

**Selected Bibliography and Species List for Herpetofauna,
Rio Grande Wild and Scenic River**

**for
National Park Service, Chihuahuan Desert Network Inventory & Monitoring Program
Las Cruces, New Mexico**

Submitted by

**Matt Goode, School of Natural Resources, University of Arizona
Tucson, Arizona**

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A general herpetological survey was conducted across six of the seven park units located in the Chihuahuan Desert Network (CHDN). These include Amistad National Recreation Area (NRA), Big Bend National Park (NP), Carlsbad Caverns NP, Fort Davis National Historic Site (NHS), Guadalupe Mountains NP, and White Sands National Monument (NM) (Prival and Goode 1995). However, no systematic herpetofaunal survey has been conducted on the Rio Grande Wild & Scenic River (WSR) (Fig. 1). This report was an attempt to compile literature that would be useful for focusing efforts on a field inventory and to develop a preliminary list of species likely to found on the Rio Grande WSR.

While there has been a wealth of herpetological research done in Big Bend NP, the vast majority has focused on single species or groups of species, and provides limited information on distributions. There have been many species lists and surveys over the years, but almost all of them are either incomplete (include only limited areas within the park) or are too old to be of any use today (Scudday 1966, Brown 1970, Degenhardt 1970 and 1977, Beaupre 1995, Werler and Dixon. 2000).

Significantly less work has been done at Amistad NRA, although one useful park-wide survey was conducted in the late 1970's (Lobello 1976). As for the Rio Grande WSR, no evidence of formal surveys were found through literature searches or the author's knowledge, with the exception of focused surveys for turtles (Forstner et al. 1999). In preparing this selected bibliography, Google Scholar, Biosis, Wildlife Worldwide, Zoological Record, Dissertation Abstracts, and Federal Government Index were searched. In addition, Michael Forstner, Texas State University was contacted by the CHDN Network Coordinator.

In planning a field inventory for the Rio Grande WSR, the number of useful sources is very limited. The best information is obtained in either regional or state field guides. In reality, the final report prepared by Prival and Goode (2005) is probably the most useful document for planning an inventory of the river, even though their work only included limited surveys along the river. This is because it is both current (includes recent taxonomic changes), and it is based on a thorough assessment of potential species for both parks (Big Bend NP and Amistad NRA). Although some species, such as riverine turtles, only occur on the river, almost all of the other species in both parks that utilize riparian habitat and/or lower desert habitats will likely occur along the river corridor. Indeed, the river corridor is likely a hotspot for amphibians and reptiles, although given the short duration of surveys associated with rafting the river, most cryptic species will not be observed even though they may be present.

In this document, a short list of references that should be useful in preparing for a river survey or assist in generating a potential species list is provided. One of the most important groups of species to document on the river will be turtles. Forstner et al. (1999, 2005, 2006 *in press*) and Bailey and Forstner (2005) have conducted surveys for turtles along the Rio Grande beginning in 1994. They recently documented the presence of a new genus for Big Bend NP, Rio Grande River Cooter (*Pseudemys gorzugi*) in 2005 (Bailey et al. 2006, *in press*). All other species, especially lizards and snakes, will be opportunistic sightings, and the number of species documented will likely be low for any given trip down the river unless adequate time is spent at designated sampling stations along the way.

Below is a listing (alphabetically) of a selected references that will assist in planning a field inventory and development of a preliminary species checklist:

- **Conant, R. and J. T. Collins.** 1998. A field guide to amphibians and reptiles, eastern and central North America. Houghton Mifflin Company, Boston.

This is the essential source for distribution data required for preparation of any field inventory work. Although range maps are at the regional scale, more detailed data on distributional limits can often be found in individual species accounts.

- **Dayton, G.** 2002. Amphibians and reptiles checklist – Big Bend National Park. Big Bend Natural History Association, Big Bend National Park, Texas.

There are many checklists and species lists for Big Bend going back decades, but most are either incomplete or dated taxonomically. This is the most current and accurate checklist for the park, and it was produced by a herpetologist that is very familiar with the park, having worked there for years as a graduate student from Texas A&M University.

- **Dayton, G.H., R.E. Jung, and S. Droege.** 2004. Large-scale habitat associations of four desert anurans in Big Bend National Park, Texas. *Journal of Herpetology*, 38:619-627.

Only includes four anurans, but is recent and discusses important “habitats” within the park.

- **Dixon, J. R.** 2000. Amphibians and reptiles of Texas. Texas A&M University Press, College Station, Texas.

This book is encyclopedic, but only has county-level distributional data on Texas herpetofauna, so is of limited use in predicting potential occurrences of species along the river.

- **Jung, R.E., K.E. Bonine, M.L. Rosenshield, A. de la Reza, S. Raimondo, and S. Droege.** 2002. Evaluation of canoe surveys for anurans along the Rio Grande in Big Bend National Park, Texas. *Journal of Herpetology*, 36:390-397.

This paper is probably of minimal use in designing an inventory effort, but may be useful in developing survey techniques, especially for monitoring. Does include information on a few anuran species found on the river.

- **LoBello, R. L.** 1976. Vertebrates of Lake Amistad National Recreation Area. M.S. Thesis. Sul Ross State University, Alpine, Texas.

This report is useful, especially for the reservoir itself. Any species occurring around the reservoir is likely to occur along the river if sufficient habitat is available.

- **Prival, D.E., and M. Goode.** 2005. Chihuahuan Desert national parks amphibian and reptile inventory. Final Report – Chihuahuan Desert Network, National Park Service.

This is by far the single most important and comprehensive document for determining what to expect along the river, because it is current and provides information on what species to expect that were not documented as part of the inventories. Although none of the work done in either AMIS or BIBE included the RIGR, most species found in both parks will be found in the riparian habitats surrounding the river at one time or another.

- **Tennant, A.** 1998. A field guide to Texas snakes. Second edition. Gulf Publishing, New York.

This field guide has maps, but they are not detailed enough and species accounts have very little information on species' ranges.

- **Werler, J. E. and J. R. Dixon.** 2000. Texas Snakes: Identification, distribution, and natural history.. University of Texas Press, Austin.

The species accounts in this book are excellent, but if they have a weakness, it is in their lack of detailed distributional data. The maps are detailed enough to aid in developing a potential species list for the river, which again, is not really any different from the two parks.

The following are herpetofaunal species list for Amistad NRA and Big Bend NP, including information on potentially-occurring, but undocumented species (taken primarily from Prival and Goode 2005). For Big Bend NP, information on two species is from Forstner (pers. comm. 2006). See Table 1 for potential species list for Rio Grande WSR (generated by M.H. Reiser, CHDN Network Coordinator 2006)

Species list for Amistad National Recreation Area.

Scientific names from Conant and Collins (1998) are in parentheses. (V) = Voucher collected.

AMPHIBIANS

ORDER ANURA – FROGS AND TOADS

Family Bufonidae – True Toads

Bufo debilis debilis – Eastern Green Toad (V)

Bufo nebulifer – Gulf Coast Toad (V) (*Bufo valliceps valliceps*)

Bufo punctatus – Red-spotted Toad (V)

Bufo speciosus – Texas Toad (V)

Family Hylidae – Treefrogs

Acris crepitans blanchardi – Blanchard's Cricket Frog (V)

Family Leptodactylidae – Tropical Frogs

Eleutherodactylus marnockii – Cliff Chirping Frog (V) (*Syrrophus marnockii*)

Family Microhylidae – Narrow-mouthed Toads

Gastrophryne olivacea – Great Plains Narrow-mouthed Toad (V)

Family Pelobatidae – Spadefoot Toads

Scaphiopus couchii – Couch's Spadefoot (V)

Family Ranidae – True Frogs

Rana berlandieri – Rio Grande Leopard Frog (V)

REPTILES

ORDER SQUAMATA – LIZARDS AND SNAKES

Suborder Lacertilia – Lizards

Family Gekkonidae – Geckos

Coleonyx brevis – Texas Banded Gecko (V)

Hemidactylus turcicus – Mediterranean House Gecko (V)

Family Iguanidae – Iguanas and Allies

Cophosaurus texanus texanus – Texas Greater Earless Lizard (V)

Crotaphytus collaris – Eastern Collared Lizard (V)

Phrynosoma cornutum – Texas Horned Lizard (V)

Phrynosoma modestum – Round-tailed Horned Lizard (V)

Sceloporus cowlesi – Southwestern Fence Lizard (V) (*Sceloporus undulatus consobrinus*)

Sceloporus merriami merriami – Merriam's Canyon Lizard (V)

Sceloporus olivaceus – Texas Spiny Lizard (V)

Sceloporus poinsettii poinsettii – Northern Crevice Spiny Lizard (V)

Urosaurus ornatus schmidtii – Big Bend Tree Lizard (V)

Family Scincidae – Skinks

Eumeces obsoletus – Great Plains Skink

Eumeces tetragrammus brevilineatus – Short-lined Skink (V)

Family Teiidae – Whiptail Lizards

Aspidoscelis gularis gularis – Texas Spotted Whiptail (V) (*Cnemidophorus gularis gularis*)

Aspidoscelis inornata heptagramma – Trans-Pecos Striped Whiptail (V) (*Cnemidophorus inornatus heptagrammus*)

Suborder Serpentes – Snakes

Family Colubridae – Colubrid Snakes

Diadophis punctatus – Ring-necked Snake (V)

Drymarchon melanurus erebennus – Texas Indigo Snake (V) (*Drymarchon corais erebennus*)
Elaphe bairdi – Baird’s Ratsnake (V)
Hypsiglena torquata janii – Texas Nightsnake (V)
Masticophis flagellum testaceus – Western Coachwhip
Masticophis taeniatus ornatus – Central Texas Whipsnake (V) (*Masticophis taeniatus girardi*)
Nerodia rhombifer rhombifer – Northern Diamond-backed Watersnake (V)
Pituophis catenifer – Gophersnake (*Pituophis melanoleucus*)
Rhinocheilus lecontei tessellatus – Texas Long-nosed Snake (V)
Salvadora grahamiae lineata – Texas Patch-nosed Snake (V)
Tantilla cucullata – Trans-Pecos Black-headed Snake (V) (*Tantilla rubra cucullata/diabolica*)
Tantilla hobartsmithi – Smith’s Black-headed Snake (V)
Thamnophis proximus – Western Ribbonsnake (V)

Family Elapidae – Coralsnakes and Allies

Micrurus tener tener – Texas Coralsnake (V) (*Micrurus fulvius tener*)

Family Leptotyphlopidae - Threadsnakes

Leptotyphlops dulcis – Texas Threadsnake (V)

Family Viperidae – Vipers and Pitvipers

Agkistrodon contortrix pictigaster – Trans-Pecos Copperhead (V)

Crotalus atrox – Western Diamond-backed Rattlesnake (V)

ORDER TESTUDINES – TURTLES

Family Emydidae – Cooters, Sliders, Box Turtles, and Allies

Pseudemys gorzugi – Rio Grande Cooter (V)

Trachemys scripta elegans – Red-eared Slider

Family Testudinidae – Tortoises

Gopherus berlandieri – Berlandier’s Tortoise (V) (scutes only)

Family Trionychidae – Softshell Turtles

Apalone spinifera emoryi – Texas Spiny Softshell

SPECIES NOT DOCUMENTED FOR AMISTAD NRA

According to estimates, there are probably 10 species of reptiles (1 lizard and 9 snakes) inhabiting Amistad NRA that we did not observe. Out of a likely total pool of 55 species in the park, 82% were documented (Prival and Goode 2005).

Due to the fact that the park is essentially a narrow strip of land around the reservoir and rivers, it is likely that some of these species do not inhabit the park permanently, but just pass through it from time to time. Furthermore, many of the records from the area are old, and because the reservoir has drastically altered virtually every aspect of the park lands (mostly in a

negative way as far as herpetological diversity is concerned), many species previously present may no longer occur in the park. This, combined with the lack of previous intensive surveys in the park, means that the total estimate of 55 species has low confidence.

The following species are likely to occur at Amistad NRA, although they were not found. This list is based on LoBello (1976), Werler and Dixon (2000), and an incomplete set of museum records (Prival and Goode 2005).

Lizards

Aspidoscelis marmorata – Marbled Whiptail. Observed along the Rio Grande near Langtry (LoBello 1976).

Snakes

Bogertophis subocularis subocularis – Trans-Pecos Ratsnake. This species has been found frequently along Hwy. 90 near the park (Werler and Dixon 2000).

Crotalus lepidus lepidus – Mottled Rock Rattlesnake. This species was observed in 1975 outside the park by the Pecos River Bridge (LoBello 1976). There is also a voucher from the mouth of the Pecos River (TCWC 71673), although no date is given. There are several specimens from along the Pecos and Devils Rivers, dates unknown (Werler and Dixon 2000).

Crotalus molossus molossus – Northern Black-tailed Rattlesnake. This species was found in Langtry in 1975 and probably still moves into the park occasionally (LoBello 1976).

Elaphe emoryi – Great Plains Ratsnake. This species was found in the past along the Devils River (LoBello 1976) and we found this snake outside the park on Spur 406 during our survey.

Lampropeltis alterna – Gray-banded Kingsnake. This species was found under the Devils River Bridge in 1969 (LoBello 1976), and there is anecdotal evidence that it has been collected illegally within the park in recent years for sale in the black market pet trade.

Nerodia erythrogaster transversa – Blotched Watersnake. This species has been found in the past along the lower Pecos River (Werler and Dixon 2000).

Sonora semiannulata – Groundsnake. A voucher was collected south of the Hwy. 277 bridge in 1975 (LoBello 1976).

Thamnophis cyrtopsis ocellatus – Eastern Black-necked Gartersnake. Collected in the past from the lower Devils and Pecos Rivers (Werler and Dixon 2000).

Thamnophis marcianus marcianus – Marcy's Checkered Gartersnake. A voucher was collected from "Amistad Reservoir" in 1984 (TCWC 63065) and along the Devils River (Werler and Dixon 2000).

Other species that may occur at Amistad (NRA), but have never been documented in the park, include the following. These species were not included in the estimate of the total number of species in the park (Prival and Goode 2005).

Amphibians

Eleutherodactylus augusti latrans – Balcones Barking Frog. Known from near Langtry and Comstock (LoBello 1976).

Eurycea neotenes – Texas Salamander. Known from a 1961 record near Del Rio (LoBello 1976).

Rana catesbeiana – Bullfrog. A non-native species that was present in a stock tank near the mouth of the Devils River in the 1960s (LoBello 1976).

Spea multiplicata – Mexican Spadefoot. Known from north of Comstock and Del Rio in the 1960s (LoBello 1976).

Lizards

Aspidoscelis tessellata – Common Checkered Whiptail. Known from near Del Rio in the 1960s (LoBello 1976).

Sceloporus variabilis marmoratus – Texas Rose-bellied Lizard. There is one voucher from this species in the Texas A&M Collection from Long Point (TCWC 54501). However, given that there are no other records from Val Verde County for this species, we believe this species was probably misidentified. We don't have the date, but the specimen number indicates it was probably collected in 1977.

Snakes

Coluber constrictor oaxaca – Mexican Racer. Known from near Del Rio (Werler and Dixon 2000).

Gyalopion canum – Chihuahuan Hook-nosed Snake. This species has been found in the Comstock area (Werler and Dixon 2000).

Lampropeltis getula splendida – Desert Kingsnake. Known from the Comstock area (Werler and Dixon 2000).

Lampropeltis triangulum annulata – Mexican Milksnake. Known from near Del Rio (LoBello 1976).

Opheodrys aestivus – Rough Greensnake. Known from near Del Rio (Werler and Dixon 2000).

Tantilla nigriceps – Plains Black-headed Snake. Known from near Del Rio and near the mouth of the Pecos River (Werler and Dixon 2000).

Species list for Big Bend National Park.

Scientific names from Conant and Collins (1998) are in parentheses. (V) = Voucher collected. Includes 2 species captured by M. Forstner & others, Texas State University – San Marcos (pers. comm.. 2006).

AMPHIBIANS

ORDER ANURA – FROGS AND TOADS

Family Bufonidae – True Toads

Bufo debilis insidiosus – Western Green Toad

Bufo punctatus – Red-spotted Toad (V)

Bufo speciosus – Texas Toad

Family Hylidae – Treefrogs

Hyla arenicolor – Canyon Treefrog (V)

Family Leptodactylidae – Tropical Frogs

Eleutherodactylus guttillatus – Spotted Chirping Frog (V) (*Syrrophus guttillatus*)

Family Microhylidae – Narrow-mouthed Toads

Gastrophryne olivacea – Great Plains Narrow-mouthed Toad (V)

Family Pelobatidae – Spadefoot Toads

Scaphiopus couchii – Couch's Spadefoot

Family Ranidae – True Frogs

Rana berlandieri – Rio Grande Leopard Frog (V)

Rana catesbeiana – American Bullfrog

REPTILES

ORDER SQUAMATA – LIZARDS AND SNAKES

Suborder Lacertilia – Lizards

Family Anguidae – Alligator Lizards

Gerrhonotus infernalis – Texas Alligator Lizard (V) (*Gerrhonotus liocephalis infernalis*)

Family Gekkonidae – Geckos

Coleonyx brevis – Texas Banded Gecko (V)

Coleonyx reticulatus – Reticulate Banded Gecko (V)

Hemidactylus turcicus – Mediterranean House Gecko (V)

Family Iguanidae – Iguanas and Allies

Cophosaurus texanus scitulus – Chihuahuan Greater Earless Lizard (V)
Crotaphytus collaris – Eastern Collared Lizard (V)
Gambelia wislizenii – Long-nosed Leopard Lizard
Phrynosoma cornutum – Texas Horned Lizard (V)
Phrynosoma modestum – Round-tailed Horned Lizard (V)
Sceloporus cowlesi – Southwestern Fence Lizard (V) (*Sceloporus undulatus consobrinus*)
Sceloporus magister bimaculosus – Twin-spotted Spiny Lizard
Sceloporus merriami annulatus – Big Bend Canyon Lizard (V)
Sceloporus poinsettii poinsettii – Northern Crevice Spiny Lizard (V)
Urosaurus ornatus schmidtii – Big Bend Tree Lizard (V)
Uta stansburiana – Common Side-blotched Lizard (V)

Family Scincidae – Skinks

Eumeces obsoletus – Great Plains Skink (V)
Eumeces tetragrammus brevilineatus – Short-lined Skink (V)

Family Teiidae – Whiptail Lizards

Aspidoscelis inornata heptagramma – Trans-Pecos Striped Whiptail (V) (*Cnemidophorus inornatus heptagrammus*)
Aspidoscelis marmorata – Marbled Whiptail (V) (*Cnemidophorus marmoratus*)
Aspidoscelis septemvittata septemvittata – Big Bend Spotted Whiptail (V) (*Cnemidophorus septemvittatus septemvittatus*)
Aspidoscelis tessellata (V) – Common Checkered Whiptail (*Cnemidophorus tessellatus*)

Suborder Serpentes – Snakes**Family Colubridae – Colubrid Snakes**

Arizona elegans elegans – Kansas Glossy Snake (V)
Bogertophis subocularis subocularis – Trans-Pecos Ratsnake (V)
Diadophis punctatus – Ring-necked Snake (V)
Elaphe bairdi – Baird's Ratsnake (V)
Elaphe emoryi - Great Plains Ratsnake (V) (*Elaphe guttata emoryi*)
Gyalopion canum – Chihuahuan Hook-nosed Snake (V)
Hypsiglena torquata janii – Texas Nightsnake (V)
Masticophis flagellum testaceus – Western Coachwhip (V)
Masticophis taeniatus ornatus – Central Texas Whipsnake (V) (*Masticophis taeniatus girardi*)
Nerodia erythrogaster transversa – Blotched Watersnake (V)
Pituophis catenifer affinis – Sonoran Gophersnake (V) (*Pituophis melanoleucus affinis*)
Rhinocheilus lecontei tessellatus – Texas Long-nosed Snake (V)
Salvadora grahamiae grahamiae – Mountain Patch-nosed Snake (V)
Salvadora hexalepis deserticola – Big Bend Patch-nosed Snake (V) (*Salvadora deserticola*)
Sonora semiannulata semiannulata – Variable Groundsnake (V)
Tantilla cucullata – Trans-Pecos Black-headed Snake (V) (*Tantilla rubra cucullata/ diabolica*)
Tantilla hobartsmithi – Smith's Black-headed Snake (V)
Thamnophis cyrtopsis cyrtopsis – Western Black-necked Gartersnake (V)

Thamnophis marcianus marcianus – Marcy’s Checkered Gartersnake (V)
Trimorphodon biscutatus vilkinsonii – Texas Lyresnake (V)

Family Leptotyphlopidae - Threadsnares

Leptotyphlops humilis segregus – Trans-Pecos Threadsnares (V)

Family Viperidae – Vipers and Pitvipers

Agkistrodon contortrix pictigaster – Trans-Pecos Copperhead (V)

Crotalus atrox – Western Diamond-backed Rattlesnake (V)

Crotalus lepidus lepidus – Mottled Rock Rattlesnake (V)

Crotalus molossus molossus – Northern Black-tailed Rattlesnake (V)

Crotalus scutulatus scutulatus – Northern Mohave Rattlesnake (V)

ORDER TESTUDINES – TURTLES

Family Emydidae – Cooters, Sliders, Box Turtles, and Allies

Trachemys gaigeae gaigeae – Big Bend Slider

Pseudemys gorzugi - Rio Grande River Cooter (captures by M. Forstner & others, Texas State University)

Family Kinosternidae – Mud Turtles

Kinosternon flavescens – Yellow Mud Turtle (V)

Family Trionychidae – Softshell Turtles

Apalone spinifera emoryi – Texas Spiny Softshell

SPECIES NOT DOCUMENTED FOR BIG BEND NP

According to the Big Bend NP Amphibians and Reptiles Checklist (Dayton 2002), there are probably 69 species in the park at present. Although the primary goal at Big Bend NP was to survey the three main mountain ranges (Sierra Quemada, Sierra del Caballo Muerto and Mesa de Anguila) in the park, rather than conduct a complete inventory of the park, it was still important to document as many of the park’s species as possible (Prival and Goode 2005).

According to Dayton’s (2002) list, Prival and Goode (2005) did not observe ten of these species that occur in the park. These species include: 1 toad, 1 salamander, 1 lizard, 4 snakes, and 3 turtles. In total, assuming that the park list is correct, 86% of the park’s reptiles and amphibians were documented. It is difficult to estimate the percentage of species found in the three mountain ranges surveyed, due to the lack of previous surveys in the those ranges.

The following list contains species that probably occur in the park, but were not found during the Prival and Goode (2005) inventories. Locality data is taken from Dayton (2002) and incomplete voucher records (Prival and Goode 2005).

Amphibians

Frogs and Toads

Spea multiplicata – Mexican Spadefoot. Collected in 1990 from the Rosillos Mountains (SRSU 1355). Reportedly found in the past at Panther Junction as well.

Salamanders

Ambystoma tigrinum mavortium – Barred Tiger Salamander. Has been found near Panther Junction, but unknown whether these animals naturally inhabit the area or were released pets.

Reptiles

Lizards

Anolis carolinensis – Green Anole. A non-native species that has been introduced at Rio Grande Village.

Snakes

Lampropeltis alterna – Gray-banded Kingsnake. Found in the Chisos Mountains and foothills.

Lampropeltis getula splendida – Desert Kingsnake. Found in lower elevations of the park.

Lampropeltis triangulum – Milksnake. Found in the Chisos Mountains and foothills, as well as in floodplains on the east side of the park.

Leptotyphlops dissectus – New Mexico Threadsnake. Inhabits the Chisos Mountains.

Turtles

Gopherus berlandieri – Berlandier's Tortoise. A species that is not native to the park, but has been found in the Chisos Basin and Rio Grande Village, probably because park visitors have released them there as unwanted pets.

Terrapene ornata luteola – Desert Box Turtle. Known from Panther Junction and near Persimmon Gap.

Trachemys scripta elegans – Red-eared Slider. A non-native species found along the Rio Grande. (This species was captured in surveys along the Rio Grande in Big Bend NP by M. Forstner & others, Texas State University).

According to the Big Bend NP Amphibians and Reptiles Checklist (Dayton 2002), the following species used to occur in the park, but may have been extirpated in recent years or their occurrence in the park has not been documented, though they may occur there. These species were not included in the estimate of the total number of species in the park (Prival and Goode 2005).

Amphibians

Frogs and Toads

Bufo woodhousii australis – Southwestern Woodhouse's Toad. Last seen in the Rio Grande floodplain in the early 1970s.

Hyla cinerea – Green Treefrog. Not native to the area, but has been heard calling at Rio Grande Village.

Reptiles

Snakes

Crotalus viridis viridis – Prairie Rattlesnake. May occur in the northern part of the park.

Heterodon nasicus kennerlyi – Mexican Hog-nosed Snake. One record from Panther Junction.

Tantilla nigriceps – Plains Black-headed Snake. May possibly occur in the Basin or Rio Grande Village. Note that this species is very similar in appearance to *Tantilla hobartsmithi*, Smith's Black-headed Snake, which definitely occurs in the park.

Other Literature Cited

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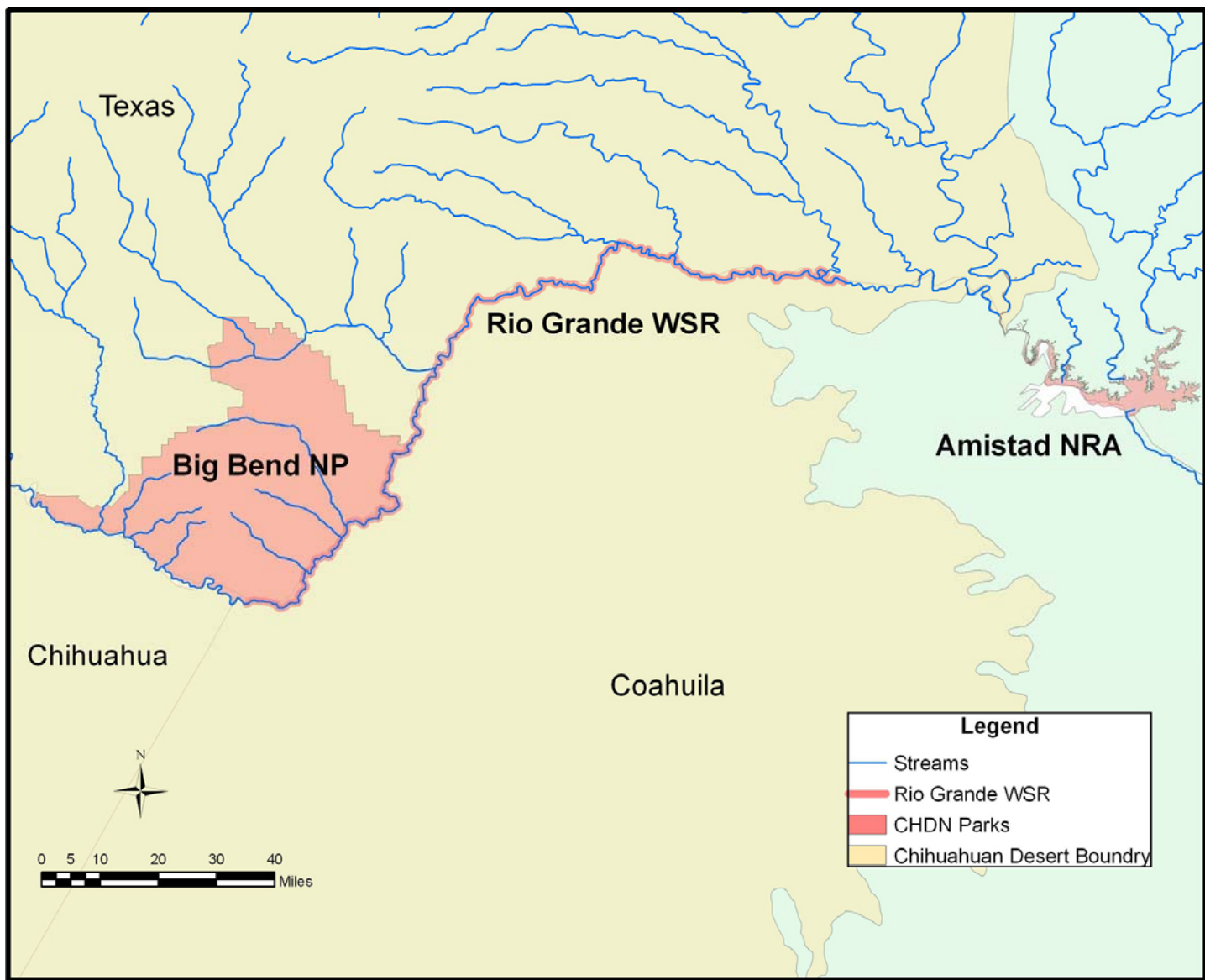


Figure 1. Map of Big Bend NP, the Rio Grande WSR and Amistad NRA. (Map produced by CHDN.)

Table 1. Potential list of species for the Rio Grande Wild & Scenic River corridor. Species list is primarily from Prival and Goode (2005), with additional observations from Forstner (pers. comm.. 2006). Order follows individual species list, by park, in text above. (*Table generated by H. Reiser, CHDN Network Coordinator.*)

GENUS	SPECIES	SUBSPECIES	COMMON NAME
AMPHIBIANS			
True Toads			
Bufo	debilis	debilis	Eastern Green Toad
Bufo	debilis	insidior	Western Green Toad
Bufo	nebulifer		Gulf Coast Toad
Bufo	punctatus		Red-spotted Toad
Bufo	speciosus		Texas Toad
Treefrogs			
Acris	crepitans	blanchardi	Blanchard's Cricket Frog
Hyla	arenicolor		Canyon Treefrog
Tropical Frogs			
Eleutherodactylus	guttulatus		Spotted Chirping Frog
Eleutherodactylus	marnockii		Cliff Chirping Frog
Narrow-mouthed Toads			
Gastrophryne	olivacea		Great Plains Narrow-mouthed Toad
Spadefoot Toads			
Scaphiopus	couchii		Couch's Spadefoot
True Frogs			
Rana	berlandieri		Rio Grande Leopard Frog
Rana	catesbeiana		American Bullfrog
REPTILES			
LIZARDS			
Alligator Lizards			
Gerrhonotus	infernalis		Texas Alligator Lizard
Geckos			
Coleonyx	brevis		Texas Banded Gecko
Coleonyx	reticulatus		Reticulate Banded Gecko
Hemidactylus	turcicus	turcicus	Turkish House Gecko
Iguanas & Allies			
Cophosaurus	texanus	scitulus	Chihuahuan Greater Earless Lizard
Cophosaurus	texanus	texanus	Texas Greater Earless Lizard
Crotaphytus	collaris		Eastern Collared Lizard
Gambelia	wislizenii		Long-nosed Leopard Lizard
Phrynosoma	cornutum		Texas Horned Lizard
Phrynosoma	modestum		Round-tailed Horned Lizard
Sceloporus	cowlesi		Southwestern Fence Lizard
Sceloporus	magister	bimaculosus	Twin-spotted Spiny Lizard
Sceloporus	merriami	annulatus	Big Bend Canyon Lizard
Sceloporus	merriami	longipunctatus	Presidio Canyon Lizard
Sceloporus	merriami	merriami	Merriam's Canyon Lizard
Sceloporus	olivaceous		Texas Spiny Lizard
Sceloporus	poinsettii	poinsettii	Northern Crevice Spiny Lizard

Species list cont.

GENUS	SPECIES	SUBSPECIES	COMMON NAME
Urosaurus	ornatus	ornatus	Texas Tree Lizard
Urosaurus	ornatus	schmidtii	Big Bend Tree Lizard
Uta	stansburiana		Common Side-blotched Lizard

Skinks

Eumeces	obsoletus		Great Plains Skink
Eumeces	tetragrammus	brevilineatus	Short-lined Skink

Whiptail Lizards

Aspidoscelis	gularis	gularis	Texas Spotted Whiptail
Aspidoscelis	inornata	heptagramma	Trans-Pecos Striped Whiptail
Aspidoscelis	inornata	llanuras	Plains Striped Whiptail
Aspidoscelis	marmorata	marmorata	Western Marbled Whiptail
Aspidoscelis	marmorata	reticulorians	Eastern Marbled Whiptail
Aspidoscelis	septemvittata	septemvittata	Big Bend Spotted Whiptail
Aspidoscelis	tesselata		Common Checkered Whiptail

SNAKES**Colubrid Snakes**

Arizona	elegans	arenicola	Texas Glossy Snake
Arizona	elegans	elegans	Kansas Glossy Snake
Arizona	elegans	philipi	Painted Desert Glossy Snake
Bogertophis	subocularis	subocularis	Trans-Pecos Ratsnake
Diadophis	punctatus	armyi	Prairie Ring-necked Snake
Diadophis	punctatus	regalis	Regal Ring-necked Snake
Drymarchon	melanurus	erebennus	Texas Indigo Snake
Elaphe	bairdi		Baird's Ratsnake
Elaphe	emoryi		Great Plains Ratsnake
Gyalopion	canum		Chihuahuan Hook-nosed Snake
Hypsiglena	torquata	jani	Texas Nightsnake
Masticophis	flagellum	lineatulus	Lined Coachwhip
Masticophis	flagellum	testaceus	Western Coachwhip
Masticophis	taeniatus	ornatus	Central Texas Whipsnake
Masticophis	taeniatus	taeniatus	Desert Striped Whipsnake
Nerodia	erythrogaster	transversa	Blotched Watersnake
Nerodia	rhombifer	rhombifer	Northern Diamond-backed Watersnake
Pituophis	catenifer	affinis	Sonoran Gophersnake
Pituophis	catenifer	sayi	Bullsnake
Rhinocheilus	lecontei	tessellatus	Texas Long-nosed Snake
Salvadora	grahamiae	grahamiae	Mountain Patch-nosed Snake
Salvadora	grahamiae	lineata	Texas Patch-nosed Snake
Salvadora	hexalepis	deserticola	Big Bend Patch-nosed Snake
Sonora	semiannulata	semiannulata	Variable Groundsnake
Sonora	semiannulata	taylori	Southern Texas Groundsnake
Tantilla	cucullata		Trans-Pecos Black-headed Snake
Tantilla	hobartsmithi		Smith's Black-headed Snake
Thamnophis	cyrtopsis	cyrtopsis	Western Black-necked Gartersnake
Thamnophis	cyrtopsis	ocellatus	Eastern Black-necked Gartersnake
Thamnophis	marcianus	marcianus	Marcy's Checkered Gartersnake

Species list cont.

GENUS	SPECIES	SUBSPECIES	COMMON NAME
Thamnophis	proximus	diabolicus	Arid Land Ribbonsnake
Thamnophis	proximus	rubilineatus	Red-Striped Ribbonsnake
Trimorphodon	biscutatus	vilkinsonii	Texas Lyresnake
Coralsnakes & Allies			
Micrurus	tener	tener	Texas Coralsnake
Threadsnakes			
Leptotyphlops	dulcis	dulcis	Plains Threadsnake
Leptotyphlops	humilis	segregus	Trans-Pecos Threadsnake
Vipers & Pitvipers			
Agkistrodon	contortrix	laticinctus	Broad-banded Copperhead
Agkistrodon	contortrix	pictigaster	Trans-Pecos Copperhead
Crotalus	atrox		Western Diamond-backed Rattlesnake
Crotalus	lepidus	klauberi	Banded Rock Rattlesnake
Crotalus	lepidus	lepidus	Mottled Rock Rattlesnake
Crotalus	molossus	molossus	Northern Black-tailed Rattlesnake
Crotalus	scutulatus	scutulatus	Northern Mohave Rattlesnake
TURTLES			
Cooters, Sliders, Box Turles, & Allies			
Pseudemys	gorzugi		Rio Grande Cooter
Trachemys	gaigeae	gaigeae	Big Bend Slider
Trachemys	scripta	elegans	Red-eared Slider
Mud Turtles			
Kinosternon	flavescens		Yellow Mud Turtle
Softshell Turtles			
Apalone	spinifera	emoryi	Texas Spiny Softshell
Tortoises			
Gopherus	berlandieri		Berlandier's Tortoise