

Outdoor Safaris • Grades 6-12

Journey out into the field for an unforgettable hands-on learning experience. The Virginia Living Museum's science safaris give students an exciting combination of in-class laboratory instruction and hands-on topical field study. Developed under a Virginia Environmental Endowment grant as model programs for high school students, the Museum's science safaris are combined laboratory and field classes that stress field study, experimentation, data collection and analysis. After an introduction to the day's topic, students will leave the classroom behind to become immersed in a first-hand learning experience in the natural world.

Cave Ecology – Grades 7-12 Science SOLs LS.6 LS.8 LS.10 LS.11 ES.1 ES.2 ES.7 ES.8 BIO.1 BIO.4 BIO.8

Traverse the rocky trail through Fountain Cave in Grottos Virginia. Using only headlights and flashlights to guide your way, this adventure will take you through the twilight, middle and dark zones of a geologically old cave. Learn about cave formations, the ecological importance of caves and maybe encounter a cave animal or two.

Chesapeake Bay Ecology – Grades 6-12 Science SOLs 6.1 6.3 6.5 6.7 6.9 LS.4 LS.6 LS.8 LS.9 LS.10 LS.11 BIO.1 BIO.4 BIO.6 **BIO.8**

Develop research skills through hands-on field work at the Chesapeake Bay. Go seining to collect living specimens that thrive near the shoreline, discover what animals live on the nearby piers and pilings, and gain a better understanding of the Bay's ecology.

Estuarine Ecology – Grades 7-12 Science SOLs LS.4 LS.6 LS.8 LS.9 LS.10 LS.11 BIO.1 BIO.4 BIO.6 BIO.8

Grab a paddle and lets go canoeing on the Chesapeake Bay. Collect data pertaining to weather, salinity, and other physical factors and learn how they play a part in the ecology of the Bay. Spend some time collecting evidence of marine life and explore ways we can better protect these amazing creatures.

Freshwater Aquatics – Grades 7-12 Science SOLs LS.4 LS.6 LS.8 LS.9 LS.11 BIO.1 BIO.4 BIO.6 BIO.8 CH.1

Cruise along through a beautiful swamp ecosystem in a canoe. Throughout the trip you will be conducting experiments to understand the chemistry, light depth, and oxygen content of this freshwater system. Experience the specialized plants and animals that are adapted to live in such a unique environment.

Paleontology - Grades 6-12 Science SOLs LS.4 LS.8 LS.13 ES.1 ES.2 ES.9 BIO.4 BIO.6 BIO.7 BIO.8

Reveal fossils of organisms that were once prolific in Virginia 3-5 million years ago. Hand-collect these fossils in the field, learn how they became fossil, and

identification skills. Make a connection between these fossils and their modern day relative and discuss why these organisms are still significant today.

Virginia Living Museum School Science Programs are:

- **SOL-correlated**
- **Grade-level targeted**
- Taught by the Museum's professional science educators
- Endorsed by the VA Dept. of Education.

U.S. Dept. of Education, **National Science Foundation**

The Virginia Living Museum is a private non-profit natural history museum and environmental education center dedicated to connecting people to nature through educational experiences that promote conservation.

Payment and Cancellation

Payment can be made by cash, check, credit card or the Museum can invoice. Two weeks notice is required for cancellations for all bookings.

Chaperones

Classroom teachers and school staff are admitted free. The Museum also recommends one adult chaperone for every 10 students.

Length of Program 6 - 12+ hours (varies with destination) Students 25 maximum **FEE Contract Schools: Please call for information** Other Schools: \$30 per student (\$660 minimum) **Cave Ecology** (\$35 student/\$700 minimum) Fuel surcharge may apply. Safaris are field study programs. They do not include a self-guided visit to the Museum's exhibits.



Classroom Outreach Programs • Grades PreK-3

A Walk in the Woods - Grade PreK

Embark on a "classroom hike" into the woods. Listen to the sounds of the woods, discuss what makes up a woodland habitat, and meet some of animals that live there. Help your little explorers develop a fascination and a respect for wild animals.

Wildlife of Virginia - Grades K-1 Science SOLs K.1 K.6 K.7 1.1 1.5

Encounter our animal ambassadors of Virginia in this hands-on program. Students will explore non-live animal artifacts to learn more about reptiles, birds, and mammals and their unique adaptations.

Growing Up Wild - Grades 1-2 Science SOLs 1.1 1.5 2.1 2.4 2.5

Discover the diverse life cycles of wild animals. We'll first discuss what it means to be a wild animal before taking a closer look at animals through the various stages of their life cycle and then meet their adult counterparts.

Chain of Life - Grades 2-3 Science SOLs 2.1 2.5 2.8 3.1 3.4 3.5 3.11

Create a food chain to help visualize the transfers of energy from one living organism to the next. Determine the relationship between predator and prey and how that relates to being an herbivore, omnivore, and a carnivore.

Chain of Life - Grades 2-3

Compare and contrast the specialized physical and behavioral adaptations of our most impressive animal ambassadors. This large group program reinforces multiple life science SOL concepts while encouraging the students to think critically about what it really takes for animals to survive in the wild



Length of Program 45 minutes Students 60 maximum FEE: \$250 first program, \$220 per additional program - same day Fuel surcharge may apply

Assembly Outreach Program • Grades 3-7

Amazing Animal Adaptations - Grades 3-7

Science SOLs will be custom-correlated to your grade level

Designed to reinforce multiple life science SOL concepts, this program features live animals, specimens from the museum's collections and audience participation in a memorable large group format. Students compare and contrast physical and behavioral adaptations and actively participate in activities that help them better understand how animals locate food, escape predators and overcome survival challenges every day in the wild.

Length of Program 45 minutes Students 200 maximum FEE \$345 first program, \$295 per additional program - same day Fuel surcharge may apply

Discovery Boxes

Amazing Astronomy

Real meteorites, tektite, earth rocks and minerals identical to those found on the Moon and Mars, spectrometers, lenses, mirrors, a Rive Ray box, AV materials, posters, scale model of the solar system, distance to the nearest star tape, comet balls.

Be a Tree

Collections of leaves, wood, seeds and flowers; real taxidermied mounts of bat, bird, insects and other tree-associated animals; tree products, bark rubbings and petrified wood; puppets.

Digging Dinosaurs

Real dinosaur bones, teeth and other fossils; Casts of dinosaur skin, eggs and skulls; dinosaur hatchling sculpture, scale models and puppets.

Incredible Insects

Insect mounts, collections, eggs and architecture; fossil insects and scale models, insect products, beekeeper hat and gloves and insect eye viewer; student microscope.

Natural History of Early Virginia

Natural items used by Virginia's Native Americans and Jamestown settlers for survival, trade, food, jewelry, music and toys. Includes puppets, corn grinding mortar and pestle with corn to grind, artifacts, animal furs, bone/horn tools, feathers, jewelry, Native American crafts, skulls with skull key.

Shark Secrets

Real shark jaws, shark vertebrae, shark skin and fossil shark teeth; shark embryo and eggs, shark products, stingray mount, posters, puppets, student microscope.

Snakes Alive

Real snake skeleton, skull, taxidermied mount; collection of reptiles and amphibians, snake eggs, embryos, fossils and skins, reptile products, puppets and posters.

Tropical Rainforest

Museum specimens of insects, crystals, leaves and piranha; skins and feathers of endangered tropical bird species, rainforest products, scale models and puppets; posters.



Under the Bay

Museum mounts of fish, squid, skate and algae; collections of shells, crabs, corals and sea stars; scale models, posters, puppets; children's books, reference materials and activity guides; student microscope.

All boxes include AV materials, children's books, reference materials and activity guides.

FEE Contract Schools: \$50 per week

Other Schools: \$150 per week (\$100 for the next consecutive week

Automatic pick-up and delivery are included.