

Appendix C  
Texas Natural Diversity  
Database – Elemental  
Occurrence

**APPENDIX C**

# Element Occurrence Record

**Scientific Name:** Anaxyrus houstonensis

**Occurrence #:** 1

**Eo Id:** 344

**Common Name:** Houston Toad

**Track Status:** Track all extant and selected historical EOs

**TX Protection Status:** E

**Global Rank:** G1

**State Rank:** S1

**Federal Status:** LE

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## Location Information:

### Watershed:

12090301 - Lower Colorado-Cummins

### County Name:

Bastrop

### State:

TX

### Mapsheet:

30097-B2, Smithville NW

30097-B3, Lake Bastrop

30097-A2, Smithville

30097-A3, Bastrop

30097-B1, Paige

30097-A1, Winchester

### Directions:

AN AREA BOUNDED BY STATE HIGHWAY 95 ON THE WEST, THE COLORADO RIVER ON THE SOUTH, 30 12'00" LATITUDE ON THE NORTH, AND 97 07' 30" LONGITUDE ON THE EAST

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## Survey Information:

**First Observation:** 1970

**Survey Date:** 1983

**Last Observation:** 2003

**Eo Type:**

**Eo Rank:** A

**Eo Rank Date:**

**Observed Area:** 70,000.00

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## Comments:

**General Description:** PLAIN DIVIDED BY SMALL STREAMS AND CREEKS; SANDY SUBSTRATE WITH LOBLOLLY PINE; TWO STATE PARKS AND SEVERAL IMPROVED ROADS ARE WITHIN THIS AREA; SEE TPWD PARK DIVISION FILES

**Comments:** THE HEALTHIEST POPULATION KNOWN, MANAGED FOR NO IMPACT BY TP& WD ON THE TWO STATE PARKS

**Protection Comments:** SUPPORT LEGAL STATUS

**Management Comments:** ENCOURAGE REINTRODUCTIONS, STUDY MINIMUM PRESERVE AREA NEEDS

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## Data:

**EO Data:** IN 1983, A LARGE POPULATION, 1,000 TO 1,500 INDIVIDUALS, REGULARLY OCCURRING; SOME HYBRIDS WITH BUFO VALLICEPS & BUFO WOODHOUSEI, BUT FEW TOADS EMERGE AS EARLY AS JANUARY OR FEBRUARY & MATE; EGGS DEPOSITED IN PONDS OR TEMPORARY POOLS OF WATER; SMALL RED \* INDICATE TOADS LOCATED BY A LIMITED ROAD SURVEY IN 1993; 26 FEBRUARY 1999, 8, 11, 19 MARCH 1999, 1 APRIL 1999 TOADS CHORUSING

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## Element Occurrence Record

### Managed Area:

#### Managed Area Name

BASTROP STATE PARK

BUESCHER STATE PARK

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### Reference:

#### Citation:

BROWN, L.E., ET. AL., 1983. AGENCY REVIEW DRAFT OF THE RECOVERY PLAN FOR THE HOUSTON TOAD (BUFO HOUSTONENSIS). USF& WS, ALBUQUERQUE, NM. 48PP.

PBS& J. 1999. RESULTS OF HOUSTON TOAD SURVEY AT TAHITIAN VILLAGE, BASTROP COUNTY, TEXAS. PREPARED FOR LCRA. JULY 1999.

PBS& J. 1999. RESULTS OF HOUSTON TOAD SURVEY AT THE PROPOSED GENTEX ELECTRIC GENERATION FACILITIES, BASTROP COUNTY, TEXAS. PREPARED FOR GEN TEX POWER CORPORATION. JUNE, 1999.

TEXAS DEPARTMENT OF TRANSPORTATION. 1993. HOUSTON TOAD MONITORING ALONG STATE HIGHWAY 21 FROM THE ENTRANCE OF BASTROP STATE PARK TO FM 1441. BASTRO COUNTY, TEXAS. 2 FEBRUARY-11 MAY, 1993.

BROWN, LAUREN E., 1971. NATURAL HYBRIDIZATION AND TREND TOWARD EXTINCTION IN SOME RELICT TEXAS TOAD POPULATIONS. SOUTHWESTERN NATURALIST 16(2):185-199.

QUINN, HUGH R. AND GREG MENGDEN. 1984. REPRODUCTION AND GROWTH OF BUFO HOUSTONENSIS (BUFONIDAE). S.W. NAT. 29(2): 189-195.

QUINN, HUGH. NO DATE. CURATOR OF REPTILES HOUSTON ZOOLOGICAL GARDENS PARKS & RECREATION DEPARTMENT PH-713/520-3208.

BROWN, L.E. 1975. THE STATUS OF THE NEAR EXTINCT HOUSTON TOAD (BUFO HOUSTONENSIS) WITH RECOMMENDATIONS FOR ITS CONSERVATION. HERP. REV. 6:37-40.

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### Specimen:

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# Element Occurrence Record

**Scientific Name:** Anaxyrus houstonensis      **Occurrence #:** 23      **Eo Id:** 3642  
**Common Name:** Houston Toad      **Track Status:** Track all extant and selected historical EOs  
**Global Rank:** G1      **State Rank:** S1      **TX Protection Status:** E  
**Federal Status:** LE

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## Location Information:

### Watershed:

12070102 - Yegua

### County Name:

Lee  
Bastrop

### State:

TX  
TX

### Mapsheet:

30097-C2, McDade

### Directions:

AREA NORTHEAST OF MCDADE ON THE BASTROP/LEE COUNTY LINE; EXTENDS FROM THE WEST YEGUA CREEK NORTH TO HENDERSON SPRING AND FROM MARSHY BRANCH EAST TO GUM SPRING BRANCH AND PIN OAK BRANCH

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## Survey Information:

**First Observation:** 1996-03-05      **Survey Date:**      **Last Observation:** 2002-03-07

**Eo Type:**      **Eo Rank:**      **Eo Rank Date:**

### Observed Area:

## Comments:

**General Description:** WOODLANDS DOMINATED BY POST OAK, BLACKJACK OAK, WATER OAK, ELMS AND YAUPON WITH A FEW SCATTERED LOBLOLLY PINES; OTHER SPECIES CHORUSING IN 1996 AND 1997: RANA UTRICULARIA AND Hyla chrysoscelis; SPECIES HEARD ONLY IN 1997: PSEUDACRIS STRECKERI; SCAPHIOPUS HOLBROOKII SEEN COMMONLY ON ROADS BUT NOT CALLING; 2001 OTHER SPECIES DETECTED INCLUDE LEOPARD FROG, CHORUS FROG, CRICKET FROG, GRAY TREE FROG, GREEN TREE FROG, SPRING PEEPER

**Comments:** GENERALLY, TEMPERATURES WERE IN THE 60'S AND 70'S F. WITH RELATIVE HUMIDITY OF 80% OR GREATER WITH PRECIPITATION OCCURRING OR HAD OCCURRED WITHIN THE PREVIOUS 24 HOURS; SEE REPORT (U97KUH01TXUS) FOR MORE PRECISE DESCRIPTION OF LOCATIONS WITHIN BOUNDED AREA; REPORT (U01SHE01TXUS) EXPLAINS WHERE AND WHY SURVEYS WERE FOCUSED

### Protection Comments:

### Management Comments:

## Data:

## Element Occurrence Record

**EO Data:** 1996-03-05: SMALL CHORUS OF TOADS CALLING FROM SMALL TANK IN LEE COUNTY; 1997-02-19: PEAK CHORUSING NIGHT IN 1997, HEARD LARGE NUMBERS IN SOUTHERN PORTION OF AREA; 1997-02-28: SECOND BEST CHORUSING NIGHT, 20-30 INDIVIDUALS CHORUSING IN SOUTHERN PORTION OF AREA WITH ANOTHER SMALL CHORUS IN THE NORTHERN PORTION OF AREA; 1997-03-11: NO TOADS HEARD; 1997-03-12: ONE TOAD HEARD IN SOUTHERN PORTION OF AREA; 6 MARCH TO 19 APRIL 2000 TOADS CONFIRMED IN THIS AREA; 7, 8, 13, 14, 19, 23, 27 FEBRUARY, 7, 10, 12, 22, 30 MARCH, AND 1, 3, 9 APRIL 2001 TOADS DETECTED; IN 2000 AND 2001, DNA ANALYSIS OF COLLECTED TADPOLES CONFIRMED BUFO HOUSTONENSIS FROM MARSHY BRANCH; 30 JANUARY, 20 FEBRUARY, 6, 7 MARCH 2002 TOADS DETECTED

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### **Managed Area:**

**Managed Area Name**

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### **Reference:**

#### **Citation:**

Sherrod, C. Lee (Horizon Environmental Services, Inc.) and Dr. J. R. Dixon. Assessment of potential Houston toad occurrence on or affected by the proposed Three Oaks Mine, Bastrop and Lee counties. Prepared for Alcoa, Inc., Rockdale, TX. October 2000, updated August 2001. 24 pp. with appendices and map.

KUHL, JOHN. 1997. MEMO TO U.S. FISH AND WILDLIFE SERVICE AND TEXAS PARKS AND WILDLIFE DEPARTMENT CONCERNING 1996-1997 SURVEYS FOR BUFO HOUSTONENSIS IN PORTIONS OF LEE AND BASTROP COUNTIES. MARCH 24, 1997.

Horizon Environmental Services, Inc. 2002. 2002 Houston toad assessment on the proposed Three Oaks Mine, Bastrop and Lee counties, Texas, proposed 16,062-acre permit area and adjacent areas. Prepared for Alcoa, Inc., Rockdale, TX. June 2002. 8 pp.

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### **Specimen:**

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# Element Occurrence Record

**Scientific Name:** Anaxyrus houstonensis

**Occurrence #:** 24

**Eo Id:** 4685

**Common Name:** Houston Toad

**Track Status:** Track all extant and selected historical EOs

**TX Protection Status:** E

**Global Rank:** G1

**State Rank:** S1

**Federal Status:** LE

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## Location Information:

### Watershed:

12090301 - Lower Colorado-Cummins

### County Name:

Bastrop

### State:

TX

### Mapsheet:

30097-B3, Lake Bastrop

### Directions:

LCRA SIM GIDEON POWER PLANT PROPERTY, LAKE BASTROP, NORTH OF HIGHWAY 21, EAST OF LAKE BASTROP

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## Survey Information:

**First Observation:** 1994-03-15

**Survey Date:** 1999-02-26

**Last Observation:** 1999-02-26

**Eo Type:**

**Eo Rank:** E

**Eo Rank Date:** 1999-02-26

### Observed Area:

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## Comments:

**General Description:** 1999 - SMALL POND SITUATED ON EDGE OF LOBLOLLY PINE STAND, SOILS - PATILO COMPLEX, TEMPERATURE 72.6 F. WITH RELATIVE HUMIDITY OF 78%

**Comments:** FEBRUARY, MARCH, AND APRIL 1999 TOADS WERE HEARD CHORUSING ON BASTROP STATE PARK AND ADJACENT PRIVATE LANDS

### Protection

#### Comments:

### Management

#### Comments:

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## Data:

**EO Data:** MARCH 1994, 8 TOADS OBSERVED; MAY 1994, 1 TOAD OBSERVED; FEBRUARY 1995, 3 TOADS OBSERVED AND CHORUSING; MARCH 1995, 1 TOAD OBSERVED AND CHORUSING; 3 APRIL 1995, 1 TOAD OBSERVED AND CHORUSING; 10 FEBRUARY 1999, 2 MALES OBSERVED CALLING FROM SMALL POND IN TRANSMISSION LINE RIGHT-OF-WAY EAST OF EXISTING SUBSTATION AND 1 TOAD CALLING FROM ROADSIDE DITCH ON ENTRANCE ROAD TO POWER PLANT; 26 FEBRUARY 1999, 1 MALE ON ENTRANCE ROAD TO POWER PLANT

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## Managed Area:

### Managed Area Name

LCRA TRACT - LAKE BASTROP TRACT

## Element Occurrence Record

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### Reference:

#### Citation:

PBS& J. 1999. RESULTS OF HOUSTON TOAD SURVEY AT THE PROPOSED GENTEX ELECTRIC GENERATION FACILITIES, BASTROP COUNTY, TEXAS. PREPARED FOR GEN TEX POWER CORPORATION. JUNE, 1999.

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### Specimen:

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## Element Occurrence Record

**Scientific Name:** Anaxyrus houstonensis

**Occurrence #:** 25

**Eo Id:** 2733

**Common Name:** Houston Toad

**Track Status:** Track all extant and selected historical EOs

**TX Protection Status:** E

**Global Rank:** G1

**State Rank:** S1

**Federal Status:** LE

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### Location Information:

**Watershed:**

12090301 - Lower Colorado-Cummins

**County Name:**

Bastrop

**State:**

TX

**Mapsheet:**

30097-A3, Bastrop

**Directions:**

TAHITIAN VILLAGE, JUST EAST OF BASTROP, SOUTH OF HIGHWAY 71

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### Survey Information:

**First Observation:** 1999-03-19

**Survey Date:**

**Last Observation:** 1999-04-02

**Eo Type:**

**Eo Rank:** E

**Eo Rank Date:** 1999-04-02

**Observed Area:**

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### Comments:

**General Description:** 19 MARCH 1999, 60 DEGREES F., 96% RELATIVE HUMIDITY WITH OCCASIONAL LIGHT RAIN, FLOODED DITCH MEASURED 30'X5' WITH A DEPTH OF 3"-4"; 2 APRIL 1999, 73.7 DEGREES F., 92% RELATIVE HUMIDITY WITH LIGHT DRIZZLE THROUGHOUT NIGHT

**Comments:** 8, 11 MARCH 1999, CHORUSING HEARD AT BASTROP STATE PARK

**Protection**

**Comments:**

**Management**

**Comments:**

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### Data:

**EO Data:** 2316 CST 19 MARCH 1999, 2 MALE TOADS CALLING FROM DITCH; 2 APRIL 1999, 2 MALE TOADS CALLING FROM SAME DITCH AS MARCH OBSERVATION, 3 GULF TOADS ALSO PRESENT WITH A PAIR AMPLEXED, NO FEMALE HOUSTON TOADS OBSERVED, A CHORUS OF HOUSTON TOADS WERE ALSO HEARD CA. 0.25 AIR MILE NORTHEAST OF DITCH, NUMBER OF TOADS COULD NOT BE DETERMINED

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### Managed Area:

**Managed Area Name**

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### Reference:

2012-04-05

## Element Occurrence Record

**Citation:**

PBS& J. 1999. RESULTS OF HOUSTON TOAD SURVEY AT TAHITIAN VILLAGE, BASTROP COUNTY, TEXAS.  
PREPARED FOR LCRA. JULY 1999.

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**Specimen:**

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# Element Occurrence Record

**Scientific Name:** Anaxyrus houstonensis

**Occurrence #:** 27

**Eo Id:** 8719

**Common Name:** Houston Toad

**Track Status:** Track all extant and selected historical EOs

**TX Protection Status:** E

**Global Rank:** G1

**State Rank:** S1

**Federal Status:** LE

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## Location Information:

### Watershed:

12070102 - Yegua

### County Name:

Bastrop

### State:

TX

### Mapsheet:

30097-C1, Fedor

### Directions:

CA. 4.7 AIR MILES NORTH OF PAIGE, CA. 0.4 AIR MILE WEST OF BASTROP/LEE COUNTY LINE

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## Survey Information:

### First Observation:

### Survey Date:

### Last Observation:

### Eo Type:

Eo Rank: E

### Eo Rank Date:

### Observed Area:

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## Comments:

### General

### Description:

### Comments:

### Protection

### Comments:

### Management

### Comments:

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## Data:

### EO Data:

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## Managed Area:

### Managed Area Name

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## Reference:

### Citation:

Sherrod, C. Lee (Horizon Environmental Services, Inc.) and Dr. J. R. Dixon. Assessment of potential Houston toad occurrence on or affected by the proposed Three Oaks Mine, Bastrop and Lee counties. Prepared for Alcoa, Inc., Rockdale, TX. October 2000, updated August 2001. 24 pp. with appendices and map.

2012-04-05

Element Occurrence Record

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**Specimen:**

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## Element Occurrence Record

**Scientific Name:** Spiranthes parksii      **Occurrence #:** 141      **Eo Id:** 8806  
**Common Name:** Navasota ladies'-tresses      **Track Status:** Track all extant and selected historical EOs  
**Global Rank:** G3      **State Rank:** S3      **TX Protection Status:** E  
**Federal Status:** LE

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### Location Information:

#### Watershed:

12090301 - Lower Colorado-Cummins

#### County Name:

Bastrop

#### State:

TX

#### Mapsheet:

30097-A2, Smithville

#### Directions:

N of Buescher SP in the University of Texas Stengl Lost Pines Biology Station.

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### Survey Information:

**First Observation:** 2003-10-26      **Survey Date:** 2005-FA      **Last Observation:** 2004-10-23

**Eo Type:**      **Eo Rank:** E      **Eo Rank Date:** 2004-10-23

#### Observed Area:

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### Comments:

**General Description:** The habitat is old pasture/meadow with relatively minor variations in topography that, nonetheless, flood in most springs. The soil is sand over red clay. Officially this is Axtell fine sandy loam, 2 (Afc2), <5% slopes, eroded as per Baker, F.E. 1979 (Soil Survey of Bastrop County, TX, Soil Conservation Service, Washington, D.C.). The depressions hold enough water in the spring to support good colonies of moss and liverwort. *S. parksii* occurs on the edges of these moss-filled depressions in competition with pine seedlings, grasses, and *Rubus* canes.

**Comments:** Plants were not found in two nearby drainages. Dr. Jim Manhart of Texas A&M took samples from the 12 plants observed in 2004 for genetic research. No further data has been received from Dr. Manhart. Three dozen basal rosettes were observed in the spring of 2005, but only 4 *S. cernua* were observed in the fall.

#### Protection

#### Comments:

#### Management

#### Comments:

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### Data:

**EO Data:** 26 Oct 2003: One plant positively identified as *S. parksii* was observed. 23 Oct 2004: One plant positively identified as *S. parksii* with the possibility of 5 others also being *S. parksii*. Fall 2005: No *S. parksii* were observed.

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### Managed Area:

#### Managed Area Name

## Element Occurrence Record

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### **Reference:**

#### **Citation:**

Wendt, Tom. 2008. E-mail of 5 February to Sandy Birnbaum, Texas Natural Diversity Database manager, concerning *Spiranthes parksii* specimens at the University of Texas Herbarium.

Schappert, Phil. 2006. E-mails of 25 and 26 January to Sandy Birnbaum, Texas Natural Diversity Database manager, concerning *Spiranthes parksii* at the Stengl Lost Pines Biology Station in Bastrop County, TX.

Schappert, Phil. 2005. Endangered orchid a no-show this year. Lost Pines Nature Notes, Number 35.

Sheviak, Charles. 2004. E-mail of 13 December to Charmaine Delmatier, U.S. Fish & Wildlife Service botanist, concerning the positive identification of *Spiranthes parksii* at the Stengl Lost Pines Biology Station in Bastrop County, TX.

Unknown author. 2004. *Spiranthes parksii* recovery team meeting notes for 13 August 2003 and 13 July and 8 November 2004.

Schappert, Phil. 2004. E-mail of 27 October to Dr. Jim Manhart, Texas A&M University, concerning *Spiranthes parksii* at Stengl Lost Pines Biological Station, Bastrop County, TX and adjacent areas including Lee County.

Schappert, Phil. 2004. E-mail of 21 September to Tom Dureka and others concerning *Spiranthes parksii* at Stengl Lost Pines Biology Station, Bastrop County, TX.

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### **Specimen:**

University of Texas Herbarium, Austin, TX; Charmaine Delmatier et al. (#8659), Accession # 00445024, 18 Oct 2004, TEX.

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