

COLORADO PARKS & WILDLIFE

# Quick Key to Amphibians and Reptiles of Colorado



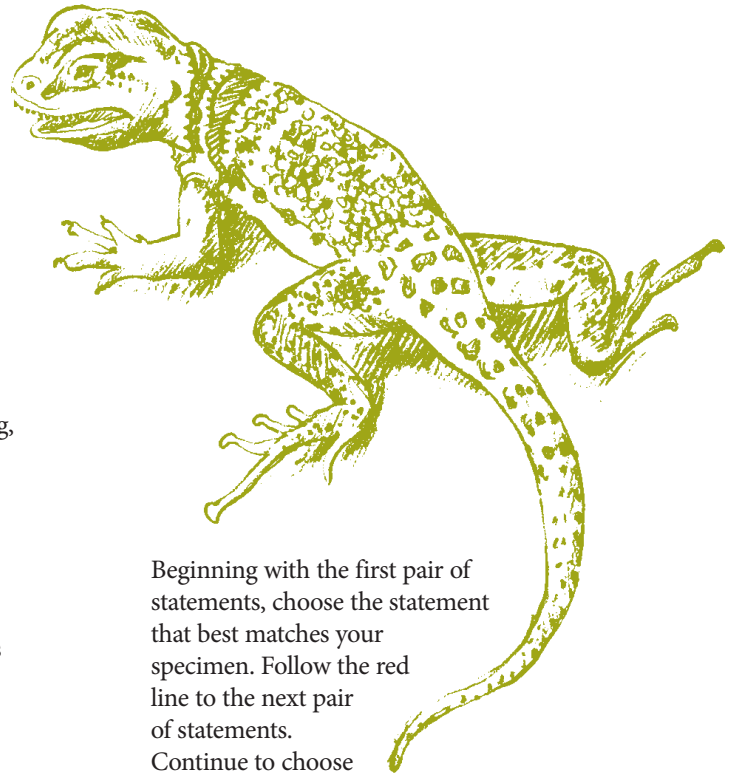
Colorado is home to more than 70 amphibian and reptile species. This Quick Key was developed to help you identify these diverse animals. No matter where you are in the state, in the city, near a pond, even enjoying the view from over 12,000 feet, you likely are sharing that space with an amphibian or reptile.

The current distribution, abundance, and population trends of many salamander, frog, toad, turtle, lizard, and snake species in Colorado are poorly known. Some species appear to be declining, but there isn't enough information to determine whether the decline is cause for alarm or simply a natural fluctuation.

To learn more about these interesting animals, check out the Colorado Parks & Wildlife (CPW) website, which has additional photographs, species descriptions, sound files of species calls, and ecological information.

### How do I use this key?

This key contains paired statements describing adult reptiles and amphibians. Drawings highlight important identifying characteristics to look for on the animal. Composite drawings combine the features of several animals.

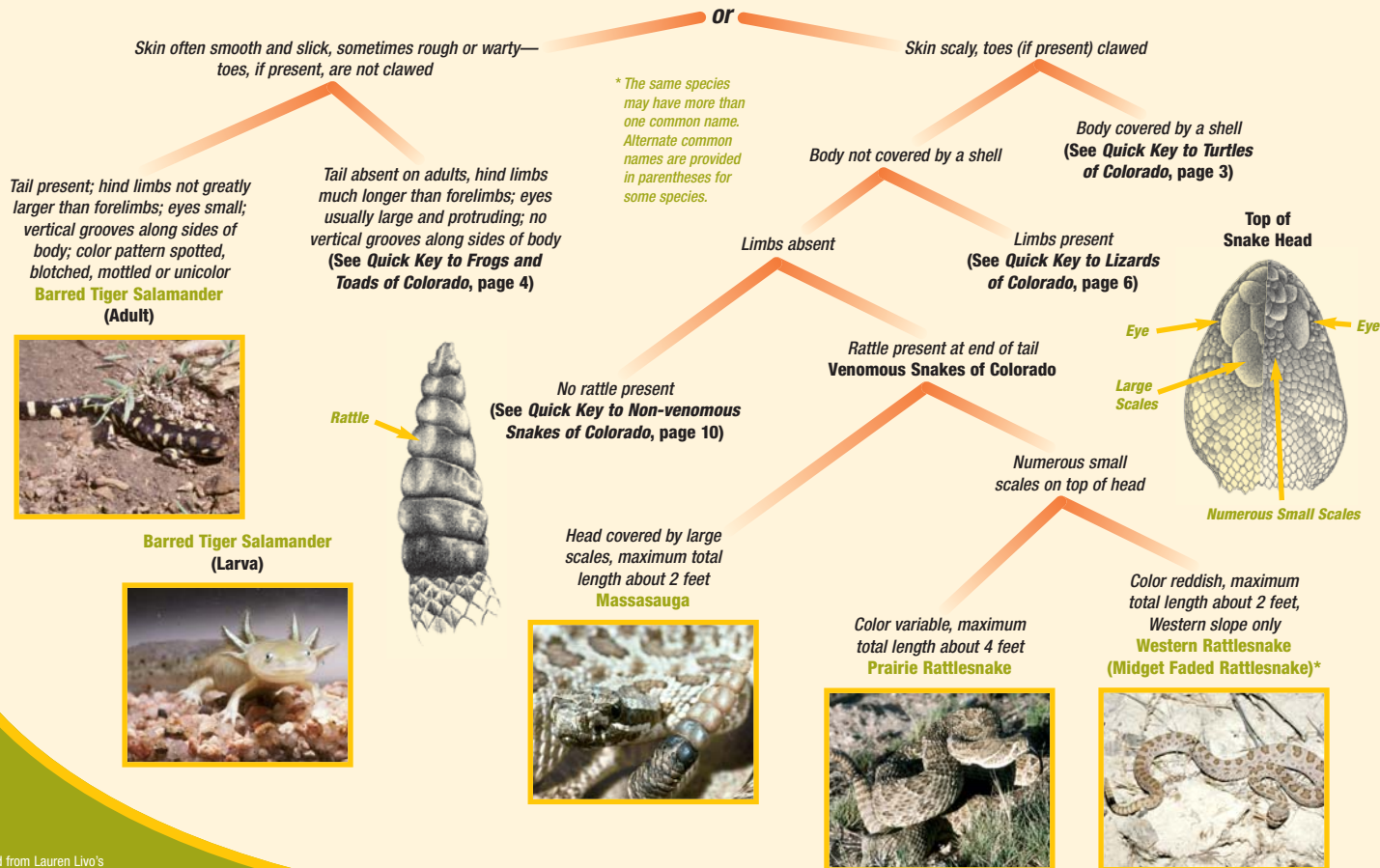


Beginning with the first pair of statements, choose the statement that best matches your specimen. Follow the red line to the next pair of statements.

Continue to choose the description that most closely matches the animal until you reach a species name and photo. You can confirm your identification using the CPW website. If you find an animal that doesn't fit any description found in this key, it may be introduced to the state, an exotic, non-native species or even a juvenile or color variant of a native species. If possible, take a picture of the animal to submit to CPW for identification.

Photos in the key that are depicted with **orange** borders and species names have not been seen in Colorado for decades. If you find one of these animals, report your observation immediately and document the location and identification of the animal with photographs.

# Quick Key to AMPHIBIANS and REPTILES of Colorado



# Quick Key to TURTLES of Colorado

or

Carapace (upper shell) hard, covered by rigid, horny plates,  
five claws on forefeet

Carapace flat and leathery, with row of raised tubercles  
(bumps) on leading edge, three claws on forefeet, elongated snout  
**Spiny Softshell Turtle**

High domed upper shell with many  
conspicuous yellow lines against  
a dark background, plastron  
(lower shell) with distinct hinge,  
primarily found on land (terrestrial)

**Ornate Box Turtle**



Upper shell green or brown,  
with few or no yellow markings

Carapace mostly green, head  
with yellow or orange streaks

Narrow yellow streaks on head,  
no indentation in carapace (upper shell)  
behind head, rear carapace smooth,  
and plastron (lower shell) bright red  
**Painted Turtle**



Large red blotch behind each eye in addition  
to yellow streaks on head, indentation in  
upper shell behind head, large dark spots  
on plastron (lower shell), rear of upper shell  
jagged, no notch in upper jaw **NON-NATIVE**

**Pond Slider**



Carapace lacking saw-toothed rear  
margin, plastron double-hinged  
**Yellow Mud Turtle**



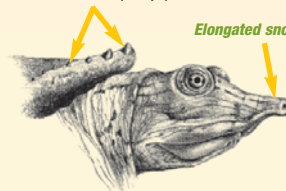
Carapace mostly  
brownish: no yellow  
streaks on head

Carapace with saw-toothed rear margin,  
plastron small and lacking hinge  
**Snapping Turtle**

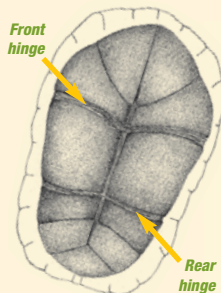


Raised tubercles (bumps)

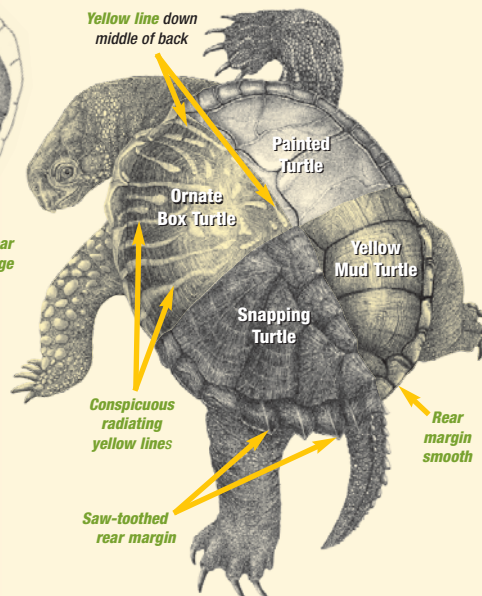
Elongated snout



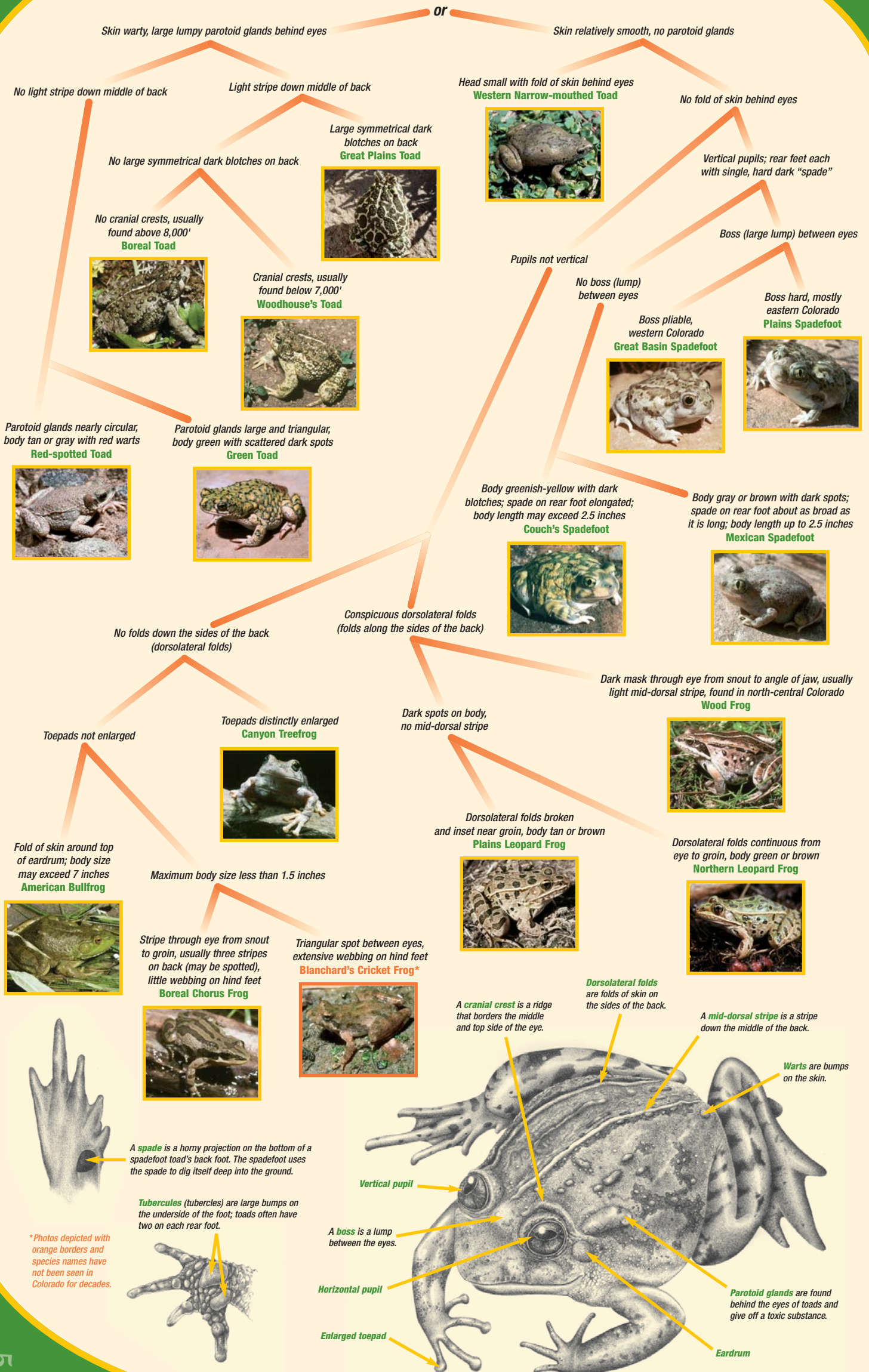
Double-hinged Plastron



Composite Turtle

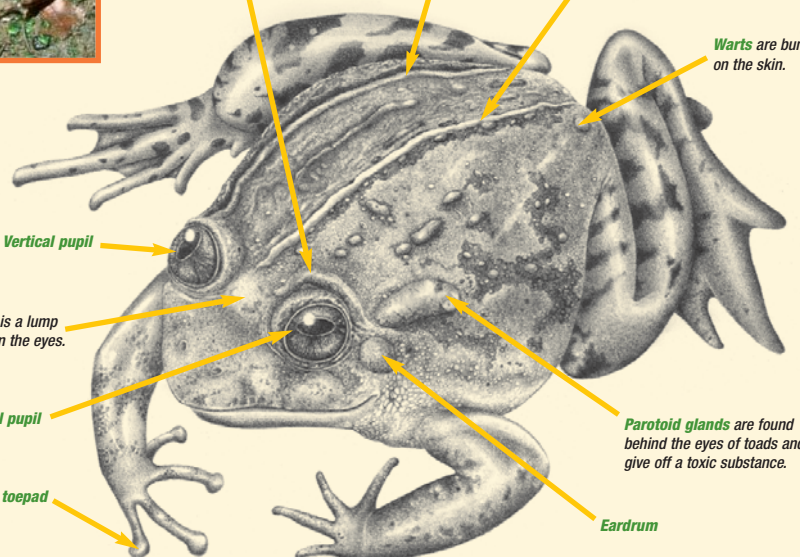
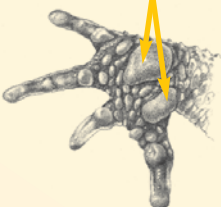


# Quick Key to FROGS and TOADS of Colorado



A spade is a horny projection on the bottom of a spadefoot toad's back foot. The spadefoot uses the spade to dig itself deep into the ground.

Tubercles (tubercles) are large bumps on the underside of the foot; toads often have two on each rear foot.



Composite Frog/Toad

# Quick Key to LIZARDS of Colorado

or

Horn-like spines on back of head

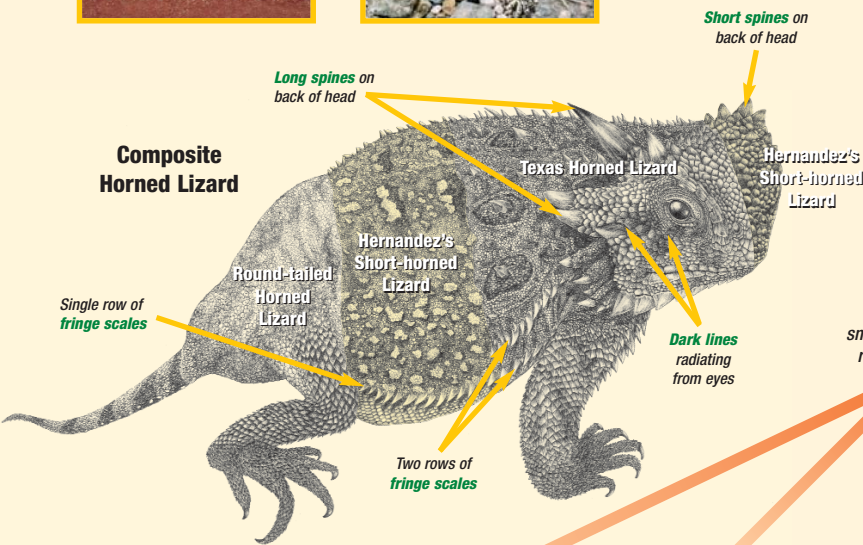
No horn-like spines on back of head

Short spines on back of head, no dark bars radiating from eyes

Long spines on back of head, two rows of fringe scales on sides of body, dark bars radiating from eyes  
**Texas Horned Lizard**

No fringe scales on sides of body  
**Round-tailed Horned Lizard**

Single row of fringe scales on sides of body,  
**Hernandez's Short-horned Lizard**



Scales variable, but not very shiny

Rear margin of each scale on back pointed

Scales on back rounded and granular

Scales on back smooth and shiny with rounded rear edges

Continued from this point on page 8

Individual scales clearly black and cream, total length to 13.75 inches  
**Great Plains Skink**

Black wedge-shaped mark on side of neck, up to 13 inches total length  
**Desert Spiny Lizard**

Longitudinal stripes down length of very slender body, total length to about 7.75 inches



Usually has light stripe along each side of back contrasting strongly with brown body and dark stripes; occurs south and west of Arkansas River  
**Variable Skink**

Body tan with several dark stripes; occurs north and east of Arkansas River  
**Many-lined Skink**



Keeled scales on rear of thigh, dorsal color variable

No black wedge-shaped mark on neck

Granular scales on rear of thigh, black bar usually present on shoulder  
**Common Sagebrush Lizard**

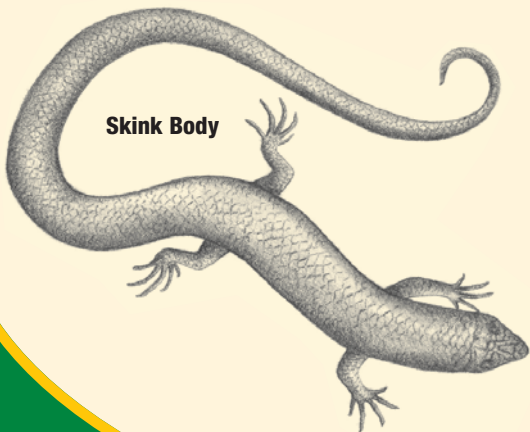
Western slope and San Luis Valley  
**Plateau Fence Lizard**

Eastern Colorado  
**Prairie Lizard**



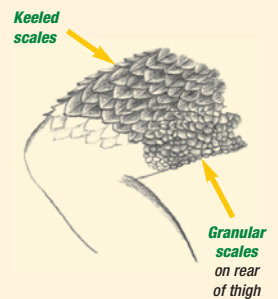
Western Colorado

North-central to southeastern Colorado



South-central Colorado

Eastern Colorado



# Quick Key to LIZARDS of Colorado

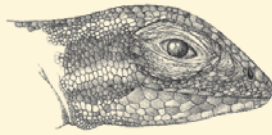
(See previous page for Horned Lizards, Skinks, and Spiny Lizards)

or

External ear openings visible

No ear opening

No external ear openings  
Common Lesser Earless Lizard



Distinct neck between head and body, no large and rectangular belly scales

No distinct neck between head and body, large and rectangular belly scales

Dark collar-like mark on neck  
Eastern Collared Lizard



No dark collar-like mark on the neck

Stripes running length of body, no spots or checkered pattern

Found on western slope  
Plateau Striped Whiptail



Found on eastern slope  
Six-lined Racerunner



Conspicuous brown spots on back  
Long-nosed Leopard Lizard



No conspicuous brown spots on back

Checkered pattern

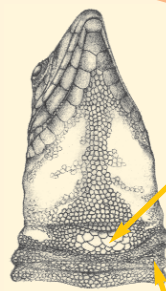
Scales down middle of back not enlarged; black spot on chest behind foreleg  
Common Side-blotched Lizard



Row of enlarged scales down middle of back  
Ornate Tree Lizard



Scales in front of gular fold abruptly enlarged; occurs on Eastern Slope

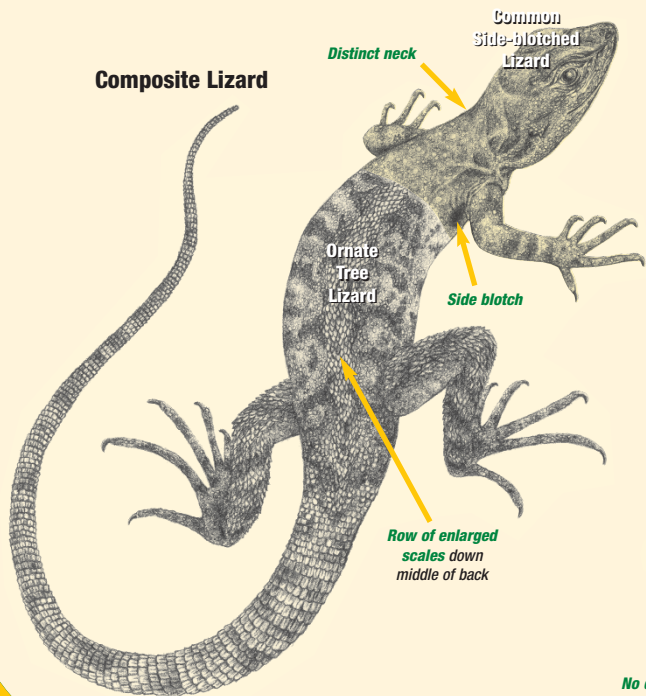


Gular fold

Scales in front of gular fold not abruptly enlarged; occurs on Western Slope  
Tiger Whiptail



Composite Lizard



One or two complete stripes down center of back; more checkered appearance; back of thigh spotted or reticulated  
Common Checkered Whiptail



Single stripe down center of back (stripe may be incomplete); less checkered appearance; unbroken, irregular pale streak on posterior surface of one or both thighs  
Colorado Checkered Whiptail



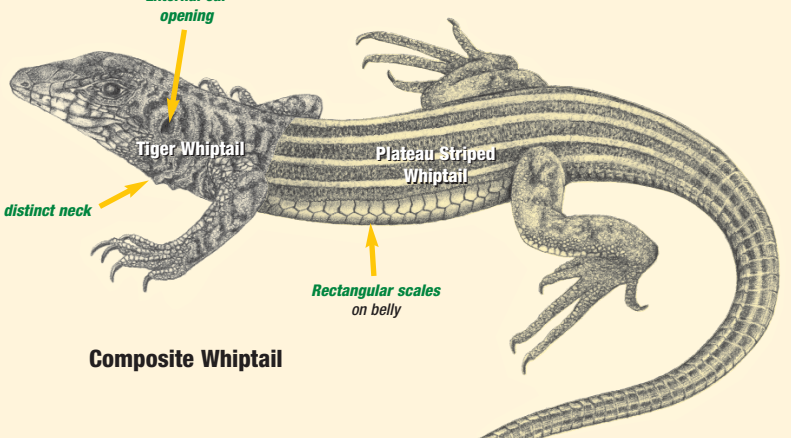
External ear opening

No distinct neck

Tiger Whiptail

Plateau Striped Whiptail

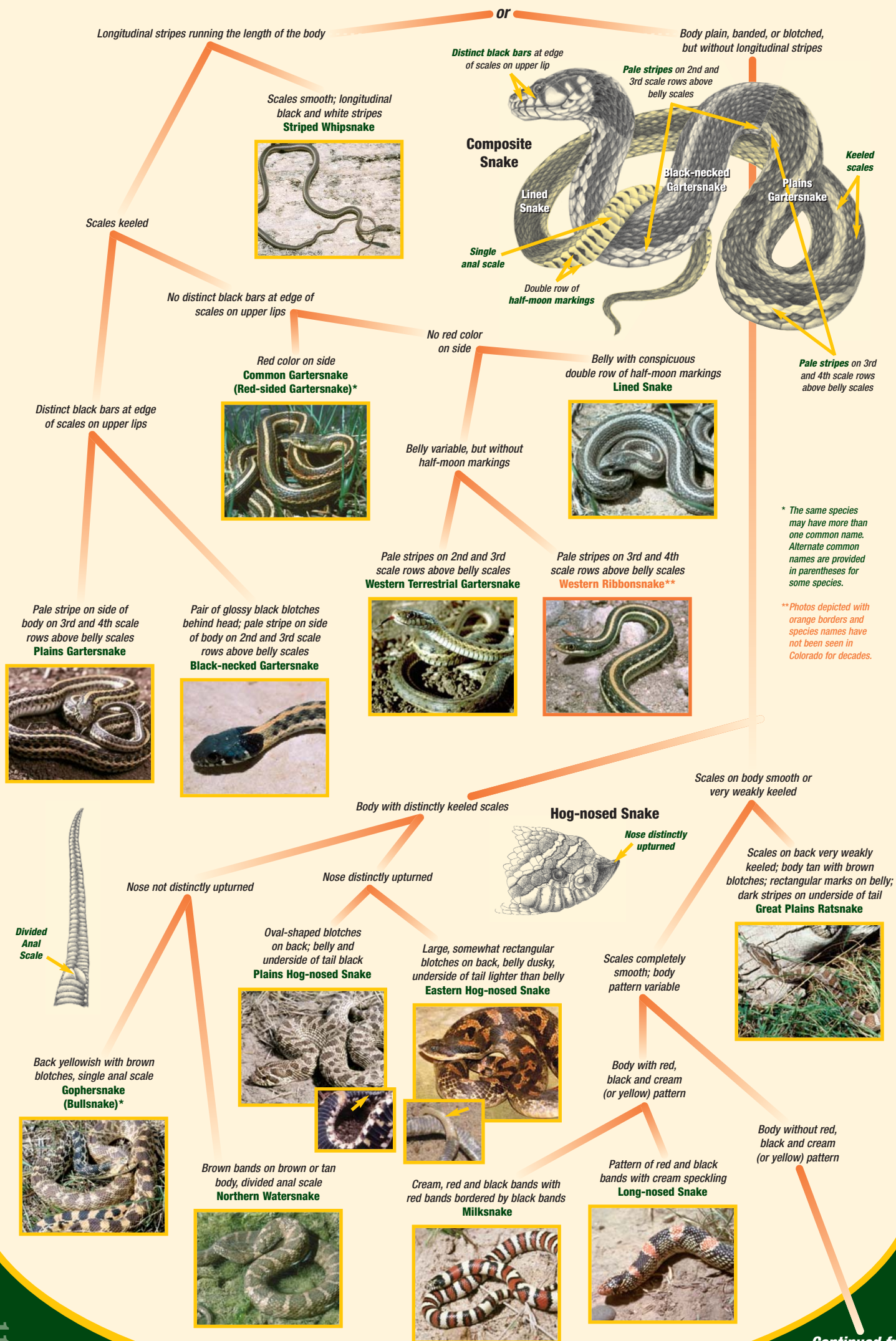
Rectangular scales on belly



Composite Whiptail

# Quick Key to NON-VENOMOUS SNAKES of Colorado

(See page 2 for Key to Venomous Snakes)



\* The same species may have more than one common name. Alternate common names are provided in parentheses for some species.  
 \*\*Photos depicted with orange borders and species names have not been seen in Colorado for decades.

Continued from this point on page 12



# Quick Key to NON-VENOMOUS SNAKES of Colorado

or

No pattern of brown blotches on paler background

Pattern of brown blotches on paler background

Tan body, black head, adults less than 15 inches

Western slope  
**Smith's Black-headed Snake**



Body and color varies, adults larger than 15 inches

Eastern slope  
**Great Plains Black-headed Snake**



Vertical pupils, divided anal scale, length less than about 2 feet

Single anal scale; length to 56 inches  
**Glossy Snake**



Distribution in southeastern Colorado  
**Chihuahuan Nightsnake**



Distribution in western Colorado  
**Desert Nightsnake**



No black and white bands and no black with white speckling

Pattern of black and white bands or black with white speckling

Tail resembles braided whip; adults large (to 80 inches), color variable  
**Coachwhip**



Pattern of alternating black and white bands, distribution in southwestern Colorado  
**California Kingsnake**



Black with white speckling, distribution in southeastern Colorado  
**Speckled Kingsnake**



Tail plain; not resembling braided whip

Olive body with orange ring around neck  
**Ring-necked Snake**



No olive body with orange ring around neck

Worm-like appearance, dorsal and ventral scales about the same size, vestigial eyes  
**Texas Blind Snake (Texas Threadsnake)\***



Body not worm-like in appearance

Body variable (orange, brown, or gray), often with dark saddles; maximum total length about 15 inches  
**Western Groundsnake**



No dark saddles on dorsum, maximum length exceeds 15 inches

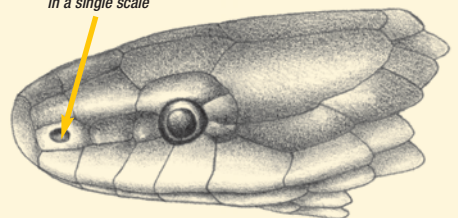
Greenish body with yellow or cream belly; nostril centered between two separate scales  
**North American Racer**



Body bright grass green; nostril centered in a single scale  
**Smooth Greensnake**

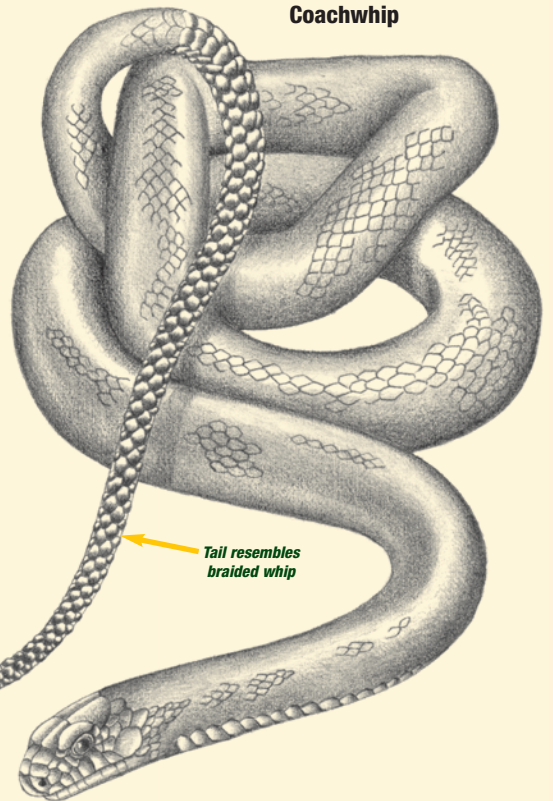


Nostril centered in a single scale



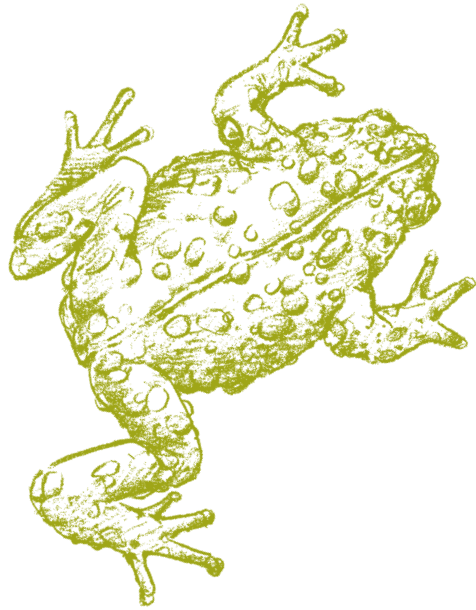
**Smooth Greensnake**

**Coachwhip**



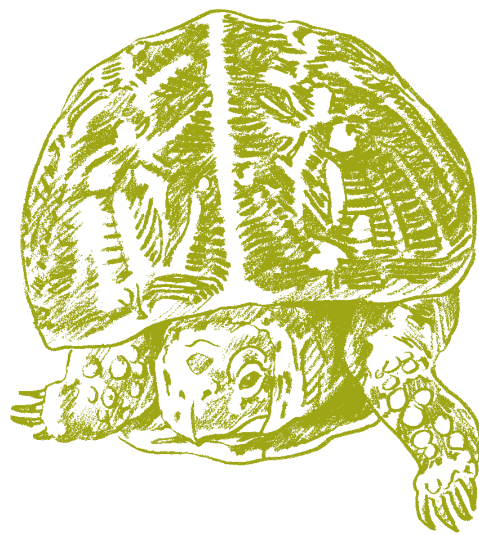
Tail resembles braided whip

\* The same species may have more than one common name. Alternate common names are provided in parentheses for some species.



### How to Observe Reptiles and Amphibians

- Learn to recognize venomous snakes and observe them from a safe distance.
- Be gentle on the animals and their habitat. Do not trample amphibian breeding sites.
- Use caution when lifting or turning objects to find animals. If possible, wear protective gloves. If you remove animals from under rocks or logs, place the objects back in their original positions and then release any animals you captured next to the object. The microhabitats under these objects are used by many kinds of organisms; it may take years to develop suitable conditions for some of them.
- Do not collect live specimens unless you are working on a specific research project and have the necessary scientific collection permit from the Colorado Parks & Wildlife. Instead, take photographs of the animals you find. Specimens collected as road kills can be donated (with data noting location and date of collection) to the University of Colorado Museum in Boulder.



ILLUSTRATIONS © MARJORIE LEGGITT

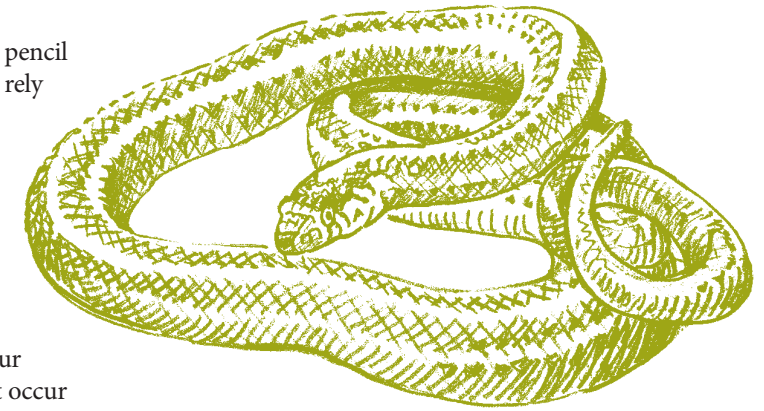
- Do not move animals from one location to another. Do not release pets or other individuals that have been in captivity for an extended period of time or held with other animals. Some of the possible results of translocating animals or releasing captives include: death of animals released in unsuitable habitat, disruption of populations that are genetically adapted to local conditions, transmission of disease, harm to native wildlife, and confusion of the natural distribution of the released species.
- Clean your nets, boots, and other gear with a 10% chlorine bleach solution between surveys to reduce the possibility of inadvertently transferring pathogens from one location to another.
- Be careful not to create a traffic hazard on roads. If you find a snake, turtle, and other species on a road and can safely remove it, be sure to pull over to the side and park off the road if possible. Record your observation data, then release the animal well off the road on the side to which it was headed. Do not stop or attempt to retrieve animals from heavily traveled roads if doing so would endanger you or other motorists.

### Tips for Recording Herpetofaunal Data

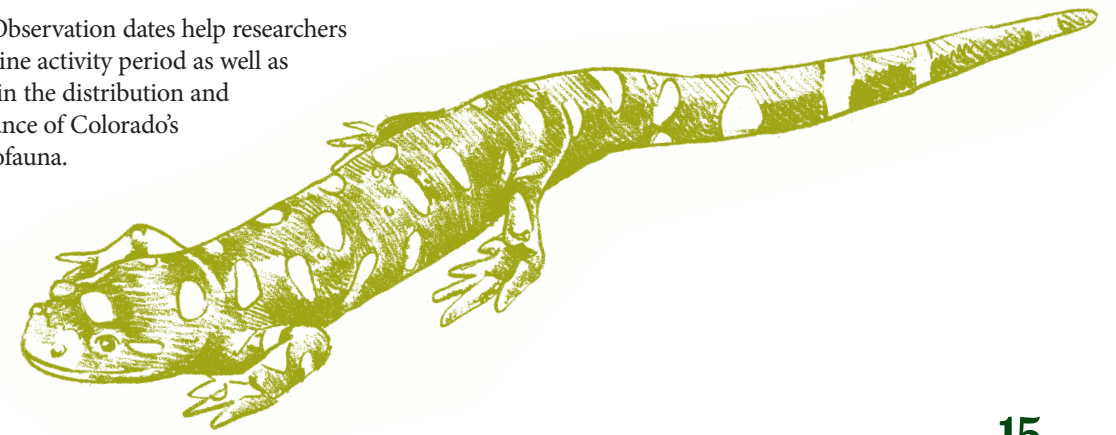
- Always bring something to write on and a pencil or waterproof pen. Good science does not rely on memory!
- It's essential that you know where you are. Take the time to find your location on a map or record the GPS coordinates.
- Visit a site at different times of the year and under different weather conditions, and try to visit a site in different years. By making multiple visits, you increase your chances of finding most of the species that occur in the area and you can also document year-to-year changes.

### Essential Information for Every Observation

- **Precise location.** Your observations are much more valuable when you have good information about the locations. GPS units and even Smartphones can provide Latitude and Longitude or UTM (Universal Transverse Mercator) coordinates. Topographic maps and online sources can show additional information, such as elevation and names of geographic features. A written description of the location enhances the information and can help cross-check the reliability of geographic coordinates. You really can't record too much information on the location.
- **Date.** Observation dates help researchers determine activity period as well as trends in the distribution and abundance of Colorado's herpetofauna.



- **Number of individuals detected for each species.** The number of individuals of each species you saw or heard is important for assessing changes in their relative abundance over time.
- **Photographs.** Submitting a photograph that documents the amphibian or reptile you observed allows others to have confidence in your identification, and it allows researchers to make maximal use of your information for scientific analyses. Of course, taking a photograph won't always be possible. In these cases, you should write down the identifying characteristics you observed in your specimen(s).



## Good Places to Look for Amphibians and Reptiles

- Edges and shallows of lakes and ponds
- Marshes and other wetlands
- Creeks and margins of rivers
- Intermittent stream courses with permanent pools
- Pools that form after heavy rains or floods
- Rock outcrops
- Sandy prairies
- Plains and valleys with lots of rodent burrows
- Arroyos (dry gulches, washes)
- Debris on the ground near abandoned ranch or farm buildings
- Prairie dog towns (be alert for rattlesnakes)



The purchase of Colorado fishing and hunting licenses or a State Parks pass supports wildlife conservation. Buy yours today:

- Online—[cpw.state.co.us](http://cpw.state.co.us)
- By phone—(800) 244-5613
  - At CPW Offices and State Parks
- At License Vendors statewide



COLORADO PARKS & WILDLIFE  
6060 Broadway, Denver, CO 80216  
(303) 297-1192

[cpw.state.co.us](http://cpw.state.co.us)

COVER PHOTO © LAUREN LIVO AND STEVE WILCOX  
CONTENT © CPW BY WENDY HANOPHY  
DESIGN BY STATE OF COLORADO IDS DESIGN