

Midwest Open Air Museums Magazine



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THE SPIRIT OF PEORIA 2020 SPRING CONFERENCE

In This Issue:

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Fit for History – A Primer for Energy and Vitality at Living History Museums

Switchel – Historical Hot-Weather Drink of Choice

Across the Loramie Summit – The Story of the Miami and Erie Canal

Grain Harvest 1865

Grain Cradles – The Cradle of 19th Century Agriculture

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By Debra A. Reid

Rowman & Littlefield

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Interpreting History

January, 2017

284 pages.

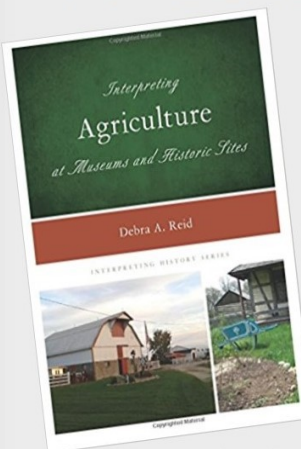
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Interpreting Agriculture at Museums and Historic Sites is an excellent tool to help create compelling agriculture-related programs and experiences. It provides many examples of how humanities themes and agricultural topics can be combined, supported by excellent case studies and resource lists. The book can be a great benefit to both greenhorns and those with experience in the field.

Jim McCabe, Special Projects Manager, The Henry Ford

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Reviewed by Laura Poresky

Cover Photo - The Spirit of Peoria docked at Starved Rock State Park as conference participants pause for a photo before boarding. (Photo by Brian Fox Ellis)



MOMCC is the Midwest Regional Affiliate of

ALHFAM 
The Association for Living History, Farm and Agricultural Museums

EDITOR'S NOTEBOOK

By Tom Vance

IT'S been a very different and unusual spring. My daughter had a meeting in Orlando the last week of February, and her husband, my wife and I, and two grandsons flew down to join her after the meeting and spend a few days at Disney World. I got the spring issue of the magazine done and to the printer the Friday morning that we left. When we returned the next week, I had about five days to get the magazine processed and into the mail as well as prepare the power points for the two sessions I had agreed to do before we left for the Spring Conference.

One session was on shirts and caps which was a recap of two recent articles from the magazine. The other session was on how to write articles for the magazine. One of the class attendees, Kristie Hammond, wrote an article that appears in this issue.

I still can't believe we got both trips in before the pandemic hit. But hit it did and much of the world came to a stop. My wife and I have pretty much stayed home. I have used the time to clean and re-organize my basement and, of course, work on this issue of the magazine. Most importantly, however, it has given me a



break from the hectic daily schedule of life – a chance to rejuvenate, recharge, and enjoy some of the little things in life.

The spring conference on the *Spirit of Peoria* was indeed in a class of its own when it comes to conferences. It was different and refreshing, and there have been requests for a repeat. A job well done.

The ALHFAM meeting has been cancelled and will be held online. The MOMCC fall conference is still on, and hopefully we won't have a resurgence of the pandemic in the fall. The Osthoff is a beautiful and grand Edwardian hotel, so plan now to attend.

I hope you have been able to use this time to refresh your spirit while staying safe. □

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MOMCC was established in 1978 with the goal of furthering the interchange of materials, information, and ideas within the history museum field.

Membership

We welcome membership and participation from administrators, volunteers, interpreters, curators, historians, educators, maintenance/facilities staff, gift shop workers, facilitators, docents, and anyone else with an interest in history and public education. Membership is \$30 per year for individuals, \$35 for families, and \$50 for institutions. Membership application can be found at www.momcc.org.

Our Purpose

The purpose of MOMCC is to further promote excellence and to provide a forum for the interchange of materials, information, ideas, and consideration of issues within the open air, interactive, and historical museum profession.

MIDWEST REGION: The Midwest is defined as the eight states of Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin.

OPEN-AIR MUSEUM: Interpreting life as material culture in the context of buildings, objects, and open space. A site or facility that interprets history through exhibits, living history interpretation, and/or educational programs.

Resource Committees

Interpretation, Music, Art, and Material Culture

Leadership and Supervision

Agriculture, Gardens, and Foodways

PRESIDENT'S PERSPECTIVE

By Mike Follin

SPRING has always been my favorite time of year. The colors, freshness, and new beginnings all coming together to bring renewed life out of the cold and dark of winter. There has been only one time when that didn't happen, the spring my father died, and I was a young man of 30. But I remember a friend said to me, "You will not see spring this year, but you will see it again, and when you do, it will be even more vibrant than before." I have thought of that every year when I see spring and how true it was and is.

For many of us spring has always been a time of renewal, refurbishing, and reopening a NEW season for the public and full of energy and promise. But this spring is very different, and yet in many ways the same. We will not see spring and reopening as we have seen it the past, but it will be different, new, and exciting as we explore ways to communicate the past to our public. For many of us, we are taking roads never walked before, carrying a message with which we are familiar but perhaps in an unfamiliar venue. This spring is unique because we are not only continuing to impart history, we are MAKING history.

The recent MOMCC Spring conference on the *Spirit of Peoria* was a great beginning to spring. Let me again take the opportunity to thank Becky and all the folks who made it possible. I would also like to extend that thank you to the membership who attended and supported us in this "change of conference venue." Without your support and willingness to try something different, it couldn't have happened. We received many great comments from the participants and look forward to doing it again, as requested by several, in the future.

How wonderful it was to be among friends and folks passionate about sharing history. As one of our conference fellowship recipients said, *"It was inspiring to meet so many people dedicated to making history come alive for visitors across the Midwest and the country. The sheer volume of knowledge and experience was truly encouraging for the future of living history museums."* This states well what our organization is all about: sharing knowledge, experience, and most of all encouragement to go forth and do. The article written and submitted by her detailing her conference experience should be an inspiration to all of us to dig deep, hold on, and march forward. We all are facing uncharted waters in the way we do our jobs, but as long as we continue to pull together, to share, encourage, and support one another we will emerge out of the storm successful and for the better.

One of my favorite sayings is "There are no such things as bad experiences, there are only learning experiences, they become bad experiences when you cease to learn from them and repeat them." Thank you all for your continued support of MOMCC during this difficult time. We have stood together as an organization sharing, learning, and supporting each other for forty years. Let us continue into the next forty doing the same, so that we can truly say these were good experiences because of each other. I look forward to being able to see you up close and personal in the future and shaking your hands in congratulations of jobs well done.

Johann Wolfgang Von Goethe (1749-1832) was a German writer, poet, novelist, and playwright. He believed in the "creative power of nature." I thought his quote appropriate for these times.

"Knowing is not enough, we must apply. Willing is not enough, we must do." □



MOMCC FELLOWSHIP APPLICATION

MOMCC Fall Conference 2020

Celebration, Parties, Milestones

November 12-14, 2020

At the Osthoff Resort, Elkhart, Wisconsin

For each conference, MOMCC gives out a limited number of fellowships to help offset conference costs.

Fellowships cover conference registration in addition to funds for lodging at the conference site.

All applications must be received by October 1, 2020

Please visit www.momcc.org for the full application

including necessary qualifications and selection criteria.

REMEMBERING

CHARLIE KELLER

MOMCC PRESIDENT, 2002-2003

Charles Keller, age 83, died at his home in Champaign, Illinois on April 17, 2020. Born November 25, 1936, he grew up in Long Beach, California. His lifelong appreciation for craftsmanship developed during years of projects with his father. He had a warm sense of humor and a gentle, kind disposition that endured throughout his life.

Charlie attended Long Beach High School and Long Beach City College and graduated from the University of Iowa with a Bachelor of Arts – with expertise as a trombonist in Music and a major in Anthropology – in 1958. He went on to obtain a master's degree in Archaeology at the University of Missouri and his PhD in Anthropology from the University of California Berkeley in 1966.

He served on the faculty in the Department of Anthropology at the University of Illinois from 1967 to 1992. He led archaeological excavations in South Africa and Tanzania, discovering an especially rich site at Montagu Caves which continues to influence the understanding of early human behavioral variability. He also published scholarly works on African archeology and the dynamic union of mind and hand in the evolution of tool use in pre-modern and modern civilizations.

During his academic career, he sought out an iron-working apprenticeship in New Mexico and took up artisan blacksmithing and tool-making. Charlie's first-hand historical knowledge of tools enriched his teaching as well as his life. "I want my students to understand the complexity of historical crafts. These techniques require as much head as hand." By combining practical experience with analysis and teaching, Charlie gained and could convey to his students a deep and subtle appreciation of early technology and preindustrial craftsmanship.

Following his tenure at the University, Charlie worked at what is now the Museum of the Grand Prairie in Mahomet, Illinois, as a collection's manager. In this capacity he curated an exhibit still in place that focuses on the Cheesebro blacksmithing shop from 1910 in Sangamon, Illinois. He was a member of the Midwest Open Air Museums organization and served in various roles including president in 2002 and 2003.

Charlie retired from the University early to concentrate on the craft of iron work in a historic blacksmith shop built in 1869 in Newman, Illinois, which he later placed on the National Register of Historic Places as the Streibich Blacksmith Shop. Charlie created a business, Forge & Anvil, through which he produced historic artifacts for museums and living history sites over three decades. He was the subject of numerous newspaper and magazine articles, including one in *This Old House* in 1998. Several PBS documentaries chronicled his craftsmanship in iron and Charlie himself authored numerous articles on his craft.

Charlie published *Thinking and Acting with Iron* (1991) as part of the Learning Series by the University of Illinois' Beckman Institute. He and his wife, Janet Dixon Keller, also a professor of Anthropology at the University of Illinois, co-wrote *Cog-*

nition and Tool Use: The Blacksmith at Work (Cambridge University Press, 1996).

His love of working with his hands also extended to gunsmithing, especially black powder and its accoutrements. He loved participating in period reenactments and historic festivals. He also built, with the help of other craftsman, a beautiful cabin in the woods in rural Illinois to which he would go to restore his balance and energy.

Charlie shared his "Reflections" on his involvement with MOMCC during the 2004 Fall Conference at Heritage Hill, Wisconsin. It appeared as part of "MOMCC 25th Anniversary President's Forum," published in *Midwest Open Air Museums Magazine*.

"My introduction to MOMCC came some time in the 1980s during blacksmithing demonstrations at Lincoln Log Cabin Historic Site. At first, the vendor's room was my main [MOMCC] conference focus...Before long, however, the wealth of historic and craft information I heard in the hallways drew me to more and more sessions.

"Later, common interests and shared experiences with Tom Sanders and Tim Talbott lead to informal connections with the *Magazine* and more exposure to ideas and programs. Listening and visiting with knowledgeable people was enough to bring me back to successive conferences even though I had never presented a session or been concerned with organizational details. Then came a fateful phone call from Shirley Willoughby saying a candidate was needed for an upcoming ballot. (Have you ever tried to say 'no' to Shirley?) Following Charlie Pautler as Vice President, I took to heart his advice that the main function of the office was to remove crying children from session rooms (wrong!). Little did I know, never having attended a Board meeting, how complex the mechanics of this organization are, and the dedication of the people who see that it functions.

"I had the extreme good fortune to become President following Becky Crabb's term. We were in sound shape financially, the website was up and running, and the *Magazine* was flourishing. With the efforts of the long time Board members, and the creativity of newer ones, MOMCC membership grew during times of budget cuts and staff reductions. The Magazine and website have reached new levels of excellence and usefulness; the conferences and workshops grow in diversity and attendance; and we have consolidated the relationship with ALHFAM. But complacency doesn't characterize MOMCC. Reading Candace Matelic's reminiscences, two ideas are striking, one is 'exploration' and the other is 'facilitating.' Just as during her presidency in the 1970s, our organization continues exploring new ways to facilitate the communication of historical understanding to our visitors." □



THE MOMCC 2020 SPRING CONFERENCE THROUGH THE EYES OF A FIRST-TIMER

By Kristie Hammond, Colonial Williamsburg

As someone who is relatively new to the field of living history, I was honored to be chosen as a fellowship recipient to the spring conference, “Traveling in America.” As a teacher, I tried to bring living history into the classroom through a few of my personal costumes and research, but now I get to do it full-time. It was inspiring to meet so many people dedicated to making history come alive for visitors across the Midwest and the country. The sheer volume of knowledge and experience was truly encouraging for the future of living history museums.

Since I currently live in Virginia, I knew attending would be “jumping regions,” but having grown up in Ohio, it felt like coming home. I began to understand how real and welcoming the ALHFAMily is. Months before the conference, I started planning my strategy. I didn’t feel that I had any area of expertise or particular interest to focus on - I wanted to learn it all! I chose sessions with much waffling back and forth, so I was thrilled when I later learned that conference resources were gathered in a Google Classroom. With my sessions decided (mostly), I began my own research - how would I connect what I would learn in Illinois to Virginia?

I started with the conference theme, “Travel in America.” Working as a part of a historical tourist site, I thought of how all our guests, some more than others, travel to see us. Then I began to get more specific; the conference was held on a riverboat, *The Spirit of Peoria*. My site, Colonial Williamsburg, is situated right between two rivers, the James to the south and the York to the north. So, I began to research how people travelled on these rivers in the 18th century. I learned about the batteau boat, the many attempts (with varying degrees of success) in building canals to extend the reaches of these rivers, and the people who contributed to the process in one way or another.

With this new-found knowledge, I was excited to learn even more. In what ways was travel different in Illinois than in Virginia, and how was it similar? What history is connected to the Illinois River, and *The Spirit of Peoria*? How have other sites engaged with their guests in new ways? By the end of the conference I had some answers, and as with most research, more questions.

The first session I attended was “Be a Published Author: Write an Article for MOMCC Magazine.” Well it worked! In all seriousness, it was a very well-done session and gave me everything I needed to get started. Perhaps the biggest help was the list of idea categories and some examples of what had been written in past articles.



The Spirit of Peoria, tied up at Starved Rock State Park for an overnight stay at the lodge. (All photos by the author)

Next, in “Food Afloat,” I learned about how cooking aboard boats changed, much as the boat designs themselves changed through the years. From simple crafts that would have preserved provisions or stopped along the shore to cook, to larger vessels with full cookstoves and kitchens, dining on the water has changed significantly.

In “Moving Up the River,” Debra Reid shared many great sources to use when researching travel and life in the past. There was also an interesting discussion on primary and secondary sources. How much influence has an editor or publisher had when publishing a diary that would otherwise be considered a primary source? Do we have a similar effect when we interpret true primary sources through a modern lens?

In the session “If We Had It To Do All Over Again: Re-evaluating Recreated Sites for Living History,” we got to start with a clean slate and think about which components are most important when creating a living history site and what aspects of our own sites we might change or improve in some way.

The session “Migration Patterns of Domestic Livestock,” was very interesting for me since I have not personally tried to research livestock. I learned about some of the common resources used to determine what types and sometimes even breeds of livestock were in an area during a certain time period. Participants shared stories of engaging guests through livestock interpretation.

The Agriculture, Gardens, and Foodways resource

group was very enlightening in showing what I personally had taken for granted. Growing up, I had always had a big garden and was around various livestock. I hadn't really stopped to think what kind of questions a guest might have if they hadn't had similar experiences.

Now, the conference wasn't just sessions and presentations, as interesting and important as those are, but times of music, storytelling, and conversation over meals. There was even a very competitive Carpetbagger Challenge. This challenge emphasized the community spirit as Deb Reid shared how she remembered making her carpet bag at a past conference with many of the current attendees who had also brought the bag they had made.

The captain and crew of *The Spirit of Peoria* were also very hospitable. They offered sessions specific to the paddleboat and welcomed small groups into the wheelhouse to see first-hand how the steering, navigation, and communication worked.

Brian "Fox" Ellis portrayed John James Audubon in a very engaging and informative display. He shared a wealth of information and asked thought-provoking and reflective questions to keep his audience engaged. Sometimes it can be hard in first-person interpretation to switch between modern and historical time periods, but he did a wonderful job alluding to modern times without stepping out of character. The following morning, he led us on a hike up Starved Rock and shared the heartbreaking story of what happened there to give it its name.

The New Member Reception was a great experience as well. I was looking forward to learning about other historical sites and how they work. The response was overwhelming. Everyone was very open, and team-oriented not only at the reception, but in the hospitality room, over meals or any "in between" moments.

Perhaps the most powerful moment was a time of music. While on board *The Spirit of Peoria*, there was a rousing bit of piano music and singing. With many attendees in costume and familiar tunes, one could imagine the comradery travelers from another time must have felt. Traveling in any other time would take significantly longer and would allow the formation of stronger bonds. Even though we were only together for two, short but very full days, there was still a sense of community.

The Pettengill-Morrison House Museum in Peoria on Saturday, was a lovely home and tour. It demonstrates one of the potential problems many historical homes encounter: an original home built for one family and a huge trove of artifacts from another, later family. How do you tell both stories? Our tour guide did a wonderful job sharing this history, including both families, and answering our questions.

One of the special exhibits at the Peoria Riverfront Museum was on DaVinci and his inventions. It was particularly interesting how the exhibit was set up. When people think of museums, often there's a note of passive experi-



Tours of the Wheelhouse showed guests how the steering, navigation and communication works.



A ragtime piano sing-along by Ted Lemen entertained everyone with a ragtime piano sing-along during the wine and cheese and first-timers reception on Saturday afternoon.



The Carpet Bag Challenge – Vendors were encouraged to sell their wares from their carpet bags. Jim Patton was voted the best carpetbag salesman.



Saturday activities in Peoria included house tours of the Pettengill-Morrison Historic House and the Riverfront Museum that was featuring an exhibit on Leonardo DaVinci among other interesting exhibits.



ence, walking around looking at old stuff and reading about it, often very quietly. This exhibit created examples of DaVinci's machines and had them clearly marked "Touch" or "Don't Touch." There were many where guests could go from one to another, trying them out and seeing how they worked – even one where you could step inside. This is not a new concept to many in living history, but it was exciting to see in what might be considered a "typical museum." (Admittedly, with COVID-19, the Riverfront museum had a limited exhibition space, presumably because they are not so typical and had to close more hands-on areas.)

Since learning of ALHFAM and MOMCC, I have heard so much about ALHFAMily. After just one conference it is easy to see why. Everyone I met was very welcoming and eager to help someone just starting out. It was exciting not only to learn new information but to hear about what various sites are doing to attract new visitors. I am looking forward to staying involved, and who knows? Maybe some of these questions will spark an idea for a session of my own.

Special thanks to the Midwest Open Air Museum Coordinating Council for granting me the fellowship to attend the spring conference. Also, many thanks to Mike and Don from Point Basse for letting me tag along with them to see the Pettengill-Morrison House and Riverfront Museum as well as getting me back to the airport. A final thank you to everyone who shared their expertise and experiences at their sites with me. □

About the author – Kristie Hammond has been an Interpreter at Colonial Williamsburg for a year this May. Originally from south central Ohio, she graduated from Mount Vernon Nazarene University with a bachelor's degree in History and Integrated Social Studies. Before starting at Colonial Williamsburg, she was a substitute teacher. In her spare time, she enjoys gardening, listening to audiobooks, and working on paint-by-numbers.



A lovely and lively step back in time: my first experience with MOMCC's Spring Conference

By Lexie Bickell, Ohio Village

As a new member of the Midwest Outdoor Museum Coordinating Council, I was not sure what to expect as I checked in to the Quality hotel in Peoria, Illinois the night before the conference was to begin, but in the welcome center I met a number of friendly folks who made me feel at home right away.

I had never even heard of the Illinois River, so this adventure was new territory! We boarded the *Spirit of Peoria* and found a lovely breakfast waiting for us in the main salon. Many people were in period clothing, which once we were underway, lent the perfect ambiance. It was indeed a step back in time. Rolling along in our 19th-Century Stern-Wheeler past the woods on each shore, it seemed as if we really were traveling in the 19th-Century.

The sessions I attended were very informative for the most part, and the ragtime music at the end of the afternoon

was fabulous. We enjoyed wonderful food and great conversation with our fellow Ohio Village interpreters, a relaxing opportunity to get to know one another even better. The mist which had accompanied us for most of the day lifted just as we reached the end of the day's journey.

Docking on the remote shore of Starved Rock State Park at dusk was beautiful. The only light came from our boat as we tied to a tree. Another step back into history.

I enjoyed our stay at the historic Starved Rock Lodge. The fun continued the next day with interesting sessions, lunch, and brief but sunny walks on deck as we rolled back down the river to Peoria. It was easy to meet and interact with the crew of our boat, whose captain was a young woman. We were in good hands!

I'm looking forward to another MOMCC conference!

THE SPIRIT OF PEORIA 2020 SPRING CONFERENCE

Photos by John Gebhardt, Friends of the Log Cabins, and Tom Vance



Riverboat tunes on the boiler deck.



Lots of great food.



Ragtime piano sing-along.



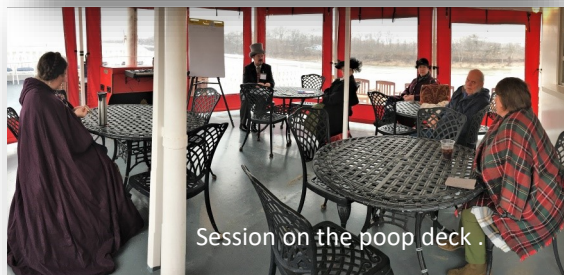
Luxurious dining area on the main deck.



The Wine Bar



Sewing Book Workshop



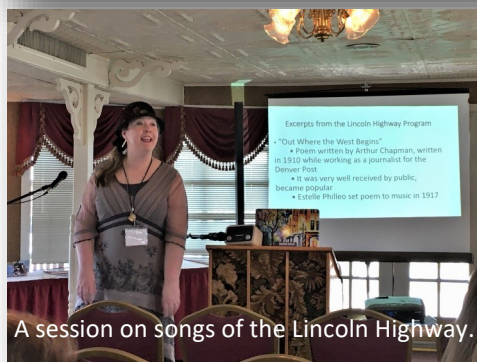
Session on the poop deck.



Period clothing was the attire.



The Administration Interest Group



A session on songs of the Lincoln Highway.



Brian "Fox" Ellis as John J. Audubon



Session on packing a carpet bag.



At Starved Rock Lodge.



The Carpet Bagger Challenge.



Waiting to see John J. Audubon.

Hogs and Hominy

FOOD AND THE GROWING MIDWEST

By Cynthia Clampitt, Food Historian

AMONG the handful of things most Americans remember learning in school about the settling of what would become the United States is that Pocahontas and Squanto introduced newcomers to corn in the early 1600s. It was, though, actually maize to which the Europeans were introduced. The word “corn” simply means the dominant cereal grain of a region. In England, wheat is corn. Initially, settlers called the grain “Indian corn” – a name that persisted until the late 1800s. In time, maize became corn – but only for us. Only in the U.S. and Canada does “corn” always mean maize.

Corn did help those first settlers survive – but it was the arrival of pigs that helped them thrive. A good source of protein makes a huge difference. At Cahokia, Illinois, looking for possible clues as to what might have contributed to the abandonment of the great city in the mid-1300s, researchers discovered a decline in meat-eating, as deer had been over-hunted. That paralleled a decline in health among the Native Americans who built the Mississippian city; even for indigenous people, corn alone was not enough.

Why did settlers bring pigs? There are several reasons, actually. For 2000 years, pork was virtually the only meat available for most of Europe’s working class. As a result, many brought pigs because pork and lard were deeply ingrained in both culture and cuisine. But an even more urgent reason for focusing on pigs was that, in the New World, forests were filled with bears and wolves. Sheep would have been lunch for these carnivores. A full-grown hog, on the other hand, can take care of itself; even today, feral hogs have been known to kill bears. Plus, only rabbits breed faster than pigs. Bring over a couple of pregnant sows, and within a remarkably short time, you have thousands of pigs. In fact, pigs soon vastly outnumbered settlers.

This is not to say cattle didn’t get brought to Jamestown and Plymouth, but it was a bit later, in smaller numbers, and mostly for milk. Beef wouldn’t become common for several decades into settling the Midwest and didn’t really compete with pork until the 1900s.

Moving West

Colonists had long hoped to acquire more land to accommodate the too-rapidly growing population crowded along the eastern seaboard. Once they won independence from Britain, there was nothing to keep the liberated Americans from seeking that land. They surged into what was

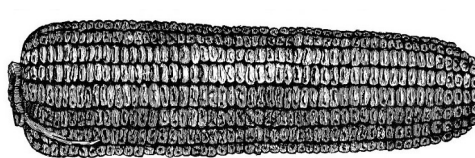
then known as the Northwest Territory – the land won from France during the French and Indian War. But people didn’t just want land, they wanted corn land. They had nearly 200 years of loving corn behind them as the 1800s were dawning, but there were even more compelling reasons than that for taking corn into the new region.

The first to set out for the territory were those known as “backwoodsmen,” people who set off on foot with little more than a backpack, a rifle, and a hatchet. And seed corn. One seed of corn will grow half a pound of food, versus wheat or barley, where one needs a hundred seeds to produce that much food. If your future depended on what you could carry on your back, you wanted that seed that could produce half a pound of food.

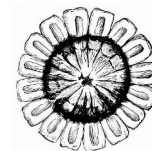
There were other reasons corn was ideal for the frontier. It grows in a wide range of soils. It grows rapidly and reliably. It is easy to plant – and so easy to harvest, that women

Indian Corn Varieties in 1884

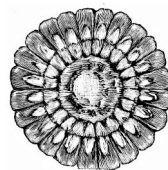
(From: *The Home and Farm Manual* by Jonathan Periam, 1884)



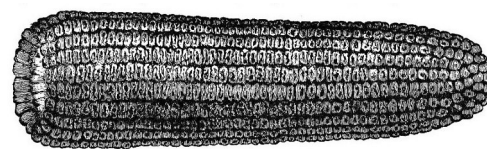
WHITE DENT



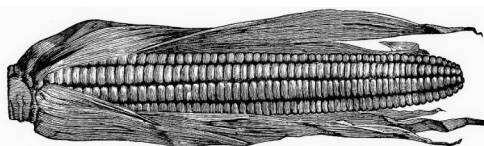
WHITE DENT OR PARRISH



MAMMOTH YELLOW DENT



YELLOW DENT



YELLOW FLINT



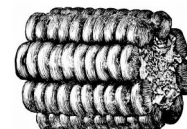
EIGHT-ROWED FLINT



NORTH STAR DENT



WASHAKUM FLINT



SILVER WHITE FLINT



Improved breeds of hogs in the United State in 1867 - Many farmers raised “native” hogs that were well adapted to the land but improved breeds were increasingly brought in to the United States as well as being bred and developed here. (From: Facts for Farmers by Solon Robinson, 1867)

and children can do the work. (This had actually been traditional among Native Americans, but it became vital on the frontier, where all hands were needed to survive.)

Another benefit of growing corn is that, unlike other grains, you can eat it at many stages. The baby ears that pop up first are no different than those cute little miniature ears on salad bars or in stir fry. Then, during the summer, green corn is available. Sweet corn didn’t exist until the 1600s, wasn’t encountered by European settlers until 1799, and wasn’t widely grown until after the Civil War. However, all types of corn, including popcorn, go through a “milky stage” before fully ripening. If roasted or boiled quickly enough, this milky stage, also called green corn, can be eaten just like sweet corn. In fact, that’s why the saying exists that you should start the water boiling before you pick the corn, because green corn loses sweetness so quickly. Looking at cookbooks from the early 1800s, green corn appears in many recipes, but sweet corn can be used in place of green corn.

In addition, unlike wheat, corn didn’t require a mill, whether a family-size quern or a local water-powered grist mill, to be prepared for consumption. It could be eaten young or green, but even fully ripened and dry, the options were tremendous. It could be pounded, boiled, parched, or grated and turned into a wide range of breads, cakes, stews, and porridges.

But as more settlers moved into the region, there was another compelling reason to raise corn: you could feed it to livestock.

Hogs and Hominy

Fortunately for settlers, pigs love corn. Most animals do, in fact (as you may remember if you read the book *The Yearling*). Because corn quickly became stunningly abun-

dant wherever settlers went, it was the perfect way to keep animals well-fed. Granted, the first pigs to arrive in the 1600s were primarily foraging in the surrounding forests. Even at the early foraging stage, though, pigs developed a taste for corn – and unfortunately, often the corn stored by Native Americans. It became a source of stress even when settlers and Native Americans otherwise got along. However, as settlers began to move west after the American Revolution, when the newly named Northwest Territory was opened to them, corn became the primary way of feeding pigs. In fact, the concept of stockyards and feeding large groups of animals in one place originated in Ohio, because without corn, stockyards couldn’t exist. So, it was in Ohio that the paradigm that would define Midwestern agriculture – raise corn to feed to livestock – first arose, and it was in Ohio that the term “Corn Belt” came into existence.

As corn and pigs moved westward, states progressively became known for the abundance of this pair. In the 1830s, Tennessee temporarily gained the nickname “Hog and Hominy State,” so great was the presence of the two. Even backwoodsmen came to depend on pigs. When archaeologists excavated Davy Crockett’s birthplace in Tennessee, they discovered that 92 percent of the bones disposed of there were from pigs.

For families on the frontier, pork and corn would appear at three meals per day (or more, in cases where farming chores made an extra meal or two desirable). If a cow had been brought along, it was for milk – not just because the breeds available were milk cows, but also because butchering a cow for a single family just didn’t make sense. Pigs were a more reasonable size for a small group of people to consume. Plus, pigs had the remarkable ability to be easily and deliciously preserved, with sausages, salt

pork, and smoked hams being processed once the weather turned cold. While the time of year and amount of time needed to process a pig would change when meat packing became big business (first in Cincinnati and then in Chicago), it would remain the standard for those on the frontier into the late 1800s – and continues until today in some places. Another thing those sausages and hams did, besides preserving pork, was preserve cultures, as the flood of settlers increasingly represented new arrivals from overseas, rather than simply the earliest colonies now become states.

But whatever form they took, corn and pork continued to dominate menus across the Midwest.

Not Today's Pigs

The pigs that trotted alongside the covered wagons headed into the rapidly evolving Midwest were rougher creatures than what we see on farms today. They were a fairly tough lot, accustomed to foraging and wandering, returning to their owners each night for the delights of an easy meal of corn. But the nicknames these pigs had suggest how much closer they were to wild ancestors: stump-rooters, snake-eaters, and wound-makers.

Though pigs and humans had been together for about 12,000 years at this point, the idea of breeding pigs to be something other than just slightly tamer than wild boars had only started in England in the late 1700s. This is when what we today call heritage breeds were developed. But even once breeding for specific traits became common, folks on the frontier were looking for something different in their pigs than what breeders in England wanted. On the frontier, pigs needed resilience and, possibly more importantly, endurance. Pigs were certainly vital for settlers on the frontier, but they were also very important for the meat-starved residents of the eastern states. So, pigs, raised in the thousands on the open plains, had to be able to walk to market. The first new breed developed in Ohio, the Poland China, could be fed up to market weight and then herded a thousand or more miles to the cities of the East Coast. A new nickname for pigs at this point was “cornfields on legs,” because it was the easiest way to move corn to market. One bushel of corn gave you eight pounds of meat, and then that meat could walk to its final destination.

Worth noting is that, in the days before petroleum came into use, lard was often as important as pork. Pigs became known as “prairie whales,” since they supplied oil for light and fat for candles and soap. In the mid-1800s, the Midwest became the leading supplier of lard worldwide.

Once railroads began crossing the country, pigs could actually be bred for other characteristics – such as flavor – rather than just for the ability to walk long distances without dropping dead. British breeds (too recent to be known

yet as heritage breeds) were imported, and there was actually a great Berkshire pork craze in mid 1800s. (Somewhat paralleled by interest in Berkshire pork today.)

Trains also meant the processing, not just the raising, of livestock could occur in the Midwest. With the addition of ice to train cars (patented in 1867), processed meat, rather than live animals, could be shipped east. Ice also meant not all pork would be salted and packed in barrels. Chicago became, as Carl Sandburg wrote, “Hog butcher for the world.” However, it would be Iowa that would take the lead on raising both corn and pigs. In fact, the first Corn Palace was built in Sioux City, Iowa, in 1887 to celebrate the grain that had made them the world leader in raising pork.

The changes were stunning. Things that happened in the Midwest had an impact on the whole world. Thanks to grain elevators and the Chicago Board of Trade (1848), grain began to be thought of as a commodity, rather than something raised by a farmer. Inventions and improvements came along at an incredible rate, from the John Deere plow to the Wright Brothers' plane. The Midwest was settled and developed faster than any other region in history. One good illustration of the speed with which the region changed is the fact that Laura Ingalls and Frank Lloyd Wright were born four months apart, in 1867, in Wisconsin. But Wright stayed and took part in the region's rapid evolution, while the Ingalls family, along with many others, pursued the swiftly vanishing frontier. But that's just one example of many. Another one I love is the fact that a small trading post, just a patch of swampy land on the edge of Lake Michigan, purchased from Native Americans in 1833 would be host to the stunning Columbian Exposition a mere 60 years later. The Midwest exploded into existence and brought the rest of the world along for the ride. Corn made it possible. Pigs helped.

Today, the Midwest still grows more corn and raises more pork than any other region in the world. “Hogs and Hominy” are our history and also very much a key part of the present. However, holding on to the events and realities of that remarkable history is vital, as it offers a sense of what went in to creating today's world – and it should make us feel very grateful indeed. □

About the Author – Cynthia Clampitt is a writer, speaker, and food historian based in northern Illinois. She is the author of *Midwest Maize: How Corn Shaped the U.S. Heartland* and *Pigs, Pork, and Heartland Hogs: From Wild Boar to Baconfest*. Clampitt is currently working on a book about all the places in the Midwest where one can “visit history.”



Martha B. Katz-Hyman, Cliff Jones, Susan J. McCabe,
and Mary Seelhorst

THE LIVING HISTORY ANTHOLOGY: PERSPECTIVES FROM ALHFAM

(Routledge Press, 2019).

Hardcover, \$108.97; Paperback, \$32.96. 262 pages.

Size 6.1 x 9.2. ISBN - 978-1138353718

Reviewed by Laura Poresky,
Living History Farms

ALHFAM has produced a lot of information over the years, and a great deal of it is immured in the *Proceedings* of its yearly conferences. They can be looked at online – you’ll need a member login – and on paper, if your site has the collected volumes. There’s an online index, which can be sufficient if you know what you’re looking for and just need to find it. But last year, ALHFAM published a neat little volume of the most pertinent monographs from the *Proceedings*, covering living history topics in several directions.

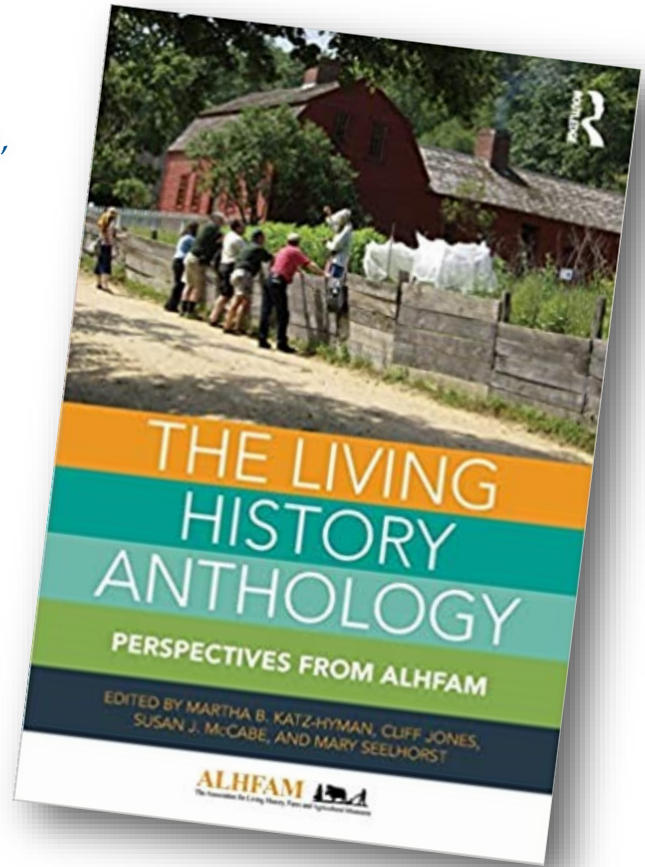
These essays are pulled directly from their sources, with brief introductions to each one. So there are different writing styles and levels of verbosity that made this a difficult straight-through read for me. I also don’t like reading short story collections. It’s best to treat this anthology as small plates. Read a couple, digest, and talk them over; many of the essays are meant to make you think about living history, why we do it the way we do, and whether that’s the way to do it. The works are grouped by topic.

Tom Kelleher is good at big-picture thinking of this sort, and he has two essays here. Wendy Engler’s very practical “Living With Livestock” goes over everything to consider before adding animals to a site. Yes, you’ll need to find the right breeds for your area/period, you’ll need fencing and an on-call vet – and you need to decide how those animals fit in your programming, how to train them to be around visitors, and what to do with them when visitors aren’t around, because, as she points out, they aren’t artifacts you can put into storage for the off-season. I en-

joy learning how other museums deal with particular challenges, so Ellen Gasser’s “Using Their Voices: Engaging Cultural Communities in Living History” was a pleasure. She describes the ways two sites at Heritage Park Historical Village were created and supported to represent the area’s First Nations and Jewish cultures. With both, having members of those cultures as interpreters has been a big plus for the visitor experience. Getting those members in has its difficulties, which Gasser addresses frankly.

Some essays are abstract, many address best practices, and at least a couple come from outside of the United States. You aren’t going to learn how to make a shave horse from this book. But you could learn to consider how that shave horse should be registered by Collections staff, ways visitors could interact with it, and how your interpretation program might put it to use. Does the person using it need to be wearing period clothing? Do you need a person to tell visitors what that first-person interpreter is doing with the shave horse?

This is a good book to have on the shelf, and that shelf should be on-site. Give it a brown paper cover and put it where newer staff can dip in on quiet days to get a broader picture of what we do. It’s hard to get seasonal staff out to conferences. *The Living History Anthology* is a way to bring some of the best thoughts on the field in to absorb at your own pace. □





FIT FOR HISTORY



A PRIMER FOR ENERGY AND VITALITY AT LIVING HISTORY MUSEUMS DURING THE HOTTEST PART OF THE YEAR.

By Lauren Muney, Certified Wellness Coach

***Note:** This article is an adaptation of an article written in 2006 for performers at Renaissance festivals and was originally a talk for actors and stage combatants.*

THE summer day breaks over the museum site. It's early morning, you're tired, and you dream of sleeping just a bit longer. You get in your car and drive to the parking lot. Only one thing is on your mind – a few cups of coffee and perhaps a Danish or a bagel. After all, these things taste good and certainly give you a quick rush! Hey, it's energy food, right?

You *want* to perform and work throughout the day with full gusto. However, you begin to notice that, as the hours drift on, the same level of performance becomes more and more tiresome. You can't seem to grasp your fullest energy or think with clarity. You feel it's too hot to eat, so you have a mug of water – not too much however, because that would mean you would have to visit the restrooms. That's a visit that takes too long. Besides, you don't want to fuss with fixing your period clothing afterward. Later in the day, it's still too steamy to eat. You get another mug of water or perhaps a soda. You have to present in both the shade and the sun, and, like most of us, you dread the sunny areas. You are sweating profusely.

It's almost the end of the day. You've done so much you can barely think – and have hardly sat down at all. After all, there are so many visitors who need to be entertained and it's your job to do it well. It's been a weary day, so you plan to get a beer or two to wind down. You can't wait to order a really big plate of something – anything that will be your big meal of the day. It's now about 8:00pm.

You are *exhausted* and wonder how on earth you're going to get through several more weeks of the season.

Does the above sound familiar?

Every year, at least one staff member or visitor has some type of “episode,” either from heat exhaustion, dehydration, or simply not eating enough during the day. This is neither a lie nor an exaggeration. I myself had heat exhaustion one year and many other moments of heat stress. This not only made me very ill but made me susceptible to heat exhaustion for the rest of my life.¹

I am here to offer you strength, fitness, and energy throughout your entire season.

The Play's the Thing

Living history museums are an awesome spectacle with sights, sounds, and smells like no other place. However, the days start early and run late. There are approximately eight hours per day for almost three summer months where you need to be on your toes, in the best of health, in the quickest of mind, in the surest of tongue, in the strongest of muscular endurance, and in the happiest of demeanors. And you have to do everything so seamlessly that it *looks* like you *aren't* working whatsoever.

Physical fitness is your ability to carry out tasks without undue fatigue. Fitness improves your ability to withstand the rigors of the grueling outdoor season. Clearly put: the more fit and healthy you are, the better you will feel *inside your skin*. Fitness is about *being fit for the environment*, not fitting a certain shape or size.

Outwit (and outfit) Yourself

It is important that you prepare for the tough days facing you. You need to educate yourself to strengthen your system rather than deplete it.

Summer weather – Be ready for the heat and sun. The body needs 10 days to acclimatize to extensive outdoor heat and humidity. How long has it taken you? Wear sunscreen, long sleeves of loose weave, and hat for protection. To prepare for the all-day heat of the hot season, try driving in your car without air conditioning for a few days before the heat arrives.

EMERGENCIES – If you start to feel out-of-sorts, *tell someone* and go into the shade FAST. DO NOT force yourself to keep working in such conditions. *Managers, do not ask any staff member to stay out or even stay vertical*. Cold compresses need to be placed immediately on your wrists and back of your neck. Heat exhaustion and heat stroke are real. Ask someone for water and/or Gatorade (see the section on electrolytes).

Texas tricks for heat really work – We can't help the heat, but we can be smart in how we deal with it. A trick from Texas: in hot weather, run ice cubes (or wet kerchiefs) on your wrists and on the back of your neck. Women, con-

1. My heat exhaustion was diagnosed by the Laurel (MD) Rescue Squad, the day after it happened.



Interpreters at Conner Prairie during the hot summer season keep their stoneware mugs close by. (Photo credit: Monica Richard)

sider putting an ice cube inside your bra or corset/stay; men, put one in your hat. Wet cloths can work as well as ice cubes, and you can re-wet anywhere with running water; feel free to wear damp kerchiefs with your costume. Adjust your costume and hair so you don't look overheated and bedraggled but keep yourself as cool as possible. *The extreme heat will leave in a couple of days or weeks.*

Water is your lifeblood. Literally – Your body is over 70 percent water, and you need it to process every function of every cell in every ounce of tissue in your body. Sweating? That precious water is leaking out of your body. Sweating harder? Your body is starting to overheat from trying to cool you down. If you dehydrate, your body will start to shut down major functions and organs. You can do without food for a while, but you cannot do without water. Start training yourself in the pre-summer season to have water on hand at ALL times. Carry a water bottle (or two!) everywhere: in your car, at work, wherever. Sip it frequently and deliberately. **DON'T RELY ON OTHERS FOR WATER.** Make sure you always have some. Make that water bottle (or mug) your companion and friend.²

Sweating? – Feel, taste, and smell the salt in your sweat? If you are sweating this hard, you are losing valuable sodium and other electrolytes in your sweat; without sodium and other minerals, your body will begin to shut down. (See the section on electrolytes).

Frequent small meals make happy people – The second most important thing you can do is fuel your body, even before the day begins. Your body works best when eating – get this – five to six *small* meals rather than the traditional two to three “squares” per day. The body is such an efficient machine, it needs and works best on frequent meals; this frequency will *not* make you feel sluggish, and

it will keep you energetic. It works best for the brief break times as well as for the heat. Try it outside the working day also.

Breakfast of Champions – You need to start with a good breakfast every day (see below for details). This isn't just something that your mother said to hear herself talk. Your body needs to re-fuel in the mornings, after renewing itself in sleep from the previous day's stresses. Eating breakfast will safeguard you from that mid-morning drop of energy and sleepiness.

REST when you can – Granted, your managers want you lively all day. But you will have to gauge your activity level carefully. Whether you are onsite or on break, *gather yourself for a few minutes.* Take these few resting minutes to dip a hanky in your cold-water mug and press it to your forehead, neck, and hands. Take a few minutes on site to rest in your character; this will still allow visitors to be next to you, watching you, while you are still onsite. By sitting for a break, you will renew your energy to perform (and think) better, refreshed, and for longer.

Protein in the mornings and the rest of the day – Protein is the best fuel for breakfast. Protein contains amino acids, which are the building blocks of your entire body. From neurotransmitters (your brain) to muscles, your body craves protein in order to run well, maintain your energy, balance your moods, prepare your muscles, and renew & repair from activity.

Slow on sugar – Sugar is a killer; it steals your energy, alters your mood, and ruins your body's functioning. Its quick “high,” and starch-oriented foods won't help the sustained needs that the season demands of you. Your body will feel “activated” very quickly from the rise in blood sugar, then plummet. Think of sugar like rocket-fuel which burns out the rocket after the fuel is used up.

2. Detailed information on needs of water in the exercising body:

“...If body weight has dropped by more than 1 pound from the day before and if urine color is more like apple juice than lemonade, dehydration is likely (*Institute of Medicine, 2004, p. 4-24, 4-26*).

The IOM report also addresses the use of alcoholic and caffeinated beverages. “While consumption of beverages containing caffeine and alcohol have been shown in some studies to have diuretic effects...” (*Institute of Medicine, 2004, p. 5-5*). Common sense dictates that such drinks should not be ingested at times when the **effects of caffeine and alcohol on stimulating excess water loss in the urine could compromise hydration status.** Thus, beverages containing caffeine or alcohol should be avoided before or after heavy [sweating], when maintaining and restoring hydration status is important.”

Signs of dehydration

	No Dehydration	Some Dehydration	Severe Dehydration
CONDITION	Well, alert	*Restless, irritable, fatigue, headache, cramps, light-headed*	*Lethargic or unconscious; floppy, confused, severe irritability*
EYES (Tears)	Normal (present)	Sunken (not present)	Very sunken and dry (not present)
MOUTH & TONGUE	Moist	Dry	Very Dry
THIRST	Drinks normally, not thirsty	*Thirsty, drinks eagerly*	*Drinks poorly or not able to drink*
SKIN PINCH	Goes back quickly after pinching	*Goes back slowly after pinching*	*Goes back VERY slowly after pinching*
DECIDE [*= MAJOR SIGN OF DEHYDRATION]	No signs of dehydration	*If two or more signs in this column, including at least one major sign, there is some dehydration.	*If two or more signs in this column, including at least one major sign, there is severe dehydration.

FATS are sustained energy – Surprised? The brain and body are fueled by fats in the absence of sugars. This is not the fat in French fries – it’s the healthy fat found in butter, cheese, avocados, nuts, almond butter, and fish. Feel full after some guacamole? That’s the avocado working hard for you. Think of fats like clean-burning gasoline for your body. A little will go a long way, however, so don’t have too much of a portion.

Did I mention drinking lots of water?

Electrolytes: the secret force in your cells – and in your sweat

In hot weather we sweat; this cools our bodies. Your body produces sweat to rid itself of excess body heat.³ But with sweat we lose important minerals that our entire bodies need for basic functioning.

Sweat comprises liquid from inside and between your cells – this liquid contains sodium, potassium, chloride, magnesium, and other minerals. These minerals are called electrolytes; they are what your cells (especially nerve, heart, and muscle) use to maintain voltages across their cell membranes and to carry electrical impulses (nerve impulses, muscle contractions) across themselves and to other cells.⁴ The body desperately needs these electrolytes to maintain proper body functioning. Without these minerals, your body stops certain functions: eating food, absorbing water, contracting (or releasing) muscles, thinking clearly, staying calm, etc.⁵ Additionally, the changes in the fluid levels can hurt your heart’s pumping abilities.

Ok, enough of the science language, here’s the real scoop

When you sweat heavily, you lose important stuff in the sweaty liquid. Sweat doesn’t simply look bad and make us feel uncomfortable; without replacing the electrolytes lost in sweat that make our body function, we will actually mis-function. Drinking ONLY water does not replace the minerals we have lost through intense sweat – we need to replace electrolytes we sweat out of our bodies and maintain the fluid-to-nutrient balance.

The media has been bantering around the word “hyponatremia;” they call this “drinking too much water.” That’s not really what they mean – hyponatremia (“too little salt”) is actually when the body has reduced sodium and electrolytes (due to sweat and exertion) and the person keeps drinking plain water instead. With too much water where the electrolytes are *not replaced* (i.e.: the fluid-to-mineral balance is unbalanced), the person can fall ill as both food and water cannot be processed in the body, and other functions also shut down including muscles, nerve impulses, thought processes, etc.

3. Sweat: <http://health.howstuffworks.com/sweat.htm>.

4. Electrolytes: <http://science.howstuffworks.com/question565.htm>.

5. Signs of dehydration: <https://pedialyte.com/dehydration-symptoms-causes>.

However, we DO need the water *plus* the sodium and the other minerals we sweat out of our bodies:

- ◆ Electrolytes include sodium, potassium, chloride, calcium, and magnesium, plus a few trace others.
- ◆ Have you heard that bananas solve cramps? Bananas have potassium, an electrolyte mineral; without potassium, the impulses from muscles cannot work efficiently. Replacing potassium recreates the muscle impulses.
- ◆ Have you heard that people recommend “soaking in Epsom salts” when your body feels crampy? Epsom salts are magnesium salts – *electrolytes* – that move through the skin cells during the bath to get back into the body.
- ◆ Without sodium *your body cannot process food*, including digestion; your body will repel or be disinterested in food which you need for replenishment and sustenance.⁶ To help yourself become interested in food again (to keep up your energy), make sure you are hydrated with water and electrolytes.
- ◆ Without the electrolyte balance, muscles like your legs, *or even your heart*, don’t function well!
- ◆ Sometimes what we think is “fatigue” during very hot, sweaty weather may be dehydration or lack of water and electrolytes.
- ◆ Keep drinking and replacing; with every hour, your ‘fluid debt’ increases. Dehydration and electrolyte loss are also cumulative over a period of days, which means you can become dehydrated with even a moderate exercise routine if you don’t drink enough to replace what you lose on a daily basis.

Without food or water or body-cooling we become fatigued, then exhausted, and possibly become very ill. This is also where we hear about heat illnesses such as heat exhaustion and heat stroke.

SOLUTION

Drink water AND Gatorade or Pedialyte (or other sports drink) OR consider finding either natural sea salt OR sports-electrolyte replacement (I use a brand called “NUUN”⁷). Drinking pickle-juice or eating pickles helps too. This will help your performance, keep you feeling better on museum work or volunteer days, and *will also help you EAT FOOD*, which you need to keep up your strength. You can find electrolytes at Vitamin Shoppe, online, or other sports-nutrition locations. (See “Sample food cooler” on page 20 for information).

WARNINGS and advice:

- ◆ Gauge your sports-drink intake on your activity and sweat levels. If you aren’t sweating (like October), you don’t need to drink sports-electrolyte drinks. Don’t drink only sports drinks anyway, drink water also.

- ◆ Gatorade is very high in sugar. Its marketing says it’s meant to “replenish” you after sports in lieu of eating real food – for many people, the sugar gives them the rush they crave, but that ‘rush’ is inefficient and unhealthy. *Gatorade is not a meal-replacement; however, it can suffice for some electrolyte replacement.*
- ◆ For electrolyte replacement on very sweaty days without the high sugar, try Pedialyte.⁸ Pedialyte is well-respected in the sports community because it doesn’t give a sugar rush. You can add it to water.
- ◆ Do NOT drink Gatorade (or sports drink) PLUS electrolytes. *Choose one or the other.* Too many electrolytes may be as bad as too few: the body’s cells need to be in balance. Too much electrolyte replacement (“*hyponatremia*”) or too much sodium is hurtful also.

6. Easy-to-read information on what happens when you sweat during high activity:

“Early in the event, sweat rates and sodium loss rates are high...As sodium levels fall, the body increases the level of the hormone aldosterone that influences kidney function to slow sodium loss. As exercise continues and sodium is lost, blood pressure may fall. The body produces the hormone vasopressin to help maintain blood pressure. If exercise continues, with more water and electrolyte losses, performance begins to suffer, and the person slows down. Since sodium is important for the absorption of food and water from the digestive tract, what the person eats and drinks is not absorbed. Nausea results. Even the sight of food may make one want to retch. This is your body’s way of telling you “Don’t bother because I can’t process food or water even if you force yourself to eat and drink.”

“Just a small reduction in body fluids and electrolytes, for instance, leads to a lower circulating blood volume. As a result, your heart has to pump harder to maintain adequate blood flow to your vital organs, and your body is less able to control blood pressure, distribute nutrients and eliminate waste.

“What’s more, because blood flow to your skin is reduced and you have less water in your system, you don’t perspire or dissipate heat the way you normally would. In extreme cases, this can cause your body core temperature to soar, leading to heat exhaustion and possibly heat stroke – a potentially life-threatening condition in which your body temperature climbs to 104 F or more, sometimes reaching as high as 107 F.

“Not all cases of dehydration have such serious consequences, but even a two percent loss of body weight can affect athletic performance, and a three to five percent loss adversely affects reaction time, concentration and judgment. What’s more, dehydration is insidious; these effects often occur before you’re aware of them.” – *Mayo Clinic*

7. NUUN electrolytes website: <https://nuunlife.com/blogs/nuuniversity/tagged/hydration>.

8. Pedialyte is an electrolyte replacement drink normally given to children. It’s low in sugar and useful in electrolytes. Many sports people use it.

“Summer Weight Loss Clinic”?

So many people say to me, “I lose so much weight during the summer season! It’s great! I can fit into clothes I keep stored away! I plan my year so I can lose weight during the summer!”

Here is some serious information: unless you are eating well and exercising heartily, you are losing weight in a manner which is unhealthy and temporary.

- ◆ Does that lost weight truly stay off?
(*Real, healthy weight loss is sustainable and stays off*)
- ◆ Do you feel energized or drained?
(*Healthy weight loss will make you feel bright, cheery, light, and energized*)

If you are skipping meals, under a lot of stress, and under-hydrated, chances are that you are *losing muscle and water* and *not* fat. When you don’t feed your body enough food while it is under stress and being forced to its limits, the body usually keeps its fat and *will consume its own muscle* for fuel. Your body is truly eating itself alive. You’ll “lose weight,” get smaller, and end up exhausted and possibly ill for a while after the summer (or living history season) ends as your body tries to recoup its losses.

So, what is the *good news*?

The good news is that you can plan ahead for an incredible, energy-filled season. Gone will be the moments you drag yourself through the day – you will be amazed at how fast your brain will think, how wonderful you feel in the morning, and how refreshing your sleep will be.

The Plan - for energy and health during the living history day:

Learn to pack food and water. Food should be in small hand-sized units for easy and frequent eating. A small cooler (and Tupperware) kept offsite is inexpensive for this. You can even pack period food items. You will save money by not purchasing fast (and non-nutritious) food and by packing your own (*See the sample food cooler section*).

Eating home-packed food every two to three hours will help prevent exhaustion, headaches, muscle cramps, “brain farts,” slowed muscle reaction, and brain fog. Think ahead for your needs and you won’t be disappointed.

Plan ahead (*see the sample food cooler section*). Buy chicken breasts, turkey sausages, eggs, cheese, nuts, raw veggies, even steaks; prepare early and pack them in your off-hours while doing catch-up chores like laundry. Cook everything all at once and store for use later in the week; pack your cooler and you are set.

SAMPLE FOOD COOLER:

- ◆ 2 pre-cooked cold chicken breasts (or chicken or turkey sausages from a whole foods grocery), sliced for easy eating (*protein*).
- ◆ *OR*: an easy sandwich: high-fiber multigrain bread, peanut butter, raisins (*carbohydrate & protein*). You can cut the sandwich into pieces for eating quickly between work spurts.
- ◆ 3 hard-boiled eggs (*protein*).
- ◆ Small handful of spinach (*magnesium - electrolyte and iron – helps the blood*).
- ◆ Chunk of low-fat cheese or soy cheese (*protein, calcium, and carbohydrate*).
- ◆ 1 apple (*carbohydrate*), 1 banana (*potassium – an electrolyte*).
- ◆ Baggie of salted almonds, cashews, or pecans with raisins (*protein, fat, sodium, and magnesium*).
- ◆ 3 olives (*sodium, fat*).
- ◆ Water.
- ◆ ONLY ON VERY SWEATY DAYS. Gatorade, Pedialyte, or other sports drink (look on the label for *sodium, potassium, and magnesium*). Full spectrum electrolyte replacement is put into water (like “Electrolyte STAM-INA” packets, available at Vitamin Shoppe⁹ or “NUUN” electrolytes,¹⁰ available at some sports stores or on their website). Pedialyte can be found in grocery stores.
- ◆ EMERGENCY FOOD ONLY. “Sports gels” (not meant as full-day meal-replacement) are little packets of carbohydrate food plus protein; this ‘pudding-like’ substance can help give energy to very active people. “Accelgel” has carbs plus protein. (Note: this is almost pure sugar. This is only for use in *emergencies* and for the most active of people. Otherwise, use real food).

Hint: Cook all food at once on Friday night, say, four chicken breasts and six eggs. This will take only 30 minutes total. Then, separate the food into plastic baggies. Make a day bag – one for each day – and place it in the fridge to pack before leaving the house in the morning. This takes five more minutes. In *35 minutes*, you will have all your food for a weekend for *UNDER \$15* – two lunches, four snacks, and tons of energy, all ready to go.

9. Vitamin [://www.vitaShoppe.com](http://www.vitaShoppe.com): httpsminshoppe.com.

10. NUUN electrolytes website: <https://nuunlife.com/blogs/nuuniversity/tagged/hydration>.

Drink water and replace your electrolytes with a sports drink on sweaty days. Drink more water than sports drink, however.

Eat a good, solid breakfast. No, not a protein bar or a bagel (unless there is more food with it). A filling and rather nutritious breakfast is a historical-type breakfast: bacon (fats), eggs (protein). Add a whole-grain bagel for some healthy carbs, and an apple or orange.

Can't eat breakfast in the morning? *I suggest you try.* The healthiest, most alert people eat breakfast, and you won't wilt in a couple of hours. Don't live on the self-identity that "I don't eat breakfast." Do what's right for your body, *not what you've always done.*

Vegetarian? You still need the benefits that protein gives you. Consider making the one-minute protein shake (recipe is in the box to the right).

Have a 'Meal Plan Buddy.' Make a pact with a friend to do these same recommendations and support each other in the process of living well. Ask each other if you've eaten every two to three hours, if you are drinking water, if you are making good food choices. Ask each other "How are you feeling?" Make sure you are totally honest with your buddy. This is a time for love and support, but *not coddling.* Open up if you are tired or happily report if you are feeling great. Change the pain or share the love.

Farmers: you have special energy needs and strength requirements. You need to start planning far ahead for your strenuous activities. Do NOT skimp on breakfast or on any of your food: you especially MUST EAT every two hours and drink *lots* of water – even when performing in the shade. You definitely need Gatorade, switchel (see the article on page 23), pickle juice, or an electrolytes sports drink! Do NOT eat sugars unless there is a protein and fat with it – a whole meal. *Wear a wet cloth around your neck, and keep re-wetting it all day, frequently.* □

Protein drink: five minutes preparation, incredible nutrition.

This is one of the most nutritious meals in the world as well as one of the *fastest*. If you have problems with making time for food or creating breakfast, hate cooking, or just want GOOD nutrition, this can't be beat. Combine these ingredients in a blender and drink:

- ◆ 8-12 oz **water or milk.**
- ◆ 1-2 scoops of **protein powder** (30-40 g of protein): *I use "Vega Brand: proteins and greens."*
- ◆ 1 Tsp of **Flax Seed Oil.**
- ◆ 1 few shakes of **frozen fruit** from a bag of frozen fruit (you can purchase blueberries, strawberries, cherries, raspberries, blackberries, or a mixture).
- ◆ A couple of spoonsful of **nuts and seeds:** sunflower seeds and flax seeds are particularly good.
- ◆ 1/3 cup **raw oatmeal** (*not* the 5-minute 'quick' oats).
- ◆ 3-4 **ice cubes.**

About the Author - Lauren Munez currently serves on the Board of Directors of ALHFAM, (Association for Living History, Farm and Agricultural Museums). She is a historical artist, creating silhouettes with period interpretation in her business, Silhouettes By Hand. She is a former Certified Physical Fitness Trainer and certified wellness coach, and still maintains deep connection to the forces that keep us safe, healthy, and active in our living history work - especially in outdoor activities in heat, cold, sun, and with insects. She has written several articles for trade publications, including articles improving on fitness for stunt professionals and keeping living history personnel safe from ticks.



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Switchel

HISTORICAL HOT-WEATHER DRINK OF CHOICE

SWITCHEL is a hot-weather drink that was popular in 18th and 19th century America. The basic drink is a simple combination of apple cider vinegar, molasses, water, and ginger. It is thought to have come to America in the 1600s either with European immigrants or from the Caribbean.

Switchel became the preferred summer drink of choice up until the early 20th century. It became synonymous with the haying season in the north and Midwest, which gave it its other names, haymaker's punch and harvest drink. Families would make large batches of it for farmers to take into the fields as a way to stay hydrated and cool.

Although the simple four ingredients remained the base, each family had their own recipe modified to their own tastes. The sweetener used varied from region to region. Molasses could be replaced by sorghum in the south, maple syrup in the north, and honey in the Midwest. Other ingredients and flavorings could also be added. While primarily a non-alcoholic drink and touted as such by temperance societies, rum, brandy, or hard cider was added on occasion. Cayenne pepper could also be added to treat a cold.

Switchel was primarily a farmers' and laborers' drink, but it also found its way aboard sailing ships and even into the halls of congress during hot summer sessions. Because switchel was primarily a drink of the lower classes, it was, for a long time, left out of the recipe books. After a 200-year history in the United States, it finally made its appearance in 1853 in Elizabeth Hall's *Practical American Cookery and Domestic Economy*. Her recipe may have been intended for haying season when large amounts were needed.

Harvest Drink. Mix with five gallons of good water, half a gallon of molasses, one quart of vinegar, and two ounces of powdered ginger. This will make not only a very pleasant beverage, but one highly invigorating, and healthful.

A reduced adaptation of the recipe is as follows:

- 5 cups of cold water
- ½ cup of blackstrap molasses
- ¼ cup of apple cider vinegar (preferably raw, unfiltered)
- 3 tablespoons ground ginger

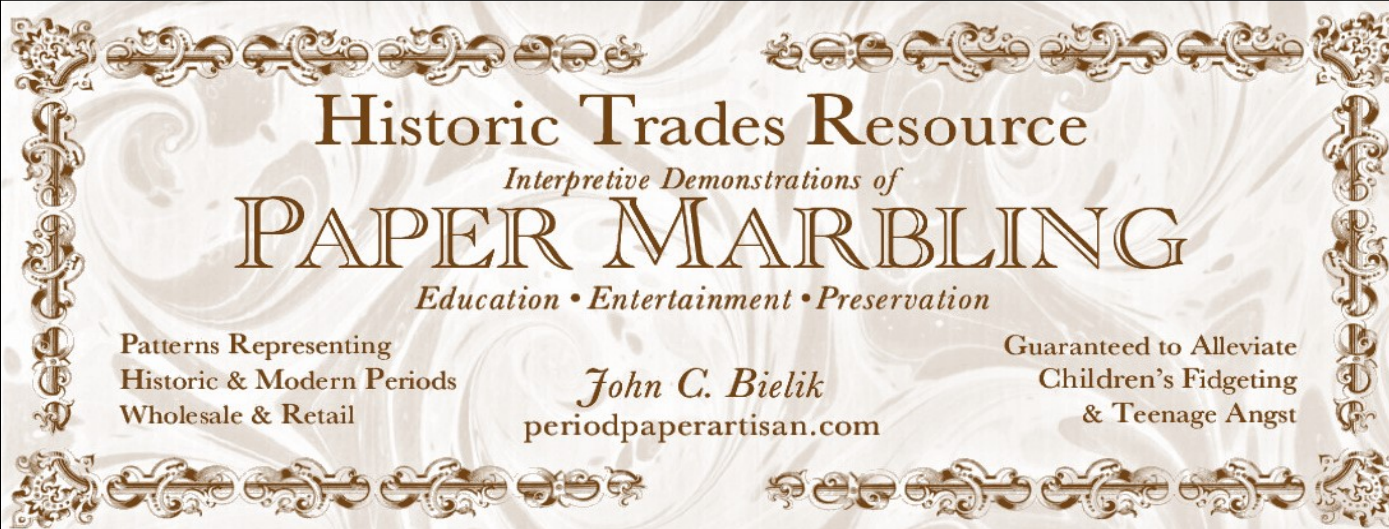
Mix ingredients thoroughly. Store in jars, jugs, or bottles. Shake before serving. Serve cold.

The popularity and use of switchel declined in the 20th century when soft drinks, and, later, sports drinks became popular. Switchel, however, is making a comeback and can be found in some grocery stores and online.

The ingredients in switchel are high in potassium, especially molasses. Potassium is an electrolyte and replaces those you lose in sweat. Each ingredient also comes with vitamins, minerals, and natural sugars, making switchel a much better option than a bottle of soda or a sports drink.

So, on those hot days this summer, consider sending switchel out with your interpreters to keep them hydrated and on top of their interpretive game. Switchel can also serve as an interpretive talking point because of its prominent, although not well-known, place in history.

Limited space does not allow a listing, but there are a number of good articles about switchel online that give a lot more detailed information. □



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Across the Loramie Summit

THE STORY OF THE MIAMI AND ERIE CANAL

By Andy Hite, Johnston Farm & Indian Agency



IN 1825, a new era dawned in Ohio as the first spadeful of dirt were turned for both the Ohio and Erie Canal southwest of Newark on July 4, and the Miami and Erie Canal on July 25 in Middletown. From those beginnings, the first great internal improvement project began in Ohio. By 1845, nearly 3,000 immigrant workers, as well as local citizens, had constructed almost 1,000 miles of artificial waterways that brought population and prosperity to the fledgling state.

The initial plans called for a big zig-zag canal crossing Ohio from Cincinnati to Cleveland. After some study, however, it was determined that there was not a sufficient source of water for the proposed route. As a result, a political compromise became a part of Ohio's canal story. The Ohio and Erie Canal was to be built from Portsmouth to Cleveland, and the Miami Canal was to be constructed to connect Cincinnati and Dayton.

Above Photo – The walls of Lock 1 South (Big Lock) at Lockington have been restored. There were six locks at Lockington with a drop/rise of 67 feet. Lockington is on the south edge of the Loramie Summit. The lock-tender's house, which is scheduled for restoration, is on the right. (Photo by Tom Vance)

There was also a tacit understanding that this western canal would one day be extended to Lake Erie.

Before the canal came to western Ohio, most villages were small clusters of homes served by a general store or two, a small hotel (if the town was lucky), probably a blacksmith and livery stable, maybe a mill on a nearby stream, and often little else. By 1829, the Miami Canal had been completed to Dayton, and it was an immediate success. About the same time that the first canal boat arrived in Dayton, the people to the north began pushing for the promised extension of the canal to Toledo and Lake Erie. It was not until 1837 that the canal made its way to Piqua, Ohio, and another eight years before it was completed to Toledo.

Two people and another state came together to complete the canal across western Ohio. Ohio Representative William Barbee and Piqua resident and Ohio Canal Commissioner John Johnston joined forces to lobby the legislature to complete the canal as promised. At the same time, Indiana had begun work on the Wabash and Erie Canal and needed an outlet to Lake Erie, which they acquired by connecting with and following the Maumee River to Toledo. These factors all combined to help move the canal north from Dayton.



Map courtesy of The Canal Society of Ohio.

Following the completion of the canal in 1845, businesses in those sleepy towns lucky enough to be touched by the ribbon of prosperity saw their economies boom. Specialty shops and businesses replaced the general stores as people from the surrounding areas came into town to do business near the canal. Canal towns became shipping centers as goods came in and went out by canal boat. Prosperity had come to western Ohio attached to the end of a tow rope.

Ohio was not building canals in a vacuum. Many of our founding fathers had envisioned America as a nation crisscrossed by canals like the canals of Europe. Canal-building started on the east coast and moved west. In Ohio, the canal bug bit when New York completed the Erie Canal and the realization came that if we could get to Lake Erie, we could get to the lucrative east-coast markets by water. This raised the price Ohio farmers received for their crops, and lowered the price that Ohio paid for finished goods coming in.

Ohio was not the only western state building canals about this time. The Pennsylvania and Ohio Canal as well as the Sandy and Beaver Canal came into the Ohio canals from the east. Indiana's Wabash and Erie Canal joined Ohio's canals from the west, as did the Cincinnati and Whitewater Canal in southwestern Ohio. Illinois, Michigan, and even Wisconsin got into some attempts at canal-building, and Kentucky "canalized" four rivers. Commercial canal building, however, stopped at the Mississippi River.

The coming of the railroads in the 1850s spelled the beginning of the end for canals, which had a difficult time competing with the faster, more efficient railways. The year of peak income for the Miami and Erie Canal was 1851. None the less, the canals continued to operate into the early twentieth century.

The Miami Extension Canal

The Canal Act of 1825 included the promise that the Miami Canal would be completed through to Lake Erie "at an early date." Residents and politicians from communities along the proposed route continued agitating to make that date as early as possible. Not only did they wish for the advantages of canal transportation for their towns, they also had the added stimulus of the rival Ohio and Erie Canal project.

On May 24, 1828, Ohio was granted 500,000 acres of government land along the proposed route to help fund the construction of the canal. This act provided that the canals already under construction in Ohio should be completed within seven years, and the Miami Extension should begin within five years (by 1833) and be completed within

twenty years (by 1853). Otherwise all proceeds from the sale of these lands would revert to the U.S. government.

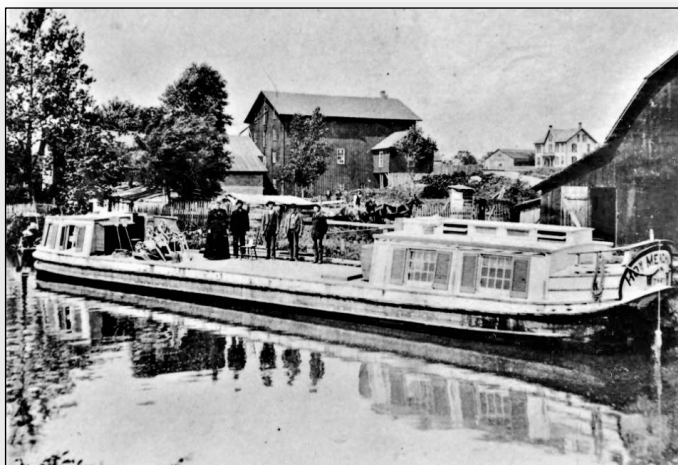
On December 1, 1831 the state legislature voted to place the public lands on sale; the land sale fund reached its goal by 1833. The sections of the canal between Dayton and just north of Loramie Creek near Lockington were authorized and let to contractors in 1833 and 1834. These sections were completed and opened in July of 1837.

In 1836, the Ohio legislature authorized a vast program of canals, railroads, and turnpikes. Included in this package was a further extension of the Miami Canal from Loramie Creek to a point on the Wabash and Erie Canal. The newly authorized portion of the Extension was built in three divisions. The first, a 32-mile segment to St. Marys, and the second, a 12-mile stretch containing the Deep Cut, were both opened in 1843. The effects of the Panic of 1837 and cost over runs resulted in some debate about completing the last 33-mile section, but finally the contract was let to a contractor in June of 1843; that section opened in 1845.

With the wedding of the waters of the Miami Extension and Indiana's Wabash and Erie Canal at Junction, western Ohio was finally able to celebrate the promised completion from Cincinnati to Toledo. The canal now would be known as the Miami and Erie Canal.

Putting Water in the Canal

As the Extension was being constructed north from Dayton, engineers faced a tremendous challenge: how to get the water needed to supply the Loramie Summit as the canal crossed the backbone of Ohio. There was not enough naturally available water in this area, so to meet this need, three man-made lakes were built to meet the needs of the extension: the Lewistown Reservoir, the Mercer County Reservoir, and the Loramie Reservoir. These three reservoirs provided water flowing both south and north from the summit as well as for the summit itself.



The Homer Meacham, a state repair boat on the Miami and Erie Canal, is shown here in Delphos, Ohio, ca 1870. (Photo credit: The Canal Society of Ohio)

The Lewistown Reservoir created an impoundment of both the north and south branches of the Great Miami River and included the existing 60-acre natural Indian Lake. The reservoir covered 919 acres to an average depth of 11.5 feet. Since the reservoir would be near Lewistown, it was decided that this would be known as the Lewistown Reservoir, although it was also known as Indian Lake. The water impounded by this reservoir used the natural channel of the Great Miami River to carry the water to the Port Jefferson Dam, then down the Sidney Feeder Canal to Lockington.

Like the Mercer County and Loramie Reservoirs, timber was left standing to protect the embankments from erosive wave action. The 1880 *History of Logan County* painted a rather bleak picture of what would eventually be called “Ohio’s Million Dollar Playground.”

*“Today one cannot well imagine anything more dismal and desolate than this spot, this vast submerged plain, thickly studded with the bare and darkly decaying trees, whose leafless branches spread abroad as if to warn the unwary of the dreadful miasma lurking below. Quinine ought certainly to be at a premium in the locality surrounding this cesspool of pestilence.”*¹

As early as 1838, it was felt that the Lewistown Reservoir might not provide sufficient water to meet the anticipated demand. Nothing was done to address this potential problem, however, until a very dry period in the 1850s. By 1856 the Ohio Legislature authorized the Board of Public Works to enlarge the reservoir to an area not smaller than 5,000 acres.

The Mercer County Reservoir, also known as the Grand Lake, Grand Lake St. Marys, or the Grand Reservoir, was the largest artificial body of water in the world at the time (and until Hoover Dam opened in 1935), covering 15,748 acres. This reservoir supplied water for navigation from St. Marys north to Junction where the Extension met Indiana’s Wabash and Erie Canal. At Junction the water supply was supplemented by water from the Wabash and Erie Canal’s Six Mile Reservoir, located east of Antwerp.

This was the largest of the planned reservoirs and the first on which construction began in late 1837. The work was accomplished by building two dams, nine miles apart, on both the west and east ends of a large, shallow, glacial valley. Two streams, Beaver Creek and Chickasaw Creek, were blocked, creating the reservoir. To the north and south high natural banks helped impound the water.

The Extension itself was about three miles east of the reservoir and was connected by a navigable feeder canal that exited through a lock and entered the extension canal near St. Marys. On the stone lock you can read the inscription that the proud contractors dedicated to themselves.

*Col. A.P. Miller, Comm. Board of Public Works
John W. Erwin Resident Engineer
A. Michael Haveland, Ass’t
Samuel Doyle and R.B. Dickey, Cont’s
Jon’t. Spillman, Mason – 1852*

As the canals began to wane, other uses for the reservoir were found. Beginning in the mid-1880s, an oil and gas boom took off in northwest Ohio. In 1891, an oil well was drilled in the Mercer County Reservoir, and it was not long before oil derricks dotted the water much like trees had at an earlier time. These were reputed to be the first “offshore” oil wells anywhere in the world. By the early twentieth century, the oil boom in this part of Ohio was essentially over. From that time on, all the canal reservoirs took on more recreational uses as fishermen, boaters, and eventually homeowners began to seek out these reservoirs as summer and weekend get-away sites. In 1902 the Mercer Reservoir was set aside by the state of Ohio for use as a public park.



The world’s first off-shore drilling occurred at Grand Lake St. Marys (Mercer Reservoir) in 1891. Photo ca. 1915. (From George Neargarder’s photo collection)

The Loramie Reservoir supplied water to the summit level of the Miami Extension. In 1843, the construction of what would be known as the Loramie Reservoir was included in another contract for canal work. This reservoir was located approximately one-half mile east of the canal and about three miles south of the northern end of the summit. This was the simplest of the reservoirs on the Extension. To create it, a single earthen embankment was constructed to create a pool of water necessary to feed the canal. This reservoir, when completed, covered an area between 1,800 and 2,600 acres. The feeder to the main canal was not navigable and entered the canal just north of the stone aqueduct that carried the canal over Loramie Creek. Like the other reservoirs, timber was not cleared from the area to be flooded. The Loramie Reservoir eventually became a state park after its usefulness as a canal structure had passed.

Canal Boats

By 1850, more than 400 canal boats operated on the Miami and Erie Canal. The vast majority of these vessels were the line, or freight boats. There were also passenger packets/mail boats that catered to those who came to enjoy travel on the canal. Also found was the state boat, a floating repair facility complete with men, tools, and supplies to keep the canal operating. Occasionally pleasure crafts also used the waters of the canal as well.

The line boats on this stretch of canal carried lumber, stone, brick, and bulk non-perishable goods. The quantities hauled could be formidable. For example, the limestone with which the Catholic cathedral in Cincinnati was built came from quarries north of Dayton near the Miami-Montgomery County line. Within three months of the canal opening in Piqua in 1837, merchants there received 342 tons of goods and shipped out goods in similar quantities. Farm produce from the fertile soil of western Ohio was another staple of canal business. It was the prosperity of this expanded market that brought many of western Ohio's settlers to this area as the new and viable transportation system went into operation.



Line, or Freight, Boat in Fort Loramie, date unknown.
(postcard from the Dave Neuhardt Collection)

Passenger packets were often brightly painted and combined passenger, dining, sleeping, and mail service in one cramped area. The boats usually held 40 or more passengers and were built lighter to achieve a bit more speed. Speed, however, is relative; in 1850 one could leave Piqua at 8:00 a.m. one day and arrive in Cincinnati 24 hours later, assuming everything went smoothly. An entire trip from

Cincinnati to Toledo took four days and five nights, again allowing for no surprises along the way. The fare for long trips, including bed and meals, could reach twelve cents per mile. Shorter trips were less expensive, and you could pay for meals separately. Each passenger was permitted 30 pounds of baggage for free. This was indeed first-class travel for its day.

Local farm boys, leading the family mules, often pulled the canal boats along the towpath. These local boys, called "hoggees," pulled the canal boats for several miles, before switching off with another hoggee further down the canal.

Not only did canal boats take raw materials out of Ohio to far-away markets, but finished goods came back at prices that were now affordable for the farmers and others who were enjoying income for their goods that was as much as ten times higher than what they had received locally. The world was coming to western Ohio by way of canal boat.

The Last Existing Canal Boat

Sitting under a shelter in Piqua, Ohio, is the *Troy Belle*. The *Belle* is the last known canal boat to travel the waters of the Miami and Erie Canal. It is about half the size of a normal boat, and without a rudder, she would best be classed more as a houseboat.

The *Troy Belle* arrived at her current location in 1963. At that time, a collector of local history, John Scott Garbry, acquired the boat and moved it to his Willowbrook Farm as related by this newspaper account:

*"The Troy Belle recently made her final trip. Not by inland waterway, but atop a lowboy trailer pulled by a diesel truck. Creaking and groaning she was wrestled gently off the trailer. Weather beaten and forlorn, a rotted shell of her former glory, the Troy Belle is now berthed on dry land near a private lake"*²



The last remaining canal boat is located on a private farm near Piqua, Ohio. It is less than half the length of a regular canal boat and actually more of a houseboat. (Photo by the author)

1. The History of Logan County and Ohio (Chicago, O.L. Baskin & Co., 1880), 544.

2. The Piqua Daily Call (1963).

The Canal Towns

Almost 40 towns were located along the Miami and Erie Canal from Toledo to Cincinnati, and almost all of them saw increased prosperity because of the canal. Farmers could get their crops to market and received up to ten times for them than they could locally. Goods from as far away as the east coast made their way to western Ohio. Canals were often located along the back side of main street stores where merchants unloaded goods directly into their back doors. The canal also provided water power to operate local grist, saw, and woolen mills. Many of these towns today are restoring parts of their canal heritage. Following is a quick look at four of them.

Lockington is located on the southern edge of the summit where it begins its decent to Cincinnati. The town was platted in 1837 around the first six locks and in the area where the Sidney feeder canal from the Lewistown Reservoir connects with the Extension. It is the highest point on the Extension, 512 feet above Cincinnati and 396 feet above Toledo. The series of six locks and a drop of 67 feet offered inexpensive and plentiful waterpower. A number of flour, saw, and woolen mills were built on Loramie Creek and one mill astride a mill race adjacent to Lock 3 South. The walls of the first, Lock 1 South or the “Big Lock,” have been restored, and the nearby lock-tender’s house is slated for restoration. (See photo on page 24)

New Bremen is located 23 miles north of Lockington on the northern edge of the summit where it begins its descent to Toledo and Lake Erie. The town was founded in 1832 by German immigrants from Hanover and Bavaria. These immigrants were German Protestants, in contrast to the German Catholics in surrounding areas. After the canal came to



New Bremen – Lock 1 North has been restored with operational gates in the canal park in the center of town. The lock-tender’s house on the right has been recreated and houses the Miami and Erie Canal Heritage Center. (Photo credit: localremnants.com)

town in 1845, the town was divided into two communities with the canal as the border. New Bremen was on the west and Ober (Upper) Bremen on the east, where the business center developed. The two towns merged in 1876. The land east of the canal was referred to as “Frogtown” from all of the frogs living in the canal ponds, and the land on the west side was nicknamed “Cheesequarters” because of the dairies located there. The coming of the canals to New Bremen meant prosperity. Gristmills, woolen mills, sawmills, warehouses, and pork packing plants dotted the village.

Lock 1 North is now located in a park in the center of town. It was originally constructed of wood, later capped in concrete, and recently completely reconstructed in concrete. There is a lock-tender’s house there as well. The original structure burned about 40 years ago but has since been rebuilt and now houses the Miami and Erie Canal Heritage Center.

Piqua, the first town south of Lockington, was established in 1797. In 1816, its original name of Washington was changed to Piqua, which was derived from the Shawnee language and means “He who has risen from the ashes.” Originally an agricultural area, it converted to the production of linseed oil around 1815 and became America’s largest producer. With the coming of the canal by 1837, Piqua became the most important canal port between Dayton and Toledo. Industries blossomed as well, and by the mid-nineteenth century included more than 100 enterprises including 85 coopers who made over 250,000 barrels that were shipped throughout Ohio.

The canal itself became a source of income for Piqua. Engineers and contractors worked from Piqua on the Extension as it moved north to the Mercer County Reservoir, and it was also a collection point for tolls on the canal starting in 1842. Located just north of Piqua is the home and farm of John Johnston, the Ohio Canal Commissioner who, along with Ohio State Representative William Barbee, convinced the Ohio legislature to fund the Miami and Erie Canal Extension from Dayton to Toledo. The Extension runs through Johnston’s property, which is today a State Historic Site.

St. Marys – In 1794, General Anthony Wayne constructed Fort St. Marys here as a supply post for his army as it moved north on the way to Fallen Timbers. In 1812, Colonel (and later canal commissioner) John Johnston from Piqua negotiated the Treaty of St. Marys, which allowed more American settlement following the War of 1812. The town of St. Marys was established in 1823. With the coming of the canals in the next decades came the prosperity enjoyed by most canal towns.

Behind the stores on the south side of Spring Street is a large parking lot. The canal originally extended across this lot, where it included a turning basin and Lock 12 North,

located just behind the stores. It has since been taken out. Lock 13 North was located about a block away, and for many years was under a woolen mill. After the mill was demolished, the area was converted to a park where the lock was replicated. A mill race, also called the Upper Canal, parallels the lower canal through town. A section of the canal remains behind the Spring Street stores and is the location of the *Belle of St. Marys*, a reproduction canal boat that is used for civic events. As the canal passed behind the buildings that lined Spring street, this was where the action was as goods were unloaded into the various businesses.



The Belle of St. Marys is a replica canal boat located in a section of original canal behind stores on the main street of St. Marys, Ohio. Notice the doors on the rear of the stores that open onto the canal where goods were transferred directly from canal boats in the day. (Photo by Tom Vance)

The Canal in Political & Human History

While the Miami Extension brought economic prosperity to western Ohio, there were other events that have been somewhat overlooked. History is the story of people, and three events are tied very closely to the canal that should be included while the story of the canal is being told.

Toledo War – Long before Woody and Bo stared at each other from opposite sidelines, Buckeye and Wolverine militias had stared at each other with another type of victory in mind. The point of contention was the exact location of the border between Ohio and the growing Michigan Territory. Former President John Quincy Adams summed up what became known as the Toledo War this way, “Never in the course of my life have I known a controversy of which all of the right was so clearly on one side, and all the power so overwhelmingly on the other.”³

The Northwest Ordinance of 1787 had established that the boundary between the northern and southern potential states of the Northwest Territory would be a parallel line running east and west from the southern tip of Lake Michi-

gan. This would put the mouth of the Maumee River and Toledo in the Michigan Territory. However, when the first Ohio Constitution was drafted, the parallel line was moved north to put the area in Ohio.

This was not a problem until it became clear that Indiana’s and Ohio’s canals would be terminating in Maumee Bay, creating a large trade center. Ohio the state and Michigan the territory both were determined to claim the bay. Conflicting surveys were run and at one point armed troops were on opposite sides of the line ready to fight for the “Toledo Strip.” The only shooting took place in April 1835 at what is known as the Battle of Phillips Corner, where the only casualty was a mule.

Ultimately politics won out as President Jackson stepped in and awarded the Toledo Strip to the State of Ohio and the Michigan Territory was given the Upper Peninsula. In return, the Democrat Jackson received Ohio’s electoral votes and the U.S. Presidency. Politics won out!

Randolph Freedmen – On June 10, 1846, a group of 383 former slaves arrived at the last portion of a journey that had begun May 24, 1833. On May 24, 1833, John Randolph of Roanoke, Va., died. In his will, Randolph had stipulated that his slaves be freed: “I give and bequeath to all my slaves their freedom, heartily regretting that I have ever been the owner of one.” Three years later, funds were provided for the transportation of the group to Ohio, where land would be purchased for their settlement. Each person over the age of 40 was to receive 10 acres of land.

The *Cincinnati Daily Chronicle* described their arrival in Ohio, “[It was a] singular scene – one which never occurred here, and may never occur again. In front of our office and occupying the center of the street for half a square, was a crowd of Negroes, men, women, and children, like a drove of sheep coming to market. They were dressed in coarse cottons, apparently comfortable in bodily circumstances, and walked along from the river to the canal.”⁴

On July 12, 1846, the boats carrying the Randolph Freedmen arrived at the docks in New Bremen. The group disembarked and went to a camp while attempting to find a peaceful solution to the local objections to the arrival of the group. The camp was surrounded by armed local citizens who read a proclamation stating, “Resolved, that we will not live among Negroes; as we have settled here first, we have fully determined that we will resist the settlement of blacks and mulattoes in the county to the full extent of our means, the bayonet not excepted.”

3. Don Faber, *The Toledo War* (Ann Arbor: University of Michigan Press, 2008).

4. *The Cincinnati Daily Chronicle* (July 2, 1846).

On the return trip the group stopped at the home of John Johnston, according to family members of the group, and remained for some time before disbanding into smaller groups and establishing smaller settlements in Shelby and Miami Counties.

Miami Removal – October 6, 1846, was a day that many Miami living in northeast Indiana never thought would come. Hundreds of tribal members were loaded onto three canal boats on the Wabash and Erie Canal to begin a journey to a new home west of the Mississippi River. The next day, more tribal members were loaded onto two additional canal boats for the trip south and west.

In 1840, the Treaty of the Forks of the Wabash was signed, forcing the Miami to give up the Indiana reservation for a 500,000-acre parcel of land in what would become Kansas. The move was to take place within five years. The Miami resisted the final move until that day in October 1846 when canal boats pulled away from what we know today as Peru, Ind. This began the four-day trip on the Wabash and Erie Canal to Junction, and then down the Miami and Erie Canal to the Ohio River at Cincinnati. On about October 8, the flotilla would have been passing by the home of former Canal Commissioner John Johnston.

The journey west continued to Cincinnati, where the Miami were moved onto the steamboat *Colorado* to complete the trip west. By November 1, the journey was over. Along the route a small child and an elderly tribal member died. In the 21st century there are concentrations of descendants of the forced migrants in Indiana, Kansas, and Oklahoma.

Epilogue

In March 1913, an event as fateful as the turning of the first spades full of canal dirt gripped Ohio. Torrential spring rains soaked the entire state, and with the rain came flooding. The 1913 Flood sounded the death knell for the canals of Ohio. As the torrents of water flowed down the canals and valleys of Ohio, canal structures were destroyed by the power of nature. Newer and faster transportation systems were already challenging the canal. This was just the last straw as canal use came to a halt.

Today the canal boats and their crews are relegated to the pages of history books or to the memories of those very few people who still recall the time when mules pulled boats across western Ohio. There are, however, still some magnificent vestiges of this not-so-distant time. Standing on or near those places today, one must marvel at the skill and ingenuity of those who planned and created this ditch that did indeed bring the entire world to the landings in every town touched by Ohio's canals. □

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About the Author – Andy Hite started with the Ohio History Connection in 1993 and has been Site Manager of Johnston Farm and Indian Agency since 1997. He holds undergraduate and graduate degrees in education and previously taught history. He is involved with numerous historical and education organizations including the local board of education and the Canal Society of Ohio.





The Harvest.

This month, appropriate to the season, we have *The Harvest*. The whole group of scenes will repay study, equally for the picturesque effect of the whole, and that of each one viewed by itself, for the excellence of the figures, the naturalness of the attitudes, and the life and motion they exhibit, and for the faithfulness with which the different means of harvesting and final securing of the grain, either for the market or the miller, are portrayed.

Time was (not very long ago either) when all the grain in this country was reaped by the sickle; work at which, at this day, over a great part of Europe, women find constant and lucrative employment during harvest time...Each reaper cutting handful by handful gathered his or her armfuls and laid them in the gavel, till it was enough for a sheaf, and then bound it. Slow, back-breaking work. How different this from the sweep of the cradles as lusty arms

swing them through the falling grain, sometimes making a cut of 8 or 9 feet, and laying each clip evenly in the swath. Voicelessly perhaps the cradlers go, but the simultaneous rush of the several scythes through the sonorous straw is one of the most inspiring sounds of the harvest field, especially when it begins anew after the musical rip-rap rip-rap of the whetstone. Here the labors are divided, one party cuts, and another set of active hands does the binding.

Even this is slow and tedious, and with the will to do it faster, came the way. The clattering reaper now swoops around the field, and by its automation rake delivers the gavels ready for binding upon the short-cut, even stubble, as fast as horses can walk. Many binders find enough to do to keep up with the single man with the reaping machine. In the thrashing scenes we see similar contrast, horses and iron supplanting human muscle. Such has been the ad-

vance of the past few years, and this is only a sample of the progress in other departments, not only of agricultural theory and practice, but also in other arts of life and peace, and—for how sadly do many realize it—in the arts of war.

The nation returns now to peace, and peaceful arts will prosper as never before. We may look for great advancement in farming practices, but do not let us go too fast. The heading harvesters so much approved where crops are great and hands are few, and straw of little value, though surprisingly expeditious and excellent in their operation, are adapted to only limited area of country. This will doubtless be narrowed year by year until they will be counted, with wooden plows, and we may almost say sickles, among the fossils of agriculture.

From: *The American Agriculturist*, Volume 24, August, 1865, 247-248.

Grain Cradles

THE CRADLE OF NINETEENTH CENTURY AGRICULTURE

By Tom Vance

THE common grain cradle is widely seen in antique shops and museums. Its history and function, however, are less well known. There has been a lot written about the early reapers, but little information is available about grain cradles. This article will bring together some of the diverse information that is out there and fill in a few more of the details.

When I first started work at Lincoln Log Cabin State Historic Site south of Charleston, Illinois, in 1974, we aspired to create a living history farm around the 1840s cabin of Thomas Lincoln. About 1977, we planted a small field of wheat. There were a couple of grain cradles in the collection, and I determined to use them to harvest the small wheat crop. I learned two things from the experience: first, an inexperienced cradler will sooner or later dig the tip of the scythe blade into the soil, which will twist and ruin the blade; and second, antique grain cradles are often too fragile to use without breaking them.

By the 1980s, we were planting about five acres of wheat each year. We harvested the crop with scythes, as our cradles were either twisted or broken. Seasonal interpreters then spent the rest of the summer flailing and winnowing wheat on the threshing floor of the Lincoln barn.

I have since retired from Lincoln Log Cabin and am doing consulting work for the Illinois Amish Heritage Center east of Arthur, Illinois. In preparing for their annual steam threshing show in 2017, I had found both a grain flail and a Clipper grain separator at a local antique shop, so I

determined to do a grain processing demonstration. They had a field of oats on site that they were harvesting and threshing. The thought occurred to me, “wouldn’t it be nice to have a grain cradle to demonstrate cradling with.” Well the day before the event, a local gentleman drove in with a grain cradle in the back of his pickup and offered to sell it for \$85. It was in good condition, perfect for demonstrations, and we got several spectators to try their hand at it (see Fig.1). We even had visitors helping flail the oats.

My interest in grain cradles, along with the idea of using the grain harvest and processing as a demonstration at living history farms, was piqued. I have since found another grain cradle that appears to be an interesting early design at a local Amish auction.

In researching grain cradles on the internet, only a few sources were found. A good one, “American Grain Cradles” by Richard Van Vleck, gives a good overview of the history of grain cradles including a listing of grain cradle patents. The website One Scythe Revolution includes links to good YouTube videos of grain cradles being used, and Baryonyx Knife Co. has some information on grain cradle patterns.

A handful of articles and references to grain cradles was found in *American Agriculturist* and issues of *The Rural New Yorker* and *The Genessee Farmer*. Leo Rogin’s 1931 book, *The Introduction of Farm Machinery...During the Nineteenth Century*, gives good information on the history and use of grain cradles, and the 1868 book, *The American Wheat Culturist* by Sereno Todd gives good information on making, adjusting, and using a grain cradle. Agricultural implement catalogs from 1838 through 1933 also give good illustrations and information, and patent record illustrations were also found.

There seem to be no current sources for reproduction grain cradles. The Baryonyx Knife Company sells scythe blades and snaths (handles). Owner Benjamin Bouchard indicates that they are also considering selling grain cradle finger blanks. With these essential parts, a good woodworker should be able to put together a working grain cradle. One Scythe Revolution also sells blades and snaths, but their snaths are the European style. They do, however, have good wooden hay forks and rakes. Sharpening stones are available from scythesupply.com.



Fig. 1.— A visitor harvesting oats with a grain cradle at the Illinois Amish Heritage Center Steam Threshing Show near Arthur, Illinois in 2018. (Photo by the author)

History of the Grain Cradle

The methods and implements used in harvesting and processing grain, namely the hand scythe and sickle, wooden flail, and winnowing basket, changed little from biblical times to the eighteenth century.¹ At some point a longer handle was added to the scythe so the operator could stand erect.

A bow scythe was described as early as the thirteenth century in Europe.² The bow scythe catches and presses the cut grain against the standing grain for easy gathering. A



Fig. 2. – A European-style bow scythe (Credit: scytheassociation.com)

YouTube documentary video of a traditional grain harvest in 1966 in the Hunsrück area of Germany shows the use of bow scythes. A link to it can be found on the One Scythe Revolution website. The site also has a good video of American grain cradles being used.

According to Leo Rogin,³ the American grain cradle made its first appearance in the wheat fields of Virginia, Maryland, and Pennsylvania in the last decade of the eighteenth century. It spread to other areas of the country by 1800. The first U.S. patent granted for a grain cradle was to Isaac Babcock of Rensselaerville, New York, in 1823.⁴

The grain cradle continued to be used into the twentieth century, long after the coming of the reaper and the mechanical binder. The last grain cradle patent was issued in 1924; cradles continued to be sold into the 1930s.

A series of photographs taken by J.C. Allen in Indiana during the 1914 wheat harvest shows a farmer cutting a large field of wheat with a cradle scythe while his wife gathers, binds, and then shocks the sheaves (Fig. 3). One reason for the persistence of the cradle scythe was probably that many farmers could not afford a reaper, or their farms were too small to justify one.

Sereno Todd in his 1868 book, *The American Wheat Culturist*, said:

“Although the great bulk of harvesting grain will probably be done with horse-power, still grain cradles will always be needed, even if horse-reapers are used to cut nearly the whole crop. Cradles must be employed to cut the grain around stumps, trees, along fences, to cut the corners of a piece of grain, when the reaper is in motion and so forth.”⁵

Rogin goes into detail about the amount of wheat that a cradler could harvest in a day. He quotes sources that vary from two to four acres per cradler. Different factors were

1. Percy Bidwell and John Falconer, *History of Agriculture in the Northern United States 1620-1860* (Washington: Carnegie Institution of Washington, 1925), 125.
2. Richard Van Vleck, “American Grain Cradles,” American Artifacts, accessed May 17, 2020, <https://www.americanartifacts.com/smma/grain/cradle.htm>.
3. Leo Rogin, *The introduction of farm machinery in its relation to the productivity of labor in the agriculture of the United States during the nineteenth century* (Berkeley: University of California Press, 1931), 126.
4. Van Vleck, “American Grain Cradles.”
5. Sereno Edwards Todd, *The American Wheat Culturist...* (New York: Taintor Brothers & Co., 1868), 346.

HARVESTING WHEAT WITH A GRAIN CRADLE IN 1914



Fig. 3. – A farmer sharpens his cradle scythe blade during the 1914 wheat harvest. As he cradles wheat, his wife binds the wheat into sheaves. The sheaves are then stacked into shocks for drying. After about two weeks, they are picked up and taken to the separator for threshing. (Photos taken by J.C. Allen in 1914, probably in Indiana. Photos from *Farming Comes of Age*, used by permission of Todd Price, owner of the J.C. Allen photo collection.)

involved including the region of the country, ethnic variations, the skill level of the cradler, and the wheat itself. Rogin quotes a Virginia farmer “who tells us that a man can cradle three acres of twenty-bushel (per acre) wheat more easily than two acres of thirty-bushel wheat.”⁶ As per regional differences, Rogin says, “The rate of cradling in the west appears to have been somewhat higher,” but that several observers indicated that “a good cradler could not average more than three acres per day.”⁷

George Washington even weighed in on the subject in a letter dated June 18, 1792.

“Formerly, I have given to skillful and careful cradlers, a dollar a day, during harvest, which was a sixth more than the usual price; but then, I knew the men, and they would oblige themselves to cut clean and lay well, four acres of wheat a day (if it did not stand very heavy on the ground).”⁸

The 1838 catalogue of the Joseph Breck and Co. of Boston lists grain cradles with the following description:

“The Grain Cradle is an article which is coming into very general use in the New England States, where they were till of late but little known, although they have been in very general use in the southern and western States for many years, and which is found to be decidedly the best mode of harvesting grain, as it is supposed one man will cradle five acres in a day when he cannot reap more than one...”¹⁰

An article on Hussey’s Reaper in *American Agriculturist* in October 1845 compares the cost of harvesting 104 acres of wheat in eight days by Hussey’s Reaper versus six cradlers each cutting two acres per day. With nine rakers and binders following the cradlers and seven laborers following the reaper, it cost \$65 less to use the reaper.⁹

Rogin concludes that the national average that can be harvested is two acres a day per cradler and that 20 bushels per acre is the average yield. Laborers including skilled cradlers, as well as the cash to pay them, however, were not readily available to the average farmer in the west, so Rogin also comes to the conclusion that many farmers were limited in what they could grow by what they and their family could harvest within the 10-14 day window after the grain ripens in June or July.

6. Rogin, 128.

7. Ibid, 127

8. Ibid, 126.

9. “Hussey’s Reaper,” *American Agriculturist*, Vol. VI, no. 10 (October, 1845): 300.

10. Joseph Breck & Co. *Annual catalogue of the England Agricultural Warehouse and Seed Store* (Boston: New England Farmer Office, 1838), 59.

The U.S. Patent Record

Van Vleck, in his article “American Grain Cradles,” includes a listing of U.S. patents related to grain cradles. There are 50 patents from 1823 to 1924. Many are for grain cradle designs, but some are for improvements of things like how the scythe blade attaches to the snath. The list gives the date issued, patentee’s name, patent number, town, and state. Another graph gives the number of patents by state. New York has the most with 13 patents, and Indiana is second with seven. Also in the Midwest, Michigan has two, and Wisconsin, Ohio, Missouri, and Iowa each has one. A graph of patents by decade is shown below in Fig. 4.

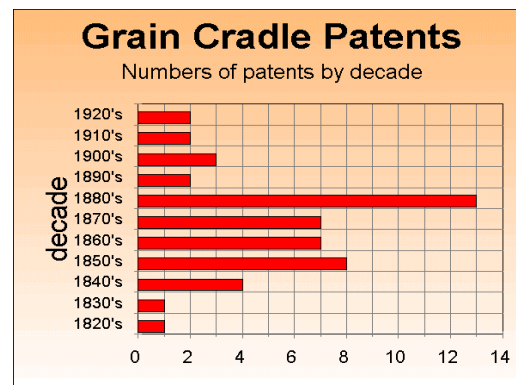


Fig. 4. – From Richard Van Vleck, “American Grain Cradles,” *American artifacts*.

By searching the U.S. Patent Office website with the patent numbers, I was able to find the illustrations associated with the patents except for the first, in 1823, for which a patent number is not listed by Van Vleck. The list would seem to be comprehensive, except that there are grain cradles advertised as patented that are not found in the list of patents. One such is an 1852 ad for “Chaplin’s Patented Grain Gatherer.”

The second and third patents are in 1837 and 1843. The configuration of the 1837 cradle is unique. The configuration of the 1843 cradle is a universal style that lasts into the twentieth century and is the style most seen in antique shops and at museums. I am going to call it type “A” for sake of reference. The cradle fingers are made of steam-bent wood and are attached directly to the snath or handle by wooden bracing rods or wires. These braces allow for the adjustment of the fingers as they need to be perfectly aligned with the scythe blade.

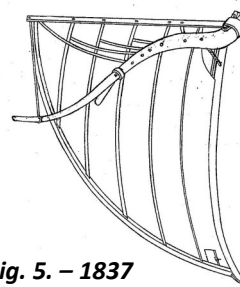


Fig. 5. – 1837

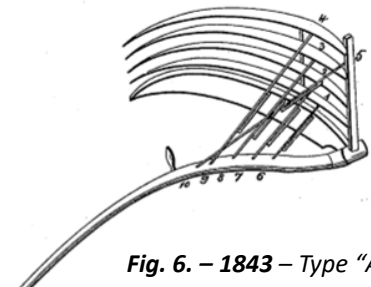


Fig. 6. – 1843 – Type “A”.

An article in the November 1845 *American Agriculturist*, shows a type “A” grain cradle. The article is about Grant’s Patent Fan-mill. This early style of fan-mill can still be found today. The cradle is not mentioned in the article, but it is probably also made by the Grant Manufacturing Co.

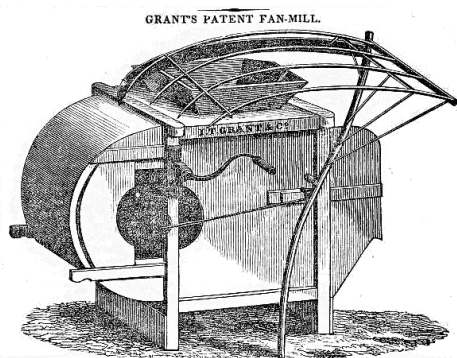


Fig. 7. – This illustration in the November 1845 *American Agriculturist* of a Grant’s Fan-Mill shows a type “A” grain Cradle.

Patents for type “A” cradles are also found in 1844, 1850, 1853, 1856, and in many subsequent years including the last patent in 1924.

What I will call type “B” is shown in figures eight, nine, and ten. In this configuration, the finger braces are attached to a horizontal cross piece rather than to the snath. The cross piece is supported by a bowed main brace. A similar configuration is also found in patents dated 1882 and 1903 and in grain cradle advertisements from 1838 to 1906. The handle configuration seen in Fig. 8 is atypical of any other patent and is similar to that found in European bow-cradles and scythes. A cradle that I purchased at a local Amish auction recently is type “B” (see Fig. 16).

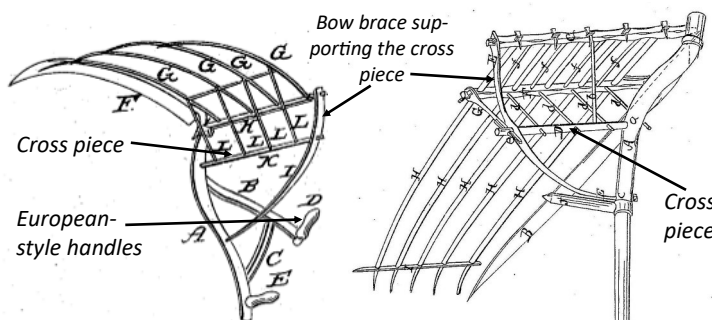


Fig. 8. – 1843 – Type “B” with European-style handles.

Fig. 9. – 1857 – Type “B”.

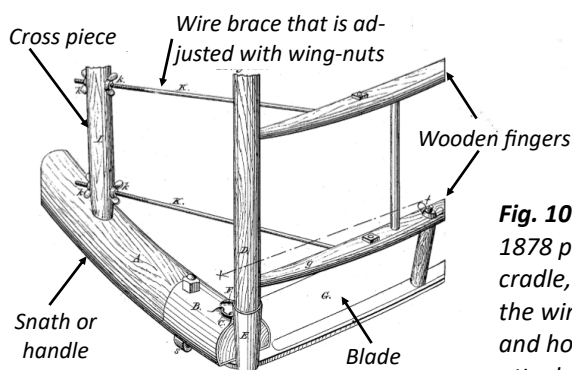


Fig. 10. (left) – From the 1878 patent, a type “B” cradle, showing details of the wing nut adjustments and how the cradle attaches to the snath.

Four patents dating 1885, 1886, 1887 and 1890 were for grain cradles that utilized wire instead of wooden fingers to form the cradle. This configuration we will call type “C.” One other patent dated 1882 is a type “B” cradle but has wire added between the wooden fingers.

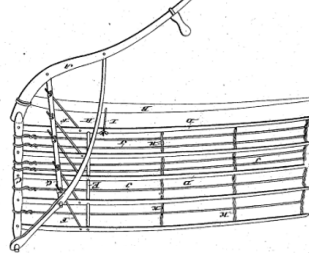


Fig. 11. – 1882 – Type “B” with wire between the wooden fin-

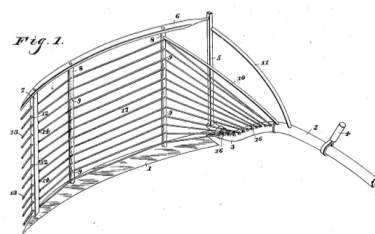


Fig. 12. – 1890 – Type “C” with wire instead of wooden fingers.

The last distinct configuration is found in patents dated 1888, 1889, 1903, 1912, and 1915. All but the first were patented by H.B. Hewitt. In these cradles, the fingers are reduced in size and increased in number to 14. A framework holds them in place. This configuration will be called type “D.” This cradle is advertised in the January 1891 issue of *The Iron Age* as “Hewitt’s 14-Finger Grain Cradle.”

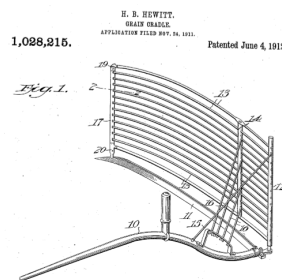


Fig. 13. – 1912 – Type “D” 14-finger grain cradle patented by H.B. Hewitt.

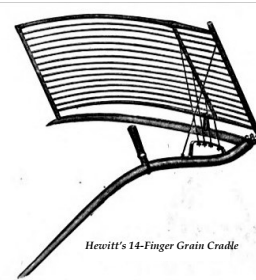


Fig. 14. – Hewitt’s 14-finger grain cradle advertised in *The Iron Age* in January 1891.

I had never seen a type “D” grain cradle until seeing it in the patent records. Then, interestingly enough, two of them appeared for sale, one on ebay and one on Etsy.



Fig. 15. – A type “D” Hewitt’s 14-finger grain cradle recently for sale on Etsy.

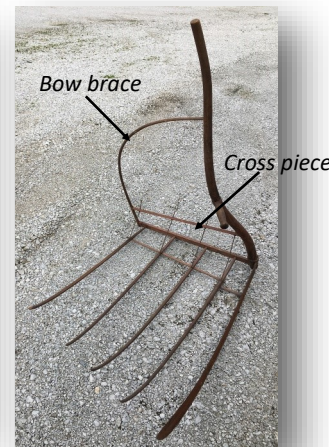


Fig. 16. – Type “B” cradle purchased at an Amish auction.

Other Agricultural Periodicals

In addition to the two previous articles cited from the *American Agriculturist*, two articles were found in other publications.

The first article, "Improved Cradle," appeared in the July 1839 issue of *The Genesee Farmer*. It touts the improved features of the "Mullay" or "Mooly" cradle (origin of the name is unknown) and its superiority over the "common cradle." The curved snath is the primary improvement, which allows a better cut of the grain with less effort. The maker, Mr. Chaffee of Onondaga County, New York, then goes on to give directions on how the cradle should be used.

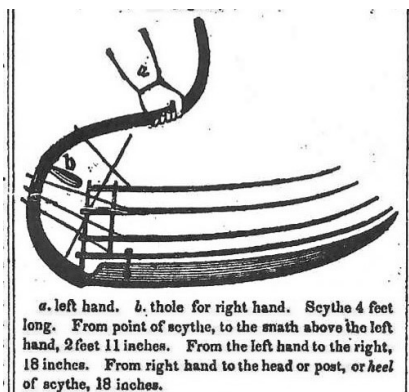


Fig. 17. – The "Mully" or "Mooly," improved cradle in the July, 1839 issue of *The Genesee Farmer*. This was later termed the "Mulley."

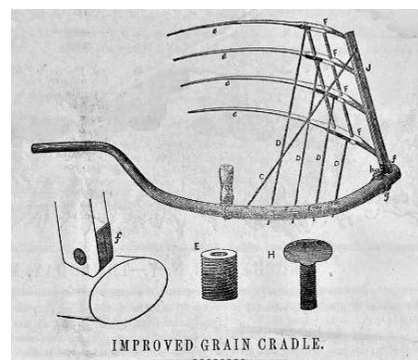


Fig. 18. – The "Improved Grain Cradle" appeared in the May, 1851 issue of *The Rural New Yorker*.

The second article, "Improved Grain Cradle," appeared in the May 1851 issue of *The Rural New Yorker*. The main improvement was attaching the post or standard into which the fingers are inserted to the snath with a hinge. This allowed the cradle to be adjusted to the pitch of the grain. Other improvements are also noted. The article indicates that Charles Clow & Sons of Port Byron, New York, has taken measures to secure a patent, but nothing was found in the patent records.

Catalogs, patterns, and trade names

Grain cradles were found in 12 seed and agricultural implement catalogs from 1838 to 1933 as follows:

- 1838 – Joseph Beck & Co., Boston
- 1839 – Robert Sinclair Jr. & Co., Baltimore
- 1851 – A. B. Allen & Co., New York
- 1852 – Parker & White, Boston
- 1853, 1858 – E. Whitman & Co., Baltimore
- 1859 – Tredwell & Pell, New York
- 1861 – Charles V. Mapes, New York

1872 – William Rennie, Toronto

ca.1890 – Strathroy Manufacturing Co., Strathroy, ON

1898, 1900, 1914, 1918, 1920 – Sears, Roebuck & Co.

1908-1914 – McLennan, McFeely & Co., Vancouver

1906, 1933 – Griffith & Turner, Baltimore

The 1838, 1851, 1852, and 1853 catalogs all used the same wood-cut illustration of a type "B" grain cradle as seen in Fig. 19. In 1858, Whitman advertised the same illustration as "Grant's Grain Cradle." Their 1853 catalog, however, advertised a type "A" cradle as "I.T. Grant Co's Grain Cradle."

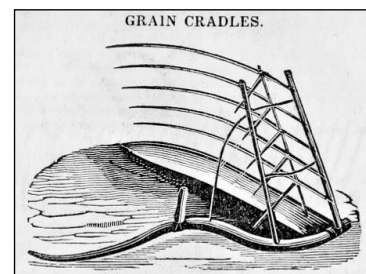


Fig. 19. – From the 1838 catalog of Joseph Beck & Co., Boston.

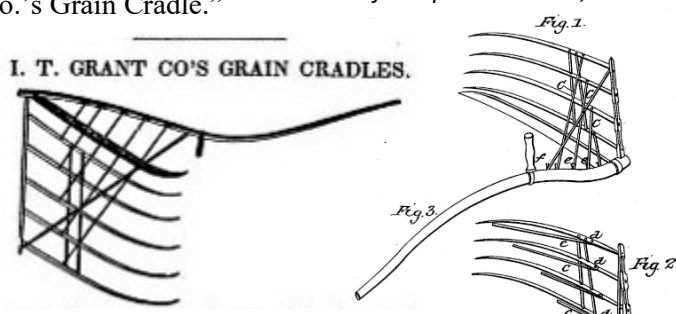


Fig. 20. (above) – "Grant Co's Grain Cradle" from E. Whitman's 1853 catalog.

Fig. 21. – Illustrations from Grant & Viall's grain cradle patent number 7,720, patented October 15,

Grant was one of many grain cradle manufacturers. Tredwell & Pell, in their 1859 catalog, list the following manufacturers: Grant, Cass, Wilcox, Breed, Blanchard, Wilkinson, and others. Most cradles are advertised as being made from the finest white ash with four, five, or six fingers and the braces being made of either metal or wood.

Grant's grain cradle appears again in Charles Mapes' 1861 catalog along with a "Grapevine" cradle and Wilcox's grain cradle. The first two are both type "A" and the Wilcox is a type "B." (See Fig. 22) Cradle "patterns" appear here with the introduction of the "grapevine" cradle.

William Rennie in his 1872 catalog introduces more patterns: "The Grape Vine is generally preferred. Also, the Morgan, half Mulley, full Mulley, &c."

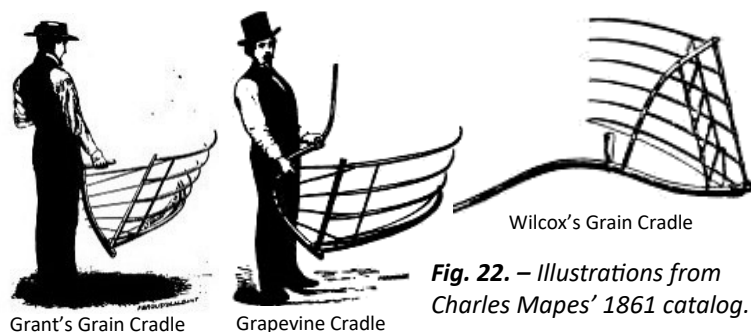


Fig. 22. – Illustrations from Charles Mapes' 1861 catalog.

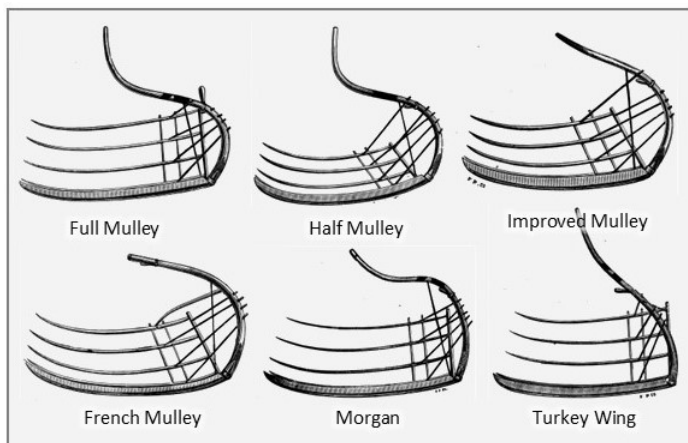


Fig. 23. – Grain cradles manufactured by the Strathroy Manufacturing Company from their catalog, ca. 1890, showing different cradle patterns. (Credit: Baryonyx Knife Company)

The next question concerned the pattern names associated with different cradles. What is the difference between the Morgan, Grapevine, Mulley, etc.? I then found a page from a Strathroy Manufacturing Co. catalog on the Baryonyx Knife Co. website that added more names to the mix as shown in Fig. 23.

I emailed Benjamin Bouchard of the Baryonyx Knife Co. and asked him about the patterns. His reply was, “Mulay (Mulley) cradles had particular curves to the snath that caused the end to pair with the blade at an oblique angle rather than the usual square...”

I also found two advertisements for grain cradles in *The Iron Age*. The first, by the North Indianapolis Cradle Works in January 1891, offered cradles made in: Turkey Wing, Morgan, Dutch Row, Ohio Premium, half Grape Vine, Empire, and Southern patterns. The second was Thomas C. Fisher, Anderson, Indiana, who offered the following cradles: Dutch Bow, Grant, Southern Clean Sweep, Southern Morgan Grapevine, Turkey Wing, Improved Turkey Wing, and the hand-made Anderson Champion.

These seem to be a combination of pattern names, manufacturer names, and trade names and is an area that is certainly open to more in-depth research. □

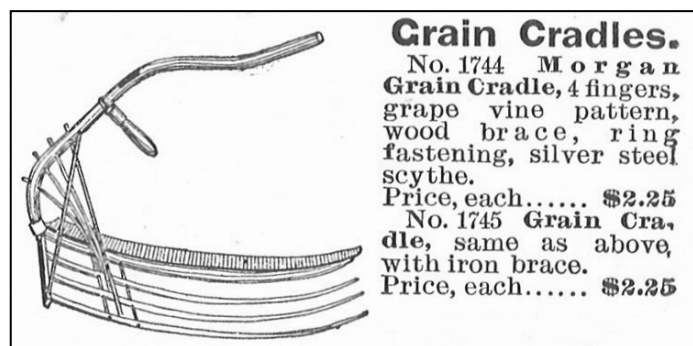


Fig. 24. – Grain Cradle listing in the 1898 Sears, Roebuck and Company catalog indicating a Morgan grain cradle of the grape vine pattern.



Fig. 25. – Grain Cradles listed in the 1906 Griffith and Turner catalog include both factory-made and hand-made cradles. The factory-made cradle is type “B,” and the Schwob’s hand-made cradle is type “A.”

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Reaping with Cradles in Illinois – This photo appeared on page 60 of the book *Cyrus Hall McCormick, His Life and His Work* by Herbert N. Casson, published in 1909 by A.C. McClurg and Co., Chicago. The photo shows three type “A” grain cradles. The two on the right, however, are unusual in that the main brace on each is curved rather than straight. The date of the photo is unknown other than it was taken before 1909.