



The Beneski Museum of Natural History Field Trip Planning Guide



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Welcome to The Beneski Museum!

The Beneski Museum of Natural History is an exciting place to explore and learn. It is filled with specimens of plants, animals, rocks, fossils, and artifacts from all over the world and across time. These collections help us understand how the Earth and its inhabitants have changed over time. Taking a field trip to the Museum offers students and teachers an opportunity to interact with real objects. Field trips engage the senses, bring curriculum concepts to life, and inspire new questions.

This Field Trip Planning Guide is designed to help you plan a meaningful learning experience at Beneski Museum of Natural History. Please take the time to read over this information at least one month before your field trip. If you have any questions, contact us at avenne@amherst.edu.



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About Us

Did you know?

The origins of the Amherst College Museum date back to the very earliest days of Amherst College. The College itself began in 1821 as a teaching institution primarily for missionaries that would be stationed worldwide. From the beginning, science was a vital part of the curriculum.

Perhaps the most significant event to affect scientific study and research at Amherst College was the addition of Edward Hitchcock as Professor of Natural History



and Chemistry in 1825. Hitchcock had wide-ranging interests, a keen sense of scientific investigation and the dynamic energy to execute numerous scientific investigations and ensuing publications. He also encouraged alumni to send back scientific specimens from all over the world and he collected geologic and fossil specimens from local sites. One of these collections, the Hitchcock Ichnology Collection (ichnology is the study of tracks and traces), today continues to be one of the largest fossil track collection in the United States and one of the most studied.

Other key people who joined the faculty of Amherst College in the 19th century, further expanding science's role at Amherst College, included Charles Upham Shepard and Benjamin K. Emerson (responsible for the mineral collection). In the 20th century, Frederik Brewster Loomis, and later Albert E. Wood, both professors of biology, greatly expanded the scientific collections, particularly the vertebrate fossils, through field expeditions in numerous North and South American localities.

The "The Beneski Museum of Natural History" is the fifth generation of natural history museums at Amherst College. Throughout the years, as the collections were created and expanded, they were housed and displayed in several campus buildings. The first museum, the Octagon, was built in 1848. As Hitchcock's influence and collections expanded, another building was constructed in 1855, the Appleton Cabinet, dedicated solely to his ichnology collection and to the numerous zoological specimens that were being sent back by alumni. These collections were key parts of the scientific curricula in Amherst's classrooms. Today, the Amherst College Museum's collections reflect the historical journey of scientific inquiry at Amherst College and of western culture in general. Our collections are derived from expeditions, donations and exchanges, and have been acquired throughout the past 180 years of Amherst College.

Today, the Museum's collection is comprised of over 200,000 specimens and artifacts. Less than one percent of our collection (1,700 individual specimens) is on display; the rest is preserved for scientific research!

Top 10 -

Reasons to Take a Field Trip to Beneski Museum of Natural History

1. The Museum excites and motivates students to learn about the history of our natural world.

2. Immersion in the Museum environment engages all students in a multi-sensory learning experience.

3. Museum exhibitions are interdisciplinary—they can be used to enhance school-based learning across diverse subject areas.

4. Exposure to collections and exhibitions enables students to build and practice vocabulary.

5. At the Museum, students can engage in the process of inquiry: asking questions, collecting evidence, and constructing explanations.

6. Field trip activities can foster students' critical-thinking skills: analyzing, reasoning, problem-solving, and creative thinking.

7. Field Trip activities can support critical pedagogy by engaging students in reflection and evaluation using authentic resources.



8. A field trip to The Beneski Museum of Natural History deepens students' awareness of the valley's cultural institutions and understanding of the Museum as a place for lifelong learning.

9. The Museum offers students a unique experience that cannot be replicated in the classroom.

10. Field trips make learning FUN!

Plan for Success

Implementing a successful learning experience at The Beneski Museum requires preparation. In order to effectively lead your group, you need to have a clear understanding of the Museum's layout, available resources, and the day's learning activities. Use our Field Trip Check List to ensure you are well prepared for your visit.



Field Trip Check List

At least two weeks before your field trip:

- Prepare to register. <https://www.amherst.edu/museums/naturalhistory> to learn more.
 - Choose three potential field trip dates
 - Decide which exhibitions you would wish like to visit
 - Determine the total number of students and chaperones who will be visiting
 - Identify you preferred lunch location

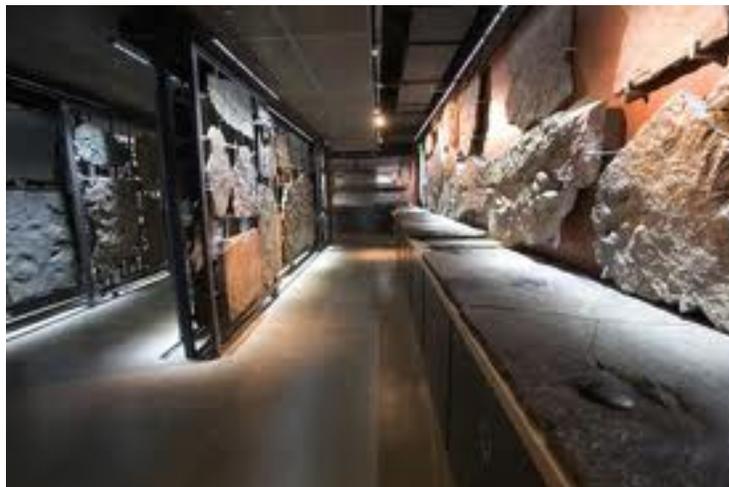
- Complete the online field trip registration at https://www.amherst.edu/museums/naturalhistory/group_visits.
- Complete necessary school paperwork (e.g. field trip application, student permission slips, etc.).
- Coordinate transportation.
- Choose a focus for the field trip. (See p. 7-10)
- Recruit chaperones.
- Prepare yourself.
Visit the Museum prior to your field trip. General admission to the Museum is free
- Open Tue-Sun 11 AM – 4PM and Thu. 6-10PM



Plan for Success (continued)

At least one week before your field trip

- Prepare chaperones. (See p. 16)
- Create chaperone groups. Remember to follow our chaperone-student ratio. Grades PreK to 2: one adult per five students.
- Grades 3 to 12: one adult per ten students.
- Prepare itineraries for chaperones and gather materials for students.
- Complete pre-field trip activities in the classroom.



On the day of your field trip

- Provide identification for your group members. Give chaperones nametags. Use nametags, stickers, or matching shirts with your school's name and contact information.
- Distribute maps and itineraries to chaperones. Highlight important meeting times and locations. (See p 17 -18)
- Bringing lunch? Organize lunches in labeled boxes or bags to speed up the check-in process.
- Bringing coats? Cubbies for up to 50 coats at the Main entrance
- Bring supplies for student work. Make sure everyone has a pencil, something to write on and the necessary field trip activity sheets



After the Field Trip

- Complete post-field trip activities in the classroom. Encourage students to synthesize and reflect on their field trip learning.

Focus Student Learning

Implementing a successful learning experience at The Beneski Museum of Natural History requires focus. With over 15,000 square feet of exhibitions, The Beneski Museum of Natural History has more treasures than anyone can see in one day.



To give your students enough time to explore a topic in-depth and meet specific learning objectives, focus your field trip on one or two relevant exhibitions or even a few galleries within one floor. Connecting a focused field trip experience to classroom learning provides students with the necessary background information and time to reflect and make the trip meaningful.

There are three main parts to a focused field trip:

1

Pre-field trip activities completed in the classroom



2

Field trip activities at The Museum



3

Post-field trip activities conducted back in the classroom



Trip Tip: 

A visit to the Museum aligns with Common Core Standards for Language Arts and Literacy. Students can gather evidence, make logical inferences, and support conclusions using multiple sources of information in our exhibitions.

1. Before the Field Trip

A successful field trip begins well before students board the bus.

Goals

- Students have realistic expectations about what they will see and do at the museum
- Students understand the goals for learning at the Museum
- Students understand how the field trip fits into classroom learning
- Students complete activities that prepare them for learning at the Museum

Strategies	Examples: Students can...
Prepare for the field trip experience	<ul style="list-style-type: none">• Read a book about natural history museums• Examine a museum map• Explore the Museum website• Discuss students' prior visits to the Beneski Museum or other museums• Communicate behavior expectations and consequences
Prepare for the field trip activities	<ul style="list-style-type: none">• Review or introduce relevant content and vocabulary• Complete pre-field trip activities• Distribute field trip activity sheets and review directions• Model field trip activities

Trip Tip:

Use a book to introduce elementary students to natural history museums
We suggest

- *The Field Mouse and a Dinosaur Named Sue* by Jan Wahl
- *How to Take your Grandmother to a Museum* by Lois Wyse

Trip Tip:

Resources from The Beneski Museum of Natural History learning collection of specimens and artifacts can be used to familiarize students with The Museum before a visit—check out Museum in a Box for your classroom! (Under Development for Fall 2012)

Visit <https://www.amherst.edu/museums/naturalhistory> to learn more.



2. During the Field Trip

Goals

- Students thoughtfully engage with Museum resources through focused activities
- Students meet the trip's learning objectives.
- Students build on learning started during pre-field trip activities
- Students have fun learning.



Strategies	Examples: Students can...
Observe	<ul style="list-style-type: none"> • Play I Spy • Use simple “scopes make out of paper tubes to focus observations • Recreate objects through scientific illustration or careful sketching • Compare and contrast object from home to Museum objects • Select an object and answer; Who? What? When? Where? How?
Read and Record	<ul style="list-style-type: none"> • Read or listen to a story in a gallery connected to the exhibitions' content • Create a comic strip to illustrate concepts and make inferences about what happens next • Write a description of a specific object • Take notes to write a newspaper article reviewing an exhibition • Record Field trip observations by taking pictures or quick video clips
Search & Find	<ul style="list-style-type: none"> • Look for objects that relate to particular categories, themes, etc. • Answer fill in the blank questions • Work in groups to create a scavenger hunt in a small exhibition then exchange and complete another group's hunt
Investigate	<ul style="list-style-type: none"> • Collect evidence to test a hypothesis • Look for information to answer a student created question

Trip Tip:

Our Museum covers more than 15,000 square feet. To help make this large space more manageable, the Floor is broken into smaller parts or galleries. Have small groups work in select galleries. Students can compile and share information when they return to school.

NOTE: See pages 12–15 of this guide for reproducible student activity sheets.

3 After the Field Trip

Encourage students to reflect on their Museum experience and synthesize learning after the trip

Goals

- Students reflect on their field trip experience
- Students share what they learned at the Museum
- Students discuss and investigate questions that arose during the Museum visit
- Students connect Museum experiences to learning at school

Strategies	Examples:
Reflect	<ul style="list-style-type: none">• Discuss what students liked and didn't like about the visit• Share field trip findings during a classroom discussion• Compare and contrast observations• Write a Journal entry about the experience
Present	<ul style="list-style-type: none">• Create a class book that illustrates field trip learning• Display field trip information and pictures on a classroom bulleting board• Present field trip observations and learning to another class or group of parents• Work in groups to design a museum exhibition; have students serve as docents for guests and another classroom• Edit pictures or film to crate a final presentation, public service announcement, or museum advertisement• Create a scientific poster to display evidence gathered at the Museum
Investigate	<ul style="list-style-type: none">• Record museum-inspired questions to investigate further• Conduct investigation to learn more

Trip Tip:

No one can possibly know the answer to every question that students ask while visiting The Beneski Museum of Natural History. Encourage students to make further observations. Prompt students to think about possible explanations for their questions and ideas about how they might find the answers!



Exhibitions at a Glance

Below is a list of the permanent exhibitions located on each level of the Museum. More information about our exhibitions can be found at <https://www.amherst.edu/museums/naturalhistory/collections>. Be sure to visit https://www.amherst.edu/museums/naturalhistory/group_visits for information about visitation policies

Museum Level	Exhibition	Science	Social Science	Great for Young Learners	Educator Guide Available*
Lower	Mesozoic Reptiles	X	X	X	In Process 5/12
Lower	Dinosaurs	X		X	
Lower	Track Book	X		X	
Lower	Walk in the Dinosaur tracks	X		X	
Lower	History of Trackways & How they are made...	X	X		
Lower	10,000 Trackways	X	X	X	In Process 5/12
Lower	Ancient Lakeshore Diorama	X	X	X	

Museum Level	Exhibition	Science	Social Science	Great for Young Learners	Educator Guide Available*
Entry	Ice Age Mammals	X	X	X	In Process 5/12
Entry	Evolution of the Horse	X	X	X	
Entry	Patagonia – Isolation Evolution	X			
Entry	Human Factors & Extinctions	X	X	X	
Entry	Vertebrate Evolution Drawers	X		X	
Entry	Ancient Mammals of North America	X		X	
Entry	Fossils in the field	X	X	X	

Museum Level	Exhibition	Science	Social Science	Great for Young Learners	Educator Guide Available*
Upper	Human Evolution	X	X	X	
Upper	Geology of the Connecticut River Valley & Paintings	X	X		
Upper	Bedrock Geology Model	X			
Upper	Milestones in Vertebrate Evolution	X			
Upper	Invertebrate Evolution Drawers	X	X		
Upper	How Fossils are Formed Drawers	X		X	
Upper	Ancient Marine Fossils	X			

Name _____ Date _____

Field Trip Observation Guide

Part 1

I visited the _____ Exhibition

I observed _____.

Recorded your observation in the box below. Draw or write what you see.



Part 2

I wonder _____

I learned _____

Part 3

I have more questions about what I learned. My questions are:

Name _____

Date _____

Field Trip Specimen/Museum Display Observation Guide

Describe what you see.



Draw the Specimen/Display.



What is it made of?

How was it preserved or made?

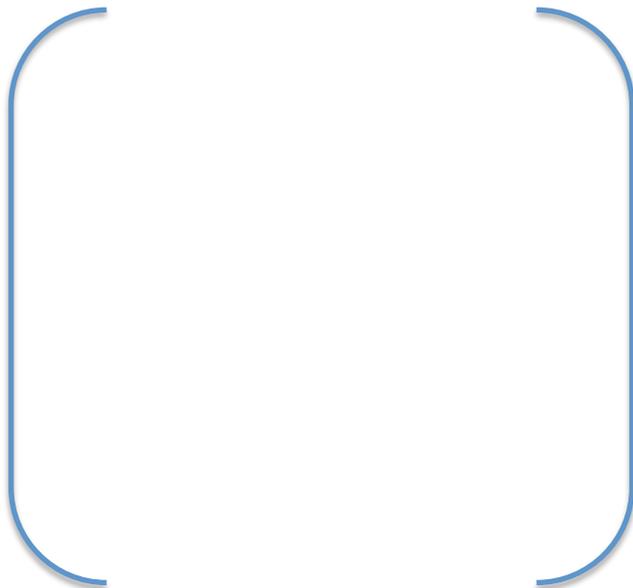


Name _____

Date _____

Beneski Museum of Natural History Field Guide

Sketch the specimen.



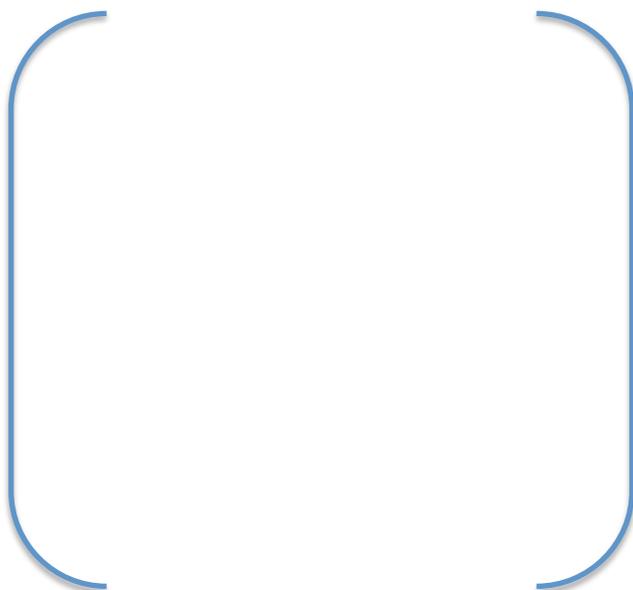
Specimen: _____

Location: _____

Date: _____

Description:

Sketch the specimen.



Specimen: _____

Location: _____

Date: _____

Description:

An Investigation at -The Beneski Museum of Natural History

Question to Investigate:

Group Members:

Investigation Methods:	Notes
Background Information:	
Resources:	
Evidence:	
Conclusion:	

Date: _____

Dear Field Trip Chaperone,

Thank you for joining us on our field trip to The Beneski Museum of Natural History! Our visit is scheduled to take place on (Day) _____, (Date) _____.

Please meet us at (Location) _____ at (Time)_____.

We will return to school by (Time) _____.

During the field trip, the students will learn about (Field Trip Focus) _____.

At the Beneski Museum of Natural History, we will visit (List Key Exhibits here) _____

_____. While visiting

these exhibitions, students will, _____

You will be assigned to lead a small group of students during the visit. Please make sure that students stay with you at all times and are on task. If you have questions or need help, please contact me or find a Museum staff member or volunteer. Let me know if you have any questions before the trip. Again, thank you for sharing your time with us.

Sincerely,

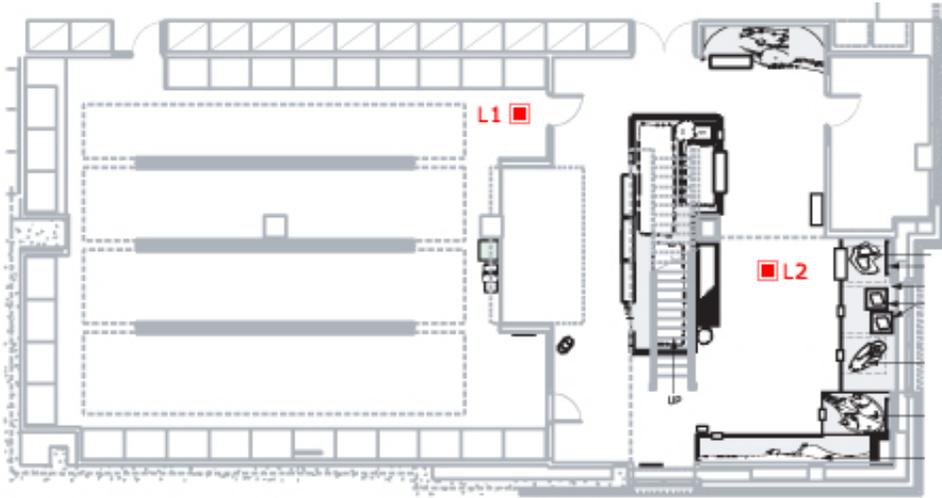
(teacher name)

(contact information)

Lower Level

Beneski Museum of Natural History

L1 - Hitchcock Ichnology Collection
L2 - Mesozoic Reptiles



Group Leader/Teacher: _____

Number of Students in Your Group: _____

Itinerary Location	Time	Special Instructions
_____	_____	_____
_____	_____	_____
_____	_____	_____

Remember

- Stay with our group at all times.
- Please keep all food and drink outside of the Museum
- Bathrooms are located at the end of the hallway on the main and upper levels outside the museum
- Have a question? Ask one of the Museum staff members or volunteers wearing Museum nametags.

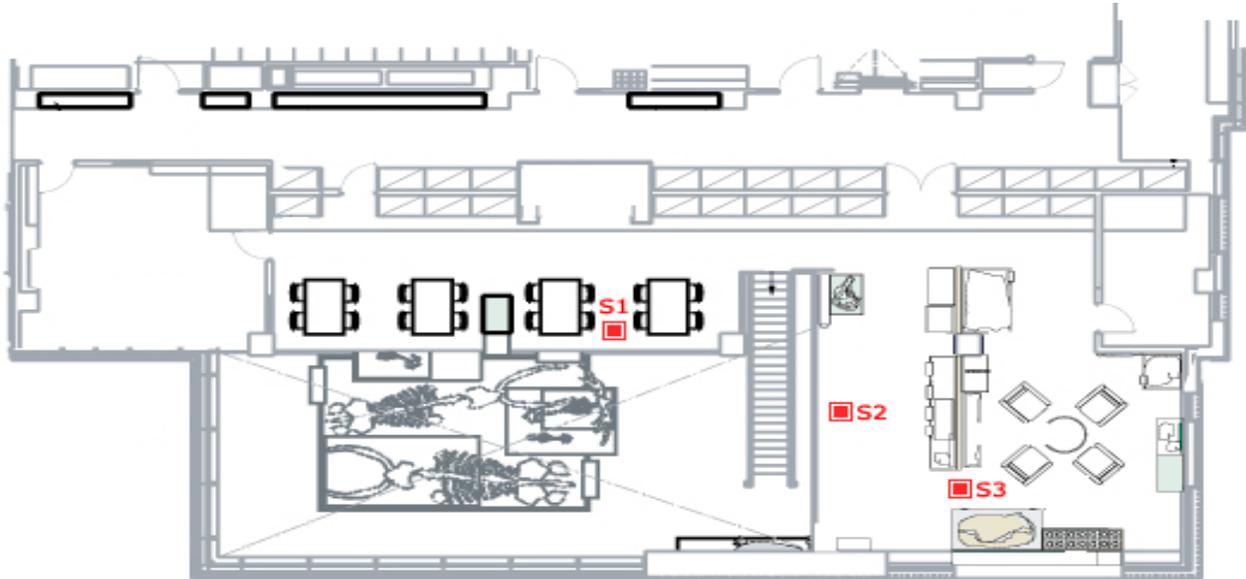
Upper Level

Beneski Museum of Natural History

S1 - Human Evolution

S2 - Geology of the Connecticut River Valley

S3 - Bedrock Geology Model



Chaperones, ask students questions to keep them focused and on task...

- What do you see?
- How are these objects different? The same?
- What does this object remind you of?
- What is interesting about this object?

Entrance Level

E1 - Entrance

E2 - Ice Age Mammals

E3 - Evolution of the Horse

