

2023-2024 Annual Report



From the VMNH Team

VMNH is an ever-growing entity ripe with collaboration. Scientific collections continue to grow, a new pavilion is being constructed, and one-of-a-kind exhibit development is ongoing. Our exhibits and education programs are informed by our research, our precious specimens and artifacts are prepared for public showing, and our outreach is inspired by the natural world.

Staff have worked to leverage state funding to obtain grants, partnerships and private support to continue our trajectory of growth, and we pride ourselves on doing work that occurs nowhere else in the Commonwealth. It all starts with our collections and the treasure-trove of information they provide on natural and cultural heritage. Exhibits, publications, classes, field trips, and virtual experiences all convey the story of our natural world.

We invite you to explore this report to learn of our work protecting cultural heritage, describing new fossil species, documenting biodiversity, providing expert instruction for students, and other endeavors. Afterward, please visit with us and see firsthand the growth of the Commonwealth's natural history museum.



From the Foundation

The Virginia Museum of Natural History Foundation has seen tremendous growth over the past year, with vital collaborations driving continued success. Working directly with museum staff and the VMNH Board of Trustees, the VMNH Foundation has worked to provide funding support for the Science Outreach Initiative, a multi-year program that includes science festivals, need-based education programming, and ground-breaking programs in scientific research and collections. With VMNH Foundation support, the museum's science festivals drew more than 10,000 visitors from across Virginia and from multiple states, with nearly 3,000 visitors attending the science festivals free of charge thanks to the Museums for All initiative. This program provides free VMNH admission to EBT card holders thanks to underwriting support from Hooker Furnishings, Carter Bank & Trust, and the Community Foundation Serving Western Virginia. In addition to providing support for science festivals, the VMNH Foundation also worked with staff to secure important individual, grant and corporate support for need-based education programming for learners of all ages. With this vital support, thousands of children from across the Commonwealth took part in engaging, standards-based museum education programs. The VMNH Foundation is grateful to all supporters, with donations of all types and amounts making possible a variety of mission-based programs and initiatives in research, education, and exhibits. As we look forward to the coming year and beyond, the VMNH Foundation is excited to collaborate further with museum staff, the VMNH Board of Trustees, and the thousands of generous supporters across the Commonwealth and beyond.

> Dr. Joan Montgomery President, Virginia Museum of Natural History Foundation

VMNH Board of Trustees

Chair

Lisa Carter, Urbanna

Vice-Chair Mark Buss, Manakin-Sabot

Treasurer Cord Cothren, Danville

Secretary Nathan Sanford, Roanoke

Trustees Dr. Makunda Abdul-Mbacke, Axton

Dr. Thomas Benzing, Waynesboro

Anne Axton Burnett, Henrico

Jennifer Burnett, South Boston

Dr. Melany Clark, Ridgeway

Dr. Arthur Evans, Richmond

Emma Ito, Richmond

Sherri Jordan, Richmond

Dr. Carole Nash, Harrisonburg

Roberto Quinones, McLean

Lauren Woodson Hall, Roanoke

From the Board of Trustees

The Code of Virginia states that the purposes of VMNH represent an essential government function, and we are proud to report that the daily operations conducted by the staff and volunteers are handled professionally and to great effect. We provide two illustrative examples: The Homeschool Science and Engineering Academy (HSEC) and the Cultural Heritage Monitoring Lab (CHML).

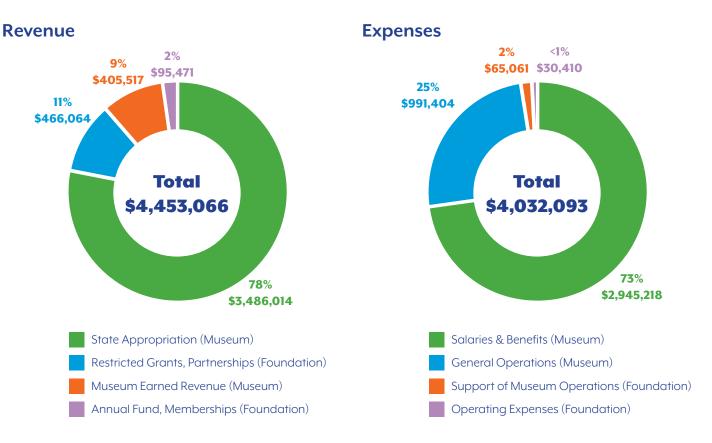
HSEC provides homeschooled families a science curriculum and gives students hands-on, inquiry-based projects and classes guided by the Virginia science Standards of Learning. More than 50 families from five Virginia and two North Carolina counties participate. Their learning takes place in a classroom setting, and also in the museum's exhibit galleries, in a modern microscopy lab, and outdoors at J. Frank Wilson Park. Participating students develop confidence in the sciences.

With partnerships involving the U.S. Department of Defense, the Smithsonian Institution, and private technology companies, CHML has provided the U.S. and partnering governments with satellite-driven data on the status of cultural resources (museums, libraries, churches, cemeteries, monuments) worldwide that are at risk from natural disaster and armed conflict. The VMNH archaeologists that staff CHML are the only North American team conducting this mission, and work has occurred in Ukraine, Djibouti, and Sudan. In addition, CHML has monitored and provided conservation recommendations for coastal and riverine Virginia Indian sites threatened by flooding and erosion.

Both HSEC and CHML utilize innovative methods and partnerships, and provide essential services to the Commonwealth and beyond. The Board of Trustees supports these efforts at the Virginia Museum of Natural History.

Cover image: Specimens prepared with specialized stains highlight structures of bone in red and cartilage in blue. Photo by Adam Davis.

Fiscal Year 2024 (July 1, 2023 to June 30, 2024)



By the Numbers 2023-2024





29 published scientific articles



4,578 visitors receiving free admission through the Museums for All program



14,687 students participating in VMNH education programs



754 donations to the VMNH Foundation



• 41 Corporate Partnerships

Science Festivals Initiative

The *Science Festivals Initiative* was launched in 2017 as a key tactic in support of VMNH science outreach. Goals included: 1) increased visitation, 2) diversified revenue, 3) expanded science outreach, and 4) growth in memberships, partnerships and donations.

This transformative 7-year initiative represents a successful strategic collaboration between the VMNH Board of Trustees, the VMNH Foundation, and VMNH staff, with key philanthropic support serving as the catalyst for this program's continued growth and success in 2024 and beyond. Since its 2017 launch, this initiative has resulted in a 57% average annual increase in festival revenue and an 80% average annual increase in festival revenue and an 80% average received free and discounted festival admission since 2017 thanks to the *Museums for All* program, an initiative providing free admission to EBT card recipients.





Research & Collections

For more information about scientific research at VMNH, visit **www.vmnh.net/research-collections**.

Archaeology & The Cultural Heritage Monitoring Lab

The VMNH Archaeology Department has developed new capabilities over the past two years, including a dendrochronology lab (tree ring dating) and large stone tool and marine shell reference collections. The department has also expanded its digital collections by over 60,000 records.

The VMNH Cultural Heritage Monitoring Lab (CHML) has played a significant role in international affairs using advanced satellite technologies to identify impacts to cultural heritage from conflict and natural disaster. CHML's work in Ukraine has received international recognition and continues to play a critical role in the global response to the destruction of historic sites.

Paleontology

As part of a National Science Foundation grant-funded project, paleontology curator Dr. Adam Pritchard, paleontology technician Lucy Treado, and VMNH Research Associate Dr. Brooke Haiar of the University of Lynchburg managed undergraduate student teams from the University of Lynchburg and the College of William & Mary at the annual summer dinosaur dig in Wyoming. Pritchard and Treado mentored three students from the dig on paleontology research projects, physically preparing dinosaur skeletal material and describing samples of dinosaur skin for publication.

Herpetology

VMNH Assistant Curator of Herpetology Dr. Arianna Kuhn established the first ever VMNH Herpetology Lab and frozen tissue collection. Complementing this advancement, the first field collection programs and research projects have also been initiated with regional university and agency partners to build these assets.







Invertebrate Zoology

Over the past fiscal year, the digitization of the museum's mollusk collection (nearly 50,000 specimens) was completed, representing nearly a third of the museum's dry invertebrate collection. A new genus and six new species previously unknown to science were described, and curators compiled the first comprehensive list of the Commonwealth's terrestrial isopods. Curators also documented the range expansion of the invasive red imported fire ant in Virginia.

Other ongoing research projects include a review of the chelodesmid millipedes of the Antilles and the Bahamas; the first world catalogue of the millipede family Chelodesmidae; taxonomy and description of new species of flat-backed millipedes; a catalog of the spiders of Virginia; ongoing research into new isopod-ant associations; an updated checklist of the terrestrial isopods of Puerto Rico; a review of the invasive ants of Florida; and research into the spread and impacts of the invasive needle ant.

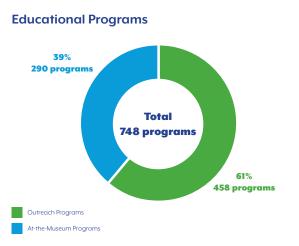
Mammalogy

Dr. Nancy Moncrief, curator of mammalogy, retired after a highly accomplished 33-year tenure at the museum. Following her retirement, Dr. Moncrief was named Curator Emerita in appreciation of her accomplished career. Moncrief is one of only 4 VMNH curators to have received the honor.

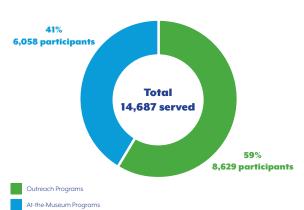
During her career, Moncrief published dozens of peer-reviewed papers, many of which reported new findings about the distributions, ecology and evolution of mammals in the mid-Atlantic region of the United States, particularly in Virginia. Her research into mammal populations on Virginia's barrier islands has provided a comprehensive foundation for the management of mesopredators (medium-sized carnivorous or omnivorous animals, such as raccoons and foxes), and the restoration of critical nesting habitats for beach-nesting shorebirds and colonial waterbirds on the islands.



Education & Outreach (July 1, 2023 to June 30, 2024)



Total Served





The VMNH Education Department provided 748 programs, serving 14,687 students during the 2023-2024 school year.

VMNH educators are constantly striving to implement new and creative programming for school groups, homeschool families, and community partners at the museum, utilizing the museum's variety of spaces including the exhibits, collections, and Microscopy Lab as well as providing outreach program opportunities. The Education Department continues its scholarship program for local and surrounding under-served school districts each year. Scholarships are made possible through various grants with local and regional community partners, covering museum exhibit admission and SOLcorrelated education program costs. The Education Department works with scout and public groups state-wide for after-hours exploration and engaging programs with special themed *Night at the Museum* sleepovers.



Strategic Initiatives

Internships

The Virginia Museum of Natural History partnered with the Smithsonian Institution (SI) to host two summer interns through SI's Leadership for Change internship program. The program focused on the documentation and communication of climate threats to sensitive species in rural southwest Virginia.

Jean S. Adams Education Pavilion

Construction began on the Jean S. Adams Education Pavilion, with anticipated completion in early 2025. This exciting new venue will serve as a multi-purpose resource for education programming, special events, science festivals, and community events.

VMNH Energy Efficiency Initiative

LAD L

The museum's rooftop solar array provided continued energy savings for the museum, with LED lighting and building automation systems facilitating further energy efficiency.



Looking to the Future

- Jean S. Adams Education Pavilion to open early 2025
- The Age of Dinosaurs special exhibit to open February 8, 2025
- VMNH reaccreditation by the American Alliance of Museums in 2025
- Completion of *Museum Without Walls: 2020-2025* strategic plan in spring 2025, with launch of 2025-2030 strategic plan







VMNH Waynesboro

To help meet our mission of being a science education resource for all citizens of the Commonwealth, the VMNH Board of Trustees approved an effort to establish a branch of the museum near the heavily traveled south entrance to the Shenandoah National Park. Detailed design for the VMNH-Waynesboro campus included the schematic design for a 28,000 square foot facility, as well as the initial concepts of exhibits. Exhibit themes include geology/ hydrology of Virginia's Blue Ridge and Shenandoah Valley, regional biodiversity, fossil resources, and the first peoples of the region. Preliminaries will be developed in FY 2025, and will be submitted to the state with a request to move the project to the capital construction pool.

Featured Exhibits



February 11, 2023 to January 20, 2024

sponsored by The Helen S. & Charles G. Patterson, Jr. Charitable Foundation Trust, Martinsville-Henry County Tourism, and Sovah Health



February 10, 2024 to January 11, 2025

sponsored by

Bassett Furniture Industries, Boxley Materials Company, Monogram Foods Loves Kids Foundation, The Helen S. & Charles G. Patterson, Jr. Charitable Foundation Trust, and Martinsville-Henry County Tourism

Upcoming Science Festivals



Bonez & Booz October 26, 2024

sponsored by Bassett Furniture Industries, Boxley Materials Company, Homes by Amy + Co., Monogram Foods Loves Kids Foundation, and The Helen S. & Charles G. Patterson, Jr. Charitable Foundation Trust



Reptile Festival April 25-26, 2025

sponsored by Bassett Furniture Industries, Boxley Materials Company, and The Helen S. & Charles G. Patterson, Jr. Charitable Foundation Trust



Dino Festival

sponsored by Bassett Furniture Industries and The Helen S. & Charles G. Patterson, Jr. Charitable Foundation Trust

Thank you to our supporters!

For a complete list of donors in fiscal year 2024, please visit **www.vmnh.net/donors**.





21 Starling Avenue, Martinsville, VA 24112 www.vmnh.net information@vmnh.virginia.gov



The mission of the Virginia Museum of Natural History is to interpret Virginia's natural heritage within a global context in ways that are relevant to all citizens of the Commonwealth.