

The Art of Seeing

By Kate Ratkovich (with Sigrid Arnott and Kent Bakken)

"The long grass swirled around us. We sat cross legged on the ground taking a well-deserved break from digging. Tom had never spoken this directly to me about Vietnam before. Perhaps the memories were stirred up, there in the towering green grass, like the dust now sticking to our sweaty faces. "You have to tell me," he said between a long drag from his cigarette, "if you go anywhere... if you end up having to go overseas."

I promised I would. Though, at the time I did not expect I would be deployed to Kandahar Airfield the following year. Tom continued on speaking vaguely, at first, about the war. As an Upper Sioux Elder, he had a nurturing way of transporting me when he spoke that felt more like a storybook than mere chit-chat. I recall that I hoped he would write a book about all the things he had done, the things he had seen. I suppose in hindsight, that is not the point of storytelling.

"That day his recollections about his survival in Vietnam became less story book, and more personal and specific. There was weight growing with every word. I braced myself. His voice started to waver...

Whatever memories haunted him so profoundly never escaped his lips that day. I waited, not wanting to break the widening silence. Taking a deep breath, he paused and ended the tale with these words I will never forget. "Wherever you go... you're gonna have to go with your eyes open" (Ratkovich 2015).

Go with your eyes open. Often times you can never really begin to understand what you see without the long observation it requires to duplicate it. Clear as a photograph? Not quite. The case for Archaeological Illustration is still relevant. However, there's more to archaeological illustration than a technical

reproduction of an artifact. It is the art of seeing, of taking notice. Human observation is the key to real understanding and image preservation. The stakes involved are high when compared to the various sources of data collection in the field of archaeology. Without precise imagery, there is an incomplete record, details lost. Despite the advancement of digital photography and 3D imaging, there is something about human observation and the time spent in it that best communicates to the service of science and understanding of history.

Sometimes all that remains of an artifact after hundreds or even thousands of years is a hastily taken photograph. This is at best a disservice to the archaeologists' effort to carefully uncover it and at worst could disrespect the workmanship and soul of its creator. Though the intention here is not to condemn the use of photography, but instead provide some clarity from the illustrator's perspective. Photography certainly has its place in the field. Photography, in most cases, is the ultimate note-taking tool. But just as presenting a shoebox full of field notes as a final report is incomplete, so too is a photograph when the goal is to provide vivid context especially if the transparent material of an artifact is particularly difficult to represent in a photo.

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Kate Ratkovich is an archaeologist and a scientific illustrator with broad experience from Minnesota iron mines to the Great Rift Valley in Kenya. She is proficient in specialty areas including mapping, interpretive illustration, and scaled drawing in charcoal, graphite, and pen & ink.



Letter from the President

By Dan Wendt

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 were saddened by the passing of Pat Emerson in August. Pat was the Director of Archaeology at the Minnesota Historical Society and was a leading advocate for the profession and study of Minnesota's past through archaeology. Pat Emerson was a leader, supporter and friend to the Minnesota Archaeological Society. She had been involved in our Board of Directors in various executive roles since the 1970s. There is no replacing the value of her leadership on our board. I particularly appreciated her support of the MNHS volunteer program that allowed the avocational community to participate in archaeological projects. Please see this newsletter for a more complete remembrance and memorial from fellow Board Member Anna Morrow.

September was Archaeology Month and MAS was involved in programs around the state. Key MAS activities included a special lecture by MAS Board Member Bob Suchanek at the Steele County Historical Society. Bob provided an introduction to his study of stone tools in Steele County. Archaeology Day at Mille Lacs Kathio State Park was well timed with great weather, fall color and a variety of displays and demonstrations highlighting the state's archaeology and the central role of the Mille Lacs region in the early story of Minnesota. Archaeology Fair at Fort Snelling State Park was cancelled due to the flooding in the park but we hope to be back next year with more cooperative weather.

October brought the Midwest Archaeological Conference to Mankato Minnesota. Archaeology in our state was highlighted throughout the conference and the conference included visits to Minnesota's premier archaeological sites including Jeffers Petroglyphs and Pipestone National Monument. During the conference we recruited 15 new members. Thank you to those who helped represent MAS at our table in the conference hall.

We are excited to announce that April will be the premier of our public television video on Minnesota Archaeology. The development of the video is being supported through Minnesota Legacy Grant funds in the Minnesota Historical and Cultural Heritage Program. We are excited about the wonderful video that Twin Cities Public Television has filmed and produced. We are planning to share it with our members at the annual meeting tentatively scheduled for April 24th.

MAS Board

The 2016 issue of the *Minnesota Archaeologist* was printed and shipped in September and we plan to have the 2017 volume completed later this year. Thank you for your patience. Thank you to our authors who provide content that makes the journal possible.



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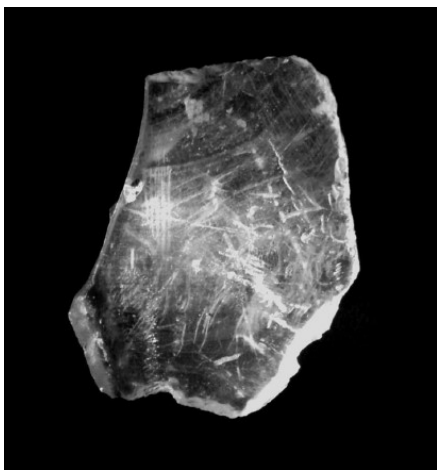
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The Art of Seeing (continued from p. 1)

In 2018 a scraper constructed from a clear and colorless bottle-glass fragment was discovered at the intersection of the Wadsworth Trail and the Chipewa River in Pope County, Minnesota.

This glass artifact was recycled into a double end scraper of bottle glass using lithic technology. The scraper elements are on opposite ends of a side panel sherd of a square, decolorized bottle. One is flaked from the interior of the bottle, the other from the exterior. The flaking is careful and regular, and produced good working edges. One of the scraper elements is largely intact, while the other has been damaged and is only partly preserved. In addition, there are numerous peck marks on the flat surface of the piece that suggest a working surface. This artifact is clearly a traditional tool made from bottle glass using stone tool technology.

Decolorized, flat panel bottle glass is rare before the late nineteenth century—especially in rural Minnesota. The original bottle was likely a squared whisky bottle. The glass sherd is flaked in the traditional manner to create a customary tool similar to the other lithic artifacts it was found near (Bakken et. al. 2019)



*Photograph of a scraper from Pope County
by Kate Ratkovich*

Pictured above is a photograph of the scraper recovered in Pope County. The image does nothing to show the artifact's construction, let alone, what it could be. Without the detailed written description this image appears to be nothing more than a shard of weathered glass. Due to its completely transparent material, it was critical to have this artifact illustrated as photographs did little to capture the many characteristics of this significant clear glass tool. Significant because

little is known about the decline and persistence of traditional flint knapping and the replacement of stone tools with metal tools, or about the chronology of this process. There seems to be an assumption that traditional stone tools and ceramics were rapidly replaced, but it is not clear that this assumption is justified. Since there is so little relevant archaeological evidence, any site that yields evidence about this economic and technological transformation is potentially important (Bakken et. al. 2019)

Now, nearly all individuals in the archaeological field are talented "seers". Many can spot a small pottery sherd in sandy soil, identify burial mounds in an overgrown forest, some can identify a person's age, sex, and ethnicity from a miniscule bone fragment. They have trained themselves to pay close attention to nuances. Trust what is there, what isn't. The art of seeing is a trained skill. This needs to transfer to the preservation of imagery. Despite one's artistic skill, or perceived lack thereof, try to draw what is seen. Really try. Look hard, take time. The artifact in hand may have waited a thousand years to be seen gain, one can spare an hour with it. So, really try. Where dark values are noticed, place it. Where there is light, don't. In principle, it's very easy.



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

The Art of Seeing (continued from p. 3)



1 cm

*Illustration by
Kate Ratkovich*

I encourage all, dear readers, to employ these practices. Sure, one could hire some wickedly talented artist to do all the intimate observation and I could shamelessly plug my business here (Running Rat Studio: Archaeological Illustration & Fine Art runningrat@gmail.com), but I won't.

All it takes is lots of practice.

What one will produce in notes and sketch books may not make the cut to be published and that's fine (that's what the wickedly talented artist is for). What strength one will gain is extreme awareness to shape, color, texture, light, and space. In time these skills will transcend beyond one's hobby or career and into everyday life.

Sound heavy? It is. This artifact, like many an illustrator comes into contact with, carries the weight of time and the human beings linked to it. There is great care that goes into representing an object of this importance by hand. Yes, accuracy is the obvious factor. Repeated measuring with calipers, manipulating the direction of light to expose the depth of the blow that produced that micro flake and the smoothness of a healed fracture in bone. The great care that comes with intense observation is what this illustrator finds so magnetic.

Personally, there is a profound amount of nurturing, dare I say love, for the pieces I have been given the honor of illustrating. Many of these items were sacred and buried with loved ones where every stroke of the pencil felt like wrapping wounds in dressing. There is an intense amount of respect that cannot be avoided when handling and really seeing something of that magnitude, something I fear is lost when simply taking a photograph.

My friend, Tom, has since passed away. I never did get to tell him that I was to be deployed to

Afghanistan. I never got to tell him that since that day I have never stopped seeing, really seeing.

"Go with your eyes open. These words meant that not only should we all walk through this world wide-eyed and with a reasonable amount of caution, but to see the world as it is, for what it is. Go with your eyes open. To fully submerge oneself in the moment, to experience it wholly: the beautiful, the pristine, but also the ugly and, at times, tragic. Finally, to "go with your eyes open" consequently means that once you see, it cannot be unseen. I want to share what I have seen in a way that is more than simply recording, but my contribution to the story" (Ratkovich 2015).

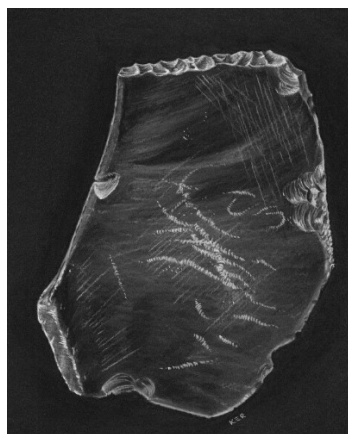


Illustration by Kate Ratkovich

So keep taking notice of the subtle things. Wonder. Keep looking, keep learning. Recognize when to consider putting down the camera and support those who are skilled in this art for history's sake.

Bakken, Kent, David Maki, and Sigrid Arnott with Laura Koski and Kate Ratkovich 2019 (upcoming publication) *An Archaeological Survey of Pope County, Minnesota*. Report of Investigation 259, prepared by Archaeo-Physics on behalf of the Minnesota Archaeological Survey Oversight Board with funding from the Arts and Cultural Heritage Fund.

Ratkovich, Kate
2015 *Go With Your Eyes Open*. Masters Thesis Exhibit, University of Wisconsin-Superior

In Memory of Pat Emerson by Anna Morrow

Writing a remembrance of Pat is a daunting privilege and many thanks to those who helped. The word first came from Dan Wendt. "Terrible, terrible news this morning, I am afraid. You may have already heard, but I wanted to make sure. We've lost too many fine friends and colleagues these last two or three years but this one is especially hard."

Dan also sent the following biography: *Pat attended high school in St Paul and studied anthropology at Hamline University and Mankato State University before working as an instructor at Mankato State, and an archaeologist at Impact Services, Mankato. In 1985, she accepted the position of Program Manager, Minnesota DNR Trails and Waterways Unit Archaeological Reconnaissance Survey with the MNHS Archaeology Department. In 1994, she became the Program Manager, Minnesota DNR Division of Fish and Wildlife Cultural Resource Program. Pat took on the role of Acting Head of Archaeology in 2004, became the Head of Archaeology in 2005, and became the Director of Archaeology in 2013. Pat's commitment, compassion, and expertise held true throughout her 33 years at MNHS.*



Pat with atlatl (courtesy of MNFieldNotes.com)

And from close friend Wanda Radford, "Pat was a passionate advocate for archaeology and for the programs she supervised. She was the glue that held Minnesota Archaeology together through her work with the Minnesota Historical Society, the Council for Minnesota Archaeology, the Minnesota Indian Affairs Council, the Tribal Historic Preservation Offices, and the Minnesota Archaeological Society."



Pat confers with a colleague (courtesy of Jim Cummings)

From Kent Bakken, "Rod {Johnson}, Christina {Harrison}, that was bad enough, but Pat...I'm feeling just lost."

From colleague Sue Mulholland, "The first thoughts that come to mind are that Pat was a class act, very professional in all our dealings. She helped me out numerous times. I was not directly involved in her efforts to save the Neubauber Collection as an entity; that was so like her, even though eventually unsuccessful...she was instrumental in the Legacy funding projects for the Statewide Archaeology Survey. Very sad, this is devastating for us all."

I first met Pat in the 1980s at the MAS activities and at Fort Snelling as a volunteer. Her knowledge of archaeology in the Upper Midwest and Manitoba was amazing. She seemed to be able to answer any question. I thought she was brilliant.

Someone might grow to her stature, but right now, Patricia Emerson is irreplaceable. Like Kent and many of you, I'm feeling just lost.

2019 Kathio Archaeology Day

by Erin Fallon, Mille Lacs Kathio State Park Naturalist

Nearly 30 years has passed since the first Archaeology Day occurred in 1990 at Mille Lacs Kathio State Park. This annual event promotes interest in archaeology and the role it plays in better understanding the state's diverse cultural heritage. This year, Kathio's Archaeology Day occurred on Saturday, September 28th 2019 with over 500 people in attendance.

For many, the highlight of the day was the excavation performed by archaeologist and former Park Naturalist, Jim Cummings, and State Historic Preservation Office National Register Archaeologist, David Mather. The current excavation is a continuation of the long-range Petaga Point Public Archaeology Program, which began in 2006. They started excavation at the current location in 2018 and excavated only one square meter each year, as part of the Archaeology Day event. Many artifacts were discovered in this year's investigation. The park will hold public interpretive programs this coming winter, when park visitors can see and discuss what was found. Check Mille Lacs Kathio State Park's Events Calendar on their website throughout the winter for more details.

Archaeology Day was co-sponsored by the Minnesota Archaeological Society, SCSU Anthropology Collective and MNDNR Parks & Trails. Special thanks goes out to all of the hard-working volunteers that make this event possible. We all look forward to seeing you on September 26th, 2020 at Kathio's Archaeology Day!



Screening at Archaeology Day 2019 (courtesy of MnDNR)

MAS Hill-Lewis Award 2020: Call for Nominations

The Hill-Lewis Award is given annually by MAS to a living avocational archaeologist who has made outstanding contributions to Minnesota archaeology. The MAS Board is seeking nominations for the 2020 Hill-Lewis Award. Please forward your nomination to Dan Wendt, MAS President at Wendt001@gmail.com. The 2020 submission deadline is March 1st.

Nominees for the award should have made important contributions to our knowledge of Minnesota archaeology (prehistoric or historic) through original research or publication, collaboration with professional archaeologists, site stewardship, site preservation, public outreach, or exceptional K-12 teaching. Nominees do not have to be members of the Minnesota Archaeological Society. Nominators should submit a nomination letter detailing the nominee and their accomplishments, as well as at least one letter of support for the nomination. The Hill-Lewis Award will be awarded at the Minnesota Archaeological Society Annual Meeting in April.

Our 2018 recipient was David Peterson who conducted a 14 year study of iron trade axes working

with institutions and individuals across the upper Mississippi River drainage and Lake Superior drainage. The database contains measurements, technical characteristics, maker's marks and photographs of over 1000 trade axes. His work has been published in Volume 68 of the Minnesota Archaeologist (Peterson 2009).

Our 2019 recipient, Rod Johnson, had been involved in the Minnesota Archaeological Society for more than 30 years and for the past 25 years had served on our board of directors in several positions including President, Vice President and Treasurer. Starting in 1982 he was a dedicated volunteer for the Institute for Minnesota Archaeology and later the Science Museum of Minnesota and Minnesota State Historical Society. Minnesota learned about the ancient art of flint knapping from Rod through his public outreach and willingness to support events throughout the state.

The Hill-Lewis Award epitomizes the MAS goals of increasing public involvement in archaeology and in promoting the stewardship of the unique and irreplaceable archaeological record of Minnesota.

Minnesota Obsidian

By LeRoy Gonsior



*(Obsidian flake from the Petaga Point site
(courtesy of Jim Cummings)*

During this year's Kathio Archaeology Day excavations at the Petaga Point site at Mille Lacs Kathio State Park an obsidian flake was recovered. How common is obsidian in archaeological sites in Minnesota? Ask any group of Minnesota archaeologists and it is likely that none of them have found any. The obsidian that has been recovered in Minnesota is almost entirely debitage (waste flakes) and associated mostly with the Woodland Period. The seminal obsidian study by Richard Hughes, available in the 2007 *Minnesota Archaeologist*, sourced 53 obsidian artifacts from 28 Minnesota archaeological sites. Obsidian Cliff in Wyoming was the most common source area with Bear Gulch and Malad source areas in Idaho and non-volcanic glass from Powder River Montana also identified.

Obsidian has been recovered from four other Minnesota state parks including Glendalough, Lake Carlos, Monson Lake and Lake Vermilion-Soudan Underground Mine. The largest recovery of obsidian was from the Armstrong Bay site on Lake Vermilion in 2011 where 155 obsidian flakes in association with cremated bone was radiocarbon dated to AD 1400. Recovery of obsidian from Minnesota sites is typically only one flake; few have more than one flake. The Petaga Point obsidian flake is the second recovered from the site. The first was found in the 1960s.

Snowshoeing into the Past

Mille Lacs Kathio State Park
Saturday January 25, 1:00 -3:00 pm

After an indoor look at some artifacts, archaeologists will lead us on a snowshoe trek to locations where they discovered evidence of a village from the 1600s and a "campsite" dating to over 3,000 years ago. Snowshoes and basic snowshoeing instruction are provided.

Registration is required and is limited to the first 25 people. To register, call 320-532-3269 and leave your name, phone number and number of people attending. Meet at the Interpretive Center.

(image courtesy of MnDNR)



Minnesota Archaeological Society
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Contact Anna Morrow
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