

WESTERN BIRDS



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AVIFAUNA OF THE PALOS VERDES PENINSULA, CALIFORNIA

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I dedicate this paper to Shirley Wells. Without her untiring efforts and constant encouragement I might never have completed the checklist. Shirley had been carefully compiling records of bird abundance on the peninsula for many years. Her records, combined with my own extensive card file, formed the heart of the list. Shirley's enthusiasm and expertise inspired all of us who had the pleasure of her acquaintance.

The avifauna of the Channel Islands off the coast of southern California has been studied by several workers (Howell 1917, Johnson 1972, Jones 1975). Some similarities exist between the fauna of these islands and adjacent mainland areas, such as the Palos Verdes Peninsula. Palos Verdes juts out from the Los Angeles basin to a position about 35 km from Catalina Island, the nearest island (Figure 1), and supports an interesting flora and fauna showing affinities to that of the Channel Islands.

Records of bird distribution and abundance compiled by Shirley Wells and myself from 1965 to 1976 have been combined with published records to produce the annotated checklist presented here. The list includes a large number of rare and vagrant species, as well as a number of species now extirpated from the peninsula. The bulk of the abundance data pertains to regular visitors and resident species. As with all lists based primarily upon field observations, descriptions of relative abundance are probably biased by the observability of each species. Perhaps the most obvious bias in the list is treatment of open ocean species. For this study all species that occur within the designated circle are included, although data on strictly pelagic species are scanty at best.

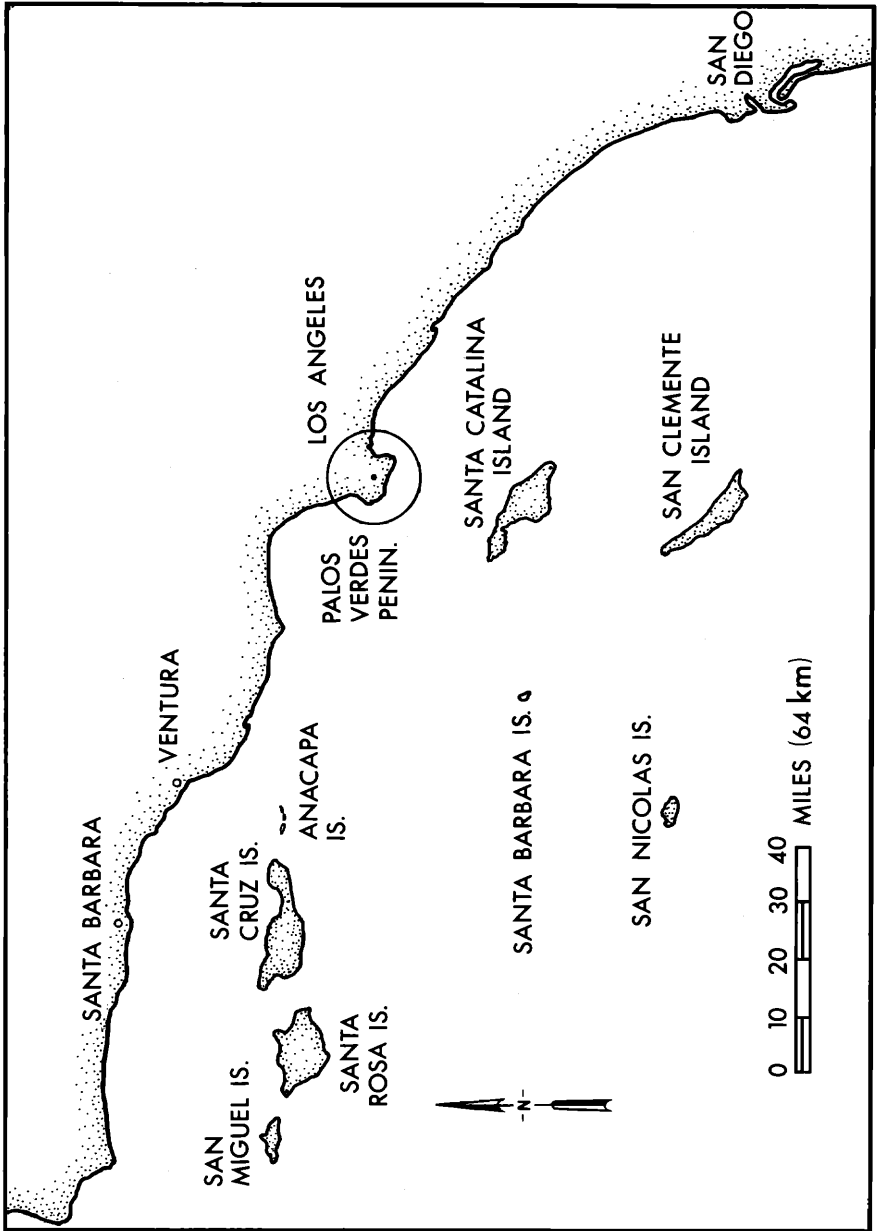


Figure 1. The Palos Verdes Peninsula, Los Angeles Co., California, and adjacent Channel Islands.

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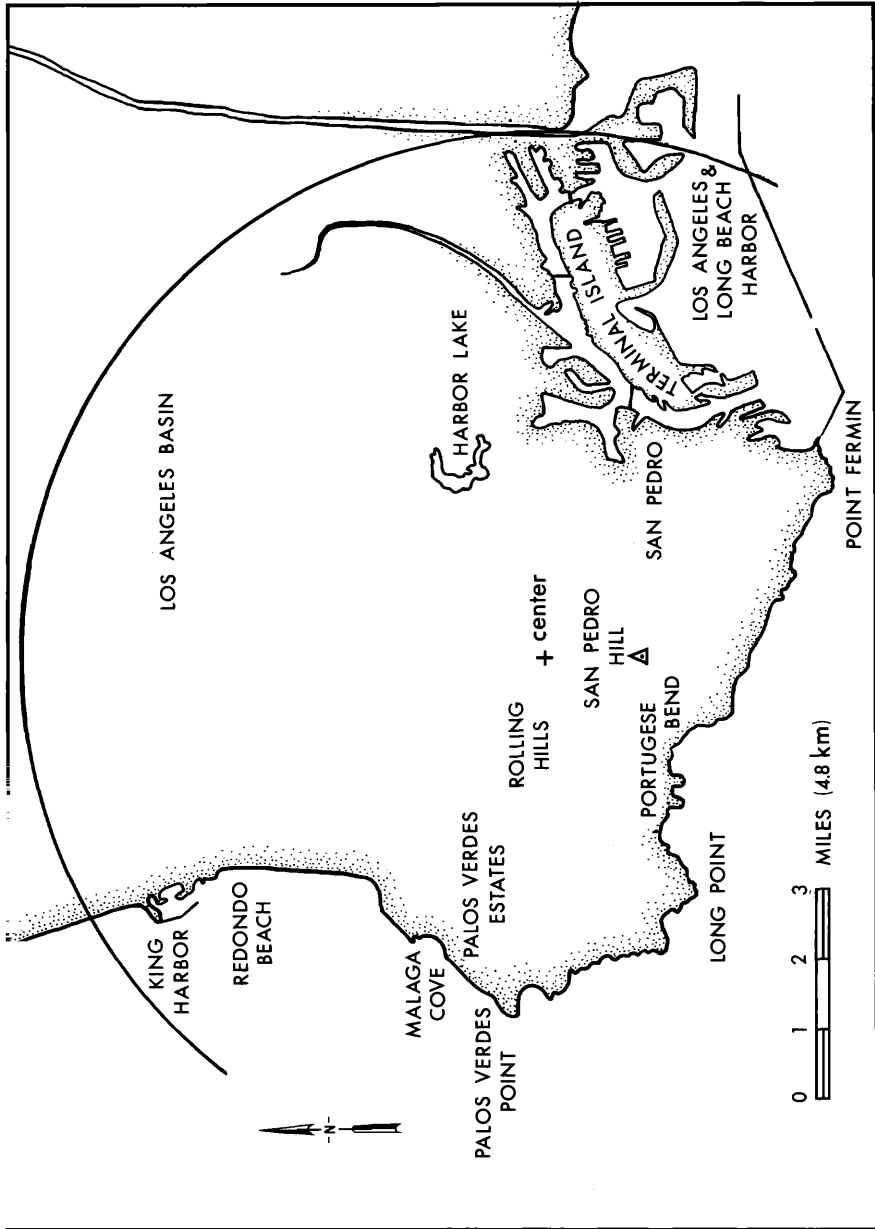


Figure 2. The Palos Verdes Peninsula. Circle corresponds to the Christmas Bird Count area, centered at 33°46'10" N, 118°20'18" W, with a diameter of 24.2 km (15 mi).

DESCRIPTION OF AREA

The Palos Verdes Peninsula rises abruptly out of the Pacific Ocean to a maximum elevation of 451 m. The hills slope down gradually to the north and east into the Los Angeles basin. The highest point on the peninsula is San Pedro Hill, located at 33°45'45" N, 118°20'10" W (Figure 1). This peninsula is located approximately 32 km southeast of the Santa Monica Mountains, 56 km south of the San Gabriel Mountains and 48 km west of the Santa Ana Mountains.

The Palos Verdes Peninsula, for purposes of this paper, includes all of the area within a 24.2 km (15 mi) diameter circle, centered 1.1 km WSW of the intersection of Palos Verdes Drive North and Palos Verdes Drive East, 33°46'10" N, 118°20'18" W, San Pedro, Los Angeles County (Figure 2). This area has been previously described as a count circle for the National Audubon Society's annual Christmas Bird Count (Bradley and Wells 1969). It encompasses the Palos Verdes hills and surrounding lowlands and includes all or part of the following cities: Carson, Gardena, Harbor City, Hermosa Beach, Long Beach, Lawndale, Manhattan Beach, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, San Pedro, Torrance and Wilmington. The area includes approximately 82.9 km² of hills, 170.9 km² of flat land and 204.6 km² of open ocean.

Steep cliffs (approximately 30 to 65 m high) face the ocean along the entire shoreline from Malaga Cove south to Point Fermin. The western and southern slopes of the peninsula are relatively steep and are distinctly terraced. The terraces (evidence of former shorelines) are much less distinct on the more gradual eastern and northern slopes. Many large gullies and canyons drain the hills. Although a few of these canyons have relatively permanent streams, most smaller creeks are dry throughout much of the year.

Geologically the Palos Verdes Peninsula is an active area. Many rapid periods of uplift have helped to create the terraced hills (Woodring et al. 1946). There are also a few areas of recent subsidence such as the Portuguese Bend region. The peninsula was probably an island until it became joined to the mainland during the Quaternary, and it also shows stratigraphic similarities to the southern Channel Islands (Valentine and Lipps 1967).

The vegetation of the Palos Verdes Peninsula has been extensively altered by spreading suburban and agricultural development. During the early days under Spanish rule the Rancho Palos Verdes was utilized as grazing land for herds of beef cattle. For a detailed account of the early history of this area see Fink (1966). Much of the native vegetation has been lost or severely restricted. The more open

hilltops and the gentle slopes were originally dominated by various native grasses. The steeper gullies and canyons were covered with an association of coastal sage and chaparral species.

Today the remaining open fields are planted with grain, garbanzo beans and various other commercial crops. Sprawling suburban development had a less adverse effect on the gullies and canyons. In these areas, as well as on some of the steeper southern slopes, some native vegetation persists. The dominant species in gullies and canyons include: Lemonadeberry (*Rhus integrifolia*), California Sagebrush (*Artemisia californica*), buckwheat (*Eriogonum* spp.), sage (*Salvia* sp.), Black Mustard (*Brassica nigra*), and Prickly Pear (*Opuntia occidentalis*).

Suburban residential areas currently make up about 60% of the peninsula's land area. Several different habitats are within the general classification of suburban residential. The chief variants are the age of housing tracts and the relative density of houses. Many older areas have relatively low-density housing as well as luxuriant growths of trees and shrubs. The most mature and densely vegetated areas are located in Palos Verdes Estates on the northwestern slope of the peninsula. Here large numbers of ornamental shrubs and trees create a semi-forest habitat. The parkland areas with larger pines, *Eucalyptus* and broad-leaf evergreen trees are important nesting habitats for a variety of bird species. The newer, high-density tracts support few bird species.

The peninsula's northern slope is dominated by a more open *Eucalyptus* habitat (introduced in 1908 and the 1920s). In the cities of Rolling Hills and Rolling Hills Estates are a large number of horse stables and some open pastures. Here the canyons contain dense growths of various brush species as well as a few willow-grown streams. These north-facing slopes are subjected to higher summer temperatures and lower humidity than the western and southern portions of the peninsula. Larger parks, golf courses and cemeteries on the peninsula are planted with a bewildering variety of introduced trees and shrubs and support a number of bird species. The majority of the native bird species, however, still nest in the less disturbed canyons.

A distinct belt of vegetation inhabits the talus slopes and steep rocky cliffs facing the ocean. Low perennials and patchy growths of Lemonadeberry are characteristic here. This belt contains many plant species which are characteristic of Channel Island floras (Dunkle 1950).

Along the nearly 26 km of rocky shoreline is a rich algal flora (Bradley et al. 1972). In deeper water there were once extensive Giant Kelp (*Macrocystis pyrifera*) beds which have been largely

destroyed by metropolitan pollution (Dawson 1966). Recent attempts have been made to reestablish kelp beds along the peninsula shoreline.

The area that is now occupied by Los Angeles and Long Beach harbors was at one time an extensive *Salicornia* marsh. Willow-grown sloughs extended north from the estuary through freshwater marshes and the small lake now called Harbor Lake. The sloughs continued north to meet the low lying areas of Dominquez Channel. Along the coast north of Malaga Cove were sand beaches and grass-covered bluffs and dunes that represented Coastal Strand habitat (Munz and Keck 1959). Terminal Island (formerly Rattlesnake Island) also possessed fairly extensive Coastal Strand habitat above the *Salicornia* marsh.

ISLAND AFFINITIES

One of the most intriguing facets of the avifauna of Palos Verdes is that a relatively large number of common southern California species are absent or occur only as migrants on the peninsula, though they nest commonly in similar habitat on adjacent portions of the mainland. (Tables 1 and 2). These absentees include some of the indicator species for chaparral and coastal sage communities. For example there are no records for the Wrentit, a species generally considered "the voice of the chaparral." Some missing species have been recorded as vagrants to the peninsula and may represent potential colonizers.

The absence of these species is more interesting when compared to species absent from the adjacent Channel Islands. A comparison with the partial list given by Johnson (1972) corresponds almost perfectly. The only species listed by Johnson as absent that is present on the Palos Verdes Peninsula is the Brown Towhee. When the list of absentees is compared with the lists for the various individual islands, the similarity is even more striking. There are a few species whose absence may be attributed to lack of appropriate habitat, for example, Acorn Woodpecker and White-breasted Nuthatch.

Table 1. Common species in coastal southern California that are not known to occur on the Palos Verdes Peninsula.

Mountain Quail
Screech Owl
Plain Titmouse

Wrentit
Western Bluebird
Mountain Bluebird

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Table 2. Common or formerly common breeding species in coastal southern California that have been recorded only as vagrants or migrants on the Palos Verdes Peninsula.

Band-tailed Pigeon	Bell's Vireo
Acorn Woodpecker	Wilson's Warbler
Nuttall's Woodpecker	Blue Grosbeak
White-breasted Nuthatch	Lawrence's Goldfinch
House Wren	Sage Sparrow
California Thrasher	Black-chinned Sparrow

Another evident similarity between the avifaunas of the Channel Islands and the peninsula is the occurrence of a number of insular endemic subspecies on the peninsula. The Lutescent Orange-crowned Warbler (*Vermivora celata lutescens*) is a common summer visitor and migrant throughout coastal southern California. This subspecies breeds in suitable habitat in the coastal hills and mountains of Los Angeles and Orange counties adjacent to the Palos Verdes Peninsula. On the peninsula this subspecies is replaced by the chiefly insular form, the Dusky Orange-crowned Warbler (*V. c. sordida*) (Grinnell and Miller 1944). My analysis of museum specimens at the Los Angeles County Museum of Natural History, as well as preliminary banding studies, reveals that most specimens can be identified to subspecies with morphometric data. Nesting birds banded on the peninsula belong to *V. c. sordida*. Tape recordings of Orange-crowned Warblers in southern California reveal that *V. c. sordida* has consistently slower and lower pitched songs than *V. c. leutescens* (Bradley unpubl.). The only other place where the Dusky Orange-crowned Warbler nests on the mainland, Point Loma, San Diego County, is also a peninsula with insular floral and faunal affinities. Johnson (1972) mentioned that this subspecies has not expanded its range beyond the "immediate" coast. The Dusky Orange-crowned Warbler is generally distributed and nests throughout the canyons and gullies of the peninsula along the coastal slopes as well as on the inland slopes to the north and east.

Another interesting example of an island endemic on Palos Verdes is the Channel Island form of the Allen's Hummingbird (*Selasphorus sasin sedentarius*). Apparently this subspecies has only recently established a population on the peninsula. Shirley Wells and Gary Stiles first discovered its nesting in 1969 (Wells and Baptista 1979). Since then the subspecies has spread throughout much of the peninsula and is a common resident. In the sense that the Palos Verdes peninsula is isolated from the remainder of the mainland, this invasion could be considered intra-island colonization rather than "recolonization of the mainland" as described by Johnson (1972). It

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should also be noted that the mainland race (*S. s. sasin*) is a regular migrant through the peninsula.

At least two other species may be represented by their insular endemic subspecies on the peninsula. One, the Western Flycatcher (*Empidonax difficilis*), nests on the peninsula. Unfortunately no specimens of this population have been compared with those studied by Johnson. Some evidence suggests that the peninsula population belongs to *E.d. insulicola* (S. Wells pers. comm.). Another species that includes an island endemic subspecies is the Rufous-sided Towhee (*Pipilo erythrophthalmus*). Individuals of this species measured during banding operations on the peninsula may belong to the island subspecies *P.e. clementae* (Bradley and Wells unpubl.). More work needs to be done with both species before definite conclusions can be made.

Sound recordings yield additional evidence of the "isolated" nature of the peninsula's avifauna. As mentioned earlier, members of the insular subspecies of the Orange-crowned Warbler possess a distinctive "song dialect" on the peninsula. Members of the peninsula population of the House Finch have also been recorded. Analysis of these recordings indicates a dialect distinctive from those recorded elsewhere on the southern California mainland (Bradley unpubl.).

Related to endemism and isolation is the occurrence of short term invasionary populations of various species. On the peninsula a number of species have colonized the area for a year or two and then disappeared. These species include Red-breasted Nuthatch, Lazuli Bunting, Red Crossbill, and perhaps the Black-chinned Sparrow. At least two of these, the Red-breasted Nuthatch and the Red Crossbill, are "invasionary" species throughout much of their ranges, and their sporadic occurrence in a particular locale with irregular breeding is "typical." Nevertheless the occurrence and subsequent disappearance of any population from the mainland represent the form of turnover described by Diamond (1969).

Table 3. Species that no longer nest on the Palos Verdes Peninsula.

Great Egret	Yellow-billed Cuckoo
Least Bittern	Belted Kingfisher
American Bittern	Downy Woodpecker
Fulvous Whistling-Duck	Western Kingbird
Clapper Rail	Horned Lark
Virginia Rail	Rough-winged Swallow
Sora	Blue Grosbeak
Snowy Plover	Savannah Sparrow
American Avocet	Grasshopper Sparrow
Black-necked Stilt	

The chief factor affecting avifaunal turnover on Palos Verdes has been man. The extensive habitat modification that has occurred since the appearance of modern man correspondingly affected the avifauna. A number of species have been extirpated from the peninsula. Most of these were residents of coastal marshes, which were destroyed by the development of Los Angeles and Long Beach harbors. At first, extensive changes were wrought by cattle grazing associated with early Spanish settlers. Agricultural activities caused more changes, and rapid urban and suburban development have further modified the area. Most of the above changes caused drastic declines or extirpation of native species. Species that no longer breed on the peninsula are listed in Table 3. Increased irrigation and planting extensive "forests" of introduced trees and shrubs have allowed certain species to expand their populations. Examples include Anna's Hummingbird, Common Flicker, Cliff Swallow, Common Crow, Scrub Jay, Mockingbird, American Robin, Hooded Oriole, Northern Oriole, Brewer's Blackbird, Brown-headed Cowbird, House Finch, American Goldfinch, Lesser Goldfinch, Rufous-sided Towhee and Brown Towhee.

CHECKLIST TERMINOLOGY

Abundant - species seen in large numbers on nearly every trip to suitable habitat by a competent observer. A few species that are highly vocal but inconspicuous are listed as common or fairly common, though they are rarely seen. There are undoubtedly other inconspicuous and quiet species whose relative abundance has been underestimated.

Very common - seen on nearly every trip but usually in fewer numbers than abundant species, occasionally only a few individuals.

Common - seen on about 75% of the half-day trips made to suitable habitat by a competent observer.

Fairly common - seen on about 50% of the trips as above.

Uncommon - seen on about 25% of the trips as above.

Rare - seen only occasionally, usually at least one report each year.

Casual - fewer than 10 records for the peninsula.

Accidental - only one or two records for the peninsula.

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ANNOTATED CHECKLIST

- COMMON LOON, *Gavia immer*. Fairly common winter visitor. Occurs along coast primarily on the northern rocky shoreline and off Redondo Beach. Decreasing in recent years. A few non-breeding individuals present in most summers.
- ARCTIC LOON, *Gavia arctica*. Distribution and status essentially same as Common Loon.
- RED-THROATED LOON, *Gavia stellata*. Distribution like Common Loon, less common during summer.
- RED-NECKED GREBE, *Podiceps grisegena*. Casual winter visitor, primarily along rocky coastline. One record for Harbor Lake 2 Oct 1970 (RS).
- HORNED GREBE, *Podiceps auritus*. Fairly common winter visitor, predominately along the northern rocky shoreline and Redondo Beach.
- EARED GREBE, *Podiceps nigricollis*. Common winter visitor along coast, a few non-breeding individuals. Formerly nested irregularly at Bixby Slough (Willett 1933), no recent nesting records.
- WESTERN GREBE, *Aechmophorus occidentalis*. Very common winter visitor along coast, a few non-breeding individuals. Decreasing in recent years.
- PIED-BILLED GREBE, *Podilymbus podiceps*. Common resident in fresh water, breeds at Harbor Lake, rare along coast.
- SHORT-TAILED ALBATROSS, *Diomedea albatrus*. Specimen taken at San Pedro 3 Apr 1898 (Grinnell and Miller 1944). May have occurred regularly within the count circle in past years, but there are very few recent records for California.
- BLACK-FOOTED ALBATROSS, *Diomedea nigripes*. Pelagic, rare in this area.
- NORTHERN FULMAR, *Fulmarus glacialis*. Irregular winter visitor; most years absent but some years common. Predominately pelagic, visible from shore in flight years.
- PINK-FOOTED SHEARWATER, *Puffinus creatopus*. Fairly common pelagic migrant; sometimes visible from shore.
- SOOTY SHEARWATER, *Puffinus griseus*. Very common pelagic migrant; frequently visible from shore during stormy weather, especially in fall.
- SHORT-TAILED SHEARWATER, *Puffinus tenuirostris*. Accidental; two sight records, one from shore Oct 1972 (DB & RS), and one from a boat 18 Dec 1972 (AS).
- MANX SHEARWATER, *Puffinus puffinus*. Pelagic, probably uncommon. Has been observed from shore.
- BLACK STORM-PETREL, *Oceanodroma melania*. Pelagic, has been observed from shore.
- WHITE PELICAN, *Pelecanus erythrorhynchos*. Rare winter visitor.
- BROWN PELICAN, *Pelecanus occidentalis*. Common post-breeding wanderer or fall migrant, fairly common winter visitor, and uncommon non-breeding summer visitor.
- BLUE-FOOTED BOOBY, *Sula nebouxi*. Casual in fall (McCaskie 1972).
- DOUBLE-CRESTED CORMORANT, *Phalacrocorax auritus*. Fairly common, non-breeding resident. Decreasing in recent years.
- BRANDT'S CORMORANT, *Phalacrocorax penicillatus*. Uncommon or fairly common, non-breeding resident. Decreasing in recent years.
- PELAGIC CORMORANT, *Phalacrocorax pelagicus*. Uncommon or fairly common, non-breeding resident. Decreasing in recent years.
- MAGNIFICENT FRIGATEBIRD, *Fregata magnificens*. Casual, summer and fall. Two recent records are of immature plumaged individuals.

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- GREAT BLUE HERON, *Ardea herodias*. Uncommon, primarily in summer at Harbor Lake, decreasing in recent years.
- GREEN HERON, *Butorides striatus*. Fairly common resident, probably still breeds at Harbor Lake.
- LITTLE BLUE HERON, *Florida caerulea*. Accidental; one at Harbor Lake, 24 Nov 1971 (AS,SW) (McCaskie 1972).
- CATTLE EGRET, *Bubulcus ibis*. Accidental. Harbor Lake, one 17 Nov 1972 (RB) and six during Jan 1974 (SW). More records can be expected as this species continues its range expansion.
- GREAT EGRET, *Casmerodius albus*. Rare winter visitor, decreasing in recent years.
- SNOWY EGRET, *Egretta thula*. Uncommon winter visitor, decreasing in recent years.
- BLACK-CROWNED NIGHT HERON, *Nycticorax nycticorax*. Common breeding resident, occasionally seen in large flocks in winter.
- YELLOW-CROWNED NIGHT HERON, *Nyctanassa violacea*. Accidental. One at Harbor Lake, 20 May - 2 Jun 1963 (GV) (McCaskie 1963).
- LEAST BITTERN, *Ixobrychus exilis*. Old breeding record (Grinnell and Miller 1944). Only recent record was "a single bird at Harbor Park [Bixby Slough], October 8 [1960] (Russell and Marion Wilson). This species appears there regularly" (Small 1961). This inconspicuous bird has been sighted on three occasions since we began our records in 1965.
- AMERICAN BITTERN, *Botaurus lentiginosus*. Old breeding record for Bixby Slough (Willett 1933). Few records in recent years, all in winter.
- WHITE-FACED IBIS, *Plegadis chihi*. Rare fall migrant at Harbor Lake. Formerly a common winter visitor to the salt marshes of Los Angeles Harbor and Bixby Slough.
- WHISTLING SWAN, *Olor columbianus*. Formerly wintered in small flocks in the sloughs and marshes (Willett 1933), no recent records.
- CANADA GOOSE, *Branta canadensis*. Uncommon winter visitor.
- BRANT, *Branta bernicla*. Uncommon winter visitor along coast.
- WHITE-FRONTED GOOSE, *Anser albifrons*. Casual, fall and winter.
- SNOW GOOSE, *Chen caerulescens*. Uncommon transient, overhead and at Harbor Lake.
- FULVOUS WHISTLING-DUCK, *Dendrocygna bicolor*. Nested at Bixby Slough in 1903, and was "still fairly common" as a migrant in 1933 (Willett 1933). No recent records.
- MALLARD, *Anas platyrhynchos*. Common winter visitor, also introduced and feral at Harbor Lake and several other parks.
- GADWALL, *Anas strepera*. Uncommon winter visitor on freshwater ponds.
- PINTAIL, *Anas acuta*. Abundant winter visitor at Harbor Lake and other freshwater ponds.
- GREEN-WINGED TEAL, *Anas crecca*. Very common winter visitor at Harbor Lake and other freshwater ponds.
- BLUE-WINGED TEAL, *Anas discors*. Casual, in winter at Harbor Lake.
- CINNAMON TEAL, *Anas cyanoptera*. Abundant winter visitor at Harbor Lake and other freshwater ponds, as well as Los Angeles Harbor. Very common breeding resident at Harbor Lake, threatened by further development.
- AMERICAN WIGEON, *Anas americana*. Very common winter visitor to freshwater lakes and ponds.
- NORTHERN SHOVELER, *Anas clypeata*. Very common winter visitor to freshwater lakes and ponds.
- REDHEAD, *Aythya americana*. Fairly common winter visitor to freshwater lakes and ponds. One old breeding record for Bixby Slough (Willett 1933).
- RING-NECKED DUCK, *Aythya collaris*. Uncommon winter visitor to freshwater lakes and ponds.

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- CANVASBACK, *Aythya valisineria*. Common winter visitor to freshwater lakes and ponds.
- GREATER SCAUP, *Aythya marila*. Rare, or rarely reported, winter visitor to the Los Angeles Harbor area.
- LESSER SCAUP, *Aythya affinis*. Common winter visitor to fresh water and Los Angeles Harbor.
- COMMON GOLDENEYE, *Bucephala clangula*. Accidental. Two pair, Bixby Slough [no date] (Willett 1933).
- BUFFLEHEAD, *Bucephala albeola*. Fairly common winter visitor to both fresh and salt water habitats.
- OLDSQUAW, *Clangula hyemalis*. Casual in winter along coast. Most records are for Terminal Island.
- WHITE-WINGED SCOTER, *Melanitta deglandi*. Common but irregular winter visitor. In some years almost as numerous as Surf Scoter but in other years, quite rare. Occurs along coast and in Los Angeles Harbor.
- SURF SCOTER, *Melanitta perspicillata*. Abundant winter visitor to coast and harbor. Non-breeding individuals summer over occasionally.
- BLACK SCOTER, *Melanitta nigra*. Rare and irregular winter visitor to coast and harbor. Flocks of up to 14 have been observed, but the usual number is one or two individuals.
- RUDDY DUCK, *Oxyura jamaicensis*. Very common winter visitor. Common breeding resident at Harbor Lake.
- COMMON MERGANSER, *Mergus merganser*. Casual in winter.
- RED-BREASTED MERGANSER, *Mergus serrator*. Common to very common winter visitor in small groups along coast.
- HOODED MERGANSER, *Lophodytes cucullatus*. Accidental. One, South Coast Botanic Garden 16 Nov 1975 through Mar 1976 (EB, SW, GN).
- TURKEY VULTURE, *Cathartes aura*. Rare transient. Little or no suitable habitat remains.
- WHITE-TAILED KITE, *Elanus leucurus*. Uncommon winter visitor.
- GOSHAWK, *Accipiter gentilis*. Accidental. One, South Coast Botanic Gardens 17-28 Jan 1974 (SW).
- SHARP-SHINNED HAWK, *Accipiter striatus*. Fairly common winter visitor, usually in wooded areas.
- COOPER'S HAWK, *Accipiter cooperii*. Fairly common winter visitor, uncommon breeding resident.
- RED-TAILED HAWK, *Buteo jamaicensis*. Common breeding resident, numbers increase in winter. Decreasing in recent years due, in part, to heavy loss of chicks to falconers.
- RED-SHOULDERED HAWK, *Buteo lineatus*. Rare winter visitor to wooded areas.
- BROAD-WINGED HAWK, *Buteo platypterus*. Casual, records for Rolling Hills and San Pedro (McCaskie 1968).
- ZONE-TAILED HAWK, *Buteo albonotatus*. Accidental. One, Point Fermin, 10 Nov 1975 (SW, JMo).
- ROUGH-LEGGED HAWK, *Buteo lagopus*. Casual winter visitor, usually over open fields.
- FERRUGINOUS HAWK, *Buteo regalis*. Accidental. One, Harbor Park, 31 Dec 1966 (DBn) and one near landfill on Crenshaw Blvd., 15 Nov 1972 (SW).
- GOLDEN EAGLE, *Aquila chrysaetos*. Casual in winter.
- BALD EAGLE, *Haliaeetus leucocephalus*. Casual in winter. One unsubstantiated record of nesting along cliffs near Lunada Bay (1931; Fink 1966).
- MARSH HAWK, *Circus cyaneus*. Uncommon or rare winter visitor. Formerly common in salt marshes of Los Angeles Harbor.

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- OSPREY, *Pandion haliaetus*. Rare transient and winter visitor. Once common in salt marshes of Los Angeles Harbor; no recent breeding records for southern California.
- PRAIRIE FALCON, *Falco mexicanus*. Casual in winter near quarry at the end of Via Forestal, near Portuguese Bend.
- PEREGRINE FALCON, *Falco peregrinus*. Casual in winter.
- MERLIN, *Falco columbarius*. Casual in winter.
- AMERICAN KESTREL, *Falco sparverius*. Very common breeding resident. Like Red-tailed Hawk, suffers heavy losses to local falconers.
- CALIFORNIA QUAIL, *Lophortyx californicus*. Common breeding resident, decreasing in recent years as housing developments encroach on breeding habitat.
- RING-NECKED PHEASANT, *Phasianus colchicus*. Introduced, common breeding resident in brushy areas or near open fields, declining.
- CHUKAR, *Alectoris chukar*. Introduced in the 1930s, but apparently never became established. A few records within last 10 years.
- COMMON PEAFAWL, *Pavo cristatus*. Introduced, very common breeding resident, apparently increasing.
- SANDHILL CRANE, *Grus canadensis*. Accidental. One flying overhead 4 Oct 1972 (RS).
- CLAPPER RAIL, *Rallus longirostris*. Extirpated. *R.l. obsoletus* was a common breeding resident in salt marshes of Los Angeles Harbor, but no habitat remains. One breeding record for Bixby Slough 14 Jun 1906 (Willett 1933).
- VIRGINIA RAIL, *Rallus limicola*. Rare and inconspicuous winter visitor, decreasing with continued habitat destruction. Recent records are from Harbor Lake and Madrona marsh. Undoubtedly nested in extensive freshwater marshes formerly present.
- SORA, *Porzana carolina*. Uncommon and inconspicuous winter visitor, decreasing in recent years. Formerly nested in freshwater marshes of Bixby Slough.
- COMMON GALLINULE, *Gallinula chloropus*. Rare and secretive resident, more frequently seen in winter. Several old breeding records for Bixby Slough. A few may still nest at Harbor Lake.
- AMERICAN COOT, *Fulica americana*. Abundant breeding resident, most numerous in winter.
- BLACK OYSTERCATCHER, *Haematopus bachmani*. Casual in winter along rocky shorelines.
- AMERICAN OYSTERCATCHER, *Haematopus palliatus*. Accidental. One, Point Fermin 22 Dec 1978 - spring 1979 (DH).
- SEMIPALMATED PLOVER, *Charadrius semipalmatus*. Uncommon winter visitor along coast, primarily on sandy beaches, and at Harbor Lake.
- SNOWY PLOVER, *Charadrius alexandrinus*. Fairly common winter visitor, less common in summer, along sandy beaches. Formerly nested at Bixby Slough (Grinnell and Miller 1944), no recent breeding records.
- KILLDEER, *Charadrius vociferus*. Abundant breeding resident. In winter frequents parks, coast and marshes.
- AMERICAN GOLDEN PLOVER, *Pluvialis dominica*. Casual in spring and fall.
- BLACK-BELLIED PLOVER, *Pluvialis squatarola*. Abundant winter visitor to all aquatic habitats. Occurs at all times except mid-summer.
- RUDDY TURNSTONE, *Arenaria interpres*. Fairly common winter visitor, primarily along southern coast and Los Angeles Harbor.
- BLACK TURNSTONE, *Arenaria melanocephala*. Common winter visitor along rocky shoreline.
- COMMON SNIPE, *Capella gallinago*. Common but inconspicuous winter visitor to freshwater ponds and lakes.

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- LONG-BILLED CURLEW, *Numenius americanus*. Uncommon winter visitor to open fields and lawns.
- WHIMBREL, *Numenius phaeopus*. Fairly common winter visitor along rocky shore, most common during migration.
- SPOTTED SANDPIPER, *Actitis macularia*. Very common winter visitor along rocky shoreline.
- SOLITARY SANDPIPER, *Tringa solitaria*. Casual in fall and spring at Harbor Lake and South Coast Botanic Gardens.
- GREATER YELLOWLEGS, *Tringa melanoleucus*. Uncommon winter visitor, fairly common transient.
- LESSER YELLOWLEGS, *Tringa flavipes*. Rare transient.
- WANDERING TATTLER, *Heteroscelus incanus*. Common winter visitor, sparsely distributed along rocky shore.
- SURFBIRD, *Aphriza virgata*. Uncommon winter visitor primarily along rock jetties and breakwaters. Fairly common transient along coast in small flocks.
- WILLET, *Catoptrophorus semipalmatus*. Abundant winter visitor, some non-breeding individuals present in summer.
- RED KNOT, *Calidris canutus*. Rare transient and winter visitor.
- PECTORAL SANDPIPER, *Calidris melanotos*. Rare fall migrant.
- BAIRD'S SANDPIPER, *Calidris bairdii*. Rare fall migrant.
- LEAST SANDPIPER, *Calidris minutilla*. Formerly very common winter visitor, decreasing in recent years.
- DUNLIN, *Calidris alpina*. Uncommon winter visitor.
- WESTERN SANDPIPER, *Calidris mauri*. Formerly very common winter visitor, now decreasing.
- SANDERLING, *Calidris alba*. Abundant winter visitor along coast.
- SHORT-BILLED DOWITCHER, *Limnodromus griseus*. Common winter visitor, along coast and Harbor Lake.
- LONG-BILLED DOWITCHER, *Limnodromus scolopaceus*. Fairly common winter visitor, more frequently observed in freshwater habitats (Pyle and Small 1961).
- BUFF-BREADED SANDPIPER, *Tryngites subruficollis*. Accidental. One, Green Hills Cemetery 5-17 Sep 1971 (SW) (McCaskie 1972).
- MARbled GODWIT, *Limosa fedoa*. Fairly common winter visitor, primarily along sandy beaches.
- AMERICAN AVOCET, *Recurvirostra americana*. Uncommon winter visitor. Formerly nested in Bixby Slough-Harbor Lake area.
- BLACK-NECKED STILT, *Himantopus mexicanus*. Fairly common winter visitor, rare resident. Formerly nested in Bixby Slough-Harbor Lake area.
- RED PHALAROPE, *Phalaropus fulicarius*. Primarily pelagic, seen from shore in migration or in winter.
- WILSON'S PHALAROPE, *Steganopus tricolor*. Uncommon transient in freshwater habitats.
- NORTHERN PHALAROPE, *Lobipes lobatus*. Primarily pelagic, but seen along coast in migration and in winter.
- POMARINE JAEGER, *Stercorarius pomarinus*. Uncommon winter visitor. Primarily pelagic, rarely seen from shore.
- PARASITIC JAEGER, *Stercorarius parasiticus*. Uncommon winter visitor. Primarily pelagic, occasionally seen from shore.
- SOUTH POLAR SKUA, *Catharacta maccormacki*. Accidental. One seen from Long Point 24 Dec 1966 (SW).
- GLAUCOUS GULL, *Larus hyperboreus*. Accidental. One immature photographed at Terminal Island fish cannery 22 Dec 1973 - 15 Feb 1974. (GSS, RB) (Suffel 1974).

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- GLAUCOUS-WINGED GULL, *Larus glaucescens*. Fairly common winter visitor along coast.
- WESTERN GULL, *Larus occidentalis*. Very common winter visitor. Immatures are common all year.
- HERRING GULL, *Larus argentatus*. Common winter visitor.
- THAYER'S GULL, *Larus thayeri*. Probably fairly common winter visitor, but few have been reported.
- CALIFORNIA GULL, *Larus californicus*. Abundant winter visitor.
- RING-BILLED GULL, *Larus delawarensis*. Abundant winter visitor.
- MEW GULL, *Larus canus*. Common winter visitor.
- FRANKLIN'S GULL, *Larus pipixcan*. Rare in fall and winter along coast, Los Angeles Harbor and Harbor Lake.
- BONAPARTE'S GULL, *Larus philadelphia*. Abundant winter visitor.
- LITTLE GULL, *Larus minutus*. Accidental. One along northern coast 22 Dec 1969, photographed and seen by many observers (RS, GMc) (McCaskie 1970).
- HEERMANN'S GULL, *Larus heermanni*. Abundant winter visitor. Immatures are very common all year.
- BLACK-LEGGED KITTIWAKE, *Rissa tridactyla*. Irregular winter visitor, quite common along coast in some years, whereas strictly pelagic in others.
- SABINE'S GULL, *Xema sabini*. Accidental. One, Hermosa Beach 20 May 1926 (FS).
- FORSTER'S TERN, *Sterna forsteri*. Uncommon winter visitor and common transient.
- COMMON TERN, *Sterna hirundo*. Rare winter visitor and migrant.
- ARCTIC TERN, *Sterna paradisaea*. Pelagic, status uncertain. One, Cabrillo Beach 30 Aug 1968 (DB, RB).
- LEAST TERN, *Sterna albifrons*. Rare summer visitor and migrant. Grinnell and Miller (1944) list Redondo and Terminal Island as nesting localities. Nested on Terminal Island in 1973, 1974, 1976 and 1977.
- ROYAL TERN, *Sterna maxima*. Uncommon winter visitor.
- ELEGANT TERN, *Sterna elegans*. Common, August to mid-October.
- CASPIAN TERN, *Sterna caspia*. Common visitor in late summer, fall and winter.
- BLACK TERN, *Chlidonias niger*. Casual in spring and fall. Formerly common in summer at Bixby Slough (Harbor Lake).
- COMMON MURRE, *Uria aalge*. Uncommon winter visitor offshore, occasionally seen from land.
- XANTUS' MURRELET, *Endomychura hypoleuca*. Uncommon resident offshore.
- ANCIENT MURRELET, *Synthliboramphus antiquus*. Casual winter visitor offshore.
- CASSIN'S AUKLET, *Ptychoramphus aleuticus*. Uncommon resident offshore; the most frequently reported small alcid. One, Los Angeles Harbor, Sep 1970 (SW).
- BAND-TAILED PIGEON, *Columba fasciata*. Rare winter visitor.
- ROCK DOVE, *Columba livia*. Introduced, abundant breeding resident.
- WHITE-WINGED DOVE, *Zenaida asiatica*. Rare winter visitor; reported every winter in recent years.
- MOURNING DOVE, *Zenaida macroura*. Very common breeding resident, abundant in winter.
- SPOTTED DOVE, *Streptopelia chinensis*. Introduced, common breeding resident, increasing.
- RINGED TURTLE DOVE, *Streptopelia risoria*. Introduced, rare resident. One pair successfully nested in Lunada Bay 1967 (RB).
- CANARY-WINGED PARAKEET, *Brotogeris versicolurus*. Apparently introduced in 1972. Now breeding in parks and residential areas and increasing.
- YELLOW-BILLED CUCKOO, *Coccyzus americanus*. Extirpated. Formerly nested around Bixby Slough (Grinnell and Miller 1944).

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- ROADRUNNER, *Geococcyx californianus*. Uncommon, but rarely observed breeding resident; decreasing due to habitat destruction.
- BARN OWL, *Tyto alba*. Common breeding resident.
- GREAT HORNED OWL, *Bubo virginianus*. Common breeding resident.
- BURROWING OWL, *Athene cunicularia*. Uncommon breeding resident. Formerly very common breeding resident, now greatly restricted due to loss of habitat.
- SHORT-EARED OWL, *Asio flammeus*. Rare winter visitor, usually seen over open fields.
- POORWILL, *Phalaenoptilus nuttallii*. Status poorly known, probably uncommon transient and rare but regular winter visitor.
- LESSER NIGHTHAWK, *Chordeiles acutipennis*. Casual in spring and fall.
- BLACK SWIFT, *Cypseloides niger*. Accidental. Two, Point Fermin [no date] (SW and DG).
- VAUX'S SWIFT, *Chaetura vauxi*. Irregular and uncommon transient, may occur in large flocks.
- WHITE-THROATED SWIFT, *Aeronautes saxatalis*. Locally common breeding resident.
- BLACK-CHINNED HUMMINGBIRD, *Archilochus alexandri*. Common breeding summer visitor; several records of individuals visiting feeders all winter.
- COSTA'S HUMMINGBIRD, *Calypte costae*. Common breeding resident, primarily in open sparse growth of certain canyons; inconspicuous when not breeding.
- ANNA'S HUMMINGBIRD, *Calypte anna*. Abundant breeding resident.
- BROAD-TAILED HUMMINGBIRD, *Selasphorus platycercus*. Accidental. Miraleste area, One 4 Nov - 18 Dec 1972 and one (mist-netted) 10-17 Apr 1974 (SW).
- RUFIOUS HUMMINGBIRD, *Selasphorus rufus*. Fairly common transient, rare winter visitor.
- ALLEN'S HUMMINGBIRD, *Selasphorus sasin*. The mainland race *S. s. sasin* is a regular migrant. The island race *S. s. sedentarius* is a recently established breeding resident (see text), locally abundant.
- CALLIOPE HUMMINGBIRD, *Stellula calliope*. Uncommon transient, most records late April - early May. Males of the species usually precede females by a week to 10 days.
- BELTED KINGFISHER, *Megaceryle alcyon*. Uncommon winter visitor mostly at Cabrillo Beach and the Los Angeles Harbor area. Formerly nested along bluffs above Cabrillo Beach.
- COMMON FLICKER, *Colaptes auratus*. Yellow-shafted form, casual or rare visitor, usually in winter. (Most records for this form are intergrades with *C. a. cafer* or other subspecies, but "pure" forms also occur.) Red-shafted form, abundant winter visitor, fairly common breeding resident.
- ACORN WOODPECKER, *Melanerpes formicivorus*. Casual, throughout year.
- LEWIS' WOODPECKER, *Melanerpes lewis*. Casual, mostly in winter.
- YELLOW-BELLIED SAPSUCKER, *Sphyrapicus varius*. Fairly common winter visitor; both *S. v. nuchalis* and *S. v. daggetti* occur.
- WILLIAMSON'S SAPSUCKER, *Sphyrapicus thryoideus*. Casual, most records in winter.
- HAIRY WOODPECKER, *Picoides villosus*. Several old breeding records from Bixby Slough area (Grinnell 1898) seem unlikely. Only one recent record, Rolling Hills Dec 1969 (SW).
- DOWNY WOODPECKER, *Picoides pubescens*. Probably a breeding resident in willows adjacent to Bixby Slough prior to the destruction of this habitat (Grinnell and Miller 1944). Only one recent record, Palos Verdes Estates 26 Nov 1972 (DB, RB, RS).
- NUTTALL'S WOODPECKER, *Picoides nuttallii*. Rare winter visitor, less evident in recent years.

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- WHITE-HEADED WOODPECKER, *Picoides albolarvatus*. Accidental. One, Point Fermin 20 Sep 1972 (EN) and one, Portuguese Bend 27 Sep 1972 (CK).
- EASTERN KINGBIRD, *Tyrannus tyrannus*. Accidental. One Lunada Bay Oct 1969 (RS) and one, Averill Park, San Pedro 26 Sep 1971 (GSS).
- TROPICAL KINGBIRD, *Tyrannus melanicolicus*. Casual in fall and winter.
- WESTERN KINGBIRD, *Tyrannus verticalis*. Common transient. Formerly bred (Grinnell and Miller 1944), but no longer found during summer.
- CASSIN'S KINGBIRD, *Tyrannus vociferans*. Uncommon transient.
- ASH-THROATED FLYCATCHER, *Myiarchus cinerascens*. Fairly common transient and summer visitor, habitat probably insufficient for breeding.
- EASTERN PHOEBE, *Sayornis phoebe*. Accidental. One, South Coast Botanic Gardens 10-17 Oct 1972 (SW).
- BLACK PHOEBE, *Sayornis nigricans*. Very common breeding resident, very local.
- SAY'S PHOEBE, *Sayornis saya*. Common winter visitor.
- WILLOW FLYCATCHER, *Empidonax traillii*. Uncommon fall migrant.
- HAMMOND'S FLYCATCHER, *Empidonax hammondi*. Uncommon transient.
- DUSKY FLYCATCHER, *Empidonax oberholseri*. Uncommon transient.
- GRAY FLYCATCHER, *Empidonax wrightii*. Casual in spring and fall.
- WESTERN FLYCATCHER, *Empidonax difficilis*. Very common transient. Uncommon summer visitor, nests locally. Casual in winter.
- WESTERN WOOD PEWEE, *Contopus sordidulus*. Fairly common transient and summer visitor, no breeding records.
- OLIVE-SIDED FLYCATCHER, *Nuttallornis borealis*. Fairly common transient, occasional summer visitor.
- VERMILION FLYCATCHER, *Pyrocephalus rubinus*. Accidental. One, South Coast Botanic Gardens 10-18 Oct 1972 (SW). Willett (1933) mentions "records" for the Bixby Slough area.
- HORNED LARK, *Eremophila alpestris*. Common winter visitor. Formerly nested, but no recent breeding records. Nearly absent in summer. Decline attributed to habitat destruction.
- VIOLET-GREEN SWALLOW, *Tachycineta thalassina*. Common transient.
- TREE SWALLOW, *Iridoprocne bicolor*. Uncommon winter visitor, fairly common transient.
- ROUGH-WINGED SWALLOW, *Stelgidopteryx ruficollis*. Fairly common summer visitor. Formerly nested but no known breeding records in recent years.
- BARN SWALLOW, *Hirundo rustica*. Common breeding summer visitor.
- CLIFF SWALLOW, *Petrochelidon pyrrhonota*. Very common breeding summer visitor.
- PURPLE MARTIN, *Progne subis*. Rare transient.
- STELLER'S JAY, *Cyanocitta stelleri*. Rare vagrant.
- SCRUB JAY, *Aphelocoma coerulescens*. Abundant breeding resident. Quite successful in residential areas.
- COMMON RAVEN, *Corvus corax*. Locally fairly common breeding resident.
- COMMON CROW, *Corvus brachyrhynchos*. Locally common breeding resident.
- PINYON JAY, *Gymnorhinus cyanocephala*. Accidental. One, in Rolling Hills 1972 (SW).
- CLARK'S NUTCRACKER, *Nucifraga columbiana*. Rare vagrant, mostly in fall.
- MOUNTAIN CHICKADEE, *Parus gambeli*. Casual in fall, winter and spring.
- BUSHTIT, *Psaltriparus minimus*. Abundant breeding resident.
- WHITE-BREASTED NUTHATCH, *Sitta carolinensis*. Rare winter invader from mountains.
- RED-BREASTED NUTHATCH, *Sitta canadensis*. Irregular winter visitor, common in some years. One nesting record 1970 (RS).

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- PYGMY NUTHATCH, *Sitta pygmaea*. Casual in fall and winter.
- BROWN CREEPER, *Certhia familiaris*. Irregular and rare winter visitor.
- HOUSE WREN, *Troglodytes aedon*. Fairly common transient and winter visitor. No verified nesting records, but individuals sometimes remain throughout summer.
- BEWICK'S WREN, *Thryomanes bewickii*. Common breeding resident.
- CACTUS WREN, *Campylorhynchus brunneicapillus*. Locally common breeding resident in brushy canyons. Decreasing due to habitat destruction.
- LONG-BILLED MARSH WREN, *Cistothorus palustris*. Common breeding resident in freshwater marsh at Harbor Lake.
- ROCK WREN, *Salpinctes obsoletus*. Locally common breeding resident in rocky areas. Population decreasing with loss of habitat.
- MOCKINGBIRD, *Mimus polyglottos*. Abundant breeding resident. Adapts well to suburban habitats.
- BROWN THRASHER, *Toxostoma rufum*. Accidental. One, Cabrillo Beach 23 Dec 1966 through Jan 1967 (GSS, SW) and one, Rolling Hills, 16 Apr - 11 May 1975 (SW, GSS) (McCaskie 1975b).
- BENDIRE'S THRASHER, *Toxostoma bendirei*. Accidental. Sight records for Palos Verdes Estates 18 Sep 1968 (RS, DB, RB) and for fall [no date] 1969 (JS).
- CALIFORNIA THRASHER, *Toxostoma redivivum*. Accidental. One, South Coast Botanic Gardens 25 Jan - 11 Feb 1974 (SW).
- SAGE THRASHER, *Oreoscoptes montanus*. Accidental. One, 11 Sep 1973 (JT) and one 22 Dec 1975 (SW, GN).
- AMERICAN ROBIN, *Turdus migratorius*. Very common breeding resident, abundant in winter.
- VARIED THRUSH, *Ixoreus naevius*. Irregular and rare winter visitor to parks and wooded areas, may occur in small flocks.
- HERMIT THRUSH, *Catharus guttatus*. Common winter visitor.
- SWAINSON'S THRUSH, *Catharus ustulatus*. Common summer visitor, nests in Rolling Hills.
- TOWNSEND'S SOLITAIRE, *Myadestes townsendi*. Casual, November - March.
- BLUE-GRAY GNATCATCHER, *Poliophtila caerulea*. Fairly common winter visitor.
- BLACK-TAILED GNATCATCHER, *Poliophtila melanura*. Fairly common breeding resident in sagebrush (*Artemisia*) covered canyons and gullies, decreasing with habitat reduction.
- GOLDEN-CROWNED KINGLET, *Regulus satrapa*. Irregular and rare winter visitor.
- RUBY-CROWNED KINGLET, *Regulus calendula*. Very common winter visitor.
- WATER PIPIT, *Anthus spinoletta*. Very common winter visitor, decreasing with habitat destruction.
- BOHEMIAN WAXWING, *Bombycilla garrulus*. Accidental. One, San Pedro 22 Apr 1969 (SW).
- CEDAR WAXWING, *Bombycilla cedrorum*. Very common winter visitor, usually in large flocks.
- PHAINOPEPLA, *Phainopepla nitens*. Locally common summer visitor, nests in Rolling Hills. Rare winter visitor.
- LOGGERHEAD SHRIKE, *Lanius ludovicianus*. Very common breeding resident in open areas.
- STARLING, *Sturnus vulgaris*. Introduced, abundant breeding resident.
- HUTTON'S VIREO, *Vireo huttoni*. Uncommon breeding resident, very local.
- BELL'S VIREO, *Vireo bellii*. Casual, records for spring and fall.
- GRAY VIREO, *Vireo vicinior*. Accidental. Specimen, Point Fermin 9 Sep 1967 (GSS).
- SOLITARY VIREO, *Vireo solitarius*. Rare transient. One during winter 1968-69, and one, Dec 1970 - Jan 1971(SW).

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- RED-EYED VIREO, *Vireo olivaceus*. Accidental. One, San Pedro 13-21 Jul 1971 (SW) and one, South Coast Botanic Gardens 23 Jun 1971 (SW).
- WARBLING VIREO, *Vireo gilvus*. Common transient.
- BLACK-AND-WHITE WARBLER, *Mniotilta varia*. Casual in fall and spring.
- PROTHONOTARY WARBLER, *Protonotaria citrea*. Accidental. One, San Pedro 8 Oct 1965 (DP).
- TENNESSEE WARBLER, *Vermivora peregrina*. Casual in spring and fall.
- ORANGE-CROWNED WARBLER, *Vermivora celata*. The island race *V. c. sordida* is a fairly common breeding resident, increasing in winter. The mainland race *V. c. lutescens* is very common in migration. A banding study indicated that the other two subspecies are rare transients (Bradley unpubl.).
- NASHVILLE WARBLER, *Vermivora ruficapilla*. Common spring migrant, fairly common fall migrant, rare winter visitor (three recent records).
- VIRGINIA'S WARBLER, *Vermivora virginiae*. Rare transient, occasionally in flocks of up to 10 individuals.
- LUCY'S WARBLER, *Vermivora luciae*. Accidental. Two records, Palos Verdes Estates 13 Sep 1970 (RB) and 2 Oct 1974 (SW).
- YELLOW WARBLER, *Dendroica petechia*. Common transient, rare in winter. Formerly fairly common breeder, one recent nesting record, Jun 1972 (SW).
- MAGNOLIA WARBLER, *Dendroica magnolia*. Accidental. One, Lunada Bay 16 Oct 1970 (RS) and specimen collected, Point Fermin 21 Jun 1974 (CC).
- BLACK-THROATED BLUE WARBLER, *Dendroica caerulescens*. Casual in fall.
- YELLOW-RUMPED WARBLER, *Dendroica coronata*. "Myrtle" form uncommon to rare winter visitor. "Audubon's" form abundant winter visitor.
- BLACK-THROATED GRAY WARBLER, *Dendroica nigrescens*. Common transient. Rare winter visitor.
- TOWNSEND'S WARBLER, *Dendroica townsendi*. Common transient. Rare winter visitor.
- BLACK-THROATED GREEN WARBLER, *Dendroica virens*. Accidental. One, South Coast Botanic Gardens Oct 1974 (SW, GSS).
- HERMIT WARBLER, *Dendroica occidentalis*. Common transient. Rare winter visitor.
- BLACKBURNIAN WARBLER, *Dendroica fusca*. Casual in fall.
- YELLOW-THROATED WARBLER, *Dendroica dominica*. Accidental. One, South Coast Botanic Gardens 21 Oct 1972 (GM, SW, RB) (McCaskie 1973).
- CHESTNUT-SIDED WARBLER, *Dendroica pensylvanica*. Accidental. One, San Pedro [no date] 1972 (SW) and one, Palos Verdes Estates 9 Jun 1973 (RB and DB).
- BLACKPOLL WARBLER, *Dendroica striata*. Rare migrant. Usually in fall, but a few spring records. One tape recording (RB) on file at Florida State Museum Bioacoustics Archive.
- PRAIRIE WARBLER, *Dendroica discolor*. Accidental. One, Harbor Lake 21 Oct 1967 (SW and JS).
- PALM WARBLER, *Dendroica palmarum*. Casual in fall and winter.
- OVENBIRD, *Seiurus aurocapillus*. Accidental. One, San Pedro 29 Sep 1967 (SW) and one, 20 Jun 1975 (SW).
- NORTHERN WATERTHRUSH, *Seiurus noveboracensis*. Casual in spring and fall.
- MACGILLIVRAY'S WARBLER, *Oporornis tolmiei*. Fairly common transient.
- COMMON YELLOWTHROAT, *Geothlypis trichas*. Common transient, fairly common breeding resident at Harbor Lake.
- YELLOW-BREASTED CHAT, *Icteria virens*. Uncommon transient.
- WILSON'S WARBLER, *Wilsonia pusilla*. Abundant spring migrant, very common fall migrant.
- CANADA WARBLER, *Wilsonia canadensis*. Accidental. Sight record, Point Fermin 17-21 Oct 1971 (LJ, RW, SW) (McCaskie 1972).

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- AMERICAN REDSTART, *Setophaga ruticilla*. Rare transient, mostly in fall, sometimes occurs in flocks of 10-15 individuals.
- HOUSE SPARROW, *Passer domesticus*. Introduced, abundant resident, especially near stables.
- BOBOLINK, *Dolichonyx oryzivorus*. Casual in fall.
- WESTERN MEADOWLARK, *Sturnella neglecta*. Very common resident, breeds. Decreasing rapidly due to development of open field habitat.
- YELLOW-HEADED BLACKBIRD, *Xanthocephalus xanthocephalus*. Rare winter visitor. Old breeding records for Bixby Slough (Willett 1933).
- RED-WINGED BLACKBIRD, *Agelaius phoeniceus*. Very common to abundant breeding resident. Found in large flocks in winter.
- TRICOLORED BLACKBIRD, *Agelaius tricolor*. Status like that of Red-winged Blackbird. Breeds north of Harbor Lake.
- ORCHARD ORIOLE, *Icterus spurius*. Accidental. One male, Palos Verdes Estates 5 Dec 1971 - 22 Jan 1972 (DB and RB).
- HOODED ORIOLE, *Icterus cucullatus*. Very common breeding summer visitor, rare winter visitor.
- SCOTT'S ORIOLE, *Icterus parisorum*. Accidental. Two sight records for San Pedro, one Dec 1968 - Feb 1969 (SW) and one, 20 May 1974 (IL).
- NORTHERN ORIOLE, *Icterus galbula*. "Bullock's" form very common breeding summer visitor, rare winter visitor. "Baltimore" form casual, with records throughout the year.
- BREWER'S BLACKBIRD, *Euphagus cyanocephalus*. Abundant breeding resident.
- GREAT-TAILED GRACKLE, *Quiscalus mexicanus*. Accidental. One remained in San Pedro for 9 years (1969-1978).
- BROWN-HEADED COWBIRD, *Molothrus ater*. Fairly common resident.
- WESTERN Tanager, *Piranga ludoviciana*. Common to very common transient. Rare winter visitor.
- SCARLET Tanager, *Piranga olivacea*. Accidental. Sight record, male at South Coast Botanic Gardens 14 Jun 1976 (EB, SW) (McCaskie 1976).
- HEPATIC Tanager, *Piranga flava*. Accidental. One, Palos Verdes Estates 28 May 1968 (JT, RB, DB, RS).
- SUMMER Tanager, *Piranga rubra*. Casual in fall and winter.
- ROSE-BREADED GROSBEAK, *Pheucticus ludovicianus*. Casual in fall.
- BLACK-HEADED GROSBEAK, *Pheucticus melanocephalus*. Fairly common summer visitor, breeds in riparian situations.
- BLUE GROSBEAK, *Guiraca caerulea*. Uncommon to rare transient, formerly breeding (Grinnell and Miller 1944).
- INDIGO BUNTING, *Passerina cyanea*. Casual, mostly in fall.
- LAZULI BUNTING, *Passerina amoena*. Common transient. Uncommon summer visitor, breeds in some years.
- EVENING GROSBEAK, *Hesperiphona vespertina*. Casual in October and November.
- PURPLE FINCH, *Carpodacus purpureus*. Fairly common winter visitor, numbers fluctuate greatly from year to year.
- CASSIN'S FINCH, *Carpodacus cassinii*. Irregular and rare winter visitor.
- HOUSE FINCH, *Carpodacus mexicanus*. Abundant breeding resident.
- PINE SISKIN, *Carduelis pinus*. Irregular winter visitor, fairly common in peak years. One summer record, 4 Aug 1968 (SW).
- AMERICAN GOLDFINCH, *Carduelis tristis*. Fairly common resident, breeding in low-lying willow areas. Common in winter.
- LESSER GOLDFINCH, *Carduelis psaltria*. Common breeding resident.
- LAWRENCE'S GOLDFINCH, *Carduelis lawrencei*. Uncommon transient and winter visitor.

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- RED CROSSBILL, *Loxia curvirostra*. Irregular and rare visitor. A small colony bred during 1967 and 1968. Several scattered records throughout year, mostly in winter (McCaskie 1967).
- GREEN-TAILED TOWHEE, *Pipilo chlorurus*. Rare transient and winter visitor.
- RUFIOUS-SIDED TOWHEE, *Pipilo erythrophthalmus*. Abundant breeding resident.
- BROWN TOWHEE, *Pipilo fuscus*. Abundant breeding resident.
- LARK BUNTING, *Calamospiza melanocorys*. Casual in late winter and fall.
- SAVANNAH SPARROW, *Passerculus sandwichensis*. Fairly common winter visitor. *P. s. beldingi* formerly common breeding resident in the Los Angeles Harbor area; has been extirpated.
- GRASSHOPPER SPARROW, *Ammodramus savannarum*. Recorded as breeding near Bixby Slough (Grinnell and Miller 1944). Only recent record is one at Harbor Lake 4 Apr 1974 (AS).
- LARK SPARROW, *Chondestes grammacus*. Uncommon winter visitor.
- RUFIOUS-CROWNED SPARROW, *Aimophila ruficeps*. Local and fairly common breeding resident. Most often found along ocean bluffs.
- BLACK-THROATED SPARROW, *Amphispiza bilineata*. Accidental. Sight records, one, Point Fermin (San Pedro) 14-15 Sep 1974 (SW) and one, South Coast Botanic Gardens 5 Sep 1974 (SW).
- SAGE SPARROW, *Amphispiza belli*. Casual in fall.
- DARK-EYED JUNCO, *Junco hyemalis*. "Slate-colored" form, rare winter visitor. "Oregon" form, very common to abundant winter visitor.
- GRAY-HEADED JUNCO, *Junco caniceps*. Rare winter visitor.
- TREE SPARROW, *Spizella arborea*. Accidental. One, 6-9 Nov 1974 (SW) (McCaskie 1975a).
- CHIPPING SPARROW, *Spizella passerina*. Uncommon winter visitor.
- CLAY-COLORED SPARROW, *Spizella pallida*. Casual in fall. Specimen from San Pedro 2 Oct 1968.
- BREWER'S SPARROW, *Spizella breweri*. Rare transient.
- BLACK-CHINNED SPARROW, *Spizella atrogularis*. Casual in winter and fall.
- HARRIS' SPARROW, *Zonotrichia querula*. Casual in winter.
- WHITE-CROWNED SPARROW, *Zonotrichia leucophrys*. Abundant winter visitor. Rare stragglers remain throughout each summer.
- GOLDEN-CROWNED SPARROW, *Zonotrichia atricapilla*. Very common to abundant winter visitor.
- WHITE-THROATED SPARROW, *Zonotrichia albicollis*. Rare winter visitor.
- FOX SPARROW, *Passerella iliaca*. Common winter visitor.
- LINCOLN'S SPARROW, *Melospiza lincolni*. Uncommon winter visitor, fairly common transient.
- SWAMP SPARROW, *Melospiza georgiana*. Accidental. South Coast Botanic Gardens, one, 3 Nov 1974 (SW) and one, 19 Mar 1975 (SW).
- SONG SPARROW, *Melospiza melodia*. Abundant breeding resident.

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HYPOTHETICAL LIST

Species listed below have been reported but their occurrence has not been verified.

- LEACH'S STORM-PETREL, *Oceanodroma leucorhoa*. One sight record, "a few" just outside Los Angeles Harbor 14 Oct 1973 (DB).
- ASHY STORM-PETREL, *Oceanodroma homochroa*. Only report is "In 1931 I saw a single bird off San Pedro September 27, and two or three the following day." (Willett 1933).
- BLACK RAIL, *Laterallus jamaicensis*. One heard in marshy sump east of Harbor Freeway [no date] (SW).
- LONG-TAILED JAEGER, *Stercorarius longicaudus*. Four specimens taken "off San Pedro" 21 Oct 1928 - 29 Jul 1933 (Willett 1933).
- RHINOCEROS AUKLET, *Cerorhinca monocerata*. One "off San Pedro" 29 Aug 1933 (KS) (Willett 1933).
- SCREECH OWL, *Otus asio*. Twice reported from Rolling Hills, no verified records.
- CHIMNEY SWIFT, *Chaetura pelagica*. One seen well Point Fermin [no date] (DB, RB). One possible sighting South Coast Botanic Gardens 28 Nov 1973 (SW). One or two South Coast Botanic Gardens [summer 197?] (EB).
- GREAT CRESTED FLYCATCHER, *Myiarchus crinitus*. One, Point Fermin (west) 26 Sep 1970 (JH, TH, GSS, SW).
- PLAIN TITMOUSE, *Parus inornatus*. Two possible sight records, Rolling Hills 24 Dec 1972 (JM).
- FIELD SPARROW, *Spizella pusilla*. One sight record, immature plumaged individual 10 Sep 1970 (RB, DB, RS).

SUMMARY

The diverse resident avifauna of the Palos Verdes Peninsula has close affinities to that found on the Channel Islands, but a number of differences are apparent. Perhaps the peninsula's large size and freshwater habitat are the most important factors that modify the insular nature of the avifauna. The position and topography make it attractive to a wide variety of migrant passerines, as evidenced by the number of vagrants included in the checklist. Rapid and continuing development of this area is permanently altering bird populations, and several species have been extirpated as breeding species. Despite this trend, an increasing number of competent field observers are constantly adding new species to the large variety that has been listed. As of January 1976 a total of 333 species of native North American birds had been recorded for the study area. An additional seven introduced and exotic species have become established. At least 10 other species have tentatively been reported, but their occurrence remains hypothetical.

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