California Department of Fish and Wildlife

San Jacinto Wildlife Area Habitats

The diversity of topographic features and the geographic setting of the Wildlife Area are reflected by an array of vegetative communities. The low lying areas within the San Jacinto River floodplain (below 1430 foot elevation) contain examples of Alkali Sink Scrub, Fresh Water Marsh, and Cottonwood / Willow riparian habitat. The riparian and fresh water marsh habitats largely represent habitat restoration efforts which commenced upon the establishment of the reclaimed water source in 1990. Seven linear miles of Cottonwood / Willow riparian habitat have been restored along the historic San Jacinto River channel. Depending upon the season of the year, the Wildlife Area currently provides from 600 to 800 acres of freshwater marsh habitat. The upland communities above the river flood plain can be separated into an alluvial grassland and a scrub habitat primarily on the steeper hillsides. The steeper upland communities are characterized by Riversidian Sage Scrub; small freshwater seeps also occur at scattered locations along these hillside areas. Non-native grasses often predominate in the floodplain areas as well as both upland communities. Substantial agricultural activity on the Wildlife Area ceased after 1985.

Current fresh water marsh habitats on the Wildlife Area are largely a result of restoration efforts which have occurred subsequent to securing the reclaimed water supply. Lands seasonally flooded with reclaimed water have developed into productive habitat. Tall perennial emergents are characteristics of this habitat. Dominant species include Cattail (Typha hetifolia), Great Bulrush (Scirpus actus) and Alkali Bulrush (Scirpus robustus).

Plant communities on the Wildlife Area are described as follows:

Riverside Sage Scrub: The hillsides surrounding the San Jacinto River floodplain are largely dominated by Riversidian Sage Scrub. This community is considered the driest expression of Coastal Sage Scrub south of Point Conception. The most obvious species present in the community is Brittle-bush (Encelia farinosa). Other characteristic plants include Leafy Buckwheat (Eriogonum fasciculatum), White Sage (Salvia apiana) and California Sagebrush (Artemisia califomica). Typically, the Brittle-bush dominates south facing slopes while California Sagebrush is dominant shrub on th cooler north facing slopes.

Alkali Sink Scrub: This is the predominantly succulent vegetation community that occurs in the San Jacinto River flood plain. Plants found here need to be tolerant of season inundation, heavy clay soils, and general saline conditions. Dominant species include Seepweed (Suaeda), Alkali Heath (Frankenia grandifoilia) and Glassort (Saliicomia subterminalis). Various species of the Saltbush (Atriplex) are found here, including one form only in the San Jacinto Valley (Atriplex Coronata var. notatior). Other species present are Bassia and Red Goosefoot. Many non native species have also established themselves in this community due to past agricultural and grazing activities.

Summer Wetlands: Resident wetland wildlife are highly dependent on semi-permanent and permanent wetlands during the late spring and summer when seasonal wetlands are dry. Basically, the two primary habitat requirements during this time period are: 1) sufficient cover and protection from predators, and 2) an abundant food supply of aquatic invertebrates. Such invertebrates are the primary source of dietary protein for ducks and other wetland birds during the breeding season. Most species of wetland wildlife are dependent upon invertebrates as a direct or indirect food source during the spring and summer. For example, breeding ducks and shorebirds eat invertebrates almost exclusively, but herons eat other direct consumers of invertebrates such as fish, reptiles, and amphibians. Both semi-permanent and permanent wetlands provide ample protection from predators; however semi-permanent wetlands usually supply a much greater abundance of invertebrates. Invertebrate populations decline with prolonged flooding, thus a dry period of at least 2 months each year is essential for maintaining abundant populations of invertebrates.

Semi-permanent Wetlands: Semi-permanent wetlands, commonly referred to as "brood ponds", are flooded during the spring and summer, but experience a 2-6 month dry period each year. Semi-permanent wetlands provide breeding ducks, ducklings, and other wetland wildlife with protection from predators and abundant invertebrate food supplies. Water depths of 6 12" are necessary to allow wildlife access to invertebrate foods, however deeper areas (e.g. channels, potholes) are also important in that they provide open water. Well managed semi-permanent wetlands require periodic discing to prevent the vegetation from becoming too dense. In order to maximize habitat values without incurring major discing costs, it is recommended that semi-permanent wetlands be relatively small in size (2-10 acres). Various techniques have been developed for integrating semi-permanent wetlands into a moist-soil management program.

Permanent Ponds: Permanent ponds are wetlands that remain flooded throughout the year. Due to year-round flooding, permanent marshes support a diverse, but usually not abundant, population of invertebrates. However, submerged aquatic vegetation such as sago pondweed, horned pondweed, and water hyssops may occur if adequate water clarity exists. The leaves and/or nutlets of these aquatic plants are commonly consumed by waterfowl, particularly gadwalls, ring-necks, redheads, and canvasbacks. Carp and other rough fish may reduce water clarity and prohibit the growth of these desirable plants. Permanent marshes are important to resident waterfowl in mid- to late summer when local ducks are molting their flight feathers; the deep water and dense cover provide protection from predators.