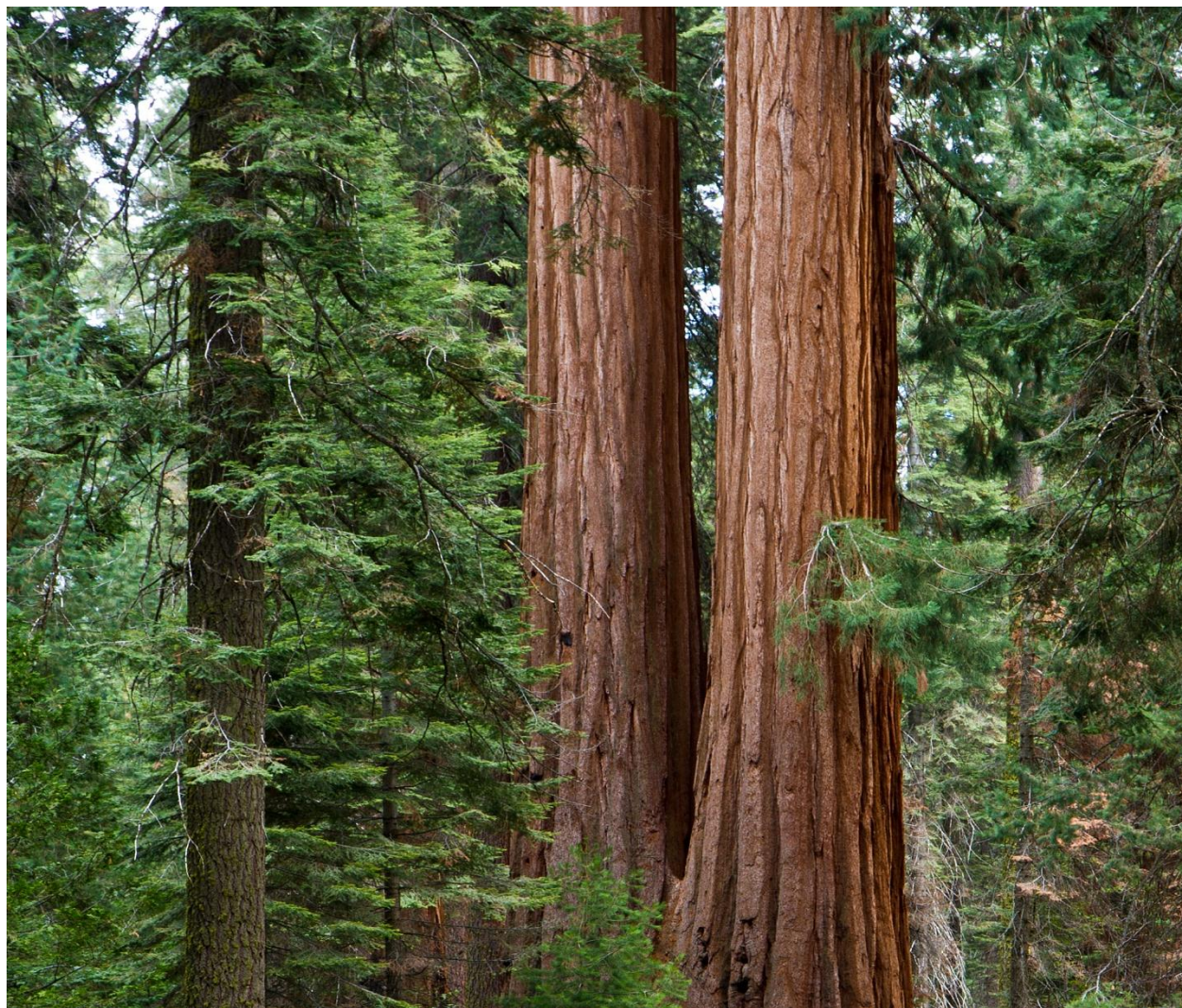




A Natural Resource Condition Assessment for Sequoia and Kings Canyon National Parks

Appendix 19 - Native and Non-native Vertebrate Species

Natural Resource Report NPS/SEKI/ NRR—2013/665.19



ON THE COVER

Giant Forest, Sequoia National Park
Photography by: Brent Paull

A Natural Resource Condition Assessment for Sequoia and Kings Canyon National Parks

Appendix 19 - Native and Non-native Vertebrate Species

Natural Resource Report NPS/SEKI/ NRR—2013/665.19

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This document contains subject matter expert interpretation of the data. The authors of this document are responsible for the technical accuracy of the information provided. The parks refrained from providing substantive administrative review to encourage the experts to offer their opinions and ideas on management implications based on their assessments of conditions. Some authors accepted the offer to cross the science/management divide while others preferred to stay firmly grounded in the presentation of only science-based results. While the authors' interpretations of the data and ideas/opinions on management implications were desired, the results and opinions provided do not represent the policies or positions of the parks, the NPS, or the U.S. Government.

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Introduction and Methodology

This appendix has the following primary components:

- **Table 3**— The list of native vertebrate species in Sequoia and Kings Canyon National Parks (SEKI).
- Explanatory narratives for some of the problematic native vertebrate species in SEKI.
- **Table 5**— The list of non-native vertebrate species in SEKI.

These tables constitute the vertebrate species list for SEKI. The “Current Status” (i.e., occurrence status) of this species list was constructed using a variety of data sources including:

- the SEKI Wildlife Observation Database,
- park records such as Superintendent’s reports and other archives, and
- published literature including research studies and historical accounts.

When classifying species, it was sometimes unclear whether a species was currently present, had ever been present, or whether observations represented vagrant individuals or individuals released in the parks. Having reduced confidence in a species being present resulted in many problematic species being classified as “Unconfirmed”. Many of these species required discussion of relevant factors for their problematic status in order to understand the full meaning of “unconfirmed”. There were three particular challenges encountered when attempting to classify the Current Status of problematic species.

1. In determining whether a species was historically present in the parks, historic data were relied upon — some dating to pre-1900. Not only do few historic records exist for most species, but there were varying degrees of confidence or uncertainty in these records.
2. In determining whether a species is currently present in the parks, confidence is high for common species in which many animals are definitively observed every year (e.g., acorn woodpecker). In contrast, confidence is low for rare species in which a single animal may be observed once or twice a decade, often from a distance, and no physical evidence is recorded such as a specimen or photo (e.g., wolverine).
3. Some species are known to have breeding populations in the parks while other species only have individuals periodically observed, which may represent a wandering animal present in the park for a short time (even one day) and thus may be biologically insignificant.

The following status categories and definitions show the exact wording from the “occurrence status” field in the NPSpecies database. NPSpecies is the master database for documenting the occurrence and status of species in NPS units. For consistency, these same terms were used in developing the SEKI vertebrate list (**Table 3** and **Table 5**) for the NRCA.

Table 1. Legend for Current Status (aka Occurrence Status)*

Current Status	Definition
Present in Park	Extremely high confidence in park; Current, verifiable evidence exists; Extant
Probably Present	Very high confidence in park; Verifiable evidence may exist, but not current; Park within range; Appropriate habitat exists; Adjacent to park
Unconfirmed	Very low to high confidence in park; Verifiable evidence may exist, but not current or insufficient
Encroaching	Extremely low confidence in park; Adjacent to park; Verifiable evidence may exist, but not current
Historic	Extremely low confidence in park; Verifiable evidence exists but not current

Note that “Current Status” is different from whether a species has a breeding population within a park. For example, some migratory species are present within a park for part of the year, but may not have a breeding population.

“Current Status” is also different than species abundance. Under the definitions as listed above, a species does not need to have a minimum number of individuals in order to be classified as “Present in Park.” Even species with occasional observations can qualify as being “Present in Park” if current, verifiable evidence of its presence exists.

It was clear how to classify a species that was observed recently, even if there was only a single observation. Using the definitions in the above legend, such a species would be classified as “Present in Park.” But it was less clear how to classify a species that had lightly used the park in the past and was not currently present. Examples are two potentially vagrant species: elk that wandered from the Owens Valley up to park boundary near the crest of the Sierra Nevada in the 1970s, and wolves that may have visited the parks occasionally through the early 1900s. None of those species have been seen in the parks in recent years, but it could be misleading to classify them as “Historic.” That term would imply that their loss was of some import to the park when it appears they had little biological significance. In addition, some species may have been misidentified. For example, the ladder-backed woodpecker was reported in the parks only once in 1994, but there are no other documented ladder-backed woodpecker observations in the Sierra Nevada.

Therefore, the status of “Unconfirmed” was used when classifying a species that appears to have made light use of the park in the past but for which there is no recent record. This results in the status of “Unconfirmed” meaning different things in different situations. Usually it means the equivalent of “uncertain” as defined in the above legend. But for some species that have been extirpated, a status of “Unconfirmed” means that they are thought to have used the resource lightly before extirpation (e.g., California condor).

In summary, breeding status and abundance was not used for establishing the *Current Status* of species that may now be present. But for species that are no longer present, the biological presence that the species once had in the environment was considered. For example, there are historical records of river otters utilizing foothill waterways to come into SEKI as recently as 1941. However, they only penetrated the park a limited distance (Simpson Meadow and Ladybug Camp) and in limited numbers. Since their use of park resources was judged to have been of relatively little importance to the species, the Current Status of the river otter was categorized as

“Unconfirmed.” In contrast, the brown bear (grizzly bear) is thought to have used the alpine zones as well as the chaparral and riparian areas of the parks. Since that use was judged to have been of relatively high importance to that species, the Current Status of the brown bear was categorized as “Historic.”

Native Species Extirpated from SEKI

Based on the above definitions and reasoning, **Table 3** classifies only three native vertebrate species as having a Current Status of “Historic:”

- Foothill Yellow-legged Frog
- Tundra Swan
- Brown Bear, Grizzly Bear

However, this is misleading. There is evidence to suggest that a large number of species were extirpated from the park during the early part of 20th century.

The Tulare Lake ecosystem was located in the San Joaquin Valley west of SEKI. It consisted of five valley lakes which were the anchors of a wetland complex of over 400,000 acres and it supported a wide variety of wildlife. Austin (2012) describes the historic function of this wetland complex and how its collapse impacted the wildlife of SEKI as follows.

Given the proximity of the Tulare Lake ecosystem to SEKI, it is reasonable to suspect that wildlife moved to some degree between the valley wetlands and the park. When Sequoia National Park was created in 1890, the Tulare Lake ecosystem still functioned in a more or less natural way. The ecosystem had already been altered significantly by that date, but the effects on the park were not yet apparent to the caretakers. Limited observations support the hypothesis that the furbearers (beavers, minks, and otters) used the connecting foothill waterways to move from the valley into the parks (Warner 1907, Sumner and Dixon 1953, Townsend 1979) and Fry (1932) described repeated observations of wetland birds travelling between the valley and SEKI from 1906-1931 (**Table 2**).

Walter Fry served SEKI for 25 years as its chief ranger, superintendent, judge, and naturalist. He recorded the changes that he observed in bird life between 1906 and 1931 and then summarized these in a report (Fry 1932). SEKI was never a significant breeding ground for waterfowl, but Fry said that it served as a “splendid refuge” for waterfowl and shorebirds during the winter months. Fry reported commonly seeing many ducks, geese, swans, and other waterfowl during the autumn, winter, and spring, some of which remained in the park throughout the year during the early years of his observations. However, he reported that by about 1930, most species were seldom seen, and when they were seen, they were few in number. Fry reported that the rapid decrease in water- and shore-birds started about 1909 and continued through 1931.

Fry attributed the decline of these birds to four principal causes:

1. the settlement and drying up of their breeding grounds
2. the length of the open hunting season and bag limit
3. the increase in the number of hunters
4. disease

Fry provided a table in his report comparing the number of birds present by family in 1906 and 1931. That table is reproduced in part below:

Table 2. Number of Species per Family for Selected Families

Family	1906	1931
Grebes	1	1
Loons	1	1
Cormorants	1	1
Ducks, geese, swans	17	2
Hérons, egrets, bitterns	4	2
Rails and coots	2	1
Stilts	1	0
Snipes and sandpipers	2	1
Plovers	2	1
Vultures	2	1
Hawks and eagles	12	10
Cuckoos	2	1
Flycatchers	7	6
Crows, jays, magpies	6	5
Blackbirds, orioles, meadowlarks*	5	3
Shrikes	1	0
Wood warblers	11	10
Total of above families	77	46

* 3 species were lost from this family during this period, but the western meadowlark was added.

This represents a loss of 30 species in 16 families during this 25-year period. One new species was added: the western meadowlark. Fry observed that the losses were all among the water birds and migratory species. The period that Fry documented (1906–1931) was generally the period during which the Tulare Lake ecosystem was being lost and the five valley lakes were drying up.

While the magnitude of the loss of park wildlife during this time is clear, because Fry did not describe the particular species lost, only losses at the family level can be identified, which is why the individual species lost are not reflected in **Table 3**. The tundra swan is the one notable exception.

While Fry reported the number of species seen, he did not report the abundance of each species. However, it is apparent from his description that waterfowl and shorebirds visited the park regularly during the early decades of the park's existence. Today these species no longer visit the parks at all. The correlation between the collapse of the Tulare Lake ecosystem and the loss of numerous bird species, despite the parks remaining largely undeveloped, is an indication that stressors outside of the park (e.g., land use change and habitat fragmentation) can impact wildlife within its boundaries.

Table 3. Native vertebrate species in SEKI.

Common Name	Scientific Name	Occurrence
FISH		
Sacramento sucker	<i>Catostomus occidentalis</i>	Present in Park
prickly sculpin*	<i>Cottus asper</i>	Unconfirmed
rifle sculpin*	<i>Cottus gulosus</i>	Encroaching
California roach	<i>Hesperoleucus symmetricus</i>	Present in Park
rainbow trout	<i>Oncorhynchus mykiss</i>	Present in Park
Kern rainbow trout	<i>Oncorhynchus mykiss gilberti</i>	Present in Park
Little Kern golden trout	<i>Oncorhynchus mykiss whitei</i>	Present in Park
Sacramento pikeminnow, Sacramento squawfish*	<i>Ptychocheilus grandis</i>	Encroaching
REPTILES		
Pacific pond turtle	<i>Actinemys marmorata</i>	Present in Park
California legless lizard*	<i>Anniella pulchra</i>	Encroaching
rubber boa	<i>Charina bottae</i>	Present in Park
Western whiptail	<i>Cnemidophorus tigris</i>	Present in Park
racer	<i>Coluber constrictor</i>	Present in Park
sharp-tailed snake	<i>Contia tenuis</i>	Present in Park
Western rattlesnake	<i>Crotalus oreganus</i>	Present in Park
ringneck snake, ring-necked snake	<i>Diadophis punctatus</i>	Present in Park
Northern alligator lizard	<i>Elgaria coerulea</i>	Present in Park
Southern alligator lizard	<i>Elgaria multicarinata</i>	Present in Park
Gilbert's skink	<i>Eumeces gilberti</i>	Present in Park
Western skink*	<i>Eumeces skiltonianus</i>	Probably Present
night snake, nightsnake	<i>Hypsiglena torquata</i>	Present in Park
common kingsnake	<i>Lampropeltis getula</i>	Present in Park
California mountain kingsnake	<i>Lampropeltis zonata</i>	Present in Park

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
Striped Racer	<i>Masticophis lateralis</i>	Present in Park
Coast Horned Lizard*	<i>Phrynosoma coronatum</i>	Unconfirmed
Bullsnake, Gopher Snake	<i>Pituophis catenifer</i>	Present in Park
Long-nosed Snake	<i>Rhinocheilus lecontei</i>	Present in Park
Sagebrush Lizard	<i>Sceloporus graciosus</i>	Present in Park
Western Fence Lizard	<i>Sceloporus occidentalis</i>	Present in Park
Southwestern Black-headed Snake	<i>Tantilla hobartsmithi</i>	Present in Park
western aquatic garter snake	<i>Thamnophis couchii</i>	Present in Park
Western Terrestrial Garter Snake	<i>Thamnophis elegans</i>	Present in Park
Common Garter Snake*	<i>Thamnophis sirtalis</i>	Unconfirmed
Common Side-blotched Lizard, Side-blotched Lizard*	<i>Uta stansburiana</i>	Unconfirmed
AMPHIBIANS		
Gregarious Slender Salamander	<i>Batrachoseps gregarius</i>	Present in Park
Sequoia Slender Salamander	<i>Batrachoseps kawia</i>	Present in Park
Kings River Slender Salamander	<i>Batrachoseps regius</i>	Present in Park
Western Toad	<i>Bufo boreas</i>	Present in Park
Yosemite Toad	<i>Bufo canorus</i>	Present in Park
Ensatina	<i>Ensatina eschscholtzii</i>	Present in Park
Mount Lyell Salamander	<i>Hydromantes platycephalus</i>	Present in Park
Northern Pacific Treefrog, Pacific Chorus Frog, Pacific Treefrog	<i>Pseudacris regilla</i>	Present in Park
Foothill Yellow-legged Frog*	<i>Rana boylei</i>	Historic
Southern Mountain Yellow-legged Frog	<i>Rana muscosa</i>	Present in Park
Sierra Nevada Yellow-legged Frog	<i>Rana sierrae</i>	Present in Park
California Newt	<i>Taricha torosa</i>	Present in Park
BIRDS		
Cooper's Hawk	<i>Accipiter cooperii</i>	Present in Park

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
Northern Goshawk	<i>Accipiter gentilis</i>	Present in Park
Sharp-shinned Hawk	<i>Accipiter striatus</i>	Present in Park
Spotted Sandpiper	<i>Actitis macularia</i>	Present in Park
Northern Saw-whet Owl	<i>Aegolius acadicus</i>	Present in Park
White-throated Swift	<i>Aeronautes saxatalis</i>	Present in Park
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	Present in Park
Rufous-crowned Sparrow	<i>Aimophila ruficeps</i>	Present in Park
Wood Duck	<i>Aix sponsa</i>	Present in Park
Sage Sparrow	<i>Amphispiza belli</i>	Present in Park
Black-throated Sparrow	<i>Amphispiza bilineata</i>	Present in Park
Northern Pintail	<i>Anas acuta</i>	Present in Park
Northern Shoveler	<i>Anas clypeata</i>	Present in Park
Eurasian Teal, Green-winged Teal	<i>Anas crecca</i>	Present in Park
Mallard	<i>Anas platyrhynchos</i>	Present in Park
Gadwall	<i>Anas strepera</i>	Present in Park
American pipit	<i>Anthus rubescens</i>	Present in Park
western scrub-jay	<i>Aphelocoma californica</i>	Present in Park
Golden Eagle	<i>Aquila chrysaetos</i>	Present in Park
Black-chinned Hummingbird	<i>Archilochus alexandri</i>	Present in Park
Great Blue Heron	<i>Ardea herodias</i>	Present in Park
Short-eared Owl	<i>Asio flammeus</i>	Present in Park
Long-eared Owl	<i>Asio otus</i>	Present in Park
Lesser Scaup	<i>Aythya affinis</i>	Present in Park

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
oak titmouse	<i>Baeolophus inornatus</i>	Present in Park
Cedar Waxwing	<i>Bombycilla cedrorum</i>	Present in Park
Bohemian Waxwing	<i>Bombycilla garrulus</i>	Present in Park
Canada Goose	<i>Branta canadensis</i>	Present in Park
Great Horned Owl	<i>Bubo virginianus</i>	Present in Park
Bufflehead	<i>Bucephala albeola</i>	Present in Park
Red-tailed Hawk	<i>Buteo jamaicensis</i>	Present in Park
Roughleg, Rough-legged Hawk	<i>Buteo lagopus</i>	Present in Park
Red-shouldered Hawk	<i>Buteo lineatus</i>	Present in Park
Broad-winged Hawk	<i>Buteo platypterus</i>	Present in Park
Ferruginous Hawk	<i>Buteo regalis</i>	Probably Present
Swainson's Hawk	<i>Buteo swainsoni</i>	Present in Park
California Quail, Californian Quail	<i>Callipepla californica</i>	Present in Park
Anna's Hummingbird	<i>Calypte anna</i>	Present in Park
Lawrence's Goldfinch	<i>Carduelis lawrencei</i>	Present in Park
Pine Siskin	<i>Carduelis pinus</i>	Present in Park
Lesser Goldfinch	<i>Carduelis psaltria</i>	Present in Park
American Goldfinch	<i>Carduelis tristis</i>	Present in Park
Cassin's Finch	<i>Carpodacus cassinii</i>	Present in Park
House Finch	<i>Carpodacus mexicanus</i>	Present in Park
Purple Finch	<i>Carpodacus purpureus</i>	Present in Park
Turkey Vulture	<i>Cathartes aura</i>	Present in Park
Hermit Thrush	<i>Catharus guttatus</i>	Present in Park

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
Swainson's Thrush	<i>Catharus ustulatus</i>	Present in Park
Canyon Wren	<i>Catherpes mexicanus</i>	Present in Park
brown creeper	<i>Certhia americana</i>	Present in Park
Vaux's Swift	<i>Chaetura vauxi</i>	Present in Park
Wrentit	<i>Chamaea fasciata</i>	Present in Park
Killdeer	<i>Charadrius vociferus</i>	Present in Park
Lark Sparrow	<i>Chondestes grammacus</i>	Present in Park
Common Nighthawk	<i>Chordeiles minor</i>	Present in Park
American Dipper	<i>Cinclus mexicanus</i>	Present in Park
Northern Harrier	<i>Circus cyaneus</i>	Present in Park
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	Present in Park
Northern Flicker	<i>Colaptes auratus</i>	Present in Park
olive-sided flycatcher	<i>Contopus cooperi</i>	Present in Park
Western Wood Pewee, Western Wood-Pewee	<i>Contopus sordidulus</i>	Present in Park
American Crow	<i>Corvus brachyrhynchos</i>	Present in Park
Common Raven, Northern Raven	<i>Corvus corax</i>	Present in Park
Steller's Jay	<i>Cyanocitta stelleri</i>	Present in Park
Tundra Swan*	<i>Cygnus columbianus</i>	Historic
American Black Swift, Black Swift	<i>Cypseloides niger</i>	Present in Park
Sooty Grouse	<i>Dendragapus fuliginosus</i>	Present in Park
Yellow-rumped Warbler	<i>Dendroica coronata</i>	Present in Park
Black-throated Gray Warbler, Black-throated Grey Warbler	<i>Dendroica nigrescens</i>	Present in Park
Hermit Warbler	<i>Dendroica occidentalis</i>	Present in Park
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	Present in

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
		Park
American Yellow Warbler, Yellow Warbler	<i>Dendroica petechia</i>	Present in Park
Townsend's Warbler	<i>Dendroica townsendi</i>	Present in Park
Pileated Woodpecker	<i>Dryocopus pileatus</i>	Present in Park
Gray Catbird, Grey Catbird	<i>Dumetella carolinensis</i>	Unconfirmed
white-tailed kite	<i>Elanus leucurus</i>	Present in Park
Pacific slope flycatcher	<i>Empidonax difficilis</i>	Present in Park
Hammond's Flycatcher	<i>Empidonax hammondi</i>	Present in Park
Dusky Flycatcher	<i>Empidonax oberholseri</i>	Present in Park
Willow Flycatcher	<i>Empidonax traillii</i>	Present in Park
Gray Flycatcher, Grey Flycatcher	<i>Empidonax wrightii</i>	Present in Park
Horned Lark	<i>Eremophila alpestris</i>	Present in Park
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>	Present in Park
Merlin	<i>Falco columbarius</i>	Present in Park
Prairie Falcon	<i>Falco mexicanus</i>	Present in Park
Peregrine Falcon	<i>Falco peregrinus</i>	Present in Park
Gyr Falcon*	<i>Falco rusticolus</i>	Unconfirmed
American Kestrel	<i>Falco sparverius</i>	Present in Park
American Coot	<i>Fulica americana</i>	Present in Park
Common Snipe	<i>Gallinago gallinago</i>	Present in Park
Common Loon, Great Northern Loon	<i>Gavia immer</i>	Present in Park
Greater Roadrunner	<i>Geococcyx californianus</i>	Present in Park
Common Yellowthroat	<i>Geothlypis trichas</i>	Present in Park
Mountain Pygmy Owl, Northern Pygmy-Owl	<i>Glaucidium gnoma</i>	Present in Park
Blue Grosbeak	<i>Guiraca caerulea</i>	Present in

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
		Park
California Condor*	<i>Gymnogyps californianus</i>	Unconfirmed
Pinyon Jay	<i>Gymnorhinus cyanocephalus</i>	Present in Park
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Present in Park
Barn Swallow	<i>Hirundo rustica</i>	Present in Park
Harlequin Duck*	<i>Histrionicus histrionicus</i>	Unconfirmed
Bullock's oriole	<i>Icterus bullockii</i>	Present in Park
Hooded Oriole	<i>Icterus cucullatus</i>	Present in Park
Baltimore Oriole, Northern Oriole	<i>Icterus galbula</i>	Unconfirmed
Varied Thrush	<i>Ixoreus naevius</i>	Present in Park
Dark-eyed Junco	<i>Junco hyemalis</i>	Present in Park
Great Grey Shrike, Northern Shrike	<i>Lanius excubitor</i>	Unconfirmed
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Present in Park
California Gull	<i>Larus californicus</i>	Present in Park
gray-crowned rosy finch	<i>Leucosticte tephrocotis</i>	Present in Park
Red Crossbill	<i>Loxia curvirostra</i>	Present in Park
Belted Kingfisher	<i>Megaceryle alcyon</i>	Present in Park
Tecolote occidental, Western Screech Owl, Western Screech-Owl	<i>Megascops kennicottii</i>	Present in Park
Acorn Woodpecker	<i>Melanerpes formicivorus</i>	Present in Park
Lewis' Woodpecker, Lewis's Woodpecker	<i>Melanerpes lewis</i>	Present in Park
Surf Scoter	<i>Melanitta perspicillata</i>	Present in Park
Lincoln's Sparrow	<i>Melospiza lincolnii</i>	Present in Park
Song Sparrow	<i>Melospiza melodia</i>	Present in Park
Common Merganser	<i>Mergus merganser</i>	Present in Park
Northern Mockingbird	<i>Mimus polyglottos</i>	Present in Park
Townsend's Solitaire	<i>Myadestes townsendi</i>	Present in

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
		Park
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>	Present in Park
Clark's Nutcracker	<i>Nucifraga columbiana</i>	Present in Park
MacGillivray's Warbler	<i>Oporornis tolmiei</i>	Present in Park
Mountain Quail	<i>Oreortyx pictus</i>	Present in Park
Flammulated Owl	<i>Otus flammeolus</i>	Present in Park
Ruddy Duck	<i>Oxyura jamaicensis</i>	Present in Park
Osprey	<i>Pandion haliaetus</i>	Present in Park
Savannah Sparrow	<i>Passerculus sandwichensis</i>	Present in Park
Fox Sparrow	<i>Passerella iliaca</i>	Present in Park
Lazuli Bunting	<i>Passerina amoena</i>	Present in Park
Band-tailed Pigeon	<i>Patagioenas fasciata</i>	Present in Park
American White Pelican*	<i>Pelecanus erythrorhynchos</i>	Unconfirmed
cliff swallow	<i>Petrochelidon pyrrhonota</i>	Present in Park
Phainopepla	<i>Phainopepla nitens</i>	Present in Park
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	Present in Park
Common Poorwill	<i>Phalaenoptilus nuttallii</i>	Present in Park
Red-necked Phalarope	<i>Phalaropus lobatus</i>	Present in Park
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	Present in Park
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>	Present in Park
White-headed Woodpecker	<i>Picoides albolarvatus</i>	Present in Park
Black-backed Woodpecker	<i>Picoides arcticus</i>	Present in Park
Nuttall's Woodpecker	<i>Picoides nuttallii</i>	Present in Park
Downy Woodpecker	<i>Picoides pubescens</i>	Present in

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
		Park
Ladder-backed Woodpecker*	<i>Picoides scalaris</i>	Unconfirmed
Hairy Woodpecker	<i>Picoides villosus</i>	Present in Park
Pine Grosbeak	<i>Pinicola enucleator</i>	Present in Park
Green-tailed Towhee	<i>Pipilo chlorurus</i>	Present in Park
California towhee	<i>Pipilo crissalis</i>	Present in Park
spotted towhee	<i>Pipilo maculatus</i>	Present in Park
Western Tanager	<i>Piranga ludoviciana</i>	Present in Park
Summer Tanager	<i>Piranga rubra</i>	Present in Park
Horned Grebe	<i>Podiceps auritus</i>	Present in Park
Black-necked Grebe, Eared Grebe	<i>Podiceps nigricollis</i>	Present in Park
pied-billed grebe	<i>Podilymbus podiceps</i>	Present in Park
mountain chickadee	<i>Poecile gambeli</i>	Present in Park
Blue-gray Gnatcatcher, Blue-grey Gnatcatcher	<i>Poliptila caerulea</i>	Present in Park
Vesper Sparrow	<i>Pooecetes gramineus</i>	Present in Park
Purple Martin	<i>Progne subis</i>	Unconfirmed
American Bushtit, Bushtit	<i>Psaltiriparus minimus</i>	Present in Park
American Avocet	<i>Recurvirostra americana</i>	Present in Park
Ruby-crowned Kinglet	<i>Regulus calendula</i>	Present in Park
Golden-crowned Kinglet	<i>Regulus satrapa</i>	Present in Park
Rock Wren	<i>Salpinctes obsoletus</i>	Present in Park
Black Phoebe	<i>Sayornis nigricans</i>	Present in Park
Say's Phoebe	<i>Sayornis saya</i>	Present in Park
Rufous Hummingbird	<i>Selasphorus rufus</i>	Present in Park
Allen's Hummingbird	<i>Selasphorus sasin</i>	Present in

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
		Park
Mountain Bluebird	<i>Sialia currucoides</i>	Present in Park
Western Bluebird	<i>Sialia mexicana</i>	Present in Park
Red-breasted Nuthatch	<i>Sitta canadensis</i>	Present in Park
White-breasted Nuthatch	<i>Sitta carolinensis</i>	Present in Park
Pygmy Nuthatch	<i>Sitta pygmaea</i>	Present in Park
Red-naped Sapsucker	<i>Sphyrapicus nuchalis</i>	Present in Park
Red-breasted Sapsucker	<i>Sphyrapicus ruber</i>	Present in Park
Williamson's Sapsucker	<i>Sphyrapicus thyroideus</i>	Present in Park
Black-chinned Sparrow	<i>Spizella atrogularis</i>	Present in Park
Brewer's Sparrow	<i>Spizella breweri</i>	Present in Park
Chipping Sparrow	<i>Spizella passerina</i>	Present in Park
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	Present in Park
Calliope Hummingbird	<i>Stellula calliope</i>	Present in Park
Caspian Tern	<i>Sterna caspia</i>	Present in Park
Great Gray Owl, Great Grey Owl	<i>Strix nebulosa</i>	Present in Park
spotted owl	<i>Strix occidentalis</i>	Present in Park
Western Meadowlark	<i>Sturnella neglecta</i>	Present in Park
Tree Swallow	<i>Tachycineta bicolor</i>	Present in Park
Violet-green Swallow	<i>Tachycineta thalassina</i>	Present in Park
Bewick's Wren	<i>Thryomanes bewickii</i>	Present in Park
California Thrasher	<i>Toxostoma redivivum</i>	Present in Park
House Wren	<i>Troglodytes aedon</i>	Present in Park
Winter Wren	<i>Troglodytes troglodytes</i>	Present in

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
		Park
American Robin	<i>Turdus migratorius</i>	Present in Park
Eastern Kingbird	<i>Tyrannus tyrannus</i>	Unconfirmed
Western Kingbird	<i>Tyrannus verticalis</i>	Present in Park
Barn Owl, Common Barn-Owl	<i>Tyto alba</i>	Present in Park
Orange-crowned Warbler	<i>Vermivora celata</i>	Present in Park
Lucy's Warbler	<i>Vermivora luciae</i>	Present in Park
Nashville Warbler	<i>Vermivora ruficapilla</i>	Present in Park
Cassin's vireo	<i>Vireo cassinii</i>	Present in Park
Warbling Vireo	<i>Vireo gilvus</i>	Present in Park
Hutton's Vireo	<i>Vireo huttoni</i>	Present in Park
Wilson's Warbler	<i>Wilsonia pusilla</i>	Present in Park
Mourning Dove	<i>Zenaida macroura</i>	Present in Park
Golden-crowned Sparrow	<i>Zonotrichia atricapilla</i>	Present in Park
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	Present in Park
MAMMALS		
pallid bat	<i>Antrozous pallidus</i>	Present in Park
mountain beaver	<i>Aplodontia rufa</i>	Present in Park
Ringtail	<i>Bassariscus astutus</i>	Present in Park
Coyote	<i>Canis latrans</i>	Present in Park
gray wolf, Wolf*	<i>Canis lupus</i>	Unconfirmed
american beaver, beaver*	<i>Castor canadensis</i>	Present in Park
elk, wapiti, wapiti or elk*	<i>Cervus elaphus</i>	Unconfirmed
California pocket mouse	<i>Chaetodipus californicus</i>	Present in Park
Heermann's kangaroo rat	<i>Dipodomys heermanni</i>	Unconfirmed
big brown bat	<i>Eptesicus fuscus</i>	Present in Park

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
common porcupine, porcupine	<i>Erethizon dorsatum</i>	Present in Park
spotted bat	<i>Euderma maculatum</i>	Present in Park
western bonneted bat, western mastiff-bat	<i>Eumops perotis</i>	Present in Park
northern flying squirrel	<i>Glaucomys sabrinus</i>	Present in Park
Wolverine*	<i>Gulo gulo</i>	Unconfirmed
silver-haired bat	<i>Lasionycteris noctivagans</i>	Present in Park
western red bat	<i>Lasiurus blossevillei</i>	Present in Park
hoary bat	<i>Lasiurus cinereus</i>	Present in Park
Snowshoe Hare	<i>Lepus americanus</i>	Unconfirmed
black-tailed hare*	<i>Lepus californicus</i>	Unconfirmed
white-tailed hare	<i>Lepus townsendii</i>	Present in Park
North American River Otter, northern river otter, river otter*	<i>Lontra canadensis</i>	Unconfirmed
Bobcat	<i>Lynx rufus</i>	Present in Park
yellow-bellied marmot	<i>Marmota flaviventris</i>	Present in Park
American Marten, marten	<i>Martes americana</i>	Present in Park
Fisher	<i>Martes pennanti</i>	Present in Park
Striped Skunk	<i>Mephitis mephitis</i>	Present in Park
Amargosa vole, California vole	<i>Microtus californicus</i>	Present in Park
Coronation Island vole, long-tailed vole	<i>Microtus longicaudus</i>	Present in Park
montane vole	<i>Microtus montanus</i>	Present in Park
Ermine	<i>Mustela erminea</i>	Present in Park
Long-tailed Weasel	<i>Mustela frenata</i>	Present in Park
American mink, mink*	<i>Mustela vison</i>	Unconfirmed
California myotis	<i>Myotis californicus</i>	Present in Park
long-eared myotis	<i>Myotis evotis</i>	Present in Park

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
eastern small-footed myotis, small-footed myotis	<i>Myotis leibii</i>	Present in Park
little brown myotis	<i>Myotis lucifugus</i>	Present in Park
fringed myotis	<i>Myotis thysanodes</i>	Present in Park
long-legged myotis	<i>Myotis volans</i>	Present in Park
Yuma myotis	<i>Myotis yumanensis</i>	Present in Park
bushy-tailed woodrat	<i>Neotoma cinerea</i>	Present in Park
Big-eared woodrat	<i>Neotoma macrotis</i>	Present in Park
American Pika, pika	<i>Ochotona princeps</i>	Present in Park
mule deer	<i>Odocoileus hemionus</i>	Present in Park
bighorn sheep	<i>Ovis canadensis</i>	Present in Park
brush mouse	<i>Peromyscus boylii</i>	Present in Park
California mouse	<i>Peromyscus californicus</i>	Present in Park
deer mouse	<i>Peromyscus maniculatus</i>	Present in Park
pinyon mouse	<i>Peromyscus truei</i>	Present in Park
heather vole, western heather vole*	<i>Phenacomys intermedius</i>	Probably Present
western pipistrelle	<i>Pipistrellus hesperus</i>	Present in Park
Townsend's big-eared bat	<i>Plecotus townsendii</i>	Present in Park
common raccoon, northern raccoon, Raccoon	<i>Procyon lotor</i>	Present in Park
Cougar, mountain lion, Puma	<i>Puma concolor</i>	Present in Park
western harvest mouse	<i>Reithrodontomys megalotis</i>	Present in Park
Broad-footed Mole	<i>Scapanus latimanus</i>	Present in Park
western gray squirrel	<i>Sciurus griseus</i>	Present in Park
Dusky Shrew, montane shrew	<i>Sorex monticolus</i>	Present in Park

Table 4. Native vertebrate species in SEKI (continued).

Common Name	Scientific Name	Occurrence
Ornate Shrew, Suisun shrew	<i>Sorex ornatus</i>	Present in Park
American Water Shrew, northern water shrew, water shrew	<i>Sorex palustris</i>	Present in Park
Trowbridge's Shrew	<i>Sorex trowbridgii</i>	Present in Park
Vagrant Shrew, wandering shrew	<i>Sorex vagrans</i>	Unconfirmed
California ground squirrel	<i>Spermophilus beecheyi</i>	Present in Park
Belding's ground squirrel	<i>Spermophilus beldingi</i>	Present in Park
golden-mantled ground squirrel	<i>Spermophilus lateralis</i>	Present in Park
Eastern Spotted Skunk, spotted skunk	<i>Spilogale putorius</i>	Present in Park
Desert Cottontail	<i>Sylvilagus audubonii</i>	Unconfirmed
Brush Rabbit	<i>Sylvilagus bachmani</i>	Present in Park
Brazilian free-tailed bat	<i>Tadarida brasiliensis</i>	Present in Park
alpine chipmunk	<i>Tamias alpinus</i>	Present in Park
Merriam's chipmunk	<i>Tamias merriami</i>	Present in Park
Allen's chipmunk	<i>Tamias senex</i>	Unconfirmed
lodgepole chipmunk	<i>Tamias speciosus</i>	Present in Park
Uinta chipmunk	<i>Tamias umbrinus</i>	Unconfirmed
Douglas' squirrel, Douglas's squirrel	<i>Tamiasciurus douglasii</i>	Present in Park
American Badger, badger	<i>Taxidea taxus</i>	Present in Park
Botta's pocket gopher	<i>Thomomys bottae</i>	Present in Park
mountain pocket gopher	<i>Thomomys monticola</i>	Present in Park
common gray fox, Gray Fox	<i>Urocyon cinereoargenteus</i>	Present in Park
American Black Bear, black bear	<i>Ursus americanus</i>	Present in Park
Brown Bear, Grizzly Bear*	<i>Ursus arctos</i>	Historic
Red Fox*	<i>Vulpes vulpes</i>	Unconfirmed
western jumping mouse	<i>Zapus princeps</i>	Present in Park

* Identifies a problematic species. See explanatory notes after this table.

Problematic Native Species

There was adequate evidence available to assist in determining the nativity and current status for most of the species in **Table 3**. However, making such determinations for some species was problematic.

The following explanatory notes document the thought processes that the parks' subject matter experts used in classifying 24 problematic species as "native" and in categorizing the current status for those species.

Prickly Sculpin

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Information obtained from <http://calfish.ucdavis.edu/>

The prickly sculpin is found in lower elevation waters, inhabiting the Central Valley and nearby low elevation mountain streams. They can be found in cool and warm streams, rivers, and lakes. This species is found throughout California in suitable habitat.

Information obtained from UC Davis Biological Museum Collections

There are no records for Tulare County or SEKI in museum archives. There are two specimens from Fresno County in low elevations of the San Joaquin and Kings Rivers.

Conclusion about nativity

Since prickly sculpin occurs in nearby west-slope Sierran foothill streams, and similar habitat exists in the low elevation portion of the Kaweah River within SEKI, any population within SEKI would be considered "Native."

Records from SEKI

There is one reported observation of this species in the Wildlife Observation Database. Dana Abell reported this species near the Ash Mountain Headquarters in the Middle Fork Kaweah River. The observation date is 1/1/1981 but it is noted that the day and/or month of the observation is uncertain.

Conclusion about current status

There is one historic observation in the parks (1981). However, prickly sculpin has a similar appearance to riffle sculpin, and thus it is possible that this observation was actually of a riffle sculpin.

There are no observations in the parks within the last decade. During this time, however, there has only been one official sampling survey for native fishes in the lower Kaweah River (Entrix

2007). In addition, because prickly sculpin is well camouflaged with its habitat, it could have contributed to prickly sculpin not being detected during the Entrix survey even if they were present.

Consequently, due to the uncertainty of both its historic and current presence, the prickly sculpin's current status within SEKI is "Unconfirmed."

Riffle Sculpin

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Encroaching

Reasoning

Information obtained from <http://calfish.ucdavis.edu/>:

The riffle sculpin has similar habitat requirements as rainbow trout. They are found in riffles and pools in cold water, with rocky and gravelly substrate and higher dissolved oxygen. This species is found throughout California in suitable habitat.

Information obtained from UC Davis Biological Museum Collections

There is one riffle sculpin archived from Tulare County. In 1985, Larry Brown collected a riffle sculpin in the Middle Fork Kaweah River “above Three Rivers.” Larry Brown is currently a Research Biologist with the U.S. Geological Survey. From his current bio: “Dr. Brown has over 25 years experience working in California aquatic systems. He is a recognized expert on the ecology of California fishes and has published on California fishes, benthic macroinvertebrates and benthic algae.”

Conclusion about nativity

Since riffle sculpin has been observed in the Kaweah River, apparently downstream of the SEKI boundary, any population within SEKI would be considered “Native.”

Records from SEKI

There are no reported observations of this species in the Wildlife Observation Database. There have not been any captures or observations in prior fish monitoring or research projects.

Conclusion about current status

Consequently, since there are no observations of riffle sculpin in the parks, but there is one valid observation of riffle sculpin adjacent to the parks, the riffle sculpin’s current status within SEKI is “Encroaching.”

Sacramento Pikeminnow

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Encroaching

Reasoning

Information obtained from <http://calfish.ucdavis.edu/>

The Sacramento pikeminnow is found in clear low to mid-elevation streams and rivers. They are typically found in deep pools and slow runs. This species is native to much of California.

Information obtained from UC Davis Biological Museum Collections

There are no records for Tulare County or SEKI in museum archives.

Conclusion about nativity

Since Sacramento pikeminnow has been observed in the South Fork Kings River near Cedar Grove, and in the Kaweah River just downstream of the SEKI boundary, any population within SEKI would be considered “Native.”

Observations from near SEKI

There was one observation made by ENTRIX, Inc. in 2007 during a study of the effects of the Kaweah No. 3 Hydroelectric Project. In the aquatic studies report, it is noted that a 600 mm long Sacramento pikeminnow was observed during a snorkeling survey below the powerhouse, which is just downstream of the SEKI boundary on the Middle Fork Kaweah River.

Records from SEKI

There is one reported observation of this species in the Wildlife Observation Database. W. Snider reported this species in the South Fork Kings River near Cedar Grove. The observation date is 1/1/1975 but it is noted that the day and/or month of the observation is uncertain.

Conclusion about current status

The one observation within the parks occurred downstream of Cedar Grove in the Kings River in 1975 (37 years ago). Since there have since been no observations in the parks, there is low confidence that Sacramento pikeminnow are still present within SEKI. However, there was one recent observation (2007) in the Kaweah River, just downstream of the SEKI boundary. Given that this recent observation documents presence adjacent to the parks, the Sacramento pikeminnow’s current status within SEKI is “Encroaching.”

California Legless Lizard

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Encroaching

Reasoning

Information obtained from Stebbins 2003 and www.californiaherps.com

This species occurs in sparsely vegetated areas in loose soil. Typical vegetation communities include beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes and sycamore, cottonwood and oak riparian areas.

This species occurs from the San Joaquin River in Contra Costa county south to Baja California, including the San Joaquin Valley and southern Sierra Nevada mountains.

Berkeley Museum of Vertebrate Zoology Specimens

There are no museum specimens of this species in SEKI. The nearest record is from Porterville, CA.

Conclusion about nativity

Since legless lizards occasionally occur in west-slope Sierran foothill terrestrial habitat, and similar habitat exists in the low elevation portion of the Kaweah River within SEKI, any population within SEKI would be considered “Native.”

Observations from near SEKI

There have been several observations just outside of the park in Three Rivers, CA. For example, Kirk Stiltz grew up in Three Rivers and is a long time SEKI employee. He recalled capturing legless lizards as a kid (2012 pers. comm.). He last remembers capturing legless lizards on Dinely Drive in Three Rivers in a woodpile. In Harold Basey’s field notes, there is one observation from 2/24/1965 of a legless lizard “7 miles up the South Fork Kaweah River.” There is another made by Rollie Cowles on 3/17/1965 at the Three Rivers airport.

Records from SEKI

There are no reported observations of this species in the SEKI Wildlife Observation Database.

Conclusion about current status

Consequently, since there are no observations of legless lizards in the parks, but there are several valid observations adjacent to the parks, the legless lizard’s current status within SEKI is “Encroaching.”

Coast Horned Lizard

Consensus Decision

- **Nativity:** Native

- **Occurrence:** Removed from the park list

Note: This species has historically been on the SEKI vertebrate list, and classified as a park-extirpated species. After careful review of its historic distribution, habitat requirements, and valid observations within SEKI and the surrounding area, it has been omitted from official vertebrate list.

Reasoning

Information obtained from Stebbins 2003 and www.californiaherps.com

This species occupies arid and semi-arid regions in California. It is primarily found in areas with low vegetation and sandy soil. Predominant vegetation communities may include: grasslands, coniferous forests, woodlands, chaparral, and open landscapes.

Current range includes areas with the appropriate habitat along the “Pacific coast from Baja California border west of the deserts and the Sierra Nevada, north to the Bay Area, and inland as far north as Shasta Reservoir, and south into Baja California. Ranges up onto the Kern Plateau east of the crest of the Sierra Nevada.”

Berkeley Museum of Vertebrate Zoology Specimen

Below is a zoomed image of coast horned lizard museum specimens found in California. Archived specimens of this species were collected from 1900 to present. Museum archives are fairly consistent with range maps found in the above sources. There are no museum records from SEKI. The closest records are found in Porterville, Goshen, and Kernville, CA, respectively. There are no records found in the southern Sierra Nevada foothills. There are collections from 1915 in the central Sierra Nevada foothill areas near Big Oak Flat and Coulterville.

Conclusion about nativity

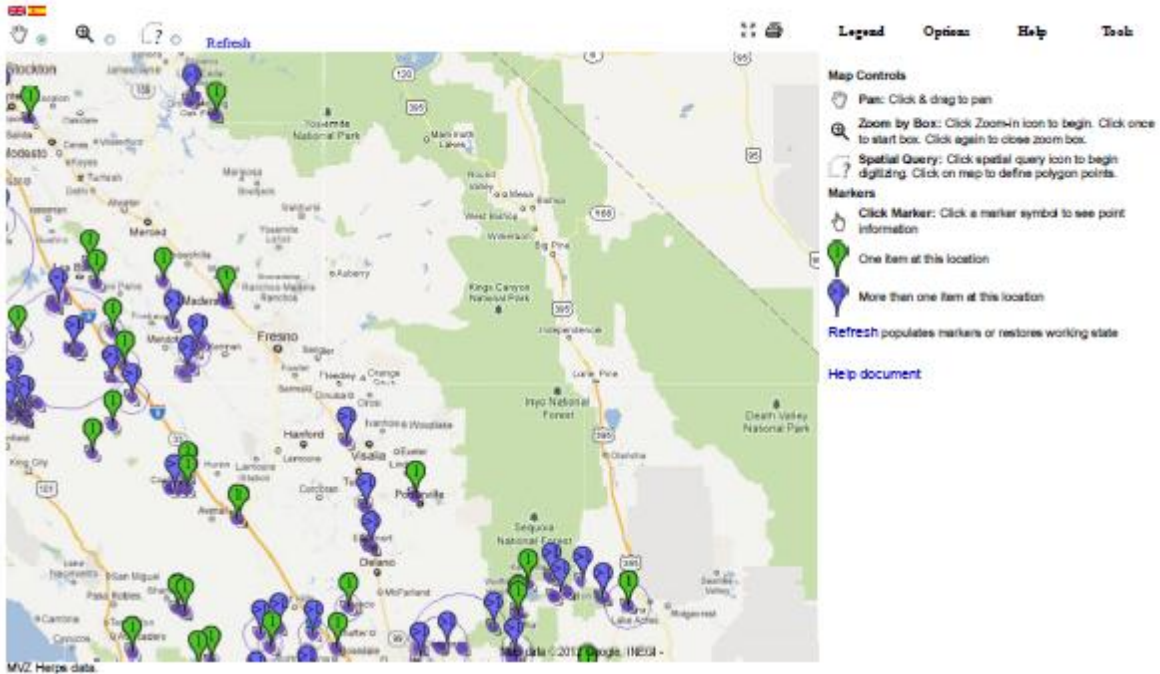
There are no records of Coast horned lizards in the southern Sierra Nevada foothills. If this species did historically occur in SEKI, it would be considered “Native” due to the close proximity of SEKI to its primary range.

Records from SEKI

There are no reported observations of this species in the SEKI Wildlife Observation Database.

Harold Werner provided the following reasoning as to why the coast horned lizard is on the parks vertebrate list: “I think that the checklist was more recent (maybe 1940s), and contained a reference to a 1922 (or there about) record of the species in Thompson Canyon.”

Harold is referring to a park species checklist that includes the coast horned lizard. Thompson Canyon is an unknown location in SEKI. It has been theorized that if this canyon is within the park, it may be in the North Fork Kaweah River area or near the ranger cabin on the Colony Mill Road.



Conclusion about current status

There are no definitive historic observations in SEKI. The only reference to the coast horned lizard occupying SEKI is from a 1940's checklist referring to a 1920's observation. Further, the location is unknown. Due to the uncertainty of both its historic and current presence, the coast horned lizard's current status within SEKI is "Unconfirmed."

Common (Valley) Garter Snake

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

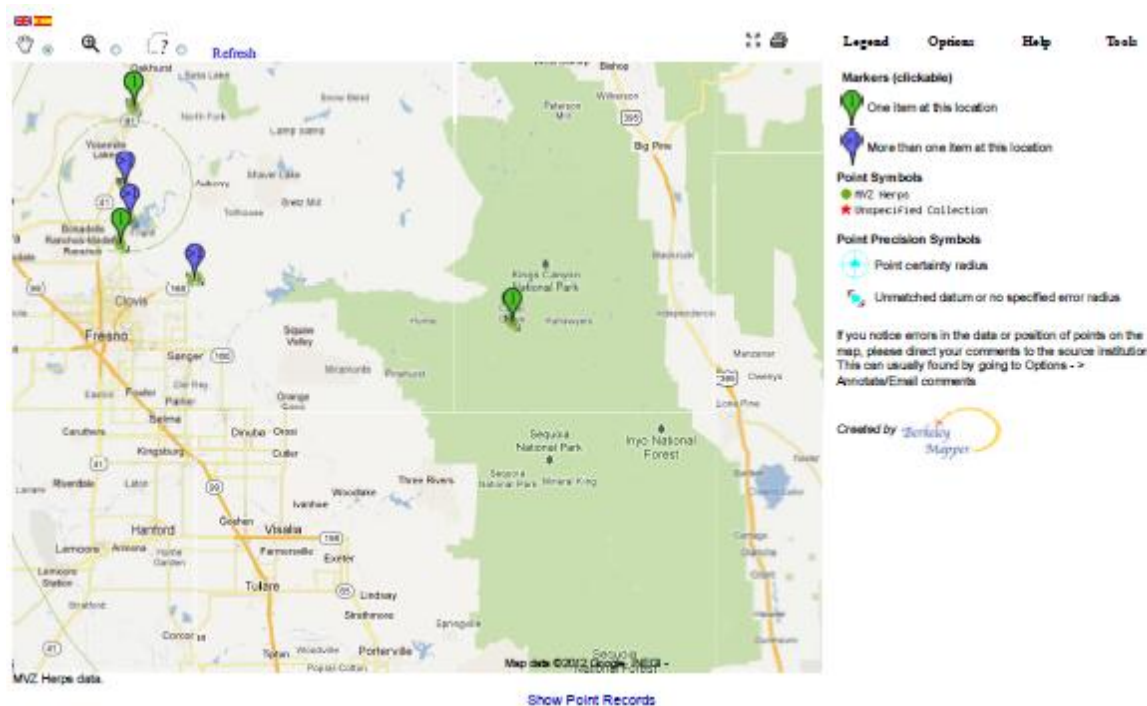
Information obtained from Stebbins 2003 and www.californiaherps.com

This species occurs in diverse habitats. Typical vegetation communities include forests, mixed woodlands, grassland, chaparral, farmlands, often near ponds, marshes, or streams.

This is the most widespread garter snake species in all of North America. It is widespread in California, but largely limited to the Central Valley and lower elevations in the Sierra Nevada.

Berkeley Museum of Vertebrate Zoology Specimens

There is one museum specimen archived from the South Fork Kings River watershed near Cedar Grove on 9/13/1916. This specimen was collected during the historic Grinnell Survey, Southern Sierra Nevada Transect.



Conclusion about nativity

Since the common garter snake was historically observed in the parks near Cedar Grove, and more recently observed 1) in the parks in Ash Mountain and 2) adjacent to the parks in Three Rivers, CA, any population within SEKI would be considered “Native.”

Observations from near SEKI

David Graber recalls capturing this species in Three Rivers, CA, which is a few miles downstream of the boundary of the parks.

Records from SEKI

There are two reported observations of this species in SEKI. In addition to the 1916 specimen described above, there is one observation in the SEKI Wildlife Observation database. David Graber reported that he and Harold Werner captured an adult common garter snake in 1982 in Ash Mountain - at the SEKI Southern Sierra Research Center. However, Harold Werner commented that he does not remember this observation event, and does not recall ever seeing this species in the parks.

Conclusion about current status

The specimen collected in 1916 documents that this species was present in the parks historically. The more recent observation suggests that this species was still present in 1982. However, because there is some disagreement about this observation and because it occurred 30 years ago, it is uncertain whether this species is currently present. Consequently, the common garter snake's current status within SEKI is "Unconfirmed."

Common Side-blotched Lizard

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Removed from the park list

Note: This species has historically been on the SEKI vertebrate list, and classified as a park-extirpated species. After careful review of its historic distribution, habitat requirements, and valid observations within SEKI and the surrounding area, it has been omitted from official vertebrate list.

Reasoning

Information obtained from Stebbins 2003 and www.californiaherps.com

This species is the most common lizard found in arid and semi-arid landscapes. It is found year round in open rocky areas with scattered vegetation. It is a habitat generalist, utilizing sandy washes, hardpan, sandy, rocky, and loamy areas. Predominant vegetation communities include chaparral, scattered trees, grassland, shrub, and cactus.

The current range of this species includes appropriate habitat in the Central Valley and Coast Ranges in California.

Berkeley Museum of Vertebrate Zoology Specimens

Below is a zoomed image of side-blotched lizard museum specimens found in California. Archived specimens of this species were collected from 1900 to present. Museum archives are consistent with range maps found in the above sources. There are no museum records from SEKI. The closest museum record is found in Orange Cove, CA. There are no records found in the Sierra Nevada foothills. Many observations are in the Central Valley and southern coast range.

Conclusion about nativity

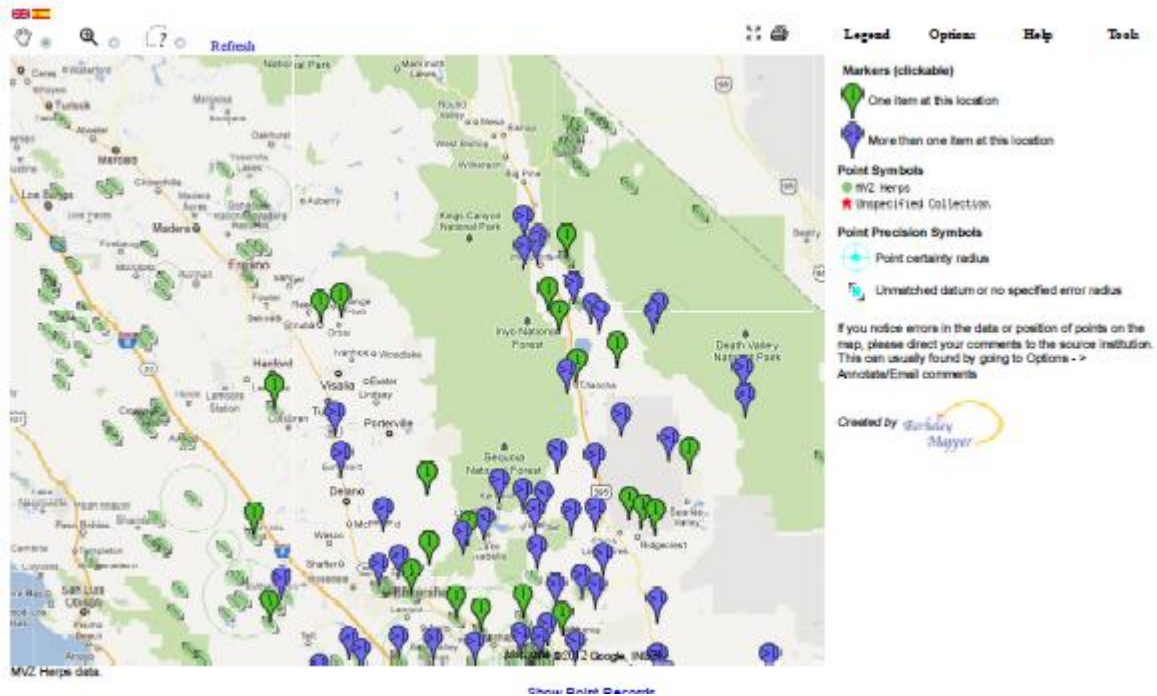
Since side blotched lizards historically occupied the nearby Central Valley, there was potential for this species to exist in the low elevation portion of the Kaweah River drainage within SEKI. Therefore, any population within SEKI would be considered “Native.”

Records from SEKI

There is one historic observation in the parks (4/23/1933). This observation was made by Joseph Dixon at Ash Mountain Headquarters (refer to pg 3008 of Dixon’s field notes).

Observations from near SEKI

Harold Werner reported that he once captured a side-blotched lizard on the west side of the small dam at Lake Kaweah (date uncertain), in what is roughly Lemon Cove, CA.



Conclusion about current status

Side-blotched lizards have not been observed in the park in recent years. The observation from Joseph Dixon was of a single individual. Where present, this species is often a common and abundant lizard. Although confidence exists in this observation, since it was a single individual the historical presence of the species in the parks cannot be determined conclusively. It is possible that this individual could have been transported from outside the parks by a park visitor.

Due to the uncertainty of both their historic and current presence, the side-blotched lizard's current status within SEKI is "Unconfirmed".

Western Skink

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Probably Present

Reasoning

Information obtained from Stebbins 2003 and www.californiaherps.com

Typical vegetation communities include grassland, woodlands, pine forests, sagebrush, chaparral, especially in open sunny areas such as clearings and the edges of creeks and rivers.

This species occurs along the California coast ranges, inland in Northern California north of the Central Valley, and in the northern Sierra Nevada. They are also found in the southern Sierra Nevada on the Kern Plateau, and in isolated locations east of the Sierra Nevada.

Berkeley Museum of Vertebrate Zoology Specimen

There is one museum specimen archived from SEKI for this species. This specimen was collected on May 30, 1934 in Upper Funston Meadow.

Conclusion about nativity

Since 1) the western skink was historically observed in the parks in Upper Funston, and recently observed in the parks in the Kaweah River watershed (H. Werner pers. comm.) and adjacent to the parks in Pumpkin Hollow, Three Rivers, CA (D. Boiano observation), and 2) because their habitat exists in the parks, any population within SEKI would be considered “Native.”

Records from SEKI

There is only one reported historic observation of this species in SEKI: the 1934 museum specimen. There are no reported observations of this species in the Wildlife Observation Database. However, Harold Werner commented that he has “seen many similar lizards in the area.” He apparently captured some of these lizards, because he described that they looked like western skinks, but their scale counts did not match published descriptions for the species. Harold Werner also captured what looked like a western skink circa 2003 during a vertebrate survey for the Sierra Nevada Network Inventory and Monitoring program. He gave this (live) specimen to Berkeley Museum of Vertebrate Zoology staff for more definitive identification and to archive as a specimen. The following are notes from this collection: “It had the color patten of the western skink, but the scale count did not match. I wanted them to verify the identification. I never received any feedback from the museum, and the lizard apparently never became a specimen.” This specimen does not show up in the museum’s online database.

Conclusion about current status

The specimen collected in 1934 documents that this species was present in the parks historically. The recent observations in the parks by Harold Werner suggest that this species is still present. Although he was uncertain due to their scale counts not matching up with published descriptions for the species, several of these were adult animals, which are distinct from their only congener in the parks – Gilbert’s skink. Thus, although Werner may have seen a variety of western skink

that is unique to the southern Sierra Nevada, he nevertheless likely saw western skinks. The western skink's current status within SEKI is "Probably Present."

Foothill Yellow-legged Frog

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Historic

Reasoning

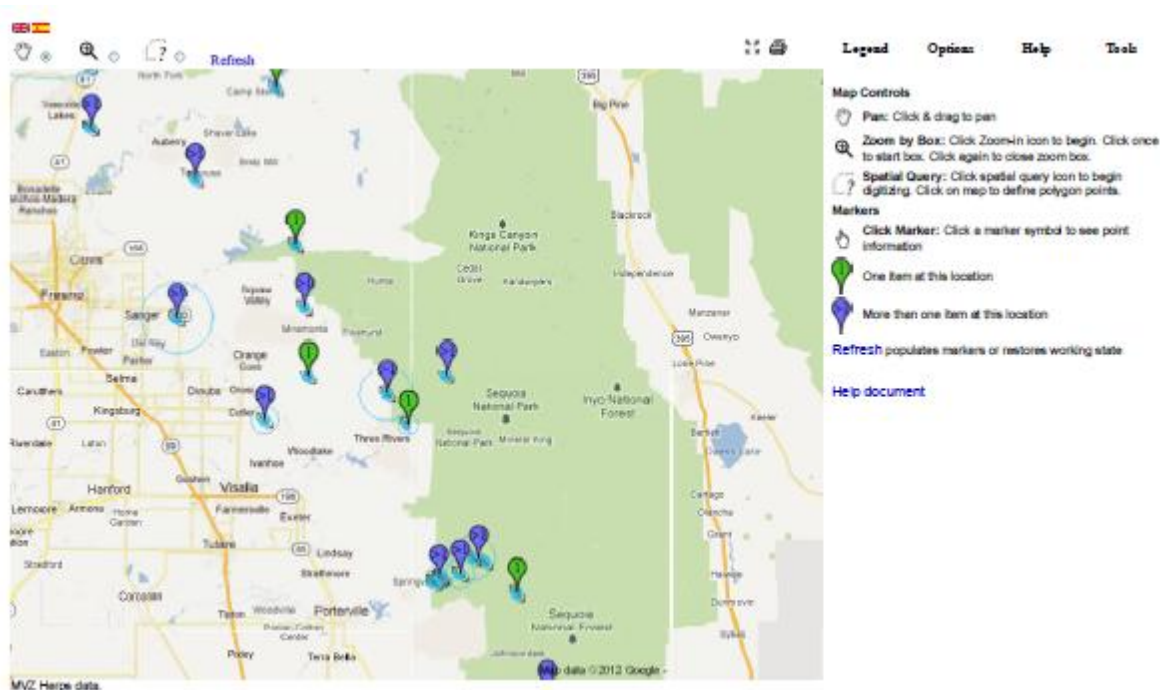
Information obtained from Stebbins 2003 and www.californiaherps.com

This species is found in rocky streams and rivers with open, sunny banks. Typical vegetation communities include forests, chaparral, and woodland habitat.

This species is found in foothill and mountain habitat in coastal and inland mountain ranges of Oregon and California. This species has largely disappeared from the southern Sierra Nevada mountains.

Berkeley Museum of Vertebrate Zoology Specimens

Below is a zoomed image of foothill yellow-legged frog museum specimens found in California. Archived specimens of this species were primarily collected in SEKI in 1935. Museum archives are consistent with range maps found in the above sources. There are 6 records of confirmed foothill yellow-legged frogs captured in 1935 from the North Fork Kaweah River. There is one additional confirmed foothill yellow-legged frog specimen captured in 1935 from Alder Creek Reservoir. Three additional specimens originally identified as foothill yellow-legged frogs were captured in 1955 in Long Meadow. These are now believed to be mountain yellow-legged frogs.



Conclusion about nativity

This species historically occupied SEKI and similar adjacent foothill mountain streams. Therefore, they are considered “Native.”

Records from SEKI

The Wildlife Observation Database has the following three reported observations:

- There is an observation of this species in the Giant Forest from 8/1/1940. This record is now believed to be a mountain yellow-legged frog.
- There is an observation of this species by J. Hickey from 3/13/1966 near the Middle Fork Kaweah River “1 and ½ miles above Hospital Rock.”
- The last observation in SEKI was made by Harold Basey on 3/24/1970 from Alder Creek. The observer recorded seeing “many in various color phases.”

Harold Basey’s archived field notes include the following two observations of foothill yellow-legged frogs in SEKI:

- Many frogs at the spring on hill near the west boundary Patrol Cabin at the North Fork Kaweah River and Yucca Creek confluence on 8/10/1962.
- Many seen along the North Fork Kaweah River above Yucca Creek on 8/10/1962.

In addition, David Graber included the following comment: “Harold Basey told me he saw foothill yellow-legged frogs regularly in Sycamore, Alder, and Elk Creeks in the 1960s.”

Conclusion about current status

There are several documented observations and confirmed museum archives of this species in the parks and adjacent foothill mountain streams and rivers. Further, declines of foothill yellow-legged frogs have been well documented, including a regional extirpation of this species in the southern Sierra Nevada mountains (see Appendix 16).

Consequently, due to the certainty and commonality of their historical presence, and the lack of recent observations, the foothill yellow-legged frog’s current status within SEKI is “Historic.”

American White Pelican

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Observations from outside SEKI

This species is regularly observed at Bravo Lake reservoir (in Woodlake) and at Lake Kaweah west of the park.

Conclusion about nativity

Those populations are close enough to SEKI to call any population within SEKI “Native.”

Records from SEKI

There are two reported observation of this species in the Wildlife Observation Database. One was in 1990 and the other in 1992. These are both thought to have been just short-term uses of the park such as fly-overs.

Conclusion about current status

This species has not been reported in the park since 1992. Consequently, the American white pelican’s current status within SEKI is “Unconfirmed.”

California Condor

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Observations from outside SEKI

This species has established populations elsewhere in California.

Conclusion about nativity

The California condor once had an established presence in SEKI. That is sufficient to call any population within SEKI “Native.”

Records from SEKI

There are 42 reported observations of this species in the Wildlife Observation Database, beginning in 1899 and ending 1981. The species was observed infrequently, averaging 3.5 observations/decade. Between 1981 and 2011, there were no observations, but 2 individuals marked with GPS collars were documented within the park boundaries in 2011-2012, although it

is unclear to what extent they were using the park (e.g., they may have just flown over its boundaries).

Conclusion about current status

Two condors flew over a portion of the park in 2011 although they were not documented to land. However, it would be misleading to use this one fly-by to classify this species as Present in Park. Consequently, the California condor's current status within SEKI is "Unconfirmed."

Gyr Falcon

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Conclusion about nativity

Although the gyrfalcon is an arctic bird, it is reasonable to assume that the single observation of this species in the parks represents an individual that traveled under its own power, without the assistance of human-modifications to the landscape, such as is the case with barred owls or brown-headed cowbirds. Consequently, this is sufficient to call the species within SEKI “Native.”

Records from SEKI

There is one reported observation of this species in the Wildlife Observation Database. In the fall of 2000, D. Bockman reported a gyrfalcon at Moro Rock.

Conclusion about current status

The observational skills of D.Bockman are unknown, but peregrine falcons are occasionally observed at Moro Rock in the fall. It is possible (and perhaps even likely) that he mistook a peregrine for a gyrfalcon.

Consequently, the gyrfalcon’s current status within SEKI is “Unconfirmed.”

Harlequin Duck

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Miscellaneous observations outside SEKI

Beedy (2008) reviewed Grinnell's findings and other historical information, and reported regular historical breeding of this species as far south as the headwaters of the San Joaquin River in Madera County, just north of SEKI.

The primary breeding range of the harlequin duck is limited to northwestern North America, as far south as Oregon and in eastern Canada. It is a rare breeder in YOSE. The species was considered extirpated from its historical breeding range in the Central Sierra until a female and four ducklings were observed in Yosemite Valley in 2002 (Beedy 2008).

Conclusion about nativity

Harlequin ducks clearly occurred in both Madera County and in Yosemite. Those populations are close enough to SEKI to call any population within SEKI “Native.”

Records from SEKI

There have been 2 reported observations of this species in SEKI.

The May 1937 SEKI Monthly Report contained the following sighting:

A pair of harlequin ducks were reported on the South Fork of the Kaweah River just above Clough Cave. They were seen daily during the week of May 2 to 8 [1937].

Beedy and Granholm (1985) reported:

Nonbreeding birds [harlequin ducks] noted historically near the Clough Cave Ranger Station on the South Fork Kaweah River and near Cedar Grove on the South Fork Kings River.

Rodney Siegel, a bird expert with the Institute for Bird Populations who has extensive experience in the Sierra Nevada, thinks that that birds present in appropriate habitat in SEKI were probably breeding, even if breeding was not actually observed or reported (personal communication, 2012).

Conclusion about current status

Because there are no photographs or specimens, their status depends on the reliability of the observers and it is unknown who the observer was for either of the SEKI records. Consequently, the harlequin duck’s current status within SEKI is “Unconfirmed.”

Ladder-backed Woodpecker

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Conclusion about nativity

The ladder-backed woodpecker's range extends into southern Kern County, which is close enough to SEKI to consider any population within SEKI "Native."

Records from SEKI

There is one reported observation of this species in the Wildlife Observation Database. Dave Graber saw a ladder-backed woodpecker in Ash Mountain in 1994.

Conclusion about current status

With only a single observation, the ladder-backed woodpecker's current status within SEKI is "Unconfirmed."

Tundra Swan

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Historic

Reasoning

Conclusion about nativity

Because the tundra swan used to roost in the park, the population within SEKI was "Native."

Records from SEKI

There is one reported observation of this species in the Wildlife Observation Database, a description of the 1907 roost by Walter Fry (Fry 1932). Fry also alluded to the swan being here in at least 1906 and 1908.

Conclusion about current status

Walter Fry was a reliable observer. The tundra swan's current status within SEKI is "Historic."

American Beaver

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Present in Park

Reasoning

Historic observations from outside SEKI

Spanish expeditions and American and English trapping parties documented that beavers occupied the lower elevations of the San Joaquin River and Tulare Lake Basins in the early 19th century (Leonard 1839, Meek 1885, Maloney 1940, Farquhar 1965, Tulare County Historical Society 1968), but early 20th century naturalists questioned whether beavers naturally lived above 1,000 feet elevation in the Sierra Nevada (e.g., Grinnell et al. 1937, Tappe 1942, Twining 1942). These authors considered any beavers present in the Sierra Nevada at the time to be the result of intentional stocking by the California Department of Fish and Game (CDFG), who (re)introduced beavers throughout the state in the early 1900s. This view is still held today by many authorities. For example, YOSE biologists think that the preponderance of evidence suggests that beaver are non-native to the Sierra Nevada (Steve Thompson, personal communication). However, there is substantial evidence suggesting that beavers did naturally occupy the Sierra Nevada, casting doubt on this conventional theory.

For example, Donald Tappe recorded an eyewitness who said that beavers were plentiful on the upper part of the Carson River and its tributaries in Alpine County until 1892 when they were extirpated due to heavy trapping (Tappe 1942). There are also accounts of beavers at relatively high elevations in the Tulare Lake Basin including the area that is now SEKI, which could not possibly have been the result of stocking by CDFG. These records are described below.

Records from SEKI

There are four reported observations of this species in SEKI:

1. Warner (1907) reported that a 14-man party led by Ewing Young which included Colonel Jonathan J. Warner trapped the Kings River in the fall of 1832 “up to and some distance into the mountains and then passed on to the San Joaquin River, trapped that river down to canoe navigation in the foothills...” (Warner, 1907). Young and Colonel Warner are believed to have trapped the North Fork of the Kings River up to about present-day Courtright Reservoir (elevation 8,170 feet). They then crossed the divide to the South Fork of the San Joaquin River. A logical route for this crossing would have been via Hell for Sure Pass, taking them into present-day Kings Canyon National Park (Williams 1973). Aspen Meadow (elevation 8,206 feet) and Blaney Meadows on the upper reaches of the San Joaquin had suitable beaver habitat. As Young’s party progressed down the San Joaquin, they came upon the trail of another trapping group. When they caught up with that group, it turned out to be a Hudson’s Bay Company party led by Michel La Framboise (Farquhar, 1965). Earle Williams similarly interpreted accounts of Colonel Warner’s expedition, stating that “Warner had been trapping fur-bearing animals at the headwaters of the Kings River about the same time that the Walker party was descending the Merced River” (Williams 1973). In summary, this observation is based on circumstantial evidence. All that is known for sure is that the Walker party trapped

up the Kings River to its headwaters, then crossed over the divide into the headwaters of the San Joaquin. This probably put them within the boundaries of what is now SEKI. There they would have found more beaver habitat. As they progressed down the San Joaquin, they found that another party was trapping that river.

2. On the Kern River, Roy De Voe, a native of the lower Kern Canyon, recalled that he had seen “very old beaver sign” at Lower Funston Meadow (elevation 6,480 feet) in 1946 (Townsend 1979). These would have been evidence of native beaver because the California Department of Fish and Game (CDFG) did not reintroduce beavers to the upper tributaries of the South and North Forks of the Kern River until 1949–52 (Townsend 1979).
3. De Voe also reported that his friend Kenny Keelor trapped the Kern River for beavers around 1900, making his camp at the mouth of Rattlesnake Creek (elevation 6,585 feet) until they were largely trapped out by about 1910–1914 (Townsend 1979).
4. Walter Fry reported beavers at Ash Mountain (on the Kaweah River) in 1920. This observation is documented in the parks’ Wildlife Observation Database.

Conclusion about nativity

The nativity of beavers in the Sierra Nevada generally, and SEKI particularly, remains controversial. However, given the above accounts that demonstrate that beavers clearly occurred there in the parks historically, the beaver is considered “Native.”

Note that CDFG reintroduced beavers to the upper tributaries of the South and North Forks of the Kern River between 1949–52 (Townsend 1979). The records are unclear as to where the source population came from, but it is possible that they came from Colorado. If that is the case, they would represent a non-native genotype.

Conclusion about current status

The native populations of beaver within the park were apparently extirpated. However, a population has since recolonized the Kern River drainage as a result of a reintroduction by the California Department of Fish and Game. Consequently, the beaver’s current status within SEKI is “Present in Park.”

American Mink

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Historic observations outside SEKI

James Carson reported in 1852 that mink were present in the area surrounding Tulare Lake (Carson 1852).

In 1915, Joseph Grinnell collected three mink at Merced Lake in Yosemite (elevation 7,500 feet) (Grinnell and Storer 1924).

There are a number of well documented mink sightings from Kaweah Oaks Preserve in the 1980s and possibly later (personal communication, Rob Hansen, 2012). These include numerous photographs taken from a blind set up on the edge of Deep Creek, a mink that entered that blind to take food from the photographer, and a road-kill mink on Highway 198 next to the preserve. Rob Hansen recalled an anecdotal reference from another observer who saw a mink on the 3.25 mile stretch of the Kaweah River channel between McKay's Point and Highway 245 (Road 212).

Kirk Stiltz, a long time SEKI employee recalled observing mink twice in the Kaweah River (personal communication, 2012), first in about 1979 just below the Slicky swimming hole in Three Rivers and again in about 1986 just above where Highway 245 (Road 212) crosses the river south of Woodlake.

Conclusion about nativity

Mink were reported to have occurred in both the Tulare Lake Basin outside SEKI and in YOSE. Those populations are close enough to SEKI to call any population within SEKI "Native."

Records from SEKI

There are four reported observations of this species in SEKI:

1. John Chapin reported a mink near the head of Whitman Creek which flows through Hockett Meadows (elevation about 8,700 feet) in 1933 (Sumner and Dixon 1953).
2. Mike William, a park ranger, reported a mink at the bridge over Roaring River in 1989.
3. Terry Gustafson, a backcountry ranger, reported a mink in Golden Trout Creek near the Kern River in 1990.
4. Rebecca Green, a bear technician (or possibly a bear management volunteer), reported a mink in a stream near Bearpaw Meadow (elevation about 7,700 feet) in 1994.

Conclusion about current status

The reliability of the four observations of mink in SEKI is considered below:

1. The Chapin observation is the most compelling. John Chapin was interviewed about this observation by John Dixon. Chapin was familiar with mink in the Eastern Sierra and he said that he had an unusually good view of the animal. In addition, this elevation is consistent

with observations made by Grinnell in Yosemite where mink became established in Merced Lake (elevation 7500 feet).

2. The William observation was in potential habitat for mink. Mike was a seasonal ranger in the Roaring River area off and on from 1981–1990. Since he viewed the animal from the bridge, he was in position to have had a reasonably good view. Based on interviews with people who knew him, his observation should be considered moderately reliable (Gregg Fauth, personal communication, 2012).
3. The Gustafson observation was in potential habitat for mink. Based on interviews with people who knew him, his observation should be considered moderately reliable (Harold Werner, personal communication, 2012).
4. The Green observation was in potential habitat for mink. Rebecca was a bear technician in 1994 and today she is a respected mustelid biologist. However, because but she had spent little time in the field when she reported this mink observation, it is considered only moderately reliable.

With only a single observation from 1933 that can be considered more than moderately reliable, there is no substantial evidence of the continued presence of mink in SEKI. It is even conceivable that all 4 observers were mistaken and could have confused a mink with some other mammal such as a mountain beaver. Consequently, the mink's present occurrence status within SEKI is "unconfirmed."

Black-Tailed Hare

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Observations or information from outside SEKI

This species is common in the Central valley and foothills.

Conclusion about nativity

Those populations are close enough to SEKI to call any population within SEKI “Native.”

Records from SEKI

- There are 8 reported observations of this species in the Wildlife Observation Database. One of those was in the foothills where black-tailed hare would be expected. The other 7 were from higher elevations (typically subalpine and alpine) and are presumed to be misidentifications of Townsend’s hare.
- In addition to the 8 sightings in the Wildlife Observation Database, Harold Werner and Diane Ingram once observed this species within SEKI. They were in appropriate habitat and confident of their observation.

Conclusion about current status

Harold Werner and Diane Ingram are competent observers.. However, it has been several years since their observation. Consequently, the black-tailed hare’s current status within SEKI is “Unconfirmed.”

Grizzly Bear

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Historic

Reasoning

Observations or information from outside SEKI

Explorer reports from the early 19th century reported regularly encountering grizzlies both in the alpine zones and in chaparral and riparian corridors, as did gold miners in mid-century (Storer and Treves 1955).

Conclusion about nativity

Those populations are close enough to SEKI to call any population within SEKI “Native.”

Records from SEKI

There are 6 reported observation of this species in the Wildlife Observation Database, made from 1877 to 1924 in four different watersheds. The last observation was documented in a monthly report to the SEKI superintendent.

Walter Fry (1932) assessed the status of the grizzly bear when he did a 25-year survey (1906-1931) of the animals of Sequoia NP:

I have not listed the California grizzly bears in this report, because we have never considered them a resident of the park; although at very rare intervals individual animals have been reported within the park, and a few have been killed west of the park. From 1921 to 1922, a large bear seen at various times within the park was, undoubtedly, a grizzly. This is possibly the bear killed at Horse Corral by Jesse Agnew in 1922.

Conclusion about current status

Sequoia National Park was created in 1890. It is clear from the above records that at least a few grizzly bears were seen in SEKI between then and 1924. It is unknown to what extent grizzly bears used the area before the park was created though, because by the turn of the 20th century, grizzly bears had been virtually extirpated from the Sierra Nevada.

While empirical records for SEKI are few, but there is no uncertainty that grizzly bears inhabited the Sierra Nevada as a whole, and were widely distributed elsewhere in California. There is no reason to suspect that this widely distributed species would have avoided the present-day park. Consequently, the brown bear's current status within SEKI is "Historic."

Elk

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Observations or information from outside SEKI

At the time of Euro-American settlement, elk were relatively abundant in the valleys and the wider river bottoms of the Tulare Lake Basin. However, there are no accounts of them penetrating up into the smaller canyons. Hale Tharp was the first Euro-American settler in the Three Rivers area; he arrived in 1856. When interviewed about the wildlife that was present in the area, he did not mention of elk (Fry 1924).

Conclusion about nativity

The populations of the Tulare Lake Basin were close enough to SEKI to call any population within SEKI “Native.”

Records from SEKI

There are two reported observations of this species in the Wildlife Observation Database: 1974 at Woods Lake and 1978 at Sawmill Pass, both along the Sierra Crest. These animals are assumed to be short-term vagrants that came from Owens Valley.

Conclusion about current status

This species has not been observed in the park since 1978. Consequently, the elk’s current status within SEKI is “Unconfirmed.”

Gray Wolf

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Historic observations outside SEKI

The park is well within the historic range of the gray wolf. Carson (1852), Fremont (1885), and Audubon (1906), stated that gray wolves were present in the lowlands of the San Joaquin Valley including the area around the Tulare Lake and Grinnell et al (1937) concluded that “unquestionably wolves ranged regularly over the northern one-fourth of the State and south along the Sierra Nevada to Inyo County at least...”

Conclusion about nativity

Those populations are close enough to SEKI to call any population within SEKI “native”.

Records from SEKI

There are 4 records of reported observations of this species in SEKI:

1. Hale Tharp was the first Euro-American settler in the Three Rivers area. In an interview with Walter Fry, he recalled that gray wolves were plentiful in that area when he arrived in 1856 (Fry 1924). He saw 6 gray wolves when he took a trip to Log Meadow in what is now Sequoia National Park in the spring of 1861. While it is possible that Tharp might not have known the difference between coyotes and gray wolves, presumably Walter Fry, would have explored such a point. Fry was the parks' naturalist and was interviewing Tharp in order to make an accurate record of this 1861 discovery trip.
2. In describing the principal animals of Sequoia National Park, the superintendent's annual report for 1900 listed both coyote and "black wolf".
3. On September 25, 1908, Charlie Howard killed a gray wolf at Wolverton. Writing in 1932, Walter Fry described the animal as having been a large male in fairly good condition, but quite old, as evidenced by badly worn teeth (Fry 1932). Guy Hopping, a long-time national park ranger and former superintendent of General Grant National Park, reported seeing and hearing a wolf in the Roaring River area in the summer of 1912. He described the howl as deep, like that of a big old hound (Sumner and Dixon 1953).

Conclusion about current status

Walter Fry served SEKI for 25 years as its chief ranger, superintendent, judge, and naturalist. When he wrote up his 25 year survey of the animals of SEKI, he concluded from his research that the gray wolf was native to the parks (Fry 1932). This, combined with the observations described above indicates that wolves clearly inhabited the parks to some degree. However, considering that wolves are pack animals and the records available are solely of individual animals, it appears likely that gray wolves were not significant components of the ecosystem. There is no record of wolf packs or breeding in the park. Thus, the evidence is equivocal regarding the extent that gray wolves used the park and therefore their current status within SEKI is "Unconfirmed".

Heather Vole

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Probably Present

Reasoning

Conclusion about nativity

This species has established populations near the park. Those populations are close enough to SEKI to call any population within SEKI “Native.”

Records from SEKI

There are 6 reported observation of this species in the Wildlife Observation Database. These were made from 1988–2006. One of these was by Jim Warner, a long-time district naturalist and well-respected observer.

Conclusion about current status

SEKI has appropriate habitat for the heather vole. It is likely that this species is present, but it is rarely observed because generally one must be specifically searching for it (e.g., trapping) to see it. Consequently, the heather vole’s current status within SEKI is “Probably Present.”

River otter

Consensus decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Historic observations outside SEKI

River otters are native to the San Joaquin Valley. When Jedediah Smith's party trapped the upper part of the San Joaquin Valley in 1827/28, they caught 10 river otters (Tulare County Historical Society 1968).

James Carson reported in 1852 that river otters were present in the area surrounding Tulare Lake (Carson 1852).

Frank Latta recorded that the Yokuts who lived in the vicinity of Goose Lake (on the lower Kern River) hunted both beavers and otters (Latta 1977).

A group of sailors arrived at the south end of the Tulare Lake Basin in 1853 and trapped beavers and otters from Kern and Buena Vista Lakes (Latta 1977).

Joseph Dixon interviewed J.W.B. Rice who lived on the Kaweah River, 4 miles northeast of Lemon Cove, . in the vicinity of present-day Terminus Dam. Rice reported having trapped three

otters in the Kaweah near his place and knew of others being taken on that stream (Sumner and Dixon 1953).

Conclusion about nativity

River otters were reported to have occurred in both the Tulare Lake Basin (outside SEKI) and in Yosemite. Those populations are close enough to SEKI to call any population within SEKI “Native.”

River otters in the West are intimately associated with salmonids or other large fish. They are generally assumed to have been restricted to lower elevations prior to the introduction of exotic trout. They would have had no way to make a living above the fish line, which was the first cataract on each of the rivers in the Tulare Lake Basin, unless they were living on something else. (Fish probably existed a little higher than the first cataract based on Peter Moyle’s book on California fish.)

However, Roland Knapp theorizes that otters at higher elevations lived on mountain yellow-legged frogs, aquatic reptiles, and invertebrates (Knapp 2010). Prior to the recent population crash of mountain yellow-legged frogs, they may have been the most abundant vertebrate at those elevations.

From the historic observations, one may reasonably conclude that river otters were present in the Tulare Lake Basin. Based on trapper records, they appear to have used foothill waterways and to have come upstream on the Kaweah River at least as far as present-day Terminus Dam into the early- or mid- 20th century.

It is reasonable to hypothesize that otters utilized foothill waterways to colonize habitats in SEKI to the extent that there was a sustaining fishery.

Records from SEKI

There are four reported observations of this species in SEKI (all from Sumner and Dixon 1953):

1. William Colby and Poly Kanawyer reported otter in the Kings Canyon at about 5,000 feet elevation in about 1910. That would have been on the Middle Fork Kings River, about four miles upstream from Tehipite Valley.
2. Poly Kanawyer also reported otter in Simpson Meadow (on the Middle Fork Kings River) in about 1910.
3. Ray Walls, an electrical foreman, reported seeing an otter on the South Fork Kaweah River near Ladybug Camp in March 1941.
4. CCC educational adviser McDonald of the Maxon Ranch CCC Camp also reported seeing an otter near Ladybug Camp one month later in April 1941. Presumably this was the same animal that Walls had seen.

Conclusion about current status

These observations are reasonably compelling. They are also consistent with the trapper records that otters came up the Kaweah as far as Terminus Dam. However, since there are no photographs or specimens to verify these observations, the reliability of the observers should be considered. It is conceivable that all some of these observers may have seen some other mammal and misidentified it as a river otter. River otters can for a variety of mustelids. Even though a

second observer confirmed the river otter observation sighting at Ladybug Camp a month later, that observer may have been primed to see a river otter by the earlier report. Therefore, we cannot definitively accept any one of these sightings since they are not verified by photographs or specimens. However, considered together, the four SEKI records cannot be discounted; river otters were apparently present in the park as recently as 1941.

However, the records suggest that the otters only penetrated the park as far as Ladybug Camp and Simpson Meadow. Furthermore, it appears that they may have only been here in limited numbers, at least during the period when the Tulare Lake ecosystem was being lost and the five valley lakes were drying up. This indicates that they made limited use of the park resource, they were a transient species. Consequently, the river otter's current status within SEKI is "Unconfirmed."

Sierra Nevada Red Fox

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Conclusion about nativity

The Sierra Nevada red fox has established populations in Lassen Volcanic National Park, near Sonora Pass, and on the Humboldt Toiyabe National Forest. Those populations are close enough to SEKI to call any population within SEKI “Native.”

Records from SEKI

There are 14 reported observations of this species in the Wildlife Observation Database, made between 1896–2005. None of these are known to be reliable records; many or all could have been misidentifications of gray fox.

Conclusion about current status

There are no confirmed records of this species in the park. Consequently, the Sierra Nevada red fox’s current status within SEKI is “Unconfirmed.”

Wolverine

Consensus Decision

- **Nativity:** Native
- **Occurrence:** Unconfirmed

Reasoning

Conclusion about nativity

Wolverines are reliably reported to have occurred in the park in the early 20th century. Therefore, any population that were to occur within SEKI would be “Native.”

Records from SEKI

There are 50 reported observations of wolverine in the Wildlife Observation Database from 1903-2008. People continue to report wolverines on occasion, although no definitive evidence of their presence has been produced in decades.

Conclusion about current status

Some of the reported observations of wolverines in SEKI are probably a case of mistaken identification. However, there are a number of well-documented observations that are clearly wolverine (Sumner and Dixon 1953). Therefore, the SEKI records are definitive; wolverines were undoubtedly present in the park at one time.

However, it is unclear whether any of the recent reported observations are reliable. Consequently, the wolverine's current status within SEKI is "Unconfirmed."

Table 5. Non-native vertebrate species in SEKI.

Common Name	Park Accepted Name	Occurrence	Invasive
FISH			
black bullhead	<i>Ameiurus melas</i>	Present in Park	Invasive
brown bullhead	<i>Ameiurus nebulosus</i>	Unconfirmed	
goldfish	<i>Carassius auratus</i>	Unconfirmed	
common carp, European carp	<i>Cyprinus carpio</i>	Unconfirmed	
green sunfish	<i>Lepomis cyanellus</i>	Present in Park	Invasive
smallmouth bass	<i>Micropterus dolomieu</i>	Encroaching	
golden shiner	<i>Notemigonus crysoleucas</i>	Present in Park	
California golden trout	<i>Oncorhynchus mykiss aguabonita</i>	Present in Park	Invasive
Kern River rainbow trout*	<i>Oncorhynchus mykiss gilberti</i>	Present in Park	Invasive
rainbow trout*	<i>Oncorhynchus mykiss mykiss</i>	Present in Park	Invasive
Little Kern golden trout*	<i>Oncorhynchus mykiss whitei</i>	Present in Park	Invasive
brown trout	<i>Salmo trutta</i>	Present in Park	Invasive
brook trout, charr, salter	<i>Salvelinus fontinalis</i>	Present in Park	Invasive
AMPHIBIAN			
American Bullfrog, Bullfrog	<i>Rana catesbeiana</i>	Present in Park	Invasive
BIRD			
Chukar, Chukar Partridge	<i>Alectoris chukar</i>	Present in Park	
Common Pigeon, Rock Dove, Rock Pigeon	<i>Columba livia</i>	Present in Park	
black swan	<i>Cygnus atratus</i>	Probably Present	
White-tailed Ptarmigan	<i>Lagopus leucura</i>	Present in Park	
Wild Turkey	<i>Meleagris gallopavo</i>	Present in Park	
Brown-headed Cowbird	<i>Molothrus ater</i>	Present in Park	Invasive
Helmeted Guineafowl	<i>Numida meleagris</i>	Historic	
House Sparrow	<i>Passer domesticus</i>	Present in Park	
Common Peafowl, Indian Peafowl	<i>Pavo cristatus</i>	Present in Park	
Great-tailed Grackle	<i>Quiscalus mexicanus</i>	Present in Park	
Barred Owl	<i>Strix varia</i>	Present in Park	Invasive

Table 6. Non-native vertebrate species in SEKI.

Common Name	Park Accepted Name	Occurrence	Invasive
Common Starling, European Starling	<i>Sturnus vulgaris</i>	Present in Park	
MAMMAL			
domestic cow	<i>Bos taurus</i>	Present in Park	
domestic goat	<i>Capra hircus</i>	Historic	
Virginia Opossum	<i>Didelphis virginiana</i>	Present in Park	
domestic cat	<i>Felis silvestris</i>	Present in Park	
house mouse	<i>Mus musculus</i>	Unconfirmed	
domestic pig	<i>Sus scrofa</i>	Present in Park	Invasive

*Species whose natural range includes certain locations in SEKI, but has been introduced to other locations in SEKI outside of its natural range.

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