OUICK KEY TO REPTILES AND AMPHIBIANS NEVADA CITY AREA

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We made this key to help novices with field identifications. Only those species likely to be found in the area are included, with the more common species listed first. Some species we have yet to personally see here. Please report sightings of noted species, or any not in this key, to us at 277-4440. Your comments and suggestions are welcome. Some of these species are suffering from habitat loss and over collecting, and a few are protected by law [protected]. Please treat any animals you capture gently and with respect; replace any logs or stones you overturn as you found them. It is against California law to break apart logs or rocks to collect reptiles. To learn more about the diet, range, and natural history of particular species, refer to the references at the end of the key.

TURTLES Α.

Western Pond Turtle: shell to 6"; brown or olive with pattern of fine yellow lines on shell. Common in ponds and slow streams. Look for head above water surface, or basking on rocks or logs. Males wander far from water. (You may also find non-native released pet turtles, such as red-eared sliders or box turtles.) [PROTECTED]



B. LIZARDS

a. Lizard is a "bluebelly" lizard, with tail about same length as body; up to 8" long. See b.

aa. Lizard is otherwise: slender with very long tail, or flat with very short tail. See c.

b. Scales of back pointed; rough when stroked backwards. All zones, most common lizard

Northwestern Fence Lizard: 6-8"; coloration greatly variable (and can darken or lighten skin color at will); usually patterned with bars of gray and brown, but may be unpatterned, black, or have turquoise flecks. Has rough scales on back; blue bars on belly & throat, with orange or yellow hind thighs (females less colorful). Ac tive during the day on rocks, logs, and trees. Males stake out territories and do "pushups" display.

bb. Small scales and smooth. Usually rust color behind fore legs. Usually above 6000 ft.

Sagebrush Lizard: 4-5"; brownish-patterned above, with blue belly bars. Similar to Fence Lizard but smaller,





with smooth scales on back, often rust color behind forelegs, higher elevations. Most often on ground, rocks, under shrubs.

- c. "Snakelike" lizard, tail about twice body length. See d.
- cc. Flattened lizard with horns on head, very short tail.

Coast Horned Lizard: 3-5"; body disc-shaped and flattened, covered with short spines, horns on head (commonly called "horned toad"). Lives in areas with open ground; cryptic coloration and habits. Likes sandy soils to bury itself in. [protected][report sightings]

- d. Body roundish in cross section, no fold of skin on sides. Usually fast moving. See e.
- dd. Body squarish in cross section. Fold of skin along side when it exhales. Very common. Alligator Lizards: to 11", tail about twice head & body length; stout triangular head; may bite (harmless) or smear captor with excrement; usually seen in mornings, late afternoon, dusk, or hiding under logs. Prefer damper areas. Walks slowly and deliberately when hunting, but wriggles like a snake to escape.

Southern Alligator Lizard: brown to reddish-brown with distinct black crossbars with white flecks: eyes yellow; lower elevations.

Northern Alligator Lizard: olive-brown without distinct crossbars; eves dark or dark around pupils; higher elevations.

sightings] with striped adult may occur here.

e. Skin very smooth and oily looking, solid tan or striped (tail may be blue). Small legs. Gilbert's Skink: to 10", tail about 1-11/2 x head & body length; smooth polished skin; fast snakelike movement; tan body (young have dark lengthwise stripes & turquoise tail), may be rusty as adult; may have bright red head. Very fast active lizard of grassy areas. Active during the day, secretive. Glides gracefully when hunting, wriggles like an eel to escape. Difficult to capture, tail fragile. Western Skink [REPORT







ee. Skin dry looking, tan with spotted or blotched black pat tern; strong legs.

Western (California) Whiptail: to 14", slender tail 2x head & body length; skin dark with pale blotched pattern, sometimes with pale stripes; scales small and beadlike; very fast; moves in jerky advances and flicks forked tongue. Active in open, brushy, rocky and sandy areas. Prowls actively from cover of one shrub to the next. Difficult to approach.

C. SNAKES

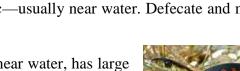
- a. Top of body having some sort of pattern: See b.
- aa. Top of body solid-colored: See d.
- b. Body pattern with regular blotches down spine, or alternating bands. See g.
- bb. Body pattern with lengthwise stripes on sides or spine, or checkered: See c.
- c. Yellowish stripe down spine, may have stripes or blotches on side or be finely check ered.

Garter Snakes: to 30". Our most common snakes; our only aquatic snakes. Dark, slender, with yellowish stripe on top or spine; red, orange, or yellow stripes or blotches along sides; terrestrial and/or aquatic-usually near water. Defecate and may bite when handled. Color quite variable.

Valley Garter Snake: often found near water, has large eyes, and usually red blotches or stripe between yellow stripes, top of head black, belly may be blueish.

Sierra Garter Snake: lives along and in clear streams and lakes (may swim in cold water), may or may not have yellow stripe along spine, upper body with checkered pattern. Our only "water snake," although other garter snakes commonly hunt tadpoles in water.

Mountain Garter Snake: mainly on land, usually yellow stripes separated by black with no red.











cc. No stripe down spine, only on sides

Striped Racer: to 48" brown to black, with yellowish stripe <u>along sides</u>; in chaparral or pine forest. Climbs in brush. May hold head high when hunting. [REPORT SIGHT-INGS]

- d. Red-orange band on neck, bright red-orange belly **Ringneck Snake**: 15"; gray above, red below; <u>red neck</u> <u>ring</u>; slender, secretive; cool areas.
- dd. Not as above, See e.
- e. Body slender: See f.
- ee. Body stout, rubbery.

Rubber Boa: 28"; no neck; <u>blunt head and tail</u>; very smooth skin; slow moving; brown above, yellowish be low; young coppery-gold; skin may fold; coils into a knot for defense.

f. Long, active, fast snake
 Racer: 30-54"; very fast; hunts with head raised; slender; uniform olive brown above, yellow below; large

eyes; glides smoothly into trees and shrubs.

- ff. Small, slow, secretive snake **Sharp-tailed Snake**: 8-18" (usually only small individuals are seen); reddish-gray above, <u>black and white cross-</u> <u>bars below</u>; sharp tail tip; small head; small individuals similar to earthworms. Very common in town and found under overturned objects.
- g. Body patterned with alternating bands (rarely stripes in Common Kingsnake). See j.
- gg. Body pattern of usually symmetrical blotches along spine. See h.











h. Head about same diameter as body. See i.

hh. Flat triangular head with bulging jaws on a slender neck; rattles on tail, pupils vertical

Northern Pacific Rattlesnake: to 60"; grayish to brownish with even-blotched pattern down the spine; <u>tail</u> <u>banded light and dark</u>. Rattlesnakes, though poisonous, are non aggressive, and are an important part of the food chain and ecosystem. Please do not harass or kill them. They can only strike about as far as half their body length, and a person can easily walk faster than they can crawl. Do not handle!



i. Body with large dark blotches in regular pattern. Pupils round.

Pacific Gopher Snake: to 60" brown tan, or yellowish with variable pattern of <u>large</u>, <u>dark saddle marks down</u> <u>spine</u>; body more slender than the rattlesnake, common. This harmless snake mimics the rattlesnake in coloration and defensive behavior (it may hiss loudly and vibrate its tail against leaves to make "rattling" noise), but can be recognized by its narrow head which lacks the flattened bulging jaws of the rattler (although some Gopher

Snakes may flatten their head when threatened). Note: immature Racers also are blotched and look very similar to young Gopher Snakes, but have larger eyes, more

rapid travel, and lack the keeled scales in the middle of the back that the Gopher Snake has.

ii. Body with small blotches; dark "hood" patch behind head; <u>pupils vertical</u>.

California Night Snake: a small snake rarely over 16". Body beige to gray with dark blotches or spots. Dark brown "hood" blotches on back of neck. Nocturnal. [REPORT SIGHTINGS]

- j. Alternating dark and light bands. **California Kingsnake**: to 42"; brown to black with alternating <u>yellow or white bands</u>.
- jj. Alternating red, black and white bands. **California Mountain Kingsnake**: to 30"; banded black, white and red. Uncommon.









D. SALAMANDERS AND NEWTS

a. Tail rounded: See b.

- aa. <u>Tail flattened</u> top and bottom to an edge; common in woods or streams, even in the day.
 Sierra Newt: 8" brown/orangish above, yellow/bright orange below; terrestrial except in winter/spring when they enter the water to breed; the skin is pebbly during terrestrial phase. These salamanders secrete a toxin from the skin, which can be absorbed through cuts or mucus membranes—use caution when handling.
- b. Body wormlike, 4 toes on hind foot: See d.

bb. Body not wormlike, 5 toes on hind foot: See c.

c. <u>Base of legs oragne</u>, <u>base of tail constricted</u>. Ensatina: 6"; dark bronze with orange blotches or bronzy with gold speckles (very variable), pale belly; protruding bug eyes; common under logs; stands tall if bothered; may produce sticky secretion. Lungless salamander never found in water, even as larva.

cc: <u>Legs dark at base</u>, black with yellow blotched band <u>down middle of back</u>.

Long-toed salamander: 7"; dark belly, toes of hind foot slender, 2nd toe from outside is very long, belly & sides with tiny white spots; spawns in water. Uncommon [REPORT SIGHTINGS]

d. Looks like a large worm with tiny legs and bug eyes; variously patterned; 4 toes on hind foot.

Slender salamander: to 5"; lungless salamander with na solabial groove; found under logs and stones; may flip when touched; questionable occurrence in this area [REPORT SIGHTINGS]









E. FROGS AND TOADS

a. Skin covered with large <u>"warty" bumps; walks</u> and hops rather than jumps; stout animal.

California Toad: 3-5"; dusky-greenish with dark blotches; <u>whitish stripe down spine</u>; terrestrial (often in burrows) except during breeding season.

- aa. Skin relatively smooth, with small glandular bumps: See b.
- <u>Dark stripe</u> through eye; often away from water.
 <u>Sierran Treefrog</u>: 1-2"; pads on tips of toes; green, tan, brown or gray; terrestrial, but often in or near water, climbs trees and rocks, very common.
- bb. No dark stripe through eye; aquatic frogs; (look for fold of skin behind eye): See c.
- c. Eardrum conspicuous, as large or larger than eye, with fold of skin running from rear of eye over ear and <u>down</u> to jaw; in slow water rather than streams; common in warm ponds.

Bullfrog: to 8"; large dark greenish frog; hind legs banded; huge tadpoles overwinter and mature 2^{nd} year into abundant $1\frac{1}{2}$ " juveniles. Nonnative and displacing native species, common.

- cc. Eardrum not conspicuous; skin fold on side running toward hips. See d.
- d. Skin flecked or mottled; underside of legs red or yellow. See e.
- e. Underside of hind legs yellow (sometimes pale); skin fold on side of body may be indistinct.

Yellow-legged Frogs: 3"; usually in running water; two

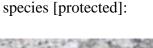
Foothill usually blends with surroundings; pale triangle on top or snout; 1000 to 6000 ft;

Mountain (or Sierra Nevada) usually heavily mottled; may smell like garlic when handled; above 5000 ft. Now rare[REPORT SIGHTINGS]













ee. Red color on belly and underside of hind legs; usually in ponds or slow water.

California Red-legged Frog: 2-5"; prominent ridge of skin on side of body from eye to hips; usual dark mask. Red underside of legs (may be yellow in juveniles). [PROTECTED][REPORT SIGHTINGS]



- dd. Body usually having dark <u>roundish spots</u> with light outlines; underside cream or yellowish.
- **Northern Leopard Frog**: 2-5"; prominent skin fold on side of body; distinct black oval spots (may be ringed with white), legs usually banded. native population may be extinct; others may be introduced [REPORT SIGHTINGS]



F. REFERENCES

Update May 2015: the best current resources for identification and information:

www.californiaherps.com

Stebbins, R.C., 1966. A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin.
Storer, T.I. and Usinger, R.L., 1963. Sierra Nevada Natural History. Univ. of Calif. Press.
Basey,H.E., 1976. Discovering Sierra Reptiles and Amphibians. Yosemite Association.
Verner, J. and Boss, A.S., 1980. California Wildlife and Their Habitats: Western Sierra Nevada, U.S.D.A. Gen. Tech. Rpt PSW-37

Thanks to Tim Manolis for his helpful comments.