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The Herpetofauna of the Research Ranch

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Collecting efforts over several decades by numerous workers, including Mark Doderer and the present authors, have led in the past to several editions of the list of the herpetofauna of the Research Ranch. The current list that follows, of the 44 species known or thought to occur on the Ranch, incorporates changes in taxonomy and nomenclature that have accrued since the last list was prepared. A few additional species may occur, and some may be erroneously listed, as for example some species of Whiptail lizards (*Cnemidophorus*). The Ranch is not semiarid to the extent of much of the adjacent territory, hence the depicted ranges of numerous semiarid species in small-scale maps of field guides such as those of Stebbins are deceptively misleading. For example, it is highly unlikely that Colorado River toads (*Bufo alvarius*), Banded geckoes (*Coleonyx*), or Leopard lizards (*Gambelia*) occur on the Ranch even though the range of each is shown on Stebbins' maps as occurring throughout our territory. Nevertheless such guides do suggest species that might be sought with reasonable expectation of occurrence, as for example the Southwestern Woodhouse's toad (*Bufo woodhousii australis*). Scientific and standard English names used here conform with the checklist of North American herpetozoa (Crother, B. I. (ed.) 2000. Scientific and standard English names of amphibians and reptiles of North America north of Mexico, with comments regarding confidence in our understanding. Soc. Study Amph. Rept. Herp. Circ. (29): I-iv, 1-82.).

TAILLESS AMPHIBIANS: six species of five genera.

Spadefoot toads: two species are listed. Couch's spadefoot (*Scaphiopus couchii*) is rarely seen except after deluges. The Chihuahua Desert spadefoot (*Spea multiplicata stagnalis*) is much more common.

Toads: only the Red-spotted toad (*Bufo punctatus*) is known from the Ranch. One or two other species may occur.

Treefrogs: only the Canyon treefrog (*Hyla arenicolor*) is known from the Ranch, and no other is likely to occur.

True frogs: two species are listed. The Chiricahua leopard frog (*Rana chiricahuensis*) and the Lowland leopard frog (*Rana yavapaiensis*) are recorded.

LIZARDS: nineteen species, of eight genera.

Whiptail lizards: seven species are said to occur on the Ranch, but we suspect some are in error; that is too many species to be essentially sympatric. Much work remains to be done on this group. Canyon spotted whiptail (*Cnemidophorus burti stictogrammus*), Chihuahuan spotted whiptail (*C. exsanguis*), Gila spotted whiptail (*C. flagellicaudus*), Arizona striped whiptail (*C. arizonae*), Sonoran spotted whiptail (*C. sonorae*), Sonoran tiger whiptail (*C. tigris punctilineatus*), Desert grassland whiptail (*C. uniparens*). The only *C. inornatus* complex lizard known from Arizona is what is now called *C. arizonae* (formerly *C. i. arizonae*, but *C. inornatus* in earlier Ranch lists). However, *C. arizonae* has been reliably recorded only from the Willcox area, east of the Ranch. Occurrence on the Ranch is dubious, but would be of great interest if confirmed. Its grassland habitat on the Ranch, however, is dominated by *C. uniparens*.

Collared lizards: Eastern collared lizard (*Crotaphytus collaris*). Majority current opinion rejects subspecies of this species.

Alligator lizards: Arizona alligator lizard (*Elgaria kingii nobilis*).

Skinks: Mountain skink (*Eumeces callicephalus*), Great Plains skink (*E. obsoletus*).

Earless lizards: Chihuahuan earless lizard (*Holbrookia maculata flavilenta*).

Horned lizards: Hernandez's short-horned lizard (*Phrynosoma h. hernandesii*), Round-tailed horned lizard (*P. modestum*), Regal horned lizard (*P. solare*).

Spiny lizards: Clark's spiny lizard (*Sceloporus c. clarkii*), Slevin's bunchgrass lizard (*S. slevini*), Southern Prairie lizard (*S. undulatus consobrinus*).

Tree lizards: Lined tree lizard (*Urosaurus ornatus linearis*). No subspecies of this species are recognized by Stebbins or Collins, but the checklist now in preparation includes this and other subspecies. The species is in need of a new analysis of geographic variation .

SNAKES: seventeen species, of ten genera.

Rattlesnakes: four species. Western diamond-backed rattlesnake (*Crotalus atrox*), Rock rattlesnake (*C. l. lepidus*) (only one subspecies in U.S. according to most recent research), Black-tailed rattlesnake (*C. m. molossus*), Mojave rattlesnake (*C. s. scutulatus*).

Ring-necked snakes: Regal ring-necked snake (*Diadophis punctatus regalis*).

Hog-nosed snakes: Mexican hog-nosed snake (*Heterodon nasicus kennerlyi*).

Fangless nightsnakes: Spotted nightsnake (*Hypsiglena torquata ochrorhynchus*).

Kingsnakes: Western black kingsnake (*Lampropeltis getula nigrata*), Arizona mountain kingsnake (*L. p. pyromelana*) (the subspecies *L. p. woodini*, formerly listed for the Research Ranch, is now not considered valid).

Whipsnakes: Sonoran whipsnake (*Masticophis bilineatus*) (no subspecies are now recognized), Sonoran coachwhip (*M. flagellum cingulum*).

Coralsnakes: Arizona coralsnake (*Micruroides e. euryxanthus*).

Gopher snakes: Sonoran gopher snake (*Pituophis catenifer affinis*).

Patch-nosed snakes: Big Bend patch-nosed snake (*Salvadora deserticola*) (some authorities regard this as a subspecies of *S. hexalepis* (which therefore could not occur with *S. deserticola* on the Research Ranch, as formerly listed), but we here follow the undocumented authorization of the deceased expert on the genus, Charles Bogert. Also Mountain Patch-nosed snake, *S. g. grahamiae*.

Gartersnakes: Western black-necked gartersnake (*Thamnophis c. cyrtopsis*), Mexican gartersnake (*T. eques megalops*), Checkered garter snake (*Thamnophis m. marcianus*).

TURTLES: two species, of two genera.

Mud turtles: Sonoyta mud turtle (*Kinosternon sonoriense longifemorale*).

Box turtles: Desert box turtle (*Terrapene ornata luteola*).

INTRODUCED SPECIES: Bullfrog (*Rana catesbeiana*), found at least once but now perhaps extirpated; Bolson tortoise (*Gopherus flavomarginatus*), successfully introduced and reproducing, but long-term success unlikely without rigid control of predation and devoted care.

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