



MISSOURI ARCHAEOLOGICAL SOCIETY

---

# ANNUAL MEETING

---

SPRINGFIELD, MISSOURI

MARCH 14–16, 2025



## NOTIFICATIONS

There is a small red ticket in the back of your nametag holder. This is for the door prize drawing to be held at 7 p.m. (or shortly thereafter) on Saturday evening. The ticket holder must be present to win.

If you are attending the banquet, you should have received a large color-coded ticket in your registration packet to place next to your plate so that the waitstaff knows your dinner choice. If you are not attending the dinner, you may still attend the Koch Lecture by Dr. Benn.

If you would like to attend the banquet dinner and did not pre-purchase a ticket, a limited number will be available at the registration table.

Tickets for the field trip may still be purchased for \$13. Inquire at the registration table.

**The generosity of many helps so much in making the meeting a success. The Society wishes to thank the following individuals and groups:**



*For hosting and helping with the hospitality suite:* Members of the Pomme de Terre and Ozarks Chapter. Special thanks to Susan Boyd.

*For volunteering:* Sally Bell, Riley Blair, Claire Blodgett, Susan Boyd, Mary Conrad, Jack Eastman, Judy Freeman, Sue Cupka Head, Cinda Houston, Neal Lopinot, Gail Lundeen, Debbie Miller, Clark Montgomery, Sarah Reid, Melia Richardson, Jennifer Rideout, James Roberts, Dustin Thompson, and Jessica Totsch.

*For donating door prizes:* Anonymous, Cafe Cusco, Chabom Tea & Spices, The Discovery Center, Gail Lundeen, **Meals by Monica**, Oasis Hotel & Convention Center, Gina Powell, Van Gogh Eaterie, and Wonders of Wildlife Museum & Aquarium.

*For donating silent auction items:* Arkansas Archeological Survey, Alan Banks, Roger & Susan Boyd, Ben & Lisa Burton, Amy Creasy Clark, Jack Eastman, The Estate of Larry Grantham, Jim & Peggy Feagins, Samuel Hensen, Neal & Sharon Lopinot, **Gail Lundeen**, Clark Montgomery, Gina Powell, Bob & Micol Reeder, Candy Sall, Eric Smith, **Lyle & Martha Sparkman**, St. Louis Art Museum, and Dustin & Ashleigh Thompson.

Finally, we are very grateful to our presenters and those who brought displays for sharing their time and research.

## Friday, March 14

- 6:00–8:00 p.m. Registration (Coco-Fiji Ballroom Lobby)  
6:00–9:00 p.m. Exhibit, book sales, silent auction set-up (Coco-Fiji Ballroom)  
6:00–10:00 p.m. Welcome reception (Hospitality Suite, Mojave)  
7:00–8:00 p.m. Board Meeting (Bora Bora)

## Saturday, March 15

- 7:15–8:00 a.m. Exhibit, book sale set-up (Coco-Fiji Ballroom)  
7:30–8:15 a.m. Chapter presidents meeting (Bora Bora)  
8:00–10:00 a.m. Registration (Coco-Fiji Ballroom Lobby)  
8:30 a.m.–3:25 p.m. Presentations (Coco-Fiji Ballroom)  
8:15 a.m.–3:40 p.m. Book sales, exhibits, silent auction (Coco-Fiji Ballroom)  
3:40 p.m. End of silent auction  
3:50–4:10 p.m. General business meeting (Coco-Fiji Ballroom)  
4:10–4:30 p.m. Trustees meeting (Coco-Fiji Ballroom)  
4:30–5:15 p.m. Artifact Identification Session (public)

### ***Presentations***

- 8:30 a.m. Welcome, Kevin Cupka Head  
8:40 a.m. **The Missouri Archaeological Society: Its First 90 Years**—Robert L. Reeder  
9:05 a.m. **Missouri Department of Transportation and Our Role in Historic Preservation**—Keitly Duran and Kevin DeMera  
9:30 a.m. **BREAK**  
9:40 a.m. **Buried Beneath Parking Lots, Salvage Investigations at Missouri Botanical Gardens**—Joe Harl  
10:05 a.m. **Reconstructing the Illinois State Penitentiary at Alton, Illinois, 1833–1860**—Don L. Booth  
10:30 a.m. **BREAK**

10:40 a.m.	<b>Unburying Antebellum Narratives at a Little Dixie Plantation</b> —Jennifer Rideout
11:05 a.m.	<b>A Review of the 2024 MAS Archaeological Field Survey Workshop at the Dennig Cabins Site (23OR1426) along Greer Spring Branch</b> —Dustin Thompson
11:30 a.m.	<b>BREAK</b>
11:40 a.m.	<b>Musical Instruments and Missouri Archaeology</b> —Michael J. Fuller
12:05 p.m.	<b>Bannerstones from Northwest Missouri</b> —Candace Sall and David Easterla
12:30 a.m.–1:30 p.m.	LUNCH, on your own
1:30–2:00 p.m.	Poster Sessions
2:00 p.m.	<b>Characterizing Ozark Chert Resources Using Reflectance Spectroscopy for Sourcing Stone Artifacts</b> —Ryan M. Parish and Simon Sherman III
2:25 p.m.	<b>Reassessing the Role of Burlington Chert in the Poverty Point Lithic Exchange Network</b> —Simon Sherman III
2:50 p.m.	<b>BREAK</b>
3:00 p.m.	<b>New Radiocarbon Dates for the Greenbrier Site, Sixteenth-Century Town on the White River, Independence County, Arkansas</b> —Juliet E. Morrow
	<b><i>Banquet and Koch Lecture</i></b>
6:00–7:30 p.m.	Cash Bar, Banquet, Awards, Door Prizes, Koch Lecture (Maui Ballroom)
7:45 p.m.	<b>Geoglyph Cosmograms in Native American Mythology of the Northern Plains</b> —David Benn
After banquet	Informal get-together (Mojave)

## **Sunday, April 3**

11:00 a.m.–??	Field trip to The History Museum on the Square (meet at front doors of Museum)
---------------	--

## Abstracts

### **The Missouri Archaeological Society: Its First 90 Years—**

*Robert L. Reeder (President, Missouri Archaeological Society)*

This year, 2025, marks the 90th anniversary of what we know today as the Missouri Archaeological Society. Over its 90-year history, the Society has been an active and successful blend of amateur and professional archaeologists studying Missouri archaeology and sharing this information with the public. Some aspects of the organization have changed through time, but it remains true to the original aims of the Society founders. While focused on the past, the Society faces some challenges to its continuation into the future.

### **Missouri Department of Transportation and Our Role in Historic Preservation—**

*Keitly Duran and Kevin DeMera  
(Missouri Department of Transportation)*

Under the National Historic Preservation Act of 1966, every state in the US is required to protect archaeological sites. Under federal mandate, public archaeology should have a vital role in every state, and Missouri is no exception. The Missouri Department of Transportation (MoDOT), plays a crucial role in preserving the rich history of Missouri through its Department of Historic Preservation. Our team of archaeologists and other historic preservation specialists are dedicated to preserving the state's history, ensuring that important archaeological resources are respected even amidst the demands of road construction and public safety. MoDOT is one of the state agencies that contributes to the preservation of Missouri's historical and archaeology heritage, utilizing taxpayer funds responsibly and effectively. Our staff is involved in a wide range of activities, from conducting archaeological surveys, to recording historic architecture, to collaborating with local historians and members of our community. As co-stewards of the state's many archaeological sites, we work to ensure that federal laws are adhered to, allowing federal dollars to fund necessary roadway improvements, while safeguarding our historical heritage. As part of our mission, we strive to educate the public about the significance of the archaeological finds that may be uncovered along the roads Missouri citizens travel daily. Our goal is not only to study, preserve, and record these cultural treasures, but also to ensure that the citizens we serve understand their importance. Public archaeology is a vital aspect of our mission at MoDOT. By engaging in preservation efforts, we foster a deeper appreciation for Missouri's history and promote community awareness in our shared history. At MoDOT, historic preservation through taxpayer funded archaeology is not just a professional mandate, it's a commitment to our fellow citizens to maintain the heritage of the communities in Missouri.

## **Buried Beneath Parking Lots, Salvage Investigations at Missouri Botanical Gardens—Joe Harl (*Archaeological Research Center of St. Louis*)**

A historic midden was uncovered during renovations and the installation of new lines for lights. It represents a trash dump associated with the families of the first two directors of the gardens and staff members. Remains associated with the homes occupied by working-class families were also uncovered under another parking lot. These materials provided interesting insights into upper and middle-class families and working-class families at the end of the nineteenth century and beginning of the twentieth century.

## **Reconstructing the Illinois State Penitentiary at Alton, Illinois, 1833–1860—Don L. Booth (*SCI Engineering, Inc.*)**

Research of the Illinois State Penitentiary at Alton, Illinois, the State's first official institution (1833), included an analysis of a standing (though relocated and reconstructed) remnant of the prison cell block walls; a review of a previous archaeological investigation (1974); and a study of the available maps, photographs, and artistic renderings of the penitentiary through time. This research resulted in an interpretation and reconstruction of the floor plan of the prison cell block. The research also yielded a postulated sequence of construction of the prison building as it morphed from its original 24 cells in 1833 to 256 cells by the time it closed in 1860. Other structures depicted on historic maps within the roughly four-acre walled compound of the penitentiary will also be explored.

## **Unburying Antebellum Narratives at a Little Dixie Plantation—Jennifer Rideout (*Center for Archaeological Research, Missouri State University*)**

A routine CRM survey encountered sites potentially connected to a cemetery—lost to history—for African-Americans enslaved on an early Little Dixie Plantation. The potential site for a cabin that served as a hub of activity at a pivotal moment in Mormon history—between their expulsion from Kansas City and the onset of the Mormon War was also revealed. Ironically, the sites are near a town named Liberty.

## **A Review of the 2024 MAS Archaeological Field Survey Workshop at the Dennig Cabins Site (23OR1426) along Greer Spring Branch—Dustin Thompson (*Center for Archaeological Research, Missouri State University*)**

In June of 2024, Center for Archaeological Research archaeologists set out with nine volunteer participants to evaluate the precontact component of the Dennig Cabins site. This program was done in partnership with the Mark Twain National Forest with funding from a Historic Preservation

Fund Grant from the Missouri State Historic Preservation Office. During the week-long program, 15 mini-test units were excavated across the site to look for evidence of intact precontact deposits. In addition, a series of talks by professional archaeologists ranging from artifact identification and analysis to ethics in archaeology were given to provide participants with the knowledge needed to help protect cultural resources and encourage the recording of sites.

### **Musical Instruments and Missouri Archaeology—***Michael J. Fuller (St. Louis Community College)*

Music is a human universal, but it is rare for musical instruments to be preserved in the archaeological record. The variety of musical instruments that have been documented by anthropologists and archaeologists include flutes, whistles, rattles, drums, and rasps. Evidence takes the form of preserved artifacts as well as pictographs representing musicians.

### **Bannerstones from Northwest Missouri—***Candace Sall (Museum of Anthropology, University of Missouri) and David Easterla (Northwest Missouri State University, emeritus)*

There is extensive difference in the morphology of surface-collected bannerstones from northwest Missouri. Raw materials and shapes vary widely for these 14 counties in northwest Missouri, while diameter of the drilled hole varies little.

### **Characterizing Ozark Chert Resources Using Reflectance Spectroscopy for Sourcing Stone Artifacts—***Ryan M. Parish (Department of Earth Sciences, University of Memphis) and Simon Sherman III (Department of Anthropology, Washington University, St. Louis)*

Chert sourcing is the process of accurately identifying the place on the landscape where past people obtained natural material used to manufacture tools. By identifying tool-stone sources and matching artifacts back to these locations, archaeologists can reconstruct past human behavior such as how people moved around the land, who they interacted with, and how they organized their technology. However, correctly matching chert artifacts back to the source is difficult. The reflectance spectroscopy technique which uses atomic, molecular, and structural data is proving to be a powerful chert-sourcing tool. The presentation will introduce the technique and reveal the results of a recent study that examined Ozark tool-stone sources. The analysis of 10 types and over 600 samples of Ozarks chert, quartzite, and rhyolite used by precontact people illustrates the potential of reflectance spectroscopy to source stone artifacts in the region.



## **Reassessing the Role of Burlington Chert in the Poverty Point Lithic Exchange Network—*Simon Sherman III (Department of Anthropology, Washington University, St. Louis)***

During the Late Archaic period (4000–2500 cal yr BP) in the southeastern United States, the Poverty Point culture in northeastern Louisiana exhibited an unparalleled use of exotic materials, including cherts, copper, and steatite. The Poverty Point site (16WC5), occupied around 3600–3100 cal yr BP, features massive earthworks and diverse artifacts but lacks burials, making it unique among Late Archaic cultures. The site's function remains debated, with emerging research on siliceous stone sourcing offering new insights. This study advances chert sourcing methodologies through non-destructive Visible/Near-Infrared Reflectance and Fourier Transform Infrared Spectroscopy, analyzing 845 bifaces against an expanded dataset, including Edwards Plateau limestone from west Texas and Missouri samples such as Jefferson City Chert, Roubidoux Chert and Quartzite, Reed Springs Chert, Gasconade Chert, Pitkin Chert, Burlington Chert, Silexite, and Aphanitic Rhyolite. Dimensionality reduction using LASSO regression refined spectral data, enhancing prediction accuracy and addressing key gaps in artifact classification and raw material origin analysis.

## **New Radiocarbon Dates for the Greenbrier Site, Sixteenth-Century Town on the White River, Independence County, Arkansas—*Juliet E. Morrow (Arkansas Archeological Survey)***

This presentation describes the results of ongoing research at the Greenbrier site (3IN1), a late Mississippian town site located on privately owned land in the Middle White River Valley in Independence County, Arkansas. In 1999 and 2000, the Arkansas Archeological Society and Arkansas Archeological Survey excavated part of a roughly 9-m<sup>2</sup> burned structure (House 1) initially interpreted as a dwelling. Ceramic sherds from this house and four radiocarbon dates from the site, ranging from A.D. 1400–1600 (calibrated), indicate that Greenbrier is contemporary with Late Mississippian sites in the eastern Lowlands along the St. Francis and Mississippi rivers. Prestige goods suggest that Greenbrier was part of the wider Mississippian sociopolitical economy and was likely a node along a major trade route. Results from instrumental neutron activation analyses suggest that potters at Greenbrier used local clay sources; however, a chemically equivalent local source has yet to be identified. From December 2019 to October 2021, a gradiometer survey of approximately 30% of the estimated site area identified traces of a double-walled ditch and/or palisade that appears to have been expanded at least once. Images from the gradiometer survey show over 123 anomalies that are plausibly interpreted as dwellings, in addition to a central plaza, and two separate double ditches and/or

walls. Spatial patterning of dwellings and wall-like anomalies suggests that the late Mississippian town expanded to accommodate growth of the community. Excavation of House 1 in 2023–2024 revealed a central hearth and platform surrounded by posts. Radiocarbon dates on charred plants recovered in recent excavations precisely date the burning of the structure to the mid-sixteenth century and suggest the destruction of the house may be attributable to the De Soto expedition that passed through this area in 1541.

## **Poster Presentations**

**Surveying Missouri's Data Deficient Regions: Southwest Pilot Study**—*Ashley Purvis, Jessica Ogden, and Matthew Benson (Missouri State University)*

This poster summarizes the research design, methods, results, and challenges of an inaugural archaeological survey course completed in the Fall of 2024. Students learned and applied archaeological survey methods to discover and record sites in Christian and Webster counties.

## **Conservation and Research of Art and Artifacts**

Billie Follensbee, Session Organizer and Chair  
(*Professor, Missouri State University*)

*This poster session features research and conservation by six students of the Missouri State University MST488 Basic Conservation of Art and Artifacts class of Fall 2024. In this Citizenship and Service-Learning Integrated course the students receive training in basic cleaning, stabilization, preservation, exhibition, and storage of art and artifacts, as well as limited training in basic restoration techniques. The students have based their posters on the research and conservation conducted for their course final projects, for which they analyzed, conserved, and restored objects loaned to us by a number of different Community Partners.*

**Conservation of the Gravestone of H.A. White**—*Madison Baker*

This gravestone memorializes H.A. White, who died in 1876 at the age of one year and eight months. Located at the Maple Park Cemetery in Springfield, Missouri, this gravestone's dove motif and the epitaph are typical of how late nineteenth-century family members left a parting sentiment for their young children. In this conservation project, I carefully cleaned and reconstructed the broken gravestone.

**Conservation of a Bound Volume of Harper's Bazaar Magazine**—*Riley Blair*

This bound volume features illustrations by Rose O'Neill, a trailblazing female illustrator and suffragist best known for the creation

of the iconic Kewpie doll. In this conservation project, I cleaned the detached covers and the pages and I repaired tears using reversible materials. I then reconstructed the spine and reattached the covers to the volume. Finally, I used consolidants and archival paints to restore the appearance of the exterior.

### **Conservation of a Haudenosaunee Wall Pocket ‘Whimsy’— Cassidy Hale**

The boom in tourism in the Niagara region at the turn of the twentieth century incentivized indigenous Haudenosaunee artisans to create tourist-trade objects, later dubbed as “whimsies,” using their highly developed skills in beadwork. This whimsy is a wall pocket, which was used to hold household items. In this conservation project, I cleaned the velvet fabric and the beadwork, recreated two missing ornaments, and restored missing beadwork.

### **Conservation of Early Twentieth-Century Toy Wooden and Cane Chairs—Malena Hemenway**

In the early twentieth century, toy manufacturers created high-quality wooden doll furniture using both hand- and machine-made parts. These doll chairs also reflect Arts and Crafts Movement household furniture typical of this time period. In this conservation project, I reattached the broken cane seats and repaired the broken stretcher. I also cleaned the chairs, filled areas of loss with plaster, and painted the infilled areas with watercolors.

### **Conservation of a Large Hertwig China Doll—McKenna O’Connor**

With its glazed porcelain head and hand-painted features, this doll closely resembles the Hertwig China doll, which was made in Germany in the late nineteenth to early twentieth centuries. Unlike solid China dolls, this doll’s stuffed fabric body allowed children to easily change its clothing. In this conservation project, I cleaned the porcelain parts of the doll. Then I tested the clothing for colorfastness, and I cleaned dirt and stains from the fabric.

### **Conservation of a *La Malinche* Dance Mask—Melia Richardson**

The La Malinche mask is a female mask worn in traditional Mexican dances. While this mask originally depicted the indigenous translator for Hernán Cortés, it is also used to depict the daughter of Moctezuma and other female characters. In this conservation project, I cleaned the surface of the mask and then filled in areas of lost plaster and paint. Then I painted the restored areas, and I sealed and stabilized the mask with a consolidant.

## Saturday Evening Koch Lecture

### **Geoglyph Cosmograms in Native American Mythology of the Northern Plains—*David Benn (Landmark Archaeology, Inc.)***

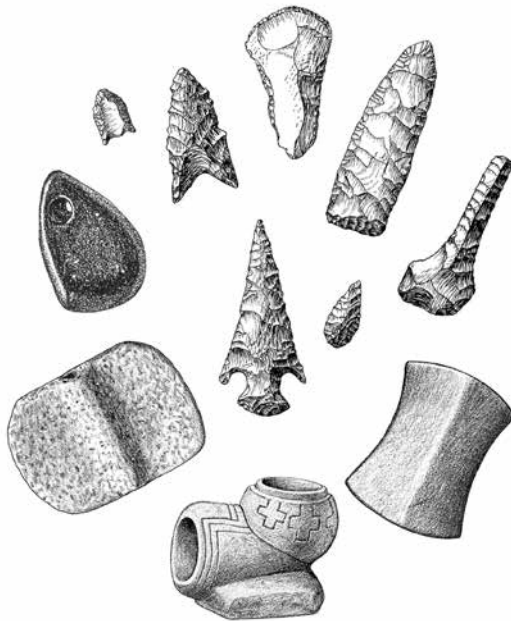
Geoglyphs at three Middle–Late Woodland and Oneota sites (13WD130, -134, 39LN108) in northwestern Iowa and adjacent South Dakota take the form of anthropomorphs, turtles, bison, and thunderers that are similar to petroglyphs at Pipestone Monument in southern Minnesota. Evidence indicates the geoglyphs were cosmograms where vision quests and other life-renewal rituals were conducted. The cosmograms and ritual evidence are compared to ethnographic descriptions of Lakota tribal myths to reveal possible symbolism. The sites are hypothesized to have once been part of “sacred” localities where multiple ritual sites fitted a structured mythological landscape. In this narrative, archeological investigation penetrates two levels of inquiry: the sacred geography of place and legendary archetypes of mythology.



# Artifact Identification Workshop

Bring artifacts to this workshop for identification by professional archaeologists Kevin Cupka Head, Dustin Thompson, and Jennifer Rideout (Center for Archaeological Research, Missouri State University); Julie Morrow (Arkansas Archeological Survey, Arkansas State University, Jonesboro Research Station); and Candace Sall (Director, Museum of Anthropology, University of Missouri).

Please note, this workshop is for identification purposes only and not to provide economic valuation.



## Field Trip

Join us for a tour of the History Museum on the Square. Journey through eight interactive galleries to see how Springfield and the region shaped American history. Each gallery brings unique stories to life through world-class exhibits. A rich collection of artifacts, photographs, and “voices of history” are combined. Exhibits include “Native Crossroads at the Spring,” “Pioneers and Founders at the Crossroads,” “Wild Bill Hickock and the American West,” plus more.

### History Museum on the Square

154 Park Central Square, Springfield

Phone: (417) 831-1976

from the Oasis parking lot: Turn left onto/Glenstone Ave, after 2 miles turn right onto W. Chestnut Expressway; after 1.7 mi turn left onto N. Boonville Ave and continue for 0.4 mi

Parking lots are at the intersection of Olive and Boonville before arriving at the Museum on the northwest corner of the square

- There are several parking options within walking distance from the Museum. The closest free parking lots are located at the corner of Olive St. and Boonville Ave. There are two parking lots at that corner offering free 2-hour parking.
- Our group will meet in the Welcome Center through the main doors of the History Museum on the Square for an introduction to the Museum before starting their self-guided tour. The Museum asks that all group members arrive and enter the Museum at the same time.
- Please note that food and drinks (other than water bottles) are not allowed.



Painting by Andy Thomas

## Exhibits

*Dating Northeast Missouri Pottery at the Sycamore Bend Site-*  
Doug Gifford and David Gifford

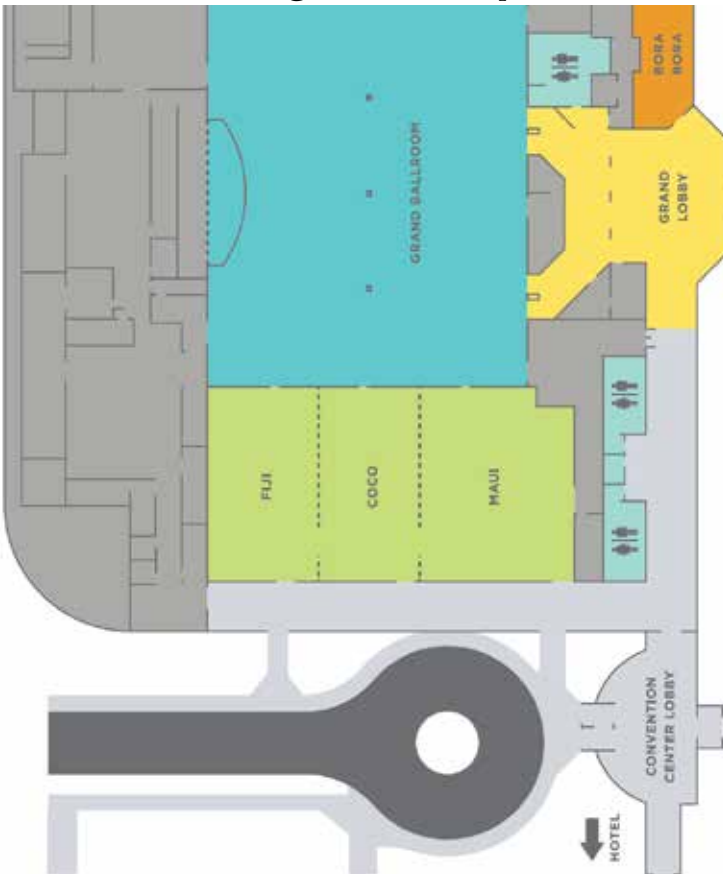
*Hematite Axe Heads-*Alan Banks

*Fifty Years of the Center for Archaeological Research-*Center for  
Archaeological Research, Missouri State University

*Public Outreach-*Kansas City Archaeological Society

*Southwest Missouri Chipped-Stone Artifacts-*Southwest  
Missouri Chapter

## Meeting and Banquet Rooms



To:  
Hospitality Room (Mojave)  
Restaurant  
Sleeping Rooms





The Missouri Archaeological Society is a nonprofit organization dedicated exclusively to educational and charitable purposes.