

Houston Toad

Anaxyrus
[*Bufo*]
houstonensis

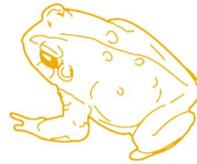
Team Members

Maddi Holman

Dani Shewmake

Julian Wilson

Adam Kassir



References

[1] "Houston Toad." *Houston Zoo*, 5 November 2016, <http://www.houstonzoo.org/saving-wildlife/texas-conservation/houston-toad/>.

[2] Houston Zoo, Texas Parks and Wildlife and Jacob and Terese Hershey Foundation. "An Educator's Guide to The Houston Toad." *Houston Zoo*, 5 November 2016, PDF file.

[3] "Houston Toad (*Bufo Houstonensis*)." *Texas Parks and Wildlife*. Texas Parks and Wildlife Foundation, n.d. Web. 08 Nov. 2016.

*Images under the "Houston Zoo To the Rescue" section and toad clip art above were taken from the pdf file. The images were provided by Paul Crump, Rachel Rammel, Dale Martin, and Stephanie Adams. The illustration was provided by Rachel Rammel, Danny Beckwith and the Houston Zoo.

About the Piece

This piece was inspired by the endangerment of the Houston Toad and our university's proximity to the Houston Zoo, where conservation breedings program is currently underway. The Houston Toad is a charismatic symbol of local conservation efforts in Houston and surrounding areas. This popularity will ideally help to raise awareness and involvement for the threat that so many amphibian species currently face. Our goal was to make a piece out of natural materials from around Rice University campus in order to emphasize the integral connection between conservation efforts, urban environments, and the natural world.

Materials were collected around the campus of Rice University, and included a variety of leaves, particularly those from the multitude of Live Oaks that give Rice its status as an arboretum. Ball moss, or *Tillandsia recurvata*, was used to rim the eyes of the toad, which were constructed using several acorns. The piece was then mounted on a poster board for display and stability.

Seeing as though the piece itself is made from dead leaves, it is fairly fragile, so sticker reproductions of the piece were made in order to share the project without risking damage to it. The stickers are also a great way to advertise the Houston Toad and get people talking about what they can do to help restore this species to its original abundance. Additionally, by using natural materials we hope to encourage others to do projects using sustainable products in order to further conservation-based behavior.



Do you know your Houston Toad?

Anaxyrus houstonensis (the Houston Toad) is a splendid natural member of the Southeast Texas ecosystem. It fills a vital niche that is a



requirement for the healthy functioning ecosystem. The little amphibian only grows to be about 2 to 3.5 inches and is a slow, clumsy thing, capable of only hopping short distances and with no great speed [3]. Because of this they are generally unable to outrun all but the

slowest of predators. To survive, the friendly toads have adapted to their environment by blending into the leaves and mud that blanket the Texas foliage in the form of their very cryptic, mottled, rough appearance. Lucky residents of the area can hear the mating calls of male Houston Toads all throughout December through June [3]. However, for the last few decades, this species has been faced with a growing threat of extinction! The toads face a variety of serious threats, but the greatest of these is habitat loss/fragmentation [3]. The balance in habitat that they require is surprisingly fragile, and even slight alterations to the decreasing wetlands they breed in can cause great damage to toad populations. Periodic droughts and human activities such as highway building, pesticide use, and conversion of land for agriculture all harm toad survival prospects in ways that have seriously built up over time [3]. Now learn about how YOU can step in now, stop the extinctions, and save the Houston Toads!

Houston Zoo To The Rescue

Captive Rearing Program

The Houston Zoo is currently working in collaboration with the U.S. Fish and Wildlife Service, Texas State University and Texas Parks and Wildlife to preserve the Houston Toad population. At the zoo, there is a 1200ft² quarantine facility used for captive breeding and maintenance of toad egg strands [1] The facility is managed by two full-time "Houston Toad Keepers". As part of their job, "Toad Keepers" have to monitor the water quality and clean the tanks regularly while the eggs are developing. While the eggs grow and transition into tadpoles, the staff feeds them a diet full of small insects like "fruit flies, springtails, and crickets" [2]. However, for the adult toads kept in captivity at the zoo, they get a much hearty diet consisting of foods like "collard greens, lettuce, and sweet potatoes" [2].



Once they are old enough, the toads are loaded up into egg cages developed by researchers at Texas State University and released either at Bastrop State

Park or onto private properties owned by local Texas residents. This program has provided important contributions to the preservation of our local endangered species, the Houston Toad. According to the Houston Zoo, through the captive rearing program they were able to release "600,000 Houston Toad eggs from the zoo back into the Texas wild in 2015" [1].



Save the Toad!

1. Access to lands from private landowners

If you live in the following areas you can help the Houston Toad by giving the zoo permission to use your land:

- Bastrop
- Lee
- Milam
- Robertson
- Leon
- Lavaca
- Colorado
- Austin

contact : conservation@houstonzoo.org

2. Visit Bastrop State Park

This is the last state-protected land for the Houston Toad. By visiting the park, a portion of the entrance fee goes to help support and maintain the conservation effort and habitat recovery.

3. Limit Pesticide Use



4. Plant Native Plants

Native plants can attract insect species that are excellent food sources for the Houston Toad.



Ex: ground beetle

