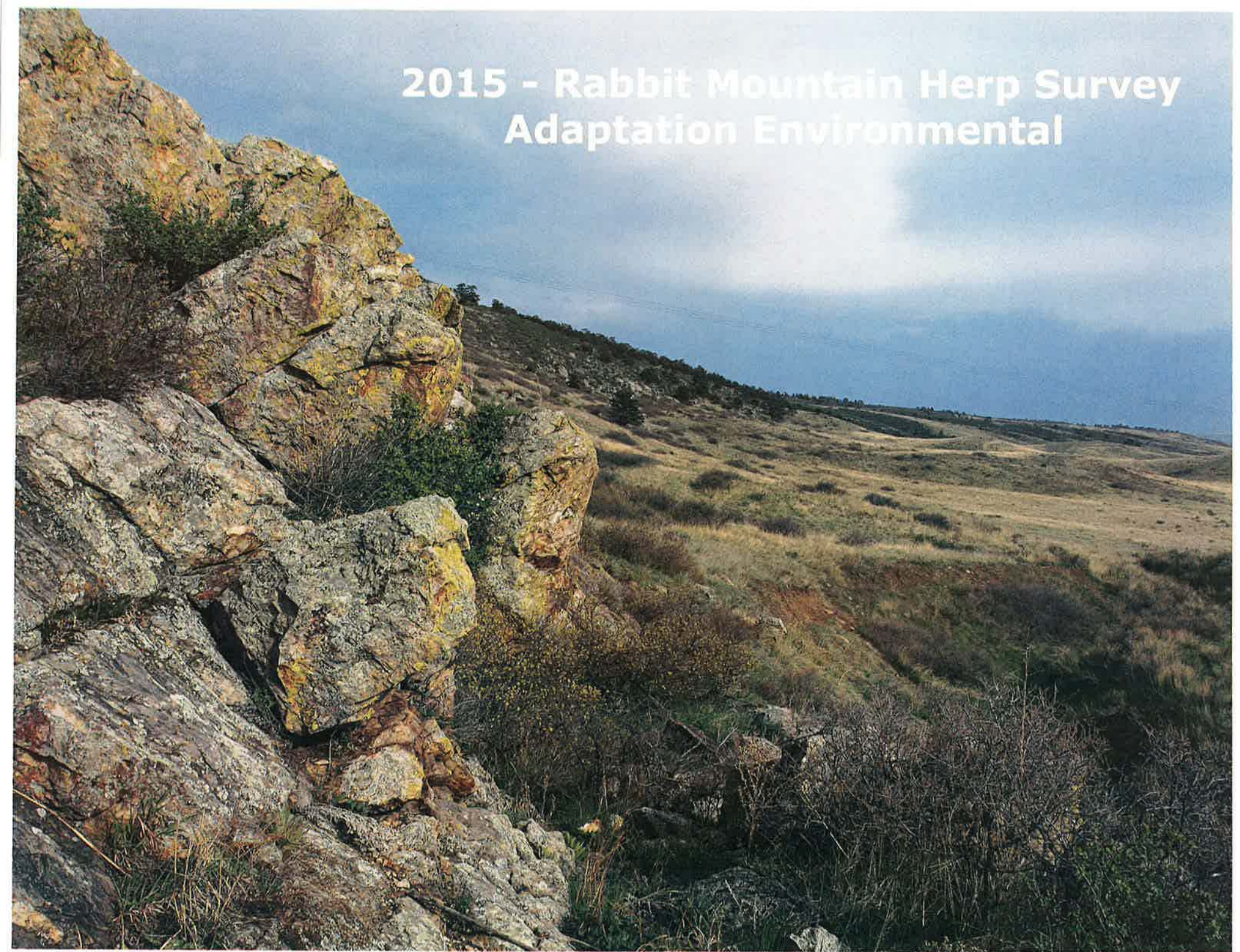


# 2015 - Rabbit Mountain Herp Survey Adaptation Environmental



# Plains Black-headed Snake

## *Tantilla nigriceps*

Not Dangerous

Status: Common

Rank: Secure



### Overview

Black-headed Snakes are fossorial, living the majority of their lives underground. They are often detected in rocky hill sides at Rabbit Mountain Open Space, and after precipitation. Previous to this survey, less than 10 records of the species were known from Boulder County.

### Ecology

Black-headed snakes are the smallest snakes at Rabbit Mountain Open Space. Foraging underground, due to their fossorial nature, they are rarely encountered. There are enlarged, grooved teeth in the rear upper jaw which help to deliver mild venom to subdue their prey. 1-3 eggs are laid in late-June and July and typically hatch in September.

### Diet

Black-headed snakes prey upon centipedes, spiders and other insects.

### Conservation Concerns

Habitat fragmentation, road mortality, and loss of habitat are conservation concerns to the Black-headed snakes.

### Management Recommendations

Provide educational information regarding Black-headed snakes and their roles in the ecosystem. Limit property access to trails only. Minimize disturbance of micro-habitats associated with natural cover (e.g. rocks).

### Description

A small slender tan or cream colored snake with a dark gray-brown or black head cap. The head cap tapers to a point on its rear edge and extends back more than 3 small scales behind the parietal furrow (central seam between rear-most large head scales). The scales are smooth and the small head is barely distinct from the neck. A red, pink, or orange stripe runs down the center of the belly.

### Size

Adults grow up to 15 inches in length.



# Bullsnake

## *Pituophis catenifer sayi*

Non-Venomous

Status: Common

Rank: Secure



### Overview

Bullsnakes prefer grasslands and prairie dog colony regions at Rabbit Mountain Open Space, but may also be detected throughout the entire property.

### Ecology

Bullsnakes are the largest snake at Rabbit Mountain Open Space. They actively forage above ground and in mammal burrows. 5-20 eggs are laid in late-June to mid-July, and typically hatch in late-August and September. Defensive posturing and fierce hissing may appear to mimic that of rattlesnakes, and Bullsnakes also will wiggle their tail at times producing a faint, buzzing sound.

### Diet

Bullsnakes prey on small to medium size mammals, birds/eggs, and lizards.

### Conservation Concerns

Habitat fragmentation, road mortality, humans, and loss of wetlands are conservation concerns to the Bullsnake. Mistaken identities of this species are often confused with rattlesnakes and may lead to its demise.

### Management Recommendations

Provide educational information regarding Bullsnakes and their roles in the ecosystem. While they occur throughout grassland habitats, prairie dog colonies may be important habitats for food and refuge.

### Description

Dorsally they are yellowish or pale brown, with a series of large dark brown or black blotches, and smaller dark spots on the sides. Ventrally they are yellowish, either uniform or with brown markings.

### Size

Adult Bullsnakes average 36-50 inches, and larger specimens have been recorded. Hatchlings average 12 inches.



Juvenile Bullsnake Mask

# Common Garter Snake

## *Thamnophis sirtalis*

Not Dangerous

Status: Not Common

Rank: Secure



### Overview

A not so common species in Colorado and a pleasant surprise at Rabbit Mountain Open Space. (Note: The Plains Garter Snake and Wandering Garter Snake are more abundant species here.) Common Snakes are a diurnal, terrestrial species and may be frequently found in vegetation near natural water sources.

### Ecology

Not dangerous to humans, the species uses mild venom from enlarged teeth at the rear of its mouth to subdue and digest prey. When threatened, Wandering Garter Snakes may flatten their head, strike, and release musk and feces from its vent. Females give birth to 10-40 young in mid-August to early September.

### Diet

Common Garter Snakes are opportunistic predators of small mammals, birds, amphibians (and larva), fish, earthworms and invertebrates.

### Conservation Concerns

Habitat fragmentation, humans, road mortality, and loss of habitat are conservation concerns to the species. Water quality and invasive species (e.g. American bullfrogs) may significantly and negatively impact populations.

### Management Recommendations

Provide educational information regarding Common Garter Snakes and their roles in the ecosystem; particularly as predators and prey. Maintain good water quality with refuges of cover (e.g. vegetation, rocks).

### Description

A relatively small and slender-bodied snake with three crème colored stripes running the length of its body. Patterns of black spots on a red background can be seen between the stripes. Belly is usually light, white or grey with a row of small black spots along the edges. Juveniles look like small adults. The scales are keeled. There are enlarged, grooved teeth in the rear upper jaw.

### Size

Adults grow 24 - 44 inches in length.

# Plains Garter Snake

## *Thamnophis radix*

Not Dangerous

Status: Common

Rank: Secure



### Overview

A common species and generalist of Front Range habitats, including Rabbit Mountain Open Space. Plains Garter Snakes are a diurnal, terrestrial species and may be frequently found in vegetation near natural water sources.

### Ecology

Not dangerous to humans, the species uses mild venom from enlarged teeth at the rear of its mouth to subdue and digest prey. When threatened, Plains Garter Snakes may flatten their head, strike, and release musk and feces from its vent. Females give birth to 6-30 young in mid-August to early September.

### Diet

Plains Garter Snakes are opportunistic predators of small mammals, birds, amphibians (and larva), fish, earthworms, slugs and invertebrates.

### Conservation Concerns

Habitat fragmentation, humans, road mortality, and loss of habitat are conservation concerns to the species. Water quality and invasive species (e.g. American bullfrogs) may significantly and negatively impact populations.

### Management Recommendations

Provide educational information regarding Plains Garter Snakes and their roles in the ecosystem; particularly as predators and prey. Maintain good water quality with refuges of cover (e.g. vegetation, rocks).

### Description

A relatively small and slender-bodied snake with a single stripe down the middle of its back usually bright yellow to orange in color and a lighter colored stripe on each side of the body located on the 3<sup>rd</sup> to 4<sup>th</sup> scale row. Juveniles look like young adults. Belly scales are usually white or light grey. The scales are keeled. There are enlarged, grooved teeth in the rear upper jaw.

### Size

Adults grow 24 - 42 inches in length.

# Wandering Garter Snake

## *Thamnophis elegans vagrans*

Not Dangerous

Status: Common

Rank: Secure



### Overview

A common species and generalist of Front Range habitats, but less abundant at Rabbit Mountain Open Space. (Note: The Plains Garter Snake is a more abundant species here.) Wandering Garter Snakes are a diurnal, terrestrial species and may be frequently found in vegetation near natural water sources.

### Ecology

Not dangerous to humans, the species uses mild venom from enlarged teeth at the rear of its mouth to subdue and digest prey. When threatened, Wandering Garter Snakes may flatten their head, strike, and release musk and feces from its vent. Females give birth to 6-11 young in mid-August to early September.

### Diet

Wandering Garter Snakes are opportunistic predators of small mammals, birds, amphibians (and larva), fish, and invertebrates.

### Conservation Concerns

Habitat fragmentation, humans, road mortality, and loss of habitat are conservation concerns to the species. Water quality and invasive species (e.g. American bullfrogs) may significantly and negatively impact populations.

### Management Recommendations

Provide educational information regarding Wandering Garter Snakes and their roles in the ecosystem; particularly as predators and prey. Maintain good water quality with refuges of cover (e.g. vegetation, rocks).

### Description

A relatively small and slender-bodied snake with a mix of gray and dark brown and a lighter stripe along the center of its back. Juveniles of the species may have a checkered pattern that becomes more conspicuous with age. Color and pattern variation is common in the species with local tendencies existing. The scales are keeled. There are enlarged, grooved teeth in the rear upper jaw.

### Size

Adults grow 24 - 42 inches in length.

# Lined Snake

## *Tropidoclonion lineatum*

Non-Venomous

Status: Common

Rank: Secure



### Overview

Fossorial species rarely observed finds at Rabbit Mountain Open Space extended the known range of the species 12 miles north. Lined Snakes are nocturnal. Found under debris, natural cover and artificial cover.

### Ecology

Not dangerous to humans. When threatened, Lined Snakes may strike or gape, displaying and open mouth. Breeding occurs in late spring, early summer babies born in mid-August to early September. Average brood between 7 and 8. Ovoviviparous

### Diet

Lined Snake feed primarily on earthworms.

### Conservation Concerns

Habitat fragmentation, humans, road mortality, and loss of habitat are conservation concerns to the species.

### Management Recommendations

Provide educational information regarding Lined snakes and their roles in the ecosystem. Protecting rocky outcrop areas and minimizing their disturbance will maintain important and associated micro-habitats.

### Description

Lined snakes are olive green to brown with a distinctive tan or yellow stripe down the back from head to tail. They have similar stripes down each side on scale rows 2 and 3. On the belly, they have a double row of clean-cut black half-moon spots running down the middle. They have narrow heads and small eyes. Keeled scales..

### Size

Adults grow 12 to 16 inches in length.



# Central Plains Milk snake

## *Lampropeltis triangulum gentilis*

Non-Venomous

Status: Common

Rank: Secure



### Overview

Milk snakes are very secretive animals and mostly fossorial, living the majority of their lives underground. They have been observed in rocky outcroppings at Rabbit Mountain Open Space. Their name was commonly given when observed near cattle in pastures/ barns, and it was believed they stole milk from cows.

### Ecology

Active from March through October, Milk snakes are slow moving and active on the surface only at night. Milk snakes are difficult to detect at Rabbit Mountain Open Space, however moisture may bring them to the surface. Foraging occurs both above and below ground. 4-8 eggs are laid in July and hatch in late August/ early September.

### Diet

Milk snakes prey upon small rodents, birds, lizards, other snakes, and bird/ reptile eggs.

### Conservation Concerns

Habitat fragmentation, humans, road mortality, and loss of habitat are conservation concerns to the Milk snakes. Collection as pets may be a threat.

### Management Recommendations

Provide educational information regarding Milk snakes and their roles in the ecosystem. Protecting rocky outcrop areas and minimizing their disturbance will maintain important and associated micro-habitats.

### Description

The Central Plains Milk snake is a red, black, and white (sometimes more yellow than white) banded snake. The scales of these snakes are smooth.

### Size

Hatchling are typically 5-8 inches, while adult are commonly between 16-32 inches.



# Eastern Yellow-bellied Racer

## *Coluber constrictor flaviventris*

Non-Venomous

Status: Common

Rank: Secure



### Overview

Eastern Yellow-bellied Racers are common at Rabbit Mountain Open Space. They likely occur in all habitat types across the entire study site. Natural and artificial cover provides a beneficial refuge to the species when not actively foraging for prey.

### Ecology

Racers are fast moving, highly active, diurnal snakes. They are active foragers with well-developed eyes for spotting prey movement. They undergo an ontogenic color change from hatchling to adult.

### Diet

Eastern Yellow-bellied Racers prey upon insects, lizards, frogs, toads, snakes, small mammals, and birds.

### Conservation Concerns

Habitat fragmentation, humans, road mortality, and loss of wetlands are conservation concerns to the Eastern Yellow-bellied Racer.

### Management Recommendations

Provide educational information regarding Eastern Yellow-bellied Racers and their roles in the ecosystem. Maintain habitats with access to cover and adequate water sources.

### Description

Eastern Yellow-bellied Racers are olive-green snakes with yellow bellies as adults. Hatchlings and juvenile snakes are patterned with square saddles on their backs with a white or yellowish belly.

### Size

Eastern Yellow-bellied Racers are medium sized slender snakes ranging from 24-48 inches long. Hatchlings range between 8-12 inches long.

Adult Racer



Sub-adult Racer



Hatchling Racer



# Prairie Rattlesnake

## *Crotalus viridis*

Venomous

Status: Common

Rank: Secure



### Overview

Prairie Rattlesnakes are common at Rabbit Mountain Open Space. They occur throughout the entire study site. General information should be provided on-site for how to act/ assist in cases of snakebite: 1. Move to safety, 2. Call 911 (or immediately take pets to a veterinarian), 3. Attempt to remain calm, 4. Do not try to remove venom (e.g. sucking, cutting, and extraction kits)

### Ecology

Prairie Rattlesnakes are the only dangerous snake found at Rabbit Mountain Open Space. They are ambush predators hunting along trails used by prey. Their venom is used to subdue prey and start the digestion process. Young are born during late summer and early fall.

### Diet

Prairie Rattlesnakes feed on small to medium size mammals, lizards, amphibians, and birds/ eggs.

### Conservation Concerns

Human persecution is a significant threat to the species. Habitat fragmentation, road mortality, and loss of habitat are conservation concerns to the Prairie Rattlesnake.

### Management Recommendations

Provide educational information regarding Prairie Rattlesnakes snakes and their roles in the ecosystem. Limit property access to trails only, maintain healthy prairie dog colonies.

### Description

Prairie Rattlesnakes are usually lightly colored in hues of brown. Patches of dark brown are often distributed in a dorsal pattern. A color band may be seen at the back of the eye. Prominent white/ cream facial stripes are present. Scales are strongly keeled. A rattle at the tip of the tail is common, but not always present.

### Size

Prairie Rattlesnakes commonly grow to more than 30 inches in length. The maximum recorded size is nearly 5