Bio-boxes:
Our Bio-boxes can bring the museum’s unique and valuable resources right into your classroom. Each Bio-box 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 are excited to announce that this year we will 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 $20 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.
We are excited for a new school year. We invite you to take advantage of the resources available to you from the Bean Life Science Museum. This guide will outline these resources in detail so you can determine what will work best for you and your students.

**LIVE-ANIMAL SHOWS**

We offer live animal shows in three formats: in-house, outreach, and webcasts.

**WEBCASTS (FREE):** Webcast live animal shows (via Skype or Google Hangouts) provide an opportunity for students and teachers to interact with a museum educator and see our live animals in real time from the convenience of their classroom. Webcasts are free and neither the museum educator nor the students have to invest in travel time or bus fees. This also allows us to reach schools that are a bit more distant from the museum. Webcast shows must be scheduled at least one week in advance and require the proper technology (webcam, internet, projector, sound system, etc.).

**IN-HOUSE SHOWS (FREE):** Groups can choose from nine different live animal shows based on different biological concepts. These private shows are held in the museum and are free. In-house shows must be scheduled at least one week in advance.

**OUTREACHES:** Outreach shows, where we bring a live animal show to your school, must be scheduled at least two weeks in advance and cannot be scheduled more than four months in advance. If multiple shows are scheduled for the same group on the same day, groups will need to pay for any time in between (if the shows are not scheduled back to back). Due to staffing issues, outreach shows will not be scheduled during the university’s final exam week. For the 2019–2020 school year, final exams are scheduled for the weeks of December 13–19, 2019 and April 16–22, 2020. Outreach shows cost $55. There will be an additional $20 distance fee for every 20 miles (beyond the first 20 miles) required to travel to your location. Schools in the partnership districts (Provo, Nebo, Alpine, Wasatch, and Jordan) will receive a $10 discount for outreach shows. Additional outreach shows scheduled back to back (within 30 minutes) for the same day at the same location are $20 each. A credit card will be required to secure your live animal show 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 live animal show at least 48 hours prior to your show.

**RESERVE YOUR SHOW ONLINE:** Request a live animal show for your class on our website. Visit mlbean.byu.edu and fill out the request form as completely as possible. For questions, you can also call (801) 422-6698 or email: beanmuseum@gmail.com.

We also have a short informational video you can watch which will answer the most frequently asked questions we receive about our live animal shows. You can watch it at https://mlbean.byu.edu/Live-Animal-Shows/Overview.

**ADDITIONAL INFORMATION:** To help us improve our education programs, teachers are requested to fill out a feedback form after each show. Shows will typically last between 30 and 45 minutes. In-house and webcast shows start 15 minutes after the hour.

**LIVE-ANIMAL SHOW TOPICS**

Our live animal shows are interactive, make effective use of inquiry learning methods, and focus on the Utah State Core Curriculum Standards for students from kindergarten to fifth grade.

All of our shows include up to three live animals and can be adapted for any age group.

**Preschool**

**Animal Discovery:** A quick, age-appropriate glance at vertebrates. Students will play a “game” and in the process discover new things about animals. This show is interactive and created specifically for kids under the age of six. While we won’t limit group size, this show works much better for groups of 15 or less. Live animals include three of the following: cockroach, frog, turtle, lizard, or snake.

**Kindergarten**

**Animal Comparisons:** A touch-and-feel approach to showing the differences between animal form and function. This is an inquiry-based show that allows students to closely observe differences in body parts, body coverings, and specialized senses in different animals. Live animals include three of the following: tarantula, frog, lizard, turtle, or snake. (Standard 4 Objectives 2 and 3)

**First Grade**

**Classification:** An opportunity for students to explore how and why scientists classify living things. Students will use inquiry methods to learn about animal classification. Live animals include three of the following: snake, cockroach, frog, tarantula, lizard, or turtle. (Standard 1 objective 4)

**Second Grade**

**Habitat Hunters:** An opportunity for students to explore various living sustaining factors and decide which habitat a particular organism might best live and survive in based on that organism’s adaptations. Live animals include: reptile (snake, lizard, or turtle), cockroach, and frog. (Standard 4 objective 1c)

**Third Grade**

**Nature Interactions:** An examination of how living things interact to produce mutually beneficial conditions. Plants and animals will be discussed and students will help determine why some species survive better in one environment over another. Live animals include: snake or lizard, turtle, and frog. (Standard 2 objective 2)

**Fourth Grade**

**Utah’s Diversity:** A discussion of several Utah ecosystems including the kinds of plants and animals that occupy each ecosystem. This show involves an interactive discussion about three Utah ecosystems: wetlands, forests, and deserts. Students will help the educator analyze each specimen and learn why they are found more commonly in one habitat versus another. Live animals include: tarantula or lizard, frog, and snake. (Standard 5 objective 1, 2)

**Fifth Grade**

**Adaptations:** This show examines various plant and animal adaptations while exploring how specific adaptations promote survival under varying environmental conditions. Live animals include three of the following: tarantula, snake, frog, or turtle. (Standard 5)

**Vertebrate Variety:** This show designed for all ages. Using technology and both living and non-living specimens, we allow patrons to determine the defining characteristics of the five vertebrate classes.

**Research and Collections:** Designed for older audiences, such as junior high, high school, and college-aged participants, this live animal show showcases the museum’s collections and how they are used in research.

**WEBSITE RESOURCES – MLBEAN.BYU.EDU**

We have many resources available for teachers on our website.

**Live Animal Show Information** – You can find information about each live animal show, including details about the animals and educators.

**Scavenger Hunts** – Several scavenger hunts based on our new exhibits are available online for teachers to print and distribute before coming to the museum.

**Audio Tour** – Our audio tour can be accessed through our website and contains interesting information about 90 different animals.

**Exhibit Videos** – We have over 25 exhibit videos (2–6 minutes in length) featuring Matt Meese (from Studio C) as our version of David Attenborough or the Crocodile Hunter. They are available on our website (mlbean.byu.edu) and on YouTube.

**IdentifyMe** (identifyme.byu.edu) This mobile website can be used in the museum with personal smart phones or with one of the museum’s iPads (available for checkout from the information desk). 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. Teachers can recommend these to their students as instructive extracurricular activities.

**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 Experienceships” activities. Topics include birds, lichens, trees and shrubs, insects, wildflowers, reptiles and amphibians, fish, mollusks, and mammals. Cost is $12 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 with a $5/ day late fee per specimen. See our website for more information and to download the request form.