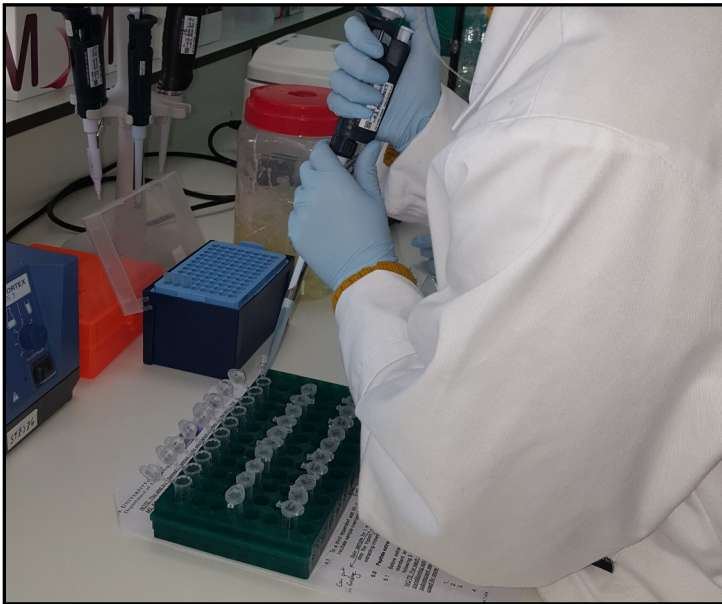


## Profile: Zooarchaeo Consulting



(Left) Laura Koski completing ZooMS testing at the University of York. (Right) Laura Koski (images courtesy of Laura Koski and the Council for Minnesota Archaeology)

### By Laura Koski

I started Zooarchaeo Consulting in 2018 with the aim of helping fill the small but necessary niche of faunal analysis in Minnesota's archaeological sphere with the additional branch of CRM-g geared GIS services. This combination of skills also allows me to complete in-depth spatial analysis of faunal remains at archaeological sites. Over the past three years, Zooarchaeo Consulting's projects have ranged from contracts for analysis of faunal assemblages large and small, technical report writing, predictive archaeological GIS models, and geodatabase builds for management of cultural resources at MNDNR and MNHS historical and archaeological sites. As the owner of Zooarchaeo Consulting, I am a member of the Minnesota Archaeological Society, the Vice President of the Council for Minnesota Archaeology, and just recently became one of the newest members of the International Council for Archaeozoology.

There are a number of research areas I have been pursuing to help broaden zooarchaeological understanding in Minnesota. Most recently, Zooarchaeo Consulting's research has focused on Minnesota's military foodways. During several years of completing faunal analysis for the materials Nienow Cultural Consultants, LLC recovered during their 2018-2020 archaeological research and testing completed at Fort Snelling's Lower and Upper Posts, it occurred to me how little the animal resources utilized at the fort had been researched. Majorly, it became clear how many separate archaeological surveys or excavations had occurred at the fort over the past 60 years which uncovered faunal remains, but many of those remains were yet to be analyzed. Or, if they had been identified, they were only understood in the context of their isolated excavation projects. *Continued p. 5*

## **Letter from the President**

*By Dan Wendt (MAS Board President)*

The letter from the MAS President is intended as a vehicle to inform the general membership of the Minnesota Archaeological Society of recent Board of Directors activities. The following is a brief recap of the events, discussions, and decisions that transpired during the past quarter and future plans.

We published Volume 77 of the *Minnesota Archaeologist* in 2020. The volume covered topics including the Grand Meadow Chert Quarry, the Mississippian Center at Trempealeau, and the Kensington Stone. The volume was originally slated for publication in 2018 so all members 2018 to current got a copy. Volume 78 will be published later this year and will include papers honoring Guy Gibbon. Thank you for your patience. We are working hard to catch up.

An updated style guide for the *Minnesota Archaeologist* has been created by our editor Danielle Kiesow. The guide provides instruction and templates to make it easier for both authors and editors. We are working on our publishing process to better serve this key purpose for MAS.

The first virtual meeting of the Council for Minnesota Archaeology was held in February. There were a series of posters and presentations that highlighted current research on Minnesota archaeology. There was broad participation in the event crossing multiple state lines and into Canada. Multiple conversations continued after the event highlighting the power of connecting in new ways.

We are looking forward to having our annual meeting in the fall perhaps coordinated with Archaeology Month in September. We will announce the 2021 recipient of the Hill Lewis Award and we will share thoughts on how MAS can reach for new ways to share our energy and enthusiasm, advocating for Minnesota's archaeological heritage. Follow our newsletter, Facebook and webpage for updates on the meeting and opportunities to get involved in Minnesota archaeology.

### **MAS Board**

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## Thor Olmanson (1959–2020) by Colleen Wells

Thor Albert Olmanson passed away December 4, 2020, after a battle with esophageal cancer. Having worked in the field for over forty years, Thor was well-known in the archaeological community—not only in the state of Minnesota, but also in places such as Iowa, Illinois, North Dakota, South Dakota, Wyoming, Montana, Idaho, Indiana, Kentucky, and Georgia. His first experience in the field of archaeology was in 1976, when he assisted with the reconstruction of a ca. 1500s



Hidatsa Indian farming village under the direction of Professor Michael Scullin. He began his professional career in 1978 working for Impact Services as a Field Archaeologist. He worked for a wide variety of organizations and agencies throughout his career, including the Nicolet County Historical Society, the Minnesota Historical Society, the Wyoming Office of State Archaeology, the Bureau of Land Management, and a variety of private archaeological consulting firms. Most recently, he served as Program Director for the Leech Lake Band of Ojibwe Heritage Sites Program (LLHSP), where he remained for nearly 17 years.

The second of six children, Thor was born on January 5, 1959, to Myron “Don” and Barb Olmanson of St. Peter, Minnesota. The family led an adventurous life, traveling to far-away places such as Burma, where his father—a physician—worked with the famous Dr. Seagraves, also known as the Burma Surgeon, when he was a small child. The family traveled to countless destinations around the world, providing the children with a diverse world view and understanding of different cultures and landscapes. He carried a love for travel into adulthood. Throughout his life, he traveled to such places as the Cayman Islands, the Bahamas,

Kenya, Ecuador, Mexico, and Belize.

Thor completed his undergraduate degree in Environmental Ecology with an emphasis in Human Ecology at Gustavus Adolphus College in 1981. He received his MS in Multidisciplinary Studies/Anthropology at Minnesota State University at Mankato in 2000, conducting his thesis research in Belize, where he studied splinter group migration patterns among Hutterites there.

After receiving his Master’s Degree, he worked in Indiana, Kentucky, Idaho, and Montana before returning to Minnesota in 2004 to work for LLHSP. He would remain there until his death. During his tenure there, he oversaw the survey of over 113,000 acres, the documentation of over 1,200 sites, and the excavation of dozens of sites. Of special significance to Thor was the Walker Hill Site, an early hilltop site discovered by LLHSP in 2005. While controversial, it gained attention at both the local and national level, along with the expected criticism and skepticism. In 2007, a complete diminutive point made of agate discovered at the site demonstrated that it was indeed cultural and not the result of natural geological processes. In 2019, he was able to return to the site and obtain OSL samples, which confirmed the suspected age of the site.

Thor became an icon of professionalism and expertise within the field of archaeology. The work he conducted and oversaw provided extensive information on the history and prehistory of Minnesota and the Headwaters Region in particular. He was well-respected, not only for his contributions to the field, but for his disarming nature and friendly personality.

*(continued next page)*



**Share your thoughts on Minnesota archaeology and find out what is happening right now across the state and region on our page.**

## Thor Olmanson (1959–2020) *continued*

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Thor had many passions and talents beyond his professional career. He was very artistic, making leather goods and beautiful jewelry from stone, metal, antler, fossils, and bone. He also loved the outdoors, nature walks, and his pets. He shared these passions with his beloved wife, Jill Stoffregen, with whom he shared a lifelong love. While their early lives had taken different directions, they were able to reconnect, fulfilling each other's lives in a way that nothing else could. He was a close confidant to his stepchildren, Sophie Draper and Robert Draper, and he shared many wonderful experiences with them as well as providing direction and guidance in their lives. In addition to his wife and stepchildren, Thor leaves behind his mother, five siblings, numerous cousins, nieces, nephews, and dear friends.



*Photos courtesy of Colleen Wells*

Thor passed peacefully at home, surrounded by his family and showered with love and kindness. Rest gently, Thor. We shall all miss you.

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### ***The Minnesota Archaeologist - Call for Papers***

If you recently presented at the biannual Council for Minnesota Archaeology Conference, have a paper ready, or are looking to publish an article on Minnesota or Upper Midwest archaeology, *The Minnesota Archaeologist* is currently looking for submissions to add to our article queue for publication in 2022 and 2023. We accept original research both in longform or shorter "Research Notes," book reviews for newer Midwest archaeology/anthropology publications, discussions on a recent volunteer project or experience, and student research. Please keep your article to no longer than 10,000 words, 10 figures, and 5 tables. A new style guide for *The Minnesota Archaeologist* was recently published for prospective authors in January, and can be accessed on the MAS website at [mnarchsociety.org/mnarch.html](http://mnarchsociety.org/mnarch.html) or you can email the Lead Editor, Danielle Kiesow, directly at [editor@mnarchsociety.org](mailto:editor@mnarchsociety.org) and Danielle will send you the style guide over email. We look forward to reading and publishing your work!

## Zooarchaeo Consulting *continued*

For this reason, it has become a goal of mine to pull together data from the various faunal contexts across Fort Snelling's Upper and Lower Posts, analyzed either by myself or others, and pull all of the data into one master faunal resource context for the fort to both help understand the patterns of faunal resources utilized on the whole, and help inform any future zooarchaeological work at the fort. This context would pull together the raw faunal data with context from the written record of Quartermaster Ledgers, personal letters and memoirs, and standard practices of the North American butchery and meat packing industry. I have most recently been working on pursuing this by completing a faunal analysis of the Enlisted Men's latrine materials with the goal of comparing the food both rationed to and hunted by the Enlisted Men with the results of the Officer's Latrine faunal analysis published by Dr. David Mather within the past year (Mather 2020). This article will likely be published in a Fort Snelling-focused edition of *The Minnesota Archaeologist* in 2022.

After consulting with other zooarchaeologists across the country requesting certain resources or reference materials, it also became clear how much of a knowledge gap Minnesota's military forts have become regarding regional historical military foodways. Zooarchaeologists across the nation have expressed great interest in helping bring Minnesota's faunal military context into the greater national understanding of the military foodway network, and I hope to help make this happen with cooperation from the other zooarchaeologists completing analyses at the forts, and after receiving data sharing permissions from the appropriate agencies.

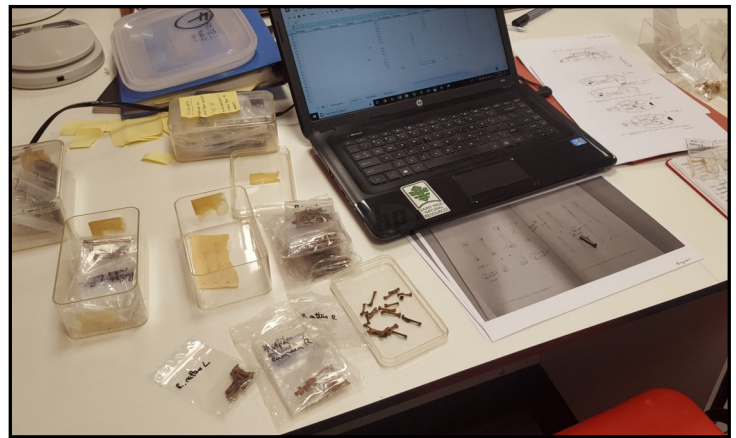
Another goal of Zooarchaeo Consulting is to use the business as a platform to bring ZooMS to the Midwest. ZooMS, short for Zooarchaeology by Mass Spectrometry, was first developed at the University of York in 2009. The method relies on surviving collagen proteins in bone, parchment, eggshell, mollusc shell, hair, leather, and most all animal-based materials (besides enamel and calcined bone). It is particularly useful for bone too fragmented or modified to identify, for differentiating between morphologically similar species, and even has the potential to identify species of freshwater mussels in shell middens or small pieces of shell temper. I earned my MSc in Zooarchaeology from the U of Y specifically to study the ZooMS process. Now, with institutional support from York, I have been working to increase awareness of the method while moving towards the hopeful goal of helping develop a sample prep lab, either through Zooarchaeo Consulting or other interested agencies,

and work towards creating a regional peptide signature database. ZooMS has sincere potential to help advance zooarchaeology in the Midwest, and I am just happy to see the idea of it gaining some local traction.

Ultimately, my goal as the owner of Zooarchaeo Consulting is to help ensure faunal analysis is less overlooked in the post-field analysis stages by offering affordable and timely zooarchaeological services to both institutions and small CRM businesses. This has spanned from analyzing expansive long ago-recovered and overlooked assemblages, to reviewing recent assemblages as small as three elements. My analysis is always delivered with a detailed identification spreadsheet and (if desired) a write-up putting the remains into context with the site while referencing known faunal research and contextual information applying to the assemblage. Zooarchaeo Consulting also offers professional GIS services specialized for cultural resource mapping, communication, and geodatabase management. Feel free to contact me if you are interested in any of the above-mentioned research, services, or are also interested in advancing zooarchaeology in Minnesota. I am always open to ideas and new research pursuits to further the field.

Laura Koski, MSc, RPA  
Zooarchaeo Consulting, LLC  
ljoreenl@gmail.com

Mather, David  
2020 Zooarchaeology of the Officer's Latrine  
Feature (1824-1865) at Historic Fort Snelling. *The Minnesota Archaeologist* (76)



*Laura working on an assemblage of microfauna.  
Photo courtesy of Laura Koski.*

## Thank You Longtime MnArch Editor Kent Bakken

Kent Bakken, the longtime editor of *The Minnesota Archaeologist*, has passed the torch to the capable hands of Danielle Kiesow. Kent has been instrumental to the success of the journal for over 20 years, ensuring that Minnesota Archaeological Society members have access to thoughtfully crafted and rigorously edited original archaeological research focused on Minnesota and the Upper Great Lakes region.

Kent was a contributing editor for the omnibus volume 51-54 (volume year 1992-95); an issue editor for volume 60 (2001); a managing editor for volumes 67 (2008), 68 (2009), 69 (2010), 70 (2011), 71 (2012), and 72 (2013); and editor for volumes 62 (2003), 63 (2004), 64 (2005), 73 (2014), 74 (2015), 75 (2016), and 76 (2017). This is impressive list and a hearty thank you is extended to Kent for shepherding a generation of archaeological research through the publication process.

We asked some of *The Minnesota Archaeologist's* past contributors to send a few quotes about working with Kent, here's what they sent back:

"To coin a phrase there is no drama with Bakken."

"Reading papers for or with him is eye-opening. At first hesitant to suggest a change, then the reply "OK, let's look at that". Back and forth for a bit and then coming away feeling victorious, then realizing he has led you right back to the original. Sometimes it works the other way. Finding typos, mistakes in grammar or spelling are appreciated. Matching references in text with Reference List can be grueling. Back and forth again but never any yelling, use of exclamation marks, e.g."



"In other venues with Kent his knowledge on many issues is surprising, and always "to be continued"."

"It will be interesting to learn what is next for Kent. Perhaps a neighborhood vegetable garden?"

**From Dr. David Mather (National Register Archaeologist - Minnesota State Historic Preservation Office):**

More than thirty years ago, I happened to meet Kent Bakken through mutual friends when I was a student in Iowa City. After graduation, I moved to Minnesota for a summer dig, and then stayed for a job in the Archaeology Department at the Minnesota Historical Society. The then-new issue of *The Minnesota Archaeologist* was in the break room and glancing through the Table of Contents I noticed Kent's article, "A Middle Woodland Beach Ridge Site in Roseau County, Minnesota" (1988). Honestly, this impressed me so much, and I aspired to do the same thing, vowing to myself that I would one day publish my own research. I did not imagine at that time, however, that Kent would be the journal editor once I was ready to do so. Over many years he provided constant encouragement on potential articles and kind criticism on drafts. My favorite was when he gently pointed out that at the beginning of one draft I'd said that my subject could be considered a type assemblage but in the conclusion I said that it was not. I could only laugh, as I'd come back to an old manuscript and clearly my thoughts had changed. I am so grateful to Kent, and for his tenure as editor. He first inspired me to write, both for *The Minnesota Archaeologist* and otherwise, and since then has continually inspired me to keep doing it.

# *Tinkling Cone Found at Ft. Ridgely State Park*

by Amy Ollila, Archaeologist II, Minnesota Historical Society



*Iron tinkling cone from the 2020 excavations at Fort Ridgely CCC Camp SP-12 /Fort Ridgely Creek Site*

The Minnesota State Parks and Trails Cultural Resource Management Program

(MSPATCRMP) of the Minnesota Historical Society had a memorable 2020 archaeological field season. As I am sure other archaeologists have found this past year, applying COVID-19 safety measures to our archaeological

survey tasks highlighted how much close collaborative work we do in the field. Changes for us included creating socially distant excavation unit teams, using plastic gloves to share paperwork, and finally have the peace of mind that no one will steal your favorite shovel because you have already touched it.

Other than COVID-19 being a large part of the 2020 field season, the MSPATCRMP archaeological team worked on an excavation of a site in Fort Ridgely State Park in advance of a proposed shower building. The Fort Ridgely CCC Camp SP-12 /Fort Ridgely Creek (21NL158) archaeological site was the location of the Fort Ridgely CCC Camp SP-12 from 1934-1939 and a precontact site that was most likely built upon by the CCC camp.

The 2020 excavations revealed 477 artifacts of precontact lithics, ceramics, bone, and CCC construction and occupation material. One of the most interesting artifacts we found was a decorative iron tinkling cone which may represent a late 19th Century American Indian occupation. Tinkling cones, fashioned by trimming and rolling sheet metal or repurposed metal into conical forms, are used to decorate leatherwork including, clothing, moccasins, bags, cases, etc. When these cones collide, they make a tinkling or a jingling sound. The cone we found was made of iron approximately 0.6 cm thick and 2.8 cm long. Five fragments of trimmed sheet metal were recovered within the same excavation block as the tinkling cone and appear to be of a similar thickness. It seems plausible to suggest that the sheet metal may have been repurposed from former containers, considered too valuable to discard. One of the discussions that we had on identifying this metal cone was whether it is a "jingle" cone from a Jingle Dress or a decorative "tinkling" cone.

## **Jingle vs. Tinkling**

The term "jingle" is specifically used for the cones on Jingle Dresses in the Jingle Dress Dance tradition and did not become part of women's ceremonial clothing until circa 1920. Brenda Child, a Northrop professor of American Studies at the University of Minnesota from the Red Lake Ojibwe Reservation, describes that sometimes you can identify the material and time period of jingle cones by any paint or labels left on the inside of the jingle cone. Jingle cones are more commonly made out of thinner metal material and are larger than pre-1920s tinkling cones used for general decoration. A common material is the lids of Copenhagen snuff cans. The Jingle Dress Tradition was born out of the Ojibwe story of a vision of a father to a sick daughter had about a dress with healing properties during the 1918 influenza pandemic that devastated the Ojibwe community (Child 2020).

A metal cone found pre-1920s for decoration is considered a "tinkling" cone. Research from Birk and Richner on Fur Trade sites and materials (2004) documented many tinkling cones made out of kettle-metal and describe them as common in the western Great Lakes Region. There has been no documented change in the tinkling cones' size or shape over time so that pinpointing a time frame of when a tinkling cone by itself was made or used is difficult. What we can do is compare the cone to others found. The tinkling cone found in the 2020 excavations was most like the iron tinkling cones found at the 1800s trading post, village, and cemetery mounds site of the Little Rapids Site in Scott County. It is because of this comparison we felt confident in calling the cone a tinkling cone.

Perhaps now in our pandemic today, the sound of a tinkling jingle cone is just what is needed.

*A thank you to Stacy Allan, who analyzed the Fort Ridgely artifacts, and Nancy Hoffman, who advised on the tinkling cone research and definition.*

## **References**

Birk D. A. and J. J. Richner (2004) *From Things Left Behind: A Study of Selected Fur Trade Sites and Artifacts, Voyageurs National Park and Environs, 2001-2002*. Midwest Archaeological Center, Technical Report Number 84.

Child, B. (2020) *The Jingle Dress, a Modern Tradition An Interview with Brenda Child*. <https://cla.umn.edu/news-events/story/jingle-dress-modern-tradition>, accessed March 9, 2021.

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