

Mammals of Younger Lagoon

The **brush rabbit**, *Sylvilagus bachmani*, naturally occurs along the coast from south of the Columbia river in Oregon to Baja California, Mexico. They are most often found in areas with dense brushy cover, such as the chaparral biome. Brush rabbits have 3 to 4 litters per year of 2 to 4 offspring, and their breeding season in California lasts from December to June. Brush rabbits are herbivores and feed on a variety of plant species. *Sylvilagus bachmani* was spotted on all camera traps at Younger Lagoon except for the sandy beach habitat. This species was captured by the coastal prairie, coastal scrub and wetland habitats. Rabbits have a significant impact on restoration projects at Younger Lagoon as they ravage newly sprouted forbs and grasses. In order to limit their impact, fences are put in place to prevent them from entering restoration sites.

The **California ground squirrel**, *Otospermophilus beecheyi*, is found in Western Oregon, Western Nevada, Southwestern Washington, Baja California, and most of California. Its natural habitat encompasses chaparral and mountain biomes in grasslands, fields, and oak woodlands. This species lives in burrow systems, and mates in early spring with females producing one litter each year of 5 to 11 offspring. *Otospermophilus beecheyi* eats a varied diet of seeds, nuts, fruits, fungi, roots, insects, and quail eggs. The California Ground Squirrel was only spotted on one camera trap at Younger Lagoon in the wetland habitat.

The **Eastern Grey Squirrel**, *Sciurus carolinensis*, is commonly found throughout the Eastern United States, Canada, and in some of the Western United States including California. This species is usually found in temperate forests among oak and walnut trees. The breeding season of this species occurs from December to February and May to June and females bear two litters per year of 2 to 8 offspring. It has an omnivorous diet eating nuts, seeds, and leaves as well as insects, eggs, frogs and a variety of other things. *Sciurus carolinensis* was only captured on one camera trap at Younger Lagoon, in the coastal prairie habitat.

The **coyote**, *Canis latrans*, naturally occurs throughout North and Central America from Panama all the way through Canada. Its natural habitat encompasses dune, grassland, chaparral, mountain, and a variety of forest biomes. This species breeds between January and March, and usually stays in a mated pair for a few years. On average, one female will produce 6 offspring per year. *Canis latrans* has a carnivorous diet and prefers to eat rabbits, squirrels, and mice but is known to venture from this diet into many other food options if necessary. Coyotes were captured at all camera trap locations at Younger Lagoon excluding the one located at the wetland habitat. These biomes include coastal scrub, coastal prairie, and dune. Coyotes play an integral role in restoration at Younger Lagoon, without them rabbit presence would be much higher leading to more destruction of restoration efforts.

The **bobcat**, *Lynx rufus*, naturally occurs throughout North America, from Southern Canada to Southern Mexico. Its natural biomes include desert, grassland, chaparral, forest, and mountain habitats. Bobcats are polygynandrous and mate in early spring, the females produce about 1 to 6 kittens per year. *Lynx rufus* is carnivorous and preys on rodents, rabbits, birds, and reptiles. Bobcats were captured at three camera traps, located in wetland and coastal prairie habitats. Bobcats also aid in keeping numbers down of the small destructive herbivores at the reserve.

The **mule deer**, *Odocoileus hemionus*, occurs from southwestern Canada to western Texas, all the way to the pacific coast with notable gaps in southern Nevada, southeastern California, southwestern Arizona, and the great salt lake desert region. They occur in dune, grassland, chaparral, forest, and mountain biomes in the western United States north of central Mexico. Mule deer are polygynous, with a male guarding a female harem until he is displaced by a stronger male. Females give birth to a litter of one or two offspring per pregnancy. Like other ruminants, mule deer are able to digest fibrous roughage and woody stems. They live off of any available forage, with changes in seasonal variability resulting in metabolic changes as well. Deer were captured at all trap locations except lower terrace, which occurs in coastal prairie habitat. The herbivory of the deer at Younger Lagoon is not often focused around the restoration plots and they are not known to have significant negative effects on these projects.

The **long-tailed weasel**, *Mustela frenata*, occurs from slightly north of the United States and Canadian border through to northern South America. They often occur in chaparral, forest, and scrub forest biomes. They have a polygynous mating system, and mate in mid-summer, but they delay egg implantation until the next spring, meaning that they have a gestation period of 280 days. They produce an average of 6 offspring per year. *Mustela frenata* are primarily carnivorous and prefer to eat small rodents and rabbits, but will expand their diets to birds, reptiles, and fruits when needed. Long-tailed weasels were captured on two camera traps, in the coastal scrub and coastal prairie habitats. Due to their diet, the weasels also help to keep rabbit numbers in check, playing another key role in the aid of restoration at Younger Lagoon.

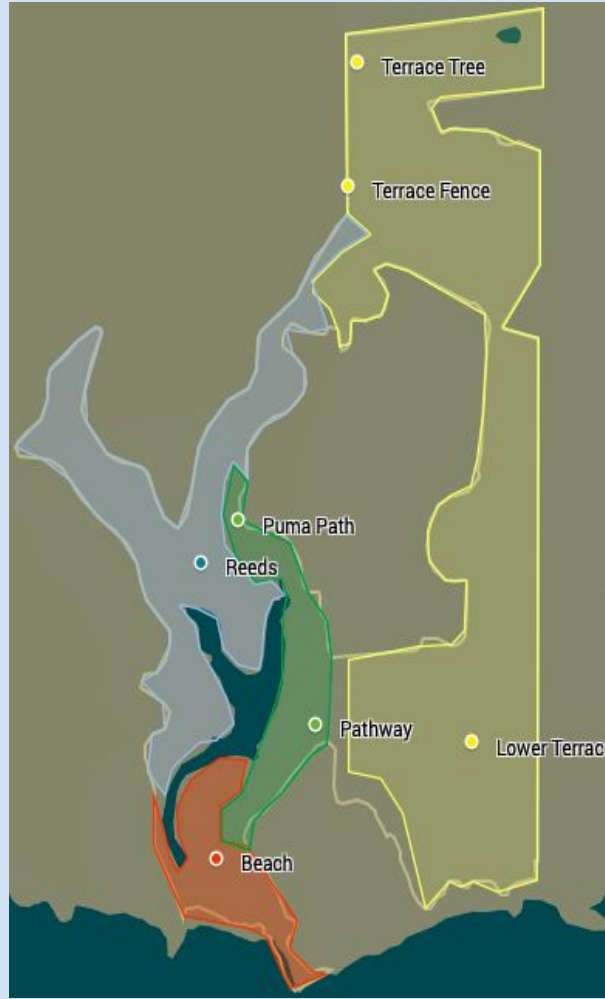
A few **other small mammals** known to reside at Younger Lagoon were rare to capture (or not captured) on camera traps. These include deer mice, voles and moles. These small mammals (along with the squirrels) play an integral role in seed dispersal and potentially the aeration of soils by digging holes at the reserve. When small mammals such as these are poisoned with pesticides, the larger mammals that eat them can become indirectly poisoned as well. As you can see, restoration efforts and community composition are affected by both abiotic factors and ecological interactions.

Information acquired from ADW (animaldiversity.org) and Vaughan Williams (Restoration Field Manager at Younger Lagoon Reserve).





Younger Lagoon Natural Reserve: Mammal Survey Fall-Winter 2020



- Coastal Prairie
- Coastal Scrub
- Wetlands
- Sandy Beach

Camera traps, deployed at seven sites across four different habitat types at Younger Lagoon Natural Reserve were set out to collect presence-only data for local species of mammals. With this type of data, we have no idea what might be out there that we *didn't* capture (^° 3 ^°)

Species Occurrence by Trap Site

Beach

- Coyotes
- Deer

Lower Terrace

- Brush Rabbits
- Coyotes

Pathway

- Coyotes
- Deer
- Brush Rabbits

Puma Path

- Bobcats
- Brush Rabbits
- Coyotes
- Deer

Reeds

- Bobcats
- Brush Rabbits
- California Ground Squirrels
- Deer

Terrace Fence

- Brush Rabbits
- Coyotes
- Deer

Terrace Tree

- Bobcats
- Brush Rabbits
- Coyotes
- Deer
- Eastern Grey Squirrels