



VOLUNTEER EDUCATION CATALOG

Education and Training for MNHM Volunteers

Updated 12/2025

Without volunteers, the museum would become extinct. This is not hyperbole. Morrison Museum cannot operate without a community-based crew of volunteers who are able to devote their time, energy, and talent to the museum's efforts.

MNHM serves the curious and we know one of the key motivations for volunteering with us is to feed *your* curiosity. Because we value you and your time, MNHM offers extensive training and mentorship designed to provide support, community, and enrichment as volunteers provide service in support of the Museum's mission.

All training opportunities are provided at no cost to volunteers.

Program Changes for 2026

- **ORIENTATION** training sets all Museum Volunteers up for success by providing our entire crew with essential foundational information.
- **MUSEUM HOST** training covers the front-of-house essentials for greeting, checking in, and orienting museum guests; answering FAQs and ringing up gift shop sales.
- **CERTIFIED PALEONTOLOGY INTERPRETER** training prepares crew members for the essential task of guiding our guests through the exhibition.
- **CERTIFIED CORE PREPARATOR** training provides crew members with the tools, knowledge, and eye for the detailed work of cleaning rock matrix to reveal fossil material, great and microscopic.
- Return of the **DIGGING DEEPER** lecture and field trip series for volunteer enrichment.
- For long-term volunteers in all categories, on-going enrichment opportunities deepen knowledge through lectures, field trips, and self-study options.

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VOLUNTEER TRAINING

MUSEUM ORIENTATION

ORIENTATION training is required for all MNHM volunteers. The slideshow highlights foundational information such as the museum's mission, funding, and history. It also provides an overview of exhibition content, museum programming, and research. The slideshow is followed by a brief self-assessment and a checklist/scavenger hunt for additional familiarization.

TRAINING SESSION

M.101: Museum Orientation

- Overview: History of MNHM, mission, funding, how MNHM translates our mission into action.
- Facilitators: Museum Staff
- Duration: about 45 minutes (includes self-study and scavenger hunt)
- Sessions are held as needed, schedule with museum staff

MUSEUM HOST

MUSEUM HOSTS are the welcoming and knowledgeable face of the museum. Hosts are trained to greet guests, assist them with ticket pricing/questions, check-in, initial museum orientation, and gift shop sales.

These frontline volunteers are indispensable to the museum's operations, and their training is conducted by appointment with the Deputy Director or Museum Education Coordinator.

TRAINING SESSION

M.102: Museum Host Operations

- Overview: Mechanics of visitor services; general information, phone etiquette, customer service norms, museum shop transactions, admissions and check-in process.
- Facilitators: Museum Staff
- Duration: About two hours.
- Sessions held as needed, scheduled with MNHM staff.

CERTIFICATION TRAINING

At MNHM, certain roles require specialized training to ensure crew members have the depth of knowledge and commitment to accuracy needed to pursue skilled tasks like educating the public or preparing fossils. Certified volunteers will receive a name badge with the new title and a certificate.

CERTIFIED PALEONTOLOGY INTERPRETER (PI)

Using the Interpretation Guide as our content reference, seven workshops will guide trainees through the exhibition in the order our guests experience it. Trainees will complete and review study questions with staff and shadow other certified guides on at least two programs. Trainees will join a staff person for a mock program as a final exam prior to solo programming.

MNHM volunteers of all roles are encouraged to attend PI workshops. Seasoned volunteers bring valuable perspectives and experiences to these training opportunities.

IMPORTANT NOTES

- Training Commitment:
 - Seven 1-hour workshops over seven days
 - A self-study option is available for applicants unable to attend workshops
 - Workshop study question completion and review with staff
 - Shadowing at least two museum programs
 - Complete at least one mock program with museum staff
 - Applicants must be prepared to lead museum programs within six months of starting the certified interpreter process.
 - Paleontology Interpreters are required to read and comprehend museum exhibition updates ensuring they are prepared to expand their knowledge and program content as the museum evolves
- Most workshops are held on Saturday mornings, 9 - 10 AM. See volunteer training and education schedule for dates and times.
- For self-study options, contact museum staff for Interpretive Guide and Study Questions.
- All workshops are held at the museum.

PALEONTOLOGY INTERPRETER WORKSHOPS

For the initial training sessions (PI.101 - PI.105) interpretation will be defined, modeled and practiced. Volunteers will be introduced to the Interpretation Guide and supplementary documents that will provide discussion topics for daily museum programs.

1. **P.I.101: Introduction/Exhibit Orientation**
 - a. Using “skull corner” as our organizer, the group will discuss the POETRY of excellent interpretive techniques and how to apply them at MNHM. Volunteers will be introduced to the Interpretation Guide.
2. **P.I.102.1: Jurassic Morrison I**
 - a. First finds: *Allosaurus*, *Apatosaurus*, *Stegosaurus* and historic discoveries.
3. **P.I.102.2: Jurassic Morrison II**
 - a. Jurassic traces and recent discoveries (Quarry 5 Project)
4. **P.I.103: Cretaceous Colorado**
 - a. Highlights of nearly 80 million years of life history in the Front Range.
5. **P.I.104: Ice Age Front Range**
 - a. An introduction to Pleistocene mammals and Ice Age survivors.
6. **P.I.105: Paleo Lab and Grounds**
 - a. Demonstrations and discussion points.
7. **P.I.106: Interpreter Roundtable**
 - a. These interactive discussions are open to new and continuing volunteers. Topics vary from new research, new exhibition elements, and/or an opportunity to dig deeper into some of our core specimens/topics. Roundtable dates are scheduled and topics are TBD (to be determined).
8. **P.I.107.1: Mentorship (Shadowing)**
 - a. Volunteers will shadow at least two tours conducted by staff or volunteers. Shadowing is scheduled by signing up for a museum shift.
9. **P.I.107.2: Mentorship (Dress rehearsal)**
 - a. Overview: Volunteers will provide a mock guided tour for museum staff. Dress rehearsal can occur during a museum shift and is scheduled with museum staff.

CERTIFIED FOSSIL PREPARATORS

Fossil preparation is a highly valued volunteer role at the museum, though it demands a significant and consistent time commitment, exceeding that of other volunteer positions. This is a role best suited for individuals who possess considerable patience and find satisfaction in the meticulous preparation process itself, rather than solely the final, completed fossil.

The Core Preparator Training is a carefully structured program designed to provide prospective volunteers with the essential theoretical knowledge and practical skills necessary for the specialized preparation of the Quarry 5 specimens. By enhancing their existing knowledge base and deepening their understanding of paleontology, this program offers volunteers an unparalleled opportunity to provide superior service to the museum and its visitors.

The training blends remote lectures with hands-on workshops held in the paleontology lab. Lectures will cover foundational subjects such as preparation theory, best practices, lab safety, and basic specimen identification. The workshops focus on practical experience to master equipment and techniques, establishing a strong base for subsequent lab work.

Successful completion of this initial training is only the first step. Certification is achieved after a substantial practical phase. Certified volunteers then have the option to pursue further advanced training, which is covered in a separate document.

This free program is open to all eligible museum volunteers. We are committed to delivering the highest quality, engaging content to deepen the knowledge of every participant, and museum staff are proud to leverage their expertise in support of our volunteers toward this goal.

GETTING STARTED

CORE PREPARATORS are tasked with working on designated projects away from exposed fossil material. Their primary objective is to explore the rock surrounding the fossil material. All volunteer preparators start in the core preparator role. Fossil preparators are first trained in the core preparator role.

These volunteers undergo rigorous instruction to effectively identify fossil material within rock. They are proficient in utilizing various instruments and equipment within the laboratory setting, adhering to established protocols. Additionally, they are introduced to basic interpretation techniques to facilitate the public's understanding of the process of preparation and the significance of the Quarry 5 Project (Q5P).

If interested in volunteering in the Paleontology Lab, one must be an active museum volunteer. Training spots are limited due to logistics; there will be a waiting period in which volunteers need to be active in order to keep their spot for training.

IMPORTANT NOTES

- To be eligible for training, volunteers must be trained in another role, active for at least 12 months.
- Total Time Commitment: 50 hours, including ten hours of training and 40 hours of applied training.
- Session Duration: One-hour lectures. Four-hour lab workshops.
- Sessions held on select Friday mornings, see volunteer training and education schedule.
- All lectures and workshops are facilitated by Matthew T. Mossbrucker.

LECTURES & WORKSHOPS

- 1. PL.101: Introduction to Fossil Preparation**
 - a. Overview: Introduction to the paleo lab, with daily workflow, and general lab safety.
 - b. Remote lecture.
- 2. PL.102: Preparation Theory and Specimen Identification**
 - a. Overview: Concepts of preparation theory. Background knowledge for specimen identification.
 - b. Remote lecture.
- 3. PL.103: Specimen ID & Lab Tour (workshop)**
 - a. Overview: Volunteers will become familiarized with sedimentary rock, particularly sandstone. Modern and fossil bone tissues will then be introduced. Participants will be evaluated on their communication skills and accuracy. Introduction to the layout and equipment of the paleo lab, with demonstrations of ergonomics and general lab safety.
- 4. PL.104: Equipment & Tools (workshop)**
 - a. Overview: Introduction to the two main microscopes used in preparation. Participants will create an ergonomic setup to view the blocks undergoing preparation. Introduction to the use of the HW65 and HW70 air scribes. Techniques will be practiced and demonstrated.
- 5. PL.105: Paleontology Lab Practical**
 - a. Overview: Volunteers will be given a task or small project to complete.
 - b. Duration: 40 hours over 6 months

DIGGING DEEPER: LECTURES, FIELD TRIPS, & SELF-STUDY BUCKET LIST

All MNHM volunteers are encouraged to participate in the 'Digging Deeper' lecture and field trip series facilitated by our Director and Curator, Matthew T. Mossbrucker. This program offers enriching lectures and engaging field trips as part of our continuing education programs.

By attending, volunteers gain valuable insights that will help them become more knowledgeable and skilled, benefiting both the volunteer and museumgoers. Digging Deeper offerings are not mandatory. Like all Morrison Museum volunteer program efforts, there is no charge to participate.

NOTES

- Training Time Commitment: Optional
- All lectures are held remotely, via Zoom. Remote lecture links are provided via email prior to the evening of the lecture.
 - A separate document offers more details about these programs. Please request the "Digging Deeper Catalog" if interested.
- Field trip logistics are provided upon registration/RSVP
- Self-study bucket list is on your own

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Lectures

Orientation Series

1. Beyond Dinosaurs: Geohistory of the Front Range of Colorado
2. Centennial State Dinosaurs

Atlantosaurus Beds Series

3. Rediscovering Morrison: An Overview of Historical Discoveries at Dinosaur Ridge.
4. The Lakes-Marsh Atlantosaurus Beds: The North Quarries.
5. The Lakes-Marsh Atlantosaurus Beds: The South Quarries.
6. The Natural History of *Apatosaurus*: Part I
7. The Natural History of *Apatosaurus*: Part II
8. The Natural History of *Stegosaurus*: Part I
9. The Natural History of *Stegosaurus*: Part II

Lectures & Field Trips

Jurassic Morrison

10. Lecture: Rediscovering Morrison: Discoveries at Dinosaur Ridge
 - Field Trip: Quarry 5 at Dinosaur Ridge

Cretaceous Colorado: Dinosaurs of the Dakota Group

11. Lecture: Dinosaurs of the Early and Mid Cretaceous
 - Field Trip: South Platte Formation Tracksite (TBD)

Cretaceous Colorado: Dinosaurs of the End Cretaceous

12. Lecture: Dinosaurs of the End Cretaceous
 - Field Trip: Tracksite at Colorado School of Mines

Ice Age Front Range

13. Lecture: Cenozoic Colorado: Ice Age Front Range
 - Field Trip: Lamb Spring Archaeological Preserve

SPECIALIZED VOLUNTEERS

Do you have a specialized skill you can share with the museum? If you are a skilled trades worker (electrical, carpentry, plumbing), an artist, a gardener-landscaping enthusiast, a custodial professional, and/or a hard worker just looking for an active project, we might have a niche for you! Depending on your specific skill, you may be exempt from the minimum monthly hours of service, as well as the training, uniform, and other requirements associated with other Museum Volunteer roles. Specialized volunteers are required to complete a volunteer application and identify the specialized skill or role they wish to share with the museum. Specialized volunteer activities must be approved by the Director or Deputy Director.

MUSEUM STEWARD

Museum stewards provide essential assistance with museum operations including groundskeeping, and light building maintenance including cleaning exhibit elements, sweeping, dusting, and light custodial work.

NOTES

- On-the-job training is provided on a project-by-project basis.
- Basic chore lists are provided for volunteers who wish to complete steward activities during museum down time.
- Stewards may be required to use appropriate personal protective equipment (PPE)
- Stewards may elect to wear work clothes, bring work gloves, and wear work boots for specific projects.
- Steward projects are coordinated by the Museum Education Coordinator and can be completed in concert with other museum roles.

COLLECTIONS ASSISTANT

The Collections Assistant role is a volunteer position that will play a critical role in the development of the museum's collections. At present, the museum is undergoing a significant overhaul, with staff addressing all aspects of this function. This includes revisiting policies, updating the database, and implementing new management practices. These efforts are aimed at improving the efficiency and effectiveness of the museum's collection management processes. The goal is to ensure that the museum's collections are well-maintained and easily accessible to researchers, scholars, and the public alike. Therefore, this certification role is under development.

The Collections Assistant position provides an opportunity for individuals to gain valuable experience in museum collections while contributing to this important work. If you are interested in volunteering your time and skills in this capacity, please contact us to add your name to the waitlist for the Collections Assistant role.

INTERN

An intern is a volunteer engaged in a specific project in support of educational goals. Internships are coordinated with the Director and delegated to appropriate staff. Generally speaking, there are three categories of internships accommodated. Each category offers examples of potential projects.

1. Education: Create a new program or refine an exhibit.
2. Collections: Assist with collections management. Build an archival jacket.
3. Administration: Special projects like social media analysis.

Lab-based internships occur on a timetable outside of a semester and are discouraged. For those who would like assistance in honing a project, please email the Director. Proposals for an internship should be provided alongside the volunteer application.

COMMUNITY SERVICE VOLUNTEER

The Community Service volunteer position is an excellent opportunity for individuals who require service hours for legal or academic reasons. Community Service volunteers will complete work under the supervision of museum staff and assignments will depend on individual skills, abilities, and goals.

RESEARCH ASSOCIATE

Individuals who possess academic training or significant experience in a particular field can apply to become a Research Associate at the Morrison Natural History Museum. These scholars provide valuable expertise that aids in the advancement of the museum's mission. Research Associates are involved in various projects, and they work in collaboration with the Curator to ensure that their efforts align with the museum's goals. The role of a Research Associate is to contribute to the museum's research initiatives and to provide insights that further the museum's objectives.

Becoming a Research Associate is an excellent opportunity for individuals to apply their knowledge and expertise towards a meaningful cause. By working with the Morrison Museum, Research Associates have the chance to engage in exciting projects, contribute to the advancement of research, and support the museum's mission.

APPENDIX I: MUSEUM STAFF

Contact information, roles, and general schedule/location as they pertain to the volunteer program:

- **Museum Education Coordinator - Mary Ann Bonnell**
 - Role: Manages daily museum operations and volunteer program.
 - mary.ann@mnhm.org
 - 303-859-8911
 - Th - M (office)

- **Deputy Director - Sarah Miller**
 - Role: Manages daily museum operations.
 - s.miller@mnhm.org
 - 303-885-6454
 - M - F (office/remote/field)

- **Director & Curator - Matthew T. Mossbrucker**
 - Role: Manages museum and staff.
 - director@mnhm.org
 - 720-693-1964
 - M- F (remote/office/field/offsite)

- **Museum Educator - Doug Hartshorn**
 - Role: Manages daily museum operations as delegated by Deputy Director.
 - doug.hartshorn@mnhm.org
 - 303-697-1873
 - T & W (office)