# Teacher's Guide

2023-2024





Monte L. Bean
Life Science Museum

BYU COLLEGE OF LIFE SCIENCES

<u>lsm.byu.edu</u> (801) 422-5050

### Dear Educator,

The Bean Life Science Museum at Brigham Young University is excited for a new school year and hope you will utilize the resources we have available to you. While the Bean Museum is undergoing some renovations in our collections area this year, we are still able to access the auditorium for school programs. Our school programs align with the Utah core science standards and will help solidify the important science concepts and skills you are already teaching in your classroom. This guide will outline these resources in detail so you can determine what will work best for you and your students.

Sincerely, Katy Knight Education Administrator

### **School Programs**

We offer school programs in three formats: in-house, outreach, and webcasts. Choose from eight different school programs based on grade level and the Utah core science standards.

### IN-HOUSE PROGRAMS (FREE):

These private programs are held in the museum and are free. They must be scheduled at least one week in advance.

### **OUTREACH PROGRAMS:** Outreach

programs (where we come to your school) must be scheduled at least two weeks in advance and cannot be scheduled more than four months in advance. Due to staffing issues, outreach programs will not be scheduled during the university's final exam week. For the 2023-24 school year, final exams are scheduled for the weeks of December 15-21, 2023 and April 18-26, 2024.

Outreach programs cost \$65. There will be an additional \$25 distance fee if your location is over 20 miles away, and an additional \$50 if your location is over 40 miles away. Additional outreach programs scheduled back-to-back (within 30 minutes) for the

same day at the same location are \$25 each. Schools in the BYU partnership districts (Provo, Nebo, Alpine, Wasatch, and Jordan) will receive a \$10 discount for outreach programs. A credit card will be required to secure your program, but you will not be charged until after the outreach has occurred. To avoid a \$20 cancellation fee, you must cancel or reschedule your outreach program at least 48 hours prior to your program.

WEBCASTS (FREE): Webcasts are free and

available for schools that are more distant from the museum. Webcasts must be scheduled at least one week in advance and require the proper technology (webcam, internet, projector, sound system, etc.).

### RESERVE YOUR PROGRAM

**ONLINE:** Request a school program for your class on our website. Visit <a href="mailto:lsm.byu.edu">lsm.byu.edu</a> and fill out the request form. For questions, call (801) 422-6698 or email <a href="mailto:beanmuseum@gmail.com">beanmuseum@gmail.com</a>.

### ADDITIONAL INFORMATION:

To help us improve our education programs, teachers are requested to fill out a feedback form. Each program will typically last between 30 and 45 minutes.

In-house and webcast programs start 15 minutes after the hour. While we can accommodate up to 200 people, smaller groups typically work best and provide a better experience for all.

### School Programs Descriptions

Our school programs are interactive, make effective use of inquiry learning methods, and focus on the Utah core science standards for students from kindergarten to sixth grade.





# Preschool Animal Discovery: A quick, age-appropriate glance at animals. Students will play a "game" to identify and discover new things about animals. This program is interactive and created specifically for kids under the age of six. This program works best for groups of 15 people or less.

### that occupy each ecosystem. This program involves an interactive discussion about three Utah ecosystems: wetlands, forests, and deserts. Students will analyze



each specimen and learn why they are found more commonly in one habitat versus another. (Standard 4.1.1, 4.1.2)

### Kindergarten

*Needs of Living Things:* Students will use specimens to play a matching game that compares the needs of living things, including plants, animals, and humans. They will also discuss where these plants and animals live in order to meet their needs. (Standard K.2.1, K.2.2)

### First Grade

*Family Patterns:* Students will compare and contrast a variety of different animal parents and their offspring. They will also observe patterns in animal behavior and identify relationships between the parents and the offspring. (Standard 1.2.3, 1.2.4)

### **Second Grade**

*Habitat Hunters:* An opportunity for students to explore various life sustaining factors and decide which habitat a particular organism might best live and survive in based on that organism's adaptations. (Standard 2.2.1, 2.2.2)

### **Third Grade**

**Physical Traits:** Students will identify and analyze how various physical traits can affect the survival of an organism in certain environments. Includes a variety of hands-on specimens that students can use to make observations and enhance their learning. (Standard 3.2.3, 3.2.4)

### **Fourth Grade**

*Utah's Diversity*: A discussion of several Utah ecosystems including the kinds of plants and animals

### Fifth Grade

Energy Matters: In this program students will analyze how plants, animals, and decomposers obtain and use matter and energy. Students will also track the flow of energy through a variety of ecosystems using food chains and specimens. (Standard 5.3.1, 5.3.2, and 5.3.3)

**Biodiversity:** This program is designed for all ages and covers learning standards from each grade K-6. Students will analyze an ecosystem and determine the needs of the organisms living there, the traits that allow them to survive, and the interactions between them.

### WEBSITE RESOURCES - lsm.byu.edu

We have many resources available for teachers on our website.

<u>Organism of the Month</u> - Each month we feature a different plant or animal. Check out the video and visit the museum to earn a bio-card.

**Podcast** - The Y Life Science podcast features professors and university students in the College of Life Science. Each episode is a 30-45 minute long discussion about current research. These episodes could be used to supplement content taught in junior high and high school.

**School Programs Information** – You can find information about each specific school program.

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<u>Scavenger Hunts</u> – Several scavenger hunts based on our exhibits are available online for teachers to print and distribute before arriving at the museum.

<u>Audio Tour</u> – Our audio tour can be accessed through our website and contains interesting information about 90 different animals. QR codes can also be scanned on-site with smartphones to access this resource.

**Exhibit Videos** – We have over 25 exhibit videos (2–6 minutes in length) featuring Matt Meese (from Studio C and JK Studio) as our version of David Attenborough or the Crocodile Hunter. They are available on our website (lsm.byu.edu) and on YouTube. QR codes can also be scanned on-site with smartphones to access this resource.

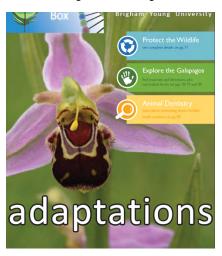
*Identify "Me"* (identifyme.byu.edu) – This mobile website can be used in the museum with personal smartphones. Students answer a series of questions based on their observations while working through a dichotomous key. Eventually the student is able to identify the name of a specific animal.

# OTHER EDUCATIONAL OPPORTUNITIES AT THE MUSEUM

The Bean Life Science Museum offers a number of other educational programs.

### Nature Experienceships:

Students ages 12 and up (including adults) can spend time with an expert learning about various life science topics by participating in the museum's "Nature Experienceship" activities. Topics include



birds, lichens, trees and shrubs, insects, wildflowers, reptiles and amphibians, fish, mollusks, and mammals.
Cost is \$15 per person. Our Nature Experienceships usually involve a local field trip.

# **Education Collection**:

Specimens from the museum's education collection can be loaned to teachers for two weeks free of



charge. A maximum of 10 specimens can be checked out at a time. See our website for more information and to download the request form.

### **Bio-boxes**:

Our Bio-boxes can bring the museum's unique and valuable resources right into your classroom. Each Biobox includes mounted specimens from the museum's education collection as well as "biofacts." Biofacts are biological artifacts, such as animal skins, feathers, eggs, antlers, bones, fruits, seeds, etc. Where possible, the Bio-boxes also include additional resources, such as field guides or topic-related videos. Each Bio-box also contains a teacher's guide, which provides teachers an overview of the subject, a description of the Bio-box's connection to specific core curriculum concepts, and ideas as to how the contents of the Bio-box can be incorporated into lesson plans. The materials in each Bio-box can be used in a number of ways in support of a single lesson or as supplemental material for an entire unit. The teacher's guide can also be downloaded from our website. Our Adaptations and Ecosystems Bio-boxes are designed for secondary-age students. We also have an Elementary Education Bio-box.

### **Bio-box Checkout Procedures:**

You can check out a Bio-box by filling out the request form on our website. Bio-boxes may be kept for up to two weeks. Use of a Bio-box is free, but you will be required to enter a valid credit card at the time of your request. For each day the box is late, a \$5.00 late fee is assessed; if any items from the box have been damaged or are missing, your credit card will be charged. Delivery service is now available for schools in Utah County for a \$35 fee. Simply indicate that you would like this service when filling out the online request form. There will be an additional \$25 distance fee for every 20 miles (beyond the first 20 miles). The credit card you provided at the time of your registration will be charged after the delivery has occurred.