

## SOUTHERN FOREDUNES, BEACH, & SALTPAN/MUDFLAT COMMUNITIES



These are coastal dependent communities that occur within a short distance from the water's edge. They are important for their value as shorebirds in particular. The Southern Foredune habitat is used by the Snowy plover and California least tern as nesting habitat. It is also important for certain plant species that are considered to be rare and endangered. However, very little of the Foredune Habitat still remains in an undisturbed state.

Originally, there were nearly 2,000 acres of these habitats present in San Diego County. However, because of beach development, these communities have been essentially eliminated. Small areas that may support components of the dune communities exist at the southern end of the Silver Strand on military lands, the slopes in Torrey Pines State Park that are adjacent to the lower salt marsh, and the mouth of the Santa Margarita River. In addition to the sensitive species of birds, these habitats are home to rare species of beetles.

Dominant plant species where the dune habitat has not been extensively disturbed include Sea rocket, Saltgrass, Ambrosia and Sand verbena. Many of these species have succulent leaves as a result of adaptations to a salty environment. One species of plant, the Coastal dunes milkvetch occurred on the Silver Strand and several other locations in the County as late as the 1930's and 1940's. However, due to disturbance on beach and sand dune areas, this species has been extirpated from San Diego County and is nearing extinction.

Saltpan and mudflat habitats are also very important for shorebirds that utilize them as feeding areas. The Salt Pan and Mudflat habitats are utilized by a wide variety of shorebirds and are an important part of the reason that Coastal San Diego County contains such a diversity of bird species.



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## MARSH VEGETATION COMMUNITY



There are two types of Marsh lands in San Diego County; Freshwater Marsh and Coastal Salt Marsh. Both of these communities are very important for wildlife, and both have had extensive reductions due to channelization, dredging and vegetation removal. Both communities have been *reduced in area by 85-90 percent of their original area* to less than 1,000 acres total.

Coastal Salt Marsh is found within the tidal zone on the edge of lagoons and bays. The major locations of this community are the Tijuana Estuary, Penasquitos Lagoon and the mouth of the Santa Margarita River. Dominant plants in Coastal Salt Marsh are Glasswort (*Salicornia*), Alkali heath (*Frankenia*), Salt grass and Cordgrass. Two notable endangered birds occur within this community, the Light footed clapper rail and the Belding's savannah sparrow. However, the Marsh lands are also important for shorebirds and the naturally occurring flow channels within Coastal Salt Marsh are important spawning areas for a number of fish species.

Freshwater Marsh land is found along stream courses and near Riparian wetland areas. It was originally found near natural springs and ponded areas within the major stream channels. It has been affected by channelization and clearing of vegetation within stream channels. Dominant plants within Freshwater Marsh include rushes, cattails, bulrushes (or tules) and several species of small willows. There is often open water in depressions or natural springs. Freshwater Marsh is home to a number of species of birds including the Yellowthroat, a species of Warbler, several species of small herons as well as rails. Freshwater Marsh in its natural state has also served as habitat for native frog species, several of which are now endangered. The introduction of bullfrogs from eastern North America has had a severe *detrimental effect* on the native amphibian populations due to its voracious appetite and large size.

Freshwater Marsh is found in small isolated areas along the major stream courses: San Diego, San Dieguito, San Luis Rey, and Santa Margarita as well as the upper ends of the major lagoons.



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## COASTAL SAGE SCRUB VEGETATION COMMUNITY



Coastal sage scrub consists predominantly of low growing, aromatic and generally soft-leaved shrubs. During spring, this is the community that gives the hills around the inland valleys their soft, gray-green color. During periods of dryness, including summer and extended drought, many of the shrubs will lose their leaves entirely only to regenerate them when rain returns. Coastal Sage Scrub is found mostly on south and west facing slopes from Camp Pendleton to the lower slopes of Palomar Mountain and around Escondido, the San Pasqual Valley, El Cajon and Jamul to the area surrounding Otay Mountain. While approximately 264,000 acres of Coastal sage scrub remains, it was originally the dominant vegetation in San Diego County and once grew where the majority of urban and agricultural development has taken place. Nearly 70% of its original area has been lost and much of what remains exists in small patches of isolated habitat.

When Coastal Sage Scrub is preserved, it helps to protect specific plant and animal species. The dominant shrub species in this habitat community are: sweet scented California sage, a low shrub with gray-green, feathery leaves, Flat-topped buckwheat, a shrub with short dark green, needlelike leaves, Black sage, a shrub with a strong odor, bright green leaves and lavender flowers, the descriptively named Saw-tooth golden bush, Laurel sumac, a large shrub with canoe shaped leaves, Bladderpod sage with its unique, inflated pods, and the San Diego sunflower. A number of animal species also make this community their home including: the California gnatcatcher, a small insect-eating songbird with a cat-like call, the brown colored California towhee, Rufous crowned sparrow and California thrasher.

The Orange throated whiptail lizard, San Diego horned lizard, Banded gecko, Black tailed jackrabbit, Audubon's cottontail and deer mice also use the Coastal sage scrub habitat. Packrats often form middens (wooden nests) in these habitats. Coyotes are common predators in this community and Mule deer may occasionally be seen.



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## CHAPARRAL VEGETATION COMMUNITY



Chaparral is a vegetation community generally composed of hard stemmed, leathery leaved shrubs. Cacti may also be present. When Chaparral is preserved, a wide assortment of plant and animal species are protected. There are a number of subtypes dominated by specific species, but the most common are represented by: several different species of Manzanita with smooth red bark, (Del Mar, Mission) Scrub oak species, Chamise, *Mimulus* with brilliant red flowers, and several species of Ceanothus which are sometimes referred to as wild lilac with blue or white flowers.

Chaparral is one of the most widespread vegetation communities in San Diego County comprising more than 630,000 acres. While there have been major losses of various forms of Chaparral to agriculture and urbanization, it still occurs throughout the foothills and mountains on exposed slopes and ridges, often forming a mosaic with Oak woodlands and Pine forest. Like many of the vegetation communities in San Diego County, Chaparral has adapted to tolerating wildfire by either resprouting from underground roots after a burn, or producing prolific seedlings after a fire. However, if fires occur more than once every 30 to 50 years, Chaparral vegetation may be replaced with more weedy vegetation often comprised of non-native species.

Chaparral is home to a wide variety of birds including the Spotted towhee, Wrentit, Black chinned sparrow, and California thrasher. A number of reptiles also inhabit this community including Western whiptail lizard, Granite spiny lizard, San Diego horned lizard and Pacific rattlesnake. Mammals that inhabit this community include a number of species of bats, deer mice and pocket mice, Black tailed jackrabbit and Brush rabbit as well as the coyote, bobcat, Mule deer and the occasional Mountain lion. In rocky areas, Ring-tailed cats occur.



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## GRASSLAND VEGETATION COMMUNITY



Grasslands that occur in San Diego County can be divided into two types; one that is composed mostly of native, perennial grasses and herbs, and one that has a large component of annual grasses which originated in the Mediterranean region. Since colonization of the San Diego area, land disturbance by heavy cattle grazing and agricultural activities have created large areas of annual grasslands in areas that were originally native grasslands and shrublands (including Coastal sage scrub and Chaparral). Native grasslands are now quite rare and occur in the hills south of Poway, Wright's Field in Alpine, parts of Camp Pendleton, Ramona, and Rancho Guiejito east of Valley Center. The annual grasslands dominated by Mediterranean species occur in these same areas and additionally in the Black Mountain area west of Rancho Bernardo, Otay Ranch, and near Warner Springs. San Diego County contains 147,200 acres of grassland. The vast majority of it is annual, also known as non-native, grassland. As development occurs, grasslands of both types are becoming limited.

Some grasslands also support vernal pool habitat where water pools due to clay or hardpan soils. These areas support unique plant and animal life because of their unique physical characteristics. The pools dry up in the summer and the plants and animals can remain dormant in the soils for years.

When Grassland habitats are preserved a variety of plant and animal species are automatically protected too. Plant species present in native grasslands include several species of: Bunch grasses, Blue-eyed grass, Checker mallow, and a number of bulb species including Wild hyacinth, and Golden stars. The Annual grassland, sometimes referred to as non-native grassland, is dominated by Wild oats, Mustard, and Brome grasses.

Both Native and Non-native grasslands are important for a variety of wildlife including: Golden eagles, Grasshopper sparrows, Horned larks, Meadowlarks, and small mammals that include the endangered Stephen's kangaroo rat.



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## RIPARIAN VEGETATION COMMUNITY: SCRUB, WOODLAND, and FOREST



As a wetland, Riparian Vegetation is one of the most sensitive habitats in California. It has suffered the loss of thousands of acres as the result of clearing in the floodplains for agriculture, sand mining operations, and transportation corridors. Current estimates are that there are roughly 29,000 acres of Riparian Vegetation in the County, but much of that is now in fragmented patches rather than extensive stream courses. Good examples of Riparian Vegetation exist in Mission Valley near the San Diego Stadium, and adjacent to the Fashion Valley shopping center. This type of vegetation may still be seen in the San Pasqual Valley, around Lake Hodges, on the San Dieguito River, San Luis Rey River, Sweetwater River, and Santa Margarita River. Riparian Vegetation exists along stream and valley bottoms as well as deep canyons in areas *where the water table is not far below the soil surface*. At one time, all of the major riverbeds in San Diego county supported extensive areas of Riparian Forest.

When Riparian Vegetation is preserved, a surprising number of plant and animal species are protected. The indicator species for the presence of Riparian Vegetation are: several species of Willows, the broad-leaved Cottonwoods, Sycamore, and Mule fat, a shrub with greasy scented leaves.

The Willow, Cottonwood and Sycamore trees are winter deciduous. Riparian Vegetation is one of the most significant vegetation communities for wildlife. It is vital to many bird species including the endangered Least bell's vireo and Willow flycatcher, as well as the more common American goldfinch, Yellow warbler, and Long eared owl. Small carnivores that inhabit Riparian vegetation include Spotted and Striped skunks, raccoons, and bobcats. Riparian Vegetation and associated stream courses are critical for a variety of amphibians including the endangered Arroyo southwestern toad, Pacific tree frog, and Western toad.

Riparian Vegetation in the desert region includes an unusually large Mesquite forest in Borrego Valley near the Borrego Sink. Mesquite Woodland, sometimes called Mesquite Bosque, consists of a dense woodland of Honey and Screwbean mesquite trees.



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## PINYON-JUNIPER WOODLANDS VEGETATION COMMUNITY



Pinyon Juniper Woodland is one of the *most isolated* vegetation communities that exists in San Diego County. It is found in remote desert mountain ranges and in some areas on the leeward side of Mount Laguna. Another location is the mountains east of Jacumba that are close to the Imperial County line. Pinyon Juniper Woodland is dominated by Four and Single leaf pinyon pine trees. Pine needles grow in small bundles. Four-leaf Pinyon has bundles of four and sometimes five needles. Single leaf pinyon has needles that grow with one per bundle. The other species that is dominant within this community is the California juniper. While Pinyon pines have cones like most normal pine trees, the fruiting body of a Juniper is a berry-like structure.

Pinyon pines produce relatively large, sweet flavored seeds that were an important component in the diet of the Native Americans. Pine nuts that are purchased in the grocery store are similar to those from Pinyon pines.

Prior to the 1940's there are indications that an extensive Pinyon pine forest existed in the area near Jacumba. However, a large fire burned through the area and the trees were eliminated. Extensive Pinyon pine forest exist north of San Diego County in the San Jacinto Mountain range and to the south in the Sierra Juarez of Baja California. Pinyon jays are common frequenters of Pinyon pine forests, however, they are sedentary and only occasionally seen in San Diego County because the Pinyon juniper woodland that occur here are relatively small in area - apparently too small to support a permanent Pinyon jay population.

Because of their remote locations, the Pinyon juniper woodlands of San Diego County are inhabited by Southern mule deer and Mountain lions. Currently, there are approximately 8,100 acres of Pinyon juniper woodland in San Diego County. There are an additional approximately 12,000 acres of Juniper habitat in which Pinyon pines are not present.



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## OAK FOREST VEGETATION COMMUNITY



Oak Forest Vegetation represents a community with specific characteristics that may be found near or blending in with other forest vegetation. It is meant to describe a true forest of *substantial trees growing in a manner that produces a closed canopy of tree cover*. It is characterized by Coast live oak, California black oak, and Canyon live oak that is sometimes called Gold cup oak. In many locations, these species grow into massive trees that are hundreds of years old.

This community is found adjacent to and intergrades with Coniferous Forest and Oak Woodland vegetation. The primary locations for Oak Forest are the northern end of Palomar Mountain, the slopes and canyons on Hot Springs Mountain, and parts of the Cuyamaca and Laguna Mountain ranges.

Inhabitants of Oak Forest include Acorn woodpeckers, Western bluebirds, Plain titmouse and Mountain chickadees. Western gray squirrels and Merriam chipmunks are also known to inhabit these forests, as well as Southern mule deer, bobcats, coyotes, and Mountain lions.



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## OAK WOODLAND & ELEPHANT TREE WOODLAND VEGETATION COMMUNITIES



Woodland occurs in a variety of locations where soil conditions are moister than the soils hosting Coastal Sage Scrub and Chaparral vegetation. In the lowlands, they are mostly confined to stream and canyon bottoms, but in the foothills and mountains they occur in areas with good soil, especially on north and east facing slopes. Woodlands have an open canopy, whereas in forests the trees are dense enough to form a closed canopy. Woodlands within the County are mostly comprised of a few species. The Coast live oak, with cup shaped leaves, grows on the coast and in the foothills. The Engelmann oak with bluish leaves grows in the foothills. Both the California black oak with its deciduous lobed leaves, and the Canyon live oak with shiny dark green leaves and big-capped acorns grow in the mountains. Oak woodlands often have an understory of Poison oak, Gooseberries and various herbs.. Approximately 125,000 acres of Oak Woodlands remain in San Diego County. There has been some loss of Oak woodland habitat as a result of firewood harvesting. The woodlands most at risk occur in coastal stream courses.

When Woodland is preserved, it helps to protect numerous species. Woodlands serve as habitat for bird species including the: Plain titmouse, Mountain chickadee, Nuttall's woodpecker, Northern flicker, Scrub jay, and a variety of Flycatchers and Owls.

Since Oak Woodlands often occur as linear features, the mammals that inhabit them are often the same ones that occur in the surrounding chaparral including coyote, bobcat and the occasional Mountain lion (Cougar). In addition, raccoons, Striped and Spotted skunks and opossums make their homes within this plant community. Shrews and Long-tailed weasels tend to prefer Oak Woodland areas that provide more moisture. Several species of bats feel quite at home, upside-down, in Oak Woodland vegetation.

The Elephant Tree Woodland occurs in the desert areas in San Diego County. This is a small tropical tree that occurs widely in Baja California and reaches its northern limit in Southern California and Central Arizona. The Elephant Tree is in the Frankincense family and its leaves give off a strong odor when crushed, like the Pepper Tree.



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## MEADOW & SEEP VEGETATION COMMUNITIES



Naturally occurring meadows exist primarily in the mountains and foothills. They cover about 16,000 acres of land within San Diego County. They form in areas where there is a high level of groundwater and fine silty soils. They are different from grasslands in that the majority of grasslands that occur in San Diego County have been heavily influenced by non-native annual species. Where Native Grasslands exist, they are dominated by bunchgrasses. However perennial grasses as well as sedges and spike-sedges dominate Montane Meadows and Seeps. During spring, they may have a somewhat boggy, moist condition. They may remain green long after the herbaceous vegetation of their surroundings have dried. However, during the fall, early frosts may cause them to die back to a golden color. Montane Meadows and their adjacent grassy areas are some of the *showiest* areas of the County for *wildflowers*, providing consistent displays of gold and cream colors from the flowering of the native annuals that occur within them. There are also large meadows in some of the upper foothill valleys. Campo Valley contains an extensive meadow and McCain Valley and the area surrounding Lake Henshaw also support extensive meadow lands.

The best places to observe Meadow and Seep communities are the meadows surrounding Cuyamaca Lake and the large Laguna Meadow on Mount Laguna.



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## CONIFEROUS FOREST VEGETATION COMMUNITY



In San Diego County, Coniferous Forest generally occurs *above an elevation of 3,500 feet* extending across the major mountain ranges of Palomar, Volcan, Hotsprings, Cuyamaca, and Laguna Mountains making up approximately 79,000 acres of the County. It generally grows in areas that receive more than 20 inches of rainfall each season including some snow. Coniferous Forest is identified by the presence of a number of species of pines including: Coulter with massive, spike covered cones, Jeffrey with a sweet smelling bark, Ponderosa with plate-like bark, and Sugar Pines with 5 needles in a bundle and long cones.

The red barked Incense cedar and the Christmas tree-like White fir also characterize it. However, to form a forest, these trees are commonly mixed with the deciduous California black oak, Canyon live oak, and Coast live oak. The Coniferous Forest in San Diego County is a remnant from a much more widespread forest that occurred in the area more than 10,000 years ago during the Pleistocene period. There has been some harvesting of timber in the past. It now forms mountain islands that were at one time connected together in a continuous swath of forest in the upper elevations of this County.

This vegetation habitat is very important for wildlife. When Coniferous Forest is preserved, many plant and animal species are protected too. Common birds that inhabit coniferous forest include: Stellar's jay, American robin, Western bluebird, Black headed grosbeak, Mountain chickadee, Plain titmouse and a variety of flycatchers. It is also important for mammals including Southern mule deer, bobcat, a wide variety of rodents and bat species. Reptiles in Coniferous Forest include Ring-necked snake, Mountain swift lizard and Mountain kingsnake. The brightly colored Large blotched salamander also occurs within this habitat.

Coniferous Forest in the central coastal portion of the County represents the Torrey Pine Woodlands in the Torrey Pines State Preserve. Coniferous Forest in the southwestern part of the County represents the Tecate Cypress Forest on Otay Mountain and Tecate Peak. Both the Torrey Pine Woodland and the Tecate Cypress Forest are *highly restrictive* and unusual vegetation communities and are associated with numerous rare species of plants.



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## DESERT DUNES, PLAYAS, BADLANDS & MUDHILL FORBS VEGETATION COMMUNITIES



Desert Playa is one of the most interesting habitats in San Diego County. They, in essence, consist of dry lake beds that contain water ONLY following unusually heavy rainfall events. Each flood period may occur in winter or after unusually heavy summer thunderstorms.

There are several distinctive naturally occurring playas in San Diego County, including the Borrego Sink and Clark Dry Lake. These areas are nearly devoid of vegetation over much of their surface, though a few specially adapted plants such as *Hoffmanseggia* do grow in the bottoms or edges of dry lakebeds. A view of these lakebeds filled with water is a sight to behold.

Desert Dunes support a series of unique plants and are found predominantly east of Borrego Springs. Plants that grow on desert dune habitats are adapted to conditions of shifting sand. They have long root systems to tap into the moisture from seasonal rainfall that lies deep within the dunes. The Flat tailed horned lizard is one species that is considered rare and endangered that occurs within the sand dune habitats as well as species of Milkvetch plants.

Mudhill Forbs habitat exists as the result of exposures of soils that may exist as clay or may have high content of minerals such as gypsum. The soils may be sticky when wet and very unstable and crumbly when dry. This unstable character and the lack of oxygen available to roots when the soils are wet eliminates the potential for many shrubs to grow there. However, in some locations, the clay soils support small native, shallow rooted, annual plants that can grow on these soils following normal or above normal winter rainfall.



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## DESERT SCRUB VEGETATION COMMUNITY



Desert Scrub is one of the *most widespread* vegetation communities in San Diego County. It covers more than half a million acres of land on the leeward side of the Mountains. It is the dominant vegetation within the Anza Borrego Desert State Park as well as vast areas that are owned and managed by the Bureau of Land Management. It is a somewhat variable community and it covers a wide range of habitats. Desert Scrub ranges from Jacumba at over 2,800 feet in an area that receives snow on occasion and an average of 6 to 8 inches of precipitation to Ocotillo, an area of hot, dry, low desert with an average seasonal rainfall of little more than 2 inches.

Desert Scrub is generally dominated by the Creosote bush. Creosote bush can pass successive years of nearly no rainfall in a nearly, dead appearing state. However, given ample rainfall, they may maintain small, sticky, shiny leaves with yellow flowers. They are called Creosote bush because they have the scent of Creosote. They are also considered some of the oldest living things. In the Mojave Desert, there are plants that have grown into clones from a common original plant that have been estimated to be over 11,000 years old. One other aspect of the home of the Creosote bush is that summer rainfall is a regular occurrence. During some years, summer rainfall may contribute more than half of the total seasonal precipitation. Occasionally, there are torrential summer downpours.

Other dominants in this community include: the Desert agave, a plant whose growing flower stalk served as an important food source to the native people, Ocotillo, Burro bush, and a variety of cacti including the Teddy bear cactus. Teddy bear cactus looks fuzzy but in fact is highly prickly to touch.

The Ocotillo has an unusual appearance of an open bundle of long spiny sticks growing up to a dozen feet tall. Following ample rains, summer or winter, the Ocotillo will grow new green leaves, and as the leaves dry and fall, the plants will produce bright red flowers at the ends of the branches. Desert Scrub Vegetation is also famous for the annual wildflowers that can carpet the ground following winter rains. There are even specific wildflowers that will carpet the ground in this community following the summer rainy period. Cacti are also noteworthy flowering plants within this community.

A diversity of wildlife inhabit Desert Scrub communities including the Kit fox, and a number of rodents including the Antelope ground squirrel and a number of species of Kangaroo rats and Pocket mice. The Desert Scrub community is also home to a variety of reptiles including the Sidewinder rattlesnake.



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## DESERT CHAPARRAL VEGETATION COMMUNITY



This community exists on the leeward side of the Peninsular Range including Mount Laguna, Volcan Mountain and Hot Springs Mountain. Approximately 143,000 acres of this community occurs in San Diego County. It grows mostly in remote areas of the County and up to this point, has been exposed to little human disturbance.

Desert Chaparral is composed of several typical chaparral species, including Chamise, but it also contains a number of species that are well-adapted to its harsh climate with very hot, dry summers, occasional late summer rainfall, and cool to cold winters with relatively low rainfall. Shrubs that are found in this community include Desert apricot with white blooms, Cupleaf white lilac, and Turpentine broom. In some locations, Redshank also occurs.

Good locations to observe Desert Chaparral are on the lower portions of Banner Grade, particularly the portion that enters into San Felipe Valley, the eastern portions of McCain Valley, and some of the lands around Jacumba.

These areas are generally known for rocky, boulder-filled terrain and are home to a number of reptiles including the Barefoot gecko and on the lower slopes, Chuckwalla. Because of the general lack of disturbance in this area, large wildlife including Mountain lions and Mule deer inhabit this vegetation community. Peninsular bighorn sheep also occur within this community.



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## WATER COMMUNITY



Open water that occurs in San Diego county is mostly the result of man-made dams. There were few natural lakes in this County in prehistoric times. Notable ones are the Laguna Lakes on Mount Laguna, and a small, swampy lake area in the vicinity where Cuyamaca Lake currently exists. There are indications that Lindo Lake in Lakeside also occurred *naturally*.

Over the years there have been small ponds created in the Sand Diego County backcountry for agricultural and recreational purposes. Many of the drinking water water reservoirs that occur within the County have become habitat for aquatic wildlife, especially bird species. Western grebes breed at Sweetwater Reservoir, and Lake Hodges is used as foraging habitat for a number of birds including terns and gulls. Several species of ducks also inhabit reservoirs and ponds in San Diego County. Herons and egrets nest in the vicinity of several of the County reservoirs. Reservoirs in the mountainous regions of the County (Lake Henshaw and Lake Morena), are used as winter foraging areas by Bald eagles. Additionally, small water areas exist along stream courses.



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## URBAN, DISTURBED HABITAT, AGRICULTURE, & EUCALYPTUS WOODLAND VEGETATION COMMUNITIES



### URBAN LAND

Roughly 420,000 acres of land in San Diego County are now classified as Urban. The vast majority of urban lands once hosted Coastal Sage Scrub vegetation. There are also large areas of development that were originally covered with Chaparral. Depending on the nature of the development, there are wildlife that utilize urban areas, many of which are non-native and introduced.

The most common birds include the introduced House sparrow and Starling. However, a number of native species including the Mockingbird, Mourning dove, Scrub jay, and Common raven have also adapted to urban and suburban life. In addition, migrating songbirds may utilize large stands of ornamental plantings during the winter. Other urban wildlife includes Striped Skunk, the introduced Opossum, Norway rat, and House mouse as well as occasional Gray foxes. In highly urbanized areas, the diversity is reduced to Rock doves, Starlings, House sparrows, Norway rats and House mice.

### AGRICULTURAL LAND

San Diego County supports approximately 164,000 acres of intensive agricultural land. In the northern part of the County, the majority of the existing agricultural lands originally were Chaparral. However, in the southern part of the County Riparian Woodland dominated such as in the Tijuana River Valley, or Coastal Sage Scrub. Depending on the crop, intensively farmed agricultural land may serve as *habitat for some wildlife*. Well-managed, modern agriculturally producing areas for commercial rowcrops, orchard or nursery production are often nearly devoid of wildlife. However, Mockingbirds, House sparrows, House finches, and in some cases Black phoebes, often inhabit the areas around barns and outbuildings.



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