

San Mateo County Parks Vegetation Resources



**Prepared for
County of San Mateo
Environmental Services Agency
Parks & Recreation Division**

**by
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6. FITZGERALD MARINE RESERVE

6.1 LOCATION AND FEATURES OF FITZGERALD MARINE RESERVE

The Fitzgerald Marine Reserve encompasses approximately 402 acres. The reserve is situated adjacent to the town of Moss Beach and extends southward to near Pillar Point, in the Half Moon Bay area of San Mateo County. The reserve encompasses approximately 35 acres of terrestrial areas along the coastline and approximately 370 acres of intertidal areas. The reserve abuts residential land uses in the north and undeveloped and open space lands to the south. The reserve contains the westernmost port of San Vicente Creek (in the Moss Beach area) and the majority of the Pillar Point Marsh (in the Pillar Point area). Sunshine Creek drains into the reserve from Sunshine Valley and Montara Mountain.

The shoreline and bluffs within the reserve have been used by humans for many centuries, from Native Americans (as evidenced in four cultural resource sites dating about 5,800 years) to current uses of the site for nature exploration (Brady/LSA, 1999). The Pillar Point Marsh was dammed by farmers in the early part of the century to improve farming conditions in the coastal valley areas. Subsequently, the US Air Force constructed an access road across the dam to reach the military installation on the coastal bluff. Additionally, in 1950, the U.S. Army Corps of Engineers constructed the breakwater around Pillar Point Harbor. The Fitzgerald Marine Reserve was established in 1969. Since then, additional uplands have been added to the north and south. The northern addition (approximately 2 acres) was added in 1996 and extends along Sunshine Creek from California Avenue to the ocean.

The reserve provides passive recreational uses, including intertidal exploration, picnicking, surf access and hiking. The intertidal zone receives high use due to its close proximity to the San Francisco Bay Area (Fitzgerald Marine Reserve and Pillar Point Marsh Master Plan, Brady & Associates, 1999)

The majority of the reserve land is undeveloped. The terrestrial portion of the reserve supports seven principal plant community types. The primary plant community types documented in the reserve are depicted on Figure 6.1 and are listed below in Table 6.1.

The primary vegetation types are willow riparian woodland, coastal scrub, coastal bluff scrub, coastal salt marsh, freshwater marsh, coastal terrace prairie and landscape tree groves. In addition to native vegetation types, there are also areas that are developed as parking.

Water resources on Reserve consist of a portion of Pillar Point Marsh, creeks and a section of the intertidal area of the Pacific Ocean near Moss Beach.

The historic land uses within portions the northern portion of the reserve (i.e., residential use) has resulted in the planting and subsequent natural revegetation of non-native trees and understory plants. The most notable non-native trees in the reserve is the large grove of Monterey cypress. The cypresses were planted over 75 years ago as a windbreak for an old home site. These trees have altered the coastal bluff landscape. The reserve also supports numerous non-native shrubs and groundcovers, including some species that are considered invasive pests. The dominant invasive species are Cape ivy, poison hemlock, sea fig, pampas grass, periwinkle, and pampas grass.

Despite the incursion of human-induced vegetation, the reserve supports several sensitive upland habitats and special status plant species. The reserve land affords considerable plant biodiversity including examples of plant communities that are indigenous to the region. The reserve is known to support plant communities that are considered sensitive; these include: riparian woodlands along watercourses, coastal salt marsh, coastal terrace prairie and freshwater marsh.

Table 6.1. Principal Plant Community Types Identified within Fitzgerald Marine Reserve

Plant Community Type	Commonly Observed Plant Species	Acreage	Status
Mixed Riparian Woodland	willow, California blackberry, stinging nettle	0.2	Sensitive under County Code
Landscape Tree Groves	Monterey cypress (planted) and eucalyptus	20.5	No protective status for botanical resources
Coastal Scrub	coyote brush, California sage, coffeeberry, poison oak	3	Sensitive if supporting rare species
Coastal Bluff Scrub	seaside daisy, lizard tail, California blackberry, yarrow, gumplant	7.3	Sensitive if supporting rare species
Coastal Salt Marsh	pickleweed, alkali heath, fat hen	13.4	Sensitive under County Code; wetland under Coastal Act
Freshwater Marsh	willow, slough sedge, cattail, bulrush, Pacific silverweed	17.7	Sensitive under County Code; wetland under Coastal Act

6.2 VEGETATION CLASSIFICATION AND CONDITION

6.2.1 Upland Forest and Woodland Communities

Landscape Tree Groves

The landscape tree groves within the reserve, covering approximately 20.5 acres (Table 6.1), are dominated by Monterey cypress (*Cupressus macrocarpa*). The majority of these trees were planted as windbreaks; a large grove occurs in the northern portion of the reserve. These tree groves are non-native, although native groves of Monterey cypress occur in southern San Mateo County and northern Santa Cruz County. The cypress tree groves occur in areas that historically were vegetated with coastal terrace prairie. Currently, the understory is sparse, although revegetation efforts have been initiated in some areas. Native understory plant species include native strawberry (*Fragaria chilensis*), Douglas iris (*Iris douglasiana*) and yarrow (*Achillea millefolium*). Non-native species also occur, including velvet grass (*Holcus lanatus*), Italian ryegrass (*Lolium multiflorum*), Australian tea tree (*Leptospermum laevigatum*), periwinkle (*Vinca major*), soft chess (*Bromus hordeaceus*), and wild radish (*Raphanus sativus*).

6.2.2 Scrub Communities

Coastal Scrub

Thickets of coastal scrub vegetation occur on the coastal hillsides within the reserve. The scrub habitat is dominated by coyote brush (*Baccharis pilularis*), yellow bush lupine (*Lupinus arboreus*), poison oak (*Toxicodendron diversilobum*), coffee berry (*Rhamnus californica*), California blackberry (*Rubus ursinus*) and California sage (*Artemisia californica*). Associated species include sanicle (*Sanicula* sp.), common yarrow (*Achillea millefolium*), hedge nettle (*Stachys* sp.), California bee plant (*Schrophularia californica*) and pampas grass (*Cortaderia jubata*).

The reserve supports approximately 3 acres of coastal scrub.

The coastal scrub within the reserve is subject to infestation from invasive, non-native plant species. Perennial plants of pampas grass (*Cortaderia jubata*), poison hemlock (*Conium maculatum*), and velvet grass were observed in some areas. Invasive biennial plants were also observed in the scrub habitats, including wild mustard (*Brassica* spp.) and wild radish. These plants grow well in the previously

disturbed soils. As these plants grow into dense stands, they successfully compete with, and over time, exclude the growth of the native plant species, such that their presence reduces the plant diversity of the habitat. The coastal scrub areas within the reserve offer opportunities to remove and/or control the spread of these invasive plant species.

Coastal Bluff Scrub

The reserve supports areas of scrub habitat that grows along the sea cliff. Plant species include sea lettuce (*Dudleya cespitosa*), prostrate coyote brush, native strawberry, Pacific grindelia (*Grindelia stricta* var. *platyphylla*) and Douglas iris (*Iris douglasiana*).

Shrubs of coyote brush, coffeeberry, California sage and poison oak occur in more protected sea cliff areas. Hillside seepage often creates mesic areas that support bracken fern (*Pteridium aquilinum*) and California polypody (*Polypodium californicum*).

6.2.3 Riparian and Wetland Communities

Cold season deciduous forests occur along San Vicente Creek (in the northern portion of the reserve) and in the upper ends of Pillar Point Marsh (in the southern portion of the reserve). These forests are commonly referred to as *riparian forests*. This streamside vegetation typically grows up to the bank full-flow line and may extent beyond this line if soil moisture levels are high or frequent flooding occurs, such as along the floodplain of Pillar Point Marsh. Characteristic woody vegetation species within the reserve are arroyo willow (*Salix lasiolepis*). The San Vicente Creek channel exhibits evidence of scour and/or deposition. The high water regime of a stream is an important component in the species composition along a watercourse, as most riparian plant species are adapted to colonizing recently disturbed (i.e., flooded, scoured or depositional areas) portions of a stream.

These deciduous forests typically occur along perennial and intermittent streams shown as a solid or dashed blue line on USGS 1:24,000 scale topographical maps and some ephemeral streams with well-defined channels. Figure 6.1 displays the occurrences of riparian woodland within the reserve based on the volunteer surveys and limited ground-truthing. Approximately 0.2 acres of riparian woodland occur in the reserve.

Mixed Riparian Woodland

Where this riparian type occurs along San Vicente Creek, willows (*Salix* spp.) are the dominant trees. Understory plant species include California polypody (*Polypodium californicum*), California blackberry, stinging nettle (*Urtica doioaca*), scouring rush (*Equisetum arvense*), hedge nettle, and California bee plant (*Scrophularia californica*). Invasive, non-native plant species were observed along the creek, most notable are Cape/German ivy (*Delaireia odorata* / *Senecio mikanioides*), poison hemlock (*Conium maculatum*), pampas grass, mustard and garden nasturtium (*Trapeaolum majus*).

The northern portion of Pillar Point Marsh supports a willow riparian woodland, interspersed with patches of freshwater marsh. The woodland is dominated by arroyo willow. Associated species include California blackberry, stinging nettle, Pacific silverweed (*Potentilla anserine*), and Cape ivy.

Coastal Salt Marsh

The coastal salt marsh occurs at the mouth of Pillar Point Marsh and extends upstream to West Point Road, encompassing approximately 13.4 acres. The marsh is dominated by plant species tolerant of high salinity, such as pickleweed (*Salicornia virginica*), fleshy jaumea (*Jaumea carnosa*), alkali heath (*Frankenia grandiflora*), coastal gumplant (*Grindelia latifolia*) and salt grass (*Distichlis spicata*). The

marsh receives seawater inflow from the Pacific Ocean (when the marsh is open to the ocean), as well as significant freshwater inflow during the winter months. Depending upon the tidal inundation level, mud flats may be visible adjacent to the marsh plain. Pickleweed is adept at colonizing these open areas, and its extent depends upon the duration and magnitude of tidal inundation.

The coastal salt marsh within the reserve has been significantly reduced in distribution since pre-European settlement. Historically, the marsh probably occupied a larger area. Agricultural uses and construction of the Air Force access road probably confined the extent of the marsh.

The marsh plain was observed to support some occurrences of invasive, non-native plant species. Iceplant was observed in some locations. The slopes along the roads were observed to support stands of poison hemlock and some pampas grass. The marsh offers several opportunities for restoration through the removal of occurrences of invasive, non-native plant.

The salt marsh areas are identified as “sensitive habitat” in the County of San Mateo LCP.

Freshwater Marsh

This vegetation type consists of areas dominated by perennial, non-woody plant species that are adapted to growing in wet conditions. The plants grow in permanently saturated soil, such as within portions of San Vicente creek and in the upper areas of Pillar Point Marsh. Winter inundations, creek flows and spring/seeps provide the moisture for the marsh species.

Within the reserve, the Pillar Point Marsh area supports a dense cattail/bulrush habitat. The most common species are California bulrush (*Scirpus californicus*) and cattail (*Typha latifolia*). The distribution of these plant species is primarily a function of historical land uses, source of water (i.e., groundwater, surface runoff) and water depth. The occurrence of other plant species also varies by water depth and the duration of inundation. Along the edges of the bulrush/cattail stands where periodic flooding often occurs, other wetland plant species are present. Common monkey flower (*Mimulus guttatus*), Pacific silverweed, watercress (*Rorippa nasturtium-aquaticum*), western goldenrod (*Euthamia occidentalis*), brown-headed rush and waterweed (*Polygonum lapathifolium*) occur in these areas. In open water areas, pondweed (*Lemna* sp.) is also prevalent.

Approximately 17.7 acres of this community occurs within the reserve. All areas supporting freshwater marsh vegetation are identified as “sensitive habitat” in the County of San Mateo LCP (wetlands).

In some areas, the freshwater marsh areas support thickets of poison hemlock, wild mustard and wild radish, three invasive, non-native plant species. The watershed offers several opportunities for restoration of the freshwater marsh areas through the removal of occurrences of invasive, non-native plant species.

6.3 SENSITIVE, RARE AND ENDANGERED BOTANICAL RESOURCES

6.3.1 Special Status Plant Species

Although no special status plant species, including those listed by the USFWS, CDFG and/or CNPS as rare, threatened or endangered, have been documented from the reserve, some habitats provide potential habitat. In addition, some of the lands provide potential habitat for plants recognized as rare or locally unique by CDFG or CNPS.

The special status plant species with potential to occur in the vicinity of the reserve are listed in Table 6.2.

In addition to special status plant species that are listed on CNPS List 1B, there are species that local botanists, including the local chapters of the California Native Plant Society, consider to be specialty plants of

the region. Such species may have limited occurrences within the region (locally rare), or may be endemic to the reserve area. These plants are typically on CNPS List 4, a watch list. Spring surveys would be needed to confirm the presence of any of these resources on reserve lands.

Table 6.2. List of Special Status Plant Species Known or With Potential to Occur in Fitzgerald Marine Reserve, San Mateo County, California

Species	Status	Observed on Site/Potential Habitat
Blasdale's bentgrass (<i>Agrostis blasdalei</i>)	List 1B	Potential
Coast lily (<i>Lilium maritimum</i>)	List 1B	Potential
Coast wallflower (<i>Erysimum ammophilium</i>)	List 1B	Potential
San Francisco popcorn flower (<i>Plagiobothrys diffusus</i>)	List 1B; SE	Potential
Fragrant fritillary (<i>Fritillaria liliacea</i>)	List 1B	Potential
Hickman's cinquefoil (<i>Potentilla hickmanii</i>)	List 1B; SE; FE	Potential
Kellogg's horkelia (<i>Horkelia cuneata ssp. sericea</i>)	List 1B	Unlikely
Marin checkerbloom (<i>Sidalcea hickmanii ssp. viridis</i>)	List 1B	Potential
Pt. Reyes horkelia (<i>Horkelia marinensis</i>)	List 4	Potential
Coast yellow linanthus (<i>Linanthus croceus</i>)	List 1B	Known from only one occurrence on bluffs at North end of Reserve near Juliana St.; reported by Toni Corelli (Breen, pers. comm.)
Gairdner's yampah (<i>Perideridia gairdneri ssp. gairdneri</i>)	List 4	Potential
Pt. Reyes meadowfoam (<i>Limnanthes douglasii sulphurea</i>)	List 1B; SE	No/Unlikely
San Francisco gumplant (<i>Grindelia hirsutula var. maritima</i>)	List 1B	Potential
San Francisco campion (<i>Silene verecunda ssp. verecunda</i>)	List 1B	Potential
San Francisco owl's clover (<i>Triphysaria floribunda</i>)	List 1B	Potential
Santa Cruz clover (<i>Trifolium buckwestiorum</i>)	List 1B	Potential
Santa Cruz microseris (<i>Stebbinososeris decipiens</i>)	List 1B	Potential
Artists popcornflower (<i>Plagiobothrys chorisianus var. chorisianus</i>)	List 3	Potential

SE: State Endangered FE: Federally Endangered

CNPS Status:

List 1B: These plants (predominately endemic) are rare through their range and are currently vulnerable or have a high potential for vulnerability due to limited or threatened habitat, few individuals per population, or a limited number of populations. List 1B plants meet the definitions of Section 1901, Chapter 10 of the CDFG Code.

List 3: This is a review list of plants that lack sufficient data to assign them to another list.

List 4: List 4 is a watch list of plants with limited distribution in the state that has low vulnerability and threat at this time. These plants are uncommon, often significant locally, and should be monitored.

6.3.2 Sensitive Plant Communities

Sensitive habitats are defined by local, State, or Federal agencies as those habitats that support special status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity. Four of the principal plant communities within the reserve–riparian woodland, oak woodland, northern maritime chaparral and coastal terrace prairie– are designated as high priority communities in the CNDDDB (CDFG 1999). This category contains native plant communities that are regarded by CDFG as having special significance under the California Environmental Quality Act. Riparian and wetland habitats are also considered sensitive under the County of San Mateo General Plan and Local Coastal Plan.

Riparian Forests

The riparian forests are all considered as sensitive habitats according to the County of San Mateo and CDFG. This status is due to the value of these forests to wildlife and the relatively limited (and declining) distribution of this habitat at the local and statewide level. These habitat types are considered areas of high biological quality, warranting preservation and management.

Coastal Salt Marsh and Freshwater Marsh

The coastal salt and freshwater marshes are considered sensitive habitats according to the County of San Mateo and CDFG. This status is due to the value of these areas to wildlife and the relatively limited (and declining) distribution of this habitat at the local and statewide level. These habitat types are considered areas of high biological quality, warranting preservation and management.

6.4 SENSITIVE, RARE AND ENDANGERED ANIMAL SPECIES

Some of the reserve provides habitat for species of concern, including those listed by the USFWS or CDFG as threatened or endangered. The special status animal species known or with potential to occur in the reserve are listed in Table 6.3. Two species, the Red-legged Frog and the San Francisco Common Yellowthroat, are reported within the park in the California Natural Diversity Database. These occurrences are mapped in Figure 6.2.

Table 6.3 was compiled using the following sources:

Fitzgerald Marine Reserve Draft Master Plan (Brady/LSA August, 1999)

Fitzgerald Marine Reserve Final EIR (Dept. of Parks and Recreation, San Mateo County 1976)

California Natural Diversity Database

Table 6.3: Special Status Animal Species that May Occur in Fitzgerald Marine Reserve or Pillar Pt. Marsh

Species	Status	Known/Potential Occurrence	Typical Habitat
Myrtle's Silverspot Butterfly (<i>Speyeria zerene myrtleae</i>)	FE	Potential	Coastal forest and wooded areas
Mission Blue Butterfly (<i>Icaricia icarioides missionensis</i>)	FE	Potential	Grasslands with larval food-plants (<i>Lupinus albifrons</i> , <i>L. formosus</i> , & <i>L. variicolor</i>)
California Red-legged Frog (<i>Rana aurora draytoni</i>)	FT	Known	Grassland, woodland, or forest in or near water
San Francisco Garter Snake (<i>Thamnophis sirtalis tetrataenia</i>)	FE; SE; DFG Fully Protected	Known	Grassland, woodland, or scrub near ponds, marshes, streams, wet meadows, or other water sources
Western Pond Turtle (<i>Clemmys marmorata</i>)	DFG CSC, Protected	Potential	Ponds, marshes, rivers, or streams with aquatic vegetation
Double-crested Cormorant (<i>Phalacrocorax auritus</i>) Rookery Site	DFG CSC	Known	Estuaries, lakes, ponds, and rivers
American Bittern (<i>Botaurus lentiginosus</i>)	FWS: MNBMC	Known	Marsh
California Black Rail (<i>Laterallus jamaicensis coturniculus</i>)	ST	Potential	Marsh and wet meadow
California Clapper Rail (<i>Rallus longirostris obsoletus</i>)	FE; SE; DFG: Fully protected	Potential	Grassy marsh
Western Snowy Plover (<i>Charadrius alexandrinus nivosus</i>)	FT; DFG CSC; FWS MNBMC ¹	Potential	Sandy beaches
California Gull (<i>Larus californicus</i>)	DFG CSC ¹	Known. Breeding status unknown.	Near water
Elegant Tern (<i>Thalasseus elegans</i>) nesting colony	DFG CSC; FWS: MNBMC ¹	Known. Breeding status unknown	Near water

Species	Status	Known/Potential Occurrence	Typical Habitat
Golden Eagle (<i>Aquila chrysaetos</i>)	DFG CSC, Fully protected ²	Known. Breeding status unknown.	Hunts over open areas in hilly or mountainous country
Osprey (<i>Pandion haliaetus</i>)	DFG CSC ¹	Known. Breeding status unknown	Near fresh or saltwater
American Peregrine Falcon (<i>Falco peregrinus anatum</i>)	SE; FWS MNBMC; DFG Fully protected ¹	Known. Breeding status unknown.	Wetlands and open areas with cliffs or other high perches
Merlin (<i>Falco columbarius</i>)	DFG CSC ³	Potential	Variety of habitats
Cooper's Hawk (<i>Accipiter cooperii</i>)	DFG CSC ¹	Known. Breeding status unknown.	Woodland, forest
Sharp-shinned Hawk (<i>Accipiter striatus</i>)	DFG CSC ¹	Known. Breeding status unknown.	Mixed woodlands
White-tailed Kite (<i>Elanus caeruleus</i>)	DFG Fully protected; FWS MNBMC ¹	Known. Breeding status unknown.	Grasslands, farmlands
Northern Harrier (<i>Circus cyaneus</i>)	DFG CSC ¹	Known. Breeding status unknown.	Grassland, marsh
Long-eared Owl (<i>Asio otus</i>)	DFG CSC ¹	Potential	Roosts in thick woods; hunts over open fields
Short-eared Owl (<i>Asio flammeus</i>)	DFG CSC; FWS MNBMC ¹	Known. Breeding status unknown.	Open areas of marsh, grassland, or tundra
Burrowing Owl (<i>Athene unicularia</i>) Burrow Sites	DFG CSC; FWS MNBMC	Known	Open grassland; nests on ground in abandoned animal burrows and crevices.
Tri-colored Blackbird (<i>Agelaius tricolor</i>)	DFG CSC; USFWS MNBMC ¹	Known. Breeding status unknown.	Ponds, lakes, and marshes with cattails or bulrush
Willow Flycatcher (<i>Empidonax traillii</i>)	SE ¹	Potential	Brush, often near water
Olive-sided Flycatcher (<i>Nuttallornis borealis</i>)	USFWS MNBMC ¹	Known. Breeding status unknown.	Typically found in coniferous forest, bogs
California Horned Lark (<i>Eremophila alpestris actia</i>)	DFG CSC	Known	Barren ground with short grass and few bushes
San Francisco (=Salt Marsh) Common Yellowthroat (<i>Geothlypis trichas sinuosa</i>)	DFG CSC	Known	Grassland, scrub, marshes
Yellow Warbler (<i>Dendroica petechia</i>)	DFG CSC ¹	Known. Breeding status unknown.	Wet habitats (especially with willows and alders), open woodlands, gardens
Bank Swallow (<i>Riparia riparia</i>)	ST ¹	Known. Breeding status unknown.	Nest in holes in earthen banks near water.
Black Swift (<i>Cypseloides niger</i>)	DFG CSC; USFWS MNBMC ¹	Known. Breeding status unknown.	Nests in crevices in cliffs, often below waterfalls or on sea cliffs.

Species	Status	Known/Potential Occurrence	Typical Habitat
Vaux's Swift (<i>Chaetura vauxi</i>)	DFG CSC; USFWS MNBMC ¹	Known. Breeding status unknown.	Woodlands near lakes, rivers, streams
White-throated Swift (<i>Aeronautes saxatalis</i>)	DFG CSC; USFWS MNBMC ¹	Known. Breeding status unknown.	Nest in cliff crevices and small holes in building walls or concrete bridges.
Purple Martin (<i>Progne subis</i>)	DFG CSC ¹	Known. Breeding status unknown.	Colonial cavity nester
Rufous Hummingbird (<i>Selasphorus rufus</i>)	USFWS MNBMC ¹	Known. Breeding status unknown.	Forests, edges of woods, thickets
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	DFG CSC; USFWS MNBMC	Known	Open, brushy fields and the edges of woods
Townsend's Western Big-eared Bat (<i>Corynorhinus (=Plecotus) townsendii townsendii</i>)	DFG CSC	Potential	Dwells in caves, buildings.
Salt-marsh Harvest Mouse (<i>Reithrodontomys raviventris</i>)	FE; SE	Potential	Coastal salt marsh with dense pickleweed (<i>Salicornia virginica</i>)
San Francisco Dusky-footed Woodrat (<i>Neotoma fuscipes annectens</i>)	DFG CSC	Potential	Forest and scrub
California Sea Lion (<i>Zalophus californianus</i>)	FM	Known	Coastal waters and inlets; haul out on beaches and rocks along coast.
Harbor Seal (<i>Phoca vitulina</i>)	FM	Known. Breeds within the reserve.	Nearshore waters and inlets; haul out on beaches and rocks along coast.
Northern Elephant Seal (<i>Mirounga angustirostris</i>)	FM	Known	Breeds on coastal islands. There is a breeding colony at Año Nuevo.
Southern Sea Otter (<i>Enhydra lutris</i>)	FT; DFG Fully Protected; FM	Known	Nearshore waters and inlets in regions where kelp forests occur
Steller's Sea Lion (<i>Eumetopias jubatus</i>)	FM; FT(rookery)	Known	Typically feeds in offshore waters but sometimes seen near shore. There is a breeding colony on Año Nuevo.

FT: Federally Threatened; FE: Federally Endangered; SE: State Endangered; DFG CSC: CA Dept. of Fish and Game species of concern; DFG Fully Protected: CA Dept. of Fish and Game fully protected species; USFWS MNBMC: U.S. Fish & Wildlife Serv. Migratory Nongame Birds of Management Concern; FM: Protected under the Federal Marine Mammal Protection Act of 1972.

¹ status applies to nesting birds

² status applies to nesting and wintering birds

³ status applies to wintering birds

6.5 INVASIVE, NON-NATIVE PLANT SPECIES AND PATHOGENS

6.5.1 Invasive, Non-native Plant Species

Pampas grass, poison hemlock and Cape ivy, three invasive non-native plant species, have become established in several locations within the reserve. Their occurrences are discussed in the plant community type description. Other species observed within the reserve include scattered occurrences of periwinkle, yellow star thistle, Harding grass, velvet grass, garden nasturtium and Monterey cypress. The distribution of these plants, based on the volunteer field reconnaissance surveys and limited ground-truthing is depicted in Figure 6.3.

6.6 PLANT SPECIES LIST

Table 6.4 was compiled using the following sources:

Fitzgerald Marine Reserve Final EIR (Dept. of Parks and Recreation, San Mateo County 1976)

Fitzgerald Marine Reserve Draft Master Plan (Brady/LSA August, 1999)

Scientific names follow Hickman (1993).

TABLE 6.4 PLANT SPECIES OF FITZGERALD MARINE RESERVE AND PILLAR POINT MARSH

Trees

<i>Castanea</i> sp.*	chestnut
<i>Cupressus macrocarpa</i> *	Monterey cypress
<i>Eucalyptus globulus</i> *	blue-gum eucalyptus
<i>Leptospermum laevigatum</i> *	Australian tea tree
<i>Myrica californica</i>	wax myrtle
<i>Phoenix canariensis</i> *	Canary Island palm
<i>Pinus radiata</i> *	Monterey pine
<i>Pseudotsuga menziesii</i>	Douglas fir
<i>Salix coulteri</i>	Coulter's willow
<i>Salix lasiolepis</i>	arroyo willow

Shrubs

<i>Artemisia californica</i>	California sagebrush
<i>Baccharis pilularis</i>	coyote brush
<i>Eriophyllum staechadifolium</i>	lizard tail
<i>Genista monspessulana</i> *	French broom
<i>Lavatera arborea</i> *	tree-mallow
<i>Lonicera involucrata</i>	twinberry
<i>Lupinus arboreus</i>	yellow bush lupine
<i>Mimulus aurantiacus</i>	sticky monkey flower
<i>Pittosporum</i> sp.*	pittosporum
<i>Rhamnus californica</i>	coffeeberry
<i>Rosa californica</i>	California rose
<i>Rubus ursinus</i>	California blackberry
<i>Sambucus racemosa</i>	red elderberry
<i>Toxicodendron diversilobum</i>	poison oak
<i>Ulex europaeus</i> *	gorse

Herbs

<i>Abronia latifolia</i>	yellow sand verbena
<i>Achillea millefolium</i>	yarrow
<i>Allium triquetrum</i> *	wild onion
<i>Alyssum</i> sp.*	sweet alyssum
<i>Ambrosia chamissonis</i>	beach bur
<i>Anagallis arvensis</i> *	scarlet pimpernel
<i>Anaphalis margaritacea</i>	pearly everlasting
<i>Angelica hendersonii</i>	coast angelica

<i>Apium graveolens*</i>	celery
<i>Artemisia douglasiana</i>	mugwort
<i>Artemisia pycnocephala</i>	beach sagewort
<i>Aster chilensis</i>	common aster
<i>Astragalus nuttalli</i> var. <i>virgatus</i>	San Francisco rattleweed
<i>Athyrium filix-femina</i> var. <i>cyclosorum</i>	western lady fern
<i>Atriplex californica</i>	California saltbush
<i>Atriplex leucophylla</i>	beach saltbush
<i>Atriplex patula</i> var. <i>patula</i>	spear oracle
<i>Avena barbata*</i>	slender wild oat
<i>Brassica rapa*</i>	field mustard
<i>Brassica nigra*</i>	black mustard
<i>Briza minor*</i>	quaking grass
<i>Bromus diandrus*</i>	ripgut brome
<i>Bromus hordaceus*</i>	soft chess
<i>Cakile maritima*</i>	sea rocket
<i>Calandrinia ciliata</i>	red maids
<i>Camissonia cheiranthifolia</i>	beach evening primrose
<i>Carex densa</i>	dense sedge
<i>Carex obnupta</i>	slough sedge
<i>Carpobrotus chilensis*</i>	sea fig/iceplant
<i>Carpobrotus edulis*</i>	hottentot fig/iceplant
<i>Castilleja affinis</i>	Indian paint brush
<i>Castilleja ambigua</i>	Johnny-nip
<i>Castilleja subinclusa</i> ssp. <i>franciscana</i>	Franciscan paint brush
<i>Castilleja wightii</i>	Wight's paint brush
<i>Centaurea solstitialis*</i>	yellow star thistle
<i>Chamomilla suaveolens*</i>	pineapple weed
<i>Chenopodium murale*</i>	nettle-leaved goosefoot
<i>Chlorogalum pomeridianum</i>	soap plant
<i>Cicuta douglasii</i>	water-hemlock
<i>Cirsium vulgare*</i>	bull thistle
<i>Claytonia perfoliata</i>	miner's lettuce
<i>Conium maculatum*</i>	poison hemlock
<i>Convolvulus arvensis*</i>	bindweed
<i>Conyza canadensis*</i>	horseweed
<i>Coprosma</i> sp.*	mirror plant
<i>Cortaderia jubata*</i>	Pampas/jubata grass
<i>Cortaderia selloana*</i>	Pampas grass
<i>Cotula coronopifolia*</i>	brass buttons
<i>Cuscuta salina</i> var. <i>major</i>	salt marsh dodder
<i>Delairea odorata</i> / <i>Senecio mikanioides*</i>	Cape/German ivy
<i>Distichlis spicata</i>	salt grass
<i>Dudleya farinosa</i>	bluff lettuce
<i>Dryopteris arguta</i>	coastal wood fern
<i>Echium</i> sp.*	viper's bugloss/pride of Madeira
<i>Epilobium brachycarpum</i>	panicked willow herb
<i>Epilobium ciliatum</i> ssp. <i>ciliatum</i>	California willow herb
<i>Epilobium ciliatum</i> ssp. <i>watsonii</i>	San Francisco willow herb
<i>Epilobium densiflorum</i>	dense-flowered boisduvalia
<i>Erigeron glaucus</i>	seaside daisy
<i>Erigeron philadelphicus</i>	fleabane

<i>Eriogonum latifolium</i>	coast buckwheat
<i>Erodium cicutarium</i> *	red-stemmed filaree
<i>Eschscholzia californica</i>	California poppy
<i>Equisetum telmateia</i> ssp. <i>braunii</i>	giant horsetail
<i>Euthamia occidentalis</i>	western goldenrod
<i>Foeniculum vulgare</i> *	fennel
<i>Fragaria chiloensis</i>	beach strawberry
<i>Frankenia grandifolia</i>	alkali heath
<i>Galium aparine</i> *	goose grass
<i>Geranium dissectum</i> *	cut-leaf geranium
<i>Gnaphalium californicum</i>	California cudweed
<i>Gnaphalium luteo-album</i> *	weedy cudweed
<i>Gnaphalium purpureum</i>	purple cudweed
<i>Gnaphalium ramosissimum</i>	pink everlasting
<i>Gnaphalium stramineum</i>	cotton-batting plant
<i>Grindelia stricta</i> var. <i>platyphylla</i>	Pacific grindelia
<i>Hedera helix</i> *	English ivy
<i>Helenium puberulum</i>	sneezeweed
<i>Heliotropium curassavicum</i>	seaside heliotrope
<i>Heracleum lanatum</i>	cow-parsnip
<i>Hierochloa occidentalis</i>	vanilla grass
<i>Holcus lanatus</i> *	velvet grass
<i>Hordeum murinum</i> ssp. <i>leporinum</i> *	foxtail
<i>Horkelia californica</i>	California horkelia
<i>Hypochaeris radicata</i> *	rough cat's-ear
<i>Iris longipetala</i>	coast iris
<i>Iris douglasiana</i>	Douglas iris
<i>Jaumea carnosa</i>	fleshy jaumea
<i>Juncus bufonius</i>	toad rush
<i>Juncus effusus</i> var. <i>brunneus</i>	bog rush
<i>Juncus falcatus</i>	sickle-leaved rush
<i>Juncus leseurii</i>	salt rush
<i>Juncus patens</i>	spreading rush
<i>Juncus tenuis</i>	western rush
<i>Lasthenia californica</i>	goldfields
<i>Lepidium strictum</i>	wayside peppergrass
<i>Leymus mollis</i>	American dune grass
<i>Linanthus croceus</i>	coast yellow linanthus
<i>Linum bienne</i> *	small-flowered flax
<i>Lobularia maritima</i> *	sweet alyssum
<i>Lolium multiflorum</i> *	Italian rye grass
<i>Lolium perenne</i> *	perennial wild rye
<i>Lomatium dasycarpum</i>	wooly-fruited lomatium
<i>Lotus corniculatus</i> *	bird's foot trefoil
<i>Lupinus variicolor</i>	varicolor lupine
<i>Lythrum hyssopifolia</i> *	Hyssop loosestrife
<i>Lythrum salicaria</i> *	purple loosestrife
<i>Madia gracilis</i>	slender tarweed
<i>Madia madioides</i>	woodland madia
<i>Madia sativa</i>	coast tarweed
<i>Marah fabaceus</i>	wild cucumber
<i>Malva nicaeensis</i> *	bull mallow

<i>Medicago polymorpha</i> *	bur clover
<i>Melilotus indica</i> *	sweet clover
<i>Mentha arvensis</i>	marsh/field mint
<i>Mesembryanthemum</i> sp.*	iceplant
<i>Mimulus guttatus</i>	yellow monkey flower
<i>Navarretia squarrosa</i>	skunkweed
<i>Oenanthe sarmentosa</i>	Pacific oenanthe
<i>Osmorhiza chilensis</i>	wood sweet cicely
<i>Oxalis pes-caprae</i> *	Bermuda buttercup
<i>Phacelia malvifolia</i>	stinging phacelia
<i>Phalaris angusta</i>	
<i>Phalaris aquatica</i> *	Harding grass
<i>Picris echioides</i> *	bristly ox-tongue
<i>Piperia elegans</i>	Rein orchid
<i>Plantago lanceolata</i> *	English plantain
<i>Plantago coronopus</i> *	cut-leaved plantain
<i>Plantago major</i> *	common plantain
<i>Plantago maritima</i> var. <i>californica</i>	California seaside plantain
<i>Polygonum arenastrum</i> *	common knotweed
<i>Polygonum amphibium</i> var. <i>emersum</i>	water smartweed
<i>Polygonum punctatum</i>	water smartweed
<i>Polypogon monspeliensis</i> *	rabbit's foot grass
<i>Polystichum munitum</i>	sword fern
<i>Potentilla egedii</i> var. <i>grandis</i>	Pacific silverweed
<i>Prunella vulgaris</i> *	self-heal
<i>Pteridium aquilinum</i>	bracken fern
<i>Raphanus sativus</i> *	wild radish
<i>Rorippa nasturtium-aquaticum</i>	water-cress
<i>Rumex acetosella</i> *	sheep sorrel
<i>Rumex crispus</i> *	curly dock
<i>Rumex salicifolius</i> var. <i>crassus</i>	willow dock
<i>Salicornia virginica</i> *	pickleweed
<i>Sanicula crassicaulis</i>	gambleweed/Pacific sanicle
<i>Scirpus californicus</i>	California tule/bulrush
<i>Scirpus cernuus</i>	low club rush
<i>Scirpus koilolepis</i>	dwarf/keeled club rush
<i>Scirpus microcarpus</i>	panicked/small-fruited bulrush
<i>Scirpus robustus</i>	prairie bulrush
<i>Scrophularia californica</i>	California bee plant
<i>Sidalcea malvaeflora</i>	checker bloom
<i>Silene gallica</i> *	windmill pink
<i>Silybum marianum</i> *	milk thistle
<i>Sisyrinchium bellum</i>	blue-eyed grass
<i>Solanum americanum</i>	small-flowered nightshade
<i>Solanum umbelliferum</i>	blue witch
<i>Solidago canadensis</i> ssp. <i>elongata</i>	Canada goldenrod
<i>Sonchus oleraceus</i> *	common sow thistle
<i>Sparganium eurycarpum</i>	broad-fruited burreed
<i>Spergularia macrotheca</i>	large-flowered sand spurry
<i>Spergularia marina</i>	salt-marsh sand spurry
<i>Stachys chamissonis</i>	coast hedge nettle
<i>Stachys rigida</i>	rigid hedge nettle

<i>Stellaria media</i> *	common chickweed
<i>Tetragonia tetragonioides</i> *	New Zealand spinach
<i>Trifolium willdenovii</i>	tomcat clover
<i>Tropeolum majus</i> *	garden nasturtium
<i>Typha angustifolia</i>	narrow-leaved cattail
<i>Typha latifolia</i>	broad-leaved cattail
<i>Urtica dioica</i> ssp. <i>gracilis</i>	hoary nettle
<i>Vicia benghalensis</i> *	purple vetch
<i>Vicia gigantea</i>	giant vetch
<i>Vicia sativa</i> *	spring vetch
<i>Vinca major</i> *	periwinkle
<i>Vulpia myuros</i> var. <i>hirsuta</i>	six-weeks fescue
<i>Woodwardia fimbriata</i>	giant chain fern

*introduced species

6.7 ANIMAL SPECIES LIST

Table 6.5 was compiled from the following sources:

Fitzgerald Marine Reserve Final EIR (Dept. of Parks and Recreation, San Mateo County 1976)

Fitzgerald Marine Reserve Draft Master Plan (Brady/LSA August, 1999)

TABLE 6.5 ANIMAL SPECIES THAT MAY OCCUR IN FITZGERALD MARINE RESERVE OR PILLAR PT. MARSH

Insects

<i>Danaus plexippus</i>	Monarch Butterfly
<i>Icaricia icarioides missionensis</i>	Mission Blue Butterfly
<i>Speyeria zerene myrtleae</i>	Myrtle's Silverspot Butterfly
<i>Plebeajus (=Icaricia) icarioides pheres</i>	Pheres Blue Butterfly
<i>Incisalia mossi baysensis</i>	San Bruno Elfin Blue Butterfly
<i>Trichocorixa</i> sp.	Water Boatman

Aquatic Invertebrates (excluding insects)

Polychaetes
Marine Oligochaetes
Amphipods
Copepods
Ostracods
Cladocerans
Nematodes

Fish

<i>Gasterosteus aculeatus</i>	Three-spined Stickleback
<i>Cottus</i> sp.	Sculpin

Amphibians

<i>Taricha torosa</i>	California Newt
<i>Ensatina eschscholtzi xanthoptica</i>	Yellow-eyed Salamander
<i>Batrachoseps attenuatus</i>	California Slender Salamander
<i>Aneides lugubris</i>	Arboreal Salamander
<i>Bufo boreas halophilus</i>	California Toad
<i>Hyla regilla</i>	Pacific Tree Frog
<i>Rana aura draytoni</i>	California Red-legged Frog

Reptiles

<i>Clemmys marmorata</i>	Western Pond Turtle
<i>Sceloporus occidentalis occidentalis</i>	N.W. Fence Lizard
<i>Eumeces skiltonianus skiltonianus</i>	Western Skink
<i>Gerrhonotus multicarinatus multicarinatus</i>	California Alligator Lizard
<i>Gerrhonotus coeruleus coeruleus</i>	San Francisco Alligator Lizard
<i>Charina bottae bottae</i>	Pacific Rubber Boa
<i>Diadophis punctatus amabilis</i>	Pacific Ringneck Snake

Contia tenuis
Coluber constrictor mormon
Pituophis melanoleucus catenifer
Lampropeltis getulus californiae
Thamnophis sirtalis tetrataenia
Thamnophis elegans terrestris
Thamnophis couchi atratus

Birds

Podilymbus podiceps
Phalacrocorax auritus
Phalacrocorax penicillatus
Phalacrocorax pelagicus
Ardea herodias
Ardea alba
Butorides virescens
Egretta thula
Nycticorax nycticorax
Botaurus lentiginosus
Anser albifrons
Anas platyrhynchos
Anas strepera
Anas acuta
Anas crecca
Anas discors
Anas cyanoptera
Anas americana
Anas clypeata
Aythya americana
Aythya valisneria
Aythya marila
Aythya affinis
Bucephala albeola
Oxyura jamaicensis
Cathartes aura
Elanus leucurus
Accipiter striatus
Accipiter cooperii
Buteo jamaicensis
Buteo lineatus
Buteo lagopus
Aquila chrysaetos
Circus cyaneus
Pandion haliaetus
Falco columbarius
Falco peregrinus
Falco sparverius
Lophortyx californicus
Phasianus colchicus
Rallus limicola
Porzana carolina

Sharp-tailed Snake
Western Yellow-bellied Racer
Pacific Gopher Snake
California Kingsnake
San Francisco Garter Snake
Coast Garter Snake
Santa Cruz Garter Snake

Pied-billed Grebe
Double-crested Cormorant
Brandt's Cormorant
Pelagic Cormorant
Great Blue Heron
Great Egret
Green Heron
Snowy Egret
Black-crowned Night Heron
American Bittern
White-fronted Goose
Mallard
Gadwall
Pintail
American Green-winged Teal
Blue-winged Teal
Cinammon Teal
American Widgeon
Northern Shoveler
Redhead
Canvasback
Greater Scaup
Lesser Scaup
Bufflehead
Ruddy Duck
Turkey Vulture
White-tailed Kite
Sharp-shinned Hawk
Cooper's Hawk
Red-tailed Hawk
Red-shouldered Hawk
Rough-legged Hawk
Golden Eagle
Northern Harrier
Osprey
Merlin
Peregrine Falcon
American Kestrel
California Quail
Ring-necked Pheasant
Virginia Rail
Sora

Laterallus jamaicensis
Rallus longirostris obsoletus
Gallinula chloropus
Fulica americana
Haematopus bachmani
Charadrius semipalmatus
Charadrius alexandrinus
Charadrius vociferus
Pluvialis dominica
Pluvialis squatarola
Aphriza virgata
Arenaria interpres
Arenaria melanocephala
Capella gallinago
Numenius americanus
Numenius phaeopus
Actitis macularia
Heteroscelus incanus
Catoptrophorus semipalmatus
Tringa melanoleucos
Tringa flavipes
Calidris canutus
Calidris ptilocnemis
Calidris melanotos
Calidris bairdii
Calidris minutilla
Calidris alpina
Calidris mauri
Calidris alba
Limnodromus griseus
Limnodromus scolopaceus
Limosa fedoa
Recurvirostra americana
Himantopus mexicanus
Phalaropus fulicarius
Steganopus tricolor
Lobipes lobatus
Larus glaucescens
Larus occidentalis
Larus argentatus
Larus thayeri
Larus californicus
Larus delawarensis
Larus canus
Larus philadelphia
Larus heermanni
Rissa tridactyla
Sterna forsteri
Sterna hirundo
Thalasseus elegans
Hydroprogne caspia
Cephus columba

Black Rail
California Clapper Rail
Common Gallinule
American Coot
Black Oystercatcher
Semipalmated Plover
Snowy Plover
Killdeer
American Golden Plover
Black-bellied Plover
Surfbird
Ruddy Turnstone
Black Turnstone
Common Snipe
Long-billed Curlew
Whimbrel
Spotted Sandpiper
Wandering Tattler
Willet
Greater Yellowlegs
Lesser Yellowlegs
Red Knot
Rock Sandpiper
Pectoral Sandpiper
Baird's Sandpiper
Least Sandpiper
Dunlin
Western Sandpiper
Sanderling
Short-billed Dowitcher
Long-billed Dowitcher
Marbled Godwit
American Avocet
Black-necked Stilt
Red Phalarope
Wilson's Phalarope
Northern Phalarope
Glaucous-winged Gull
Western Gull
Herring Gull
Thayer's Gull
California Gull
Ring-billed Gull
Mew Gull
Bonaparte's Gull
Heermann's Gull
Black-legged Kittiwake
Forster's Tern
Common Tern
Elegant Tern
Caspian Tern
Pigeon Guillemot

<i>Columba fasciata</i>	Band-tailed Pigeon
<i>Columba livia</i>	Rock Dove
<i>Zenaida macroura</i>	Morning Dove
<i>Tyto alba</i>	Barn Owl
<i>Bubo virginianus</i>	Great Horned Owl
<i>Speotyto cunicularia</i>	Burrowing Owl
<i>Asio flammeus</i>	Short-eared Owl
<i>Asio otus</i>	Long-eared Owl
<i>Cypseloides niger</i>	Black Swift
<i>Chaetura vauxi</i>	Vaux's Swift
<i>Aeronautes saxatalis</i>	White-throated Swift
<i>Calypte anna</i>	Anna's Hummingbird
<i>Selasphorus rufus</i>	Rufous Hummingbird
<i>Selasphorus sasin</i>	Allen's Hummingbird
<i>Megasceryle alcyon</i>	Belted King Fisher
<i>Colaptes auratus</i>	Common Flicker "Yellow Shafted"
<i>Colaptes auratus</i>	Common Flicker "Red Shafted"
<i>Sphyrapicus nuchalis</i>	Red-naped Sapsucker
<i>Dendrocopos villosus</i>	Hairy Woodpecker
<i>Dendrocopos pubescens</i>	Downy Woodpecker
<i>Tyrannus verticalis</i>	Western Kingbird
<i>Tyrannus melancholicus</i>	Tropical Kingbird
<i>Myiarchus cinerascens</i>	Ash-throated Flycatcher
<i>Empidonax difficilis</i>	Western Flycatcher
<i>Contopus sordidulus</i>	Western Wood Pewee
<i>Sayornis nigricans</i>	Black Phoebe
<i>Sayornis saya</i>	Say's Phoebe
<i>Empidonax hammondii</i>	Hammond's Flycatcher
<i>Empidonax difficilis</i>	Western Flycatcher
<i>Empidonax traillii</i>	Willow Flycatcher
<i>Nuttallornis borealis</i>	Olive-sided Flycatcher
<i>Eremophila alpestris</i>	Horned Lark
<i>Tachycinetta thalassina</i>	Violet-green Swallow
<i>Iridoprocne bicolor</i>	Tree Swallow
<i>Riparia riparia</i>	Bank Swallow
<i>Stelgidopteryx serripennis</i>	Rough-winged Swallow
<i>Hirundo rustica</i>	Barn Swallow
<i>Petrochelidon pyrrhonota</i>	Cliff Swallow
<i>Progne subis</i>	Purple Martin
<i>Cyanocitta stelleri</i>	Steller's Jay
<i>Aphelocoma coerulescens</i>	Scrub Jay
<i>Corvus corax</i>	Common Raven
<i>Corvus brachyrhynchos</i>	Common Crow
<i>Parus rufescens</i>	Chestnut-backed Chickadee
<i>Parus inornatus</i>	Plain Titmouse
<i>Psaltriparus minimus</i>	Bushtit
<i>Sitta canadensis</i>	Red-breasted Nuthatch
<i>Sitta carolinensis</i>	White-breasted Nuthatch
<i>Sitta pygmaea</i>	Pygmy Nuthatch
<i>Certhia familiaris</i>	Brown Creeper
<i>Chamaea fasciata</i>	Wrentit
<i>Troglodytes aedon</i>	House Wren

Troglodytes troglodytes
Thryomanes bewickii
Cisthorus palustris
Salpinctes obsoletus
Mimus polyglottos
Toxostoma redivivum
Turdus migratorius
Ixoreus naevius
Catharus guttatus
Catharus ustulatus
Sialia mexicana
Regulus satrapa
Regulus calendula
Anthus spinoletta
Bombycilla cedrorum
Lanius ludovicianus
Sturnus vulgaris
Vireo huttoni
Vireo solitarius
Vireo gilvus
Mniotilta varia
Vermivora peregrina
Vermivora celata
Vermivora ruficapilla
Dendroica petechia
Dendroica magnolia
Dendroica caerulescens
Dendroica coronata
Dendroica coronata
Dendroica nigrescens
Dendroica townsendi
Dendroica occidentalis
Dendroica fusca
Dendroica pensylvanica
Dendroica striata
Dendroica discolor
Dendroica palmarum
Seiurus noveboracensis
Oporornis tolmiei
Geothlypis trichas sinuosa
Wilsonia citrina
Wilsonia pusilla
Setophaga ruticilla
Passer domesticus
Dolichonyx oryzivorus
Sturnella neglecta
Xanthocephalus xanthocephalus
Agelaius phoeniceus
Agelaius tricolor
Icterus galbula
Euphagus cyanocephalus
Molothrus ater

Winter Wren
Bewick's Wren
Long-billed Marsh Wren
Rock Wren
Mockingbird
California Thrasher
American Robin
Varied Thrush
Hermit Thrush
Swainson's Thrush
Western Bluebird
Golden-crowned Kinglet
Ruby-crowned Kinglet
Water Pipit
Cedar Waxwing
Loggerhead Shrike
Starling
Hutton's Vireo
Solitary Vireo
Warbling Vireo
Black & White Warbler
Tennessee Warbler
Orange-crowned Warbler
Nashville Warbler
Yellow-Warbler
Magnolia Warbler
Black-throated Blue Warbler
Yellow-rumped Warbler "Myrtle"
Yel.-rumped Warbler "Audubon's"
Black-throated Gray Warbler
Townsend's Warbler
Hermit Warbler
Blackburnian Warbler
Chestnut-sided Warbler
Blackpoll Warbler
Prairie Warbler
Palm Warbler
Northern Waterthrush
Mac Gillivray's Warbler
Saltmarsh Common Yellowthroat
Hooded Warbler
Wilson's Warbler
American Redstart
House Sparrow
Bobolink
Western Meadowlark
Yellow-headed Blackbird
Red-winged Blackbird
Tri-colored Blackbird
Northern Oriole
Brewer's Blackbird
Brown-headed Cowbird

Piranga ludoviciana
Pheucticus melanocephalus
Carpodacus purpureus
Carpodacus mexicanus
Spinus pinus
Spinus tristis
Spinus psaltria
Loxia curvirostra
Pipilo erythrophthalmus
Pipilo fuscus
Calamospiza melanocorys
Passerculus sandwichensis
Pooecetes gramineus
Chondestes grammacus
Junco hyemalis
Zonotrichia albicollis
Zonotrichia leucophrys
Zonotrichia atricapilla
Passerella iliaca
Melospiza lincolnii
Melospiza melodia
Calcarius sp.

Western Tanager
Black-headed Grosbeak
Purple Finch
House Finch
Pine Siskin
American Goldfinch
Lesser Goldfinch
Red Crossbill
Rufous-sided Towhee
Brown Towhee
Lark Bunting
Savannah Sparrow
Vesper Sparrow
Lark Sparrow
Dark-eyed Junco
White-throated Sparrow
White-crowned Sparrow
Golden-crowned Sparrow
Fox Sparrow
Lincoln's Sparrow
Song Sparrow
Longspur

Mammals

Didelphis virginiana
Sorex vagrans
Sorex ornatus
Sorex trowbridgii
Scapanus latimanus
Neurotrichus gibbsii
Myotis thysanodes
Myotis californicus
Myotis volans
Myotis evotis
Myotis yumanensis
Lasiurus cinereus
Lasiurus borealis
Eptesicus fuscus
Pipistrellus hesperus
Antrozous pallidus
Plecotus townsendii
Corynorhinus (=Plecotus) townsendii townsendii
Tadarida brasiliensis
Sylvilagus audubonii
Sylvilagus bachmani
Eutamias merriami
Spermophilus beecheyi
Thomomys bottae
Reithrodontomys megalotis
Peromyscus californicus
Peromyscus boylii

Virginia Opossum
Vagrant Shrew
Ornate Shrew
Trowbridge Shrew
Broad-footed Mole
Shrew-Mole
Fringed Myotis
California Myotis
Long-legged/Hairy winged Myotis
Long-eared Myotis
Yuma Myotis
Hoary Bat
Red Bat
Big Brown Bat
Western Pipistrelle
Pallid Bat
Lump-nosed Bat
Townsend's Western Big-eared Bat
Brazilian Free-tailed Bat
Desert Cottontail
Brush Rabbit
Merriam Chipmunk
California Ground Squirrel
Botta Pocket Gopher
Western Harvest Mouse
California Deer Mouse
Brush Mouse

Peromyscus maniculatus
Peromyscus truei
Neotoma fuscipes
Microtus californicus
Perognathus californicus
Dipodomys venustus
Rattus rattus
Rattus norvegicus
Mus musculus
Urocyon cinereoargenteus
Canis latrans
Procyon lotor
Mustela frenata
Mephitis mephitis
Spilogale putorius
Felis rufus
Felis catus
Phoca vitulina
Zalophus californianus
Eumetopias jubatus
Mirounga angustirostris
Enhydra lutris
Odocoileus hemionus columbianus

Deer Mouse
Pinon Mouse
Dusky-footed Wood Rat
California Meadow Mouse
California Pocket Mouse
Narrow-faced Kangaroo Rat
Black Rat
Norway Rat
House Mouse
Gray Fox
Coyote
Raccoon
Long-tailed Weasel
Striped Skunk
Spotted Skunk
Bobcat
Domestic House Cat
Harbor Seal
California Sea Lion
Steller's Sea Lion
Northern Elephant Seal
Southern Sea Otter
Black-tailed Deer