

U.S. Fish & Wildlife Service

# San Luis

## *National Wildlife Refuge Complex*

*San Luis, Merced, San Joaquin River*

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### *Auto Tour Routes & Nature Trails*



*“I only went out for a walk, and finally concluded to stay out till sundown, for going out, I found, was really going in.”*

*—John Muir, Scottish-American naturalist, author, and early advocate of wilderness preservation in the U.S.*



*Sandhill Cranes*  
© Rick Kimble

**Welcome to the San Luis National Wildlife Refuge Complex**

The San Luis National Wildlife Refuge Complex—composed of the San Luis National Wildlife Refuge, Merced National Wildlife Refuge, San Joaquin River National Wildlife Refuge, and the Grasslands Wildlife Management Area—consists of nearly 45,000 acres of wetlands, grasslands, and riparian habitats, as well as more than 90,000 acres of conservation easements for the protection and benefit of wildlife. The refuge units are located in the northern San Joaquin Valley of California in Merced, Stanislaus, and San Joaquin Counties.



*This Blue Goose, designed by J.N. “Ding” Darling, has become the symbol of the National Wildlife Refuge System.*

The Complex is located along the Pacific Flyway, a major north-south route for migrating birds, including large numbers of waterfowl, shorebirds, and other waterbirds. The extensive wetlands of the Complex and surrounding lands provide habitat for over a million waterfowl that arrive here each winter. Of the 30 species of waterfowl using the Complex, the most common include Ross’, Aleutian cackling, snow, and greater white-fronted geese, along with green-winged teal, mallard, northern pintail, northern shoveler, gadwall, and American wigeon. Large numbers of shorebirds and other waterbirds, songbirds, and raptors also use the habitats protected by the Refuge Complex.



*River Otter*  
© Rick Kimble



## Tours and Trails

The Refuge Complex offers visitors nearly 21 miles of auto tour routes and more than 20 miles of nature trails that lead through each of the major habitat types: wetlands, uplands, grasslands, riparian woodlands, alkali sinks, and vernal pools. These allow visitors to get close to the sights and sounds of the diverse wildlife species that live here. Birds, mammals, reptiles, amphibians, fish, insects, and native plants—they are all here and, chances are, one or more of our auto tour routes and nature trails will allow you to see or hear most of them.



*Great Horned Owl*

© Rick Kimble

Conditions in these habitats change from season to season, so the species also change. While many bird species are year-round residents, most are seasonal and can only be seen during specific times of the year. Other species pass through for a few short weeks during fall or spring migration. Just as the birds change with the seasons, so do the landscapes. Early spring wildflowers give way to summer grasses, and insect species you may not have noticed in the spring become very apparent in the fall, such as various dragonfly species. During the hot dry days of summer, you are more likely to see bird species in the morning—the next best time is the late afternoon or early evening. Likewise, most mammals, including



*Sora rail*  
© Rick Lewis

the tule elk, are more likely to be visible in the morning or early evening during the hot months.

Pick up a copy of the Refuge Complex general brochure and bird list for complete information about the bird species found on the refuges, including their frequency and seasons. There is always something to see, but certain times are better than others and the cast of nature's characters changes with the seasons. No matter when you visit, bring your binoculars, your camera, your eyes and ears—and your curiosity. You won't be disappointed.

## Auto Tour Routes

**NOTE:**  
*Please stay in  
your vehicles  
on auto tour  
routes.*

All Complex auto tour routes are one-way unless marked otherwise. Please stay in your vehicle, except at designated areas where signage indicates you may get out. Many wildlife species are accustomed to slow-moving vehicles, so your automobile is often your best “blind.” No foot traffic, bicycles, or horses are allowed on the auto tour routes. The “all-weather” roads are constructed of compacted gravel and remain firm even in wet weather.

## Nature Trails

Please stay on trails, except at special areas where leaving the trail is allowed and indicated by signage. Dogs are allowed on nature trails, but must be on a leash and under control.



### Tips to help you enjoy your visit

## NO

- Collecting plants, plant parts, or mushrooms
- Feeding wildlife
- Bicycles on Refuges
- Horseback riding
- Camping, campfires, or cooking grills

- Bring binoculars, spotting scopes, and cameras
- Share the experience—visit the refuge with a friend
- Attend a group program or tour
- Contact the Complex for recent wildlife sightings
- Respect other refuge visitors' viewing opportunities
- Minimize disturbance to wildlife
- Remain in your vehicle on auto tour routes
- All pets must be on leash and under control
- Park vehicles only in designated parking areas
- Keep noise levels to a minimum
- Please remove all trash

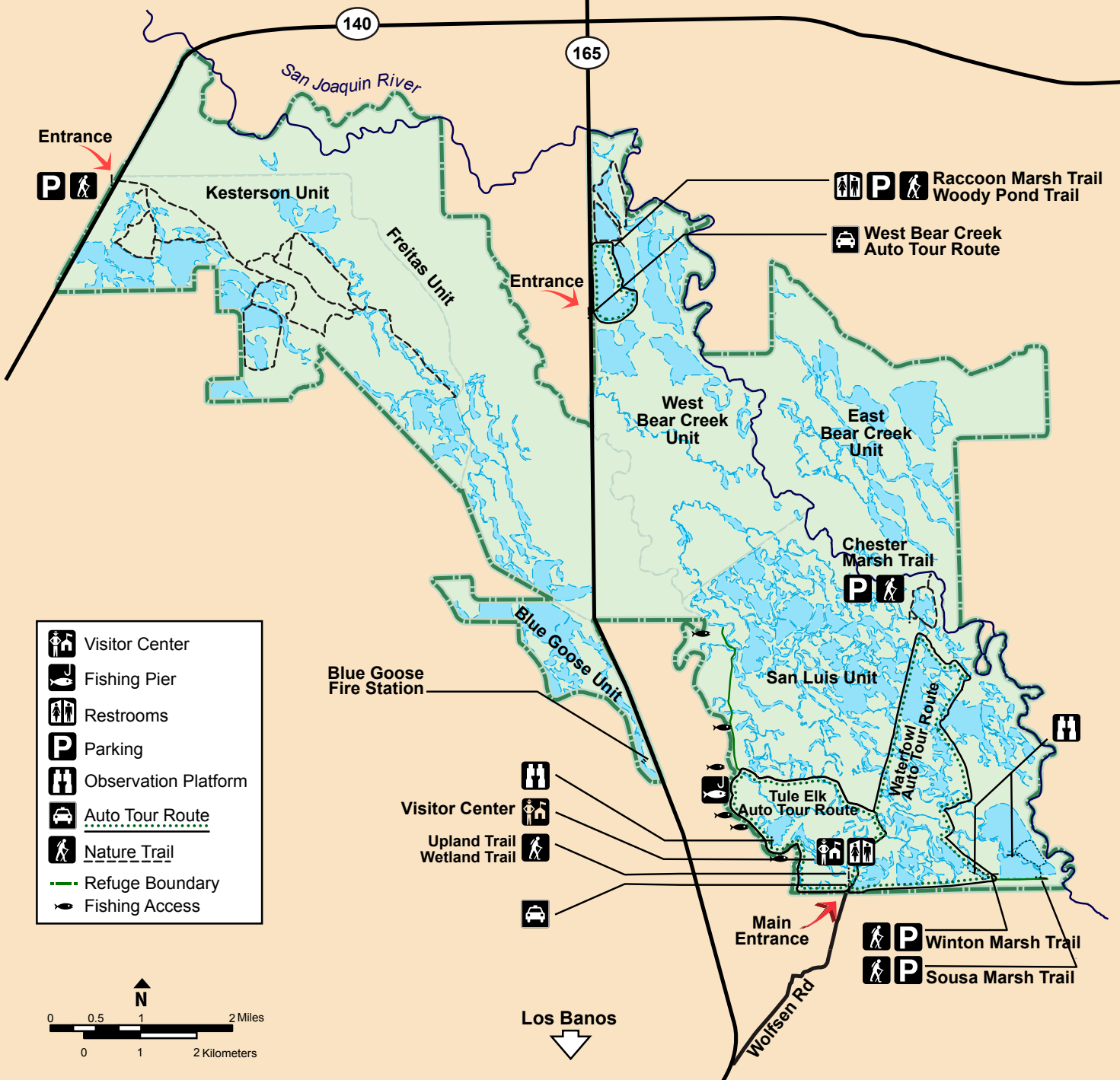


Seasonal Wetlands  
USFWS



Northern Harrier with Vole  
© Rick Lewis

# San Luis National Wildlife Refuge



## San Luis NWR

### Waterfowl Auto Tour Route

**Length:** 8.5 miles

**Season:** Open year-round

**Starts From:** Visitor Center main entrance

**Surface:** All-weather compacted gravel

The Waterfowl Auto Tour Route meanders through the heart of San Luis Refuge's upland and wetland habitats. Thousands of wintering ducks use these wetlands during fall, winter, and spring. Large flocks of geese and sandhill cranes can often be seen during the winter season, and tundra swans are usually visible during the winter.

Mammals, such as black-tailed deer and coyotes, are abundant on the Refuge and are always a viewing possibility. The variety of raptor species increases in the winter when peregrine falcons, bald eagles, and occasionally even golden eagles, hunt the valley's plentiful rodent and bird populations. Spring, summer, and fall are bountiful times when dozens of songbird species migrate through the riparian woodlands or move in for the summer breeding season.

From the Waterfowl Auto Tour Route, visitors can access three trails: the Chester Marsh Nature Trail, the Sousa Marsh Nature Trail, and the Winton Marsh Nature Trail. Each has a trailhead parking lot for vehicles. A description of each can be found under the "Nature Trails" section of this brochure.



*Peregrine Falcon*  
© Rick Lewis

*Flock of mixed ducks*  
© Mike Peters



*Tule Elk Bull*  
© Paul Prado

### Tule Elk Auto Tour Route

**Length:** 5 miles

**Season:** Open year-round

**Starts From:** Visitor Center main entrance

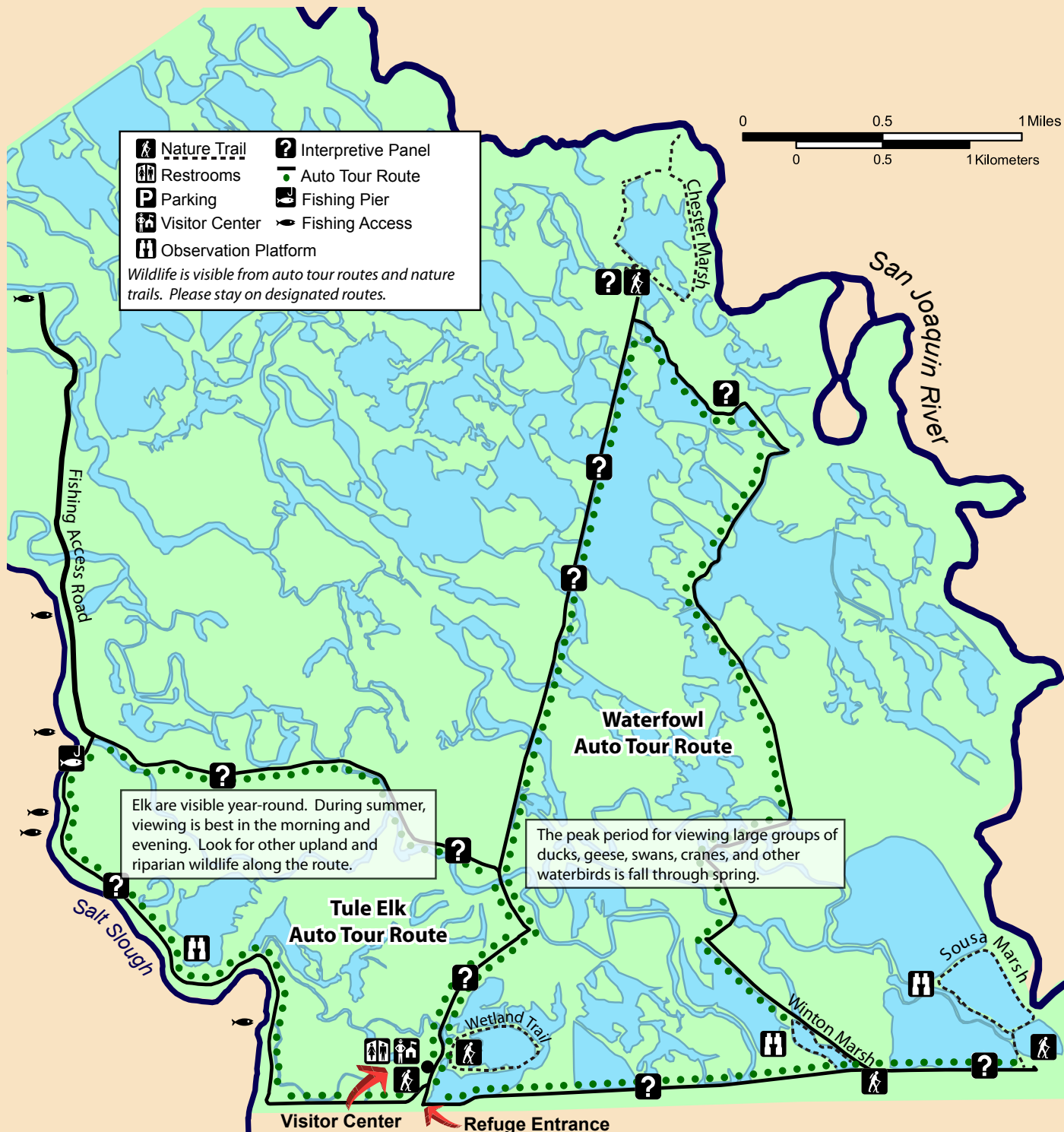
**Surface:** All-weather compacted gravel

The Tule Elk Auto Tour Route guides visitors around the nearly 800-acre enclosure that is home to a resident herd of tule elk, an endemic subspecies of North American elk. Tule is another name for bulrush, a large wetland plant. Tule elk nearly became extinct in the late 1800s when they declined to as few as 20 to 40 animals because of market hunting, habitat loss, and competition from introduced livestock.

The San Luis NWR herd was established to help tule elk recover from the brink of extinction. Today, there are more than 4,000 tule elk in 22 herds throughout California. Several interpretive panels along the tour route provide information about the elk and other species that depend on this upland habitat to survive.

A wildlife viewing platform with a spotting scope provides an elevated view into the elk's native grassland habitat. Interpretive panels provide information about the habitat and species that share the elk's upland home. In addition to elk, birds abound along the route throughout the upland/grasslands and the riparian corridor adjacent to Salt Slough, a tributary of the San Joaquin River.

# San Luis Unit of the San Luis NWR



## Wetland Nature Trail

**Length:** 0.8-mile loop

**Season:** Open year-round

**Starts From:** Visitor Center

**Surface:** All-weather compacted gravel

The Wetland Nature Trail begins at the Visitor Center, then leads visitors around a semi-permanent marsh that provides year round habitat for a variety of waterfowl and riparian species. The trail features a boardwalk that leads visitors over the wetland for close-up encounters in this cattail/tule marsh. Listen for the buzzy calls of the marsh wren. Keep a look-out for their basket-like nests hung from the tules in the summer. Benches along the trail provide places to stop and reflect on the sights and sounds of the wetland. The wetland is surrounded by riparian woodland and shallow water habitats as well as upland grasslands. Visitors will see a variety of wildlife species throughout the year.

Fall through spring are the busiest seasons when the wetland is home to many species of ducks, wading birds, raptors, and songbirds. Migrating ducks like northern pintail, northern shoveler, and cinnamon teal are abundant during the winter, foraging on aquatic plants and invertebrates. During spring and fall migrations, songbirds like yellow warblers and Townsend's warblers rest and restore their energy reserves as they forage in the riparian woodland for insects. Shorebirds such as black-necked stilts and long-billed dowitchers pick and probe the mudflats along the slough channel foraging for invertebrates.

During the summer, grassland species such as western meadowlark and western kingbird feed on seeds and insects while they nest and raise their young in the uplands. Don't forget to check the treetops in the riparian woodlands that surround the wetland. Red-tailed hawks, Swainson's hawks, and Cooper's hawks, as well as great horned owls can be found there.



*White-tailed Kite*  
© Rick Kimble

## Upland Nature Trail

**Length:** 0.5-mile loop

**Season:** Open year-round

**Starts From:** Visitor Center

**Surface:** All-weather compacted gravel

The Upland Nature Trail begins at the Visitor Center, then winds through native grasses and shrubs that provide foraging, nesting, and shelter for a variety of upland species.

Birds such as spotted towhee, California towhee, and California quail forage for seeds and hide beneath the native quail brush. Desert cottontail rabbits feed on grasses then take cover, hiding from coyotes and birds of prey in the shrubs. Western fence lizards

scamper along the ground hunting for insects, and gopher snakes make their way through the brush looking for rodents. You may find the reptiles as they come out early in the day to warm themselves on the sand as the morning sun moves higher in the sky. The upland habitat also supports a variety of pollinating insects: native wasps, bees, and butterflies. Benches offer a place to sit, look, and listen for the secretive species that make this habitat their home.



*Ground Squirrel*  
© Paul Prado



*Desert Cottontail Rabbit*  
© Ray Freeman



## San Luis NWR

### Chester Marsh Nature Trail

**Length:** 1-mile loop

**Season:** Open February 15 to September 15

**Starts From:** Waterfowl Auto Tour Route

**Surface:** Compacted gravel and dirt

The Chester Marsh Nature Trail is accessed from the Waterfowl Auto Tour Route and open to visitors from February 15 to September 15; closed during the waterfowl hunting season. An informational pamphlet, keyed to numbered stops along the trail, is available at the trailhead. The trail leads visitors around Chester Marsh and alongside riparian woodland and grassland habitats adjacent to the San Joaquin River. About halfway around the trail, a ¼-mile spur goes to the San Joaquin River and the remains of an iron truss bridge built in 1884. Travelers on the Merced-Los Banos stage route crossed the river on that bridge to the now-extinct town of Chester.

Chester Marsh is a permanent wetland that provides habitat for secretive species, including American bittern, sora, and Virginia rail. The deeper water of the permanent marsh attracts diving birds, such as double-crested cormorant, ring-necked duck, ruddy duck, and pied-billed grebe. The dense riparian woodland supports nesting raptors, such as red-tailed hawk and Swainson's hawk, as well as migrating neotropical songbirds in the spring and fall. The grasslands support a population of alkali sacaton, a native bunch grass, as well as numerous grassland birds, insects, and reptiles. Visitors can walk close to the water and rest on a bench to listen for the seasonal sounds of the marsh.



*Bullock's Oriole*  
© Lee Eastman

*Pied-Billed Grebe*  
© Rick Lewis



*American White Pelican*  
© Rick Kimble



### Sousa Marsh Nature Trail

**Length:** 1-mile loop

**Season:** Open year-round

**Starts From:** Waterfowl Auto Tour Route

**Surface:** Compacted gravel and dirt

The Sousa Marsh Nature Trail is accessed from the Waterfowl Auto Tour Route and leads visitors through a riparian woodland to the Sousa Marsh, one of the largest marshes on the San Luis NWR. The trail offers visitors their choice of two routes that loop back to the parking lot.

Once at the marsh, visitors can enjoy a snack or lunch at a shaded picnic table, or view the marsh and its wildlife with the spotting scope on the elevated observation platform. Sousa Marsh is a seasonal wetland that supports its largest diversity of waterfowl and other birds during the fall, winter, and spring. Visitors can see large numbers of duck species and other



*Greater Yellowlegs*  
© Rick Lewis

waterfowl, such as tundra swans. Raptors, including red-tailed hawks and white-tailed kites, course back and forth across the marsh watching for an unwary American coot to become a meal. The riparian woodland provides habitat for migrating songbirds during the fall and spring. Summer resident species, such as blue and black-headed grosbeaks, nest and raise their young in the native trees and shrubs of the woodland, as do year-round residents like the American robin and northern mockingbird. This woodland habitat provides rest and food for migrating neotropical songbirds like Townsend's warblers and occasional rarities like the American redstart.

## San Luis NWR

### Winton Marsh Nature Trail

**Length:** 0.5-mile  
loop

**Season:** Open  
year-round

**Starts From:**  
Waterfowl Auto  
Tour Route

**Surface:**  
Compacted  
gravel and dirt

This trail is accessed from the Waterfowl Auto Tour Route. The Winton Marsh is a permanent wetland established in honor of J. Martin Winton, a life-long advocate of wildlife conservation who promoted successful federal wildlife habitat legislation.

Winton Marsh's dense emergent wetland vegetation of cattails and bulrush provides cover and forage for secretive wetland species such as American bitterns, Virginia rail, and sora. In the winter, seasonal raptors such as peregrine falcon are sometimes spotted, perched in the tops of trees along the canal adjacent to a portion of the trail, where they wait patiently—scanning the surrounding grasslands for prey. About one-third of the way along the trail, visitors can peer into the marsh from an elevated observation deck.



*Northern Pintails*  
© Mike Peters



*Seasonal Wetland*  
© Rick Lewis

## West Bear Creek Unit

### West Bear Creek Auto Tour Route

**Length:** 2.25 miles

**Season:** Open year-round

**Starts From:** West Bear Creek entrance off Hwy 165

**Surface:** All-weather compacted gravel

Late winter and early spring are the busiest times of year along the West Bear Creek Auto Tour Route that leads around and through the various wetlands of the San Luis NWR's West Bear Creek Unit. These wetland units are among the last to flood in the fall. Scores of duck species can be found in the ponds and tundra swans occasionally make an appearance; surprises like Eurasian wigeon and horned grebes can also be seen. Secretive marsh birds like the Virginia rail and sora can often be heard, but rarely seen.

Receding water levels in the spring draw hundreds to thousands of shorebirds of many different species, and senescent tule and cattail stands

frequently host breeding colonies of yellow-headed blackbirds.

Raptors can be seen soaring above the wetlands and uplands as they hunt for unwary ground squirrels and American coots. Black-

tailed deer and river otter may make surprise appearances along the route.

Other mammals such as coyote, black-tailed jackrabbit, desert cottontail rabbit, California ground squirrel, and raccoon are always present, but not always seen. The riparian corridor east of the auto tour route provides habitat for woodpeckers, raptors, owls, and many species of songbirds and neotropical migrant birds, especially during the fall and spring migrations.



*Red and grey foxes settling a dispute*

© Rick Kimble

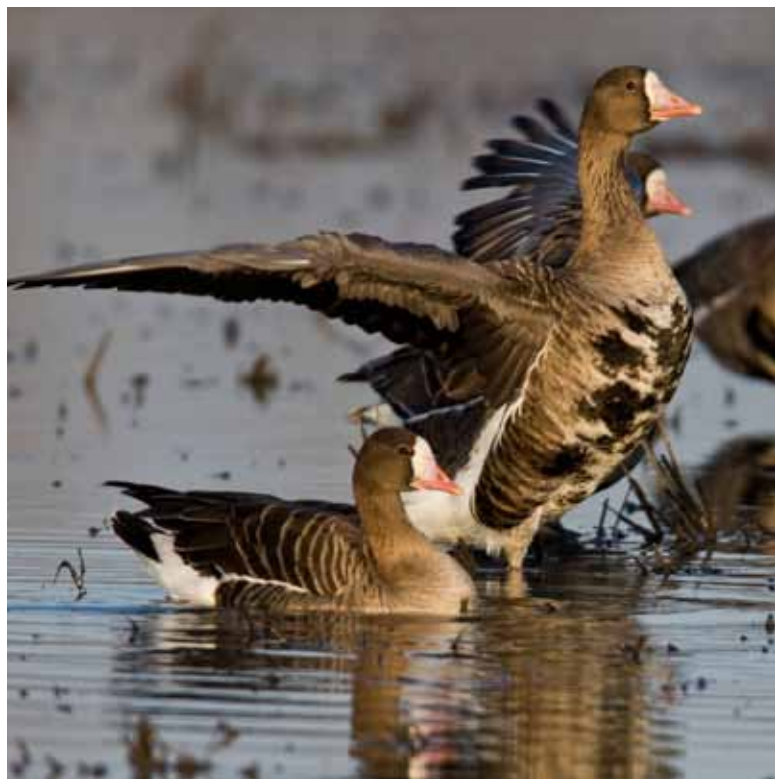
Always keep your eyes on the skies for flocks of ducks, geese, and other species like American white pelican and long-billed curlew. The Woody Pond and Raccoon Marsh Nature Trails are accessible from the West Bear Creek Auto Tour Route.

*White-fronted Geese*

© Mike Peters



*Great Egrets*  
© Lee Eastman



## West Bear Creek Unit

### Woody Pond Nature Trail— West Bear Creek

**Length:** 1.75-mile loop

**Season:** Open year-round

**Starts From:** West Bear Creek Auto Tour Route

**Surface:** Compacted gravel and dirt

The trailhead, accessed from the West Bear Creek Auto Tour Route, features a visitor kiosk and interpretive panels that introduce visitors to the habitats and wildlife of the West Bear Creek Unit. The Woody Pond Nature Trail leads around a densely-wooded seasonal wetland adjacent to the San Joaquin River. The trail makes a loop around the pond with a portion travelling atop the San Joaquin River levee between the river and the pond.

The riparian woodland is teeming with bird life during all seasons of the year. As many as 50 species of birds have been seen in just one walk around the trail. If one is lucky, they might even be treated to views of the re-introduced black-tailed deer that use the riparian woods for cover as they move from one foraging area to another. Raptors, songbirds, waterfowl, shorebirds, owls—it is possible to see them all from the Woody Pond Trail depending on the season. The cast of characters changes with the seasons—Bullock's orioles and western kingbirds in the summer, ruby-crowned kinglets, yellow-rumped warblers, and scores of waterfowl in the winter, and migrating neotropical songbirds in the fall and spring—no matter what the season, these habitats support dozens of bird species by providing critical food, shelter, and nesting habitat.



*Turkey Vulture*  
© Rick Kimble



*Raccoons*  
© Karl Stromayer

### Raccoon Marsh Nature Trail— West Bear Creek

**Length:** 1.3-mile loop

**Season:** Open year-round

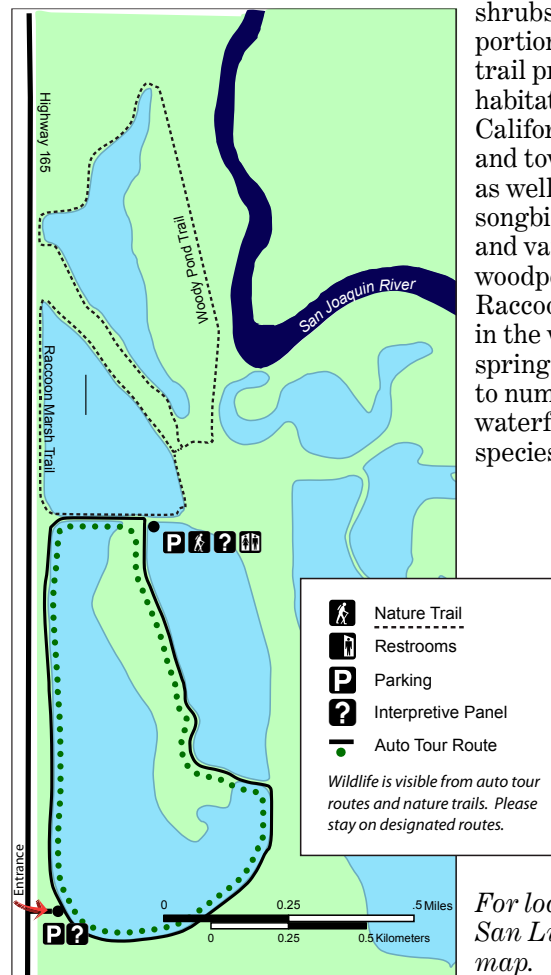
**Starts From:** West Bear Creek Auto Tour Route

**Surface:** Compacted gravel and dirt

The trailhead, shared with the Woody Pond trail, is accessed from the West Bear Creek Auto Tour Route. Raccoon Marsh is a seasonal wetland providing habitat for waterfowl and other wetland species from fall through spring. Mudflats exposed by receding water attract migrating shorebirds in early spring. Long-billed dowitchers, least sandpipers, black-necked stilts, and American avocets are common, but you never know what shorebird surprise might be in store. Habitat like this might host western sandpipers, solitary

sandpipers, or short-billed dowitchers. The willows and other shrubs along portions of the trail provide habitat for California quail and towhees, as well as many songbirds and various woodpeckers. Raccoon Marsh in the winter and spring is home to numerous waterfowl species.

## West Bear Creek Unit— San Luis NWR



*For location, see San Luis NWR map.*

## Kesterson Unit

### Kesterson Unit

**Access:** Entire area open to foot traffic

**Season:** Open February 15 to September 15

**Starts From:** Kesterson parking lot off Hwy 140

**Surface:** Compacted gravel and dirt

The Kesterson Unit of the San Luis NWR is open to the general public from February 15th to September 15th each year. Public access is limited to foot traffic only. The parking lot is located on Highway 140.

Kesterson is a unique area containing seasonal wetlands, arid upland grasslands, iodine bush scrub, and vernal pools. Kesterson is also unique in that walking “trails” are outlined by refuge roads, but once inside, visitors are free to roam wherever they choose. Spring is a great time to check the wetland basins for shorebirds. Spring also welcomes the neotropical migrant grassland species that return to the Valley to nest, such as western kingbirds and blue grosbeaks. When the winter rains and spring temperatures have been just right, the vernal pools support arrays of beautiful and vibrant uniquely-adapted wildflowers. The invertebrate-rich saline waters of the pools support scores of waterfowl and wading birds. Raptors can usually be seen soaring overhead as they scan the uplands for their rodent prey. Keep your eyes on the ground, too for the habitat is home to black-tailed deer, coyote, jackrabbits, kangaroo rats, fox, and numerous reptiles. Visit Kesterson

in the late summer and you may witness the amazing phenomena of the migratory Swainson’s

hawks “kettling” as dozens of birds spiral together—up, up, up into the sky searching for the thermals that will carry them on their fall migration to South America.



*Long-Tailed Weasel*

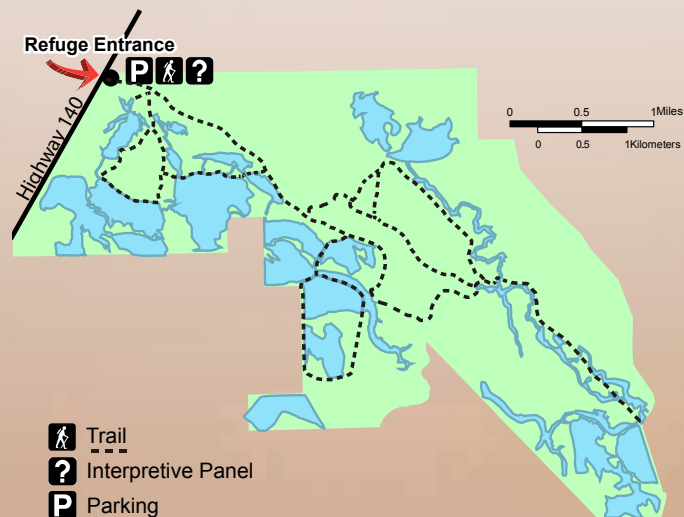
© Rick Kimble



*Long-Billed Curlew*

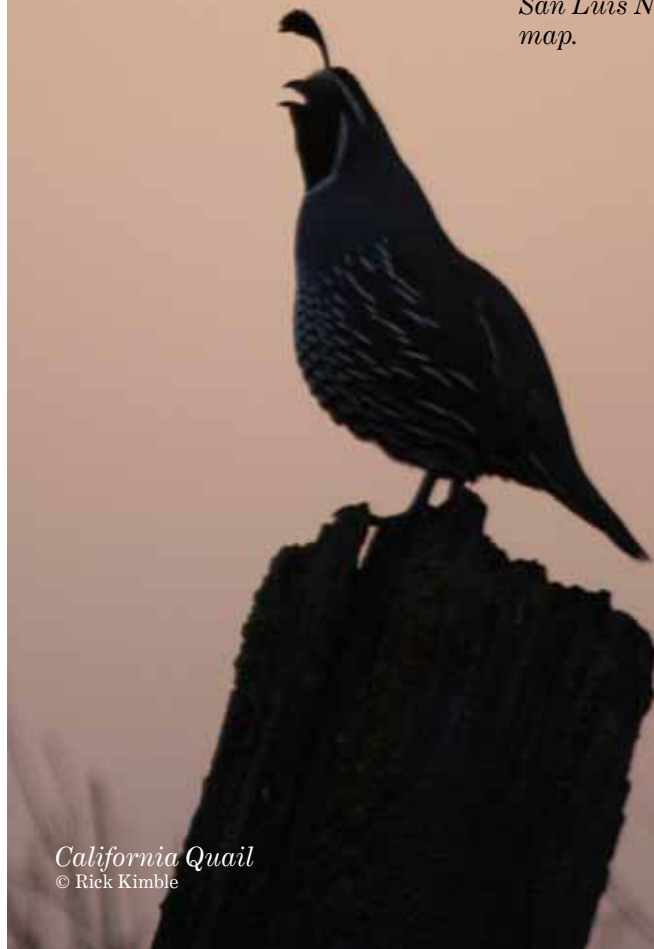
© Paul Prado

## Kesterson Unit—San Luis NWR



- Trail
- Interpretive Panel
- Parking

*For location, see San Luis NWR map.*



*California Quail*

© Rick Kimble

## Merced NWR

### Merced NWR Auto Tour Route

**Length:** 5 miles

**Season:** Open  
year-round

**Starts From:**  
Entrance off  
Sandy Mush Rd

**Surface:**  
All-weather  
compacted gravel

The Merced Auto Tour Route is a 5-mile loop that surrounds seasonal wetlands before heading across native uplands, Refuge crop fields, and irrigated pastures.

Visitors can access two elevated wildlife observation platforms along the route. One at the entrance parking lot provides a spotting scope and series of interpretive panels. The entrance parking lot also has an information kiosk to orient visitors and a vault restroom. The second observation deck is at the southeast corner of the route where visitors can picnic. It also has a spotting scope.

Visitors can leave their vehicles in the parking lot there and proceed to the observation deck or to the Bittern Marsh Nature Trail (description next page).

In the winter, the Merced NWR provides seasonal spectacles of tens

*Ross' Geese*  
© Rick Lewis



*Bald Eagle with  
Coot*

© Rick Lewis



*Burrowing Owl*

© Rick Kimble

of thousands of Snow and Ross' geese and upwards of 20,000 lesser Sandhill cranes roosting in the ponds or feeding in the uplands. Visitors are also almost guaranteed to see large numbers of waterfowl species, including northern pintail, green-winged teal, and northern shoveler, as well as shorebirds like black-necked stilt, American avocet, and white-faced ibis.

In the spring, the ponds in the southeast corner reliably host large numbers of black-bellied plover and dunlin. Keep your eyes peeled for surprises like a migrating snowy plover or stilt sandpiper. In the spring and early summer, large flocks of tri-colored blackbird frequently nest and forage on the Refuge. The wide-open landscape surrounding the auto tour route encourages the presence of raptors. Bald eagles are often spotted in the winter and burrowing owls in the grasslands.



## Merced NWR

### Bittern Marsh Nature Trail

**Length:** 1-mile loop

**Season:** Open year-round

**Starts From:** Merced NWR Auto Tour Route

**Surface:** Compacted gravel and dirt

The Bittern Marsh Nature Trail, accessed from the Merced Auto Tour Route, offers visitors a choice of an inside loop and an outside loop, as well as a short spur leading to an area with a picnic table surrounded by native cottonwood trees.

Depending on the season, the trees may be home to dozens of songbird species: house finch, warbling vireo, and American goldfinch in the summer; yellow-rumped warbler, bushtit, and ruby-crowned kinglet in the winter. During spring and fall migrations many kinds of neotropical migrant songbirds stop here for a short pause in their amazing long-distance migrations to rest in the shelter of the trees and glean protein-rich insects from the leaves and branches.

The marsh and surrounding trees are a veritable beehive of activity no matter what the season. Some secretive marsh species like American bittern, Virginia rail, and sora are often heard more easily than seen. But scan the water and the treetops for all kinds of waterfowl, shorebirds, and other species that are at home near the water, such as great egret, great blue heron, and red-winged and yellow-headed blackbirds.



*Red-Tailed Hawk*  
©Rick Lewis

*Lesser Sandhill Cranes*  
© Rick Lewis



*Raccoon Tracks*  
© Rick Kimble

### Meadowlark Nature Trail

**Length:** 1-mile loop

**Season:** Open year-round

**Starts From:** Main entrance parking lot

**Surface:** Compacted gravel and dirt

Accessed from the main entrance parking lot, the Meadowlark Trail could be called the “Songbird Trail.” The first section travels along the bank of Deadman Slough through a dense riparian woodland of native cottonwoods, black willows, and Oregon ash. Depending on the season, you may spot flycatchers, warblers, grosbeaks, and other songbirds, as well as raptors like red-tailed, Swainson’s, and red-shouldered hawks. Great-horned and barn owls frequent these trees as well. Look for large nests near the tree tops. Check closely—it may be home to a nesting great-horned owl and her owlets. Be alert because you may just spot a Bald Eagle as well!



*Loggerhead Shrike*  
© Paul Prado

The trail leaves Deadman Slough making a loop through the wetlands and upland grasslands. Along the way you may take a short spur that leads into the woods. Check the trees closely for woodpeckers and other surprises, especially during spring and fall migration seasons. The main loop offers views of grassland species such as western kingbirds, loggerhead shrikes, and western meadowlarks, as well as wetland species of waterfowl like northern pintail, northern shoveler, and cinnamon teal in the fall and winter. You may also see wading birds like white-faced ibis, long-billed dowitchers, and black-necked stilts. When in vast open habitats like this, always watch the skies for soaring raptors or flocks of waterfowl flying overhead.

## Merced NWR

### Cottonwood Nature Trail

**Length:** 1.5-mile loop

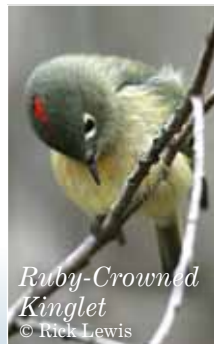
**Season:** Open year-round

**Starts From:** Cottonwood Trailhead parking off Sandy Mush Rd

**Surface:** Compacted gravel and dirt

Accessed from the trailhead on the north side of Sandy Mush Road one mile east of the main entrance, Merced NWR's Cottonwood Trail leads to an elevated observation deck that provides visitors with outstanding opportunities to view thousands of snow and Ross' geese in one of their favorite upland foraging spots on the refuge, but other species make use of this habitat too. Greater white-fronted geese and Sandhill cranes favor the same foraging habitats. Aleutian cackling geese may also make an appearance.

Along the walk to the observation deck, visitors pass through a grove of native Fremont cottonwood trees that provide nesting and foraging habitat for all manner of songbirds in summer and winter, as well as neotropical migrants in the spring and fall. The trees provide a place for red-tailed hawks, Swainson's hawks, red-shouldered hawks, and great horned owls to build nests in the spring—and provide roosting sites for raptors in the winter.



*Ruby-Crowned Kinglet*  
© Rick Lewis

### Kestrel Nature Trail

**Length:** 0.5-mile loop

**Season:** Open year-round

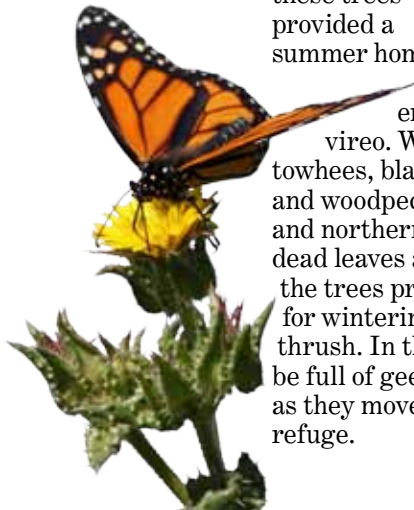
**Starts From:** Merced NWR main entrance parking lot

**Surface:** Compacted gravel and dirt



*American Kestrel*  
© Rick Lewis

*Monarch Butterfly*  
© Rick Kimble



The Kestrel trail, located near the main Refuge entrance, takes a short walk alongside Deadman Slough through native quail brush habitat. Egrets and great blue herons are often seen hunting for crayfish in the slough. Early and late in the day, you may see a black-crowned night heron hunting there, and keep a lookout toward the ground because you may spot a coyote, black-tailed jackrabbit, or fox moving through as well. The quail brush provides cover and food for a myriad of songbirds in the winter—white-crowned and golden-crowned sparrows, and yellow-rumped warblers. In the summer watch for northern mockingbirds, American robins, and western meadowlarks. The native trees on the west are full of song birds in the spring—watch and listen for all manner of surprises as the neotropical migrants move through during March, April, and May. In the summer the tall cottonwoods might be sheltering nests of red-shouldered hawks and red-tailed or Swainson's hawks. Recently, these trees provided a summer home for



*Downy Woodpecker*  
© Rick Lewis

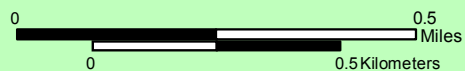
the state and federally-endangered least Bell's vireo. Watch also for spotted towhees, black-headed grosbeaks, and woodpeckers—Nuttall's, downy, and northern flicker. The litter of dead leaves and vegetation beneath the trees provide foraging habitat for wintering birds like the hermit thrush. In the winter, the sky can be full of geese and Sandhill cranes as they move back and forth over the refuge.



*Sandhill Cranes and Snow Geese*  
USFWS



# Merced NWR



- |              |                      |
|--------------|----------------------|
| Nature Trail | Interpretive Panel   |
| Restrooms    | Observation Platform |
| Parking      | Auto Tour Route      |

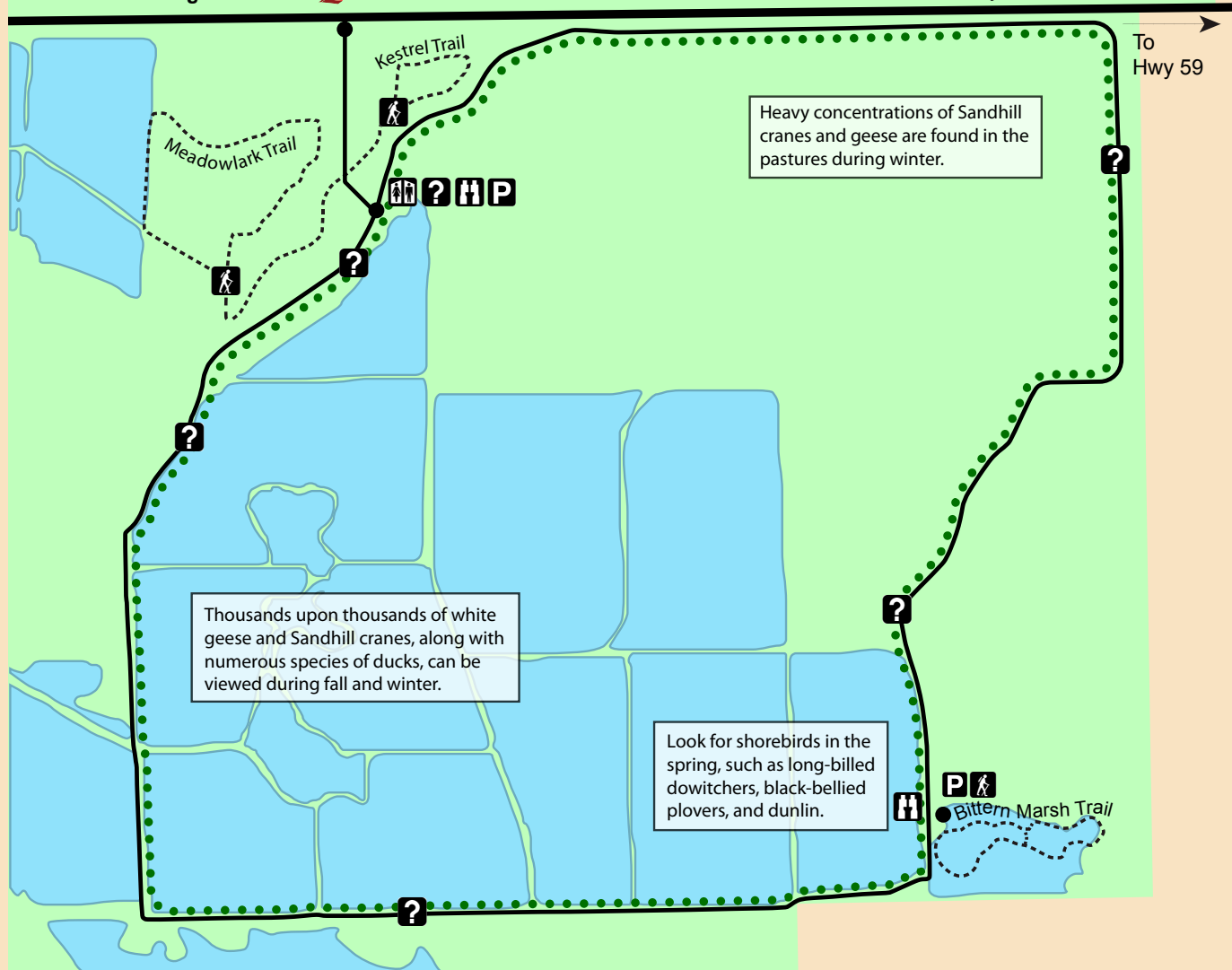
*Wildlife is visible from auto tour routes and nature trails. Please stay on designated routes.*



Refuge Entrance

Sandy Mush Rd

To  
Hwy 59



Heavy concentrations of Sandhill cranes and geese are found in the pastures during winter.

Thousands upon thousands of white geese and Sandhill cranes, along with numerous species of ducks, can be viewed during fall and winter.

Look for shorebirds in the spring, such as long-billed dowitchers, black-bellied plovers, and dunlin.

Bittern Marsh Trail

## San Joaquin River NWR

### Pelican Nature Trail

**Length:** 4 miles with series of loops

**Season:** Open year-round

**Starts From:** Refuge entrance off Dairy Rd

**Surface:** Compacted gravel and dirt

The Pelican Nature Trail, accessed from the trailhead on Dairy Road, offers the visitor a choice of three connected loops for a short walk of about one mile (just the first loop) or a longer four-mile walk if you include all three loops. The first loop departs from a free-roam trailhead “garden” that has been planted with native trees, shrubs, and forbs. The area includes two interpretive kiosks and picnic tables. From there, the first loop leads along a restored wetland that features raised vegetated mounds or “bunny mounds” that were created to provide refugia for the endangered riparian brush rabbit during San Joaquin River flood events. The riparian brush rabbit is the beneficiary of an intensive breeding and re-introduction program undertaken by the U.S. Fish and Wildlife Service and the Endangered Species Recovery Program at CSU Stanislaus intended to return the species to portions of its once vast range of riparian habitat throughout the Central Valley. The second trail loop leads you along the top of a portion of the San Joaquin River levee alongside a dense

*Beaver*  
© Rick Kimble



*American Coot*  
© Paul Prado

riparian forest. From atop the levee, you can see into the tops of the riparian trees to the east, or look out over the uplands to the west.

This perspective provides the possibility of seeing a variety of bird species—ring-necked pheasant, California quail, western kingbird, swallows, western meadowlark, and raptors over the upland grasslands; and woodland species such as woodpeckers, Bullock’s oriole, grosbeaks, and warblers in the trees. The third loop continues along the top of the levee seeming to lead the visitor right out into the San

Joaquin River. The trail follows the inside of an oxbow channel.

Keep your eyes peeled for river otters and beavers. You may also spot a flock of American white pelicans as they scan the river’s course looking for a place to set down and fish. In the winter, flocks of snow geese, Aleutian cackling geese, and Sandhill cranes are frequently seen flying overhead.

*Black Phoebe*  
© Mike Peters



## San Joaquin River NWR



*Sandhill Cranes*  
© Rick Kimble

### Beckwith Wildlife Viewing Area

**Length:**  
Observation platform

**Season:** Open October–March

**Starts From:**  
Beckwith Rd parking lot

**Surface:** Gravel, concrete, deck

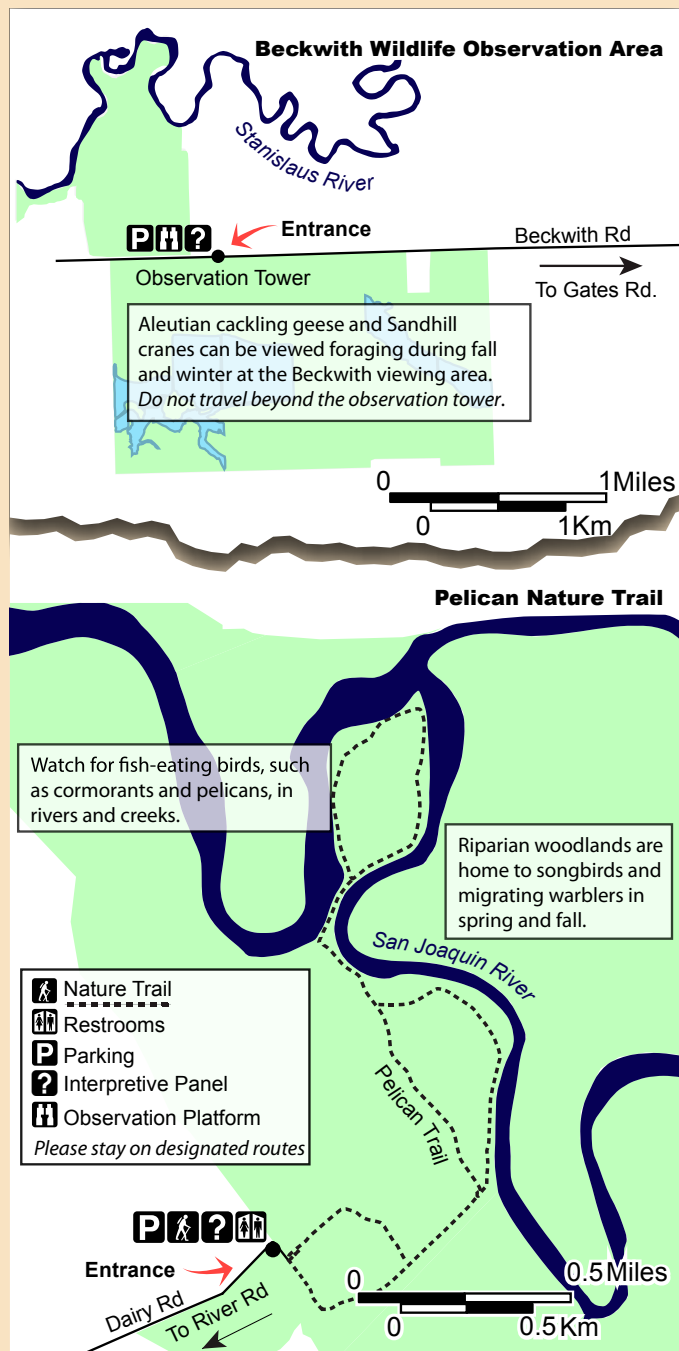
The Beckwith Wildlife Viewing Area is open seasonally October through March, and overlooks Refuge agricultural fields and grasslands that provide forage for thousands of Aleutian cackling geese and Sandhill cranes. The area is an elevated viewing platform, parking lot, and information kiosk. No interior access to the public from this area.

The San Joaquin River NWR protects a major portion of the wintering habitat for the once-endangered Aleutian cackling geese.



*Aleutian Cackling Geese*  
© Mike Peters

## San Joaquin River NWR



## Nature's Calendar *January*

- Numbers peak for geese and ducks
- Wetlands fully flooded
- Bald eagles often observed hunting on refuges
- Winter sees greatest diversity of raptors

## *February*

- Tule elk bulls shed antlers
- Great horned owls hatching
- Hawks exhibit aerial courtship displays
- Large numbers of wintering waterfowl and cranes visible

## *March*

- Waterfowl begin migrating north
- Hawks and herons nesting
- Shorebird numbers increasing
- Snakes encountered basking in the sun

## *April*

- Wildflowers are abundant around vernal pools
- Tule elk cows begin giving birth to calves
- Seasonal wetlands are drained to allow waterbird food plants to grow
- Peak number of shorebirds
- Summer neotropical songbirds begin arriving

## *May*

- Shorebirds are migrating in breeding plumage
- Songbirds are very vocal defending nesting territories
- Tiger salamanders return to burrows as vernal pools dry

## *June*

- Tule elk antlers fully grown with velvet falling off
- Shorebirds migrate north
- Seasonal wetlands are dry
- Songbird and raptor fledglings are visible

## *July*

- Seasonal wetlands are irrigated to encourage waterbird food plants to thrive
- Fall shorebird migration begins
- Coyote pups out exploring their territories

## *August*

- Swainson's hawks have fledged and will form "kettles" over grasslands
- Irrigated pastures attract ibis and long-billed curlews
- Tule elk rut and bugling peaks
- Some early northern pintails arrive

## *September*

- Sandhill cranes begin returning mid-month
- Songbirds migrate south
- Monarch butterfly fall migration peaks
- Black-tailed deer rut begins

## *October*

- Aleutian cackling geese arrive at the San Joaquin River NWR
- Greatest bird diversity occurs during fall and spring migrations
- Large numbers of American coots arrive

## *November*

- Over 15,000 Sandhill cranes are in the grasslands by Thanksgiving
- Ross' and white-fronted geese arrive
- Tiger salamanders begin trek to vernal pools to breed
- Large numbers of ducks present

## *December*

- Snow geese begin to arrive at Merced NWR
- Swans may arrive in small numbers
- Watch for eagles, falcons, and ferruginous hawks
- Black-tailed deer can be spotted at the San Luis NWR throughout the year, most often at the West Bear Creek Unit

**San Luis NWR Complex (mailing address)  
P.O. Box 2176  
Los Banos, CA 93635  
209/826 3508**

**[www.fws.gov/refuge/san\\_luis](http://www.fws.gov/refuge/san_luis)  
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[www.fws.gov/refuge/san\\_joaquin\\_river](http://www.fws.gov/refuge/san_joaquin_river)**

**San Luis NWR Visitor Center  
7376 S. Wolfsen Rd  
Los Banos, CA 93635  
209/826 3508  
Visitor Center Hours:  
Daily 8:00 am–4:30 pm (closed holidays)**

**Federal Relay Service  
for the hearing impaired  
1 800/877 8339**

**U.S. Fish & Wildlife Service  
1 800/344 WILD  
<http://www.fws.gov>**

**April 2015**



*Sandhill Cranes*  
© Rick Lewis