



The Santa Susana Field Laboratory is a former rocket engine testing and energy research facility in Southern California. The site sits in the middle of a critical wildlife linkage connecting inland Sierra Madre Mountains to the Santa Monica Mountains to the Pacific Coast. It is home to endangered plant species and abundant wildlife; deer, bobcats, coyotes, cougars and raptors roam wild.

A number of organizations are involved in on-site biological studies; the San Fernando Valley Audubon Society performs bird banding and owl surveys, the Southwestern Herpetologist Society studies reptiles and amphibians and the Pollinator Partnership researches pollinator populations.

As a result of high-technology testing and research, chemicals seeped into the soil and groundwater. Boeing is committed to a comprehensive and protective cleanup that protects the ecosystem and preserves the site as open space for future generations.

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Most illustrations show the adult male in breeding coloration. Colors and markings may be duller or absent during different seasons. The measurements denote the length of most animals from nose/bill to tail tip. Illustrations are not to scale.

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ANIMALS AT THE SANTA SUSANA FIELD LABORATORY – A Folding Pocket Guide to Observed Species

# ANIMALS AT THE SANTA SUSANA FIELD LABORATORY

A Folding Pocket Guide to Observed Species



## Mammals – Did You Know?

Santa Susana is a prime roost site for bats. Wildlife biologist Andrew Forde completed nighttime surveys that identified 12 bat species at Santa Susana, including the Townsend's big-eared bat, a candidate for Federal listing under the Endangered Species Act. For comparison, Joshua Tree National Park has 11 confirmed species with nearly 300 times the acreage of Santa Susana.



**Pallid Bat**  
*Antrozous pallidus*  
To 5 in. (13 cm)  
A California Species of Special Concern.



**Western Pipistrelle**  
*Parastrellus hesperus*  
To 3.5 in. (9 cm)



**Western Small-footed Myotis**  
*Myotis ciliolabrum*  
To 3 in. (8 cm)



**Mexican Free-tailed Bat**  
*Tadarida brasiliensis*  
To 5 in. (13 cm)



**California Myotis**  
*Myotis californicus*  
To 3.5 in. (9 cm)



**Townsend's Big-eared Bat**  
*Corynorhinus townsendii*  
To 4.5 in. (11 cm)  
A federal Candidate species and CA SSC.



**Silver-haired Bat**  
*Lasiyonycteris noctivagans*  
To 4.5 in. (11 cm)



**Big Brown Bat**  
*Eptesicus fuscus*  
To 5 in. (13 cm)



**Yuma Myotis**  
*Myotis yumanensis*  
To 4 in (10 cm)



**Western Red Bat**  
*Lasiurus blossevillii*  
To 4 in. (10 cm)  
A California Species of Special Concern.



**Hoary Bat**  
*Lasiurus cinereus*  
To 6 in. (15 cm)  
Brown fur is white-tipped.



**Greater Bonneted Bat**  
*Eumops perotis*  
To 7 in. (18 cm)  
Note large ears. A California Species of Special Concern.

**Eastern Fox Squirrel**

*Sciurus niger*  
To 28 in. (70 cm)  
Note large size and bushy tail. Coat may be dark grey, red-brown or black. Introduced to southern California.



**Western Grey Squirrel**  
*Sciurus griseus*  
To 23 in. (58 cm)



**California Ground Squirrel**  
*Spermophilus beecheyi*  
To 20 in. (50 cm)



**Deer Mouse**  
*Peromyscus maniculatus*  
To 8 in. (20 cm)  
Has white belly and a hairy tail.



**Botta's Pocket Gopher**  
*Thomomys bottae*  
To 11 in. (28 cm)  
A mole-like creature, it pushes up dirt mounds on lawns and fields.



**California Vole**  
*Microtus californicus*  
To 8 in. (20 cm)



**San Diego Desert Woodrat**  
*Neotoma lepida intermedia*  
To 12 in. (30 cm)  
Also known as pack rat. A California Species of Special Concern.



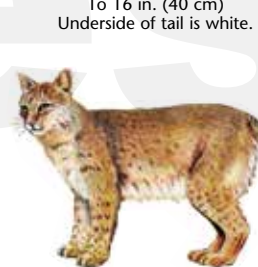
**Dusky-footed Woodrat**  
*Neotoma fuscipes*  
To 18 in. (45 cm)



**Audubon's Cottontail**  
*Sylvilagus audubonii*  
To 16 in. (40 cm)  
Underside of tail is white.



**Brush Rabbit**  
*Sylvilagus bachmani*  
To 15 in. (38 cm)



**Bobcat**  
*Lynx rufus*  
To 4 ft. (1.2 m)



**Cougar**  
*Puma concolor*  
To 9 ft. (2.7 m)



**Grey Fox**  
*Urocyon cinereoargenteus*  
To 3.5 ft. (1.1 m)



**Coyote**  
*Canis latrans* To 52 in. (1.3 m)  
Note bushy, black-tipped tail.



**Black-tailed Deer**  
*Odocoileus hemionus*  
To 7.5 ft. (2.3 m)  
Rope-like tail is black-tipped.



**Raccoon**  
*Procyon lotor*  
To 40 in. (1 m)



**Skunk**  
*Mephitis mephitis*  
To 32 in. (80 cm)

## AMPHIBIANS

### Amphibians – Did You Know?

Santa Susana provides both breeding and upland habitat for Western spadefoot toads, which has been observed breeding at two locations onsite. Western spadefoot toads are considered a California Species of Special Concern by the California Department of Fish and Wildlife (CDFW) and a Federal Species of Concern by the United States Fish and Wildlife Service (USFWS).



**California Toad**  
*Anaxyrus boreas halophilus*  
To 4 in. (10 cm)  
Males have a soft, clucking call.



**California Newt**  
*Taricha torosa* To 8 in. (20 cm)  
Red-brown skin is warty.  
A California Species of Special Concern.



**Black Bellied Slender Salamander**  
*Batrachoseps nigriventris*  
To 5.5 in. (14 cm)



**Western Spadefoot Toad**  
*Scaphiopus hammondi*  
To 2.5 in. (6 cm)  
Brown to green toad. Call resembles a cat's purr. Note vertical pupils. A California Species of Special Concern.



**Monterey Ensatina**  
*Ensatina eschscholtzii eschscholtzii*  
To 3 in. (8 cm)



**California Tree Frog**  
*Pseudacris cadaverina*  
To 1.5 in. (4 cm)



**Baja California Tree Frog**  
*Pseudacris hypochondriaca hypochondriaca*  
To 2 in. (5 cm)

## POLLINATORS

### Pollinators – Did You Know?

The Santa Susana tarplant, a California rare species, can't self pollinate and is entirely dependent on pollinators for reproduction according to Pollinator Partnership's onsite studies. Pollinator seed mixes significantly increased the occurrence of many native bee species at Santa Susana when compared to un-restored areas.



**Bumble Bee**  
*Bombus* spp.  
To 1 in. (3 cm)  
Stout, furry bee is large and noisy. Can sting repeatedly.



**Mason Bee**  
*Osmia* spp.  
To .5 in. (1.3 cm)



**Small Carpenter Bee**  
*Ceratina* spp.  
To .3 in. (.8 cm)



**Digger Bee**  
*Anthophora* spp.  
To .5 in. (1.3 cm)



**Sweat Bee**  
*Halictus* spp.  
To .4 in. (1 cm)



**Large Carpenter Bee**  
*Xylocopa* spp.  
To 1 in. (3 cm)  
Large blue-black bee has a shiny abdomen.



**Leafcutter Bee**  
*Megachile* spp.  
To .5 in. (1.3 cm)

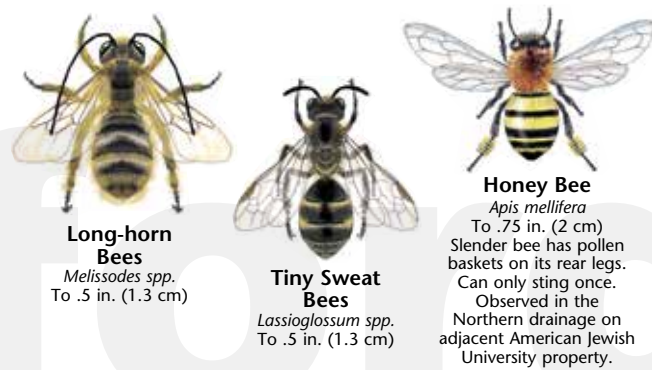


**Green Sweat Bee**  
*Agapostemon* spp.  
To in (cm)



**Alkali Bee**  
*Andrena* spp.  
To .6 in. (1.5 cm)

## POLLINATORS



**Long-horn Bees**  
*Melissodes* spp.  
To .5 in. (1.3 cm)

**Tiny Sweat Bees**  
*Lassioglossum* spp.  
To .5 in. (1.3 cm)

**Honey Bee**  
*Apis mellifera*  
To .75 in. (2 cm)  
Slender bee has pollen baskets on its rear legs. Can only sting once. Observed in the Northern drainage on adjacent American Jewish University property.

## INVERTEBRATES

### Invertebrates – Did You Know?

Fairy shrimp are a magical aquatic species that adapt to the seasonal conditions of vernal pools. At Santa Susana, these pools occur in weathered sandstone outcrops during the rainy season and dry up shortly thereafter. During the dry phase, fairy shrimp eggs survive dormant until rain induces some of them to hatch.



**Wood Tick**  
*Dermacentor* spp.  
To .25 in. (.6 cm)  
Feeds on animal blood and can transmit diseases.

Actual Size



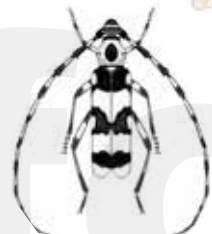
**Versatile Fairy shrimp**  
*Branchinecta lindahli*  
To .5 in. (1.3 cm)



**Common Wasp**  
*Vespa vulgaris*  
To 2 cm (.8 in.)



**Desert Tarantula**  
*Aphonopelma chalcodes*  
To 3 in. (8 cm)



**Banded Alder Borer**  
*Rosalia funebris*  
To 1.5 in. (4 cm)  
Observed in the Northern Drainage on adjacent American Jewish University property.



**Centipede**  
*Order Chilopoda*  
To 5 in. (13 cm)  
Has a single pair of legs per segment and long antennae. Can inflict a painful bite.

## INVERTEBRATES



**Ceanothus Silk Moth**  
*Hyalophora euryalus*  
To 4.5 in. (11 cm)



**Northern Checkerspot**  
*Chlosyne palla*  
To 1.5 in. (4 cm)



**Bristletail**  
*Lepitmatidae* spp.  
To .5 in. (1.3 cm)



**Trask's Shoulderband Snail**  
*Helminthoglypta traskii*  
To 1.5 in. (4 cm)

## REPTILES

### Reptiles – Did You Know?

The Southwestern Herpetologist Society conducts herpetological studies at Santa Susana by laying down pieces of plywood to encourage snakes, lizards, frogs and salamanders to take up shelter. They have identified a number of protected species including a two-striped garter snake and a coast patch-nose snake – two Species of Special Concern in California.



**Great Basin Fence Lizard**  
*Sceloporus occidentalis longipes*  
To 8 in. (20 cm)



**Western Skink**  
*Eumeces skiltonianus* To 9 in. (23 cm)  
Juvenile has a bright blue tail.



**Western Side-blotched Lizard**  
*Uta stansburiana elegans*  
To 6 in. (15 cm)  
Note dark blotches behind forelegs.



**Coastal Whiptail**  
*Aspidoscelis tigris stegnegeri*  
To 12 in. (30 cm)  
Back and sides are dark-spotted. Note long tail. A CDFW Special Animal.

## REPTILES



**Blainville's Horned Lizard**  
*Phrynosoma blainvillii*  
To 8 in. (20 cm)  
A California Species of Special Concern.



**San Diego Alligator Lizard**  
*Elgaria multicarinata webbii*  
To 16 in. (40 cm)



**San Diego Gopher Snake**  
*Pituophis catenifer annectens*  
To 5 ft. (1.5 m)



**Southern California Legless Lizard**  
*Anniella stebbinsi*  
To 8 in. (20 cm)  
A California Species of Special Concern.



**Southern Pacific Rattlesnake**  
*Crotalus oreganus helleri*  
To 5 ft. (1.5 m)  
Venomous.



**Western Yellow-bellied Racer**  
*Coluber constrictor mormon*  
To 6 ft. (1.8 m)



**Chaparral Whipsnake**  
*Masticophis lateralis lateralis*  
To 5 ft. (1.5 m)



**Two-striped Gartersnake**  
*Thamnophis hammondi*  
To 28 in. (70 cm)  
A California Species of Special Concern.



**Common Garter Snake**  
*Thamnophis sirtalis* To 4 ft. (1.2 m)  
Has yellowish back and side stripes. Color and pattern are variable.



**Coast Patch-nosed Snake**  
*Salvadora hexalepis virgulata*  
To 45 in. (1.1 m)  
A California Species of Special Concern.



**California Kingsnake**  
*Lampropeltis californiae*  
To 7 ft. (2.1 m)  
Dark snake has light crossbands on back.



**San Bernardino Ring-necked Snake**  
*Diadophis punctatus modestus*  
To 15 in. (38 cm)  
A CDFW Special Animal.