Reptiles and Amphibians

The McLaughlin Reserve has many of the typical reptile and amphibian ("herptile") species of the Coast Range. In chaparral and oak woodland are western fence lizards and California whiptail lizards. In ponds and streams are California newts and rough-skinned newts. Some species that are common in similar habitats, such as the Coast Horned Lizard and the Ensatina (a large orange-and-brown spotted salamander) have surprisingly not been found at the reserve. Other species yet to be sighted include the arboreal salamander (*Aneides lugubris*), California slender salamander (*Batrachoseps attenuatus*), coachwhip (*Masticophis flagellum*), long-nosed snake (*Rhinocheilus lecontei*), night snake (*Hypsiglena torquata*), rubber boa (*Charina bottae*), and sharp-tailed snake (*Contia teuis*). The reserve is not known to have any rare herptile species.

The herptile fauna of the McLaughlin Reserve has not yet been the subject of University research, but it is relatively well known from the pre-mine survey by the D'Appolonia company and the subsequent wildlife records kept by Homestake. These reports were used to generate the locality information and species list given here. Species descriptions have been adapted from the references by Basey (1991), Leviton (1971), and Stebbins (1972). A good field guide to herptiles of this area is Robert Stebbins' (1972) *Amphibians and Reptiles of California*.

Lizards

California whiptails (*Cnemidophorous tigris*) are slender lizards that appear "jumpy" or "nervous". They have a tail about twice as long as their bodies. When foraging they move their head frequently, shaking it from side to side. They are brownish with a striped pattern of white and brown scales and a bluish tail. They have a pointed snout and their hind legs are longer than their front legs. They are approximately 28 cm long. When walking, they drag their tails, leaving long traces on the ground. They are often heard scuttling through dry leaves. They eat insects and spiders and occasionally other lizard eggs. They mate in May and June with hatch in the fall. Their habitat is dry areas with much open ground for running, such as dry chaparral and dry oak woodland, chamise.

Alligator Lizard

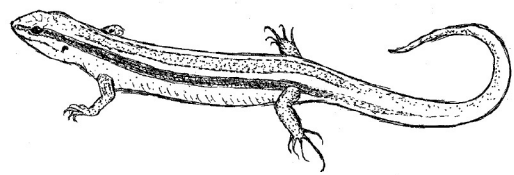
Northern alligator lizards (*Gerrhonotus coeruleus*) are slow moving and are usually found under protective cover. They are approximately 20 cm long, with a mottled tan and brown or greenish gray pattern. They have a light colored belly and dark eyes. This is the most cold-tolerant species of lizard in North America and has specific adaptations to cold climates such as incubation of the eggs within the mother until they are hatched. Mating occurs in May and June with hatch in fall. Northern Alligator

lizards can be caught by hand but will bite once they are captured. They eat insects, spiders, and millipedes. They are found in dense vegetation and cool, damp places such as under rocks or logs. They are fairly common in disturbed areas, such as along Morgan Valley Road and at Davis Creek Reservoir.

Southern alligator lizards (*Gerrhonotus multicarinatus*) have a big alligator-like head and a long body, with patches of reddish brown, dark brown, and light greenish tan on their backs. Their heads are a light greenish grey with yellow eyes. They are around 30 cm long with powerful jaws that can deliver a serious bite. When approached, they may turn and face their attacker. Alligator lizards also actually use their tails to help them climb trees and bushes. They climb to escape predators or to eat eggs or nestlings of birds. Mating occurs in April to June with young born in the fall. Their habitat is open grassland, woodland, and chaparral. This lizard will often be found in woodpiles, shaded thickets, or hiding under rocks or logs.

Side-blotched lizards (*Uta stansburiana*) are easily identified by their distinctive brown splotches behind the front legs. They are bright brown, black, and white. Males can be speckled with light blue on their backs. Their body length is approximately 8 cm. Side-blotched lizards eat insects, often shifting their diets seasonally to whatever insect is most common. They inhabit chaparral, grassland, and open woodland and are frequently found in washes. At the reserve these lizards have been seen along the Reiff Road and at Davis Creek Reservoir.

Western fence lizards (*Sceloporus occidentalis*) are among the most common and striking of the lizards on the reserve. They have jagged stripes of brown, tan, and black on their backs against a background of mainly light tan or light grey. This coloration allows them to blend in well with their surroundings. Males, however, have striking blue bellies with small blue blotches on their backs. They are approximately 20 cm long. Western fence lizards often perch in open areas on top of rocks, logs, or fence posts and males will display their blue throats and bellies to claim and hold territories. These lizards eat beetles, flies, termites, wasps, ants and spiders. They live in grasslands and disturbed areas, and are frequently seen on fence posts and rock piles. They are common at Davis Creek Reservoir and the mine site.



Western Skink

Western Skinks (*Eumeces skiltonianus*) are very distinctive in appearance and uncommon on the reserve. Western skinks have dark black bodies with two horizontal white stripes down their backs. Their tails are bright blue and can be dropped in an attack; some people hypothesize that the tail is bright blue to draw attacks and divert attention away from the head. Their scales are smooth and give skinks a shiny appearance. Heads of breeding males can be tinted orange. Their legs are of medium length but stick out to the side, keeping the lizard low to the ground and giving it a snake-like appearance

when in motion. Skinks are approximately 20 cm long. Skinks tend to forage in dead leaves and can often be heard rustling in the underbrush. Skinks eat small insects and mate in spring. They are found in woodlands, forests, and grassland among rocks, rotting logs, leaf litter and low ground cover.

Salamanders

California newts (*Taricha torosa*) are often seen in the streams and ponds at McLaughlin. They are easily identified by the dark brown back and orange underside. They are approximately 15 cm long and their skin ranges from rough when summering under logs and in burrows, to smooth when inhabiting the water in winter. Newts spend the drier portions of the year dormant under rocks and logs in dense vegetation. In fall they move over land and hide in damp open areas. In late fall through early spring (September to May) they move into areas with standing water to mate and lay eggs. The earliest that eggs have been seen in the wild is December. Their spherical egg masses are clear to yellowish and can sometimes be seen attached to submerged vegetation. A good area from which to watch them is from the bridge over Hunting Creek just before the core shed. They have also been seen along Morgan Valley Road.

Rough-skinned newts (*Taricha granulosa*) are similar to California newts in appearance except they are usually darker brown above. Their lower eyelid and upper lip below the eye are often dark as well. Rough-skinned newts spend more time in the water than California newts. They breed from December to July and eggs are laid singly, not in clusters like California newts. They inhabit cool and humid vegetation, and standing water. Rough-skinned newts appear to be less common than California newts. They are seen in ponds and slow moving streams around the reserve.

Snakes

Common kingsnakes (*Lampropeltis getulus*) can be easily identified by their striking pattern of black (or dark brown) and white stripes. They have small heads and a slender, smooth appearance and can reach 1.5 m in length. They are relatively docile but may bite when handled. When alarmed, they will often move their tail and in dry leaves this can sound like a rattlesnake. Kingsnakes eat other snakes including Rattlesnakes, perhaps giving them their common name, the king of snakes. They also eat birds eggs, nestlings, salamanders, lizards, and small mammals. Mating occurs in spring and early summer with young hatching four months later. Kingsnakes are found in the open as well as under rocks and logs. At the reserve they are most commonly found in blue oak woodland and grassland habitats. They have been seen at Davis Creek Reservoir, Reiff Road, the mine site, and elsewhere.

California mountain kingsnakes (*Lampropeltis zonata*) are orange, red, and white striped, generally shiny looking, with small black heads. They may reach 1 m in length. They resemble the poisonous coral snake, but are harmless; no coral snakes occur in California. They eat lizards, eggs, nestlings, and other small snakes, which may be killed by constriction or swallowed whole. They mate in late spring and hatch

is in the fall. They live in moist forests, woodland, and mixed chaparral. Look for these snakes near rocky streams or under rotting logs.

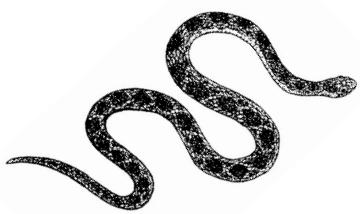
California red-sided garter snakes (*Thamnophis sirtalis infernalis*) are one of three species of garter snake found at McLaughlin. Garter snakes are generally brown to black with a single light stripe in the center of their backs. They have triangular-shaped heads, light underbellies and can be over 1 m long. They eat small rodents, lizards, birds, frogs, salamanders, tadpoles, and fish. When captured, garter snakes will bite and often release a bad smelling anal fluid. Mating occurs in spring and live young are born in summer. Up to 50 young may be produced by a single female at one hatching.

The red-sided species has a red and black checkerboard pattern on the sides and usually red on the head, particularly at the base. It may be found anywhere near water including ponds, marshes, ditches, streams, damp meadows, and woods.

Western terrestrial garter snakes (*Thamnophis elegans)* have a pale yellow, cream or whitish gray stripe on the sides, distinguishing it from the common garter snake. They are found in chaparral, meadows and clearings.

Western aquatic garter snakes *(Thamnophis couchi)* are very similar to western terrestrial garter snakes, and are distinguished mostly by their more aquatic habits. They are never found very far from water. They are seen in clear permanent streams with rocky beds and thickets near the shore.

Western yellowbelly racers (*Coluber constrictor*) were reported on the reserve in the pre-mine survey, but have not been seen since. Racers get their common name from their speed, moving faster than humans can run and possibly being the fastest snake species. Adult racers are rather nondescript snakes, blue-grey to olive green above with a light yellow belly. They are slender with a small head and large eyes. They often exceed 1 m in length. The young have a dark brown and light grey blotched appearance, similar to rattlesnakes. Racers eat small rodents, birds, insects, reptiles and amphibians by biting them with their sharp teeth and swallowing them. They mate in spring and the young hatch in the summer. They are found in grasslands and grassy river borders.



Gopher Snake

Gopher snakes (*Pituophis melanoleucus*) were initially one of the most commonly seen snakes on the reserve, but sightings have declined in the past six years. Gopher snakes have markings similar to rattlesnakes, with dark brown to black patches against a yellow or light tan background. Gopher snakes can even make a rattlesnake-like buzzing sound in dry leaves with their tails. However, gopher snakes have small, streamlined heads rather than the large, diamond-shaped heads of

rattlesnakes, and their tails are narrow, pointed and lacking in rattles. Gopher snakes also have round pupils while rattlesnakes have vertical slits. Total length for gopher snakes can be over 2 m. They eat small animals such as gophers, mice, squirrels, and small rabbits, first killing them by constriction. They may take over the burrows of such rodents for their own nests. Mating occurs in spring and eggs hatch in late summer or early fall. These habitat generalists can be found in grassland, chaparral, and oak woodland.

Northern Pacific rattlesnakes *(Crotalus viridis oreganus)* are luckily the only venomous snakes on the reserve, but unfortunately they are extremely common. They can be easily identified by the loud metallic buzz, made by the rattle at the tip of the tail, which is usually the first thing that draws human attention to them. Their color is variable, but their diamond-shaped heads and diamondlike pattern on the back are distinctive. They ambush prey, biting and killing it with venom before eating it. They are found in grassland, woodland, and rocky areas.

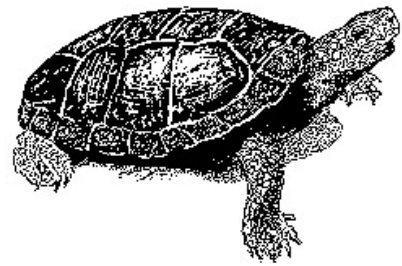
Ringneck snakes *(Diadophis punctatus)* are almost never seen in the open but can be found under rotting logs, boards or other objects. They are small, slender, olive to nearly black on the back and yellow to orange underneath, with bright orange neck bands. They emit a foul odor when disturbed. They inhabit chaparral, grassland, and woodland.

Sharp-tailed snakes (*Contia tenuis*) are secretive snakes of moist environments. They are active when the ground is damp but keep out of sight under logs, bark of standing and fallen trees, rocks, and other objects. They retreat under ground when the soil surface dries. They are reddish brown or gray above, tending toward reddish on the tail. They often have an indistinct yellowish or reddish line on each upper side. They are distinctively marked with regular, alternating crossbars of black and cream below and a tail with sharp spine at tip.

Striped racers *(Masticophis lateralis)* are slim, fast-moving snakes with large eyes. Their heads are held well above the ground when hunting. They are plain black or dark brown above, lighter on the tail, and have a pale yellow stripe on each side, bordered below by a dark stripe. They are cream below and coral pink on the underside of the tail. They are easy to mistake for garter snakes, but they lack the median stripe and have smooth scales. They inhabit chaparral, grassy patches and rocky gullies

Turtles

Western pond turtles *(Cleomys marmorata)* are the only abundant aquatic turtles native to California. They are usually found near water but females travel over land to lay eggs. They live in oak wooland, mixed coniferous and broadleaf forests and grasslands, and feed on aquatic plants, fish, invertebrates and carrion.



Western pond turtle

They are a common sight on the reserve, for example along Hunting Creek in Morgan Valley.

Toads and Frogs

Bullfrog

Bullfrogs *(Rana catesbeiana)* are native to the eastern half of the United States and are an introduced species in California. They eat virtually anything they can swallow, and their presence is extremely destructive to native species. If you see a bullfrog, kill it! Sightings have been rare at McLaughlin, but they have been seen at lower Hunting Creek near the BLM campground. Bullfrogs can be identified by their enormous size (8-20 cm length). They are olive to brownish above, often grading to light green on the head, and have a prominent fold of skin from the eye to the eardrum. Their voice is a low-pitched "jug-o-rum" bellow and they may squawk when frightened. Males are territorial and may wrestle with other males. Males float high in the water displaying their yellow throats in an aggressive territorial pose. Bullfrogs breed in March to July, and deposit their eggs in huge floating masses of 10,000 to 20,000, one egg thick.

Foothill yellow-legged frogs *(Rana boylii)* are small (4-7 cm), gray to brown, reddish or olive above, and yellow on the lower belly and the undersides of the hind legs. They can be very hard to see against a stream bed. Their voice is similar to the red-legged frog, but is rarely heard. Yellow-legged frogs will usually be found in the water. They like moving water and are common in both Hunting Creek and Knoxville Creek. They breed from mid-March to May, and deposit their eggs in compact grape-like clusters 5-10 cm in diameter attached to undersides of stones in clear moving water. Their tadpoles are mottled and blend with the gravel in the stream.

Red-Legged Frogs *(Rana aurora)* are larger (5-12 cm) and much rarer than yellow-legged frogs. They are brown to reddish above, with small dark flecks and larger blotches, and often have a dark mask bordered by a pale upper jaw stripe. They are red, or yellow in juveniles, on the lower belly and the undersides of the hind legs. Their voice is a stuttering, grating guttural sound on one pitch which lasts only 3 seconds or so and does not carry far. They inhabit quiet, permanent waters such as the Davis Creek Reservoir. They are not exclusively aquatic and may occasionally be found in grassy areas. They breed from January to May, leaving eggs in irregular clusters 6-25 cm in diameter attached to the vegetation in shallows. Their tadpoles are yellowish-brown above with pinkish iridescence on the belly.

Pacific treefrogs *(Hyla regilla)* are the only treefrogs at McLaughlin and are the most common treefrogs in California. They are small (2-5 cm) and have many color forms, but always with a black eye stripe and toepads. They can change color in a few minutes. Males have a dark olive throat. Their voice is the most familiar frog sound in

California, a loud two-part “krek-ek” lasting about 1 second. Froglets are diurnal and adults are noctural. They are good climbers, but are usually found on the ground in marshes, streams and reservoirs. They breed from January to July, placing eggs with 2 jelly envelopes in loose, irregular clusters attached to vegetation in shallows. Their tadpoles are dusky to olive-brown with eyes protruding at the sides of the head.

Western Toads *(Bufo boreas)* are a common species and the only toad found on the reserve. They are 5-12 cm in length, and dusky gray or greenish above, with dark blotches and a pale narrow mid-dorsal stripe. Males make a weak chirping sound. They breed in January-July, leaving eggs with 2 jelly envelopes in strings of over 16,000 in shallows. Their tadpoles are black to olive.