

Reptiles and Amphibians of Great Basin National Park and Vicinity



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This guide is for use in Great Basin National Park, North and South Snake Ranges, and Spring and Snake Valleys, White Pine County and Millard County, Utah. It is based on museum searches and field observations conducted as part of the Servicewide Inventory and Monitoring Program.



US Geological Survey Photo

Racer (*Coluber constrictor*)

Unique Characteristics: Plain brown, olive, or greenish body.

Description: Large, quick snake with long, slender tail, 20-73 inches (50-182cm).

Similar Species: *Masticophis taeneatus* has a cream or white stripe on each side.

Habitat: Found in sagebrush, grassland, and pinyon/juniper habitats, below 8,000 feet. Absent from extremely dry and mountainous habitats.

Range: Northern Great Basin, Wasatch front, Colorado Plateau, Northwest. Collected at Cleveland Ranch, Spring Valley, White Pine County, Nevada.

Food: Small mammals and reptiles.

Reproduction: Oviparous, 3-7 eggs laid June-August.

GRBA status: Not Present.



Utah Department of Wildlife Resources Photo

Ringneck Snake (*Diadophis punctatis*)

Unique Characteristics: Yellowish-orange to red underside flecked with black.

Description: Neckband (may be absent), drab olive, brownish, gray, or black dorsal coloration, 8-30 inches (20-75cm).

Habitat: Shadscale/Greasewood, sagebrush, and pinyon/juniper habitats, along streams and washes, under logs and rocks below 7,000 feet. Highly fossorial.

Range: Isolated Great Basin populations, Wasatch front. Documented from Snake and Pine Valleys, Utah.

Food: Small frogs, lizards, snakes, worms, and slugs. Venomous to small prey.

Reproduction: Oviparous 1-10 eggs laid during the early summer.

GRBA status: Potential.



Night Snake (*Hypsiglena torquata*)

Unique Characteristics: Large pair of brown blotches on neck. Vertical pupils.

Identification: Gray, light brown, or beige body color with gray or brown blotches on back and sides, 12-26 inches (30-65cm).

Similar Species: Wandering gartersnake has round pupils and is usually found near water.

Habitat: Found in shadscale/greasewood, sagebrush, and pinyon/juniper habitats, below 8,700 feet Usually under cover or seen on roads. Crepuscular or nocturnal.

Range: Throughout Great Basin and Western deserts.

Food: Small lizards. Venomous to its prey.

Reproduction: Oviparous, 2-9 eggs laid April-August.

GRBA status: Present.



Utah Department of Wildlife Resources Photo

Sonoran Mountain kingsnake (*Lampropeltis pyromelana*)

Unique Characteristics: Red, black, and white bands.

Description: Markings unmistakable. White nose, anal scale single, 18-41 inches (45-104cm).

Similar Species: Longnosed Snake has single subcaudal scales.

Habitat: Rocky pinyon/juniper sagebrush, riparian and montane habitats below 9,100 feet. Highly fossorial. Often surface active before and after summer thunderstorms.

Range: Isolated populations in Great Basin. Found in North Snake, Schell Creek, Egan, Fortification, and Wah Wah Ranges.

Food: Lizards and small mammals.

Reproduction: Oviparous 3-6 eggs, laid June-July.

GRBA status: Potential.



Striped Whipsnake (*Masticophis taeniatus*)

Unique Characteristics: *Cream, yellow, or white stripe on each side, bisected by a black line.*

Identification: Black, brown, or gray above often with an olive cast, yellowish below, grading towards white at the head and coral pink towards the tail, 36-72 inches (90-183cm).

Similar Species: Racer is plain brown, olive, or greenish colored.

Habitat: Common in shadecale/greasewood, sagebrush, and pinyon/juniper habitats, below 9,400 feet. Diurnal.

Range: Throughout Great Basin.

Food: Lizards, snakes, small birds and mammals

Reproduction: Oviparous, clutch of 2-12 eggs laid June-July.

GRBA status: Present.

Comments: Very quick.



Great Basin Gophersnake (*Pituophis cantifer*)

Unique Characteristics: When agitated loudly hisses, known locally as “blowsnake”.

Identification: Yellow or cream colored with black or brown dorsal blotches. Dark line across head in front of the eyes and from behind the eye to the angle of lower jaw. Dorsal scales keeled, 36-110 inches (90-275cm).

Habitat: Common in all habitats below 9,000 feet. Crepuscular.

Range: Throughout Great Basin.

Food: Rodents, birds, rabbits, eggs, lizards, snakes.

Reproduction: Oviparous, 1-2 clutches of 2-24 eggs laid June-August.

GRBA status: Present.



Long-nosed Snake (*Rhinocheilus lecontei*)

Unique Characteristics: *Most sub-caudal scales single.*

Description: Slim with black saddles flecked with whitish. Spaces between saddles are cream, yellow, pink, or red with black flecks on sides, snout long and pointed, lower jaw countersunk, 20-41 inches (50-104 cm).

Similar Species: Sonoran Mountain Kingsnake has divided subcaudal scales.

Habitat: Found in open bajada and basin shadscale/greasewood habitats, below 5,500 feet. Nocturnal.

Range: Great Basin, Mojave, and Sonoran deserts.

Food: Specialist on *Cnemidophorus*, lizards, small snakes, rodents.

Reproduction: Oviparous, 1-2 clutches of 4-11 eggs laid June-August.

GRBA status: Potential.



Wandering gartersnake (*Thamnophis elegans*)

Unique Characteristics: *Only aquatic reptile in area.*

Identification: Olive green, brown, gray, black body with dark blotches in a checkered pattern. Longitudinal stripe usually absent, 24-36 inches (61-92cm).

Similar Species: Night snake has vertical pupils, neck blotches, and is usually found in drier habitats.

Habitat: Abundant in riparian and spring habitats, below 10,500 feet.

Range: Northern Great Basin.

Food: Earthworms, insects, and trout.

Reproduction: Viviparous 4-19 young born in July-September.

GRBA status: Present.



Great Basin Rattlesnake (*Crotalus viridis lutosus*)

Unique Characteristics: *The only rattlesnake in area. Rattle on tail.*

Description: Cream, brown, tan, or yellowish above with blotches, 15-65 inches (37-162 cm).

Habitat: Shadscale/greasewood, sagebrush, pinyon/juniper, coniferous forests, riparian, and grassland rocky habitats to 10,000 feet. Hibernate at communal dens, moving up to 5 miles away and returning to the same hibernacula each year.

Range: Throughout the Great Basin.

Food: Rodents, lizards, and birds

Reproduction: Viviparous, 4-12 young born August-October.

GRBA status: Present.

Comments: **ONLY VENOMOUS SNAKE IN AREA**



Great Basin Collared Lizard (*Crotaphytus bicinctores*)

Unique Characteristics: Two conspicuous *black collar markings.*

Description: Large lizard, greenish tinge to dorsal side, short snout, 2.75-4.5 inches (6.9-11.2cm).

Similar Species: Long-nosed Leopard Lizard has large spots, lacks black collar markings, and is not found on rocks.

Habitat: Common in *rocky outcrops* in shadcale/greasewood and sagebrush habitats below 7,500 feet.

Range: Great Basin and Mojave deserts.

Food: Arthropods, lizards, berries, plant material.

Reproduction: Oviparous, 3-8 eggs laid during the summer.

GRBA status: Not Present.



Long-nosed leopard lizard (*Gambelia wislizenii*)

Unique Characteristics: Large lizard with many dark spots.

Description: Large tail and head, long snout, capable of color change, 3.25-5.75 inches (8.1-14.4 cm).

Similar Species: Collared Lizard is usually found on rocky outcrops.

Habitat: Found in basin and bajada shadscale/greasewood and sagebrush habitats, below 6,000 feet.

Range: Throughout Great Basin hydrologic province.

Food: Lizards and arthropods.

Reproduction: Oviparous, 1-11 eggs laid March-July.

GRBA status: Potential.



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Short-horned lizard (*Phrynosoma hernandesi*)

Unique Characteristics: Small dagger-like head spines (horns).

Description: Beige, brown, gray, or reddish above, rear of throat and chest buff or yellowish orange, 1.75-4.3 inches (4.4-10.8 cm).

Similar Species: Desert horned lizard has longer horns.

Habitat: Found on loose soils in sagebrush and pinyon/juniper habitats, below 11,000 feet.

Range: Found in Spring and Steptoe valleys.

Food: Ants, spiders, snails, insects.

Reproduction: Ovoviparous, 5-36 young born July-September.

GRBA status: Not present.



Desert Horned lizard (*Phrynosoma platyrhinos*)

Unique Characteristics: Large, dagger-like head spines (horns).

Description: One row of well-developed fringe scales on each side of its body and one row of slightly enlarged scales on each side of the throat, 2.5-3.75 inches (6.5-9.4 cm).

Similar Species: Short-horned lizard has short, stubby horns.

Habitat: Common on loose soils in basin and bajada shadscale/greasewood and sagebrush habitats, below 6,500 feet, crepuscular.

Range: Throughout Great Basin.

Food: Ants and insects.

Reproduction: Oviparous, 1-2 clutches of 2-16 eggs laid May-August.

GRBA status: Present, Baker Administrative Site.



Sagebrush Lizard (*Sceloporus graciosus*)

Unique Characteristics: Longitudinal striping, often a black bar on shoulder.

Identification: Gray or brown above, usually with blotches or crossbars and light stripes on upper sides, 1.875-2.625 inches (4.7-6.5 cm).

Similar Species: Western Fence Lizard has dark, crescent shaped crossbanding. Side-blotched lizard has black spot behind axilla and complete gular fold.

Habitat: Abundant in shadscale/greasewood, sagebrush, and pinyon/juniper habitats below 10,500 feet. Prefers loose soils.

Range: Throughout Great Basin.

Food: Insects, spiders, mites, ticks, scorpions.

Reproduction: Oviparous, 1-2 clutches of 2-8 eggs, laid June-August.

GRBA status: Present.



Western Fence Lizard (*Sceloporus occidentalis*)

Unique Characteristics: Dark, crescent-shaped crossbands.

Identification: Dark lizard. Blue throat and belly patches may be absent in females and juveniles, 2.25-3.5 inches (5.6-8.7cm).

Similar Species: Sagebrush lizard has longitudinal banding.

Habitat: Rocky outcrops in shadscale/greasewood, sagebrush, and pinyon/juniper habitats below 9,000 feet.

Range: Throughout Great Basin.

Food: Insects and spiders.

Reproduction: Oviparous, 1-3 clutches of 3-17 eggs laid April-July.

Comments: May quickly change from dark coloration to light, inoculates deer ticks against lyme disease.

GRBA status: Present.



Northern Side-blotched lizard (*Uta stansburiana*)

Unique Characteristics: Bluish-black blotch on each side of the chest behind the forelimb, complete gular fold.

Description: Small brown, gray, or yellowish lizard, patterned or plain above, male may be flecked with blue and yellow, 1.5-2.4 inches (3.7-5.9cm).

Similar Species: Sagebrush Lizard has blue on its belly and incomplete gular fold.

Habitat: Abundant in shadscale/greasewood and sagebrush shrub habitats, infrequent in woodland habitats, below 9,000 feet.

Range: Throughout Great Basin.

Food: Insects, spiders, ticks, sowbugs, arthropods

Reproduction: Oviparous, 1-3 clutches of 1-8 eggs.

GRBA status: Present.



Western Skink (*Eumeces skiltonianus*)

Unique Characteristics: Only skink in area; shiny, cycloid scales.

Identification: Small limbs; broad brown stripe down the back, edged with black and bordered on each side by a conspicuous whitish beige dorsolateral stripe. Juveniles tail blue, 2.375-3.25 inches (5.3-8.1cm).

Habitat: Common in riparian and pinyon/juniper ecotones below 8,300 feet.

Range: Throughout the Great Basin.

Food: Insects and arthropods.

Reproduction: Oviparous, 2-6 eggs laid June-July; nest tended by female.

GRBA status: Present.



Great Basin Whiptail (*Cnemidophorus tigris*)

Unique Characteristics: The only whiptail lizard in the area in the area, fine granular scales on back, much larger belly scales arranged in rows.

Identification: Black and sides with spots, bars, or a network of dusky or black markings on background of gray, brown, yellowish, 2.375-4.5 inches (5.9-11.2cm).

Similar Species: None.

Habitat: Basin and bajada shadscale/greasewood and sagebrush habitats below 7,000 feet.

Range: Throughout Great Basin.

Food: Insects, spiders, scorpions, and lizards.

Reproduction: Oviparous, 1-2 clutches of 1-8 eggs, laid April-August.

GRBA status: Present, Baker Administrative Site.



Western Toad (*Bufo boreas*)

Unique Characteristics: Warty skin and white to cream colored dorsal stripe.

Description: Dusky, gray, or greenish above, warts set in dark blotches, horizontal pupils, large parotoid glands, and lack of cranial crests, 2.5-5 inches (6.2-12.5 cm)

Similar Species: Great Basin Spadefoot has wedge-shaped spade on rear feet. Woodhouse's toad has prominent cranial crests.

Habitat: Desert streams, springs, lakes, and mountains, below 11,800 feet. Fossorial.

Range: Great Basin, records from western White Pine county, NV, questionable record from Gandy, UT.

Reproduction: Late January-July depending upon latitude, elevation, and local conditions.

Voice: Like a "peeping chick", no vocal sac.

GRBA status: Absent.



Woodhouse's Toad (*Bufo woodhousii*)

Unique Characteristics: Warty skin, whitish, dorsal stripe, and prominent cranial crests.

Identification: Gray, yellowish brown, olive, or blackish above with dark blotches and elongate divergent parotoids, 1.75-5 inches (4.5-12.5 cm).

Similar Species: Great Basin Spadefoot has wedge-shaped spade on rear feet. Western toad has no cranial crests.

Habitat: Sandy areas in sagebrush habitats, farms, irrigation ditches up to 8,500 feet.

Range: Records from Gandy, UT.

Voice: "nasal w-a-a-h" (snore or bawling) lasting 1.5-2 seconds.

Reproduction: Breeds in quiet streams, ponds, marshes, lakes, pools, March-July.

GRBA status: Absent.



Northern Leopard Frog (*Rana pipiens*)

Unique Characteristics: Well defined, pale bordered, oval or dark spots on back. Well-defined, dorsolateral folds continuous and not angled inward.

Identification: Slim, green or brownish frog with white to cream colored underside, 2-4.375 inches (5-11.1cm).

Similar Species: Bullfrog much larger and plain colored. Spotted frog has light colored jaw stripe with upturned eyes.

Habitat: Springs, slow streams, marshes with permanent water and aquatic vegetation, up to 11,000 feet.

Range: Great Basin distribution spotty. Found in Spring and Snake Valley marshes.

Voice: "Motorboat snore", lasting 1-5 seconds.

Reproduction: Permanent water, March-June.

GRBA status: Absent.



Utah Department of Wildlife Resources Photo

Columbia Spotted frog (*Rana luteiventris*)

Unique Characteristics: Light colored jaw-stripe, eyes slightly upturned, yellowish, orange below.

Identification: Light brown, dark, or grayish above with spots, 1.75-4 inches (4.4-10 cm).

Similar Species: Leopard Frog has much larger spots on back. Bullfrog is plain colored and much larger.

Habitat: Occur in slow streams, springs, marshes, and ponds, below 6,000 feet. Highly aquatic.

Range: Spotty Great Basin distribution, found in Snake Valley.

Voice: "Series of faint, rapid, low-pitched clicks, like clicking your tongue on the roof of your mouth", lasting about 1-10 seconds.

Reproduction: Breeds in quiet waters, springs, streams, and ponds as soon as snowmelt permits, February to July.

GRBA status: Absent.



Utah Department of Wildlife Resources Photo

Bullfrog (*Rana catesbeiana*)

Unique Characteristics: Large frog with conspicuous eardrums.

Identification: Olive, green, or brown above, legs banded, 3.5-8 inches (8.7-20cm)

Similar Species: Leopard frog smaller with large spots on back. Spotted frog smaller with small spots on back and slightly upturned eyes.

Habitat: Permanent water, below 9,000 feet.

Range: **Non-native** to Nevada, widely introduced, responsible for many native amphibian and fish declines.

Voice: “Low bellowing jug-o-rum, when alarmed a high pitched meow”.

Reproduction: Permanent quiet water, February-July.

GRBA status: Potential.



Great Basin Spadefoot (*Spea intermontanus*)

Unique Characteristics: Vertical pupils, black spade on each hind foot, no parotoid glands, glandular boss between eyes.

Description: Dusky green or gray above, whitish below, 1.5-2.5 inches (3.7-6.4 cm).

Similar Species: Bufonid toads have prominent paratoid glands.

Habitat: Occur in loose, alkaline soils in shadscale/greasewood and sagebrush. Highly fossorial, may aestivate for a full year.

Range: Throughout Great Basin.

Reproduction: Breed May-July in temporary or permanent water, often after spring rains.

Voice: “hoarse wah-wah-wah”

GRBA status: Present, Baker Administrative Site.

Glossary

Amplexus- The sexual embrace of a male amphibian, where the male clasps the female from behind

Anterior- Before or towards the front.

Axilla- "Armpit"

Boss- Protuberance or rounded swelling between the eyes in some spadefoots toads or true toads. It may be glandular or bony.

Bufoiid- Of the family Bufonidae (true toads).

Countersunk- Sunk beneath the margins of-as in the jaws of burrowing snakes, in which the lower jaw fits snugly within the margins of the upper jaw.

Crepuscular- Active during dawn and dusk.

Cranial Crests- Ridges that frame the upper rim of the upper eyelids in toads.

Cycloid Scales- Scales whose free rear borders are smoothly rounded.

Diurnal- Active during the day.

Dorsal- Upper surface of the body.

Dorsolateral- Upper sides of the body.

Dorsolateral fold- Lengthwise glandular ridge between the side of the body and the middle of the back in certain frogs.

Ecotone- Border between one plant community and another (pinyon/juniper riparian ecotone).

Fossorial- Living primarily underground.

Gravid- Laden with eggs or pregnant.

Gular fold- Fold of skin across the rear or lower portion of the throat in some lizards or salamanders.

GRBA-Great Basin National Park.

Hemipenis (Hemipenes)- One of the paired copulatory organs of lizards and snakes.

Interorbital- Region between the eyes.

Keel- Lengthwise ridge on the scales of certain lizards or snakes.

Labium- Lip.

Lateral stripe- Lengthwise stripe on the side of the body.

Oviparous- Producing eggs that hatch after laying.

Paratoid gland- One of a pair of large, wartlike glands at the back of the head in toads.

Posterior- Behind or to the rear.

Present-Found within Great Basin National Park.

Vent- Opening on the surface of the body of the cloaca which is the common discharge of intestinal, urinary, and sexual canals.

Ventral- Underside or lower body surface.

Viviparous- Producing young born alive without an egg.

Vocal sac- Sac of loose skin on the throat of frogs and toads that becomes distended and acts as a resonating chamber when they vocalize.



Great Basin National Park
Resource Management
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