

SPLASH! INTO THE EDWARDS AQUIFER EXHIBIT: TEACHER GUIDE



2201 Barton Springs Rd.
Austin, TX 78746

Tues-Sat: 10am-5pm
Sun: 12pm- 5pm
Closed Mondays

FREE

(512) 481-1466

Why Visit the Sheffield Education Center

- * Students will engage in learning about the Edwards Aquifer and Austin's local water cycle and ecology, in the dynamic field trip setting of Zilker Park.
- * Students see live animals, including the endangered Barton Springs salamanders.
- * The topics covered in the Splash! Exhibit align with TEKS Standards and serve as an ideal supplement to classroom learning.
- * It's FREE as an On-Your-Own tour. If you plan to bring more than 30 students, please call the Austin Nature and Science Center at 974-3888 for scheduling. The ANSC also offers a Splash! Into the Edwards Aquifer program for 3rd - 8th graders; call the above number for pricing and



What to Expect

The exhibit has two main components: the cave and the front gallery. The cave accommodates groups of 15 students at a time; the front gallery can hold up to 50 students. While small groups rotate through the cave, other students can engage with interactive elements in the front gallery space. In all, the Splash! Exhibit can take up to an hour.

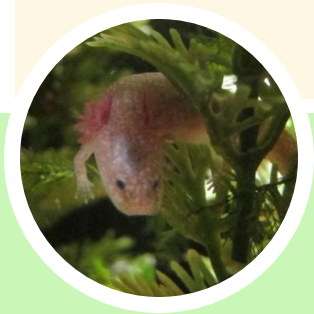
There are restrooms and water fountains directly adjacent to the Splash! Exhibit.



Instructor-led field trips:

- Splash Lab
- Texas Endangered Animals
- Amphibians Abound
- Incredible Insects

Call 974-3888 for more info



Other Places to Visit in Zilker Park:

- * An overlook onto Barton Springs Pool is steps away from the Splash! Exhibit. This is a great space to challenge students to tie together what they have learned about water and the aquifer, while viewing one of Austin's natural treasures.
- * There are many picnic tables, some of which can be reserved, and shaded grassy areas next to the Splash! Exhibit in Zilker Park for students to have lunch. There is also a large playground area within a 2-min walk from the exhibit.
- * The Austin Nature and Science Center is a 3-min bus ride away; take an On-Your-Own tour of the live animal exhibits, Dino Pit, and Naturalist Workshop for only \$1.00 per visitor (call 974-3888 to reserve a time slot). The Nature Center also offers structured, staff-led environmental education programs- visit <http://austintexas.gov/department/austin-nature-and-science-center> for more information
- * The Zilker Botanical Garden is also only a 3-min bus ride away. They offer self-guided and docent-led tours of their various gardens and can specialize by age group or subject focus. Call 477-8672 to schedule a tour or go to <http://www.zilker garden.org> for more information.

Own Your Own Guide for the Splash! Exhibit

Introduction:

Since the exhibit is designed to look like an actual limestone cave, challenge younger students to imagine that they are a drop of water entering into the aquifer. For older students, point out the “Aquifer Recharge Zone” at the entrance of the exhibit and ask if they have seen these signs around Austin. Explain that this sign helps people become aware of those parts in central Texas, where we are living on top of the aquifer. Define “aquifer” and other key terms that you may have already introduced in the classroom.

AquaTheater:

Choose the “Carved in Stone” movie from the menu. This 4-minute movie illustrates the geologic processes that formed the aquifer, as well as the watershed system of which Barton Springs and the Colorado River are each a part. Discuss the large span in geologic time, how Austin used to look, or use the worksheet for guiding questions.

Strata Cave:

This passageway shows the rock layers of the aquifer that actually exist below us in Central Texas. Encourage students to touch the layers, and to describe the differences between each layer. Challenge the students to connect how the physical make-up of each rock layer impacts the movement of water through the aquifer.

Watershed Model and Aquaria:

The watershed model demonstrates the movement of water from the Texas Hill Country through the Austin area, as well as identifying the different zones of the aquifer. Each aquarium houses aquatic animals from different zones of our local watershed. Emphasize the singularity of the Barton Springs salamander, found only in the springs of Zilker Park!

Pollution Tubes (a great place to gather your group before releasing them to try out games in the Water Science Room):

These tubes represent the different kinds of impacts human actions can have upon waterways. Discuss with students causes and effects of each type of pollution, especially in regard to the aquatic critters that live in Austin’s creeks.

Water Science Room:

Scientists have many different ways to measure the quality of water in creeks and the aquifer. Encourage students to report back a new scientific test or fact about water they learned in this room.

Background Information and Curriculum Resources:

Edwards Aquifer:

<http://www.edwardsaquifer.net/intro.html>

<http://www.esi.utexas.edu/outreach/caves/edwardsaquifer.php>

<http://www.bseacd.org/aquifer-science/about-the-aquifers/>

Water and the Austin Watershed:

<http://www.austintexas.gov/watershed/YouthEd>

<http://www.twdb.state.tx.us/Kids/>

Barton Springs:

<http://www.edwardsaquifer.net/barton.html>

<http://austintexas.gov/department/barton-springs-pool>

Barton Springs Salamander:

<https://tpwd.texas.gov/huntwild/wild/species/bartonsprings salamander/>

Films:

Living Springs- a documentary series on Barton Springs’ history, ecology, and culture
livingspringsaustin.org

Austin Underground- videos on Geology, Hydrogeology, Salamanders, and Threats and Solutions
<https://www.youtube.com/watch?v=i15hjmJ6O1E&list=PL4DE9788E1378D157>

Driving Directions

The Splash! Exhibit is located in the Sheffield Education Center (right next to Barton Springs Pool), and is easy to reach from both MoPac and I-35.

From MoPac:

Exit at FM 2244 / Rollingwood, following the signs for Zilker Park onto Barton Springs Road. After passing Stratford Road on the left, turn right into the Barton Springs Pool parking lot; proceed down the hill. The Splash! Exhibit entrance is located just to the right of the pool entrance and Philosophers' Rock Statue, next to the public restrooms.

From I-35:

Exit at Riverside Drive and proceed west. Turn left onto Barton Springs Road. After crossing Robert E. Lee Road, take the next left into the Barton Springs Pool parking lot; proceed down the hill. The Splash! Exhibit entrance is located just to the right of the pool entrance and Philosophers' Rock Statue, next to the public restrooms.

*For online driving directions, our address is
2201 William Barton Drive, Austin, Texas, 78746.*