

**VIRGINIA MUSEUM OF NATURAL HISTORY**  
**Board of Trustees Research and Collections Committee**

Saturday, Aug. 9, 2025

9 a.m.

## **A G E N D A**

- Call to order
- Roll Call: Dr. Art Evans, Dr. Tom Benzing, Dr. Carole Nash, Dr. Melany Clark, Dr. David Furth
- Approval of minutes from the May 17, 2025 meeting of the Research and Collections Committee
- April-June 2025 acquisitions (action item)
- Consideration of recommending board approval of amended live animals policy
- Other business
- Adjourn

***The mission of the Virginia Museum of Natural History:***

*To interpret Virginia's natural heritage within a global context in ways that are relevant to all citizens of the Commonwealth.*



**VIRGINIA MUSEUM OF NATURAL HISTORY BOARD OF TRUSTEES  
MINUTES OF THE RESEARCH AND COLLECTIONS COMMITTEE  
May 17, 2025, 9 A.M.  
Virginia Museum of Natural History, Room 237 Conference Room A**

Present at the meeting were Dr. Art Evans, Dr. Melany Clark, Dr. Carole Nash, Dr. Joe Keiper, Ryan Barber, Jonathan Martin, Dr. Collin VanBuren, Lauren Coleman, and Ben Williams. Attending the meeting via Zoom were Dr. Tom Benzing, Dr. David Furth, and Zach Ryder. No committee members were absent and a quorum was provided.

Committee chair Dr. Art Evans called the meeting to order. The committee unanimously approved the meetings from the previous meeting. The committee circulated the acquisitions sign-off sheet and approved it unanimously.

Dr. Collin VanBuren introduced himself as the museum's new Visiting Scholar and a vertebrate biologist working out of Dr. Nancy Moncrief's former office. The committee welcomed Dr. VanBuren to the museum.

Dr. Art Evans brought up the May 5 virtual joint meeting of the Research and Collections Committee and the Facilities Committee. The goal of the meeting was get the two committees on the same page regarding the museum's Douglas Avenue facility and the collections that are to eventually be moved there. Dr. Evans said that a map was presented at the meeting that had flagged several of the rooms for different collections materials. With the architectural firm in the process of reviewing the Douglas Avenue rehabilitation project to present the museum the scope of the work, now is the time to put ideas on paper, Dr. Evans said. Dr. Tom Benzing added that money used for Douglas Avenue from the maintenance reserve fund can only be used to restore the facility to its condition in 2008, which means add-ons like apartments for visiting researchers could not be paid for with maintenance reserve funds. Dr. Benzing added that staff should receive an update on cost of asbestos and lead abatement at Douglas Avenue in the coming weeks, and that the two committees should have another joint meeting in about two months when the 60% working drawings from the architectural firm are completed. Dr. Art Evans thanked the museum's curatorial staff for their detailed reports on which collections can be moved to Douglas Avenue and when. Dr. Carole Nash added that it was clear museum staff had put a lot of thought into how Douglas Avenue would be used, which was reassuring.

Dr. Art Evans asked if the committee had any thoughts about its approach to the Museum Without Walls strategic plan, such as recommending the hiring of another employee for Research and Collections. Dr. Joe Keiper said that Research and Collections has greatly increased its staff in the last decade. Discussion has taken place about asking the Commonwealth to fund the hiring of a full-time fabricator, which would potentially be an easier sell since the fabricator would work with multiple departments, including not only Research and Collections but also Exhibits and Education. Dr. Evans said that Research and Collections is the wellspring from which everything else flows at the museum, and he's pleased with the progress that has been made over the last decade. He mentioned that Research Technician Marshall Boyd is a great example of a Research and Collections staffer who works closely with other departments.

Dr. Carole Nash asked if a permanent curator would be hired to replace Curator Emerita Dr. Nancy Moncrief. Dr. Joe Keiper said that the museum will begin advertising for a curator to replace Dr. Moncrief in August 2026.

Dr. Art Evans asked if there were any thoughts about naming the Douglas Avenue facility. Dr. Tom Benzing said a naming opportunity could potentially be tied to upgrades outside the scope of maintenance reserve funding, with the hope that a benefactor might be interested in naming the facility.

Discussion took place regarding the next strategic plan and the topics it should include, such as climate change and invasive species. Dr. Collin VanBuren was directed to work with Ben Williams to compile relevant documents which could potentially be folded into strategic plan after review by the committee.

Dr. Tom Benzing asked when the model *Pelagornis* was scheduled to be installed in the new pavilion. Dr. Joe Keiper said it would be installed during the last week in May.

Dr. Joe Keiper said that Dr. Adam Pritchard was recently promoted to the position of Associate Curator. Additionally, he said, the museum will begin advertising for a new curator of Herpetology in August.

Dr. Art Evans adjourned the meeting.

**VIRGINIA MUSEUM OF NATURAL HISTORY  
RESEARCH AND COLLECTIONS ACTIVITIES**

**Report to the Board of Trustees  
April-June 2025**

**Kaloyan Ivanov, Ph.D.  
Associate Curator of Invertebrate Zoology**

**Dr. Jackson Means  
Associate Curator of Myriapodology**

- Dr. Ivanov and colleagues have a paper in press at *Proceedings of the Entomological Society of Washington*.
- Drs. Ivanov and Means, and colleagues have a paper accepted at *Proceedings of the Entomological Society of Washington*.
- Drs. Ivanov and Means, and colleagues have manuscripts in revision at *European Journal of Taxonomy* and *Cladistics*.
- Drs. Ivanov and Means and L. Hightower have a manuscript in review at *Jeffersoniana*.
- Dr. Means presented a talk to members of the King's Grant Retirement Community.
- Drs. Ivanov and Means, and L. Hightower participated in VMNH's Reptile Fest and interacted with 1,200+ visitors.

**Research & Collections**

Drs. Ivanov, J. M. Leavengood, Jr. (USDA), and C. R. Bartlett (University of Delaware) have a paper in press at *Proceedings of the Entomological Society of Washington*. The paper reports the first record of the invasive African planthopper *Leptodelphax maculigera* (Stål, 1859) (Hemiptera: Delphacidae) in Paraguay.

Drs. Ivanov and Means, C. Ziemke (U Southern Mississippi), and N. Jones (American Isopod and Myriapod Group) have a manuscript accepted at *Proceedings of the Entomological Society of Washington*. The paper focuses on the recent discovery of the terrestrial isopods *Trichorhina heterophthalma* Lemos de Castro, 1964 and *Caraiboscia christiani* Leistikow, 2001 in Puerto Rico and their association with multiple species of ants (new host associations for both taxa). In addition, the manuscript includes an updated checklist of the terrestrial isopods of Puerto Rico.

Drs. Ivanov and Means, L. Hightower, Drs. R. Bouzan, L. F. M. Iniesta, A. D. Brescovit, and J. P. P. Pena-Barbosa (Instituto Butantan, Brazil), Dr. J. Bueno-Villegas (Universidad Autónoma del Estado de Hidalgo, Mexico), Dr. C. Rojas-Buffer (Universidad de la República, Uruguay), and Dr. P. Sierwald (Field Museum of Natural History) have a manuscript in revision at *European Journal of Taxonomy*. The work represents the first worldwide catalog of the millipede family Chelodesmidae and includes detailed data on all 771 valid species along with synonymies, bibliography, and distributional information.

Drs. Ivanov, Means, Bouzan, Iniesta and Brescovit have a manuscript in revision at *Cladistics*. The work is the first biogeographic analysis of the family Chelodesmidae focused on analyzing worldwide patterns of endemism.

Drs. Ivanov and Means, and L. Hightower have a manuscript in review at VMNH's periodical *Jeffersoniana*. The work is the first part of a two-part catalog of the invertebrate type specimens in the collection of the Virginia Museum of Natural History. When completed, the paper will offer a complete list and associated data of the type specimens housed at VMNH.

Drs. Ivanov, Means, Bouzan, Iniesta and Brescovit are completing work on a taxonomic revision of the Brazilian endemic millipede tribe Cornalatini (Polydesmida: Chelodesmidae) to be submitted to *Invertebrate Systematics*. The study includes the description of two new genera and three new species along with the first molecular analysis for the family Chelodesmidae. In addition, the paper provides an identification key to all known Cornalatini genera and species.

Dr. Ivanov and colleague myrmecologists from various Florida and Georgia institutions continued work on a manuscript focused on the non-native myrmecofauna of Florida for a special issue of *Florida Entomologist*. When completed, the paper will offer a comprehensive account of all non-native ant taxa recorded from Florida, a global hotspot of introduced and invasive ants.

Dr. Ivanov and colleagues reinitiated work on the Ants of Delmarva project led by Dr. S. T. Dash of Hampton University. Drs. Ivanov, Dash, Bartlett, M. A. Ulysséa (Federal University of Paraná, Brazil) and N. Nazdrowicz (DE Division of Fish and Wildlife) participated in an online meeting regarding data compilation and future steps for the project. (June 11)

Drs. Ivanov and S. Yang (Virginia Tech) initiated a project on the recent spread of the invasive Argentine ant, *Linepithema humile* (Mayr, 1868), in Virginia. Given the well-documented ecological and economic impacts of this species, the Virginia populations represent a significant new record with important implications for invasive species monitoring and management.

Dr. Means and Dr. M. Milne (U Indianapolis) continued work on a catalog of the spiders of Virginia. When completed, the paper will offer a complete list, including bibliographic history and references, of the 650+ species of spiders found in Virginia.

Dr. Means continued work on the recently launched Millipedes of Virginia project via literature review, data compilation, and mapping of records.

This quarter, Drs. Ivanov and Means conducted fieldwork at various sites in Carroll, Giles, Grayson, Southampton, and Sussex Cos. and the Cities of Chesapeake, Norfolk, and Virginia Beach, VA; Dare, Durham, Guilford, Randolph, and Wake Cos., NC; and Florence and Horry Cos, SC in support of ongoing research projects.

Drs. Ivanov and Means, and L. Hightower completed the processing of a large number of recently collected samples from Paraguay. The materials are temporarily stored in the Recent Invertebrates lab awaiting specimen preparation.

Dr. Means processed (removed and sorted specimens for identification) over 150 litter, Malaise, pitfall, and subterranean trap samples from Patrick County, VA as part of an ongoing research project, as well as from recent field trips to Paraguay, Texas, Alabama, and Mississippi.

L. Hightower prepared 1,293 ants and 472 non-ant specimens (chiefly Hymenoptera and Coleoptera) from a recent donation by Dr. J. M. Leavengood, Jr. (USDA).

Dr. Ivanov identified 134 ant specimens on loan from Clemson University and 158 ants and 8 non-ant hymenopterans from the collection of Dr. J. M. Leavengood Jr. Some specimens from the latter will be retained for VMNH as they represent new taxa for the museum's collection.

Dr. Means identified and curated 45 specimens (millipedes, spiders, isopods, etc.) for the museum's frozen tissue and fluid collections, with another 3,000+ specimens set aside for various taxonomic experts.

Dr. Ivanov and L. Hightower completed the curation, update and inventory of the museum's Chalcidoidea (chalcidoid wasps) holdings, which included the addition of some recently collected specimens. The VMNH collection comprises 596 specimens representing 35 species.

VMNH Collections Manager H. Cartmell, with help from Dr. Ivanov, is completing work on curating and cataloging the museum's Mollusca (mollusks) holdings. Recent work included digitization of selected specimens, and preparation and installation of labels.

Virginia Tech Ph.D. student H. Swarm, who is working on wireworm ecology and IPM, used VMNH's invertebrate holdings to capture data and study Elateridae (click beetles) taxa from Virginia and the surrounding areas.

Dr. Ivanov and L. Hightower responded to an information request regarding VMNH's invertebrate holdings: *Triatoma sanguisuga* (LeConte, 1855) (Reduviidae: Triatominae; kissing bugs) (H. Kinnaird, Dr. J. K. Peterson; U Delaware)

## **Education & Outreach**

Drs. Ivanov and Means, and L. Hightower participated in VMNH's 11<sup>th</sup> annual Reptile Festival which offered a variety of displays and activities that ranged from preserved amphibian and reptile specimens from the museum's collections to live arthropods, amphibians and reptiles, and variety of herpetology-themed children's crafts and activities. The two-day event attracted 2,426 children and adults, including 696 *Museums for All* visitors, from Virginia, North Carolina, Washington, DC and ten additional states. (April 25-26)

L. Hightower prepared a display of native solitary bees for an outreach event by the Blue Ridge Foothills and Lakes chapter of the Virginia Master Naturalists. (May 17)

Dr. Means presented on the biodiversity, ecology, and natural history of Myriapoda (millipedes, centipedes, and allies) for the King's Grant Retirement Community. (June 12)

Dr. Ivanov, VMNH Executive Director Dr. J. Keiper, Chief Financial Officer J. Martin, and Visiting Scholar Dr. C. Vanburen participated in the second annual "Virginia Birding Classic" organized by the Virginia Department of Wildlife Resources. With 116 recorded species, Team VMNH took the bronze in the final rankings.

Volunteer Lauren Apel continued work in the Department of Recent Invertebrates by processing new and backlogged litter, Malaise, and black light samples from Virginia, Alabama, Louisiana, and Paraguay in support of various research projects.

Dr. Ivanov and L. Hightower gave tours of the museum's collections to Dr. G. Jofre-Rodriguez and students from Virginia Commonwealth University. (June 20)

### **Exhibits**

Dr. Ivanov participated in a meeting with Dr. Keiper, VMNH Associate Curator of Paleontology Dr. A. Pritchard, Paleontology Technician L. Treado, and Museum Experiences Manager B. Fisher to discuss the dismantling of VMNH's Pleistocene exhibit (completed in mid-June) and plans of re-imagining the exhibition space with new permanent displays along with the creation of a new temporary exhibit. (May 13)

### **Professional Service**

Dr. Means met with representatives from The Tree of Life Project to provide advice on the creation of educational materials related to evolution and natural history, including an online application and printed posters, fliers, etc. (April 14)

Dr. Means participated in a Board meeting of the Virginia Institute for Invertebrates (VII). The primary goal of this newly launched non-profit organization is to build and maintain a network of insect monitoring sites, collect long-term data, support scientific research, and help guide sound conservation strategies in Virginia. (June 16)

Dr. Means spearheaded a proposal to the Virginia Outdoors Foundation's Forest CORE Fund (Mountain Valley Pipeline Region) in association with VII and the 500-Year Forest Foundation. The CORE Fund provides money for the purchase of property for conservation and protection from development in perpetuity, which aligns with the goals of the aforementioned organizations. If awarded, VII would purchase property in Virginia for use in monitoring invertebrate diversity, abundance, and health.

Drs. Ivanov and Means reviewed selected chapters (terrestrial isopods and millipedes) for an upcoming book on cave taxa of Indiana and the surrounding territories. (completed June 26)

Dr. Ivanov copy edited four articles for the Virginia Natural History Society's periodical *Banisteria* (Volume 59). (completed April 4, May 13, 19)

Dr. Ivanov reviewed a manuscript for *Ecology and Evolution*. (completed June 30)

Dr. Means reviewed manuscripts for *Zootaxa* and *Zookeys*. (completed June 6, 18)

**Hayden Bassett, Ph.D.**  
**Assistant Curator of Archaeology**

## **INTRODUCTION**

The VMNH Archaeology Department is currently staffed by 8 personnel as of July 2025. This includes the Department Head (VMNH Assistant Curator of Archaeology), VMNH Senior Staff Archaeologist, the four core staff of the Cultural Heritage Monitoring Lab and two Archaeology Lab technicians. This quarter, Dr. Bassett focused his teams' efforts on publications, collections management, records digitization, and project development, and research funding.

## **RESEARCH AND COLLECTIONS**

The VMNH Archaeology Department continued collections organization efforts with the goal of enabling research. This included consolidating collections storage and addressing long-term loans. This facilitated better planning for anticipated acquisitions for a 2-year outlook. The department prepared two collections for a return transfer back to their institutions. This included preparations for a return of 70% of the Graham-White collection for a planned exhibit at the Salem Historical Society, and a return of 100% of the Ridgeway Hydrological Project archaeological collection back to UVA. This will free up critical collections storage space, while ensuring that the VMNH is maximizing research and education with collections in the Commonwealth.

As a producer and curatorial repository of digital collections, the VMNH Archaeology Department has expanded its digital collections holdings by nearly 56,000 "objects" this quarter and anticipates further growth in digital collections with each new quarter. At the request of its research stakeholders, the new objects include expanded cultural heritage site locations for Texas. The Archaeology Department's CHML is using these data to assess impacts to cultural heritage. These digital objects in the VMNH's digital collections have already been requested/accessed by multiple outside organizations.

A part of Dr. Bassett's research efforts this quarter were dedicated to continuing the leading role played by the VMNH's Cultural Heritage Monitoring Lab (CHML) in response to the destruction of museums, archaeological sites, and other cultural heritage sites in Ukraine and Sudan. Since February 2022, the VMNH-CHML team has been monitoring over 28,000 cultural heritage sites in Ukraine, identified potential damage to over 2,100 sites, and confirmed damage to almost 700. The VMNH team is also monitoring Sudan's museums, religious sites, and archaeological sites in the areas impacted by the ongoing Civil War. Additionally, the CHML at VMNH responded to the LA wildfires, Hurricane Helene in NC, and the earthquake in Myanmar by assessing natural disaster impacts to cultural heritage. This work has resulted in several published reports this quarter and international recognition of the VMNH as a leading research institution at the nexus of archaeology and international affairs.

## **PUBLICATIONS**

Dr. Bassett and his team released four publications this quarter, with an additional one accepted and now in press. This includes one peer-reviewed journal article (in press),

and four open-access reports. In the past three months, the CHML's four new reports have been read 3,894 times and downloaded 639 times. This brings the readership of the VMNH's Archaeology Departments 31 most recent publications from the past 20 months to 43,054 reads and 5,575 downloads. The five publications from this quarter are listed below:

Peer-Reviewed Publications:

Fitzgerald, K., Bassett, H., Maher, A., Welsh, W. (*in press*). "High-Resolution Satellite Imagery of an Early Detection Indicator for Archaeological Sites: A Case Study of Mamai-Hora, Ukraine." *Aurora*, special issue: Illicit Trafficking of Cultural Property: Examples from the Heritage Sector.

Open-Access Reports:

Fitzgerald, K., Bassett, H., Hanson, K., Averyt, K., Kane, K. E., Welsh, W., Maher, A., Muller, C. E., and Gunter-Bassett, M. (2025). "[Rapid Site Report: Earthquake Damage to the Maha Aungmye Bonzan Monastery in Inn Wa, Myanmar](#)." Virginia Museum of Natural History, Cultural Heritage Monitoring Lab, and Smithsonian Institution, Museum Conservation Institute—Smithsonian Cultural Rescue Initiative. DOI: 10.25573/data.28789934.

Fitzgerald, K., Bassett, H., Hanson, K., Welsh, W., Maher, A., Carroll, C., Averyt, K., Muller, C. E., Kane, K. E., Gunter-Bassett, M., and Daniels, B. I. (2025). "[Rapid Site Report: Damage to the Episcopal Church of the Savior in Omdurman, Sudan, and the Al-Shaheed Mosque in Khartoum, Sudan](#)." Virginia Museum of Natural History, Cultural Heritage Monitoring Lab; University of Pennsylvania Museum of Archaeology and Anthropology, Penn Cultural Heritage Center; and Smithsonian Institution, Museum Conservation Institute - Smithsonian Cultural Rescue Initiative. DOI 10.25573/data.28224995.

Welsh, W., Hanson, K., Bassett, H., Fitzgerald, K., Maher, A., Carroll, C., Averyt, K., Gunter-Bassett, M., and Daniels, B. I. (2025). "[Potential Impacts to Cultural Heritage Sites from the Palisades Fire in Los Angeles County, California, USA](#)." Virginia Museum of Natural History, Cultural Heritage Monitoring Lab; Smithsonian Institution, Museum Support Center - Smithsonian Cultural Rescue Initiative; and Los Angeles County Department of Arts and Culture. DOI: 10.25573/data.28232729.

Welsh, W., Hanson, K., Bassett, H., Fitzgerald, K., Maher, A., Carroll, C., Averyt, K., Gunter-Bassett, M., and Daniels, B. I. (2025). "[Potential Impacts to Cultural Heritage Sites from the Eaton Fire in Los Angeles County, California, USA](#)." Virginia Museum of Natural History, Cultural Heritage Monitoring Lab; Smithsonian Institution, Museum Support Center - Smithsonian Cultural Rescue Initiative; and Los Angeles County Department of Arts and Culture. DOI: 10.25573/data.28259372.

## **EDUCATION AND OUTREACH**

*Professional Service:*

Dr. Bassett continued his appointments as a Research Associate at the Smithsonian Institution, a Fellow of The Explorers Club, a Fellow of the Royal Geographical Society, and an Adjunct Lecturer in William & Mary's Department of Anthropology. He continued his duties as Vice President of the Board of Trustees for Falmouth Heritage Renewal, an international historic preservation non-profit.

This quarter, Dr. Bassett and VMNH staff archaeologist Madeleine Gunter Bassett continued to fulfill their duties in the Archaeological Society of Virginia (ASV) and Council for Virginia Archaeologists (CoVA). In their roles on committees in these organizations, VMNH Archaeology staff provide direction, technical review, grant approvals, among other tasks for state-wide archaeological research for the foreseeable future.

**Adam Pritchard, Ph.D.**  
**Assistant Curator of Paleontology**

- Dr. Pritchard submitted two manuscripts and a conference abstract on fossil reptile morphology and pathology.
- Dr. Pritchard submitted a grant for and received \$10,000 from the Luck Companies Foundation to support an intern project in Q1 2026. The project will produce 3D models and exhibit content related to the tiny Virginian reptile *Tanytrachelos*.
- Dr. Pritchard worked w/ the paleo lab to complete preparations on the newly recognized giant dinosaur specimen of *Torvosaurus* in preparation for Dino Festival 2025. The specimen, among other VMNH holdings, will be a central part of the display this year.

### **Research & Collections**

Dr. Pritchard submitted two manuscripts, one as lead and the other as co-author. One details the oldest terrestrial snake fossil ever found in Virginia. The other describes a toothless, bipedal reptile from the Triassic Period of New Mexico. He also collaborated with a Virginia Tech team on an abstract for a presentation on VMNH specimens at the Society of Vertebrate Paleontology annual meeting in Manchester, England.

Dr. Pritchard developed the collections in several targeted ways:

- Acquisition of new Triassic dinosaur tracks and vertebrate fossils from across Virginia. These were collected by Dr. Robert Weems throughout the past 50 years.
- Preparation and display planning for the *Torvosaurus* partial skeleton for Dinosaur Festival.
- Opened a dialog with Clinch River Wildlife Management officials to acquire a large slab (5' +) of invertebrate trace fossils as a wall display specimen.
- Began discussions with Dr. Glen Storrs (Cincinnati Museum Center) on possibly acquiring a giant trilobite for display.

Dr. Pritchard worked with many scientific workers seeking to use VMNH collections in their work:

- Prospective UNC student, planning to work on Triassic fossil fish collections.
- University of Georgia student, who visited to examine invertebrates from Appalachian sites in VA.
- Natural History Museum of the UK researchers, seeking images of Triassic microvertebrates.
- Utah State University researchers, who borrowed samples of Cow Branch Formation shales for destructive sampling.
- VMNH research associate Dr. Noel Boaz, who borrowed bone samples from the Saltville locality for chemical sampling.
- VT student, who borrowed pathological vertebrae of Cretaceous crocodiles from North Carolina for CT scanning and analysis.

## **Education & Outreach**

Dr. Pritchard began mentorship of two interns from the Smithsonian “Internship for Change” program. The students are working on specimen-based outreach projects, developing video content featuring VMNH specimens. He trained them in basic collections procedures, table displays of fossils, and video and audio editing. Their work is currently being released on VMNH social media, and they will present a display at the Dinosaur Festival.

Dr. Pritchard hosted Robert Simmons, a videographer from *Ranger Rick* magazine. Together, they filmed several segments focused on Virginia Museum fossil specimens and exhibit displays. The videos will be released on the official *Ranger Rick* social media accounts later this year.

Dr. Pritchard collaborated with Bethany Fisher, Christy Deatherage, and Lucy Treado on table displays for the 2025 Dinosaur Festivals. These displays will center around original fossils in the collections that have never been exhibited before or have not appeared for a long time. He also developed poster text for these displays.

Dr. Pritchard presented on early reptile fossils from Virginia to the King’s Grant retirement home community in Martinsville, VA. He is currently organizing a visit for members of the community interested in volunteering in the VMNH collections.

Dr. Pritchard provided collections tours for three families, including adults and children from Virginia, Michigan, and Maryland.

## **Grants & Funding**

Dr. Pritchard submitted two grants, one as lead and the other as a co-researcher. The first, sent to the Luck Companies Foundation, would support a student intern on a 3D modeling project focused on Triassic reptiles in Virginia. \$10,000 was received, which will be supplemented by the VMNH Foundation (discussed w/ Ryan Barber). The other proposal, in collaboration with institutions in the United Kingdom, would support CT scanning and research on Triassic microvertebrates in the VMNH collections. As of Q3, this proposal was rejected in its current form.

Dr. Pritchard organized a presentation with an honorarium at the Museum of the Shenandoah Valley for August of 2025. The presentation is part of that museum’s “Scraposaurus” art exhibition. The visit will provide \$740 to the VMNH paleontology accounts.

## **Professional Service**

Dr. Pritchard reviewed a revised version of a manuscript on early reptile hearing for *Royal Society Open Science*.

Dr. Pritchard acted as editor for a manuscript by Kal Ivanov and team on holotype invertebrates in the VMNH collections.

**Collin VanBuren, Ph.D.**  
**Visiting Scholar**

- Dr. VanBuren had a paper accepted in the journal *Integrative Zoology* with coauthors L. Bentley (U. of Queensland), N. Frobisch (Museum fur Naturkunde, Berlin), and D. Norman (U. of Cambridge) entitled “Assessing the presence, pattern, and environmental correlates of seasonal skin thickening in anurans”
- Dr. VanBuren and colleagues resubmitted a paper to *Rangeland Ecology & Management* after receiving minor revisions
- Dr. VanBuren and colleagues submitted two additional papers that are waiting for decisions from the Editors
- Dr. VanBuren had an abstract accepted for an oral presentation at the International Beaver Symposium that will take place in September in Inverness, Scotland
- Dr. VanBuren participated in his first festival at the VMNH by staffing an outreach table with staff from the Paleontology Department

### **Research & Collections**

Dr. VanBuren joined L. Hightower, J. Harris, and M. Boyd to visit a personal taxidermy collection that was offered as a donation on April 2<sup>nd</sup> in Roanoke.

- Dr. VanBuren helped J. Harris, M. Boyd, and other R&C staff transport components of this taxidermy donation on multiple trips, with plans to move the remaining specimens in early July

Dr. VanBuren facilitated the acquisition of a purple finch that was discovered (already deceased) in a back yard. The individual was banded by the USGS, meaning there are long-term data associated with it.

Dr. VanBuren continues to prepare additional publications for submission, including those on amphibian biogeography (with Dr. John Alroy, Macquarie University), beaver contributions to ecosystem services (with Dr. Emily Fairfax, University of Minnesota), and reconstructing the grazing history of the American west (with colleagues from Northern Arizona University, Auburn University, and the Canadian Museum of Nature).

Dr. VanBuren has started new projects, one focusing on monitoring invasive nutria/coypu populations and another on the impacts of beavers on wildfire and other ecological dynamics in the southeast.

### **Education & Outreach**

Dr. VanBuren participated in his first museum festival, joining Dr. Pritchard and L. Treado at the paleontology table for Reptile Fest

Dr. VanBuren held meetings with staff at Inversa Leathers, the Chesapeake Bay Trust, University of California, Berkeley, and the University of North Carolina, Charlotte to continue building his network of collaborators

### **Professional Service**

Dr. VanBuren joined the Ecological Forecasting Initiative (EFI) as a Member and joined the Translation and Actionable Science Working Group of EFI.

Dr. VanBuren has become a member of the newly formed Southeast Beaver Alliance, which hosted a virtual conference on June 26 for over 100 participants.

- Members of SEBA drafted comments on the North Carolina State Wildlife Action Plan to submit by the July 7<sup>th</sup> deadline for public comments

Dr. VanBuren is continuing to support a recent graduate from Northern Arizona University to prepare her undergraduate research work for publication

## **Misc**

Dr. VanBuren completed a three-month evaluation

Dr. VanBuren attended a Board Meeting in May to introduce himself as a new staff member

## **Research and Collections**

### **Jill K. Harris, Registrar**

Thirteen (13) collections acquisitions were recorded for 206 individual specimens and 65 vials of specimens. These specimens were added to the invertebrate zoology, herpetology, paleontology, vertebrate zoology, and education collections.

Five (5) outgoing loans were recorded from the herpetology, paleontology, and invertebrate zoology collections. The loans were made to: Smithsonian National Zoological Park, Integrative Centers for Science & Medicine (2), Virginia Tech, and Oregon State University.

Ms. Harris (database administrator) reports that, within the collections management system *Re:discovery Proficio*, staff modified/updated ten records

Ms. Harris completed one cycle of the anoxic (CO<sub>2</sub>) chamber for disinfestation. The space in the anoxic chamber was rented out by the Virginia Museum of Fine Arts (VMFA) for Ms. Harris to process VMFA objects. Ms. Harris ran a cycle with newly acquired furniture pieces belonging to the VMFA, prior to their going on exhibit at the museum in Richmond.

In addition to her usual daily tasks, Ms. Harris reported the following activities:

Ms. Harris, with assistance from Mr. Marshall Boyd, planned and organized the transport of a large acquisition of taxidermy mounts. Ms. Harris and Mr. Boyd worked with Collin VanBuren, Ben Williams, Jackson Means, Kal Ivanov, and MeShawn Spencer to acquire and transport the mounts to VMNH. At the VMNH end of the move, Tim King, Derek Eanes, Darius Dillard, and Joel Clifton joined in to offload and store the mounts. All mounts will be processed through the museum's anoxic chamber prior to going into permanent storage, on exhibition, or used in programming.

Ms. Harris is supervising and coordinating the schedule of an intern provided by the City of Martinsville. The intern, Ms. Mary Smith, is a recent Martinsville High School graduate, about to attend college in Greensboro, NC. Ms. Smith's internship is made possible by Ross Innovative Employment Solutions and the Workforce Innovation and Opportunity Act's (WIOA) Summer Work Experience Training Program for school age youth. Ms. Smith will work in several VMNH departments, helping with a variety of tasks, to gain a well-rounded museum work experience. To date she has worked in the museum store and helped educators manage a summer camp. In the upcoming weeks, she will be assisting administrative staff, the collections manager, and the exhibit manager with a variety of tasks; such as, research, collections care, and exhibition set-up.

### **Haley Cartmell, Collections Manager**

Curators and staff modified/updated 1,271 existing records and added 206 new records to the VMNH collections database Proficio during the months of April, May, and June 2025.

**APRIL-JUNE 2025 VMNH ACQUISITIONS FOR APPROVAL BY BOARD OF TRUSTEES RESEARCH AND COLLECTIONS COMMITTEE**

RIM* #	Collector/Donor	Date at VMNH	VMNH Dept.	QTY	Description	Method	To Be Accessioned (Y/N)
RIM 06-2025	Florida State Collection of Arthropods (Felipe N. Soto-Adames)	4/25/2025	RECENT INVERTEBRATES	6	Aphelidesmidae (unidentified), dried, in pieces	Gift	No
RIM 07-2025	Rhea E. Haner	5/1/2025	ORNITHOLOGY	1	Purple finch ( <i>Haemorhous purpureus</i> ) male	Gift	Yes
RIM 08-2025	Marshall Boyd	5/8/2025	MAMMALOLOGY	1	Black bear ( <i>Ursus americanus</i> )	Salvaged	Yes
RIM 09-2025	Michael Folmer	1/31/2025	PALEONTOLOGY	63	bird and unknown vertebrate specimens	Gift	Yes
RIM 10-2025	Jill K. Harris	4/29/2025	HERPETOLOGY	1	red-eared slider, baby ( <i>Trachemys scripta elegans</i> )	Salvaged	Yes
RIM 11-2025	Marshall Boyd	5/19/2025	HERPETOLOGY	2	Rough Greensake ( <i>Opheodrys aestivus</i> ) gravid adult female and Salamader ( <i>Desmognathus</i> sp) juvenile	Salvaged	Yes
RIM 12-2025	Ben Williams	6/5/2025	HERPETOLOGY	1	Northern Ring-necked Snake ( <i>Diadophis punctatus</i> )	Salvaged	Yes
RIM 13-2025	Marshall Boyd	6/5/2025	HERPETOLOGY	2	Rough Greensnake ( <i>Opheodrys aestivus</i> ) juvenile and Eastern Fence Lizard ( <i>Scaloporus undulatus</i> ) adult male	Salvaged	Yes
RIM 14-2025	USDA-APHIS (John M. Leavengood, Jr.)	5/28/2025	RECENT INVERTEBRATES	65 vials	unknown number of unidentified Hymenoptera (mostly Formicidae) specimens in ethanol	Gift	Yes
RIM 15-2025	Adam Pritchard	6/20/2025	PALEONTOLOGY	2	1 (one) bucket of mud matrix and 1 (one) bag of isolated specimens	Field Collection	Yes
RIM 16-2025	Robert Weems	6/21/2025	PALEONTOLOGY	19	11 (eleven) and 3 (three) boxes dino, mammal, vertebrate footprint/trackway casts, fragmentary turtle skeleton, reptile tooth, whale tooth cast, jaw casts: elephant, horse, tapir	Gift	Yes

\* RIM is an acronym for the Record of Incoming Material form

**APRIL-JUNE 2025 VMNH ACQUISITIONS FOR APPROVAL BY BOARD OF TRUSTEES RESEARCH AND COLLECTIONS COMMITTEE**

<b>RIM* #</b>	<b>Collector/Donor</b>	<b>Date at VMNH</b>	<b>VMNH Dept.</b>	<b>QTY</b>	<b>Description</b>	<b>Method</b>	<b>To Be Accessioned (Y/N)</b>
RIM 17-2025	Mr. Donald Usak	7/7/2025	VERTEBRATE ZOOLOGY	107	2 (two) fish on display bases, 8 (eight) glass-covered display cases w/14 (fourteen) waterfowl mounts; 5 (five) full body bird mounts; 22 (twenty-two) full body mammal mounts; and 64 (sixty-four) mammal head mounts	Gift	Yes
RIM 18-2025	Mr. Donald Usak	7/7/2025	DEPP	1	bear skin rug, with head and feet, felt backing	Gift	No

\* RIM is an acronym for the Record of Incoming Material form

**VMNH Collections Committee and Executive Director have Approved Recent Acquisitions: RIM 06-2025 through RIM 18-2025**

**VMNH Board of Trustees Research & Collections Committee Review of Acquisitions: RIM 06-2025 through RIM 18-2025**

Arthur V. Evans, Chair \_\_\_\_\_  
(signature) Arthur V. Evans, Chair Date

Thomas R. Benzing \_\_\_\_\_  
(signature) Thomas R. Benzing Date

Melany Clark \_\_\_\_\_  
(signature) Melany Clark Date

David Furth \_\_\_\_\_  
(signature) David Furth Date

Carole L. Nash \_\_\_\_\_  
(signature) Carole L. Nash Date

\_\_\_\_\_  
(signature) Date



## Calendar Year 2025 Acquisition Plans

### Archaeology Dr. Hayden Bassett

The main impediment to collections care and accessibility in 2024-2025 is storage space. The Archaeological collections room is currently at capacity (98% filled). We will increasingly have to rely on opportunistic storage until offsite storage (Douglas Ave) is complete. In 2024, the archaeology curator and staff continued to reorganize collections to maximize limited space. All available general-use storage space outside of designated archaeological storage has now been filled by other curatorial departments. Because of this, acquisition of new archaeological collections is limited to acquisition priorities 1-3. Priority 1 reflects a change from previous years' acquisition plans, in that it reorients the department's acquisitions to building research reference collections, as opposed to accepting entire archaeological site collections or donated material with limited research value. This follows post-pandemic shifts in collections-based archaeological research in which digital collections are increasingly relied upon by outside scholars/students, with museums/repositories receiving greater attention for their comprehensive reference collections as opposed to purely their site assemblages.

- Priority 1.** Collections/specimens representing comprehensive reference material by type, technology, species, and/or geography. This includes artifact, shell, wood (dendrochronology), archaeobotanical, and archaeofaunal (zooarchaeology) reference specimens to be used in the identification or analysis phase of archaeological research.
- Priority 2.** Collections from local/regional sites, generated by VMNH fieldwork. In 2024, the VMNH Archaeology Department conducted local archaeological and dendrochronology fieldwork, generating physical collections. The archaeological collections will be stored in a dedicated cabinet in the VMNH Archaeology Lab, while the dendrochronology cores will be curated in dedicated, humidity-controlled space in Archaeology Room 101. Space in these storage areas will continue to be reserved for local archaeology and Virginia-based dendrochronology.
- Priority 3.** Collections related to published research, with high research potential, currently housed elsewhere. A special emphasis will be placed on acquisition of local/regional collections.
- Priority 4.** Salvage and opportunistic: Archaeological specimens recovered through opportunistic site visits or through donations.
- Priority 5.** Collections from non-academic or research-based sources, *i.e.*, private collections. These collections tend to be large and have little to no research value. Few of these collections are accepted and then only if they have exceptional exhibit or education value or include a rare artifact type with some provenience information

**Invertebrate Zoology**  
**Dr. Kaloyan Ivanov**

The following materials are expected to be acquired within the next year. Wet and dry storage space is adequate to accommodate any new specimens acquired.

**Terrestrial Invertebrates**

- Priority 1.** Specimens generated by ongoing research activities, with primary focus on material from Virginia and the southeastern USA. Specimens from other areas in the USA and/or other countries may also be included.
- a. Hymenoptera (ants, bees, and wasps) as pinned/pointed and alcohol-preserved specimens.
  - b. Millipedes, especially in the orders Polydesmida and Chordeumatida as alcohol-preserved specimens.
  - c. Terrestrial isopods (Isopoda: Oniscidea) as alcohol-preserved specimens.
  - d. Spiders as alcohol-preserved specimens.
  - e. Cicadas (Hemiptera: Cicadidae) as pinned specimens.
  - f. Dragonflies and damselflies, true bugs, earwigs, walkingsticks, mantids, cockroaches, and beetles as pinned specimens.
  - g. Leaf-litter and soil invertebrates as alcohol-preserved (annelids, pseudoscorpions, springtails, non-millipede myriapods, and non-insect hexapods) and pinned (true bugs and beetles) specimens.
- Priority 2.** Opportunistic acquisitions of specimens obtained through site visits, salvage, or through donations (prepared to handle if such material becomes available).
- a. Various pinned and alcohol-preserved arthropods from Virginia and adjacent areas (A. Evans, S. Roble, C. Harden, D. Hennen, others).
- Priority 3.** Specimens to support exhibits and/or education programs (as needed or become available).

**Aquatic Invertebrates**

There is currently no plan to acquire new materials. If such materials become available (opportunistic acquisitions), they will be handled on a case-by-case basis.

**Forensic Work**

There is currently no plan to acquire new materials. If such materials become available (casework and teaching efforts), they will be handled on a case-by-case basis.

**Vertebrate Zoology**  
**Dr. Arianna Kuhn**

The following materials are expected to be acquired within the next year. Wet and dry storage space is adequate to accommodate any new specimen acquisitions indicated below.

**Herpetology**

- Priority 1.** Opportunistic acquisitions of specimens and tissues, through salvage events and donations when appropriate to augment the herpetology collection. At present, no large donations are anticipated. Based on FY2023-2024, we anticipate under 50 salvaged tissues and 50 salvaged specimens by the Research and Collections staff, and approximately 50 salvaged specimens and 50 tissues from Research Associate donations.
- Priority 2.** Research-targeted acquisitions of specimens and tissues, following current permit allocations for various ongoing projects will help to facilitate regional research and collaborations. Currently, the Herpetology lab maintains 8 active research permits for Virginia and North Carolina for various research projects which involve the collection of specimens, tissues, and skin swabs. These allow for up to 100 new tissues and specimens to be added to the collection over the next two years.
- Priority 3.** Educational and outreach acquisitions of specimens (wet, osteological, taxidermy), particularly those with no associated data/captive bred, to elevate outreach and education events as well as in-house exhibits. No more than 50 total specimens of this nature are anticipated, based on estimates of current items in the freezer backlog prior to 2023 that will be processed for this purpose.

**Mammalogy**

- Priority 1.** Opportunistic acquisitions of specimens and tissues, through salvage events and donations when appropriate to augment the mammalogy collection. At present, no large donations are anticipated. Based on FY2023-2024, we anticipate under 50 salvaged tissues and 50 salvaged specimens for rare mammals and occasional common species (primarily to support the dermestid colony) by the Research and Collections Department, and less than 20 salvaged specimens and 20 tissues from Research Associate donations.
- Priority 2.** Research-targeted acquisitions. Currently, there is no mammalogy-focused research program at the VMNH, nor are there collections-based permits aside from salvage (see above) to collect non-mammal vertebrate specimens.
- Priority 3.** Educational and outreach acquisitions of specimens (osteological, study skins, touch skin, taxidermy), particularly those with no associated data or are captive bred, will be considered on a piece-by-piece basis under the following criteria:
- a. they fill an important curriculum-based gap, or they are part of the

- backlogged freezer specimens that already have been assigned a Record of Incoming Material (RIM) form, and
- b. available storage space compared to the size of item is adequate.

### **Ornithology**

- Priority 1.** Opportunistic acquisitions of bird skins and tissues, through salvage events and donations when appropriate to augment the ornithology collection. Currently, a salvage-based collaboration with Radford University and University of Richmond will involve adding ~50 new skins to the collection and processing freezer backlog items that already have been assigned RIMs.
- Priority 2.** Research-targeted acquisitions. Currently, there is no ornithology focused research program at the VMNH, nor are there collections-based permits aside from salvage (see above) to collect non-ornithological specimens.
- Priority 3.** Educational and outreach acquisitions of bird specimens (osteological, study skins, taxidermy), particularly those with no associated data or are captive bred, will be considered on a piece-by-piece basis under the following criteria:
- a. they fill an important curriculum-based gap, or they are part of the backlogged freezer specimens that already have been assigned a Record of Incoming Material (RIM) form, and
  - b. available storage space compared to the size of item is adequate.

### **Ichthyology**

- Priority 1.** Research-quality specimens representing Virginia diversity. These will be obtained through salvage and collaborations with colleagues. Space exists for future acquisitions, but is shared with Herpetology expansion, and no plans have been made to add additional specimens at this time.
- Priority 2.** Specimens to support exhibits and education programs. These will be obtained through salvage, purchase, and/or collaborations with colleagues.

**Paleontology**  
**Dr. Adam C. Pritchard**

The following materials are expected to be acquired within the next year and can be accommodated in paleontology storage areas to be developed in early 2025, including ongoing work to renovate and consolidate resources at the Douglas Avenue facility. Technician Lucy Treado is working with the Building and Grounds department on the installation of new shelving and the consolidating of already-stored specimens in the facility. We are also consulting with invertebrate paleontologists and stratigraphers on the best methods of consolidating storage of Dr. Lauck Ward's sediment collections from his invertebrate-producing localities from the Atlantic Coastal Plain.

- Priority 1.** Triassic fossils of Virginia. Multiple one-day to one-week excavations in Ashland, VA, the circum-Richmond area, and hopefully reconnaissance at the former Solite Quarry. Acquisitions will include multiple types of rock containing plants, invertebrates (clam shrimp, insects), and vertebrates. Likely to total two to three double-wide cabinet drawers full of specimens.
- Priority 2.** Wyoming Dinosaur Project (Two Sisters Quarry). One three-week excavation planned for Summer of 2025. Work will recover 5-10 plaster jackets and isolated bones of dinosaurs. The specimens will be arriving at the museum in late summer 2025.
- Specimens, owned by BLM but managed by VMNH Paleontology, are likely to total two to three double-wide cabinet drawers. Lucy and I are working to free up space in the Starling Avenue facility to accommodate the new specimens, which will be accomplished partly by shifting hardier plant fossils to Douglas Avenue as the shelving space there develops.
- Priority 3.** Atlantic Coastal Plain Vertebrates (Carmel Church Quarry). One to two two-week excavations in Winter 2025, targeted at excavation of baleen whale from the St. Marys Formation. Opportunistic discoveries will almost certainly occur as well. Likely to bring in one large plaster jacket and one double-wide cabinet drawer.
- Priority 4.** Cultivated relationships with private collectors. After cultivating relationships with private collectors, specimens will be through donations. This will concentrate on northern VA fossils. Targeted donations include Virginian Eocene plants, small reptiles, and possibly mammals. Specimens are primarily sub-centimeter in size, requiring relatively limited storage capacity (est. 3-4 single-wide drawers).

**Department of Education and Public Programs (DEPP)**  
**Christy Deatherage**

There is currently no plan to acquire new materials in the DEPP. However, we will report materials that would enhance current exhibits or programs if offered to the Department.

**Earth Sciences**

There is currently no Earth Sciences curator and no plan to acquire new materials; however, there may be some opportunistic acquisitions. These will be handled on a case-by-case basis and existing storage space should be sufficient to store them. It is possible that education and/or exhibits material may be added to the collections. If this includes mineral specimens, these may be accessioned.

Note: this info will not print on final version, it is for informational purposes only, to help reviewers.

The only edits made to this document since the August 2023 BOT approved version are:

- the leaf cutter ant colony paragraph was removed, since we no longer have the ant colony, and
- all animal care sheets were removed. These care sheets are not policy, so they will become a procedural document, rather than a policy document. This is due to how frequently these care sheets change and every time they do, they would need BOT approval.

These changes have been approved by the VMNH Collections Committee and Executive Director.

## **Virginia Museum of Natural History**

### **Policies for Live Animals**

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## **I. Preface**

The Virginia Museum of Natural History (VMNH) uses live invertebrates, fish, amphibians, and reptiles in exhibits, education, and public programs as part of its mission to interpret Virginia's natural heritage within a global context in ways that are relevant to all citizens of the Commonwealth. These living collections serve an important role by helping to instill a sense of understanding and respect for creatures that are often misunderstood for a variety of reasons. The VMNH will not keep live mammals or birds without undergoing the American Zoological Association's accreditation process.

## **II. Institutional Commitment and Animal Care**

The VMNH is committed to providing the financial, physical, and human resources necessary to safely and humanely care for the animals entrusted to its care. The Manager of the Department of Education and Public Programs (DEPP) and the Exhibits Manager, in consultation with other relevant staff and outside animal-care experts, are responsible for recommending to the VMNH Executive Director all the resources needed to effectively care for the VMNH's live animals that are housed at the museum. Research and Collections Division staff are responsible for effective care of all live animals housed in their research laboratories and office spaces.

The VMNH staff research the best practices of care and maintenance for each type of animal, and then apply these practices to the fullest extent possible. Under no circumstances will the VMNH take on responsibilities for numbers or types of animals that are beyond its ability to care for humanely, nor will it engage in any activity that threatens the welfare of animals, staff, or visitors. All staff assigned to assist in the maintenance of VMNH animals receive detailed training in the care and handling procedures for each species. The live animal collection at the VMNH is under the care of a licensed veterinarian, as required by permits issued by state and federal regulatory agencies. Yearly wellness checks will be conducted, and veterinary medical staff are contacted if emergency care is needed.

The live animal collection is funded in a variety of ways, such as through grants and individual donations. Funds acquired for the live animal collection may be secured through the Virginia Museum of Natural History Foundation, a 501(c) 3 non-profit organization that exists to support the mission and programs of the VMNH.

## **III. Acquisition**

Acquisition of live animals is in full compliance with all applicable laws and regulations of local, state, federal, and international authorities. Animal ambassadors that are used in education and public programs are generally acquired through proposed donations that are considered on a case-by-case basis.

Acquisition of live animals requires VMNH staff to consider multiple criteria, including: the animal's health, habitat needs, veterinary care requirements, cost of care, legal concerns, and available

staff resources. These criteria are detailed in the Live Animal Acquisition (LAA)-Consideration Form (Appendix I).

When an opportunity to acquire an animal arises an LAA-Consideration Form is completed by the Manager of DEPP, Exhibits Manager, or a Research Curator who ultimately will be responsible for the animal's care. After completion of the LAA-Consideration Form, that staff member will consult with other staff, as needed, and make a recommendation of whether or not to acquire the animal.

If recommended that the VMNH should acquire the animal, the VMNH Executive Director is asked to review and sign the LAA-Consideration form. If the Executive Director approves the acquisition, the staff member ultimately responsible for the animal's care, will, if applicable, ask the potential donor to complete a Gift-In-Kind form (Appendix II). Copies of all of these forms are provided to the VMNH Registrar.

Upon arrival at the VMNH, all live animals are placed in an appropriate enclosure and quarantined for an appropriate length of time, as determined after consultation with a licensed veterinarian and reviewing pertinent live-animal care procedures.

#### **IV. Access and Use of Collections**

The VMNH living collections are not available for loan. Animals used in exhibits are housed on display. Animals used in public programs are either housed in the Suzanne M. Lacy Education Center, or they are housed in research laboratories and office spaces that are not accessible to the public.

#### **V. Removal and Disposal of Deceased Animals**

Live animals are not accessioned (or deaccessioned) by the VMNH. Deceased animals are removed from their enclosure and frozen as soon as possible after death. They are then considered by a Research Curator or the Manager of DEPP for acquisition as VMNH specimens, subject to the review process outlined in the VMNH Collections Policies. VMNH staff will properly dispose of remains not under consideration for acquisition.

#### **VI. Administration and Employee Responsibilities**

The live animals housed in exhibits and the Suzanne M. Lacy Education Center are under the day-to-day care of the DEPP. Animals housed in research laboratories and office spaces are under the daily care of the Research and Collections division staff. All staff follow a chain-of-care in the case of unplanned absences. Outside of DEPP, the Exhibits Manager, and the Biology Research Technician are equipped to care for the collections on display in the absence of DEPP staff. Animals housed in research laboratories and office spaces are cared for by curators, staff scientists, and research technicians. All staff responsible for animal care are trained in proper methods for care, feeding and

watering, habitat maintenance, and emergency procedures. Staff are also trained on species-specific information to share with the general public during programming.

In the event staff determines that resources are no longer available to appropriately care for a live animal, the VMNH will make every attempt to rehome it with a suitable organization.

## **VII. Permits, Inventory, and Annual Assessment of Resources**

The state of Virginia requires a permit, issued by the Department of Wildlife Resources, to exhibit wild animals. This permit requires the signature of a certified veterinarian, as well as annual wellness checks. Permit applications are submitted annually, with updated inventories of all live animals housed at the VMNH. As part of this process, the VMNH will annually assesses the financial, physical, and human resources necessary to care for each live animal, using the Live Animal Annual Assessment Form (Appendix III).

It is the responsibility of the Manager of DEPP to maintain current state permits and update inventories as needed. The Manager of DEPP is responsible for providing a copy of all state permits to the VMNH Registrar.

## **VIII. Transparency and Accountability**

The VMNH manages its collection of live animals in the public trust. The VMNH Policies for Live Animals, and all other documents related to live animals housed at the VMNH (e.g., Guidelines for Care and Maintenance, Appendix IV) are available for public review.

The Virginia Freedom of Information Act (FOIA), located in § 2.2-3700 et seq. of the Code of Virginia, guarantees citizens of the Commonwealth and representatives of the media access to public records held by public bodies, public officials, and public employees. Citizens have the right to request and/or receive copies of public records, and to request that any charges for the requested records be estimated in advance. The VMNH is legally obligated to comply with all FOIA requests, if the request is for existing documents and the records are identified with “reasonable specificity.”



**LIVE ANIMAL ACQUISITION - CONSIDERATION FORM**

Date: \_\_\_\_\_

Name of Source (Seller or Person/Institution Making Offer to Donate) \_\_\_\_\_

\_\_\_\_\_

Email Address: \_\_\_\_\_

Phone Number(s): \_\_\_\_\_

Has the animal(s) been seen in person by VMNH Staff?	Yes	No	
Has the animal(s) been formally offered to the VMNH?		Yes	No
Or, is this a pre-offer review?	Yes	No	

**TYPE OF ANIMAL(S):**

- \_\_\_\_\_ Invertebrate
  - \_\_\_\_\_ Arthropod (insects, arachnids, crustaceans, myriapods)
  - \_\_\_\_\_ Mollusk (chitons, snails, bivalves, squids, octopuses)
  - \_\_\_\_\_ Annelid (earthworms, leeches)
  - \_\_\_\_\_ Cnidarians (hydras, jellyfishes, sea anemones, corals)
- \_\_\_\_\_ Amphibian
- \_\_\_\_\_ Reptile
- \_\_\_\_\_ Fish (circle one):      freshwater                      saltwater

**PRICE, QUANTITY, AND PHYSICAL CONDITION:** (Be as accurate as possible.)

Sales price (if applicable) and quantity of each type of animal being offered, include size of the animal:

**HABITAT:**

Are there any supplies being donated or sold with the animal?      YES                      NO  
If yes, please describe and provide sales price, if applicable:

Is there any equipment being donated or sold with the animal?      YES                      NO  
If yes please describe and provide sales price, if applicable:



**HEALTH:**

Does the animal show signs of illness? \_\_\_\_\_ YES \_\_\_\_\_ NO SOME: \_\_\_\_\_  
When was the last time it was seen by a vet? \_\_\_\_\_  
How old is the animal? \_\_\_\_\_

Are quarantine facilities available? \_\_\_\_\_ YES \_\_\_\_\_ NO

**LEGALITIES:**

Does the source (owner) have all necessary permits and any other paperwork (e.g. sales documentation) for each animal? \_\_\_\_\_ YES \_\_\_\_\_ NO SOME: \_\_\_\_\_  
If not, how was it acquired? \_\_\_\_\_  
When was the animal acquired? \_\_\_\_\_  
Are there any legal restrictions to consider (i.e., endangered, threatened)? (list all concerns):

**FUTURE NEEDS:**

**SUPPLIES AND EQUIPMENT:**

1. Are there any supplies that will need to be purchased? \_\_\_\_\_ YES \_\_\_\_\_ NO  
If yes, please describe and include estimated cost:
2. Is there any equipment that will need to be purchased? \_\_\_\_\_ YES \_\_\_\_\_ NO  
If yes please describe and include estimated cost:

**CARE:** What food will the animal need?

**VET SERVICES:** Describe anticipated veterinary care needs:

**STAFF RESOURCES:** Estimate how much time for care is needed weekly?

What is the projected annual cost of food and supply needs?

Supplies/Equipment:

Food:

Vet Services:

**Total Annual Cost Projected:**



**APPENDIX II. Gift-In-Kind Form**

**GIFT-IN-KIND FORM**



Date(s) Item(s) Donated: \_\_\_\_\_

Item(s) Received From (Donor's Name): \_\_\_\_\_

Donor's Address:

Donor's Phone #: \_\_\_\_\_

Donor's Tax Identification Number: \_\_\_\_\_ (Only if value claimed for tax deduction purposes.)

Item(s) for (VMNH Recipient): \_\_\_\_\_ Department: \_\_\_\_\_  
(Printed name and Title)

Quantity and Type/Description of Item(s) [e.g., supplies, equipment, specimen(s)]:  
Note that "specimen(s)" includes donated live animal(s) and the progeny of said specimen(s).

Total Value\* of Donated Item(s): \$ \_\_\_\_\_

Means of Valuing (e.g., fair market value): \_\_\_\_\_

*\* In accordance with the Tax Reform Act of 1984, it is the responsibility of the Donor to obtain any appraisals necessary for donated property claimed as charitable deductions.*

By signing this document, the Donor indicates they have the right to transfer said item(s), such item(s) being free and clear of all encumbrances. The Donor transfers the item(s) noted on this document, which shall constitute an irrevocable and unconditional gift of same by the Donor to The Virginia Museum of Natural History, including all rights, title, and interest in and to the above item(s) absolutely and forever.

Signature of Donor: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of VMNH Recipient: \_\_\_\_\_ Date: \_\_\_\_\_  
Signature and Printed Name/Title

*Original form should be given to the museum registrar for the museum's permanent files.*

**APPENDIX III. Live Animal Annual Assessment Form (Front of Form)**



**LIVE ANIMAL ANNUAL ASSESSMENT FORM**

Date: \_\_\_\_\_

**TYPE OF ANIMAL(S):**

- \_\_\_\_\_ Invertebrate
  - \_\_\_\_\_ Arthropod (insects, arachnids, crustaceans, myriapods)
  - \_\_\_\_\_ Mollusk (chitons, snails, bivalves, squids, octopuses)
  - \_\_\_\_\_ Annelid (earthworms, leeches)
  - \_\_\_\_\_ Cnidarians (hydras, jellyfishes, sea anemones, corals)
- \_\_\_\_\_ Amphibian
- \_\_\_\_\_ Reptile
- \_\_\_\_\_ Fish (circle one):      freshwater                      saltwater

**QUANTITY AND PHYSICAL CONDITION:** (Be as accurate as possible.)

Quantity and size of the animal(s): \_\_\_\_\_

**HEALTH:**

Does the animal show signs of illness? \_\_\_\_\_ YES    \_\_\_\_\_ NO    SOME: \_\_\_\_\_

When was the last time it was seen by a vet? \_\_\_\_\_

How old is the animal? \_\_\_\_\_

How long has the animal been at VMNH: \_\_\_\_\_

Other comments/considerations: \_\_\_\_\_

**NEEDS WITHIN THE NEXT YEAR:**

**SUPPLIES AND EQUIPMENT:**

1. Are there any supplies that will need to be purchased? \_\_\_\_\_ YES    \_\_\_\_\_ NO  
If yes, please describe and include estimated cost: \_\_\_\_\_

2. Is there any equipment that will need to be purchased? \_\_\_\_\_ YES    \_\_\_\_\_ NO  
If yes, please describe and include estimated cost: \_\_\_\_\_



## **APPENDIX IV. Guidelines for Care and Maintenance**

Guidelines for Use of Live Amphibians and Reptiles in Field and Laboratory Research, Second Edition. 2004. Revised by the Herpetological Animal Care and Use Committee (HACC) of the American Society of Ichthyologists and Herpetologists.  
[https://static1.squarespace.com/static/618bf11a71fcd5398996eda/t/618fbed9a68bdd5cbcc95f78/1636810457669/guidelines\\_herps\\_research\\_2004.pdf](https://static1.squarespace.com/static/618bf11a71fcd5398996eda/t/618fbed9a68bdd5cbcc95f78/1636810457669/guidelines_herps_research_2004.pdf)

Guidelines for Use of Fishes in Research. 2013. UFR (Use of Fishes in Research) Committee, American Fisheries Society, Bethesda, Maryland.  
<https://static1.squarespace.com/static/618bf11a71fcd5398996eda/t/618fbed1f40e6c713dfa71ee/1636810449675/asf-guidelines-use-of-fishes-in-research-2013.pdf>

Guidelines for Care of Invertebrates, as provided on 2 January 2023 by staff of the Cincinnati Zoo and Botanical Garden (see following pages).

PEOPLE SERVED DATABASE printed 7/21/2025  
Summary

# of Activities	TYPE OF ACTIVITY	PROFESSIONALS AND 13+ STUDENTS	K-12 STUDENTS	K-12 TEACHERS	PUBLIC			TOTAL #
0	Conference presentations (A)	0	0	0	0			0
10	Meetings chaired (B)	111	0	0	0			111
11	Review documents/manuscripts (B)	31	0	0	0			31
11	Requests for information about collections (C)	11	0	0	0			11
6	Visiting researcher (C)	6	0	0	0			6
5	Collections tours (D)	16	0	0	0			16
0	Lab Tours (D)	0	0	0	0			0
0	Receptions	0	0	0	0			0
6	Responses to requests for information about specimens at VMNH (D)	9	0	0	3			12
0	Lectures and presentations at VMNH (D)	0	0	0	0			0
0	Technical consultations (B, D, & E)	0	0	0	0			0
8	Display table with specimens	0	0	0	2426			2426
0	Off-site education programs	0	0	0	0			0
0	Lectures Not at VMNH (E)	0	0	0	0			0
0	Off-site presentations (E)	0	0	0	0			0
0	Field trips/Field Work	0	0	0	0			0
57	<b>TOTALS</b>							2613

TOTAL # INDIVIDUALS SERVED

2613