

NATURE TRAIL GUIDE

Your self-guided tour of the Kern River Preserve (KRP) nature trail begins at the headquarters sign. About 1.5 miles in length, the trail takes an hour to walk at a brisk pace. Expect to spend two or three hours if you want to experience the extraordinary plant and animal diversity.

1. HISTORY The Kern River Preserve is managed by Audubon-California for the preservation of California's largest contiguous Great Valley Cottonwood-Willow Riparian Forest and the wildlife it



supports. As you drove into the preserve you may have noticed some historic buildings on your right. Built in 1878, the largest building is the oldest structure in the Kern River Valley. These buildings housed the Flour Mill for the Andrew Brown Ranch. Off limits to humans, the mill is now home to Barn Owls, bats, and other animals. With the recent acquisition of part of Sprague Ranch, the preserve now encompasses 2,789 acres.

NOTE: Do not walk across the cattle guard into the pasture, this is not part of the preserve. The entrance road is a vehicle easement only.



2. WATER DIVERSION

The section of forest before you is known as the Slough Channel. The waterway through it is named Prince Ditch after the family who own the water right. Water rights in the valley date to the 1880's. Fed by

the South Fork of the Kern River, the canal provides water to the slough channel on its way to the farmland southwest of the Preserve. The canal is home to introduced carp, bullfrogs, and beaver as well as native wildlife.

3. BIRDS

Over 200 bird species are attracted to the KRP environs each year, some of which are considered rare or endangered. Nesting species include: Southwestern Willow Flycatcher, Western Yellow-billed Cuckoo, Summer Tanager, and Yellow Warbler. Each season brings unique birding experiences. Species diversity during spring migration is considered among the best in the west. Summer visitors can enjoy the 89 species that nest on the preserve. Fall brings one of the largest Turkey Vulture migrations in North America. Even in winter, species in the valley number over 100.



4. HUMMINGBIRDS Spring through fall, volunteers keep hummingbird feeders stocked near the picnic tables. These are used by nesting and migrating hummingbirds. Six species of hummingbirds regularly visit these feeders at some point each year. The best time to view hummingbirds is during their fall migration in July and August.



5. WILDFLOWERS Wild roses (*Rosa woodsii*) are found throughout the preserve. Many species of wildflowers grow on the preserve. In spring, notice the beautiful, papery, prickly poppy (*Argemone munita*). During summer and fall the preserve is awash with yellow sunflowers (*Helianthus annuus*).

6. NEST BOXES Bluebirds, wrens, swallows, and other cavity nesters have declined because of loss of snags and old trees, where they find cavities and old woodpecker holes in which to nest. Volunteers have placed dozens of boxes throughout the preserve. Four native species of birds use the boxes to rear their young. The introduced European Starling is a moderate problem here in natural cavities. Volunteers monitor the boxes to keep them clean and free of pests.



7. BIOREGIONS The Kern Valley area is unique because of its diversity. It is located at the junction of five of the six bioregions found in California. Great Basin Desert, Mojave Desert, Coastal Chaparral, Sierra Nevada Forest, and Great Valley Grassland. This mix of bioregions is unparalleled in the United States. Species diversity: 2000+ plants, 150+ butterflies, 800+ moths, 325+ birds, 110+ mammals, and at least 66 species of amphibians and reptiles live and/or migrate through the region. KRP is an important component to these as riparian forests are the most species-rich habitats in North America.

8. RESTORATION On the left notice the Headquarters Restoration Site. The site was cleared for agricultural use and cultivated for close to a century. It was replanted with native trees and shrubs in 1993 and provides habitat for increasing numbers of riparian species. The first major restoration effort on the Preserve was the Cuckoo Field. In, 1986, dedicated volunteers



planted thousands of trees on this 25-acre revegetation site to jumpstart the reforestation process. Since that time natural grasses, shrubs, and some young trees have begun to recolonize the understory. Throughout the preserve, over 35,000 trees have been planted on 325-acres by volunteers.

9. MAMMALS Raccoons, black bears, beavers, bobcats, foxes, coyotes, mountain lions and mule deer, along with numerous smaller species, are attracted to the riparian forest. Food and water are plentiful here. Notice the beaver gnawings on this tree. Another interesting resident of the forest is the dusky-footed wood rat AKA "pack rat". It forages at night and hides from predators in its nest during the day. Look for large stick wood rat nests in crotches of trees throughout the forest.



10. NATIVE AMERICANS The native people of the Kern River Preserve were the Pahnkanapil (Tubatulabal). One of their village sites "Ha-halam" was located near Migrant Corner. There were two other groups of Tubatulabal occupying different areas of the valley. All groups migrated upslope during the heat of summer and spent winter months in the valley. They were hunter-gatherers relying on the natural bounty of the region to sustain them. It is estimated that 1000 of these Uto-Aztecan speaking people of Shoshonian descent utilized the Kern River Valley. There are about 400 people of Tubatulabal descent in the valley today.



11. GRASSES There are two predominant native perennial grass species here. The tall one under the trees is alkali rye grass (*Leymus triticoides*). The low growing one on the road is salt grass (*Distichlis spicata*), which is adapted to alkaline soils and can exude excess salts from its leaves. Native Americans harvested the salt from salt grass for use in food preparation. The smallest butterfly in the world the "Pygmy Blue" is found only on saltgrass.

12. NATURAL RESTORATION Notice the grove of small trees on the right side of the trail. This grove dates from a flood in 1984. During the flood, the ground was covered with a layer of silt which provided a seed bed for the trees. The seedlings came up thick here, and the faster-growing more vigorous trees are continually crowding out the smaller ones. Cottonwoods and willows produce their seed-carrying 'cotton' in early summer right after the flood season. The cotton is used by birds for food and nesting material.



13. MISTLETOE Look for the clumps of green, fleshy mistletoe (*Phoradendron flavescens*) on branches of cottonwoods and willows. This parasite produces berries which

are an important food source for many birds, including the Western Bluebird, Phainopepla, and Cedar Waxwing. The birds spread the mistletoe by leaving the sticky seeds on branches in other trees. Mistletoe is also the food source for the larvae of a beautiful butterfly, the Great Purple Hairstreak.



14. SNAGS Standing, decaying trees called 'snags' provide excellent places for woodpeckers and other cavity nesting birds to call home. Western Bluebirds, Tree Swallows and several species of wren nest in abandoned woodpecker holes. Large, rotting snags are not found in younger forests. Many rare birds are affected by a lack of suitable nesting cavities, caused by the loss of old-growth forest habitat.

Continue to the left. The fence on the right is the boundary with the neighboring ranch. Respect private property.

15. AGRICULTURE This view overlooks the neighboring ranch. Notice the difference in vegetative cover on either side of the boundary fence. Although the pasture meets the ranch's cattle management goals, different land practices are sometimes needed to meet wildlife management goals. Grazing affects which plants are present, and can prevent young trees from becoming established. Grazing can have a protective benefit as pastures provide valuable habitat and food to many species of wildlife. Agricultural areas also act as buffers between the Preserve and areas with more intensive human uses, like housing and busy roads.

16. NATIVE FOREST Across the fence on the

right is the river bottom and part of the Preserve. The fence has been left in place to help control stray cattle. The South Fork Kern River supports the largest remaining stand of riparian forest in California. Compare the natural forest on the right side of the fence to the restoration site on the left. The natural site is lower and floods more frequently; therefore there is a lot of natural regeneration of trees. The restoration site is a little higher and seldom floods. It could take many years for natural regeneration to occur here.





17. RIPARIAN TREES

Two species of trees dominate this riparian forest. Fremont cottonwood (*Populus fremontii*) is the large tree with heart shaped leaves. Red willow (*Salix laevigata*)



has long, thin leaves. The color of the new growth helps to distinguish the red willow from the cottonwood. Cottonwoods and willows are in the same plant family, SALICACEAE. Willow bark is the natural source of aspirin. Several species of moth and butterfly caterpillars eat the leaves; these larvae sustain many bird species. Cottonwoods and willows are "cornerstone species" that are part of the foundation for this entire ecosystem.

Cross through the fence at the opening. Walk on the boardwalk where available, and watch your footing. Also, beware of low branches and stinging nettle. If the path is not passable, return to the road and continue in the same direction to rejoin the trail at post 22.

18. SOUTH FORK KERN RIVER

The short path to the right leads to a view of the South Fork Kern River. The river originates high on the Kern Plateau of the southern Sierra Nevada in the Golden Trout Wilderness. The heaviest stream flow is during the spring snowmelt. The river is often dry here in summer and fall.



Return to the trail and parallel the river heading downstream.



19. STINGING NETTLE Watch for stinging nettle (*Urtica dioica*). A tall, weedy plant covered with fine, stinging hairs. Dry nettle provide material for the Willow Flycatcher and many other birds to build their nests. See this displayed in the visitor's center.

20. MEADOW The large shrubs in this meadow are mulefat (*Baccharis salicifolia*). Mulefat is a native species that forms dense thickets along riverbanks. Although the leaf resembles a willow leaf, mulefat is actually in the sunflower family.

21. HERBS Yerba mansa (*Anemopsis californica*), is a low growing herb with large broad leaves. This plant grows in wet, alkaline places and sometimes forms large mats. Native Americans and pioneers used it extensively to treat ailments ranging from pinkeye to foot fungus. Scientists have examined it for its potential as a cancer treatment. This is also a good location to see Pacific tree frogs.



Pass through the fence and continue to the right (west).

22. VIEWSHED

Two giant Fremont cottonwoods frame a view of the Piute Mountains to the south/southwest. These deceptively dry looking mountains support a thriving Jeffrey pine forest at the higher elevations.



To the southwest an island mountain, Breckenridge, towers 7500' above the San Joaquin valley floor. To the west are the Greenhorns, named for the gold miners that sought their fortune in the 1850's. The Greenhorns support the only Red Fir forest in Kern County. The magnificent view to the north is the southern end of the Sierra Nevada, the Kern Plateau, which forms the upper watershed for the South Fork Kern River. And finally the views to the east are the Scodies, an isolated range where several bioregions intersect.



23. SHRUBS Rabbit brush (*Chrysothamnus nauseosus*) is the most common shrub in drier parts of the preserve. It is a plant common to the Great Basin Desert and blooms masses of golden flowers in the fall. Another common shrub, Fourwing saltbush (*Atriplex canescens*) is an important food source for seedeaters, including sparrows, quail, and rodents. The vegetation here, in this relatively dry area, is a mix of Mojave and Great Basin Desert Bioregion species.

24. REPTILES

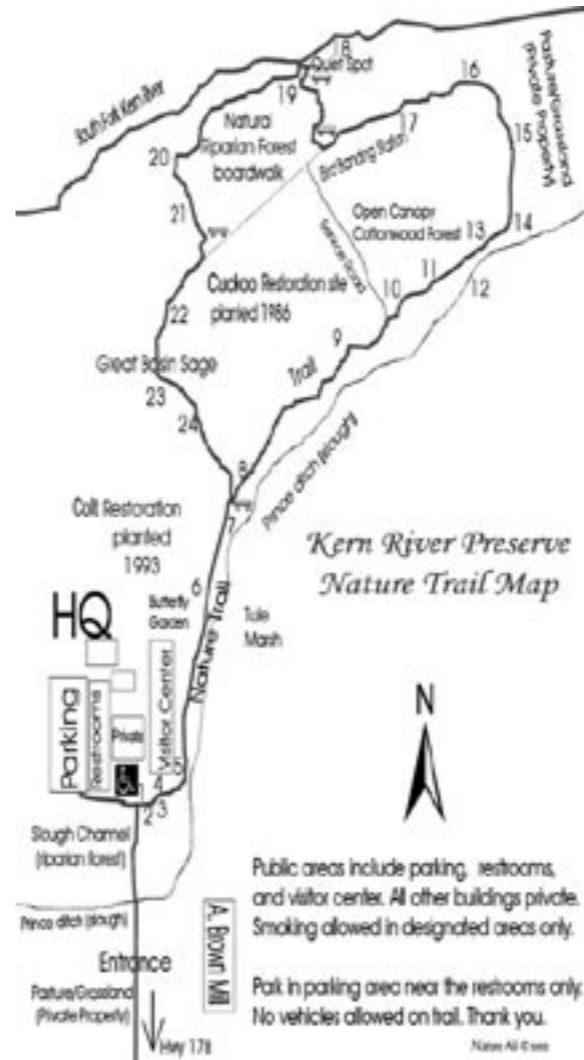
Many reptiles, like this California Kingsnake, are found on the preserve. Most are secretive and/or nocturnal, making daytime sightings a rare treat. This next section of trail is a good spot to look for tracks of reptiles, insects, mammals and even birds.



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Kern River Preserve
A Globally Important Bird Area
A National Natural Landmark
California Riparian Habitat Joint Venture Flagship Project

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Kern River Preserve
 P.O. Box 833 - 18747 Hwy. 178 - Weldon, CA 93283
 Email: krfriends@lightspeed.net
 Website: <http://kern.audubon.org>

On Hwy 178, in Weldon, California, the preserve is 1.15 miles beyond Sierra Way from the west or 0.6 miles beyond Fay Ranch Road from the east.

Images: BIRDS (Summer Tanager) - Lloyd Bulmer, RESTORATION - KRP archive, NATIVE FOREST - Dede-Rankin Gilman, VIEWSHED - Ron Tiller. All other photos, map, layout, and design by Alison Sheehey NatureAli.org. Text by Alison Sheehey, Bob Barnes, Terri Gallion, and Reed Tollefson. Based on the original text by Dave Kyser.



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