

Hi, my name is Brian Gula and I will be your flat naturalist for your self guided walk on the North Pier trail. I am an Environmental Educator and I work for the Department of Conservation and Natural Resources at Presque Isle State Park Complex. I am glad you can join me for a walk on the North Pier trail today! What do you think I've caught in my hands? Think about it as you walk today!



To get to this spot follow any path that takes you down to the beach at beach 11 and take a right on the paved road. The "do not enter" sign will be on your left.

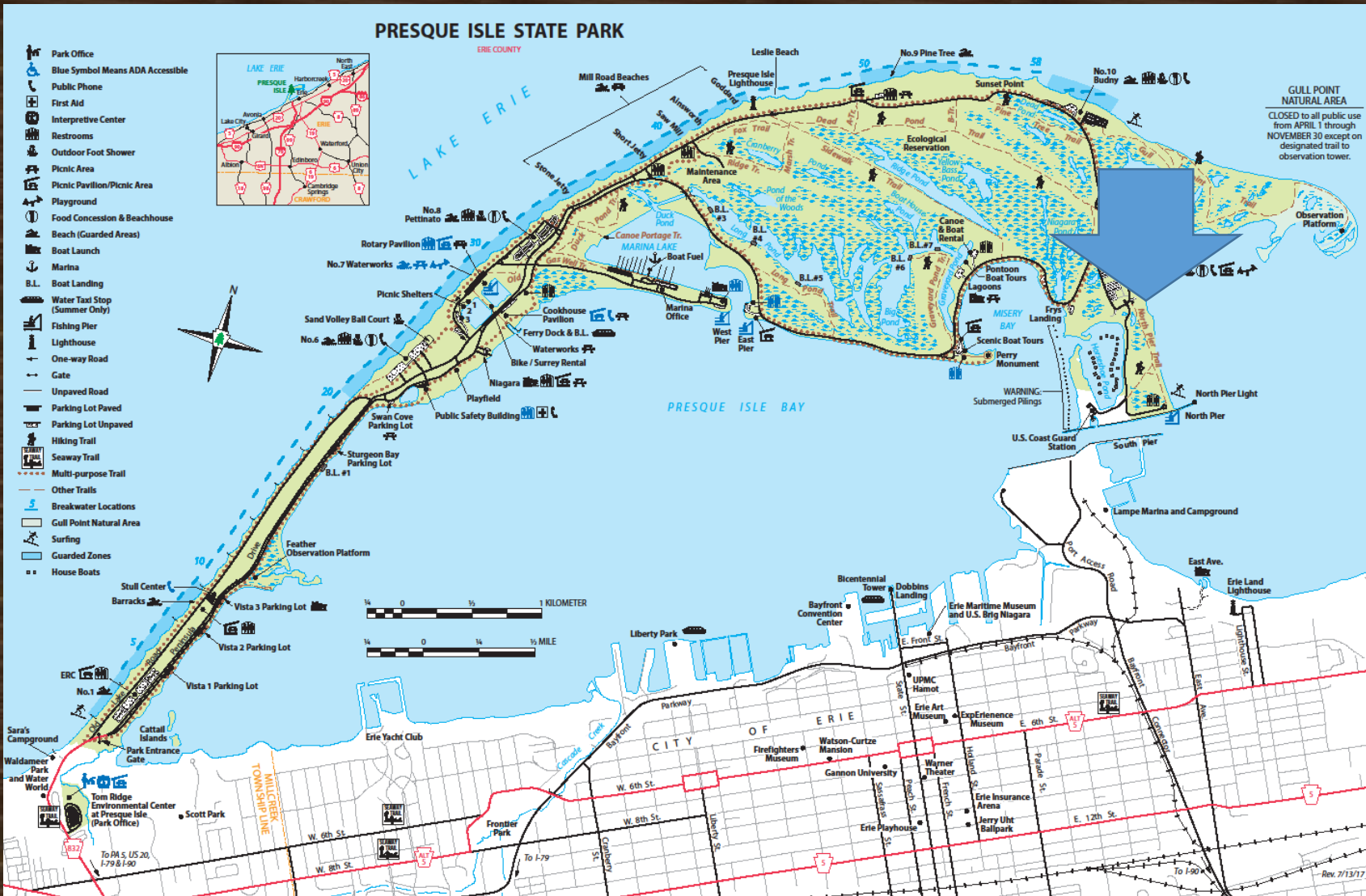


# Flat Naturalist – North Pier Trail

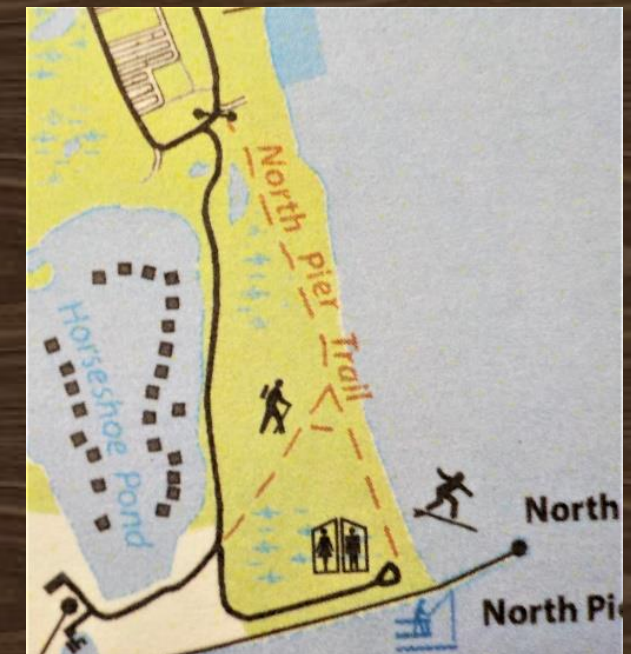


#DiscoverPIFlatNaturalist





North Pier Trail  
access from Beach  
11 parking lot near  
the nature play  
space.





- North Pier Trail is 0.7 miles long easy walking.
- The trail follows a sand ridge along the shoreline between North Pier and Beach 11.
- An old firing range used for training during WW II can be seen at the intersection. Look for a concrete wall. You can get a better view if you walk on to the beach.



Look for these natural items along the way. See if you can find them all.



Milkweed

Fowler's Toad



Wild Strawberries



Common Daisies

Clover



Common  
Mullein



Native Asters



## Welcome to the North Pier Trail!

This trail offers a unique opportunity to see a variety of habitats and a few historical structures that tell a unique story of the past and the present.

This trail is in a unique area of the park because if you go back to 1825 this land was not formed yet. This area would have been open water. Take a look at this map of 1836 and the map of 1884. (These maps will show the growth of this area). The Army Corps of Engineers were given the task to make the harbor accessible to large vessels. In 1825 the structures that were built to accomplish this was the construction of the North and South Pier. Also on the map you will see a solid line running north and south of the North Pier and the peninsula, this was a rubble mound wall that functioned as a sand trap and the North Pier prevented the sand from clogging the channel. The Engineering of the North and South Pier was to force strong currents through the two piers to self dredge itself and maintain a navigable channel into the harbor. This structure worked so well that the Army Corps had to add several extensions to the north pier throughout history to prevent the sand from wrapping around and clogging the channel. This structure is what built up the sand creating all the different types of habitat that you will experience on this trail today.



With additional matter.

Here the shore is wearing away. Here the sand is accumulating

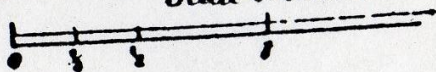
resquile or Pen-insula.

Lerry Bay

10 9 12 30

**ERIE**

*Scale of Miles.*



1. Fort Presqu'île, built in 1753.
2. Three Blockhouses, erected in 1795,  
& one on the same site in 1813.
3. The Brigs Lawrence & Niagara,  
built in 1813.
4. Old Navy Yard, three gun boats,  
built in 1813.
5. Blockhouse 1813.

*Light House.*

AS THIS MAP of 1836 shows clearly, the Peninsula was once an island, separated from the mainland by a wide breach.



# Erie Harbor Pa.

June 30. 1884.

Scale 1 in = 2500 ft.

Lake

Erie

Presqu'île

Peninsula

Misery Bay

Presqu'île

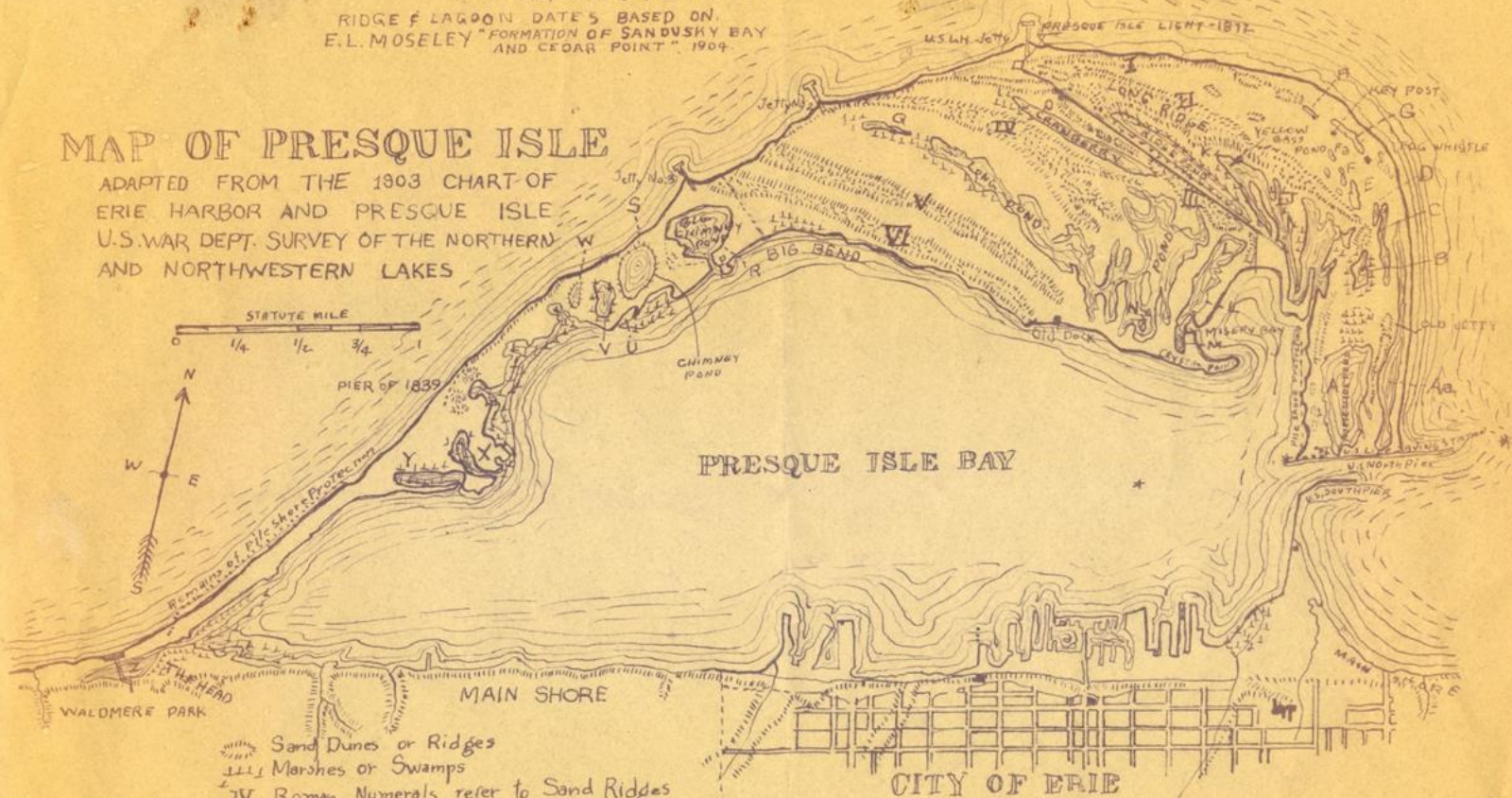
Bay

City of Erie

Edw. Maguire  
Capt. U.S. Navy



## MAP OF PRESQUE ISLE

ADAPTED FROM THE 1903 CHART OF  
ERIE HARBOR AND PRESQUE ISLE  
U.S. WAR DEPT. SURVEY OF THE NORTHERN  
AND NORTHWESTERN LAKES

Sand Dunes or Ridges  
 Marshes or Swamps  
 IV Roman Numerals refer to Sand Ridges  
 A Capital Letters refer to Ponds and Lagoons.

RIDGE NO.	YEAR FORMED	NO.	YEAR FORMED
I	1878	A-a	1902-3
II	1738-1838-1858	C	1894-5
III	1684	E-F	1882-3
IV	1594 IV-SOUTH 1500		
V	1929 OR 1409		
VI	1379		
V-S AREA	1309		

1828  
 1831 ?  
 1832-3  
 1835  
 1836-39  
 1844  
 1853-56  
 1864  
 1874  
 1881-92, 1905

NECK BROKE & FIXED BY U.S. GOVT.  
 7 1/2' DEEP BOAT CHANNEL  
 BROKE AGAIN  
 GAP MILE WIDE  
 3500' CRIB BREAKWATER AS PROTECTION-PROPOSED N. ENT.  
 GAP 3000 FEET WIDE  
 BRUSH & STONE FILL  
 GAP CLOSED BY DRIFTING SAND.  
 BREACHED & CLOSED-BULKHEADS BUILT.  
 WAVES WASHED OVER-NO BREAK.

## Stop 1

(look for the ★ on the right)

This Pond is labeled on this old map as A-a, this pond was formed from 1902 to 1903. So where you are standing now would have been the shoreline in that year. Now you can walk out to the beach and see how far away you are from the shoreline today. Continue walking.



## Stop 2 (look for the ★ on the left)

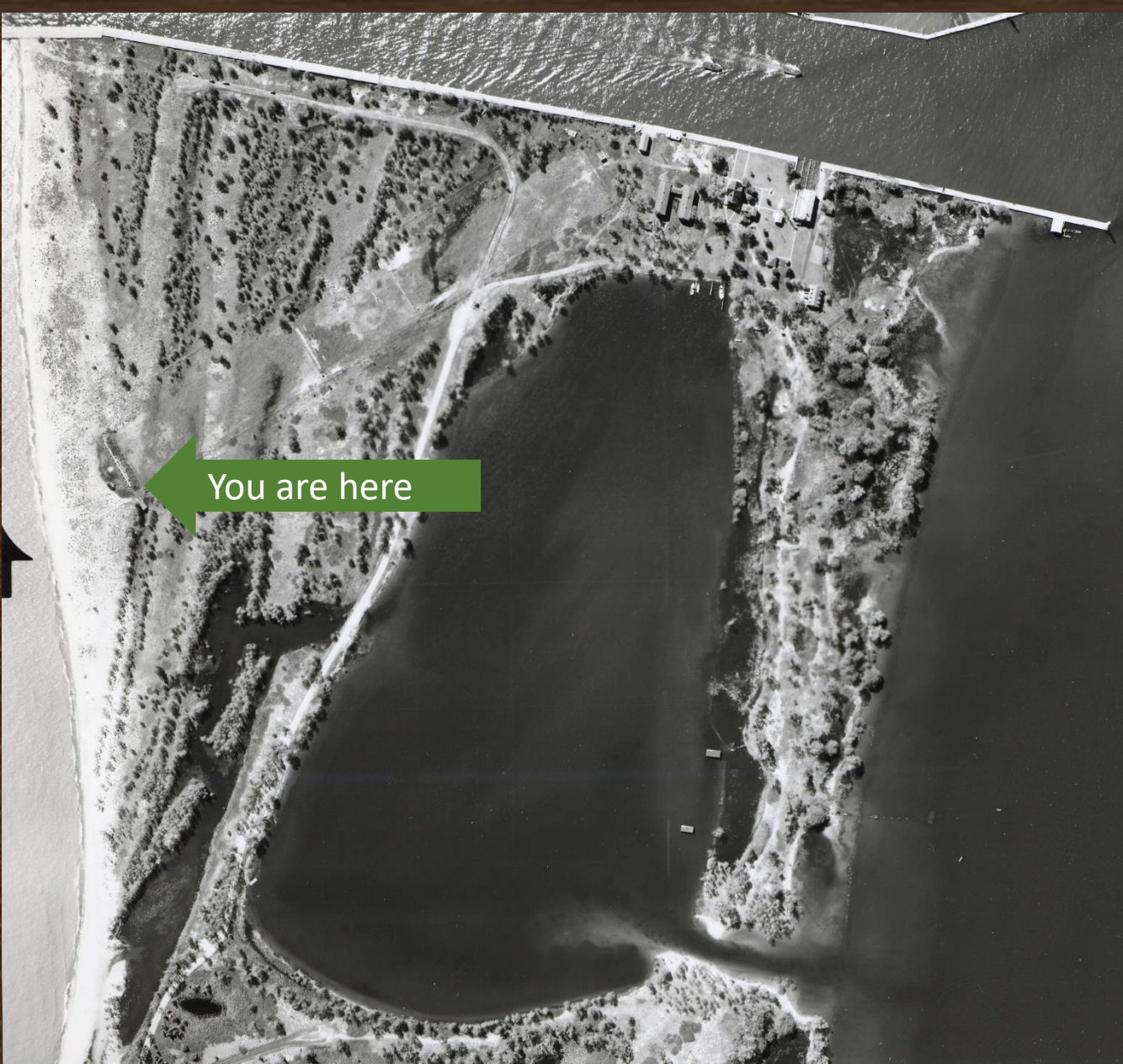
If you take your time and look, there is sign of wild life all along this trail. This is a buck rub from one of the very large male deer that live on the park. Male white tail deer will rub their antlers on several trees to mark his territory.



The EE staff put out camera traps, count deer pellets, and do a helicopter fly over to survey the number of deer on the peninsula. The Carrying capacity set by the PA Game Commission is 17 deer for the peninsula.

Continue on.





### Stop 3 (look for the ★ on the left)

The peninsula is constantly changing. It does not take long for structures, if left unattended, to be absorbed by the vegetation. If you look very closely in this picture you will see a structure that was once used in the 1940's. When you get to this location on your walk look for the hidden concrete wall among the vegetation. This structure is a firing wall used for target practice and training for the U.S. Coast Guard during WWII. The aerial picture below is from 1948. Notice how much has changed to the area from this time. Pay close attention to how much beach is in front of the firing wall compared to today.



You can walk out around the beach and stand on the dock to get a good view of the firing wall.

Men stood on this side of the firing wall holding targets. The wall protected them if one was off target. Look for numbers on this side of the concrete.



This Dock was used for the training exercises because during the shooting they had to make sure no one was boating in that area.





This is an  
up close  
shot.

Continue  
walking on.  
Stay left  
when the  
trail seems  
to split.





## Stop 4

(look for the ★ on the right)

This is Phragmites, a non-native invasive plant that is in our top 10 invasive plants to manage on the park. Five years ago much of this habitat along this trail was consumed by this species. The problem that invasive have is they can create a monoculture, losing the diversity in an ecosystem. The park uses many methods to remove and control this species. Hand pulling, burning, mowing, using herbicide have been applied. This trail has greatly improved and we are seeing much more diversity in plant and wildlife communities.

When planting in your backyard strongly consider native plants, there are many benefits for using natives.

View the large sand pile on your left.



## Stop 5



You have reached the north pier, and this large pile of sand is what is used for sand replenishment on the beaches of the peninsula.

At this site 18,000 tons of sand are unloaded here at one time.

This pile was the 8<sup>th</sup> load that was used to replenish the beaches during 2020.





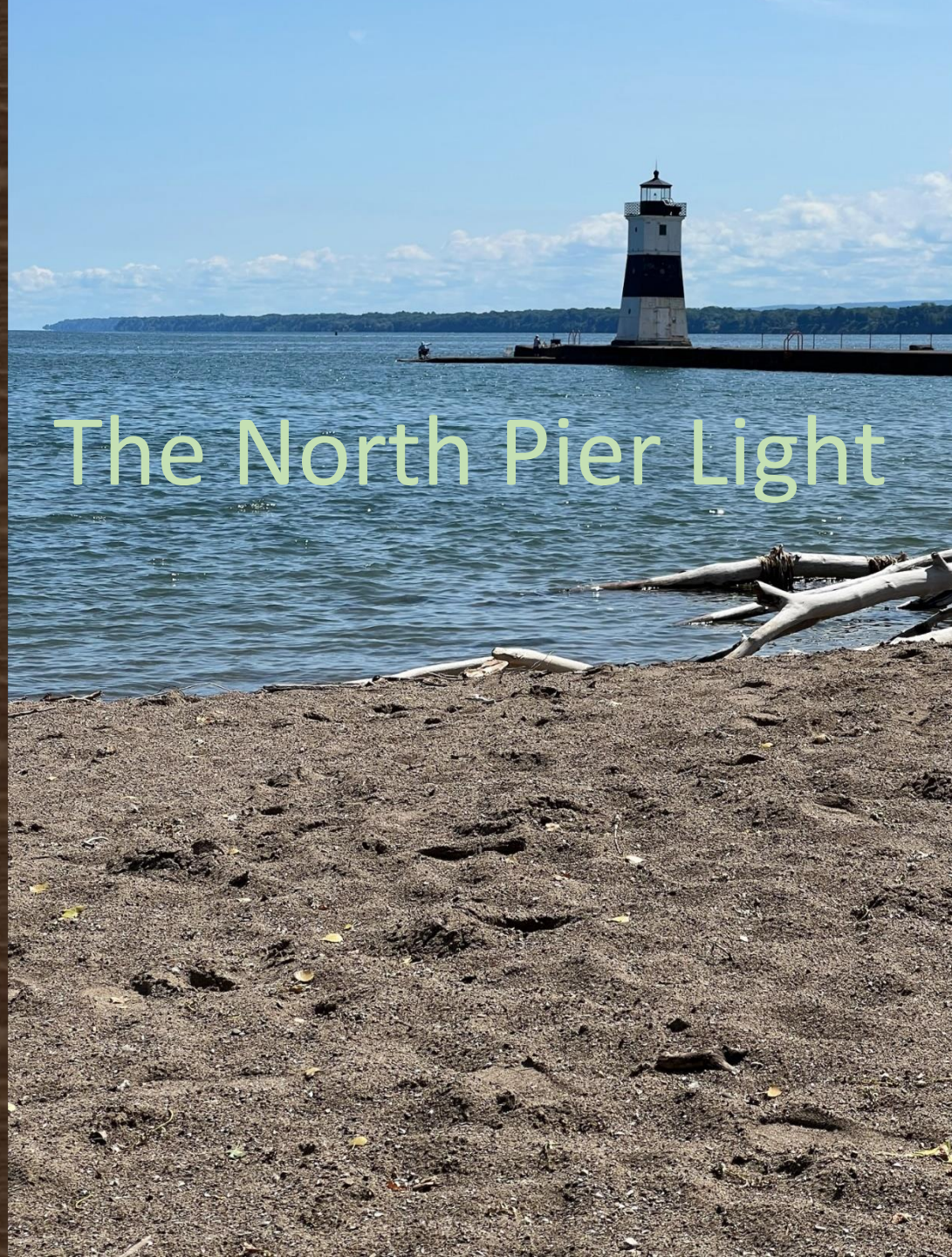
The Sand is collected from Lake Erie, then unloaded at Erie Sand and Gravel on the south side of the South Pier, Then a ship loads it from the South Pier and transfers it to the North Pier and then unloads it.



The sand is then hauled by truck to areas of the beach that need the sand nourishment.

Continue walking to a good view of the Presque Isle Light.





## The North Pier Light

There is a long history of navigational aid guiding ships into the Presque isle harbor. The first guiding light into the harbor was the land light house built in 1818.

Then the north pier light was built in 1830. As the sand built up and the north pier was extended the light moved and evolved throughout time. The one you can currently see was moved in its present location and fitted with the steel and its black and white color in 1940.





Thank you for exploring the North pier trail, you can take the trail back or you can walk the beach back. If you walk the beach back you will see Gull point in the distance. Another reminder of the constant change that occurs on the peninsula. You may also walk the trail back the way you came. ***Be sure to stop at Flat Brian and take a picture on your way back. He is against the tree line near the last star.*** Post it to Facebook or Twitter with ***#DiscoverPIFlatNaturalist***. Every Day there is something different here at the park.

**Enjoy exploring Presque Isle!**