

FLOWPATHS



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Fall 2021 News

Aquatic Science Adventure Camps 2021 Review

In summer 2021, the EARDC hosted 10 individual short camps that served 94 campers. Campers participated in a variety of adventure activities including tubing, paddle boarding, and kayaking, and were able to do some scientific exploration about water chemistry, macroinvertebrates, and habitats. We were able to have a safe and fun summer here on campus.

Aquatic Science Adventure Camps 2022



We are excited to announce that we are planning to return to our traditional schedule for the Aquatic Science Adventure Camps in 2022! We will continue monitoring the COVID-19 situation to ensure that we are following best health practices.

In addition to our traditional week-long overnight and day camp programs, we have added two new camps to the schedule; Aquatic Investigator Day Camp and Discovery Day camps. Descriptions of all four types of camps are below along with the summer schedule.

Registration will open January 2022 on the EARDC website.

Summer 2022 Summer Schedule

<i>Dates</i>	Camp*	Age
<i>June 5 - 10, 2022</i>	Overnight Expedition Camp 1	9-11
<i>June 12 - 17, 2022</i>	Overnight Expedition Camp 2	12-14
<i>June 19 - 24, 2022</i>	Overnight Expedition Camp 3	9-11
<i>June 26 - July 1, 2022</i>	Overnight Expedition Camp 4	12-14
<i>July 7, 2022</i>	Discovery Day – Habitats	12-14
<i>July 8, 2022</i>	Discovery Day – River Runner	12-14
<i>July 11 - 15, 2022</i>	Aquatic Investigators Camp	15-16
<i>July 17 - 22, 2022</i>	Overnight Expedition Camp 5	9-11
<i>July 25 - 29, 2022</i>	Explorer Day Camp 1	9-11
<i>August 1 - 5, 2022</i>	Explorer Day Camp 2	12-14
<i>August 8, 2022</i>	Discovery Day – Habitats	9-11
<i>August 9, 2022</i>	Discovery Day – River Runner	9-11

*All camps are subject to cancellation dependent on enrollment and current regulations concerning COVID-19. Detailed camp schedules will be released in January.

Camp Descriptions

Overnight Expedition Camps – The overnight camp runs from Sunday afternoon through Friday afternoon. Campers will spend the first part of the week on the main Texas State University campus staying in a residence hall. The last 3 days of camp are spent at the scenic University Camp, a Texas State-owned property located along the shores of the beautiful Blanco River. Campers will experience a wide variety of exciting, educational activities including river rafting, scuba diving, exploring a wild cave, ropes course, and even a natural water slide! Throughout the week, campers will engage with our knowledgeable staff by participating in scientific investigations related to water and the environment. Cost: \$1000.

Aquatic Investigators Day Camp – This year for the first time there will be a camp for 15-16 year old campers with a passion for science. The camp runs from 8:30am to 5pm Monday-Friday and features a variety of adventure and science programming. Campers will get the opportunity to learn lab and outdoor research skills, engage in conservation efforts, and meet a variety of professionals in the field of Aquatic Science. This camp is geared towards campers who are interested in science as a career pathway and/or are just passionate about learning science. Lunch is provided. Cost: \$500

Explorer Day Camps - We offer a week-long day camp for campers who would like the camp experience without an overnight component. The camp runs from 8:30am to 5pm Monday-Friday and features many of the daytime science and recreational activities from the overnight camp including river rafting, caving, scuba diving, and more. Lunch is provided during camp. Cost: \$500.

Discovery Day Camps – This year for each age group there will be two independent single day programs that will be offered. Discovery Day Camps run from 9am to 4pm. The Habitat Day will include a mussel hunt in the Guadalupe River and an aquatic plant ecology class. The River Runner Day's main activities will be tubing down the San Marcos River and a macroinvertebrate lab. Lunch is **not** provided; campers will need to bring their own food for the day. Cost: \$60.

Need-based scholarships will be available for campers to apply for in early spring.

Spotlight on Research



A well that intersects the Edwards Aquifer on the campus of Texas State University is currently ranked as the 3rd most biodiverse groundwater site on Earth, according to a recent paper published in the journal *Diversity* by EARDC staff and collaborators. Fifty-five groundwater-obligate species (collectively referred to as stygobionts) have been recorded from the well to date: an exceptionally high number for groundwater systems where a lack of light (and consequently a lack of photosynthesis to fuel food chains) usually limits the number of species that can survive. The paper goes on to say that new species are still being described from the site at a high rate, even though biologists have been studying it since the late 1800s. Furthermore, which species come out of the well (which is sampled using a fine-mesh net placed around the well outflow) changes cyclically over time. Some of that temporal change is related to flow rate (with distinct groups of species coming out at high and low-flow periods), but other cyclical patterns remain unexplained. One thing is for sure, there are still lots of mysteries to unlock when it comes to understanding the animals that live in the deep, dark, and inaccessible places on Earth.

Reference: Hutchins, B. T., Gibson, J. R., Diaz, P. H., & Schwartz, B. F. (2021). Stygobiont Diversity in the San Marcos Artesian Well and Edwards Aquifer Groundwater Ecosystem, Texas, USA. *Diversity*, 13(6), 234.

Holiday & COVID Hours

The EARDC analytical lab is currently open Monday – Friday, 8am – 5 pm, closed for lunch 12-1:15pm, bacteriological samples are not accepted on Fridays, only by special request..

Thanksgiving

We will be closed Wednesday November 24- Friday 26 for the Thanksgiving holiday, and bacteriological samples will only be accepted Monday of that week.

Week of November 29th, 2021

Bacteriological samples will only be accepted on Monday, November 29th and Tuesday, November 30th.

Winter Holidays

We will be closed Monday, December 20 – Friday, December 31 for the winter break. The last day to submit bacteriological samples for the month will be Thursday, December 16.

Regular business hours resume Monday, January 3rd, 2022.

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