

San Francisco Garter Snake
(*Thamnophis sirtalis tetrataenia*)



Photo: Kennan Ward

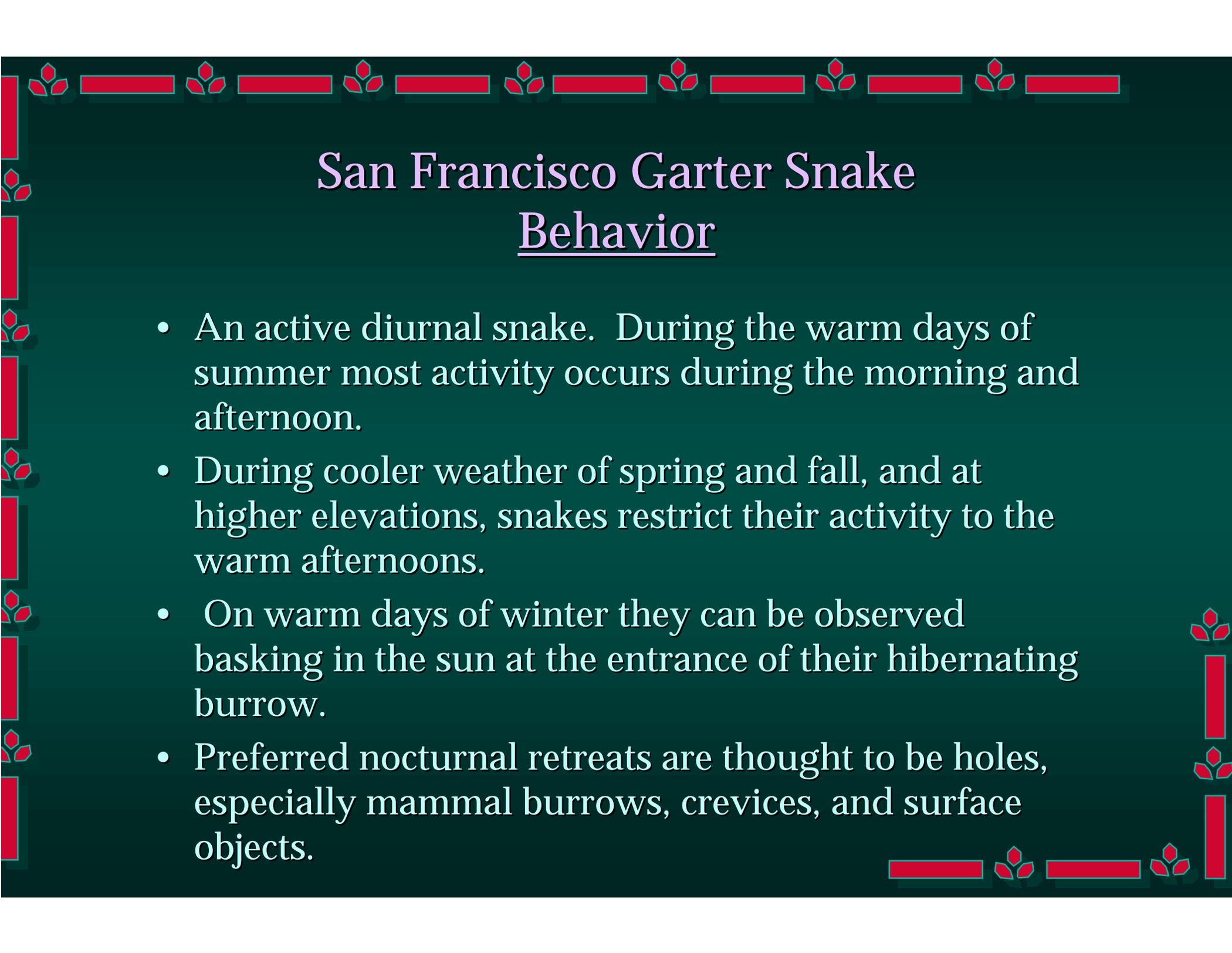
San Francisco Garter Snake

Characteristics



Photo: Frank S. Balthis

- The San Francisco garter snake has a broad, greenish yellow stripe that runs the length of its back, bordered in black and flanked on either side by red and black stripes.
- The top of its head is red and its belly is blue green.
- An adult SF garter snake can grow to 51 inches (130 cm.) in length.



San Francisco Garter Snake Behavior

- An active diurnal snake. During the warm days of summer most activity occurs during the morning and afternoon.
- During cooler weather of spring and fall, and at higher elevations, snakes restrict their activity to the warm afternoons.
- On warm days of winter they can be observed basking in the sun at the entrance of their hibernating burrow.
- Preferred nocturnal retreats are thought to be holes, especially mammal burrows, crevices, and surface objects.

San Francisco Garter Snake Habitat

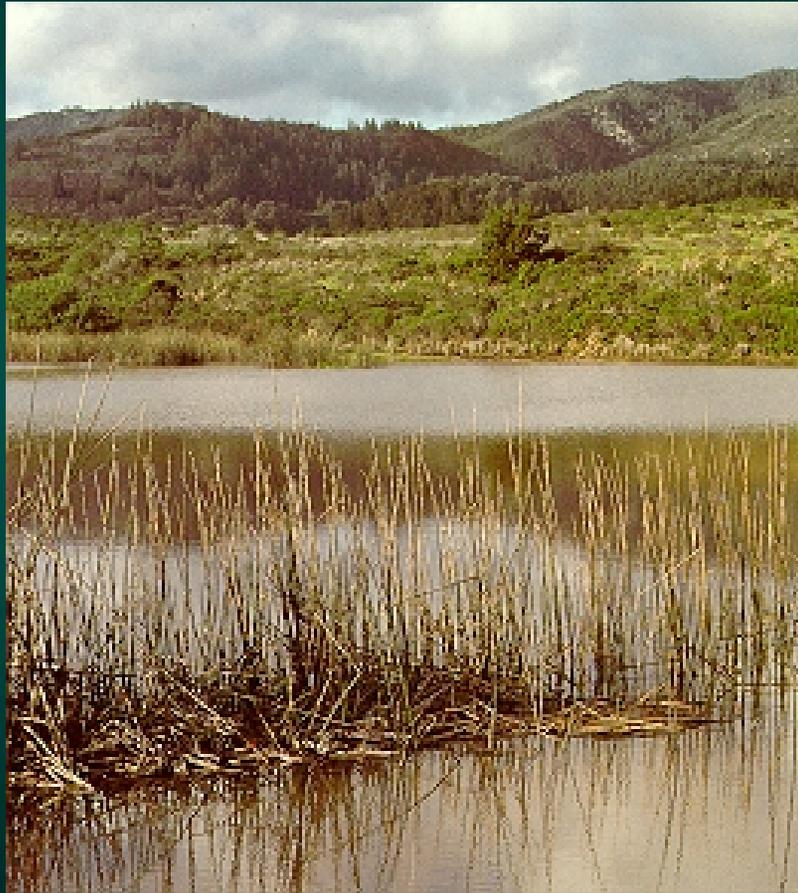


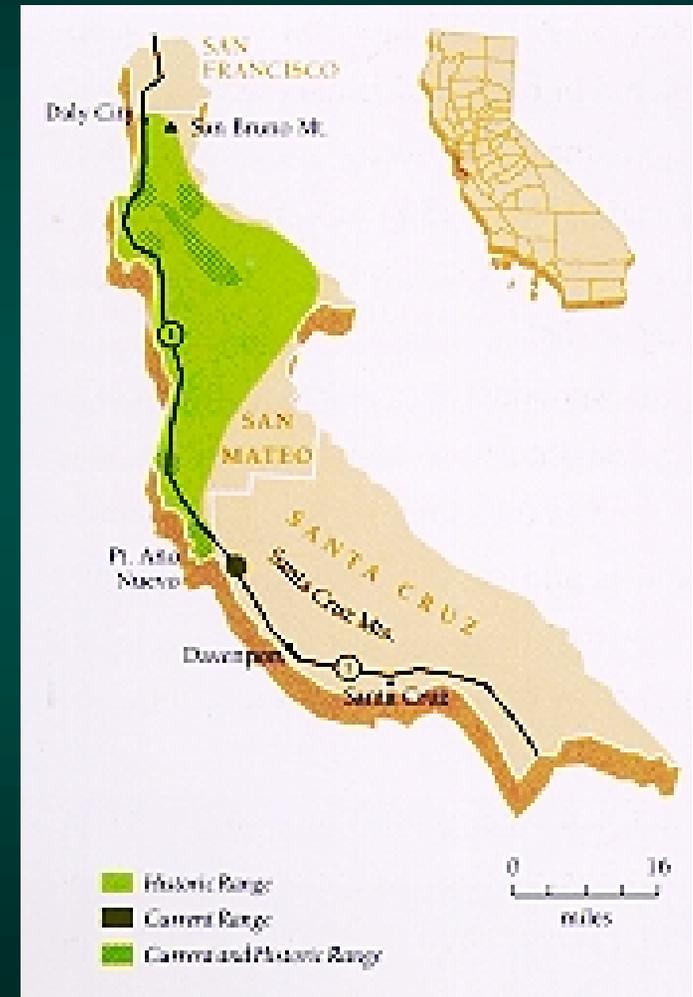
Photo: Frank S. Balthis

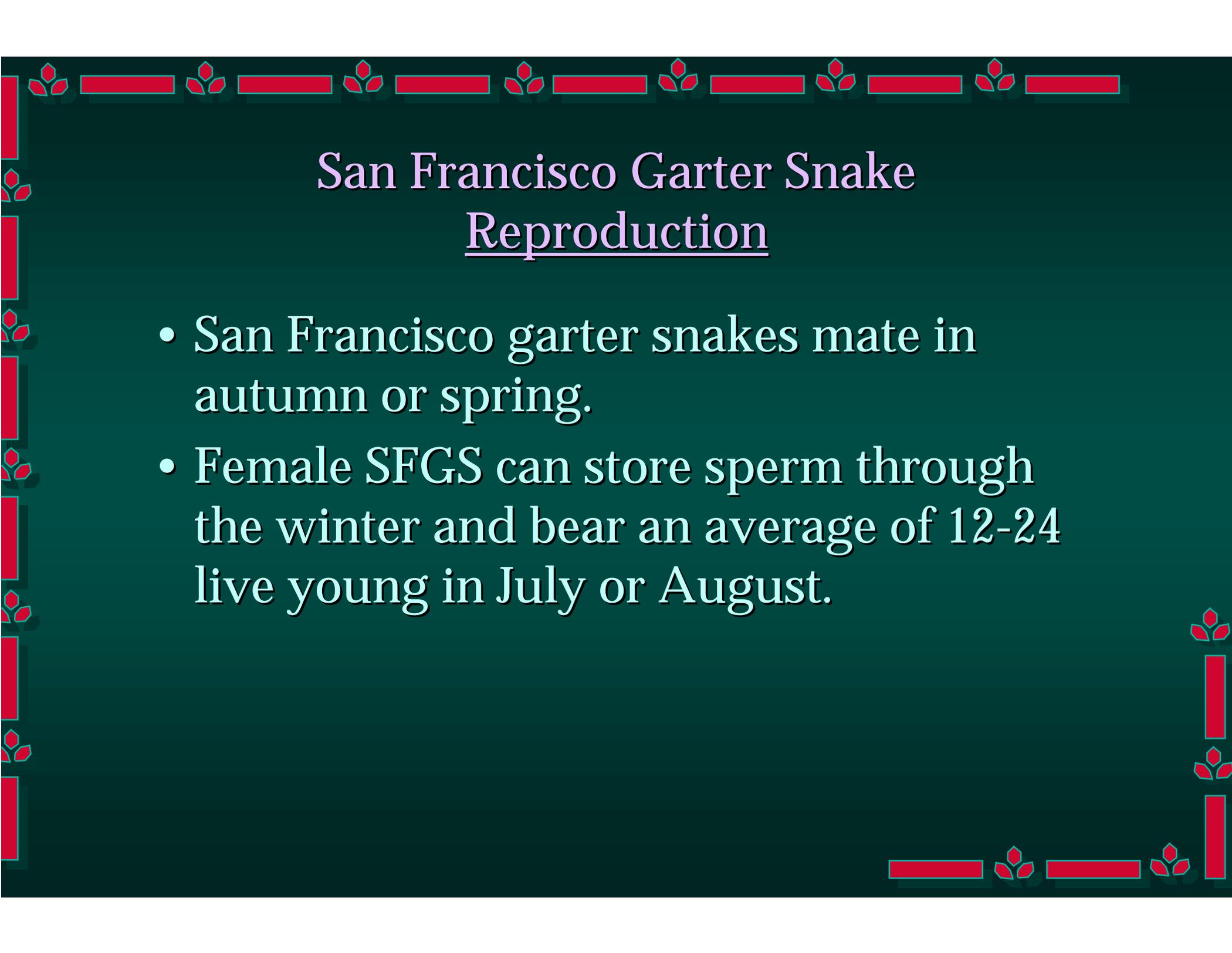
- San Francisco garter snakes live secretively in wetlands or grasslands near ponds, marshes and sloughs, where they are likely to retreat into water when disturbed.
- Most often they are found around ponds and marshes that support large frog populations.
- They may spend time in upland areas as well, especially during autumn and winter, and may overwinter there.

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Range

- The historical range of the San Francisco garter snake lay entirely within San Mateo County. It extended from the San Francisco County line south along eastern and western foothills of the Santa Cruz Mountains to Point Ano Nuevo.
- They are currently limited to small areas within this historical range. In 1990 however, a single snake was captured at Rancho del Oso, near Davenport in Santa Cruz County.
- SFGS have been sighted in four managed areas, all within San Mateo County: Pescadero Marsh Natural Preserve, Ano Nuevo State Reserve, Laguna Salada, and the San Francisco State Fish and Game Refuge.





San Francisco Garter Snake Reproduction

- San Francisco garter snakes mate in autumn or spring.
- Female SFGS can store sperm through the winter and bear an average of 12-24 live young in July or August.

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Food



Bill Palmer

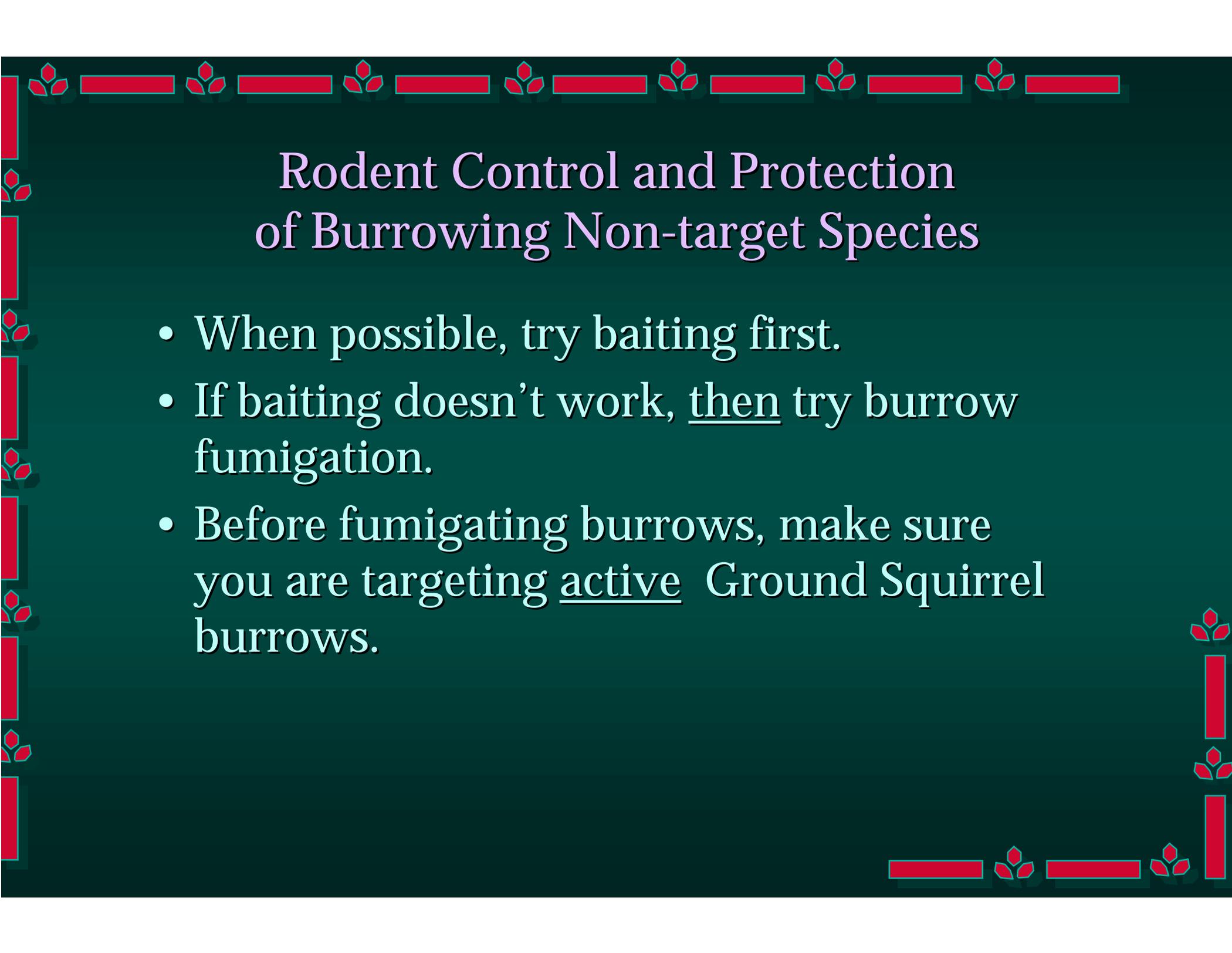


Frank S. Balthis



Sharon Bailey

- Although San Francisco garter snakes prefer frogs, they also prey upon other amphibians and small fish.
- Prey includes Red-legged frogs, Pacific tree frogs, California newts, Western toads, and mosquitofish.



Rodent Control and Protection of Burrowing Non-target Species

- When possible, try baiting first.
- If baiting doesn't work, then try burrow fumigation.
- Before fumigating burrows, make sure you are targeting active Ground Squirrel burrows.

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Burrow Fumigant Use Limitations

- **Use Limitation Code 5:** “Use shall be supervised by a person (wildlife biologist, county agricultural commissioner, university extension advisor, state or federal official or others) who is trained to distinguish dens and burrows of target species from those of non-target species. Use shall occur only in the active burrows of target species. The person responsible for supervision shall be aware of the conditions at the site of application and be available to direct and control the manner in which applications are made (per Section 6406 of Title 3, California Code of Regulations). Contact your county agricultural commissioner for information on training.”

How do we know it is an active Ground Squirrel burrow?

- Often active Ground Squirrel burrows have large deposits of dirt accumulated around their entrance. However, not all burrows show such deposits at the entrance and have to be monitored more closely.
- Look also for debris such as nutshells, fruit rinds, and scat dispersed near the entrance.
- Inactive burrows typically have cobwebs at the entrance.



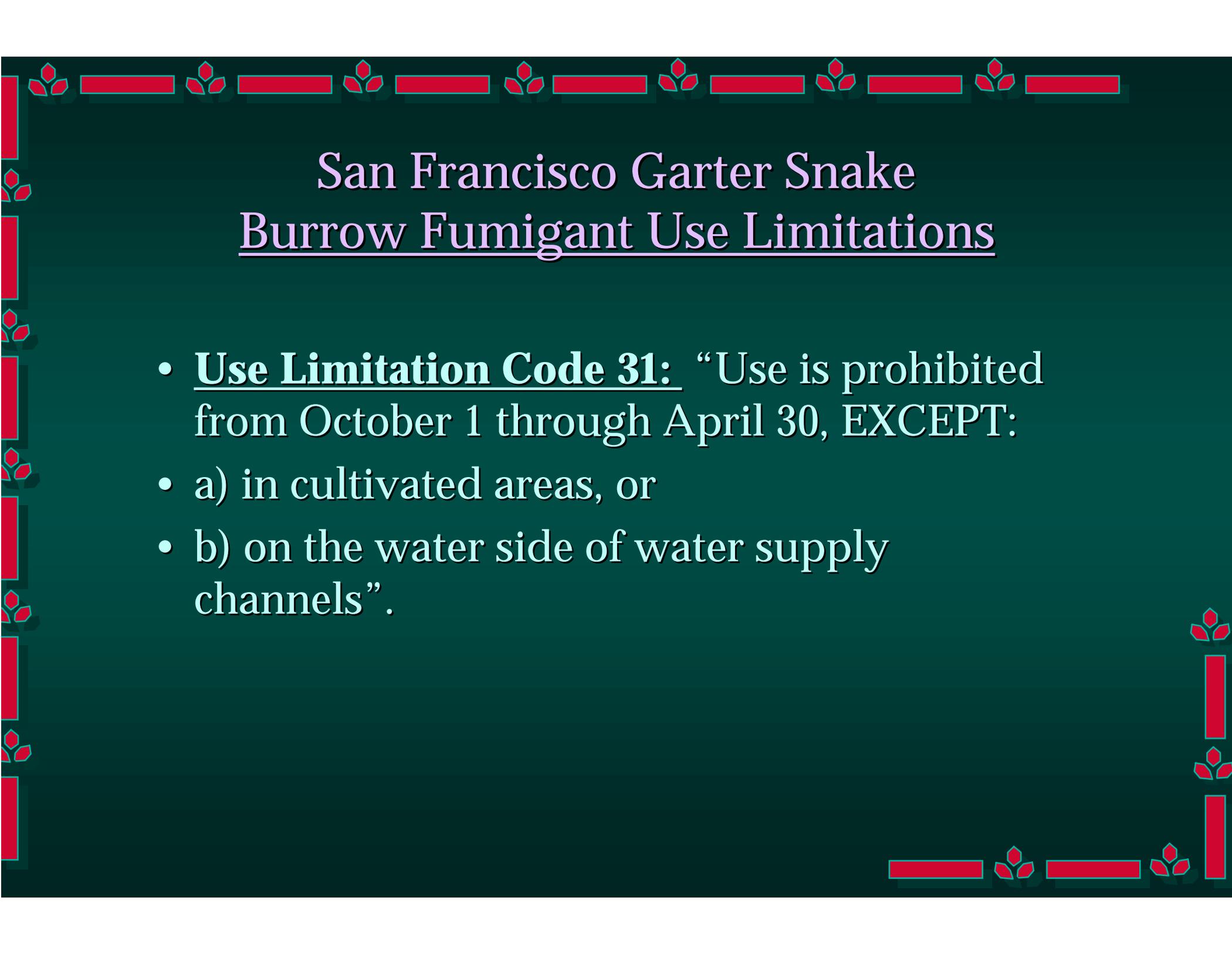
Photos: Paul Gorenzel, UC Davis

How do we know it is an active Ground Squirrel burrow?



Photo: Paul Gorenzel, UC Davis

- Look for tracks (see pictures).
- If the substrate is hard, try softening up the area around the entrance by wetting it down, thus forming a “mud plate”. Track plates made by smoking aluminum or tin sheets can also be used. Chalk can also be spread around the entrance, this creates a “more durable” soft surface where tracks can be observed.



San Francisco Garter Snake Burrow Fumigant Use Limitations

- **Use Limitation Code 31:** “Use is prohibited from October 1 through April 30, EXCEPT:
 - a) in cultivated areas, or
 - b) on the water side of water supply channels”.