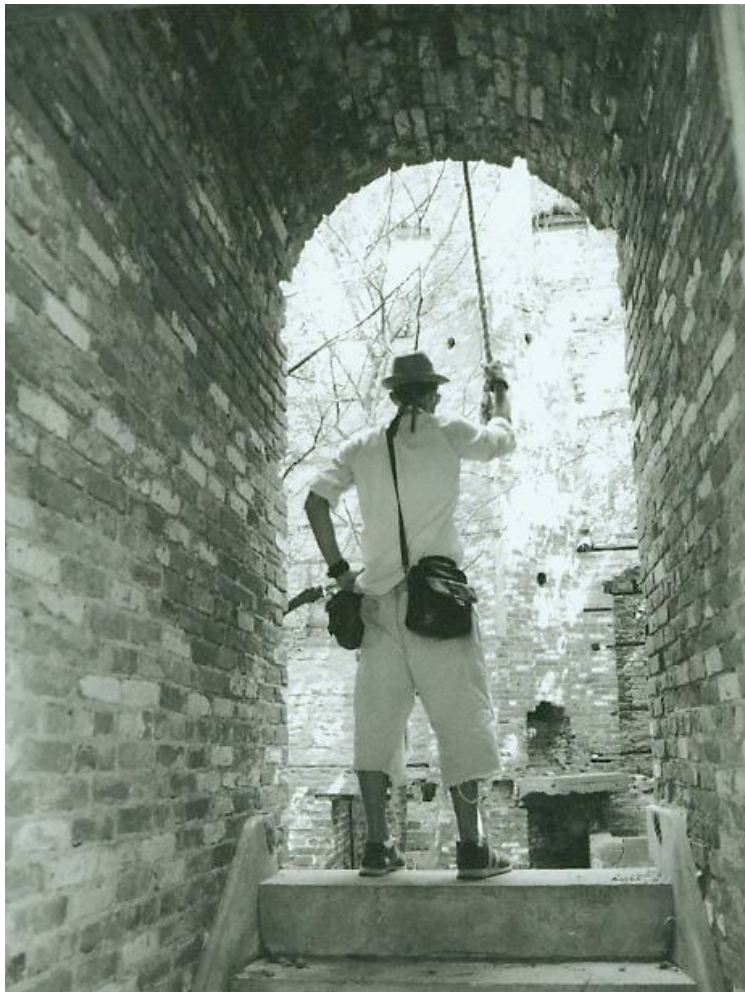


Figure 29: Another View of the Entrance



Figure 30: Another View of the Rear of the Lighthouse



Figure 31: Looking Straight Up Inside Today's Light Tower



Figure 32: February, 2014, by Jake Dunfee



Figure 33 - February, 2014. Emily and Jake Dunfee Behind the Lighthouse on a Snowmobile

10. 1942-44 – Some World War 2 Notes

The article “Life History of a Small Island”¹² contains an interesting story that had the original title “Green Island and the Manhattan Project” in a working draft before it was published.

It states that sometime between 1942 and 1944, “Miners were recruited from the gypsum mines that lined the Port Clinton area, sworn to secrecy, and delivered to Green Island under guard” to mine the germanium salts that could be found in the strontium there. The germanium was needed for early transistor research and the other main source was in Nazi-controlled Africa.

According to the author, Kenneth R. Dickson, the information was obtained from Dr. Ed Foster, emeritus chairman of the University of Toledo’s Engineering Department, who worked on the project. Dickson states that “the miners and engineers arrived on Green Island and reopened one of the existing strontium mines. All was going well until the mine spring a leak and the waters of Lake Erie were entering the mine faster than the pumps could remove it”. The operation was shut down, and the whole project lasted less than five days. When Dickson asked Dr. Foster if they removed enough material to make early transistors, he replied “the bomb went off, didn’t it?”

The skeptical reader will argue that germanium wasn’t used for transistors until 1948, but there are two possible responses that would not invalidate the story. Either the government made the first transistors secretly and Bell labs later patented them, or the germanium was needed for some other purpose related to the Manhattan project. With the Manhattan project files now de-classified, someone may find more information about this story hidden in the millions of pages available.

Last but not least, the article also mentions that Green Island and West Sister Island were both used as bombing or strafing targets during World War II. According to the article, the planes that fired at Green Island came from Wright-Patterson AFB near Dayton.

¹² Article by Kenneth R. Dickson. Published in *Inland Seas* magazine (The Quarterly Journal of the Great Lakes Society) Vol. 49, No. 2, Summer 1993, pp. 88-92

11. The Blue Cenote and Other Caves on Green Island

An unpublished Spring, 2007 survey of the caves on Green Island identified three definitive caves, plus several small cavelets and one cenote. The group surveyed a total 400 feet of cave in five different caves.

The following text and photos are from the unpublished study. Credits will be added here after the study is published, but for now the contributor wishes to remain anonymous. The blue cenote is most likely the cave from which strontium/germanium was taken for the Manhattan Project.

On the north side, the Blue Cenote – a beautiful blue 36x26-foot roundish pond in a slump - was measured and plumbed - it connects to the lake and lake fish have been reported in the Cenote - but no attempt was made to dive it, thanks to common sense and 50-degree water. Blue Cenote is surprisingly shallow: only about four feet at its deepest point, we found, and it is 37 feet 9 inches from the Lake.

The Blue Cenote has not technically been proven to be a cave, although its shape and location in the rock would indicate as much. Its location, 37 feet from the Lake, would indicate a connection to the Lake itself, especially given the light rhythmic movement in the cave that mirrors the Lake's waves and the occasional presence of fish in the Cenote. An interesting natural feature, it is heavily veined with Celestine crystals

Measurements were taken from above the pool, from the rock surface to the water level, and then across on an N-S and E-W axis. Maximum water depth was approximately four feet, but shallower in most areas. From the profile and plan views below, we can see that the Blue Cenote was perhaps a dome cave which collapsed completely into the Lake due to its shoreline proximity, which had a diameter of perhaps 40 to 50 feet.



Figure 34: The Blue Cenote on Green Island



Figure 35: The Blue Cenote on Green Island, 2nd photo