NATURE TRAIL GUIDE

Your self-guided tour of the Kern River Preserve (KRP) nature trail begins at the headquarters sign. About one mile long, the trail takes an hour to walk at a good 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 one of the oldest structures 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 21st century acquisitions, the preserve now encompasses 2,987 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. This waterway through it is named Prince Ditch after the family who own water rights. 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 fish and bullfrogs as well as native wildlife. The driveway is closed to foot traffic to protect endangered birds during the breeding season.

3. BIRDS - Over 300 bird species are attracted to the South Fork Kern Valley 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 108 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 can over 200.

HUMMINGBIRDS - March through September, volunteers keep hummingbird feeders stocked near the picnic tables and also planted the hummingbird gardens below the feeders. These are used by nesting and migrating hummingbirds. Four species breed locally while two others are only seen in migration. The

best time to view humminabirds is during their migration in July and August.



4.

5. WILDFLOWERS - These wild roses (Rosa woodsii) are found growing naturally throughout the preserve. Notice other types of wildflowers on the preserve. In spring, notice the beautiful, papery, prickly poppy (Argemone munita). In late summer

through fall the preserve is awash with common sunflowers (Helianthus annuus). 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 chorus frogs.

6. NEST BOXES - Bluebirds, wrens, swallows, and other cavity nesters have declined across the nation due to loss of snags and old trees. Perching birds use natural cavities and old woodpecker holes to nest. Volunteers have placed dozens of boxes throughout the preserve. Four native species of birds use the boxes to rear their young.

Volunteers monitor the boxes to keep them clean and free of pests. NOTE: next post ~200 yards.

NATURAL DIVERSITY - Rest a moment in the shade of

this huge cottonwood. This Fremont cottonwood measures 21' in circumference and that is estimated to be over 100 years old.

The Kern Valley area is located at the junction of three of the ten floristic provinces found in North America. Great Basin Desert, Mojave Desert, and Californian Provinces intersect in this valley. This mix of major habitats is unparalleled in the United States. Species diversity: 2000+ plants, 150+ butterflies, 800+ moths, 350+ birds, 100+ mammals, and at least 66 species of amphibians and reptiles live and/or migrate through the region.

8. RESTORATION - On the left is the Colt Restoration Site which had been cleared for agricultural use and cultivated for over a century. Replanted with native trees and shrubs in 1993, it again provides habitat for increasing numbers of native

riparian species. The first major restoration effort on the Preserve was to your right in 1986. Dedicated volunteers planted trees this 25-acre revegetation site. Since then natural grasses, shrubs, and trees have recolonized the understory. Thousands of trees have been planted on 550-acres around the preserve.



MAMMALS - Raccoons black 9. 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 tooth marks on this downed tree: the tree was felled by a beaver during

the 1998 El Niño year 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 area are the Pahkanapil (Tübatulabal). One of their village sites "Ha•halam" was located near Migrant Corner. There are two other village sites located within the boundaries

of the preserve. Historically hunter-gatherers that relied on the natural bounty of the region to sustain them, the native people migrated upslope during the heat of summer and spent winter months in the valley. It is estimated that 1000 of these Uto-Aztecan speaking people utilized the Kern River Valley. There are about 800 people of Tübatulabal as well as Koso and Kawaiisu descent in the valley today.

11. GRASSES - There are two predominant native perennial grass species here. The tall one under the trees is alkali rve grass (Levmus 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" utilizes 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 macrophyllum) 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 the host plant 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.

15. AGRICULTURE - This view overlooks the newest part of the preserve. Notice the difference in vegetative cover on either side of the boundary fence. This section of the preserve will be managed with some seasonal cattle grazing, 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 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 - Three species of trees dominate this riparian forest. Fremont cottonwood (*Populus fremontii*) is the large tree with heart shaped leaves. Black willow (*Salix gooddingii*) is the tall thin leaved tree with very similar appearing red willow (*Salix laevigata*) only

growing to 25'. 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 "keystone species" that are the foundation for this entire ecosystem.

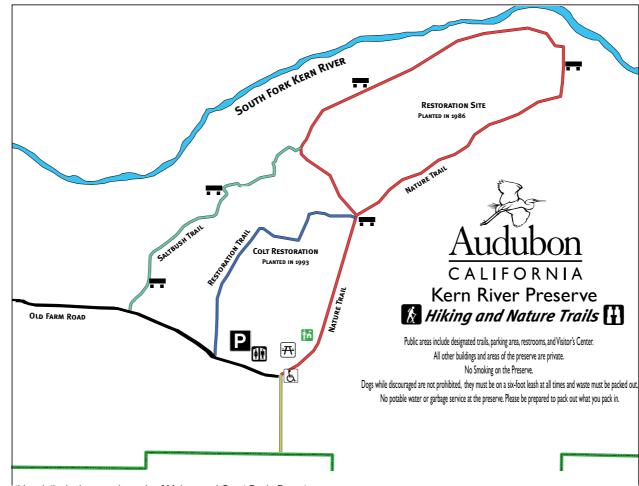
18. SOUTH FORK KERN RIVER - The South Fork Kern River originates high on the Kern Plateau of the southern Sierra Nevada in the Golden Trout Wilderness. The heaviest stream flow is during the spring snow melt. The river is often dry in summer and fall.

19. 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 magnificent view to the north is 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 ecoregions intersect.

20. SHRUBS - Rabbit brush (*Ericameria nauseosa*) 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 aka shadscale (*Atriplex canescens*) is an important food source for seed eaters, including sparrows, quail, and rodents. The vegetation here, in



⁺ this relatively dry area, is a mix of Mojave and Great Basin Desert species.

21. REPTILES - Many reptiles are found on the preserve. Most are secretive and/or nocturnal, making daytime sightings a rare treat.

Audubon Kern River Preserve

A Globally Important Bird Area A proposed National Natural Landmark California Riparian Habitat Joint Venture Flagship Project

KRP is owned and managed by National Audubon Society, a private, non-profit organization. We need your support. Donate to Audubon Kern River Preserve today.

VOLUNTEER. The Visitor Center has fee/free literature and support envelopes. To pay for membership, literature, or to make a donation; deposit money in the locked metal box by the window under the wood duck.

Thank you for visiting. Please sign our Guest Book.

Audubon CALIFORNIA

Audubon Kern River Preserve P.O. Box 1662 - 18747 Hwy. 178 - Weldon, CA 93283 Email: <u>krpfriends@audubon.org</u> Website: <u>http://kern.audubon.org</u>

Send Donations to:

Audubon Kern River Preserve 4225 Hollis Street Emeryville, CA 94608 (510) 601-1866 x 223

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.



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