# New Amphibian and Reptile County Records from the Lower Rio Grande Valley in Texas

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The Lower Rio Grande valley in southern Texas consists of a unique arrangement of ecosystems including: the coastal sand plains, subtropical woodlands, and tamaulipan thornscrub forests. These habitats support a high diversity of amphibians and reptiles. Many of these species occur nowhere else in the United States (Jahrsdoerfer and Leslie 1988). Sampling in this region has historically been accomplished from roads and other areas where public access existed. Although reptile and amphibian species have been thoroughly documented in the area, especially along the Rio Grande, distributional gaps exist in species' ranges due to the lack of access to large tracts of private ranchlands. In May of 2013, The East Foundation (EF) formed a partnership with researchers from Texas A&M University, establishing an Assessment of Terrestrial Vertebrate Biodiversity and Scientific Collections project. This project allowed access to 250,000 acres across four counties (Jim Hogg, Kenedy, Starr and Willacy Counties) and three of these four counties have received little herpetofaunal work. Our main task was to determine species distributions within and across the various habitat types of the region, and to increase the knowledge of biodiversity in this area.

Here, we report 11 new county records from the Lower Rio Grande valley in Texas which is the result of these recent survey efforts. Current county records were determined by examining Dixon (2013). All voucher specimens were deposited at the Biodiversity Research and Teaching Collections (TCWC) and verified by Heather L. Prestridge. Locality information was obtained via handheld GPS (WGS 84), and all nomenclature follows Crother (2012). Specimens were collected under the authority of a Texas Parks and Wildlife Scientific Research Permit (SPR-0506-662) assigned to Toby J. Hibbitts and under an approved Texas A&M University IACUC protocol (AUP 2013-81).

### **ANURA- Frogs**

HYLA SQUIRELLA (Squirrel Tree Frog).: Willacy Co.: ca. 0.34 rd km S Junction S Port Rd and State Hwy 186 on State HWY 186 (26.545474 ° N; -97.436737 ° W). 11

September 2015. Connor S. Adams and Dalton B. Neuharth. TCWC 100829. Specimen collected from vegetation in roadside ditch. This record fills a gap between Cameron County to the south and Hidalgo County to the west.

LEPTODACTYLUS FRAGILIS (Mexican White-lipped Frog).: Zapata Co.: ca. 7.35 rd km NE Junction Hwy 83 and FM 2687 on FM 2687 (26.8185 ° N; -99.06218 ° W). 25 May 2015. Seth Patterson, Toby J. Hibbitts, and Connor S. Adams. TCWC 100728. Specimen collected from dense grass next to flooded roadside ditch. This record extends the previously known range of this species 33 air km northwest of El Sauz, Starr County, Texas.

# **SQUAMATA- Lizards**

**HEMIDACTYLUS TURCICUS** (Mediterranean House Gecko).: Jim Hogg Co.: San Antonio Viejo Ranch, East Foundation property, ca. 56.47 air km S and 10.22 air km W of Hebbronville (26.79598 ° N, -98.78593 ° W). 11 March 2013. Connor S. Adams and Toby J. Hibbitts. TCWC 97899. Specimen collected from woodpile next to abandoned house in thornscrub forest. This record fills a gap between Brooks County to the east, Starr County to the south, Webb County to the northwest, and Zapata County to the west.

*OPHISAURUS ATTENUATUS* (Slender Glass Lizard).: Willacy Co.: El Sauz Ranch, East Foundation property, ca. 2.71 air km S and 3.73 air km W of Port Mansfield (26.52937 ° N, -97.4625 ° W). 29 June 2014. Connor S. Adams and Timothy B. Garrett. TCWC 100577. Specimen collected from funnel trap along drift fence in open, sandy grassland. This record fills a gap between Cameron County to the south, Hidalgo County to the west, and Kenedy County to the north.

*PLESTIODON TETRAGRAMMUS* (Four-lined Skink).: Jim Hogg Co.: San Antonio Viejo Ranch, East Foundation property, ca. 56.47 air km S and 10.22 air km W of Hebbronville (26.79598 ° N, -98.78593 ° W). 11 March 2013. Connor S. Adams. TCWC 97887. Specimen collected under rotten log next to windmill tank in thornscrub savannah. This record fills a gap between Duval County to the north, Starr County to the south, and Webb County to the northwest.

SCELOPORUS GRAMMICUS (Graphic Spiny Lizard).: Jim Hogg Co.: San Antonio Viejo Ranch, East Foundation property, ca. 39.10 air km S and 8.86 air km W of Hebbronville, TX (26.95126 ° N; -98.76796 ° W). 1 June 2013. Toby J. Hibbitts and Connor S. Adams. TCWC 97901. Specimen collected from caliche road. This record fills a gap between Starr County to the south and Zapata County to the west and is 35 air km north of the nearest records in La Gloria, Starr County, Texas.

# **SQUAMATA- Snakes**

CEMOPHORA COCCINEA (Scarletsnake).: Willacy Co.: El Sauz Ranch, East Foundation property, ca. 30.21 air km E and 5.43 air km N of Raymondville (26.53107 ° N; -97.46689 ° W). 4 June 2014. Connor S. Adams and Timothy B. Garrett. TCWC 100580. Specimen collected from funnel trap along a drift fence in open, sandy grassland. This record extends previously known range of this species 47 air km southeast of nearest records south of Armstrong, Kenedy County, Texas.

FICIMIA STRECKERI (Tamaulipan Hook-nosed Snake).: Jim Hogg Co.: San Antonio Viejo Ranch, East Foundation property, ca. 52.17 air km S and 18.06 air km W of Hebbronville (26.839002 ° N, -98.859506 ° W). 16 March 2015. Wade A. Ryberg and Connor S. Adams. TCWC 100683. Specimen collected from under rock on calichelimestone hill in thornscrub forest. This record fills a gap between Duval County to the north, Starr County to the south, Webb County to the northwest, and Zapata County to the west.

MICRURUS TENER (Texas Coralsnake).: Jim Hogg Co.: San Antonio Viejo Ranch, East Foundation property, ca. 41.53 air km S of Hebbronville (26.93072 ° N, -98.67765 ° W). 16 August 2013. Connor S. Adams. TCWC 97943. Specimen collected in funnel trap along drift fence in open, sandy grassland. This record fills a gap between Brooks County to the east, Duval County to the north, Starr County to the south, and Zapata County to the west.

**RENA DULCIS** (Texas Threadsnake).: Willacy Co.: El Sauz Ranch, East Foundation property, ca. 2.71 air km S and 3.73 air km W of Port Mansfield (26.52937 ° N, -97.4625 ° W). 22 May 2014. Connor S. Adams and Timothy B. Garrett. TCWC 100561. Specimen collected from pitfall trap along drift fence in open, sandy grassland. This record fills a gap between Cameron County to the south, Hidalgo County to the west, and Kenedy County to the north.

*TANTILLA NIGRICEPS* (Plains Black-headed Snake).: Willacy Co.: El Sauz Ranch, East Foundation properties, ca. 5.07 air km S and 8.37 air km W of Port Mansfield (26.508804 ° N, -97.509065 ° W). 10 March 2014. Connor S. Adams. TCWC 100581. Specimen collected under rotten log in subtropical woodland. This record fills a gap between Cameron County to the south, Hidalgo County to the west, and Kenedy County to the north.

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### LITERATURE CITED

- Crother, B. I. (ed.). 2012. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, With Comments Regarding Confidence In Our Understanding. SSAR Herpetological Circular 39:1-92.
- Dixon, J. R. 2013. Amphibians and Reptiles of Texas. Third Edition. Texas A&M University Press, College Station, Texas, USA. 447 pp.
- Jahrsdoerfer, S. E., & Leslie Jr, D. M. 1988. Tamaulipan brushland of the Lower Rio Grande Valley of south Texas: description, human impacts, and management options. OKLAHOMA COOPERATIVE FISH AND WILDLIFE RESEARCH UNIT STILLWATER.