

# Southern California Special-Status Species Survey Calendar



*Artemis Environmental  
Services, Inc.*

# Avian Species

- General Nesting Bird
- Raptors
- Western Burrowing Owl
- Western Snowy Plover
- Southwestern Willow Flycatcher
- Brown-headed Cowbird
- Belding's Savannah Sparrow
- Coastal California Gnatcatcher
- Ridgway's Rail
- California Least Tern
- Least Bell's Vireo

# Avian Species

- Varying Habitats
- Grasslands
- Beaches/salt marsh/coastal lagoons/coastal wetlands
- Riparian
- Woodlands/grasslands
- Scrub

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
General Nesting Bird <sup>4</sup>		Feb 15							Sept 15			
Raptors <sup>4</sup>	Jan 15								Sept 15			
Western Burrowing Owl ( <i>Athene cunicularia hypugaea</i> )		Feb 15					Jul 15					
Western Snowy Plover ( <i>Charadrius alexandrinus nivosus</i> ) <sup>3</sup>				Apr 01					Sept 15			
Southwestern Willow Flycatcher ( <i>Empidonax traillii extimus</i> ) <sup>1,2</sup>					May 01		Jul 31					
Brown-headed Cowbird ( <i>Molothrus ater</i> )		Feb 15		Trapping Survey				Aug 30				
Belding's Savannah Sparrow ( <i>Passerculus sandwichensis beldingii</i> ) <sup>2</sup>		Feb 15		Apr 30								
Coastal California Gnatcatcher ( <i>Polioptila californica californica</i> ) <sup>3</sup>		Feb 15 NCCP	Mar 15 Non-NCCP			Jun 30 Non-NCCP		Aug 30 NCCP				
Ridgway's Rail ( <i>Rallus obsoletus levipes</i> ) <sup>1,2</sup>		Feb 15		Apr 30								
California Least Tern ( <i>Sterna antillarum browni</i> ) <sup>1,2</sup>				Apr 01					Sept 15			
Least Bell's Vireo ( <i>Vireo bellii pusillus</i> ) <sup>1,2</sup>				Apr 10			Jul 31					

<sup>1</sup> Federally Endangered Species  
<sup>3</sup> Federally Threatened Species

<sup>2</sup> State Endangered Species  
<sup>4</sup> Covered under Migratory Bird Treaty Act

# Amphibians & Reptiles

- California Tiger Salamander
- Arroyo Toad
- California Red-legged Frog
- Mountain Yellow-legged Frog
- Western Spadefoot
  
- Western Pond Turtle
- Desert Tortoise

# Amphibians & Reptiles

- Vernal Pools/grasslands
- Riparian/pond
- Riparian/scrub
- Desert

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
California Tiger Salamander ( <i>Ambystoma californiense</i> ) <sup>3,4</sup>			Mar 01 Larval Survey; March 15 Drift fence survey		May 30 Larval Survey					Oct 15 Drift fence survey		
Arroyo Toad ( <i>Anaxyrus californicus</i> ) <sup>1</sup>			Mar 15			Jun 30						
California Red-legged Frog ( <i>Rana draytonii</i> ) <sup>3</sup>	Jan 01								Sept 30			
Mountain Yellow-legged Frog ( <i>Rana muscosa</i> ) <sup>1,2</sup>					May 01			Aug 30				
Western Spadefoot ( <i>Spea hamondii</i> )			Mar 31									Dec 01

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Western Pond Turtle ( <i>Actinemys marmorata</i> )				Apr 15					Sept 15			
Desert Tortoise ( <i>Gopherus agassizii</i> ) <sup>3,4</sup>			Mar 01		May 30				Sept 01	Oct 31		

<sup>1</sup> Federally Endangered Species  
<sup>3</sup> Federally Threatened Species

<sup>2</sup> State Endangered Species  
<sup>4</sup> State Threatened Species

# Invertebrates

- Fairy Shrimp
- Crotch Bumble Bee
- Thorne's Hairstreak Butterfly
- Quino Checkerspot Butterfly
- Harbison Dun Skipper
- Hermes Copper Butterfly
- Laguna Mountain Skipper
- Delhi Sands Flower-loving Fly

# Invertebrates

- Vernal pools
- Grasslands/shrublands
- Meadow
- Oak woodlands/riparian
- Open habitat
- Woodlands/chaparral
- Delhi sands and dune substrates

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Fairy Shrimp ( <i>Branchinecta</i> spp. and <i>Streptocephalus wooltoni</i> ) <sup>1</sup>	Conduct one wet season survey (winter/spring) and one dry season survey (summer/fall)											
Crotch Bumble Bee ( <i>Bombus Crotchii</i> ) <sup>6</sup>		Late Feb		1 <sup>st</sup> flight period peak			2 <sup>nd</sup> flight period peak			Late Oct		
Thorne's hairstreak butterfly ( <i>Callophrys thornei</i> )				Apr 01	May 30							
Quino checkerspot Butterfly ( <i>Euphydras editha quino</i> ) <sup>1</sup>		3 <sup>rd</sup> Week of Feb			2 <sup>nd</sup> Sat in May							
Harbison Dun Skipper ( <i>Euphyesvestris harbisoni</i> )				Late Spring			Early Summer					
Hermes Copper Butterfly ( <i>Lycaena Hermes</i> ) <sup>5</sup>					3 <sup>rd</sup> Week of May		1 <sup>st</sup> Week of Jul					
Laguna Mountain Skipper ( <i>Pyrgus ruralis lagunae</i> ) <sup>1</sup>				Apr 15	2-year Survey					Jul 31		
Delhi Sands Flower-loving Fly ( <i>Rhaphiomidas terminates abdominalis</i> ) <sup>1</sup>							July 01		Sept 20			

<sup>1</sup> Federally Endangered Species  
<sup>3</sup> Federally Threatened Species  
<sup>5</sup> Candidate Federally Endangered

<sup>2</sup> State Endangered Species  
<sup>4</sup> State Threatened Species  
<sup>6</sup> Candidate State Endangered

# Mammals

- Bat Roost Assessments
- San Bernardino Kangaroo Rat
- Stephen's Kangaroo Rat
- Pocket Mouse Species including Pacific Pocket Mouse
- Mohave Ground Squirrel



# Mammals

- Varying Habitats
- Alluvial/scrub
- Grassland
- Desert scrub

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
General Bat Roost Assessments	Year-round											
San Bernardino Kangaroo Rat <i>(Dipodomys merriami parvus)</i> <sup>1</sup>	Year-round											
Stephen's Kangaroo Rat <i>(Dipodomys stephensi)</i> <sup>1,2</sup>	Year-round											
Pacific Pocket Mouse <i>(Perognathus longimembris pacificus)</i> <sup>1</sup>				Apr 01			Sept 30					
Pocket Mouse Species <i>(Chaetodipus spp. and Perognathus spp.)</i>	There are a variety of Pocket Mouse sub-species in varying habitats that are CDFW Species of Special Concern and may require surveys. Inquire with our biologists as to the specific sub-species in your area and what your survey requirements may be.											
Mohave Ground Squirrel <i>(Xerospermophilus mohavensis)</i> <sup>4</sup>			Mar 01				Jul 15					

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