WisArch News

The Newsletter of the Wisconsin Archeological Society

Indigenous Gardening Highlighted at Pope Farm Conservancy



The1000 year old Indigenous garden at Pope farm Conservancy in 2009. (Courtesy of the Wisconsin Historical Society).

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Wisconsin Archeological Society

www.wiarcheologicalsociety.org

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Affiliated Organizations Information

Charles E. Brown Archaeological Society

The Charles E. Brown Chapter meets monthly (except the summer months) at 7pm on the second Thursday of each month, at the Wisconsin Historical Society Auditorium, 816 State Street in Madison, across from the Union, unless otherwise noted. Contact Joe Monarski at <u>jrmonar@frontier.com</u>.

Kenosha County Archaeological Society

The Kenosha County Archaeological Society meets on the second Saturday of the months of October, December, February and April at 1:30 pm at the Kenosha Public Museum, 550 First Ave., Kenosha, Wisconsin. Contact Donald Shelton at <u>dgshelton@wi.rr.com</u>. Information on events at the Kenosha Public Museum can be found at <u>www.kenosha.org/museum/</u>.

Milwaukee Meetings of the Wisconsin Archeological Society

Milwaukee meetings of the Wisconsin Archeological Society are held at the UW-Milwaukee Campus in either Sabin Hall or in the Union. Meetings are held on the third Monday of the month during the academic year (September through May). Guest lectures begin at 7:00 pm. Contact Seth Schneider at treasurer@wiarcheologicalsociety.org.

Robert Ritzenthaler Society

The Robert Ritzenthaler Chapter meets on the second Tuesday of the month, at 7:00 pm, September through May. Meetings are held at Room 202, Harrington Hall, on the University of Wisconsin-Oshkosh Campus. Contact William Wasemiller at <u>william.wasemiller@sial.com</u>.

Rock River Archeological Society

Monthly meetings of the Rock River Archeological Society are held on the third Wednesday of the month, from September through April, at 7:00 pm, at the Visitor's Center, Horicon National Wildlife Refuge. This facility is accessible via Highway 28 between Mayville and Horicon. The Rock River Chapter invites you to visit their weblog at http://rockriverarch.blogspot.com. Contact Julie Flemming at rmas.president@gmail.com.

Three Rivers Archaeological Society

Meetings of the Three Rivers Archaeological Society had been held on the second Monday of every month (except July and August), alternating between the Macktown Living History Education Center (Rockton, IL) and venues in Beloit, Wisconsin at Beloit College and the Beloit Public Library. Currently Inactive.

UW-La Crosse Archaeological Club

The Archaeology Club provides a social and academic outlet for UW-La Crosse students interested in archaeology and/or anthropology. The Club provides speakers, field trips, and presentations. Contact Valerie Watson at <u>watson.valerie@uwlax.edu</u>.

Regional Research

My Years in the Garden Beds

By John H. Broihahn

April 2021

Between 2005 and 2017 archaeologists from the State Archaeology and Maritime Preservation Program designed, planted, tended, harvested, and educated from two demonstration garden plots at the Pope Farm Conservancy, Town of Middleton, Dane County, Wisconsin. The 110 acre conservancy was designed by the Pope family as an educational park. It covers a small section of moraine and associated features. These geomorphic features are now covered with restored prairies and a series of crop plots featuring crops that are not typically grown in the area, or not commercially grown in large amounts. At the edge of each of the plots, is a sign that describes the crop including the time and place where it was domesticated.

When Mr. Mel Pope visited the State Archaeology office he laid out his vision for the park and asked if we wanted to participate in its development. During an on-site visit, Society staff were impressed with the park and the vision. We did make one observation, however. We noted that the park did not have a crop plot featuring plant foods domesticated by Indigenous communities in the Americas. At some point during the visit, I volunteered the State Archaeology staff to work on that component of the park. Mr. Pope thought it was a great idea. I recall on the drive back to the office asking out loud why I had volunteered us for yet another project. In the end, over the 12 years that the State Archaeology program was involved, we planted around 20 gardens; gave tours to 100s of 4th graders from the Middleton-Cross Plains school district; provided tours, guide and otherwise, to 100s of others; and learned something about gardening and farming.

Mr. Pope initially built one 20 by 30 foot plot for us. We decided to date this Indigenous garden plot to ca. A.D. 1000. We thought we could emphasize the introduction of a new miracle crop-corn-while at the same time emphasizing the Indigenous (Native) invention's known as the Eastern Agricultural Complex (EAC), or Native cultigens:

Marsh elder (sumpweed, *Iva annua*) Goosefoot (*Chenopodium berlandieri*) Sunflower (*Helianthus annuus*) Little barley (*Hordeum pusillum*) Erect knotweed (*Polygonum erectum*) Maygrass (*Phalaris caroliniana*). Squash (*Cucurbita pepo*) (initially grown for their seeds and rind)

Domestication of the members of the EAC began about 6000 years ago. Gourds (Lagenaria siceraria) were apparently domesticated in Asia and Africa and came to the Americas with the

first people (Erickson et al. 2005). They continued to be grown and became part of the Indigenous crop regime.

Mr. Pope decided the 20 by 30 foot plot was too small and expanded the 1000 year old garden to a 30 ft. by 30 ft. plot soon after we started. A couple of years later, with Mr. Pope's enthusiastic support, we added a second plot where we featured different ethnic gardens, or specialty gardens, each year. These plots featured in part: The Crops of the Americas; an early 20th century Potawatomi garden; and an African-American garden. We really cannot credit Mr. Pope enough for his support. Working closely with Dr. Amy Rosebrough, he also built a series of interpretative panels talking about the American Indian history of the park.

While the Society's role in the Pope Farm Conservancy programing ended in 2017, Dr. Amy Rosebrough of the State Archaeology office has continued the project as a volunteer with the Friends of Pope Farm Conservancy Education Committee (https://www.popefarmconservancy.org). She designs, plants, tends, harvests, and educates from two gardens each year.

In this short piece I want to focus on what I took away from my years as a cultivator in the 1000 year old garden at Pope Farm (Figure 1). My recollections are just that-recollections. I did not carefully record my observations; we did not record bed dimensions; rain fall; temperatures; and variations in crop yields in a systematic manner. If you are an experienced gardener, the following may not be informative.



Figure 1. The 1000 year old Indigenous garden at Pope farm Conservancy in 2009. (Courtesy of the Wisconsin Historical Society).

In the 1000 year old garden, we built 4 to 5 garden beds using a shovel. Once the beds were built, with the silty loam to loamy soil, they were stable. The beds were roughly 1.0 to 1.5 ft. tall and 2.5-3.5 ft. wide. There was some erosion, or melting, of the ridges each year, but it was limited. Granted, we did not have any of the "gully washing toad floating" storms of recent years. Even so, the beds were clearly visible in the spring and all we had to do was scoop the eroded soil up from between the ridges and pile it back on top of the ridges.

We carved out a digging stick and it worked well to loosen the soil each spring in the beds (Figure 2). A stone hoe crafted by Bob Halseth broke up bigger clods of dirt and also worked well to pull the soil back up onto the beds (Figure 3). The bison scapula hoe I made broke soon after manufacture (Figure 4). It broke because I did not shape the scapula into a hoe-like blade leaving the edges too straight and the blade too square. I assumed that images of pre-contact and post-contact bone hoes showed worn and used tools. We also had a small antler rake that worked well to remove debris and smooth the surface of the beds (Figure 5). These tools were more than adequate to till and maintain the plot. As it turns out, minimal tillage conserves nitrogen in the soil.



Figure 2. Replica wooden digging stick used in the garden beds at Pope Farm Conservancy (Courtesy of the Wisconsin Historical Society).



Figure 3. Replica stone hoe used in the garden beds at Pope Farm Conservancy (Courtesy of the Wisconsin Historical Society).

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Figure 4. Replica bison scapula hoe used in the gardens beds at Pope Farm Conservancy (Courtesy of the Wisconsin Historical Society).



Figure 5. Replica antler rake used in the garden beds at Pope Farm Conservancy (Courtesy of the Wisconsin Historical Society).

We, and waves of fourth graders planted corn along the top of the beds and gourds and squash along the edges. Generally, our corn crop - excluding some "Mandan" corn -did well each year: the yields from the gourds and squashes varied for reasons which were unclear at the time and remain a puzzle. The sunflowers also provided consistent yields. We acquired the seeds from Seed Savers (https://www.seedsavers.org).

In the early years, we did not have problems with animals molesting the crops. However, as time passed, 13-striped ground squirrels-and maybe mice and birds as well-became a constant problem. We resorted to a variety of means to stop them from eating the seeds. In Indigenous communities, with a constant presence of people and dogs in and around the gardens, we suspect animal damage would have been minimal. We had a couple of years of deer browsing early in the project, but learned that if we planted enough squash and gourd vines the deer and other critters stayed out of the garden. In fact, in some years, we could not enter the garden plot once the gourd and squash vines "took off." This extensive cover served to shade the ground and thus it conserved moisture and limited weed growth.

Birds were a constant problem with regard to the sunflower crop. We frequently found shells/hulls cracked open on the backsides (top) of the sunflower seed pods. The birds would pull out a seed and then land on top of the pod to eat it. Again, we suspect this was less of a problem for Indigenous farmers.

Weeds-and we'll define these from a 21st century perspective-were more manageable. In Indigenous communities, we suspect the spring field burning helped control some of the weeds and insects. In our garden plots at Pope Farm Conservancy grasses were a constant problem. I swear some of the roots extended to what seemed like the center of the earth. I do not recall that grasses were an issue when we first began the 1000 year old plot, but a variety of grasses became a constant feature in the gardens. They were hard to prevent and hard to remove.

My sense is that "weeds," grasses, and fertility were the prime reasons for moving plots, or letting plots stand fallow for a time. We did not for some reason fertilize the gardens and that oversight became obvious as the yields decreased and the corn appeared stressed, particularly in dry years (see Monaghan et al. 2014:43). I had always assumed that the recovery of pottery, lithics, and other domestic debris from Indigenous garden plots was an indication that the fields were fertilized, or that the fields were built on former village locations. G. Peske's work at two garden bed sites (47 WN-96, Lasley's Point; 47 WN-215, Eulrich) in Winnebago County, eastern Wisconsin, did not result in the collection of domestic materials suggesting these materials may not always be found in Indigenous fields (Peske 1966:191, 193). Recent work by Dr. David Overstreet, Dr. William Gartner, and the Menominee Indian Tribe of Wisconsin has revealed that gardens soils were carefully manipulated using additives to insure soil health.

I'll leave it to others to debate the reason, or reasons, for building beds. I would think in areas with shallow A horizons pulling more top soil into a pile would enhance yields (Gallagher et al. 1985; Gartner 1999: Monaghan et al. 2014).

Current information suggests that even after corn became an established food source around A.D. 1000, Indigenous communities in Wisconsin and across the Great Lakes continued to grow selected crops of the EAC (See Egan-Bruhy 2014 and others). And, wild rice, a crop we currently associate with northern Wisconsin and Ojibwe and Menominee communities, appears in many diets even across southern Wisconsin when it was locally available. The origin of the corn that was being grown-8 row and 12 row-seems to be the northeastern U.S./southeastern Canada and the American Bottom.

Our motto for the project should have been "Know where your food comes from." And, by that we mean: Who domesticated it?; Who traded it?; Who adapted it to a new place?; And who trained the next generation of farmers? Indigenous farmers in the Americas changed the way we eat. They invented corn agriculture and helped spread it across the Americas. Potatoes, tomatoes, squash, sweet potatoes, peppers, amaranth, tomatillos, beans, cacao, avocados, cassava, peanuts, pineapple, and quinoa, were all "invented" in the Americas.

An online review, turned up a Web site about "Indiginizing" your diet. My guess is that most diets already contain a wide variety of Indigenous foods. See https://cuesa.org/article/what-it-means-decolonize-your-diet.

Suggested Readings

Egan-Bruhy, Kathryn C.

2014 Ethnicity as Evidenced in Subsistence Patterns of Late Prehistoric Upper Great Lakes Populations. In *Reassessing the Timing, Rate, and Adoption Trajectories of Domesticate Use in the Midwest and Great Lakes*, pp.53-72, edited by Maria E. Raviele and William A. Lovis. Midwest Archaeological Conference Inc., Occasional Papers No. 1.

Erickson, D. L, B. D. Smith, A. C. Clarke, D. H. Sandweiss, and N. Tuross

2005 An Asian origin for a 10,000-year-old domesticated plant in the Americas. *Proceedings* of the National Academy of Sciences 102(51): 18315–20.

Gallagher, James P., Robert F. Boszhardt, and Katherine P. Stevenson
1985 Oneota Ridged Fields in Southwestern Wisconsin. *American Antiquity* 50:605-612.

Gartner, William G.

1999 Late Woodland Landscapes of Wisconsin: Ridged Fields, Effigy Mounds and Territoriality. *Antiquity* 73:671-683.

Lovis, William A. and Elizabeth A. Bogen-Lovis

2004 Ridged Fields, Catastrophic Wet Season Planting, and Germination Rates: Notes from Libby's Garden. *The Wisconsin Archeologist* 85(1):78-83.

Moffat, Charles R.

1979 Some Observations on the Distribution and Significance of the Gardens Beds in Wisconsin. *The Wisconsin Archeologist* 60(3):222-248.

Monaghan, G. William, Timothy M. Schilling, and Kathryn E. Parker

2014 The Age and Distribution of Domesticated Beans (Phaseolus vulgaris) in Eastern North America: Implications for Agriculture Practices and Group Interactions. In *Reassessing the Timing, Rate, and Adoption Trajectories of Domesticate Use in the Midwest and Great Lakes*, pp.33-53, edited by Maria E. Raviele and William A. Lovis. Midwest Archaeological Conference Inc., Occasional Papers No. 1.

Peske, G. R.

1966 Oneota Settlement Patterns and Agricultural Patterns in Winnebago County. *The Wisconsin Archeologist* 47(4):188-195.

Smith, Bruce D., and Richard A. Yarnell

2009 Initial Formation of an Indigenous Crop Complex in Eastern North America. *Proceedings* of the National Academy of Sciences. National Academy of Sciences of the United States of America. 106 (16): 6561–6566.

Smith, Bruce D.

1997 The Initial Domestication of Cucurbita pepo in the Americas 10,000 Years Ago. Science.
 Washington, DC: American Association for the Advancement of Science 276 (5314):
 932–934.

Wisconsin Archaeology Month

May is Archaeology Month in Wisconsin. The 2021 poster features the Lakeland Shipwreck. For more information: <u>https://www.wisconsinhistory.org/Records/Article/CS4131</u>



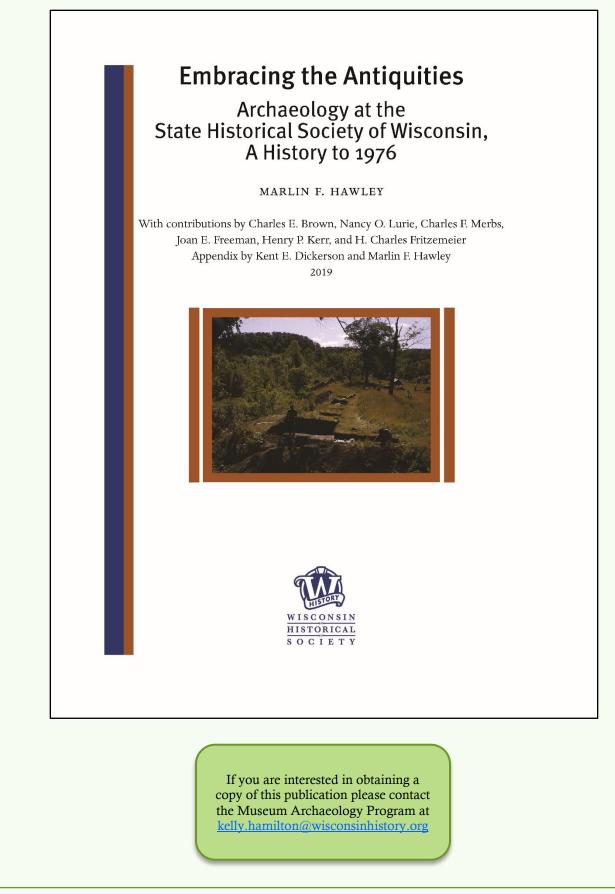


e freighter Lakeland sank in 1924 nine miles off the shores of Door County. It is still surrounded by a spilled go of Nahi, Kissel, and Rolin automobiles. Following accusations of insurance thoud, divers descended 200 feet the wreck to investigate — becoming the fest to test helium-axygen technology in the field. The divers surfaced In the bench, and the experiment was considered a failure. In 1937, Mileaukee residents Dr. Edge End and er Max 'Gone' Noh tested the mixture successfully, setting a new deep-diving record. Their groundwork enabled dem socks down to visit this deep water wreck and others like it. The wreck of the Laketand is listed on the tonal Register of Historic Places for its role in the history of underwater exploration.

wihist.org/hpa-month

The Wisconsin Historical Society's efforts depend on support from members. Learn more and become a member at wisconsistiliatory.org/membership

The following is an excerpt from:



Embracing the Antiquities, Archaeology at the State Historical Society of Wisconsin, A History to 1976

by Marlin F. Hawley 2019

Chapter 1 Introduction

Setting aside the thorny questions attending the very origins of historical and archaeological consciousness[1], as Americans pushed their way westward across the continent, learned societies sprang up in their wake. In his seminal study of American historical societies, Walter Muir Whitehill mused that, "...in the Mississippi valley historical societies were formed before there was any considerable body of history to record,"[2] by which he meant, of course, American or Euro-American history. From an anthropological perspective, however, there was already an abundance of history in the form of indigenous peoples and the vestiges of still earlier cultures (often conceptualized as "races")[3]. In consideration of the latter, one astute Wisconsin settler reflected: "We call this Continent the new world, almost viewing the west as in primeval freshness; yet we encounter on every hand, works originating in antiquity which we cannot penetrate, enveloped in mystery we cannot solve."[4] Intent as they were in recording American settlement as it happened, the early historical societies of the upper Mississippi valley and Great Lakes region also almost always acknowledged the region's derelict mounds, earthworks, and mines—in addition to, especially, stone and copper artifacts.

By the time the idea of an historical society was proposed in Wisconsin in 1846, there was already a considerable tradition of archaeological (or, if one prefers, antiquarian[5]) thought in the United States and the region and, thus, the subject rather naturally fit within the expansive mission of the State Historical Society of Wisconsin (aka Wisconsin Historical Society; herein SHSW or, when contextually clear, Society). Like other regional historical societies—Michigan and Illinois, in particular-the SHSW had a protracted birth. The Historical Society of Michigan formed in 1828 and faded away in the 1840s only to be reconstituted in 1857, while the Illinois Antiguarian and Historical Society was established in 1827, died in 1830, and was reborn in 1899 as the Illinois Historical Society.^[6] The SHSW, too, shuddered into life; first founded in 1846, it was reorganized in 1849 and formally chartered in 1853. During its 1849 reorganization, one of its principals, Increase A. Lapham, proposed a resolution for the collection of data on mounds from surveyors, while General William Rudolph Smith, the SHSW's secretary, ruminated upon the state's mounds and their authorship.[7] Following its charter, Lyman C. Draper (1853-1886) was named the corresponding secretary, which was to be a turning point for the Society. The success of early historical societies depended on any number of factors, such as location, population and resources, but also "to a considerable degree upon the personal interests and abilities of the individuals who ... shaped them in critical periods...."[8] Draper and his successor, Reuben Gold Thwaites (1887-1913), were extraordinarily effective in propelling the SHSW forward, each in their unique way shaping it into one of the most prominent state historical societies of the midcontinent.

Where antiquities were concerned, Draper's interest was immediate. Over the course of his tenure archaeology papers featured regularly in the Society's flagship publication, the *Wisconsin Historical Collections* and the Society even made its first hesitant foray into the

field. Thwaites was more circumspect, but he both expressed interest in archaeology and, more to the point, in the first decade of the twentieth century was at pains to ensure its integration into the overall mission of the Society. To accomplish this, in 1908, he forged ties to the Wisconsin Archeological Society (WAS), by hiring Charles E. Brown, one of its founders and its secretary and editor of *The Wisconsin Archeologist*, to oversee the State Historical Museum. Under Brown's direction, the Society developed its own field program, albeit a program intertwined for many years with that of the WAS. After Thwaites's death, Brown continued to anchor archaeology at the Society until his retirement in 1944. In the interwar years, Brown directed several New Deal work relief archaeology projects, all of modest scale, in southern Wisconsin.

Fieldwork stalled in the United States during WWII, but archaeology persisted at the SHSW through the war and immediate post-war years in a succession of anthropology curators, namely Brown, and then Suzanne W. Miles and Mary D. Sward. Although at the SHSW for only a few years, Miles and Sward ably represented the discipline in the critical war and immediate post-war years. After their departure, the SHSW continued to employ archaeologists, namely Robert L. Hall and Warren L. Wittry, and also contributed modest amounts of money and staff time to help the newly constituted Wisconsin Archeological Survey (herein Survey) carry out its annual research program. In time, Wittry would come to devote much effort at the Society to unravelling the "deep-time" history of the state's original inhabitants, as well as in the creation of a viable highway salvage archaeology program. The latter arose in the wake of the Interagency Archeological Salvage Program (IASP) and River Basin Surveys (RBS), the Federal-Aid Highway Act of 1956, and other federal heritage legislation that followed. The highway archaeology program Wittry shepherded into existence remains one of the oldest, longest running, in the United States. It was administered after Wittry's departure by Donald L. Brockington and then Joan E. Freeman and a succession of assistants, including William Wilson, Joseph Brandon, John R. Halsey, and John T. Penman. During the Freeman years, the Society carried out fieldwork on behalf of the Highway Commission (later Wisconsin Department of Transportation) and other state agencies, as well as federal and several private entities.

With the National Historic Preservation Act of 1966 and later amendments to it, archaeology at the Society bifurcated, with on the one hand, the field program operating within the Museum Division, and on the other, a regulatory branch within the Historic Preservation Division. Archaeology is currently the purview of the Museum Archaeology Program, which continues the Highway Salvage program, and the Division of Historic Preservation and Public History, in which are found the Office of the State Archaeologist and the regulatory State Historic Preservation Office, the Maritime Archaeology Program, and the Burial Sites Office. These latter developments lay beyond the period covered by this paper, which follows the development of archaeology, as it evolved (along with Americanist archaeology in general) through the late nineteenth century as a natural history-oriented pursuit (when archaeology at the Society was object-centered with strong emphasis on collection and exhibition) through the culture history of the mid-twentieth century up into 1976, on the cusp of the era of modern cultural resource management (CRM). While originally intended to bring the story of archaeology at the Society into the present millennium, this proved difficult as the volume of pertinent information has, not surprisingly, ballooned in recent decades. At the same time, "a history carried close to the present by a member of the community being described is a difficult undertaking...,"[9] to quote the historian George W. Stocking, Jr. in a somewhat similar context. For these reasons, this manuscript concludes, in some ways, admittedly, just as things start to get really interesting, with the rise of private-sector, for-profit CRM, Native American Graves

Protection and Repatriation Act (NAGPRA) and other issues in American archaeology looming on the horizon. After 1976, the story awaits another would-be historian.

Throughout its existence, the Society has been known primarily for its paper collections, which accumulated in rapid fashion through the efforts of its directors and librarians. Archaeology has been an aspect of the Society's mission from its earliest days, but it has tended to be overshadowed throughout much of the Society's storied history. Reflecting on the "line between history and archaeology," the French prehistorian, Alain Schnapp, concludes:

Once we look back at the origins of humankind, the answer is obvious: without prehistoric archaeology, there can be no prehistoric history. Where writing is unknown, where the transmission of memory from one generation to the next fails, only archaeology—the exploration of the material traces left by those who came before us—can make up for the lack of any other sources.[10]

Most of the history of what is now Wisconsin occurred prior to European contact and even after contact with Native Americans, large portions of the State's residents (natives and newcomers) continued to live and die outside the margins of recorded history. In its ability to compare and integrate the written record, oral tradition, and the material remains of the past, native or otherwise, archaeology has provided the Society a unique means to incorporate all aspects of the human past in the state into its mission. Finally, archaeology and anthropology have provided the Society with, especially in recent times, an avenue of interaction with Wisconsin's large, diverse, and active Native American communities.[11]

Chapter 2 A Call to Arms

From the SHSW's earliest formulation, archaeology has played a role in its mission. That a state historical society should be created "to collect from the pioneers when alive, such facts in regard to the early history of Wisconsin as they might possess,"[12] was first publicly articulated in the fall of 1845, with several of the territory's newspapers taking up the call. In the autumn of 1846, the first, tentative organizational meetings were held in Madison in conjunction with the first constitutional convention. At the second of these meetings, several influential men, including former territorial governor James D. Doty, moved to establish an historical society for the new state with it to be located in the Capitol building. In reality little more than a gentlemen's club, a "sort of atrophy afflicted the incipient Society."[13] No dues were collected and attendance barely rose into double digits, which was perhaps suited for relaxing with a brandy and fine cigar but wholly inadequate otherwise. As shaky as its footing was, the *idea* of a state historical society was at least kept alive and in 1849 the Society was reorganized. As outlined in Section 2 of the constitution of the revivified SHSW, its goal "shall be to preserve the materials for a complete history of Wisconsin *embracing the antiquities*, and the history of the Indian tribes [emphasis added]."[14]

The mission of the new society encompassed not only the totality of the early European exploration, colonization and settlement, but also the contemporary Native American and precontact aboriginal past. In light of the presence of men such as the Reverend Alfred Brunson, former territorial governor James D. Doty, Increase A. Lapham, and General William Rudolph Smith, the impetus for the inclusive vision guiding the new society is readily discernible. Governor Doty and several others of the founding cohort manifested deep concern in various aspects of the region's Native American peoples, including history, language, and customs, while the Reverend Brunson's concern extended to archaeological aspects of the past. General Smith, twice a Society organizer, president following its rejuvenation in 1853, and the author of the 1838 volume, Observations on the Wisconsin Territory; Chiefly on That Part Called the *"Wisconsin Land District,"* also evinced a deep concern in the region's antiquities, offering insightful speculations upon their origin (Figure 1). Smith thought that the mission of the Society should be "an industrious search into the remote history of our region of the country, an accurate investigation of its remaining evidences of antiquity and faithful record of the events of our time ... [emphasis added]."[15] Perhaps none of the founders, though, equaled in antiquarian interest Lapham, whose involvement in itself was probably enough to ensure that archaeology would have a role in the nascent society.^[16]

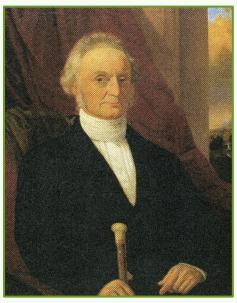


Figure 1. Portrait of General William Rudolph Smith

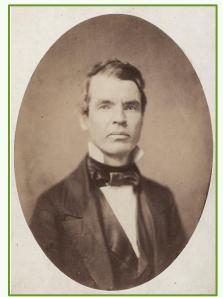


Figure 2. Portrait of Increase Lapham.

A man of seemingly boundless curiosity, Increase Lapham (**Figure 2**) developed an abiding fascination with the region's earthworks and effigy mounds, which he first observed in 1836 while working as a surveyor. His volume, *A Geographical and Topographical Description of Wisconsin*, published in 1844, offered a brief résumé of mounds and other earthworks found in the state and provided a fairly detailed description of the already famous "ancient city" of Aztalan.[17] At the first meeting of the reorganized society in January 1849, at Lapham's instigation, the Society resolved: "That the surveyors throughout this state be requested to furnish this Society with sketches from actual measurements of the ancient mounds and artificial earth-works in their vicinity."[18] This was 17 years after the Black Hawk War, and a little over a decade since expatriate British geologist Richard C. Taylor offered descriptions of the region's effigy mounds, the enigmatic animals of earth that ensorcelled antiquarians and the public alike

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in the United States and abroad.[19] (Long before it could lay claim to the sobriquet of the Dairy State, Wisconsin was the Effigy Mound State.) In any event, with little new information forthcoming, Lapham took to the field, traveling about southern Wisconsin recording and mapping mound sites, assisted by such likeminded men as Baraboo's William H. Canfield (**Figure 3**). Through this effort, he created an irreplaceable record of numerous mounds and other earthworks in the southern part of the state, many of which were destroyed in the years to come (**Figure 4**). The Society could offer nothing in the way of financial support, so Lapham turned to the prestigious, Massachusetts-based, American Antiquarian Society to sponsor his research. His monograph, *The Antiquities of Wisconsin, as Surveyed and Described*, was published by the Smithsonian Institution in 1855 as *Contributions to Knowledge* 7.[20]



Figure 3. Map showing mound sites recorded by Increase Lapham.

During the mid-nineteenth century there was as yet no general consensus that extant Native Americans, or rather their ancestors constructed the thousands of mounds and other earthworks found not only in Wisconsin but throughout much of the eastern United States. Many scholars had, by mid-century, concluded that the mounds had in fact been built by the ancestors of contemporary native peoples, but the idea that a race (or races) more advanced and more populous than the Native Americans, often referred to as the Mound Builders, had done so also colored archaeological discourse and the popular imagination through the remainder of the century and into the next. The extinct Mound Builder culture was alleged, by some, to have met its demise at the hands of the Native Americans (a notion that arguably dovetailed with the midcentury doctrine of Manifest Destiny).[21]

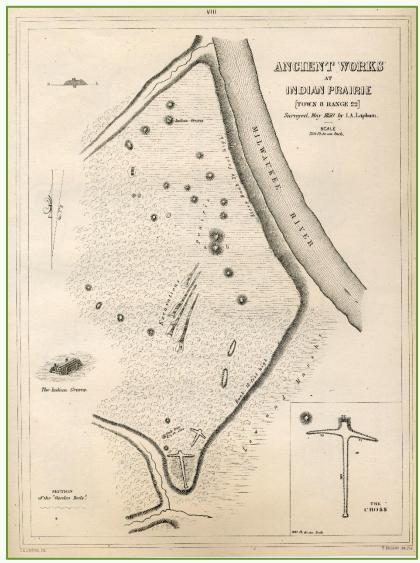


Figure 4. Increase Lapham's illustration of the Indian Prairie mound site.

The Mound Builder narrative contained a kernel of truth, in that the continent indeed had formerly been more heavily populated, but the more populous, more advanced societies were Native American and *not* non-Indian people(s). While occasionally glimpsed, it would take time to fully comprehend the calamitous effects of contact with European civilization, which over the course of a century or so unleashed repeated waves of pandemic disease (introduced by Europeans, African slaves and livestock), against which the hemisphere's indigenous peoples had no resistance, as well as violence, enslavement, and sweeping environmental changes. As a result of these, populations throughout the Americas declined by as much as 90 percent (one recent estimate puts the death toll at some 55 million dead) and many native societies collapsed or passed into extinction; those that survived often experienced severe dislocation and reorganization.[22] General Smith, writing in 1838, intuited the effects such disruptions might have on traditional knowledge (though he misapprehended inter-tribal violence as the causal agent), suggesting that although the oldest Native Americans questioned knew nothing of the origins of the mounds:

It is true that the ignorance ... may be accounted for by the supposition that centuries have elapsed since the tenants of the tombs were deposited here, and the numerous exterminating wars of the several bands that in succeeding times inhabited this country, has totally destroyed even the organs through which tradition might be carried down to us.[23]

Lapham, too, was among the scholars who rejected the hypothesis that the Mound Builders-were a separate race, inferring that the mounds had been constructed by the ancestors of the region's Native Americans:

> The ancient works in Wisconsin are mostly at the very places selected by the present Indians for their abodes; thus indicating that the habits, wants, modes of subsistence, &c., of their builders, were essentially the same.

> If the present tribes have no traditions running back as far as the times of Allouez and Marquette, or even to the more recent times of Jonathon Carver, it is not strange that none should exist in regards to the mounds, which must be of much earlier date.

It is by considerations of this nature that we are led to the conclusion that the mound-builders of Wisconsin were none other than the ancestors of the present tribes of Indians.[24]

[1] Both spring from what might be called the backward glance, but archaeology especially proceeded from recognition of objects (artifacts) and landscape features (mounds, etc.) as of human origin.

[2] Walter Muir Whitehill, *Independent Historical Societies* (The Boston Athenaeum, 1962), 243. In this era, too, natural history and other learned societies rose and fell in great numbers in communities across the eastern United States; Ralph S. Bates, *Scientific Societies in the United States* [3rd edition] (The MIT Press, Cambridge, Massachusetts, 1965).

[3] On the concept of "race," variously used as a synonym with tribe, nation and race proper (i.e., biological race), as it was employed by nineteenth century thinkers, see Terry A. Barnhart, *American Antiquities* (University of Nebraska Press, Lincoln, 2015), 3–4, *passim*. The volume is an excellent introduction to eighteenth and nineteenth–century American archaeological thought.

[4] Jacob W. Rogers, "Ancient Ruins and Mounds in Wisconsin and Illinois–Indian Traits–Indians," *Vermont Chronicle*, August 2, 1848, p. 2. Bellows Falls, Vermont. Rogers was born in New Hampshire in 1820 and settled in 1845 in what is now Green County; in 1849, he relocated to Iowa, where he was an influential abolitionist, businessman, judge, and legislator. He died in 1900; https://www.legis.iowa.gov/legislators/legislator?ga=5&personID=5838, December 21, 2016.

[5] "Archeology is the science commonly known by the name Antiquities. The latter expression is too vague, seeing that the knowledge of antiquities, reduced to a theory, ought, in common with the other sciences, to be designated by a particular and univocal name. We ought, therefore, to say archeology, as we say mineralogy, zoology, physiology, &tc"; A.L. Millen, "Introduction to the Study of Archeology, or the Knowledge of Antique Monuments," *The Monthly Magazine* 17, no. 112 (1804):135.

[6] Phillip P. Mason, "Trans–Mountain States: Alabama, Illinois, Indiana, Kentucky, Michigan, Mississippi, Ohio, and Tennessee," in *Historical Consciousness in the Early Republic, The Origins of State Historical Societies,*

Museums, and Collections, 1791–1861, edited by H.G. Jones (The North Caroliniana Society, Inc., Chapel Hill, 1995), 125–165. Leslie H. Fishel, Jr., "Wisconsin," (pp. 162–187) in the same volume discusses the Draper years, while Alfred E. Lemmon's paper, "Trans–Mississippi States: Arkansas, California, Iowa, Louisiana, Minnesota, Missouri, Oregon, and Tennessee," (pp. 188–216) reviews other upper Mississippi valley historical societies (Iowa, Minnesota). Although older, Whitehill's volume covers the history of all of the upper Mississippi and Great Lakes region historical societies in a fair degree of detail to ca. 1960.

[7] "State Historical Society," *The Wisconsin Democrat*, Madison, February 3, 1849, p. 3; "State Historical Society," *Wisconsin Express*, Madison, February 6, 1849, p. 3. Throughout at least the early part of this narrative, I have relied heavily upon Clifford L. Lord and Carl Ubbelohde, *Clio's Servant* (SHSW, Madison, 1967) and, to a lesser extent, upon John Zimm's compact volume, *The Wisconsin Historical Society* (Wisconsin Historical Society Press, Madison, 2015), which came along late in its preparation.

[8] Whitehill (1962), 269.

[9] George W. Stocking, Jr, *Anthropology at Chicago* (University of Chicago Library, Chicago, 1979), 3. Stanley A. Freed, in his magisterial history of the Department of Anthropology at the American Museum of Natural History, *Anthropology Unmasked*, (Orange Frazer Press, Wilmington, Ohio 2011), xix elaborates on the same point. For the record, I began working for the Museum Archaeology Program at the SHSW April 14, 1997.

[10] Alain Schnapp, "The Birth of the Archaeological Vision: From Antiquaries to Archaeologists," *West 86th: A Journal of Decorative Arts, Design History, and Material Culture*, 21, no. 2 (2014): 216. Many Native American peoples object to this dichotomy, however, as it privileges text over cultural tradition; operationally, many archaeologists also reject it as arbitrary, e.g., Clayton Fredericksen, "History and Prehistory: Essential Dichotomy or Arbitrary Separation?," *Australian Archaeology* 50 (2000): 94-97.

[11] This is obviously a by-product of the historic relationship between archaeologists and Native Americans arguably rooted in colonialism—about which there is an enormous literature ranging across a wide spectrum of perspectives, and is not intended as self-congratulatory. On this latter aspect of recent interactions between archaeologists and native peoples, see C.N. Matthews, "Is Archaeology Political? Transformative Praxis within and against the Boundaries of Archaeology," *Public History* 31, no. 1 (2009): 79–90. A thoughtful overview of the larger topic is Chip Colwell–Chanthaphonh, "Reconciling American Archaeology & Native America," *Daedalus* 138, no. 2 (2009):94–104, while David Hurst Thomas's older book, *Wars: Kennewick Man, Archaeology, and the Battle for Native American Identity* (Basic Books, New York, 2001) remains informative on the complex issues attending to the relations between archaeologists, biological anthropologists, and Native Americans.

[12] Peter Leo Johnson, "The Founding of the State Historical Society of Wisconsin," *The Wisconsin Magazine of History* 26, no. 3 (1942):73. Richard H. Magoon, a surveyor, lawyer, and lead miner in the Mineral Point area, Lafayette County, Wisconsin apparently first proposed the formation of a state historical society; Lyman C. Draper, "Wisconsin Necrology, 1874–75," *Wisconsin Historical Collections* 7 (Madison, 1876), 470.

[13] Johnson (1942):75.

[14] Charles Lord and John W. Hunt, "Early Records of the Society, 1849–54," *Wisconsin Historical Collections* I (1855; reprint 1903) edited, with additional material by Reuben Gold Thwaites, pp. xxxvi.

[15] Quoted in David D. Van Tassel, "William Rudolph Smith, a Cultural Capitalist," *The Wisconsin Magazine of History* 36, no.4 (1953):278. Smith was a lawyer, legislator, historian and first president of the SHSW. Born in Pennsylvania in 1787, Smith's early life was spent in his native state, where he practiced law, commanded the Pennsylvania Reserves in the War of 1812 and served in both houses of the state legislature. Following appointment as a commissioner to meet with the Chippewa regarding land cession in Wisconsin territory, he traveled west and in 1838 took up residence with his family in Mineral Point. Throughout the remainder of his life, he remained active in civic affairs, including as clerk of the state Senate and attorney general. General Smith was also a Society stalwart from its earliest days until his death in 1868; John Goadby Gregory, "Biographical Sketch of General William Rudolph Smith," in *Incidents of a Journey from Pennsylvania to Wisconsin Territory, in 1837* (Wright Howes, Chicago, 1927).

[16] Clifford L. Lord and Carl Ubbelohde, Clio's Servant: The State Historical Society of Wisconsin (SHSW, Madison, 1967), 3-9; Alfred Brunson, "Ancient Mounds or Tumuli in Crawford County," Wisconsin Historical Collections 3 (1857; reprint 1904): 178-184; Alfred Brunson, "Early History of Wisconsin," Wisconsin Historical Collections 4 (1859):223-251; Hiram Calkins, "Indian Nomenclature and the Chippewas," Wisconsin Historical Collections I (1855; reprint 1903); 119–126; Joshua Hathaway, "Indian Names," Wisconsin Historical Collections I (1855; reprint 1903): 116–118; for Governor Doty's interest in Native Americans, see, for instance, James Duane Doty, "Northern Wisconsin in 1820," Wisconsin Historical Collections VII (1908): 195-206; "Papers of James Duane Doty," Wisconsin Historical Collections XIII (1895): 163-246; Doty also donated to the Society numerous Native American ethnographic items, including pipes, knives and beaded objects; William Rudolph Smith, Observations on the Wisconsin Territory; Chiefly on That Part Called the "Wisconsin Land District" (E.L. Carey and A. Hart, Philadelphia, 1838), 69-74 and "Journal of William Rudolph Smith," The Wisconsin Magazine of History 12, no. 3 (1929):310, 311 and another version of the same, Incidents of Journey from Pennsylvania to Wisconsin Territory, in 1837, which also contains biographical and autobiographical sketches of and by Smith. In the latter version of the journal. Smith noted that on August 19, 1837, his companions opened a mound near presentday Madison. The previous day, Smith's group passed "mounds resembling entrenchments" (p. 64). Dues were finally instituted; in 1851 these were \$.50/year; "State Historical Society," Milwaukee Daily Sentinel and Gazette, January 27, 1851.

[17] Increase A. Lapham, "Antiquities of Wisconsin," *The Milwaukee Advertiser*, November 24, 1836, p. 2; Lapham, *A Geographical and Topographical Description of Wisconsin* (I.A. Hopkins, Milwaukee 1844); second enlarged edition, published in 1846 as *Wisconsin, Its Geography and Topography* and reprinted in 1999 by Ayer Company Publishers, Inc., North Stratford, New Hampshire. Citation here is to the reprint of second edition, pages 16–18, 144–145. For additional information on the early history of investigations of Aztalan, see John D. Richards, "Viewing the Ruins: The Early Documentary History of the Aztalan Site," *The Wisconsin Magazine of History* 91, no. 2 (2007/2008):28–39. [Charles] A. Alexander's poem, "The Fall of Aztalan," acknowledged the site; A. Alexander, *The Fall of Aztalan and Other Poems* (W.M. Morrison, Washington, DC, 1839), 10.

[18] Lord and Hunt (1903), xxxvi; Johnson (1942):76; "State Historical Society," *The Wisconsin Democrat*, Madison, February 3, 1849, p. 3.

[19] Richard C. Taylor, "Notes Respecting Certain Indian Mounds and Earthworks, in the Form of Animal Effigies, Chiefly in the Wisconsin Territory, U.S.," The American Journal of Science and Arts 34 (1838):88–99, plates. Taylor, incidentally, travelled in the company of fellow Englishman and geologist, George W. Featherstonhaugh, who also commented on the effigy mounds in the press, see "Scenes and Incidents in the Far West," Daily National Intelligencer, Washington, DC, July 10, 1837, p. 2 and his 1847 book, A Canoe Voyage up the Minnay Sotor, Volume 2, (R. Bentley, London), 90–93. Taylor induced the self-exiled, French Bonapartist, topographical engineer, Jean-Baptiste (aka John B.) Petitval (who was then surveying the Fox River for the federal government) to explore some of them. Petitval reported to Taylor that he had had a dozen excavated. These were somewhere on modern Buffalo Lake. General Smith visited, but did not record in the level of detail that Taylor did, a number of animal effigies in the Mineral Point area as early as 1837, remarking upon the mounds in his volume, Observations on the Wisconsin Territory; Chiefly on That Part Called the "Wisconsin Land District" (E.L. Carey and A. Hart, Philadelphia, 1838), 69-74. Subsequently, in 1839, John Locke, a physician with the geological expedition of David Dale Owen, revisited some of Taylor's sites, confirming the particulars of his report; "Report of John Locke, M.D.," Report of a Geological Exploration of Part of Iowa, Wisconsin, and Illinois (28th Congress, 1st Session, Senate Doc. No. 407, Washington, DC, 1844), pp. 176–177, plates. By the time Locke's report was published, Stephen Taylor (unrelated to Richard C. Taylor), a Philadelphian dispatched to the Lead Region to establish an Odd Fellows lodge in Mineral Point, had issued his own paper, "Description of Ancient Remains, Animal Mounds, and Embankments, Principally in the Counties of Grant, Iowa, and Richland, in Wisconsin Territory," The American Journal of Science and Arts 44 (1843):21-40, plates. Increase A. Lapham's volume, A Geographical and Topographical Description of Wisconsin. (P.C. Hale, Milwaukee, 1844) and its second edition, Wisconsin, Its Geography and Topography (I.A. Hopkins, Milwaukee, 1846) offered descriptions of mounds and of Aztalan, as did Donald McLeod's History of Wiskonsin (Steele's Press, Buffalo, New York, 1846).

[20] Lapham's volume *The Antiquities of Wisconsin, as Surveyed and Described*, Smithsonian Contributions to Knowledge No. 7 (Washington, DC, 1855; reprint 2001) was the fullest early report on effigy mounds about the state. On Lapham and his varied interests and achievements, see Robert P. Nurre, "Introduction: The Making of *The Antiquities of Wisconsin, As Surveyed and Described*," in Lapham (2001), xia–xxva; Samuel S. Sherman, *Increase A. Lapham, LL.D., A Biographical Sketch Read Before the Old Settler's Club, Milwaukee, Wisconsin, December 11*,

1875 (Milwaukee News Company, Printers 1876); Charles Mann, A Memorial: Increase Allen Lapham (WNHS, Milwaukee, 1876); P.R. Hoy, "Increase A. Lapham, LL.D., Transactions of the Wisconsin Academy of Sciences, Arts, and Letters 3 (1876): 264–267; Milo M. Quaife, "Increase Allen Lapham, First Scholar of Wisconsin," The Wisconsin Magazine of History 1 (1917–1918): 3–15 and "Increase Allen Lapham, Father of Forest Conservation," The Wisconsin Magazine of History 5, no. 1 (1921):104–108; Edward P. Alexander, "Instigator of the Weather Bureau," Science 99, no. 2570 (1944):261–262; Walter E. Scott, "An Appreciation of Increase Allen Lapham," The Wisconsin Academy Review 22, no. 1 (1975): 20–28; Michael Edmonds, "Increase A. Lapham and the Mapping of Wisconsin," The Wisconsin Magazine of History 68, no. 3 (1985):162–187; Paul G. Hayes, "Increase Allen Lapham," A Useful and Honored Life," Wisconsin Academy Review 42, no. 2 (1995):12–15. This is but a smattering of the many Lapham biographical sketches, many focused on specific aspects of his varied interests. A book length Lapham biography, written by Martha Bergland and Paul G. Hayes, is Studying Wisconsin: The Life of Increase Lapham (Wisconsin Historical Society Press, Madison, 2014).

[21] For differing views on the Mound Builder myth, see Gordon R. Willey and Jeremy A. Sabloff *A History of American Archaeology* [3rd ed.,] (W.H. Freeman, New York, 1993); Robert Silverberg *The Moundbuilders* (The New York Graphic Society, Greenwich, Connecticut, 1968); Robert C. Dunnell, "Methodological Impacts of Catastrophic Depopulation on American Archaeology and Ethnology," in, *Columbian Consequences*, Volume 3, *The Spanish Borderlands in Pan–American Perspective*, edited by David H. Thomas (Smithsonian Institution, Washington, DC, 1991), 561–580; Robert C. Dunnell, "Prehistoric Archaeology [in the] United States of America," in, *Encyclopedia of Archaeology: History and Discoveries*, Volume III, N–Z, edited by Tim Murray (ABC–CLIO, Santa Barbara, 2001), 1289–1307; Cynthia Van Gilder and Douglas K. Charles, "Archaeology as Cultural Encounter: The Legacy of Hopewell," in, *Theory, Method, and Practice in Modern Archaeology*, edited by Robert J. Jeske and Douglas K. Charles (Praeger, Westport, Connecticut, 2003), 114–132, and, most recently, Barnhart (2015) and Jay Miller, *Ancestral Mounds: Vitality and Volatility of Native America* (University of Nebraska Press, Lincoln, 2015).

[22] Barnhardt (2015); Miller (2015). The anthropologist Eric R. Wolf bleakly referred to the concatenation of these forces as "the great dying;" Eric R. Wolf, *Europe and the People without History* (University of California Press, Berkeley, 1982), 133. Scholars continue to debate pre- and post-contact population estimates for the Americas and the full extent of the impact(s) of contact, not only on indigenous populations, but also the environment; Alexander Koch, Chris Brierly, Mark M. Maslin, and Simon L. Lewis, "Earth System Impacts of the European Arrival and Great Dying in the Americas after 1492," *Quaternary Science Reviews* 207 (2019):13-36, for instance, implicate population decline, large-scale disruption to native agrosystems, and secondary succession in the onset of the Little Ice Age.

[23] William R. Smith, *Observations on the Wisconsin Territory; Chiefly on That Part Called the "Wisconsin Land District,"* (E.L. Carey & A. Hart, Philadelphia, 1838), 71. Miller (2015) demonstrates that a considerable, though disparate and far-flung, body of knowledge regarding the construction of mounds did survive "the great dying."

[24] Lapham (1855; 2001), 90.

Archaeology News & Notes

Dogs Accompanied the First People into the Americas 15,000 Years Ago

A study by a team led by Angela R. Perri at Durham University and published in the *Proceedings of the National Academy of Sciences* in January 2021, analyzed DNA data from hundreds of ancient and modern dogs. The movement of humans was found to closely mirror the movement of dogs into and across the American continent. Their genetic signatures were related back to humans and dogs in Siberia.

Research indicates dogs were first domesticated in Siberia from a gray wolf ancestor over 23,000 years ago. They moved east through Beringia into the Americas and west into the rest of Eurasia. By 15,000 years ago the dogs in the Americas consisted of four populations. Wolves are thought to have initially been attracted to campsites for food scraps and acquired a relationship with humans that over time led to their domestication.

The earliest domesticated dog remains in the Americas have been identified at the Koster and Stilwell II sites in Illinois, dating to about 10,000 years ago. David Meltzer, from Southern Methodist University and one of the coauthors of the study, said "Dogs were part of humans' technical repertoire, like stone tools. They probably offered a good advantage"



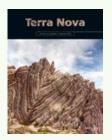
Baraboo Quartzite Gastroliths Suggest Long-Distance Dinosaur Migration

A study of five gastroliths identified as Baraboo Quartzite collected from the Morrison Formation in the northeastern Bighorn Basin of Wyoming indicates long-distance transport by dinosaurs, most likely sauropods. The report by a team led by Joshua R. Malone with Augustana College is in the February 2021 issue of the science journal Terra Nova. The rounded and polished red quartzite gastroliths were dated by analysis of the detrital zircon. The zircon age and color, texture and composition of the quartzite are indistinguishable from Baraboo interval quartzites present in southcentral Wisconsin.

The team suggests that during deposition of the Morrison Formation during the Upper Jurassic, midcontinental rocks were exposed by Appalachian-derived rivers and tributaries that flowed to the west and southwest. The dinosaurs could have ingested the stones from Baraboo outcrops or from stream gravels derived from these outcrops. No Jurassic Age rocks or dinosaurs of any kind have ever been found within Wisconsin.

The recovery of gastroliths which originated in the mid-continent suggested to the authors to be the result of long-distance (ca. 1,000 km) migration of sauropods associated with a low energy, low gradient stream flowing west from the Appalachian Mountains the to Morrison depositional formation basin. They hypothesize that this migration was in response to alternately wet and dry monsoonal seasons to find water and food. Distributional studies of lithic raw

material in the western U.S. may now have to account for dinosaur behavior to explain the presence of Midwestern lithics.



The Decline of North America's Copper Culture (8000-3000 BP), Explored in New Study

A study by Michelle R. Bebber, Kent State University, examines a longstanding enigma in North American The research was archaeology. published online in January 2021 by the Journal of Archaeological Method and Theory. Why did the use of copper for utilitarian implements decline so dramatically following the Middle/Late Archaic traditions just and when population social complexities increased during the succeeding Woodland traditions? The once wide-spread copper technology suggests that copper tools were superior to stone tools and hence their wide-spread use for thousands of years. So why didn't copper continue to be used to make tools in the same frequency into later prehistory?

The author addresses this issue through an extensive experimental program which compared replica copper tools to ones made from stone or bone to examine the role functional efficiency may have played in this decline. This study also incorporated

WisArch News

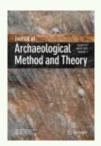
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population dynamics and ecological change that suggests a more complex relationship to explain this enigma.

Towards the end of the Archaic Period copper usage became more ritualized and less utilitarian. The author notes that this pattern is unlike what is observed with other cultural settings around the world.

She concludes that a significant factor in the decline was due to the inefficiencies inherent with copper tools, and the cost in time it took to find the copper and expertise needed in the production of useful tools. The cost simply outweighed the benefits in performance. This factor, along with more time needed to procure subsistence strategies as a result of a dryer, less predictable climate; more group competition and significant social issues as population increased. led to a significant decline in the production and use of utilitarian copper tool by the beginning of the Woodland Period.

These complex relationships explain the pattern of copper decline: selection against the most costly (heavy, utilitarian) copper tools, and selection for efficient tools such as the awl and relegation of copper as personal ornamentation.



The Wood-Overuse Hypothesis for Cahokia's Decline Questioned

Research led by Caitlin G. Rankin from the Department of Anthropology at Washington University in St. Louis, and published as a research article in the journal *Geoarchaeology*, evaluates the narrative of ecocide at the Cahokia Mounds State Historic Site. The term "ecocide" refers to ecological decline resulting from human induced activities. The concept is based on the philosophy that sees humans as fundamentally destructive to the environment.

The overuse of wood at the site, whose population is estimated to have reached 15,000 by AD 1100, has been a persistent explanation for site collapse which is dated to AD 1400. The hypothesis is that the clearing of trees in the uplands, presumably for building material and firewood, resulted in flooding of the creeks and floodplain occupied by Cahokia Mounds. As a result, farming was relocated to the uplands which further enhanced the amount of erosion and flooding.

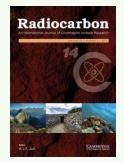
This article presents further negative evidence for this hypothesized flooding and rejects the wood-overuse hypothesis to explain the decline and abandonment of Cahokia. Although an increase in upland habitation is documented, no evidence of floodplain flooding was documented during abandonment. The authors conclude by examining reasons why such theories have persisted so long to explain the collapse of Cahokia.



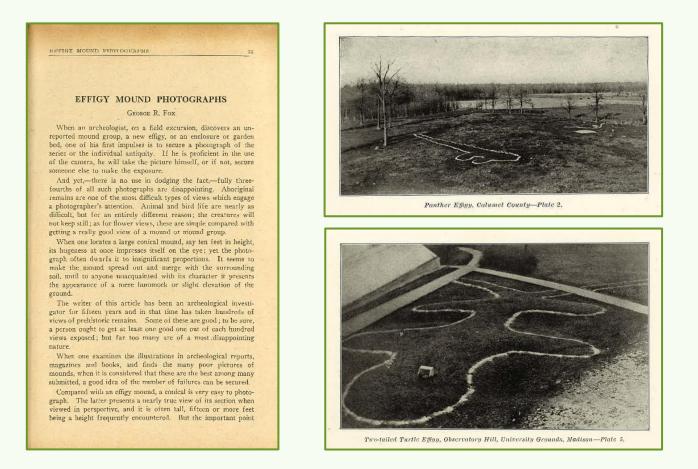
New Dates Push Copper Use in North America to World's Oldest

A new timeline for copper use in the western Great Lakes indicates the Old Copper Complex emerged at least 9500 years ago. The study, led by David Pompeani, a geologist at Kansas State University, Manhattan, is published in Volume 63 of the journal Radiocarbon in 2021. Modern methods were used to reanalyze 53 radiocarbon dates, including eight newly dated artifacts, associated with a variety of Old Copper contexts. The results of sediment analysis from soil cores extracted from lakes adjacent to ancient copper mines of the Keweenaw Peninsula and Isle Rovale were combined with the dates and indicated copper mining began 9500 years ago and ended 5400 years ago. This is some 3500 years earlier than previously thought.

The study provides evidence that Native Americans living in the western Great Lakes were among the first people to mine and fashion tools from copper in the world. The oldest reliably dated artifact from the study was a conical point recovered near Eagle Lake in Northern Wisconsin, which was dated to 8500 years ago. Early copper working has also been identified in the Middle East where a copper pendant has been documented to be 8700 years old.



Back Dirt: 100 Years Ago in the Wisconsin Archeologist



The April 1921 issue of the *Wisconsin Archeologist* has a short, lead article by Charles E. Brown on Flint Scrapers. It includes a formal classification scheme proposed by Warren. K. Moorehead.

The issue also includes an interesting article by George R. Fox on the perils involved with photographing effigy mounds. The effort to obtain a satisfactory photograph is painstakingly detailed with the results displayed in four photographic plates. Much of the effort involved carrying all the tools and ingredients to make lime whitewash, applying the lime to outline the mound shape and taking many photos with an early camera from the unsteady height of a nearby tree. Our current technology, including digital cameras and aerial drones, should not be taken for granted after reading this article.

Alanson Skinner authors *Recollection of an Ethnologist Among the Menomini Indians*. He describes several Menomini who, he relates: "in no way fundamentally different from the white man, so far as his make-up is concerned, yet viewing life and its adventures from a different standpoint from that of his white neighbors".

In Archeological Notes, gratitude is extended to Mr. Martin J. Weirick, for the excellent care he has given this last year to the Man Mound and Park outside Baraboo.

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