JEFFERSON
EDUCATIONAL SOCIETY

Quick, Timely Reads
On the Waterfront

Sand Stains, Iron, and Griswold Cookware
Presque Isle Bay Beach History Lessons

By David Frew
July 2022

Dr. David Frew, a prolific writer, author, and speaker grew up on Erie's lower west side as a proud "Bay Rat," joining neighborhood kids playing and marauding along the west bayfront. He has written for years about his beloved Presque Isle and his adventures on the Great Lakes. In this series, the JES Scholar-in-Residence takes note of life in and around the water.

Iron stains are common on Great Lakes beaches.

Bay Rat expeditions along the beaches that led west toward the head of Presque Isle Bay often resulted in purple sand stain encounters. Dark maroon spots on

otherwise light-colored sand. We noted their existence and wondered. Eventually, we asked what they were and answers, while consistent, were puzzling. We were told that the purple stains were chemical markers of iron deposits. Telltale signs of iron ore. We were both skeptical and naïve with respect to metallurgy, so we investigated.

Imagining that we would find gleaming strips of silver metal just below the surface we tried digging in the places that revealed the largest, brightest sand stains. We dug some ambitious holes, using primitive tools crafted from sticks and stones. No luck. Regardless of how hard or how deep we dug we never encountered the shiny silver pockets of iron that we had been searching for. Convinced, as usual, that the adults were probably wrong we moved on to more important matters.

If only we had known. Bog iron, as it was called, was an important local resource in the early 1800s. And the head of the bay was rich with the substance. For decades, workers would fill buckets with the sandy substance, and then haul it in barrels using barges to the Public Dock (Dobbins Landing). From there it was loaded into packet boats and floated via the Erie Extension Canal (of the Pennsylvania Canal) to iron mills that stretched from here to Pittsburgh. The “excavation” of bog iron was a seemingly magical process. After shoveling hundreds of pounds of the substance from the marshy soil at the head, the huge holes that were left in the surface sealed themselves and just a few days later, more bog material could be dug from the same spot.

Bog iron extraction took place along the shores of the Great Lakes and inland during the late 1700s and early 1800s as extractors developed skills in identifying the most productive places to dig. When a particularly productive site was located it was common for an iron mill to be built nearby. The mills were subsequently used to create the pig iron that was used to form metal tools.

The problem with bog iron extraction was that after repeated extractions from a particular place the percentage of iron ore began to decrease. For most mining sites the purity of materials degraded to the point where it was no longer productive to extract after a few years. This inevitability rendered the bog iron fields at the Head useless by the mid-1840s.

At about the same time, massive iron ore deposits were discovered in the Upper Peninsula of Michigan. The new deposits were so rich, with respect to ore purity as compared to bog iron, that they eventually changed everything in the iron and steel industry. Until 1852, when additional, rich iron ore deposits were discovered in the Lake Superior region, the process remained almost the same as it had been in the late 1700s and early 1800s. Miners and furnaces were using Michigan ore to create pig iron, which was the raw ingredient used by metal fabricators to create the tools and hardware needed to fuel the growth of the new country.

A typical mid-1800 ornamental butt hinge

One of the Erie companies that made use of bog iron was the Selden-Griswold Factory located on the banks of the Extension Canal near West 10th and Myrtle streets. Founders Matthew Griswold and his cousins J.C. and Samuel Selden began in 1865 by fabricating a variety of metal hardware from iron ore delivered via canal packet-boats, and eventually specialized in large hinges that could be used for barn doors and other oversized applications. Since these large-hinge assembles were commonly called "butt hinges," the Selden-Griswold business was nicknamed the "Butt Factory." As the business grew, it diversified into metal stove parts. Erie was developing into a major stove manufacturing mecca so there were many opportunities to subcontract large and profitable stove components.

Their canal-side location allowed Selden-Griswold easy access to the raw materials needed for their manufacturing process. Bog iron was being shipped up (south) from the bay and the coal that was needed in the smelting process was being floated north from the Pittsburgh area. The "butt factory" did its own smelting, which created a constant risk of fire. In 1887, Griswold bought out the Seldens, who had grown tired of the business and were often in disagreement regarding product selection. Griswold had introduced the idea of manufacturing cookware as early as 1870 when it began offering a limited line of frying pans and cooking pots.

In 1902, after several minor fires that had been caused by the smelting operations, the factory burned to the ground. By that time, however, the canal had closed and the West 10th Street location was no longer advantageous. Griswold Manufacturing moved to West 12th and Raspberry streets, which was a better location since it was adjacent to Erie's evolving railroad connections to Pittsburgh. It needed the new railroad access, not only for coal and limestone deliveries, but also for the hard-to-find pig iron, which was being shipped from the center of the state. Griswold stopped smelting when it moved to the new location so that it could concentrate on the product that had proved most profitable in recent years, cookware. The new

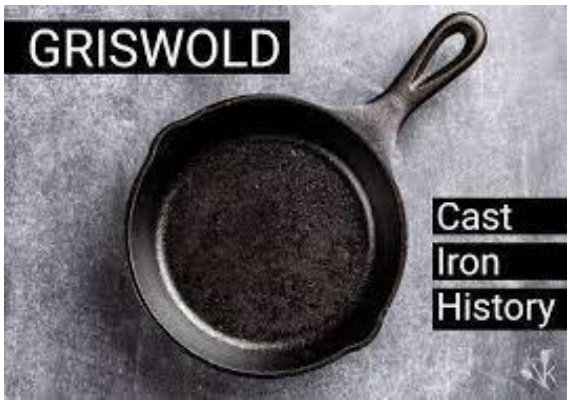
12th Street operation shifted effort and capacity that had previously been dedicated to smelting pig iron to the expansion of the cookware line and, by the early 1900s, Griswold had created a national reputation for cookware quality.

Even after the Bessemer steelmaking process had become available in the United States (1880s) and iron ore smelting had become passé, Griswold continued to use the increasingly –difficult –to obtain bog iron and pig iron to produce cookware. As the business evolved, it had become apparent that the bog iron originally used to form Griswold pots and pans was far superior to iron ore-based pig iron. Eventually it became almost impossible to find pig iron that had been made from bog iron. The only pigs that could be acquired were products of mined iron ore. The earliest mined iron from Lake Superior was processed into pig iron but after a few years that product was directly made into steel. And eventually Griswold was forced to either use iron ore-based pigs (as opposed to bog iron) or processed steel. The company experimented with aluminum alloys in the 1940s, but its products were not a success.

The Griswold Family sold the business to out-of-town interests in 1946 and the new owners continued to operate the 12th Street factory until it closed in 1957, sending 60 employees to the unemployment lines and ending a wonderful period of local history.

The historic nature of Griswold products, as well as their legendary quality, has conspired with the end of regular production to make it highly collectable. They are antiques that can be used on a daily basis and enjoyed. As such, they sell briskly. A vigorous collector's organization had evolved and meets regularly in Erie to share information, trade pots and pans, and discuss their collections. They have made the Watson Curtze Mansion (Hagen History Center campus) their unofficial home.

Every piece of Griswold cookware was indelibly marked with a company logo when made.



Griswold frying pans

The last vestige of Griswold history remaining in the Erie community is Griswold Plaza just north of Union Station. The plaza was dedicated to the Griswold family in honor of the pioneering contributions that it made to Erie manufacturing.

Griswold Plaza

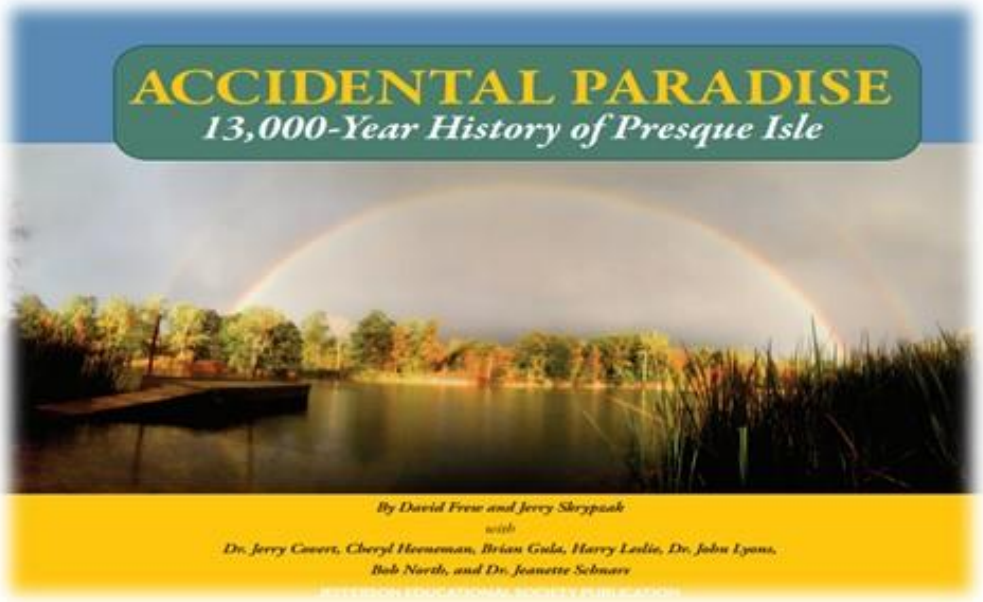
Subscribe to JES Publications Emails!

Subscribe to Book Notes Emails!

Accidental Paradise Available at TRECF!

Accidental Paradise

by Dr. David Frew and Jerry Skrypzak



The beautiful book on Presque Isle published by authors David Frew and Jerry Skrypzak – "**Accidental Paradise: 13,000-Year History of Presque Isle**" – is on sale at the Tom Ridge Environmental Center's gift shop and through a special website, **AccidentalParadise.com**.

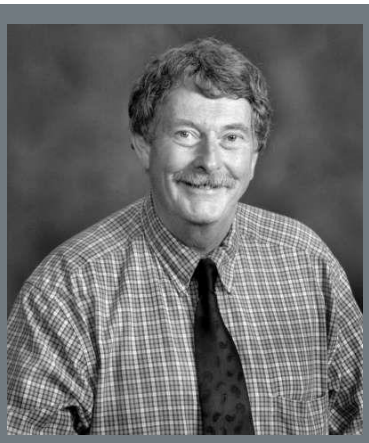
The book, priced at **$35 plus tax and shipping**, can be ordered now through the website sponsored by the TREC Foundation, **AccidentalParadise.com**.

Presque Isle Gallery and Gifts on the main floor of TREC, located at **301 Peninsula Drive, Suite #2, Erie, PA 16505** will also handle sales ***daily from 10 a.m. to 4 p.m.***

For more information, send an email to **aperino@TRECF.org**.

To watch "Accidental Paradise: Stories Behind The Stories" click **here**.

ABOUT THE AUTHOR



Historian and author David Frew, Ph.D., is a Scholar-in-Residence at the JES. An emeritus professor at Gannon University, he held a variety of administrative positions during a 33-year career. He is also emeritus director of the Erie County Historical Society/Hagen History Center and is president of his own management consulting business. Frew has written or co-written 35 books and more than 100 articles, cases, and papers.

In Case You Missed It

Refugees: In Their Own Words | Refugees Overcome Incredible Obstacles to Make New Home in Erie, Pennsylvania (Part One) written by Professor of French and International Studies **Laura Reeck**

Be Well | What Happens in Vagus…written by health and wellness expert **Debbie DeAngelo**

Book Notes #108 | 1968/2022: The Seeds of Our Discontents (Part Seven) written by Jefferson Scholar-in-Residence **Dr. Andrew Roth**

The Lost Cherry Street Compound: Economic Progress, Gentrification, or Both? written by Jefferson Scholar-in-Residence **Dr. David Frew**

A Shared Heritage | Vosburghs: One of Earliest, Most Influential Families written by Jefferson Scholar-in-Residence **By Dr. Chris Magoc, Johnny Johnson, and Melinda Meyer**