

A background image of a field of sunflowers, with a large sunflower in the foreground and several others in the background, all rendered in a light, faded, brownish-orange color. A white rectangular box with a thin black border is centered horizontally and vertically, containing the title text.

# OHIO'S CANAL HISTORY

by Natalie MacKay

# CANAL UTILITY

- Transport by waterway was the predominant form of long-distance movement in American society until the mid-19<sup>th</sup> century, when railroads offered a more cost-effective and brisk method for transporting goods and people across the vast countryside of the West.
- Canals are a vital part of early Ohio history, since much of American industry necessitated the movement of items across increasingly long distances. The founding and success of many Ohio towns relied on the economic value offered by local canals.

# CANALS IN OHIO

- Numerous canal projects were drawn up by Americans through the 18<sup>th</sup> and 19<sup>th</sup> centuries, especially among the growing populations in Ohio and other nascent western states.
- One canal that exited the planning stage and entered construction in the Summit County region was the Pennsylvania & Ohio Canal. The vision for the canal was initiated by James Geddes in a survey along the Cuyahoga and Mahoning valleys in 1823. He concluded that it would be feasible to run a canal through those valleys to connect Ohio and Pennsylvania's canal systems.

# PENNSYLVANIA & OHIO CANAL

- The Pennsylvania & Ohio Canal was highly linked to the everyday life for Ohioans that lived along its towpath. The canal attracted a substantial amount of commerce, which caused an influx of population into the Akron area.
- The founding of Munroe Falls predates the canal, but by 1842 the Pennsylvania & Ohio Canal changed life for the residents of the town.
- Boats that floated down the canal brought work into the area. Businesses popped up for serving the canal workers and travelers. People could find work leading the horses and mules down the canal, or work unloading canal shipments.



# PENNSYLVANIA & OHIO CANAL

- Before the canal, sales and distribution were locally restricted. After the canal was constructed, businesses were able to ship and sell products to a much larger area.
- The Pennsylvania & Ohio Canal offered a direct route from northeast Ohio to Pittsburgh, and favorable climate differences between the Pennsylvania & Ohio Canal and the path along Lake Erie from Cleveland to Buffalo gave the Pennsylvania & Ohio Canal a few more active weeks in late winter and fall.





# CONSTRUCTING THE P&O CANAL

- The Pennsylvania & Ohio Canal was 82 miles long – 67 of which were in Ohio. The canal terminated at Akron, where it connected with the Ohio & Erie Canal just below Lock One in the Lower Basin adjacent to property where B.F. Goodrich Company would locate almost half a century later.
- A private company was contracted by the legislatures of both Ohio and Pennsylvania to construct the canal, organized by Eliakim Crosby, Leicester King, and William Ryan, in cooperation with businessmen from Philadelphia and Beaver County, Pennsylvania.



## CONSTRUCTING THE P&O CANAL

- Sixteen locks and several slackwaters led the canal through Cuyahoga Falls, Munroe Falls, and Franklin Mills (now Kent) to Ravenna.
- From Ravenna the canal entered the valley created by the East Branch of the Mahoning River, going through Campbellsport, Newport, McClintocksburg, and Newton Falls, where it crossed the East Branch on a stone masonry aqueduct.
- After crossing the Mahoning on another slackwater, the canal route led through Niles, Girard, Youngstown, Campbell, and Lowellville before entering the state of Pennsylvania – ultimately joining the Beaver Division of the Pennsylvania Canal System at Western Reserve Basin, about seven miles south of New Castle.

# CONSTRUCTING THE P&O CANAL

- The Pennsylvania & Ohio Canal required 54 locks to overcome 424 feet of elevation change. The canal also contained 2 aqueducts, 9 dams, and 57 road bridges.
- The work was done primarily by military engineers borrowed from the state Corps of Engineers, the U.S. Topography Engineers, and the U.S. Army.
- Construction was overseen by Colonel Sebried Dodge and James Dunlop Harris.
- The locks along the Pennsylvania & Ohio Canal in the Akron area were of mitre gate design. A mitre gate lock is a walled, stone or wooden chamber at least fifteen feet wide and ninety feet long, with gates at each end. The gates come together when closed in a shallow point, facing upstream. In the closed configuration, the gates were strengthened by the mitre, allowing them to withstand the considerable pressure at higher elevations.



P & O Canal  
starts

Completed in 1840

Discontinued in 1868

Pittsburg - Youngstown & Chicago

RR Purchased Canal and  
started trains in 1889

Distinut home built	1885
House	1885
Ford House	1885
Shakespeare	1836
Town Hall	1885
Old Store	1836

## CONSTRUCTING THE P&O CANAL

- The canal required sufficient water supply to effectively operate the many locks to each summit. Brady, Phippen, Sandy, and Hodgson Lakes were all tapped to be used as feeders for the Pennsylvania & Ohio Canal.
- Water was diverted eastward from the Cuyahoga River – which drains into Lake Erie – to the Mahoning Valley watershed, dumping in the Gulf of Mexico.

## WATERWAY CONNECTIONS

- The Pennsylvania & Ohio Canal was the central figure in local Ohio economies from its opening in 1840 until 1869, after which railroads surpassed and replaced the transportation benefits of the canal.
- Many canals across the state were displaced by railways.
- The Pennsylvania & Ohio Canal connected the eastern United States canal systems to the Ohio & Erie Canal, thereby connecting by waterway the eastern shores of the U.S. with the Mississippi river.

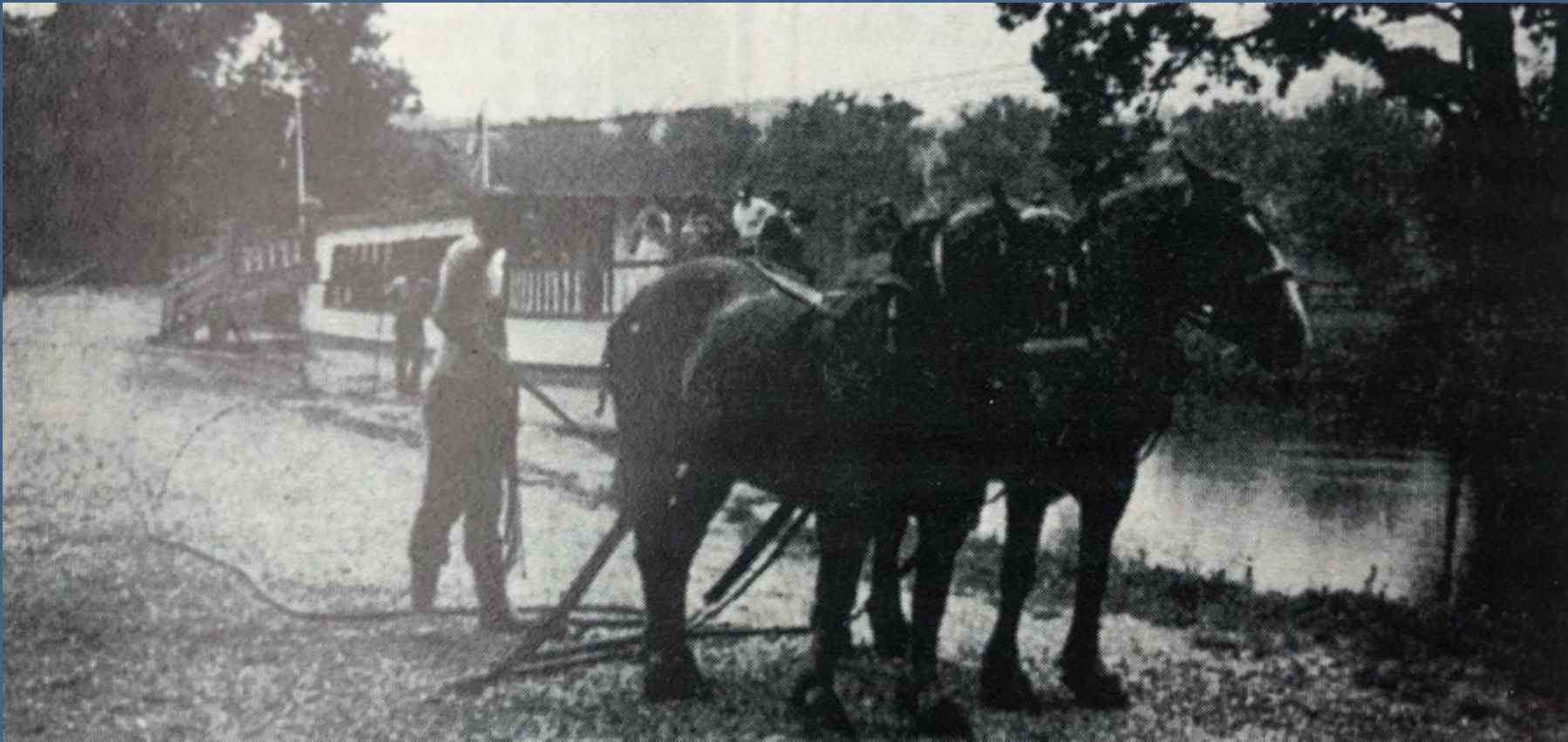
# OHIO & ERIE CANAL

- The Ohio & Erie Canal is a prolific achievement in the industrial evolution of Ohio, establishing a direct waterway between Lake Erie and the Ohio River.
- “Ohio’s Grand Canal,” as the Ohio & Erie was called, stretched 309 miles north to south, its banks and bottom lined with clay.
- Canal beds were manually dug by pick and shovel, attracting several farmers, merchants, and American emigrants to work the land. Irish and German immigrants found work constructing the Ohio & Erie Canal.
- The canal was forty feet wide and twenty-six feet deep, requiring 146 lift locks, 56 guard locks, 14 aqueducts, 204 culverts, and 14 dams by 1827.
- Construction was halted several times due to outbreaks of “canal fever.” Disease claimed the lives of hundreds of canal laborers.



# OHIO & ERIE CANAL

- The canal followed along the Cuyahoga River south from Cleveland to Akron, then south along the Tuscarawas River.
- Waters of the Muskingum and Licking Rivers were used as the canal proceeded from Coshocton to Dresden and Newark.
- The canal turned toward the Scioto River and followed south through Circleville and Chillicothe to Portsmouth on the Ohio River.
- Seven years of construction produced a territory prepared for white settlement. By 1840, one could travel from New York to any city east of the Mississippi by canal boat.
- Canal economies thrived until 1850 with the coming of the railroad.
- A young James Garfield was a mule driver along the towpath of the Ohio & Erie.



- The Ohio & Erie Canal was a massive financial undertaking. By the time construction was completed, it had cost over five million dollars – an unparalleled sum for the time.
- The canal was celebrated in the United States and lauded abroad as the eighth wonder of the world.
- There were major changes in social life during the canal days. Party boats floated down the canal, comprising about one-third of the 300 canal boats that regularly traveled to and from Massillon and Cleveland.



# OHIO & ERIE INDUSTRY

- The Ohio & Erie Canal produced bountiful economic growth for towns that cropped up along the towpath.
- The Ohio & Erie helped upstart Cleveland and Akron, building population and finance through access to the waterway.
- In Akron, important local businesses like Mustill's general store served canal workers and city dwellers alike.





## DISCONTINUATION OF OHIO & ERIE

- Operations on the Ohio & Erie Canal dwindled with the expansion of railways across the American west, and it was eventually abandoned after severe flooding damaged the banks of the canal in 1913.
- After the canal fell out of commercial and transport use, it was converted into public recreational space. Many sections of the Ohio & Erie were repurposed as parks and public fishing land various times throughout Ohio's history.
- By the latter half of the 20<sup>th</sup> century, Ohio canals had been relegated to a forgotten backdrop by many of the state's inhabitants. Canals lived on through memories and written articles.

# ENVIRONMENTAL IMPACT

- Construction of canals throughout Summit County has altered the natural characteristics of the land.
- Since canal beds were dug by hand, they often follow the easiest path, not necessarily the most topographically efficient route.
- Numerous bodies of water were created by local canals, both intentionally and unintentionally.
- Basins and reservoirs were necessary for effective operation of canals, though not all lakes along the canals were intentionally created.
- During the construction of the Ohio & Erie Canal, the flora that populated Stumpy Basin – a low lakelet on the Cuyahoga River in northern Summit County – underwent notable changes to composition.

# STUMPY BASIN

- The portion of the canal that passed through Stumpy Basin was a part of the first open section of the Ohio & Erie Canal, connecting Lake Erie to Akron.
- Twenty-two locks were constructed between the lake and Akron, the summit of the canal system. Many basins along canal routes are used in the operation of nearby locks, but this was not the case for Stumpy Basin.
- The lake was not designed for this purpose, instead resulting from a determination that it would be less expensive to flood the basin rather than dig the canal through it.
- The basin was repurposed by canal travelers as a holding area for canal boats waiting to load cargo in nearby Peninsula.



# STUMPY BASIN

- After the desertion of the Ohio & Erie Canal, the state attempted several times to turn the area into a paid fishing location, each time thwarted by poor planning.
- The construction of the Ohio Turnpike in 1951 smothered approximately three-quarters of the lakelet with concrete supports for the highway.
- In 1965, Kent State University purchased the land for conservation and study. They still maintain the area today.



# ECOLOGICAL CHANGES

- Wooded areas that line canal towpaths were extensively logged for use in boat construction and canal maintenance. Indigenous trees have spread in place of the deforestation, though the composition of the new forests do not reflect the original character of the land.
  - Early state surveys show that the area along the canal channels in Summit County had forests of oak, with chestnut, hickory, and tulip trees being secondary species.
  - In the low areas near the river one can expect to find sycamore, elm, and willow trees in greater abundance.
  - The species of tree most common in the region today are oaks, sycamores, and maples, which do not necessarily represent a true natural association to the land despite their native characteristics.



# ECOLOGICAL CHANGES

- Artificial waterways offer new environments for plants and animals to thrive in areas that were formerly restricted to them.
- Native invasive species like narrowleaf cattail thrive on ecological perturbation, proliferating throughout the bogs and basins that formerly speckled Summit County.
- Non-native species have been introduced to the region, outcompeting native flora.

Kendall Lake, Peninsula  
Notice cattails on each side



Armington Pond, Peninsula  
Cattails line the water



# FOREIGN SPECIES

Grace Park, Akron



Ground ivy, a close relative of mint introduced in gardens for culinary use as a salad herb, now wild in Ohio.

Streetsboro



Red dead-nettle is another relative of mint used in cooking by white settlers.



Garlic mustard was also first introduced by settlers for use in food preparation.





# HORTICULTURE PLANTS

The Norway maple is not indigenous to this continent yet is planted by Americans for its aesthetic value. This species does well in this climate and competes with native maple trees.



Intentionally planted Norway maples (close), wild growth Norway maples (far).



A red cultivar of Norway maple.





Callery pear and Norway maple  
growing wild near railway.



Norway maple flower



Callery pear flower

Callery pear and Norway maples  
grown purposefully.



# RESTORATION AND CONSERVATION

- Plant and animal species were deliberately and accidentally introduced to Ohio, ultimately changing the base characteristics of the entire state.
- Despite these foreign characters that now populate the region, the natural features of Summit County remain distinctly Ohioan. The ecology has greatly changed resulting from American activity, still yet members of natural Ohio species persist in the region.
- On the Towpath Trail near Cascade Valley in Akron, cardinals can still be observed feeding on staghorn sumac on sunny February afternoons.

# OHIO CANALS TODAY

- A developing environmental movement and broader awareness for the issue has been spreading across the state over the past century, especially in the time since the governorship of Jim Rhodes. Ohioans are becoming increasingly interested in the natural land and local and state history.
- Today, canals are prime locations for Ohioans to connect with nature and the environment that was created by early American settlers. The history of Ohio canals is tied to the ecological changes throughout the region.
- Many of the state-owned former canal lands have been converted into parks or otherwise locations for people to learn more about local history.



# OHIO CANALS TODAY

- In the 1990s and 2000s, around the time of the bicentennial of Ohio statehood, historians have dedicated time and effort into educating and preserving the stories of local canals.



## MARKING LOCAL HISTORY FOR OHIO'S BICENTENNIAL



- Canals are a highly important aspect of Ohio history. They mark the beginnings of countless communities within the state.
- Manmade waterways were crucial in the social and economic development of early Ohio communities, and they still play a role in Ohioans' lives to this day.