60 Hears

Office of the State Archaeologist

Fiscal Year 2020 Annual Report







Who We Are

By the Numbers

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Strategic Initiatives

Who We Are



John F. Doershuk, State Archaeologist and Director of the University of Iowa Office of the State Archaeologist



OSA Mission Statement

Advisory Committee

Indian Advisory Council

Academic Activities

Office and Staff Achievements

OSA Turns 60!

Support Iowa Archaeology with Fun Stuff







LEAVE ME ALONE!

Academic Activities



Lara Noldner Bioarchaeology Director Instructor

First-Year Seminar: A Tour of Biological Anthropology

Students explored the diverse field of biological anthropology and learned about many of the ways that knowledge of human biology can inform us about how people have evolved, migrated, and adapted to the many regions of the world we now inhabit.

[Fall 2019, 15 students]



John F. Doershuk State Archaeologist Instructor

Archaeology of the American Midcontinent

This online course immersed participants in a wideranging regional review of the culture history, technology, and settlement-subsistence practices of ancient American Indian ancestors as well as historic-era Native and non-Native adaptations. [Fall 2019, 11 students]

Field Archaeology

<u>Iowa Lakeside Laboratory</u>

The 2020 Lakeside Laboratory archaeological field school was cancelled due to COVID-19 but expects to be available for summer 2021!

Campus Imact

The OSA has dramatic impact across UI campus both as a host for professional brown bag presentations and as presenters at other campus locations.

Brown Bag Presentations hosted by OSA = 4 Reaching 200 people

Presentations by OSA staff across UI campus = 9 Reaching 327 people

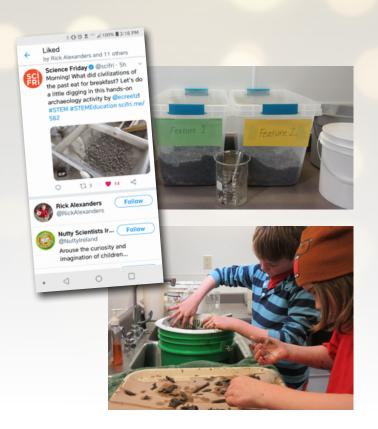
Total presentations on UI campus = 13 Reaching 527 people

Date of Presentation	Presenter(s)	UI Host	Title of Presentation or Event	In Attendan
7/16/2020	Cherie Haury-Artz, Elizabeth Reetz	Division of Diversity, Equity, and Inclusion; Iowa First Nations Summer Program	Making Atlatis and Cordage	20
9/10/2019	Jennifer E. Mack	Department of Anthropology	Bone Where There's Not Supposed to Be: The History and Bioarchaeology of Dubuque's Third Street Cemetery	18
10/4/2019	OSA Staff	OSA	OSA 60th Anniversary Open House	125
10/10/2019	Veronica Mraz and Rebecca Gansemer	Research Development Office	Information Booth at University of Iowa Research Fair	100
10/24/2019	Cherie Haury-Artz, Cueponi Cihuatl Espinoza, Kelly Clougher, Nicole Peterson	Native American Council	Land Acknowledgement: Recognizing and Respecting Indigenous Peoples	26
10/25/2019	Veronica Mraz	Department of Anthropology	Quantifying the Effects of Heat-Treating Tool Stone and How It Augments Knapper Skill	20
10/25/2019	Cherie Haury-Artz	Center for Advancement Senior College	Archaeology of Iowa	80
10/29/2019	Cherie Haury-Artz	Department of Earth and Environmental Sciences	Native American Land Use Practices	16
1/28/2020	Cherie Haury-Artz	Department of Earth and Environmental Sciences	Native American Land Use Practices	17
12/6/2019	George Horton (Iowa Archeological Society)	OSA	OSA Brown Bag: Midcontinent Mounds & Earthworks: A Hypothesis of Understanding Between the Ground and the Cosmos	22
1/6/2020	Andrew Sorensen (Leiden University)	OSA	OSA Brown Bag: Moving Beyond 'Beyond Prometheus': Future Research into Past Fire Use and Production by Palaeolithic Peoples	31
1/31/2020	Jennifer Mack	OSA	OSA Brown Bag: Of Little Archaeological Value: The Remains of the "Unknown 15"	22
2/11/2020	Lara Noldner	Department of Anthropology	Tour of OSA for UI Forensic Anthropology Class	22
3/2/2020	Elizabeth Reetz	Belin-Blank Junior Sciences and Humanities Symposium	Tour of OSA and Discussion of Research Activities	8

Office and Staff Achievements

Iowa Archaeology on NPR Sci Fri

Director of Strategic Initiatives, Elizabeth Reetz, was chosen from a nationwide, competitive pool of applicants to join the 2019 Science Friday Educator Collaborative to create an interactive STEM lesson for teachers. Elizabeth chose archaeobotany as a topic and spent winter and spring 2019 developing a classroom flotation experiment where students can explore and analyze their results and compare with authentic archaeological data from across the country. This educational resource officially launched in August and is available on the SciFri website.





Research Grant for 13PM7

Director and State
Archaeologist John
Doershuk was awarded

\$28,976 in March 2020 through the **UI Arts & Humanities** Internal Funding Initiative in support of research involving materials salvaged from flood-damaged 13PM7 (the Joy Creek Major site) Plymouth County, Iowa entitled, Origins of Ancient Village Life on the Plains of Northwest Iowa. Doershuk and OSA Associate Director Steve Lensink await news of award for Iowa Science Foundation funding to support Accelerator Mass Spectrometer precision dating of charred botanical samples from the site.

Retirement

FY 2020 was John Cordell's final full fiscal year prior to retirement at OSA. John served **30 years** as OSA's first (and thus far only) Research Collections Director. Congratulations!



OSA Turns 60!

The University of Iowa Office of the State Archaeologist (OSA) hosted an open house to celebrate 60 years of archaeological exploration and preservation in Iowa on October 4, 2019. The event included ancient technology demonstrations, self-guided tours of the facility, artifact displays, traditional pioneer and Native American toys and games, refreshments, and more.

Sixty years ago, state legislation (Chapter 263B) passed on April 7, 1959, created the OSA, which is tasked with conducting archaeological research across lowa and sharing information about the state's history with the public. Today, in FY2020, the office employs 21 full-time archaeologists and historic preservation specialists, along with dozens of seasonal staff, students, and volunteers who assist in the mission of developing, disseminating, and preserving knowledge of lowa's human past.

Turn back time







Party Bash







By the Numbers

\$2,017,906

US dollars OSA received in support from sponsored grants and contracts



vears the OSA has served lowa and Midwest region as a UI research center

200

collections were newly accessioned during the fiscal year 4,173

people engaged through OSA and archaeology events

1,801 volunteer and student hours contributed to **OSA** projects

47

staff members and adjunct researchers worked at OSA during FY 2020

30,389



archaeological sites recorded by the end of the fiscal year

Student Success



Many OSA staff members mentor students and train and supervise student workers, interns, and other volunteers. The OSA actively supports undergraduate and graduate student use of its archaeological, osteological, and comparative collections; scholarly documents; electronic databases; scientific instrumentation; and laboratory space for degree-related research. These resources contribute to the educational experience of students in diverse UI departments including,

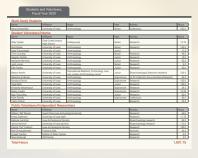
- Anthropology
- Art & Art History
- Biology

- Classics
- Earth and Environmental Sciences
- Geographical and Sustainability Sciences
- History
- International Relations
- · Native American & Indigenous Studies, and
- · Museum Studies.

In FY2020 the OSA facilities, collections, and staff provided classroom enrichment and workplace experience for a total of 18 students and 8 members of the public worked to log 1,801 hours at the OSA contributing to project activities.

Participating Institutions

- · University of Iowa
- · Clear Creek Amana High School
- · Iowa Archeological Society
- Quad Cities Chapter of the Iowa Archeological Society



Tabulated Data







Research







Archaeological and Architectural Investigations

Collections

Technology

Archaeological and Architectural Investigations

The OSA conducts both contract and grant-funded research involving archaeological and architectural history studies statewide. These projects, regardless of funding source or sponsor, generate important new knowledge on Midwestern prehistory and history, and they form the basis for many staff publications, professional and public presentations, and student and faculty research projects.

Tate House

Emergency Excavations at Site 13PM7











Infrastructure Surveys

The OSA conducted hundreds of archaeological and architectural projects in FY 2020, significantly contributing to the enhancement of statewide economic development.

Iowa Department of Transportation

FY 2020 marks 50 years of contracted services with the Iowa DOT for archaeological investigations and 31 years of historic architectural evaluations. A total of 96 Phase IA Cultural Resource Evaluation reports were submitted, along with one Primary Roads report each pertaining to Phase IA architectural reconnaissance. Phase I archaeological and architectural history survey, and Phase III architectural mitigation projects. The Phase III work involved a 1953-constructed U.S. 30 bridge over the Cedar River in Linn County. This project provided the historic context of this bridge type, lowa's first steel continuous welded I-girder highway bridge with floorbeams. The OSA also supplied background documentation for a bridge aesthetic project and for a Glenwood culturethemed rest area along I-29.

Focus on Research: West Lake Park Restoration Project, Scott County, Iowa.

The Iowa Department of Natural Resources restores numerous recreational lakes across Iowa. The program makes lakes more accessible and improves water quality through targeting dredging, shoreline deepening and armoring, repairs and upgrades to the lake's outlet structures, and installation of fish habitat. New and rehabilitated wetlands and ponds clarify water and reduce pollution.



Through a longstanding partnership, OSA has assisted DNR with lake restorations, providing survey that identified and evaluates archaeological sites, allowing the DNR to protect significant archaeological sites and allow the DNR to access Federal grants, permits, and funds for restoration work.

In FY 2020 OSA surveyed West Lake Park in Story County as water was drawn down for restoration work. Archaeologists walked muddy banks and bottoms, and augered through deep silt, finally identifying eight archaeological sites, four of which had prehistoric components. Through this work we were able to determine that the proposed restoration would not adversely affect historically significant sites, and allowed the restoration to continue on schedule.



Iowa Federation Home

Modern signage

Althea Moore and five friends in Iowa City between 1924 and 1928

Tate House

As part of an African American Civil Rights Grant from the National Park Service, OSA Architectural Historian Richard Carlson partnered with the City of Iowa City to write nominations to the National Register of Historic Places and create educational signage for two buildings in Iowa City associated with African American housing equity during the Civil Rights Era. The first building is the Iowa Federation Home on Iowa Avenue and the second is the Tate Arms on Dubuque Street.

Both houses are being recognized because they provided off-campus dormitory-style housing for African American students during a time when the University of Iowa barred them from

TATE ARMS

living on campus and housing was difficult for Black students to find due to racial discrimination.



Tate Arms house

Elizabeth Tate (1926)

The Most Modern and Convenient Home FOR

Negro Students

in Iowa City

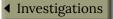
914 South Dubuque Street







University of Iowa students (1919)









Emergency Excavations at 13PM7

OSA Bioarchaeology Program Director Lara Noldner successfully applied for emergency grant funding from the Department of Cultural Affairs Historical Resource Development Program to conduct integrity assessment and human remains recovery at the Joy Creek Major site (13PM7), Plymouth County, lowa following catastrophic flooding during spring and summer 2019. A 10-day field program was completed by Alan Hawkins, Jennifer Mack, and Dustin Clarke resulting in adjustment of the site boundaries of 13PM7 to reflect the extent of the village site more accurately (13,750 sq. m or 2.6 acres), 71 features were mapped and tested, and additional human remains recovered for repatriation. This timely and thorough assessment revealed the site has considerable additional potential and led to application by OSA of multiple grants to conduct additional limited field studies and an extensive program of analytical work in coming years.









Research Collections

The OSA continually adds archaeological materials and related documents to the State Archaeological Repository and provides materials for local, regional, and national exhibition and research purposes.

200 collections accessioned this fiscal year4 collections loaned this fiscal year

378,842 total document records **91%** available digitally



The OSA has expanded its bone comparative collection with the addition of a sharp-tailed grouse, canvasback duck, and a Hudsonian godwit. The sharp-tailed grouse will be particularly important in the identification of archaeological bird bones from western lowa sites. This bird is considered an extirpated former resident of northwest lowa.





Loans

The OSA's artifact collection continued to contribute to vital public outreach and research endeavors all throughout the Midwest. The **Dubuque County Conservation Board's Swiss Valley Nature Center** is in the process of creating a new exhibit highlighting local prehistoric and historic archaeological endeavors. This includes samples from the **Charles R. Keyes Collection** as well as from archaeological sites 13JN196 and 13DB493. The exhibit is still a work in progress but will educate visitors about the history of their area for years to come.

Mary Adair from the University of Kansas borrowed prehistoric **botanical samples** for her research on site 13ML121, an OSA excavation from 1969.

The OSA also loaned a small collection of **chipped stone tools** to Will Thomson of Armadillo Arts, a close associate of the OSA. Thomson's project is to cast these artifacts to create 3D reproductions to use in various education and outreach endeavors.



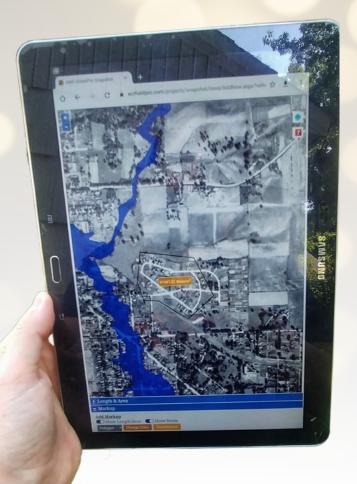
Collections

The OSA has added a number of new collections to our repository including materials from **Loess Hills Scenic Byway** project in western lowa and the **Moss Green Collection**. This collection includes artifacts from 22 prehistoric sites in lowa City recovered from a large survey conducted in 2010.



Research Technology

OSA's commitment to conducting and disseminating modern high-quality archaeological research requires a significant investment in research technology. From maintaining complex databases, to deploying a suite of scientific instruments and equipment, to supporting an array of Internet and other social media, the OSA's involvement in research technology covers the gamut of twenty-first century breakthroughs in archaeology. In FY 2020 the transition to ECR FieldPro as the online lowa Site File access portal was accomplished (I-SitesPro is now a module within ECR FieldPro). The software affords its users the ability to use project area maps without a 4G or internet connection. It also allows users the ability to save data in the cloud and import and export shapefiles.



Fiscal Year 2020 Numbers

295 new site shapes in site file

30,389 total sites recorded in lowa

251 data searches

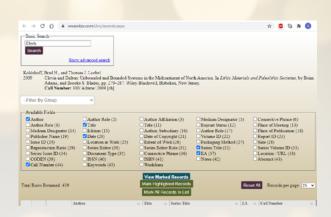
419 registered I-SitePro users (190 Full / 208 Basic / 16 Courtesy / 5 Partner)

Iowa Site File

Most archaeological sites are recorded in the lowa Site File as a result of cultural resource surveys conducted by professional archaeologists. Some, however, are reported by landowners, avocational archaeologists, and other non-professionals. Contact the **Site Records Manager** (319-384-0735).

Field and Laboratory Technology

Many of OSA's research endeavors require the use of highly specialized scientific technology in both the field and laboratory setting including robotic laser transit with data recorder, high resolution GPS units, tablets for mobile data collection, and small drones (UAS) to fly over archaeological sites to create surface models and for infrared thermographic analysis.



Website and App Development

During FY 2020 the OSA maintained portals for the Plains Anthropological Society and the Midwest Archaeological Conference, Inc. as well as support for I-SitesPro, I-Sites Public, I-SitesGov, Iowa Archaeological Society, Ancient Trails in Iowa, and Paleocultural Research Group of Colorado, A major OSA in-house effort was focused on developing iArc, a replacement for ProCite, an important piece of archival software no longer supported.

Bioarchaeology

NAGPRA Work

This year the Bioarchaeology Program began plans for two repatriations and four reburials of ancient human remains:

Repatriations are underway to the Seminole Tribe of Florida and the Osage Nation in Missouri. Four reburials were being planned (one at each of our state-owned cemeteries) for a total of 138 individuals and 32 associated funerary objects in collaboration with 26 tribes that trace their heritage to lowa. All plans are on hold due to COVID-19.

OSA Bioarchaeologist, Jennifer Mack, and UI student, Mason Koelm, completed a NAGPRA grant funded survey of all the OSA's collections for any additional NAGPRA items, and we are awaiting the guidance of tribal representatives to finalize the work. Our consultation event for this purpose also had to be postponed due to the pandemic.

Mason's work was part of an internship with the **Museum Studies Certificate Program**. He produced a **great website** about his experience at the OSA!

The Bioarchaeology Program also carried out its usual work with landowners who serve as site stewards, and local, state and federal agencies in upholding our responsibilities for ancient burial site and inadvertent discovery investigations and reporting, and the protection of sites potentially impacted by development.

Indian Advisory Council Members

Iowa counties represented in FY 2020 43

Ancient burial site investigations/reports 22

Consultation for development projects 29

Inadvertent discovery investigations 23

Repatriations/reburials (currently on hold) 6

NAGPRA Notices of Inventory published 2

M Force

UI Stanford Collection (UI-SC) Research and Documentation

UI Student Natasha Anderson started adding osteological profiles to the database for the UI Stanford Collection.

In preparation for an NSF grant for complete documentation and creating a 3D library of the UI-SC, pilot **CT scans** of individuals were conducted in collaboration with the **UI's Advanced Pulmonary Physiomic Imaging Laboratory**.

Strategic Initiatives

The OSA provides resources and opportunities that encourage the understanding, appreciation, and stewardship of lowa's archaeological past. Events took place in 16 lowa counties, seven states, two countries, and virtually, reaching **nearly 4,300 people**.

"...OUR TRIBE AND OSA'S STAFF HAVE FORMED LONG-LASTING FRIENDSHIPS AND ANTICIPATE MANY MORE YEARS OF SUCH POSITIVE COLLABORATION. IN MY POSITION AS THPO, I HAVE ONLY POSITIVE THINGS TO SAY ABOUT OSA'S PROFESSIONALISM AND INTEGRITY AND SENSITIVITY TO TRIBAL CONCERNS, AND THAT OTHER STATES SHOULD SEE THE OSA AS AN EXEMPLAR, TO SEE HOW THINGS WORK BEST FOR ALL WHEN YOU WORK ALONGSIDE TRIBES IN ONGOING COMMUNICATION AND MUTUAL RESPECT."

--LANCE FOSTER, TRIBAL HISTORIC PRESERVATION OFFICER FOR THE IOWA TRIBE OF KANSAS AND NEBRASKA



Community/Public Presentations 768
Special Interest/Private Lectures 314
K-12 Presentations/Tours 660
Higher Education Lectures/Workshops 112
Professional Conferences 876
Exhibit Booth or Outreach Tent 1,568
Total 4,298

Exploring Iowa Archaeology in the K-12 Classroom

Bringing Archaeology to Iowa Communities

Iowa Archaeology on Social Media

Exploring Iowa Archaeology in the K-12 Classroom



A total of **660** K–12 students participated in inperson and virtual archaeology presentations, activities, and tours with OSA staff.

Highlights from FY 2020 include:

- Continuing our long-time, award-winning <u>Exploring</u> <u>lowa Archaeology in the K-12 Classroom</u> presentations statewide
- Reaching over 1700 students with OSA curricula and resources, including our archaeology <u>Discovery Trunks</u>
- Participating in Ul's Iowa First Nations Summer Program
- Publishing Science Friday's first archaeology lesson, a <u>resource on archaeobotany</u>, in their educator resources collection
- Creating its first-ever virtual K-12 archaeology programs, which reached over 100 students during April and May
- Launching a virtual "Archaeology Summer Camp" in partnership with Iowa Public Radio, including a summer-long scavenger hunt BINGO





Beyond the classroom, the OSA promoted lowa's education program successes and contributed to the field education on a national level through:

- Exhibiting at the National Council for Social Studies annual meeting in Austin, TX
- Presenting at the North American Association for Environmental Education annual meeting in Lexington, KY
- Serving as the Society for American Archaeology's Public Education Committee chairperson
- Serving on the <u>Project Archaeology</u> National Leadership Team







Bringing Archaeology to Iowa Communities

OSA staff reached 4,298 people in 16 lowa counties, KY, IL, IN, MN, MO, TX, and the UK this past fiscal year to present workshops and lectures or staff an information booth.

Project Aware

The OSA participated in the 17th annual Project AWARE, coordinated by N-Compass, Inc. Project AWARE (A Watershed and River Expedition) took place on the Boone River from July 7-12, 2019. OSA Staff Cherie Haury-Artz and Elizabeth Reetz were "resident archaeologists" for the week and gave educational presentations. Over the course of five days, 18 tons of trash were removed from a 59-mile stretch of river, and 93 percent of that trash was recycled. In August, OSA participated in a clean-up on the Des Moines River with exchange students from Iraq in partnership with the Iowa Department of Natural Resources and Iowa Resource for International Service.

The 105th Annual Meskwaki Powwow

The Meskwaki Annual Powwow is one of OSA's biggest community events each year, and OSA has partnered with the Meskwaki Tribal Museum to exhibit at the Powwow for over a decade. This year, the archaeology outreach booth reached about 600 Powwow visitors who viewed the archaeological timeline display, played traditional toys and games, and talked with staff about archaeology and lowa history.

Engaging with the Interested Public through Virtual Programming

The OSA continues to foster strong relationships with heritage preservation organizations across the state. A long-standing partnership with the lowa Archeological Society (IAS) helps OSA connect with lowans, particularly in rural regions, who have a special interest in archaeology. When in-person outreach stopped due to the pandemic, the IAS approved their generous annual contribution to the OSA to help fund virtual outreach programming. Other Iowa organizations also sponsored programming. In June, OSA launched its first YouTube Live presentation, sponsored by Jefferson County Conservation and the Iowa Department of Natural Resources







What's the Point? Chipped Stone Tool Technology in SE Iowa

200 views • Streamed live on Jun 24, 2020

@lowaArchaeology

The education and outreach content on the OSA website remained a vigorous, interactive conduit between the public and the OSA. The OSA's social media pages were an important venue for disseminating news and program information in FY 2020. Active social media platforms administered by the OSA include <u>Facebook</u>, <u>Twitter</u>, <u>Instagram</u>, and <u>YouTube</u>.



4.564 followers ↑ 468

The number of unique Facebook users who actively engaged with content through likes, comments, shares, or clicks averaged 153 per day, with a maximum of 2,088 people. A sum of the total daily unique number of people who viewed content associated with the page for FY 2020 equals **333,811**!

The most popular post featuring a plesiosaur paddle bone found in a Mill Creek feature was served to a total of **16,086 people**, with 2,088 unique engaged users, 204 likes, and 29,528 total impressions, demonstrating the platform's powerful potential in terms of engagement and outreach.



2,355 followers ↑ -11

Over the course of the fiscal year, impressions (the number of times a Twitter user saw an lowa Archaeology tweet) totaled 37,890, with an average of **1,024 impressions per day**. The most engaging tweet, seen by 9,764 people, promoted the launch of OSA's archaeology lesson in partnership with Science Friday in August 2019.



1,395 followers ↑ 68















5,354 unique views ↑ 76 subscribers

On YouTube, people watched Iowa Archaeology videos **7,462** times during the FY 2020. How to Sew a Cattail Mat, produced by Liz Schultz and edited by OSA in 2004, was the most viewed Iowa Archaeology YouTube video this past year. The most popular Iowa Archaeology YouTube videos are from the **Ancient Iowa Film Series** produced by former State Archaeologist Marshall McKusick in the 1970s.



<u>The Office of the State Archaeologist Celebrates 60</u>
<u>Years</u> (John F. Doershuk, Cindy Peterson, October 7)

<u>History Camp Iowa Returns Feb. 22 At Drake University</u> (Jennifer E. Mack, February 11)

<u>Digging up Iowa History</u> (William Whittaker, Mary De La Garza, May 14)

<u>The First Settlers of Iowa</u> (William Whittaker, May 28)

<u>Dig For History At Home With Talk Of Iowa</u> <u>Summer Camp</u> (Elizabeth Reetz, June 16)

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