



**Houston
Zoo**

Houston Toads – Wetland Band

Materials:

- Rocks
- Marbles
- Bells
- Combs
- Rubber bands
- Cups
- Balloons
- Zippers
- Whistles
- iPads
- Houston and Gulf coast toad pictures
- Pictures of captive toad rearing

Preparation:

1. Gather materials listed above.
2. Print off pictures
3. Pull up TPWD frog and toad calls website on the iPads

Instructions:

1. Discuss with students several examples of local frog and toad species including the Houston toad. Discuss how frogs and toads use their calls to communicate as well as how scientists use the calls in the wild.
2. Have students select a frog or toad species to create an instrument that mimics their call. They can use any of the supplies on the table.
3. When the students are finished, have them play their instruments at the same time. Discuss if they were able to hear specific calls or if all the noises blended together.
4. Discuss modifications to this activity – giving students certain frogs/toad calls to mimic; have one student listen to a call and have the rest play their instruments, student must find correct match by listening with eyes closed.

Houston Toad Information:

The Houston toad (*Anaxyrus [Bufo] houstonensis*) is only found today in areas of deep, sandy soil in east-central Texas, and nowhere else in the world. Though previously found in high densities in Harris County and eleven other Texas counties, urban expansion, habitat fragmentation, pollution, and drought have significantly diminished their range. As a result, the Houston toad hasn't been seen in Houston since the 1970's.

While it was once one of the most abundant toads found at ponds in early spring, it is estimated that only to 150 to 300 Houston toads remain in the wild. Now more than ever it is critical that

we help this native Texan in need! The Houston Zoo has partnered with U.S. Fish and Wildlife Service, Texas State University, and Texas Parks and Wildlife in an effort to recover the wild Houston toad population. Our goal is to keep this unique amphibian species from being lost to extinction forever.

A native Texan and Houstonian, the extremely rare and elusive Houston toad hasn't been seen within Houston city limits since the 1970's. Urban expansion, while great for the city, has created many challenges for our small friends over the years in the form of habitat fragmentation and increased pollution. Extended periods of drought have also made life more difficult for the Houston toad. As a result of habitat loss, the Houston toad had no choice but to abandon city life and is now found only in areas of deep, sandy soil in east-central Texas. While the Houston toad may not call the streets of Houston home, it still has a place within our Zoo, with the hope that one day this species will thrive in numbers large enough to return it to its old stomping ground.

Behind the scenes, the Houston Zoo maintains a ~1,200 ft² Houston toad quarantine facility that serves as a location for the captive breeding of Houston toad egg strands for release into the wild. This facility is managed by two, full-time Houston toad specialists who care for the toads and work closely with the program partners in the breed-and-release efforts. This year, February 9th marked the beginning of the Houston toad captive populations breeding season. Within the Zoo's special facility lives a colony of adult Houston toads that are cared for by members of our herpetology and veterinary teams. The goal during breeding season is to help healthy toads breed and lay eggs, with the hope that surviving offspring will boost Houston toad numbers in the wild, and add genetic diversity to the existing population, which is essential for any species' survival. Just last year, the Houston toad team was able to release 900,000 eggs back into the wild, which is an incredible success for a species that is constantly fighting off the looming threat of extinction.

Work to save the Houston toad has been ongoing for years, thanks to a dedicated network of organizations including universities, federal and state wildlife agencies, non-governmental organizations, and the Fort Worth Zoo. In 2015, we began to see the results of our releases with a small number of adult toads appearing at our release sites. Egg production for release has increased dramatically each year so that over 1,000,000 eggs were produced by the Houston Zoo in 2018 alone for this release program! As of April 2018, over 270 adult toads have been found at the release sites, along with a minimum of 13 wild egg strands in one pond alone. Our releases of large numbers of captive produced eggs and tadpoles has resulted in the initial establishment of a wild population at Griffith League Ranch where they had not been seen since 2010. For the first time in many years, large multi-male choruses have been heard within the Houston toads' new home range – a song that reminds us all of why we forge ahead despite all obstacles...an echoing reminder in the night that there is always hope for the future.

Take Action:

Zoo:

- The zoo maintains a ~1,200 ft² Houston toad quarantine facility that serves as a location for the captive breeding and head-starting of wild Houston toad egg strands for release into the wild. This facility is managed by two, full-time Houston toad specialists who care for the toads and work closely with the program partners in the breed-and-release efforts.
- The Houston zoo also serves as an “ark” for the species by maintaining captive toads. Each one of these toads has high genetic importance and will be used to breed future generations of toads for release into the wild.
- Our toad staff regularly participates in educational and outreach events on zoo grounds and in the community to help educate local people about the plight of the Houston toad.

You:

- Take the family and visit Bastrop State park, the only remaining state-protected area where Houston toads can still be found! A portion of your entrance fees goes towards the park’s conservation efforts and habitat recovery.
- Limit pesticide use in your yard and plant native plants when possible! Pesticides are harmful to all amphibian species, including the Houston toad, so reducing the amount of pesticides in the environment will ultimately help the long-term survival of the toad. Native plant use helps wildlife by providing appropriate food sources. In the case of toads, native plants bring in the right type of insects (but don’t worry about having too many bugs – hungry toad won’t leave too many around!)