

# Educator's GUIDE



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**PRIVATE EVENING  
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YOUR SCHOOL!**



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**BMS AND TIFFT  
CTLE PROFESSIONAL  
DEVELOPMENT**

***NEW for the 2024-25 School Year!***



# Buffalo Museum of Science

## VISIT THE MUSEUM

Join the list of school, preschool, camp and daycare groups that explore our Museum offerings every year! Our state-of-the-art Science Studios foster hands-on and inquiry-based learning, supporting your STEM curriculum. There's something for everyone!

Want to enhance your students' experience? Add a hands-on workshop, planetarium program, or Science on Stage auditorium show to your visit!

Visit [sciencebuff.org/educators/field-trips](https://sciencebuff.org/educators/field-trips) for a complete list of programs.

## Workshop Fees

Self-Guided Group Visit (per student, 10 students minimum for group rate) . . . . .	\$16
Add Enhanced School Theme Day (per student) . . . . .	+\$3
Add Workshop (30–60 minutes; maximum 20 students for Pre-K, 30 for K-12) . . . . .	+\$120
Add Zygmunt Planetarium Experience (30 minutes; maximum 20 students) . . . . .	+\$90
Add Science on Stage Show (60 minutes; maximum 200 students) . . . . .	+\$200

## Chaperones

We require at least 1 adult for every 10 students. Teachers and chaperones are admitted free of charge, up to 1 adult for every 10 students. Additional adults are \$16 each. Discounts are not valid for group visits.

## Reservation Adjustment Policy

Final group numbers or changes to your reservation must be provided to the Museum a minimum of **48 hours prior to the scheduled visit**.

Groups that arrive with fewer people and fail to provide updated numbers 48 hours in advance will be charged the full total due on their initial reservation or the number of attendees the day of, whichever is higher.

If your program requires an extra supply fee, the number of supplies to be ordered must be finalized three weeks prior to the program. Even if the number of attendants changes, you will still be responsible for the full number of supplies ordered for your program.

## Book Your Museum Program!

**ONLINE:** Complete our online reservation request form at [sciencebuff.org/educators/educators-reservation](https://sciencebuff.org/educators/educators-reservation) and our Guest Support Specialist will contact you.

**PHONE:** Call (716) 896-5200 x323 to schedule your school or group's reservation.

**EMAIL:** Contact our Guest Support Specialist at [museumreservations@sciencebuff.org](mailto:museumreservations@sciencebuff.org).

*We recommend placing requests at least one month in advance.*

## SCIENCE ON WHEELS

### MUSEUM OUTREACH PROGRAMS

*Pricing and Capacity Guidelines*

#### CLASSROOM WORKSHOPS

##### \$175 PER WORKSHOP

An additional materials fee may apply to some workshops.

- **Pre-K Workshops:**  
Limit 20 students. 30 minutes.
- **All Other Workshops:**  
Limit 30 students. 60 minute programs.

#### ASSEMBLY PROGRAMS

##### \$375 PER PROGRAM

Limit 300 people. 60 minutes.

#### ZYGMUNT DIGITAL PLANETARIUM

##### \$250 FIRST HOUR

##### \$100 EACH ADDITIONAL PROGRAM

20–30 minute programs. Limit 20 students and 2 teachers/chaperones per program.

Large space (25'x25') and high ceilings (12') needed, such as a gym or cafeteria. Requires 45 minutes before and after the program for set up and take down.

Due to the weight of the planetarium's components, set-up locations must be fully accessible by wheeled carts. Please call (716) 896-5200 x323 for more details.

#### SCIENCE FUN FESTIVALS

##### \$1,500

Includes 4 facilitated stations. Limit 2 hours. Maximum 200 people.

*An additional materials fee may apply.*

*A mileage fee will be added for roundtrip travel for all programs.*



# Tifft Nature Preserve

## Pricing & Capacity Guidelines

*Due to the interactive nature of our programs and to ensure the best possible quality experience, we ask that you respect our class size limits. Additional fees may apply for groups that exceed limits.*

### WORKSHOPS

Maximum 60 students. Minimum 10 students. One adult required for every 10 students. Adults in 1:10 ratio and required aides are free.

**Pre-K & K workshops:** 2–2.5 hours.

**All other grade level workshops:** 2.5–3 hours.

### FEES

\$13 per student & \$10 per additional adult (September – March).

\$15 per student & \$12 per additional adult during peak season (April – June).

### GUIDED TOURS

Maximum 60 students. Minimum 10 students. One adult required for every 10 students. Adults in 1:10 ratio and required aides are free.

**Pre-K & K Tours:** 1 hour.

**All other grade level tours:** 1–1.5 hours.

### FEES

\$10 per student & \$10 per additional adult (July – March).

\$12 per student & \$12 per additional adult during peak season (April – June).

### DISCOVERY VISITS

Advance registration required for groups of 10 or more. We reserve the right to turn away self-guided groups that do not make a reservation as they may interfere with other scheduled programming.

### FEES

\$3 per person.

### TIFFT OUTREACH

**Pre-K Programs:** Classroom limit 20 students. 30–45 min.

**All Other Programs:** Classroom limit 30 students. 45 min.–1 hour.

### FEES

\$175 per classroom.

*If student count limits are exceeded, an additional fee of \$175 will be added. Additional mileage fee will be added for round trip travel.*

**Book early! We recommend placing requests at least one month in advance for non-peak season.**

## THINK OF TIFFT AS A PART OF YOUR CLASSROOM.

Tifft Nature Preserve has been engaging students of all ages and communities for decades, serving as the region's premier environmental education site in the highly accessible Buffalo area.

Groups are immersed in a natural environmental setting like no other while being guided along trails through woodlands, wetlands, and boardwalks or enjoying a hands-on lesson in our multi-classroom Darling Environmental Education Center.

**SEE PAGES 9-12 FOR TIFFT OFFERINGS INCLUDING FUNDING ASSISTANCE OFFERED THROUGH ERIE 1 BOCES EXPLORATORY ENRICHMENT.**

## Book Your Tifft Program

**ONLINE:** Complete our online reservation request form at [tifft.org/educators/program-request](https://tifft.org/educators/program-request) and Tifft will contact you.

**PHONE:** Call (716) 825-6397 to schedule your group's reservation.

**EMAIL:** Contact Tifft Nature Preserve at [tifftreservations@sciencebuff.org](mailto:tifftreservations@sciencebuff.org).

*For all programs, outreach, tours, and workshops, final group numbers or changes to your reservation must be provided to Tifft Nature Preserve a minimum of 48 hours prior to the scheduled visit.*



# Buffalo Museum of Science

## SELF-GUIDED TOURS

Explore the Museum at your pace on a self-guided tour with your group of 10 or more students! Our state-of-the-art science studios foster hands-on and inquiry-based learning, supporting your STEM curriculum. From weather to space and engineering, there's something for every member of your group!

## 12 Months of Science

NEW this year, 12 Months of Science! Every day is full of STEM fun at the Buffalo Museum of Science, so let's celebrate it! Facilitated activities and demonstrations centered on each month's theme will be available to your group every day between 10 a.m. and 2 p.m.

Plan your visit when the month's theme correlates with your curriculum to create more connections between your classroom and your Museum visit.

**October – Spooky Science Month**

**November – Make It Month**

**December – Cool Science Month**

**January – Science Sleuth Month**

**February – All About Engineering Month**

**March – Rockin' Fossils Month**

**April – Space Month**

**May – Messy Science Month**

**June – Colorful Science Month**

**July – Living Earth Month**

**August – Exciting Elements Month**

**NEW!**

## Enhanced School Theme Days

Want to dive a little deeper? We're offering NEW school group-focused theme days that are filled with even more STEM stations and activities that will enrich your students' learning experience as they explore all four floors of the Museum. Spots are limited, so you'll want to book these special experiences early!

**COST:** \$3 per student with Self-Guided Group Admission

### 2024-2025 ENHANCED SCHOOL THEME DAYS

**February 25, 2025** – Put the E in STEM, Grades 3–8

**March 11, 2025** – Dinos, Fossils, and Rocks, oh my!, Grades Pre-K–2

**April 8, 2025** – Space-a-palooza, Grades 3–8

**May 20, 2025** – Messtacular Science, Grades Pre-K–2





# Buffalo Museum of Science

## WORKSHOPS AT THE MUSEUM

*Enrich your field trip with special themed activities with our team of facilitators. Workshops are 30 minutes for pre-K and 60 minutes for all other grades.*

### SUGGESTED GRADES PRE-K

#### HOME HUNTERS

Embark on a journey to explore the diverse habitats of exotic animals with biofacts from the Museum's collection. Learn about the movement of animals with an interactive game.

### SUGGESTED GRADES PRE-K, K-2

#### BUBBLE BLAST

Explore the science of soap and water! Participants will experiment with bubble solution and tools and learn all about bubble science. A \$10 materials fee is required. **Seasonal Workshop (April – August).**

*NGSS Standards: K-2-ETS1-1, K-2-ETS1-2, 2-PS1-2*

#### RETHINK EXTINCT

Become a paleontologist and unearth animals that lived long ago! Participants will examine various fossils from Western New York and make connections between extinct creatures and those that live today.

*NGSS Standards: 2-LS4-1, (3-LS4-1)*

### SUGGESTED GRADES K-2

#### BUG WORKS

Get up close to some incredible insects! Examine live insects and other critters, observing their anatomy and behavior.

*NGSS Standards: K-LS1-1, 2-LS4-1*

#### BUFFALO IN SPACE

Help build a mega model solar system! Along the way, participants will explore the many shapes, sizes, similarities and differences of our closest neighbors in space.

*NGSS Standards: 1-ESS1-1, 2-PS1-1, 2-PS1-2*

### SUGGESTED GRADES K-2, 3-5

#### BIODIVERSITY

Investigate the adaptations that allow plants and animals to survive in their natural habitats. Using items from the Museum's collection, explore how changing environments affect living things.

*NGSS Standards: K-ESS3-1, 2-LS4-1, 3-LS3-2, 3-LS4-2*

### SUGGESTED GRADES 3-5

#### CIRCUIT MASTER

Explore electricity in a safe and hands-on way! Investigate insulators and conductors, build a circuit with your body, and feel the power of our Van de Graaff static electricity generator. Access to a wall outlet is required for this program.

*NGSS Standards: 3-PS2-3, 4-PS3-2, 4-PS3-4*

### OUR MARVELOUS EARTH

Get to know the rocks and minerals under our feet and decode clues about the history of Earth's surface. Examine the geologic processes that make up the rock cycle, including plate tectonics, erosion, and more.

*NGSS Standards: 4-ESS1-1, 4-ESS2-1*

### ARTIFACTS

Explore ancient civilizations with our excavation simulations and artifact analysis to discover the thrill of learning about the science of archaeology. While also comparing traditions, beliefs, language, and geography using items from the Museum's collection.

*NGSS Standards: 3-LS2-1, 3-ESS2-2*

### SUGGESTED GRADES 3-5, 6-8

#### SCIENCE BELOW ZERO

Chill out during this super cool workshop! Using things like liquid nitrogen and dry ice, participants will explore the phases of matter and kinetic energy in amazing ways. A \$25 materials fee is required.

*NGSS Standards: 4-PS3-2, 5-PS1-3, MS-PS1-4*

### BASE BUFFS

Inspire the inner scientist in your students! Experiment with acids and bases, make some mini explosions, and more in this hands-on program. An available sink is required for this program. A \$10 materials fee is required.

*NGSS Standards: 5-PS1-2, 5-PS1-4, MS-PS1-2*

### SUGGESTED GRADES 6-8

#### STAR SEARCH

Explore our galaxy near and far! Build and test your own map of the constellations and brush up on your skywatching skills with a virtual tour of our night skies. Requires a projection screen or blank wall.

*NGSS Standards: MS-ESS1-1, MS-ESS1-2, MS-ESS1-3*

### DESIGN CHALLENGE

Are you up to the challenge? Participants will become civil engineers and work in teams to design and build bridges. The end of this workshop will provide time for teams to carry out tests to evaluate the performance of their bridge.

*NGSS Standards: MS-ETS1-1, MS-ETS1-2, MS-ETS1-3*

### SUGGESTED GRADES 6-8 9-12

#### DISSECTIONS

Dissect a cow eye or squid with the Buffalo Museum of Science! This workshop allows participants to investigate body systems and visualize how structure relates to function. A \$50 lab/materials fee is required.

*NGSS Standards: MS-LS1-3, HS-LS1-2, HS-LS4-4*



# Buffalo Museum of Science

## ZYGMUNT PLANETARIUM

Step into our inflatable, digital Zygmunt Planetarium for a 20–30 minute facilitated experience that will allow your students to explore the night sky like never before. Limited capacity of 20 students and 2 chaperones per session. *\*Also available as an outreach program to your site. See information under Science on Wheels section.*

## SCIENCE ON STAGE

Gather your class in the Museum auditorium for an interactive and engaging program bringing theatre and science together in dynamic ways!

### SUGGESTED GRADES K-8

#### SCIENCE BELOW ZERO

Chill out during this super cool stage show! Using things like liquid nitrogen and dry ice, participants will explore the phases of matter and kinetic energy in amazing ways. **A \$25 materials fee is required.**

NGSS Standards: 4-PS3-2, 5-PS1-3, MS-PS1-4



### FAMILY STEM ENGAGEMENT NIGHT AT THE BUFFALO MUSEUM OF SCIENCE

Wouldn't it be fun for your students and their families to take over the Museum for an evening? Host a STEM Engagement Night for your students' families at the Buffalo Museum of Science. All four floors of the Museum will be open for your guests to explore at their own pace.

Pricing starts at \$3,000 for up to 200 guests. Contact our Group Reservation line for more information or to reserve a date for your group. (716) 896-5200 x323 or [museumreservations@sciencebuff.org](mailto:museumreservations@sciencebuff.org).





# Buffalo Museum of Science

## SCIENCE ON WHEELS



### LET US BRING THE MUSEUM TO YOU.

**Can't make it to the Museum? We can visit you!** Our experienced facilitators will bring a unique educational experience right to your school, library, or community center through hands-on Classroom Programs, large-scale Assembly Programs, or exciting Science Fun Festivals.

## ASSEMBLY PROGRAMS

*See pricing and capacity guidelines on page 2.*

### SUGGESTED GRADES K-8

#### SCIENCE BELOW ZERO

Chill out during this super cool liquid nitrogen demonstration! Explore the phases of matter, as well as kinetic energy in amazing ways. A \$25 materials fee is required.

*NGSS Standards: 4-PS3-2, 5-PS1-3, MS-PS1-4*



## ZYGMUNT PLANETARIUM

*See pricing and capacity guidelines on page 2.*

### ZYGMUNT DIGITAL PLANETARIUM

Show the students the night sky by stepping into our new digital planetarium.

## SCIENCE FUN FESTIVALS

*See pricing and capacity guidelines on page 2.*

Science, exploration and discovery come to your school for a day or evening event. Choose four engaging stations. Call (716) 896-5200 x323 for more details.

### AFTERSCHOOL PROGRAMMING

Just because the school day is done doesn't mean we are! The Museum provides fun, hands-on after-school programming to fit your school's needs and to take some weight off your teachers.

Using materials from our education collection and hands-on activities, we're happy to work with your staff to customize the perfect after-school program.

Call (716) 896-5200 x323 or email [museumreservations@sciencebuff.org](mailto:museumreservations@sciencebuff.org) for pricing and information!

**SEE PAGE 2 FOR INSTRUCTIONS ON BOOKING YOUR MUSEUM VISIT OR PROGRAM.**



# Buffalo Museum of Science

## CLASSROOM OUTREACH WORKSHOPS

*See pricing and capacity guidelines on page 2.*

### SUGGESTED GRADES PRE-K

#### HABITAT EXPLORERS

Embark on a journey to explore the diverse habitats of exotic animals with biofacts from the Museum's collection. Learn about the movement of animals with an interactive game.

### SUGGESTED GRADES PRE-K-2

#### BUBBLE BLAST

Explore the science of soap and water! Participants will experiment with bubble solution and tools and learn all about bubble science. A \$10 materials fee is required.

#### Seasonal Workshop (April—August).

*NGSS Standards: K-2-ETS1-1, K-2-ETS1-2, 2-PS1-2*

#### FANTASTIC FOSSILS

Become a paleontologist and unearth animals that lived long ago! Participants will examine various fossils from Western New York and make connections between extinct creatures and those that live today.

*NGSS Standards: 2-LS4-1, (3-LS4-1)*

### SUGGESTED GRADES K-2

#### INSECTIGATION

Get up close to some incredible insects! Examine live insects and other critters, observing their anatomy and behavior.

*NGSS Standards: K-LS1-1, 2-LS4-1*

#### SUPER SOLAR SYSTEM

Help build a mega model solar system! Along the way, participants will explore the many shapes, sizes, similarities and differences of our closest neighbors in space.

*NGSS Standards: 1-ESS1-1, 2-PS1-1, 2-PS1-2*

### SUGGESTED GRADES K-5

#### WILD ADAPTATIONS

Investigate the adaptations that allow plants and animals to survive in their natural habitats. Using items from the Museum's collection, explore how changing environments affect living things.

*NGSS Standards: K-ESS3-1, 2-LS4-1, 3-LS3-2, 3-LS4-2*

### SUGGESTED GRADES 3-5

#### IT'S ELECTRIC

Explore electricity in a safe and hands-on way! Investigate insulators and conductors, build a circuit with your body, and feel the power of our Van de Graaff static electricity generator. Access to a wall outlet is required for this program.

*NGSS Standards: 3-PS2-3, 4-PS3-2, 4-PS3-4*

### DYNAMIC EARTH

Get to know the rocks and minerals under our feet and decode clues about the history of Earth's surface. Examine the geologic processes that make up the rock cycle, including plate tectonics, erosion, and more.

*NGSS Standards: 4-ESS1-1, 4-ESS2-1*

### ANTHROPOLOGY ADVENTURES

Explore ancient civilizations with our excavation simulations and artifact analysis to discover the thrill of learning about the science of archaeology. While also comparing traditions, beliefs, language, and geography using items from the Museum's collection.

*NGSS Standards: 3-LS2-1, 3-ESS2-2*

### SUGGESTED GRADES 3-8

#### SCIENCE BELOW ZERO

Chill out during this super cool workshop! Using things like liquid nitrogen and dry ice, participants will explore the phases of matter and kinetic energy in amazing ways. A \$25 materials fee is required.

*NGSS Standards: 4-PS3-2, 5-PS1-3, MS-PS1-4*

#### CHEMQUEST

Inspire the inner scientist in your students! Experiment with acids and bases, make some mini explosions, and more in this hands-on program. An available sink is required for this program. A \$10 materials fee is required.

*NGSS Standards: 5-PS1-2, 5-PS1-4, MS-PS1-2*

### SUGGESTED GRADES 6-8

#### REACH FOR THE STARS

Explore our galaxy near and far! Build and test your own map of the constellations and brush up on your skywatching skills with a virtual tour of our night skies. Requires a projection screen or blank wall.

*NGSS Standards: MS-ESS1-1, MS-ESS1-2, MS-ESS1-3*

#### ENGINEERING CHALLENGE

Are you up to the challenge? Participants will become civil engineers and work in teams to design and build bridges. The end of this workshop will provide time for teams to carry out tests to evaluate the performance of their bridge.

*NGSS Standards: MS-ETS1-1, MS-ETS1-2, MS-ETS1-3*

### SUGGESTED GRADES 6-12

#### DISSECTIONS

Dissect a cow eye or squid with the Buffalo Museum of Science! This workshop allows participants to investigate body systems and visualize how structure relates to function. A \$50 lab/materials fee is required.

*NGSS Standards: MS-LS1-3, HS-LS1-2, HS-LS4-4*





# Tifft Nature Preserve

## WORKSHOPS

*In-depth science activities give students hands-on experiences both indoors and outdoors. Workshops include interactive activities as well as a guided tour of the Preserve. Indoor activity alternatives to the tour may be offered in the event of inclement weather. Workshop content is adjusted to suit different grade levels.*

**SEE PAGE 3 FOR INSTRUCTIONS ON BOOKING YOUR TIFFT VISIT OR PROGRAM.**

### WHAT'S THE NICHE?

**GRADES PRE-K-2 | SEPTEMBER – JUNE**

Investigate real animal homes and various habitats of Tifft. Through hands-on explorations and a guided tour, students discuss interdependent relationships between animals and plants while working together to match animals to their proper habitats and construct animal homes from natural materials.

*NGSS Standards: K-LS1-1, K-ESS3-1, 1-LS1-1, 2-LS4-1*

### SEEDS & NEEDS

**GRADES PRE-K-5 | SEPTEMBER – JUNE**

Explore the needs of seeds, plus plant parts, life cycles, and species diversity. Through hands-on activities and a guided tour, students investigate the shape and function of real plant seeds, create an imaginary seed designed for dispersal, and plant seeds in pots to take back for observation.

*NGSS Standards: K-LS1-1, 2-LS2-1, 2-LS2-1, 3-LS4-3, 4-LS1-1*

### WINTER SCIENCE

**GRADES 3-12 | DECEMBER – MARCH**

Compare winter animal survival adaptations. Students use weather monitoring instruments, conduct an experiment, and search for evidence of animal survival on an outdoor hike. Indoor activity alternatives to the tour may be offered in the event of inclement weather. Snowshoeing may be requested (\$2 per person), weather permitting.

*NGSS Standards: 3-LS4-2, 3-ESS2-1, 3-LS4-3, 4-LS1-1, MS-LS1-4*

### ECOSYSTEMS & ADAPTATIONS

**GRADES 3-12 | SEPTEMBER – JUNE**

Examine the real physical features and living organisms of our ecosystem on a guided tour of the Preserve. Inside, students investigate bird biofacts to learn about adaptations up-close and work in groups to design their own imaginary species and how it can survive.

*NGSS Standards: 3-LS4-2, 3-LS4-3, 4-LS1-1, MS-LS1-4*

### AQUATIC ECOLOGY

**GRADES 3-12 | APRIL – OCTOBER**

Discover our essential connection to water of the Great Lakes region. Through hands-on water quality testing and macroinvertebrate sampling, students discuss watersheds, aquatic biodiversity, and human impact.

To include fishing, add \$2 per student. This informative program is ideal for older students interested in an immersive study of the Great Lakes region.

*NGSS Standards: 3-LS4-3, 4-LS1-1, 5-ESS2-2, MS-ESS2-4, HS-LS4-6*

### TIFFT THROUGH TIME

**GRADES 3-12 | SEPTEMBER – JUNE**

Embark on a journey through Buffalo's past to present through indoor hands-on exploration and a guided outdoor tour. Explore early settlement, industrial heritage, and the environmental movement that inspired the Preserve's creation by investigating maps, artifacts, and current invasive species and conservation issues.

*NGSS Standards: 3-LS4-4, MS-PS1-3, MS-LS2-5, HS-LS2-7*

### WILDERNESS SURVIVAL

**GRADES 3-12 | SEPTEMBER – JUNE**

Discuss survival needs and venture on a guided journey indoors and outdoors in search of shelter, water, food, and fire building materials. Students can implement team-building skills while constructing a survival shelter, as well as learn knot-tying, the importance of fire and wayfinding techniques.

*NGSS Standards: 3-ESS3-1, 4-ESS3-2, HS-ESS3-1*

### CLASSIFICATION & BIODIVERSITY

**GRADES 3-12 | SEPTEMBER - JUNE**

Compete in a guided bioblitz on the trails in search of different wildlife species, from invertebrates, amphibians, reptiles, fish, mammals, and birds. While indoors, students observe distinguishing traits and play games to model classification skills and survival strategies.

*NGSS Standards: 3-LS3-1, 3-LS4-2, MS-LS4-4, HS-LS4-3*

### FOOD ENERGY FLOW

**GRADES 3-12 | SEPTEMBER - JUNE**

Witness the food web in action! Search the preserve for real world evidence of how energy flows through different trophic levels. While indoors, students simulate the food web of local ecosystems through games and hands-on investigations.

*NGSS Standards: 5-LS1-1, 5-LS2-1, 5-PS3-1, MS-LS2-1, HS-LS2-5*





# Tifft Nature Preserve

## GUIDED TOURS

Explore the outdoors with a knowledgeable facilitator on a guided tour of Tifft Nature Preserve. These tours support learning standards and enhance science curricula for all grade levels through inquiry based outdoor learning experiences. College student and adult tours available. Indoor activity alternatives may be offered in the event of inclement weather.

### CUSTOM TOUR

Seasonal availability dependent on topic

Have a unit of study approaching and there isn't a tour or workshop in our offerings that fits that topic? Let us help you customize your visit to make the most of your time at Tifft. Content is adjusted to suit each grade level. Specific content may be requested. Some topics may also be available as a workshop, upon request. **Topics include: Biodiversity, Birds, Classification, Conservation, Food Webs, Invasive Species, Nature Journaling, Tifft History, and Trees & Plants.**

### ANIMAL HOMES & HABITATS

ALL GRADES | YEAR ROUND

Learn how local animals adapt to their preferred environments.

NGSS Standards: K-LS1-1, 2-LS4-1, 3-LS4-3, 4-LS1-1

### EXPLORING NATURE

ALL GRADES | YEAR ROUND

Venture on a sensory-based journey to actively investigate the Preserve's seasonal characteristics through observation and mindfulness activities.

NGSS Standards: K-LS1-1, 2-LS4-1

### LIFE CYCLES

ALL GRADES | YEAR ROUND

Explore the Preserve in search of real animal and plant life cycles in action.

NGSS Standards: K-LS1-1, 2-LS4-1, 3-LS4-3, 4-LS1-1, MS-LS4-3

### NATURE IN WINTER

ALL GRADES | DECEMBER – MARCH

Discover how plants and animals adapt to our region's winter conditions. Snowshoes may be requested (\$2 per person), weather permitting.

NGSS Standards: K-LS1-1, 2-LS4-1, 3-LS4-3, 4-LS1-1



## DISCOVERY VISITS

Choose a Discovery Visit for an unstructured, self-guided tour and discover Tifft Nature Preserve at your own pace! With 264 acres to explore, you and your group will be amazed by the abundant flora and fauna that you'll discover. Nature scavenger hunt available upon request.

### DISCOVERY VISIT PRICING & INFORMATION

\$3 per person. Advance registration required for groups of 10 or more. We reserve the right to turn away self-guided groups that do not make a reservation as they may interfere with other programming.



# Tifft Nature Preserve

## OUTREACH TO YOUR SITE

*Can't come to Tifft? These hands-on programs will bring items from the Buffalo Museum of Science and Tifft Nature Preserve's education collection to your students for a learning experience like no other. Choose from a variety of topics to support your desired curriculum. Select programs can be facilitated indoors or outdoors in your schoolyard.*

### SCIENCE IN THE SCHOOLYARD | ALL GRADES

Nature isn't just at nature preserves and deep wilderness areas—it's all around us! Engage your students in STEAM activities to discover nature right in your schoolyard. Select a theme depending on the season and features of your schoolyard or neighborhood:

#### NATURE JOURNALING | Year-Round

NGSS Standards: 3-LS4-3, 4-LS1-1

#### MATH IN NATURE | Year-Round

NGSS Standards: 3-LS4-3, 4-LS1-1

#### BUG-OLOGY | May – September

NGSS Standards: 2-LS4-1, 3-LS4-2

#### OUTDOOR SURVIVAL SKILLS | April – November

NGSS Standards: 4-ESS3-2, HS-ESS3-1

### WHAT'S A WATERSHED | GRADES 3-12

Where does the water go when it rains or snows? Discover the dynamic water cycle of our Great Lakes region, water quality issues, aquatic habitats, and the wildlife within them during a presentation of a 3D tabletop watershed model and students' creation of their own.

NGSS Standards: 3-LS4-3, MS-LS2-5, HS-LS4-6

### ANIMAL ARCHITECTURE | GRADES Pre-K-2

Investigate real animal shelters such as songbird nests, honeybee comb, beaver-chewed branches, and more. Students work in teams to engineer a small shelter on the classroom floor from natural materials, while also discussing the importance of shelters in various habitats, and the adaptations needed to build them. (For PreK groups, a hands-on story time will be substituted in).

NGSS Standards: K-LS1-1, 1-LS1-1, 2-LS4-1

### MEASURING MAMMALS | GRADES 3-12

Use measurement, observations and inquiry to explore real furs, skulls and mammalian characteristic of local carnivores, omnivores, and herbivores. Through this hands-on process, students will compare features and adaptations of carnivores, omnivores and herbivores.

NGSS Standards: 3-LS3-1, 4-LS1-1, MS-LS4-4

### ENERGY EXPLORATIONS | GRADES 4-12

Understand why energy is vital to the world and all the people who live in it. Students will investigate what energy is and how we all use energy, plus explore renewable and non-renewable resources and the impacts of energy-related choices.

NGSS Standards: 4-PS3-2, 4-PS3-4, 4-ESS3-1, 5-ESS3-1



## Book Your Tifft Program

### ONLINE

Complete our online reservation request form and our Group Sales Coordinator will contact you.

### PHONE

Call (716) 825-6397 to schedule your school program.

Office hours are Monday – Friday,  
9 a.m. – 5 p.m.

### EMAIL

Contact our Group Sales Coordinator at  
[tifftreservations@sciencebuff.org](mailto:tifftreservations@sciencebuff.org).

Book early! We recommend placing requests at least one month in advance.



COMING JANUARY 2025!

## Professional Development Workshops

We invite you to our all-new Professional Development Workshops, coming in 2025! Teacher workshops are led by BMS and Tifft science and education experts and are aligned with NYS Learning Standards.

Workshops will encourage hands-on and inquiry-based learning while focusing on a variety of content areas.

All workshops will provide CTLE Professional Development credits. Email [museumreservations@sciencebuff.org](mailto:museumreservations@sciencebuff.org) for more information about these opportunities.



### NEED ASSISTANCE COVERING THE COST OF YOUR FIELD TRIP OR OUTREACH PROGRAM? ERIE 1 BOCES MAY BE ABLE TO HELP!

The Exploratory Enrichment cooperative service (CoSer) provides a highly effective way for schools to provide curriculum-based enrichment programming at cultural organizations including BMS and Tifft!

For more information, the Exploratory Enrichment Request Form, and Erie 1 BOCES contact information, scan code or visit [e1b.org/en/instructional-support/arts-in-education.aspx](http://e1b.org/en/instructional-support/arts-in-education.aspx)



**FIND  
WHY.**



Valuing Nature's Wisdom



*The programs of the Buffalo Society of Natural Sciences are supported in part by public funds from the County of Erie; City of Buffalo; New York State Office of Parks, Recreation and Historic Preservation; and our members and friends.*

### Buffalo Museum of Science

1020 Humboldt Pkwy, Buffalo, NY 14211  
[sciencebuff.org](http://sciencebuff.org)

**PHONE** (716) 896-5200

**TOLL FREE** (866) 291-6660

#### Museum Hours

Monday – Sunday 10 a.m. – 4 p.m.

*Extended hours on Wednesdays until 9 p.m. from October through May.*

### Tifft Nature Preserve

1200 Fuhrmann Blvd, Buffalo, NY 14203  
[tifft.org](http://tifft.org)

**PHONE** (716) 825-6397

#### Education Center Hours

Wednesday – Sunday, 10 a.m. – 4 p.m.

*Also available Monday and Tuesday for group reservations and private rentals.*

#### Trail Hours

Open daily from dawn until dusk.

## FOLLOW US



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@TifftNaturePreserve



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