BIRDS
of the
BALDWIN HILLS

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ABSTRACT

I investigated the current bird life of the Baldwin Hills through a series of 21 visits between 9 February and 10 November 2000 to all habitats in the study area. This information was supplemented by an analysis of specimen data for bird skins, eggs and nests at several major ornithological collections and by a survey of publications, unpublished field notes, and data recently obtained by participants in the Los Angeles County Breeding Bird Atlas project. From these data I generated a preliminary check-list of the birds of the Baldwin Hills, which includes 166 species. About 41 species (36 native) currently nest in the Baldwin Hills, and some 18 additional species may breed occasionally or formerly bred. Of the currently breeding species, three (California Quail, Bewick's Wren, and Spotted Towhee) are coastal scrub obligates. The eight introduced (non-native) species account for 5% of the avifauna.

Significant historical changes in the avifauna of the Baldwin Hills have occurred, although the record of birds there prior to the 1970s is sketchy. Similarly, there is no good record of the composition and extent of various natural habitats in the Baldwin Hills prior to urbanization and intensive grazing and oil extraction activity.

Bird abundance is high in degraded habitats with exotic annual vegetation and in landscaped parklands, but resident species that are mostly restricted to natural coastal scrub and riparian habitats generally occur in low numbers, and some (Greater Roadrunner, Burrowing Owl, Cactus Wren, California Thrasher) have been lost or possibly lost from the avifauna. Other species which still occur as visitors apparently no longer breed in the Baldwin Hills; these include Loggerhead Shrike and Blue Grosbeak. The reasons for the decline in populations of these species which are dependent on native habitats are complex, but almost certainly include habitat loss and degradation and the impacts of native and non-native mesopredators, including feral cats and dogs, raccoons, gray foxes, fox squirrels and corvids (jays, crows and ravens).

Although isolation from other areas of similar habitat currently characterizes the Baldwin Hills, many bird species show fair to excellent dispersal abilities, and extensive areas of healthy native habitat could potentially be recolonized. Habitat linkages to other upland areas (and the wetlands and

open areas at the mouth of Ballona Creek) might not directly lead to increased bird diversity in the Baldwin Hills, but such linkages might help restore a more balanced suite of mammalian predator species if they allow coyotes to recolonize (and thus reduce the impacts of mesopredators).

Recommendations for improving species diversity and restoring populations of coastal scrub bird species include: complete protection of existing coastal scrub habitat, restoration of degraded coastal scrub, removal of exotic predators (mostly feral cats), reintroduction of coyotes, and, possibly, reintroduction of sensitive native bird species.

INTRODUCTION

The Baldwin Hills lie within the western part of the Los Angeles Basin and are therefore in the center of an area of great avian diversity that has seen considerable change in species composition and numbers with large-scale modification of regional habitats (Garrett and Dunn 1981). Recorded within the boundaries of Los Angeles County are 477 species of native birds, plus naturalized populations of numerous exotic species (Garrett and San Miguel 2000). Over 200 bird species breed within Los Angeles County (Los Angeles County Breeding Bird Atlas, unpublished data). Nevertheless, the diversity of bird species occurring in the urbanized lowlands of the Los Angeles Basin is relatively low, with only some 30 species regularly breeding in such habitats (and a roughly similar number of regularly observed transient and wintering species).

The few undeveloped areas with within the Los Angeles Basin, particularly those with some elevational relief, harbor a considerable number of additional breeding and visiting bird species; for this reason the Baldwin Hills have a special ornithological importance within the region. Although apparently never supporting extensive tall woody vegetation cover, the Baldwin Hills nevertheless present an amalgam of open coastal scrub and grassland habitats, along with a few small riparian corridors; large portions of these habitats have now been replaced or modified by grazing, oil extraction activities, residential development, water impoundment, and park landscaping. It is thus of interest to record historical changes in the avifauna of the Baldwin Hills and characterize the birdlife that currently utilizes the area.

Prior to the current study there has been little focused ornithological field work conducted within the Baldwin Hills. Efforts to collect bird specimens (including skins and egg sets) were very spotty, and locality names (e.g. "Baldwin Hills" or "Culver City") are usually so general as to provide little specific information regarding occupied sites and habitats. Major ornithological collections (see below) contain only a few dozen bird specimens attributable to the Baldwin Hills, and these were obtained over a period of several decades; most of the more recent specimens were collected opportunistically by salvage.

The Western Foundation of Vertebrate Zoology's oological (bird egg) collections also contain few specimens confidently attributable to the Baldwin Hills; these few were mainly collected from 1907 to 1937. The only more recent surveys of the birds of the Baldwin Hills, prior to the current study, were conducted by personnel of the Los Angeles County Nature Centers in 1975-1978 as part of an environmental assessment of the proposed establishment of public parklands within the Baldwin Hills (County of Los Angeles 1982).

In the published literature only a few isolated notes about the birds of the Baldwin Hills and immediately adjacent lowlands have been included in *Audubon Field* Notes (later renamed *American Birds*, then *North American Birds*), the long-standing quarterly publication of notable bird records in North America.

This study aims to (1) characterize the historical and current avifauna of the Baldwin Hills; (2) describe bird habitats within and surrounding the Baldwin Hills; (3) identify sensitive bird species and provide details regarding their distribution, abundance and habitat requirements; (4) describe changes in the avifauna over the period for which adequate records exist (roughly the past ~100 years); (5) evaluate the avifauna of the Baldwin Hills on a regional scale, with special reference to the Ballona Creek drainage; and (6) provide conservation recommendations for sensitive bird species, for bird habitat preservation and restoration, and for habitat connectivity with other natural areas.

METHODS

Field Work

For the current study I made 21 visits to the Baldwin Hills in 2000 on the following dates: 09 February (Hahn Park); 16 February (Kenneth Hahn State Recreation Area, hereafter KHSRA); 29 February (KHSRA); 17 March (KHSRA); 21 March (West Los Angeles College perimeter and KHSRA Park); 25 March (Vista Pacifica site and Holy Cross Cemetery); 27 March (KHSRA); 30 March (KHSRA), 1 April (Holy Cross Cemetery), 10 April (KHSRA), 26 April (KHSRA), 1 May (KHSRA), 6 May (Holy Cross Cemetery and KHSRA), 23 May (KHSRA, area south of Blair Hills), 26 May (below Baldwin Hills Dam site, off Cloverdale Ave.), 28 May (West Los Angeles College perimeter and Vista Pacifica site), 11 July (KHSRA), 18 August (KHSRA), 7 September (KHSRA), 12 October (The Village Green), and 10 November (KHSRA). On these visits I noted all bird species encountered, estimated numbers of each, and mapped point locations of sensitive species (including all coastal scrub obligates). Visits were designed to cover the entire range of habitats present in and adjacent to the Baldwin Hills and encompass a broad range of seasons. Because most natural habitats in the Baldwin Hills are small in extent and have convoluted boundaries, I did not attempt quantitative censuring by point counts (which would have included multiple habitat types). During special surveys for Cactus Wrens, commercially-

available song recordings of this species were played back several times at all accessible patches of *Opuntia* cactus over a minimum of a 3 minute period.

Historical Data Sources Checked

Specimen information was examined from the databases of the ornithological collections of the Natural History Museum of Los Angeles County (LACM), the Museum of Vertebrate Zoology at the University of California, Berkeley (MVZ), the University of California at Los Angeles (UCLA), and the University of Michigan Museum of Zoology (UMMZ). Data slips accompanying the oological (egg) collections of the Western Foundation of Vertebrate Zoology (WFVZ) in Camarillo, California, were also examined. These collection data have proven useful in characterizing the general avifauna of the Baldwin Hills and surrounding region, particularly in the period of greatest collecting effort (roughly 1890 to 1930); however, locality information associated with the specimens is usually too vague (e.g. "Los Angeles", "Culver City", "Baldwin Hills", "Del Rey") to draw conclusions about abundance, habitat requirements, breeding status and exact distribution and to compile a complete list of historically occurring species.

Raw data from the Los Angeles County Breeding Bird Atlas were also examined. The atlas (hereafter abbreviated LACBBA) is jointly sponsored by the Los Angeles Audubon Society, Natural History Museum of Los Angeles County, and seven other Audubon Society chapters in Los Angeles County. Atlas field work was conducted by volunteers from 1995 through 1999 in order to ascertain the breeding status of birds in each of 410 "blocks" within the county; a "block" is 1/6 of a standard USGS 7.5 minute topographic quadrangle (the Baldwin Hills comprise parts of four atlas blocks, "Beverly Hills 6", "Hollywood 5", "Venice 2", and "Inglewood 1"). I have also examined avifaunal reports from Baldwin Hills environmental inventories conducted in 1975 and 1977 (County of Los Angeles 1982) and a report on the biota of the Ballona Creek region conducted by personnel of the Natural History Museum of Los Angeles County (Schreiber 1981). In addition, I have drawn from my own personal field notes which cover fourteen dates during the years 1984, 1990, 1991, 1992, 1993, 1998 and 1999. Records were solicited from the local birdwatching community, and notes from several observers have been incorporated into this report (see acknowledgments).

ANALYSIS OF THE CURRENT BIOTA

Historical information and current field work yielded a list of at least 166 bird species occurring in the Baldwin Hills. Of these, 158 are native species and eight are established non-natives. Forty-one species (36 native) have been confirmed recently breeding in the Baldwin Hills, and another 18 species possibly breed currently, or formerly bred. Avian habitats and their representative species

are discussed below, followed by a discussion of sensitive species and historical changes in the avifauna. Detailed accounts for all species are then presented.

Habitats

The major habitats of the Baldwin Hills relevant to avian ecology are:

Coastal scrub:
dominated by California sagebrush (*Artemisia californica*) and coyote brush (*Baccharis pilularis*), with an admixture (depending on slope, soil, and disturbance) of elderberry (*Sambucus mexicana*), toyon (*Heteromeles arbutifolium*), California sunflower (*Encelia californica*), prickly-pear cactus (*Opuntia X occidentalis*), and various exotic annuals and perennials. Typical bird species include California Quail, Western Scrub-Jay, Bushtit, Cactus Wren (possibly extirpated), Bewick's Wren, Blue-gray Gnatcatcher (winter), Hermit Thrush (winter), California Thrasher (possibly extirpated), Phainopepla, Orange-crowned Warbler, Yellow-rumped Warbler (winter), Common Yellowthroat, Spotted Towhee, California Towhee, Rufous-crowned Sparrow (rare), Song Sparrow, Lincoln's Sparrow (winter), Golden-crowned Sparrow (winter), White-crowned Sparrow (winter), and Lesser Goldfinch. Many of these species also occur in landscaped parklands and residential areas. Photos taken early in the 1900s suggest that low coastal scrub was the dominant habitat throughout the Baldwin Hills at that time and the extent of such habitat has been greatly reduced in the intervening years.

Annual Grasslands:
dominated by exotic annuals such as various grasses, mustard (*Brassica* spp.), wild radish (*Raphanus*), various Asteraceae, etc. Typical bird species include Say's Phoebe (winter), American Pipit (winter), European Starling, Common Yellowthroat, California Towhee, Savannah Sparrow (winter), Song Sparrow, Lincoln's Sparrow (winter), White-crowned Sparrow (winter), Lazuli Bunting (spring), Red-winged Blackbird, Western Meadowlark (winter), House Finch, and Lesser Goldfinch. Some of these species (such as Say's Phoebe, American Pipit, and Western Meadowlark) are also found on open lawns, such as at Holy Cross Cemetery. Grasslands with significant representation of native perennial grass species are currently absent from the Baldwin Hills.

Riparian Woodland:
usually consisting of low willows (mainly Arroyo Willow, *Salix lasiolepis*) and Mule Fat (*Baccharis salicifolia*). Typical bird species include Black-chinned Hummingbird (summer), Allen's Hummingbird, Downy Woodpecker, Black Phoebe, Orange-crowned Warbler, Spotted Towhee, Song Sparrow, Black-headed Grosbeak (summer), Red-winged Blackbird, Bullock's Oriole (summer) , Lesser Goldfinch, and American Goldfinch.

Landscaped Park And Residential Areas:

often heavily wooded with exotic trees such as pines (*Pinus*), gums (*Eucalyptus*), pepper (*Schinus*), ash (*Fraxinus*), and silk-oak (*Grevillea*), and frequently with an "understory" of non-native shrubs, ground cover, or lawns; some trees and shrubs native to southern California (but not the Baldwin Hills) have also been planted in these areas, e.g. coast live oak (*Quercus agrifolia*), white alder (*Alnus rhombifolia*) and California sycamore (*Platanus racemosa*). Such habitat is well represented in the western portion of Kenneth Hahn State Recreation Area and in residential areas such as The Village Green (south side of Rodeo Ave. between La Brea Ave. and La Cienega Blvd.). Typical birds include Cooper's Hawk, American Kestrel, Spotted Dove, Mourning Dove, Anna's Hummingbird, Allen's Hummingbird, Downy Woodpecker, Northern Flicker (mainly fall and winter), Black Phoebe, Cassin's Kingbird, Western Kingbird (summer), Western Scrub-Jay, American Crow, Common Raven, Bushtit, Ruby-crowned Kinglet (winter), American Robin, Northern Mockingbird, European Starling, Cedar Waxwing (winter, spring), Yellow-rumped Warbler (winter), California Towhee, Song Sparrow, Dark-eyed Junco (winter), Black-headed Grosbeak (summer), Brewer's Blackbird, Brown-headed Cowbird, Hooded Oriole (summer), Bullock's Oriole (summer), House Finch, Lesser Goldfinch, American Goldfinch, and House Sparrow.

***Aquatic Habitats*:**
including various small ponds (including landscaped ponds at residential developments such as Raintree and Lakeside condominium complexes in Culver City), oil property sumps, and the fishing lake at Kenneth Hahn State Recreation Area. Typical birds include: Green Heron, Black-crowned Night-Heron, Mallard (breeds), Cinnamon Teal, Ruddy Duck, American Coot (breeds), Killdeer (breeds; also found on open lawns and fields), Black Phoebe (breeds; also in riparian areas, landscaped parklands and residential areas), and Northern Rough-winged Swallow (breeds in culverts, drain pipes, concrete channels).

Although I did not conduct quantitative censuses of birds by habitat, it is clear that the greatest densities of birds are usually found in the annual "grasslands"; the majority of these individuals are of common, widespread granivorous bird species (e.g.. House Finch, Lesser Goldfinch) which occur through most of the lowlands of Los Angeles County. For those species which are generally absent from the surrounding urbanized lowlands, the most important habitat within the Baldwin Hills is coastal scrub. In this habitat occur populations of several bird species which are absent from surrounding urban areas; these coastal scrub obligate species are discussed in detail below.

HISTORICAL CHANGES

As in all areas of the Los Angeles Basin, the avifauna of the Baldwin Hills has changed considerably over the past 200 years. However, our record of change is very sketchy prior to the early 1900s. Urbanization has resulted in

increased populations of several adaptable and introduced bird species. Conversely, loss and modification of natural habitats through a succession of factors, including (but not limited to) agriculture, grazing, changes in fire regimes, oil extraction, residential and commercial development, establishment of exotic plant species, and loss of large native predators, has resulted in population declines or local extinctions of many other bird species.

The loss of open grassland areas (or replacement of natural annual grasslands with exotic annuals and Mediterranean grasses) has had important impacts on the avifauna of the Baldwin Hills. There are historical accounts of Sandhill Cranes feeding in the grasslands of the Baldwin Hills (Willett 1941) and of the presence of large numbers of wintering geese, ducks and shorebirds in the complex of habitats from the Baldwin Hills to the Ballona Wetlands/Del Rey (now "Marina del Rey") area. Typical grassland species such as Burrowing Owl, Horned Lark and Western Meadowlark were probably common in the Baldwin Hills until residential development, oil extraction activities and introduced plants and predators became too prevalent; none of these species now breeds in the Baldwin Hills.

The draining of adjacent lowland wetlands ("cienegas") which formerly occurred in the basin to the north of the Baldwin Hills and in the lower Ballona and Centinela creek drainages has resulted in diminished bird diversity in the region, although specific records of wetland birds in this area (away from the Ballona Wetlands) are few. Perhaps concomitant with the loss of these wetlands was the reduction of riparian habitats in the area. Historical (1930s) records of breeding Blue Grosbeaks in the Baldwin Hills (Western Foundation of Vertebrate Zoology data) suggest that there was adequate habitat at that time for this species, a willow riparian obligate in the Los Angeles region.

Coastal scrub habitats have been reduced and their floristic composition has probably changed considerably over the last 100+ years in the Baldwin Hills. Several bird species requiring this habitat have likely been extirpated in recent years (Greater Roadrunner, Cactus Wren, and California Thrasher). The Cactus Wren was not recorded during surveys in 2000, although most suitable habitat areas (patches of *Opuntia* cactus) were visited at least twice and tape playbacks were used; the last certain sightings occurred during Los Angeles County Breeding Bird Atlas field work in Kenneth Hahn State Recreation Area and in the area east of West Los Angeles College. The Rufous-crowned Sparrow is known only from recent (1999-2000) sightings of 1-2 individuals; these may represent the last of a remnant population; alternatively, they could be recent colonizers or seasonal wanderers (although this species is normally sedentary). There are no certain historical or recent records of the California Gnatcatcher for the Baldwin Hills, but this threatened species is known from the early 1900s at "Redondo" and "Port Ballona" and may well have occurred in the Hills.

LISTED/SENSITIVE BIRD SPECIES

Listed species (State or Federal Threatened or Endangered status) were not observed in the study area, but some may potentially occur, or are known to have occurred in recent years. These are: Peregrine Falcon (State Endangered; recent records flank the Baldwin Hills, e.g. at Marina del Rey and Exposition Park), Cactus Wren (coastal populations are candidates for Federal listing; a significant population in the Baldwin Hills occurred at least through the early 1990s and there are well-documented records to at least 1996); California Gnatcatcher (Federal Threatened; historical records in similar habitat in nearby areas; possible records for Baldwin Hills in 1970s to about 1980); and Tricolored Blackbird (being proposed for State listing; winter flocks have occurred in some recent years at Holy Cross Cemetery). Several California Bird Species of Special Concern occur in the Baldwin Hills at least as transients; the species on the published Special Concern list (Remsen 1977) or identified as strong candidates for the updated list (being developed by the California Department of Fish and Game and due out in 2001) which occur (or historically occurred) in the Baldwin Hills are: American Bittern, Bufflehead, Northern Harrier, Sora, Burrowing Owl, Belted Kingfisher, Olive-sided Flycatcher, Horned Lark (subspecies *actia*), Purple Martin, California Gnatcatcher, Swainson's Thrush, Yellow Warbler, Yellow-breasted Chat, Blue Grosbeak, Tricolored Blackbird, and Yellow-headed Blackbird. The status of these species is given in the species accounts below.

For closer examination I identified a series of eight "coastal scrub obligate" or near-obligate bird species whose distributions in and around the Los Angeles basin are largely determined by the availability of this and other similar natural habitats, and for which there is direct or circumstantial evidence that they have occurred in the Baldwin Hills. These species do not maintain populations within the urban areas which surround the Baldwin Hills. These species are:

California Quail *Callipepla californica*
Greater Roadrunner *Geococcyx californianus*
Cactus Wren *Campylorhynchus brunneicapillus*
Bewick's Wren *Thryomanes bewickii*
California Gnatcatcher *Polioptila californica*
California Thrasher *Toxostoma redivivum*
Spotted Towhee *Pipilo maculatus*
Rufous-crowned Sparrow *Aimophila ruficeps*

Obligate coastal scrub species (notably Bewick's Wren and Spotted Towhee) were surveyed during the present study and locations of singing males or observed pairs were mapped (Fig.9). Approximately 32 Bewick's Wren and 19 Spotted Towhee territories were mapped, and (accounting for unsurveyed areas on oil property) the total number of territories probably does not exceed 40-45 for

the wren and 25 for the towhee. California Quail do not maintain territories analogous to those of the wren and towhee, and I have therefore mapped localities where individuals or flocks were found (Fig. 9). The Rufous-crowned Sparrow was found at only one site (in Kenneth Hahn State Recreation Area; see Fig. 9), and no Cactus Wrens, California Gnatcatchers, California Thrashers or Greater Roadrunners were encountered during field work in the year 2000.

Birds of prey often receive special attention in faunal review documents because of their generally large size and visibility, low population sizes, and position high in the food chain. Recognizing that the public has a disproportionate interest in birds of prey, I have recorded all observation of these birds on field visits, and detailed species accounts are provided below. Breeding or possibly breeding diurnal raptor species in the Baldwin Hills include: White-tailed Kite (possibly nests); Cooper's (bred in 1999 at nearby Village Green and presumably elsewhere in the Baldwin Hills); Red-shouldered Hawk (uncommon breeding resident in residential and park plantings such as Raintree, Lakeside Villas); Red-tailed Hawk (common resident, with probably 3-4 breeding pairs); and American Kestrel (common resident, with several breeding pairs). Non-breeding visitors are: Osprey (rare transient), Northern Harrier (rare transient), Sharp-shinned Hawk (fairly common migrant and winter visitor); Merlin (uncommon migrant and winter visitor, September to April); and Peregrine Falcon (presumed to be an uncommon visitor, based on frequent sightings at Playa del Rey, mid-Wilshire area, and Exposition Park).

The present study did not obtain direct information on owls, but the Great Horned Owl is known to be an uncommon resident. The Burrowing Owl was formerly a resident and may still be an occasional transient or winter visitor; this species was resident in Playa del Rey until the early 1980s. Records of Western Screech-Owls prior to the mid-1970s (County of Los Angeles 1982) lack documentation.

POSSIBLE CAUSES OF POPULATION DECLINES AND LOCAL EXTINCTIONS

Population declines and possible extirpation from the Baldwin Hills of certain coastal scrub and grassland species (e.g. Greater Roadrunner, Burrowing Owl, Loggerhead Shrike, Cactus Wren and California Thrasher) are almost certainly due to the increasing isolation of the Baldwin Hills from other areas of natural habitat. Tracts of natural habitat surrounded by urban and suburban development are in essence biological islands for organisms with low vagility such as reptiles and amphibians, many small mammals, and permanent resident coastal sage and chaparral birds (Soule et al. 1988). Populations within such "islands" are especially prone to local extinctions if habitat linkages to large tracts of similar habitat are absent, which is the case in the Baldwin Hills. Population sizes of many birds in the Baldwin Hills have been diminished by habitat loss or

modification (through oil extraction activities, urbanization, and exotic plant introductions), and these low populations are subject to extinction through natural stochastic processes.

Another important factor in the decline of many vertebrate species within isolated tracts of natural coastal scrub habitat is the impact of an unnatural constellation of predators. Where large (apex) predators have been lost (as is the case with coyotes in the Baldwin Hills), a suite of smaller predators which prey heavily on birds and other small vertebrates can become unnaturally common. In the Baldwin Hills these "mesopredators" (Soule et al. 1988) include native gray foxes, skunks, raccoons, and corvids (crows, ravens and jays), as well as non-natives such as Eastern Fox Squirrel, opossum, and feral domestic cats and dogs. The native mesopredators often reach high population densities because they are "subsidized" by food provided by humans (garbage, pet food).

Without detailed studies on predation rates, reproductive success and adult survival of Baldwin Hills, we cannot be certain that mesopredators are the major cause of populations declines, but such patterns have been demonstrated elsewhere (Soule et al. 1988).

RELATIONSHIP OF THE BALDWIN HILLS TO SURROUNDING HABITATS

The avifauna of the Baldwin Hills bears some resemblance to that of natural areas to the north (Santa Monica Mountains) and the Palos Verdes Peninsula to the south. These areas are currently completely isolated from one another by urbanization. The Santa Monica Mountains contain more complex chaparral and woodland habitats, and harbor numerous woodland bird species which have never occurred (or at least bred) in the Baldwin Hills. It also appears that certain bird species typical of coastal scrub and chaparral habitats (notably Oak Titmouse and Wrentit) were never present in the Baldwin Hills, indicating some degree of habitat isolation even prior to urbanization of the Los Angeles Basin. Such isolation is even more typical of the Palos Verdes Peninsula, which also lacks species such as Wrentit and Oak Titmouse (Bradley 1980). Coastal scrub habitats in the Baldwin Hills were probably separated from those of the Palos Verdes Peninsula, Santa Monica Mountains, and hills of the eastern Los Angeles Basin by other habitats including freshwater marshes, grasslands, and xeric alluvial scrub. Riparian corridors can serve as linkages between upland areas of coastal scrub (for example, Wrentits have occurred historically in the lower San Gabriel River drainage), but such corridors may not have existed in sufficient form to link the Baldwin Hills to other upland areas.

The Ballona Wetlands, approximately 6 km west of the Baldwin Hills, form a complex of moderately to highly disturbed salt marsh, freshwater marsh, grassland, and coastal scrub habitats (Schreiber 1980). On the bluffs to the south of these wetlands is a small amount of remnant coastal prairie, and this

unique remnant of coastal prairie habitat continues to the south along the El Segundo Dunes (Mattoni 1993). Such coastal prairie habitat was once far more widespread along a dune system that stretched from the Ballona region to the Palos Verdes Peninsula, and the coastal sage habitats of Ballona, the Baldwin Hills, and the Palos Verdes Peninsula were thought to have been contiguous prior to agricultural and urban development (Mattoni 1993). Bird species currently shared between the Ballona Wetland region and the Baldwin Hills include a number of adaptable "weedy" species, but also some grassland species (e.g. Western Meadowlark) and birds of prey (e.g. White-tailed Kite).

Since the Baldwin Hills represent a sort of ecological island surrounded by urbanized lowlands, it is important to emphasize that a number of bird species are supported by habitats within the Baldwin Hills but are essentially absent from the surrounding areas. Species breding within the Baldwin Hills that do not breed in the urbanized areas surrounding the hills are: California Quail, Costa's Hummingbird (breeds?), Cassin's Kingbird, Western Kingbird (breeds?), Barn Swallow, Cactus Wren (extirpated?), Bewick's Wren, California Thrasher (extirpated?), Phainopepla, Orange-crowned Warbler, Common Yellowthroat, Spotted Towhee, California Towhee, Rufous-crowned Sparrow (breeds?), Song Sparrow, Black-headed Grosbeak, and Lazuli Bunting (breeds?).

CONSERVATION RECOMMENDATIONS

The most important issue impacting the diversity of native birds in the Baldwin Hills is the continuing loss or modification of natural coastal scrub habitats. Continued degradation and removal of coastal scrub habitats will ensure the loss of several bird species on the verge of elimination (e.g. Cactus Wren, California Thrasher, Rufous-crowned Sparrow), if such species even still occur in the hills. It will also likely cause the ultimate loss of even relatively common scrub obligates (California Quail, Bewick's Wren, Spotted Towhee) if scrub habitats become too fragmented and reduced in total area. For preservation of the biodiversity of coastal scrub habitats, a vigorous program of habitat protection and restoration should be initiated; restoration of extensive areas of coastal scrub could be accomplished through the removal of invasive exotic plants, appropriate soil treatments, proper fire regimes, and manual planting. An important sub-component of coastal scrub is prickly-pear cactus (*Opuntia*); restoration of numerous significant (>100 m^2) patches of prickly-pear is critical to the continuing presence or reintroduction of Cactus Wrens.

Also of importance is the loss of natural riparian areas and the replacement of natural grasslands by exotic annuals. Restoration of these habitat types could enhance populations of several native bird species, in some cases at the expense of abundant, widespread, and sometimes undesirable

species such as European Starling, Brown-headed Cowbird, American Crow, and House Finch.

Both feral cats and free-ranging feral dogs were commonly noted in KHSRA and elsewhere in the Baldwin Hills during current field work. An intensive, ongoing program of removal of such feral predators is essential to the preservation of populations of ground-nesting birds as well as native small mammals and reptiles. The natural recolonization or active reintroduction of coyotes would also contribute to the goal of eliminating exotic predators and superabundant native mesopredators in the Baldwin Hills.
Connectivity between coastal wetlands and adjacent upland habitats can be vital to the preservation of certain bird populations of coastal wetlands (Zembal1993). These connections allow large predators (in our area mainly the coyote) to occupy coastal habitats where they can control medium-sized predators (e.g. skunks, exotic red foxes, and feral cats) which take a heavy toll on ground-nesting birds. Coyotes formerly occurred in the Baldwin Hills, but currently appear to be absent. Their recolonization or reintroduction is feasible and could potentially be aided by the establishment of a corridor from the Baldwin Hills to the Ballona wetlands (along the existing Ballona Creek channel).

Should habitat preservation and restoration be considered a priority in the planning process for the Baldwin Hills, the effectiveness of such habitat in supporting wildlife must be monitored. Bird monitoring schemes generally involve repeatable censuses such as point counts, linear transects or area searches; a regular program of appropriate methodologies should be implemented for the Baldwin Hills. The most intensive monitoring involves MAPS (Monitoring Avian Productivity and Survival) stations which combine constant-effort mist-netting (for capture and release), point counts, and nest searches. Such programs are labor-intensive and require considerable training, but might be possible in a region such as greater Los Angeles with its many universities, museums, and bird clubs. Finally, consultation with the United States Fish and Wildlife Service and California Department of Fish and Game about the possibility of reintroduction of bird species such as the California Gnatcatcher, Cactus Wren, and Greater Roadrunner should be initiated, although such reintroductions, if deemed appropriate, could not occur until habitat preservation and restoration occurred.

SPECIES ACCOUNTS

The accounts below include all bird species recorded within the Baldwin Hills. Most species are treated briefly, but expanded accounts are provided for "coastal scrub obligate" species and all sensitive species, include California Bird Species of Special Concern, Threatened and Endangered species, and other species of management concern. Detailed accounts for raptors, potentially invasive non-native species, and selected other species are also provided.

Species in brackets [] have not been confirmed as a component of the Baldwin Hills avifauna, but are deemed "likely" to have occurred, or occur in nearby areas and are discussed for purposes of comparison.

ORDER PODICIPEDIFORMES

Family Podicipedidae (grebes)

Pied-billed Grebe (*Podilymbus podiceps*). Scarce non-breeding visitor to open waters, e.g. one observed on the fishing lake at KHSRA 16 December 1993 (Kimball L. Garrett).

Eared Grebe (*Podiceps nigricollis*). One was on the fishing lake at KHSRA 10 November 2000 (Kimball L. Garrett).

ORDER PELECANIFORMES

Family Phalacrocoracidae (cormorants)

Double-crested Cormorant (*Phalacrocorax auritus*). Probably a scarce non-breeding visitor to open water (e.g. lake at KHSRA), but specific records lacking; this species has increased greatly in the Los Angeles region in the past 10 years

ORDER CICONIIFORMES

Family Ardeidae (herons)

[American Bittern (*Botaurus lentiginosus*). Possibly a former non-breeding visitor to marshy areas and ponds; a specimen was taken 26 September 1925 at Inglewood Cemetery, just southeast of the Baldwin Hills (LACM collections). Bitterns require extensive marshes of *Scirpus* or *Typha*, a habitat lacking in the Baldwin Hills but formerly widespread in adjacent lowlands]

Great Blue Heron (*Ardea herodias*). Uncommon non-breeding visitor to ponds. Four specimens were collected by personnel of the Inglewood Cemetery from March 1925 through September 1926, presumably to control predation on ornamental fish (LACM collections).

Great Egret (*Ardea alba*). Probably a scarce non-breeding visitor to ponds, though specific recent records are lacking. This species occasionally visits urban parks (e.g. Exposition Park), and is a common visitor to the Ballona Wetlands.

Snowy Egret (*Egretta thula*). Scarce non-breeding visitor to ponds. One was at the fishing lake at KHSRA on 10 November 2000 (Kimball Garrett).

Green Heron (*Butorides virescens anthonyi*). Uncommon visitor to ponds. A nest with young was found in planted deciduous trees at the Raintree condominium complex in Culver City in spring 1995 (E. Osgood, LACBBA data). One collected at the Inglewood Cemetery 19 May 1925 (LACM collections).

Black-crowned Night-Heron (*Nycticorax nycticorax*). Uncommon non-breeding visitor to ponds. Nine specimens were taken at the Inglewood Cemetery between 20 March 1925 and 15 June 1928 (LACM collections).

Family Cathartidae (New World vultures)

Turkey Vulture (*Cathartes aura*). Scarce transient over open areas. A group of spring migrants noted 15 March 1977 (County of Los Angeles 1982).

ORDER ANSERIFORMES

Family Anatidae (ducks, geese)

Canada Goose (*Branta canadensis*) According to Willett (1941) "flocks...wintered on the Baldwin Hills" around the 1880s; this species no longer winters on the Baldwin Hills, but occasional flocks of transients might occasionally be found over the area.

American Wigeon (*Anas americana*). Scarce winter visitor to ponds adjacent to lawns and other grazing areas; e.g. two on the fishing pond at KHSRA on 10 November 2000 (Kimball L. Garrett).

Mallard (*Anas platyrhynchos*). Feral birds and, undoubtedly, some migratory birds from wild populations which have "tamed down" and joined the feral population, are common on the ponds at KHSRA, and occasional at other bodies of water within the Baldwin Hills. Downy young noted annually, e.g. 31 March 1995 at Raintree condominium complex, 15 April 1995 at KHSRA, and 18 June 1995 at Holy Cross Cemetery (LACBBA data).

Mallard x Pintail hybrid, (*Anas platyrhynchos x A. acuta*). Two identical males were on the fishing pond at KHSRA on 16 December 1993 (Kimball L. Garrett; photographed).

Cinnamon Teal (*Anas cyanoptera*). Uncommon transient on ponds; specific recent records lacking.

Northern Shoveler (*Anas clypeata*). Scarce transient on ponds; specific recent records lacking.

Northern Pintail (*Anas acuta*). Scarce winter visitor; e.g. one on the fishing pond at KHSRA 10 November 2000 (Kimball L. Garrett).

Green-winged Teal (*Anas crecca carolinensis*). Rare transient and winter visitor on ponds; specific recent records lacking.

Canvasback (*Aythya valisineria*). Probably a scarce transient and winter visitor on ponds; specific recent records lacking.

Ring-necked Duck (*Aythya collaris*). Uncommon to fairly common winter visitor on the fishing pond at KHSRA, e.g. 15 on 24 November 1998 (Kimball L. Garrett).

Hooded Merganser (*Lophodytes cucullatus*). One individual was present in the late 1980s on the fishing pond at KHSRA (Jonathan K. Alderfer).

Ruddy Duck (Oxyura jamaicensis). Uncommon winter visitor on ponds.

ORDER FALCONIFORMES

Family Accipitridae (hawks, eagles)

Osprey (*Pandion haliaetus*). Probably a rare fall migrant; e.g. one flying over KHSRA 7 September 2000 (KLG).

White-tailed Kite (*Elanus leucurus*). Uncommon non-breeding visitor, and possible rare breeder. Records include one observed 29 November 1947 (Ralph Mall, Audubon Field Notes 2:24) and single birds at KHSRA 28 December 1998 (Daniel S. Cooper) and 21 March 2000 (Kimball L. Garrett). A pair observed in the southern portion of KHSRA 10 June 1997 (LACBBA data) suggests possible nesting in the Baldwin Hills. Kites are regularly observed in the Ballona Wetlands (Schreiber 1980).

Northern Harrier (*Circus cyaneus*). Scarce transient over grasslands and other open areas; not recorded during field work in 2000. This species is encountered uncommonly at the Ballona Wetlands during the winter (Schreiber 1981).

Sharp-shinned Hawk (*Accipiter striatus*). Fairly common transient and winter visitor, present mainly October through early April; found in residential areas as well as natural open habitats, but requires some trees and brush.

Cooper's Hawk (*Accipiter cooperii*). Fairly common resident (most numerous from September through April when the resident population is augmented by

transients and wintering individuals). Breeds in tall shade trees, e.g. at The Village Green just north of the Baldwin Hills.

Red-shouldered Hawk (*Buteo lineatus*). Uncommon resident where groves of exotic trees are present (e.g. KHSRA). At least occasional nesting likely where abundant tall trees have been planted, but LACBBA failed to confirm breeding in or adjacent to the Baldwin Hills.

Red-tailed Hawk (*Buteo jamaicensis*). Fairly common resident, with numbers possibly augmented from September through April by migrant and wintering individuals. Field work during 2000 suggested that 3-4 pairs probably breed within and adjacent to the Baldwin Hills; LACBBA data show at least three confirmed and one additional probable breeding pairs in the area. It is not uncommon to see 4-6 birds in the air at once over the two main north-south ridges of the Baldwin Hills. Noted as nesting in eucalyptus groves by County of Los Angeles (1982).

[Rough-legged Hawk (*Buteo lagopus*). An undated report of this scarce far northern winter visitor cited by L. A. County Nature Center personnel (County of Los Angeles 1982) should be disregarded.]

Family Falconidae (falcons)

American Kestrel (*Falco sparverius*). Common resident in open habitats; recently fledged young were noted at KHSRA 20 July 1999 (LACBBA data).

Merlin (*Falco columbarius*). Uncommon winter visitant and transient, mainly from October into April. A pale bird observed in Ladera Heights on 3 November 2000 (Richard Barth) showed characters of the prairie subspecies *richardsoni*; most other records pertain to the nominate subspecies (e.g. one at West Los Angeles College on 21 March 2000; Kimball L. Garrett).

Peregrine Falcon (*Falco peregrinus*). Probably a scarce visitor from surrounding areas. This species, until recently considered Federally Endangered and still listed as such by the State of California, occurs regularly at the Ballona Wetlands, along the lower Los Angeles River, and around downtown Los Angeles (where a pair has nested intermittently over the past 15+ years). It is presumably birds from these areas that occasionally pass through the Baldwin Hills, although pure transients might sometimes occur as well.

ORDER GALLIFORMES

[Family Phasianidae (pheasants and partridges)]

[Ring-necked Pheasant (*Phasianus colchicus*). An Asiatic species formerly established as a game bird in pasturelands and agricultural fields in portions of

the Los Angeles Basin; recent sightings from 1983 in Fox Hills (William Principe) and in spring 2000 in the same area (Don Sterba) may pertain to birds having escaped locally rather than remnants of an established breeding population]

Family Odontophoridae (New World quail)

California Quail (*Callipepla californica*). Uncommon resident in coastal scrub habitats and adjacent open areas. Most of the recent sightings come from the upper/eastern portion of KHSRA and the area east of West Los Angeles College. A group of 18-20 birds, including young of the year was in KHSRA on 2 October 2000 (Valerie Anderson). This species, which forages and nests on the ground, can be highly sensitive to the impacts of exotic predators and its continuing presence in the Baldwin Hills is therefore in jeopardy. Quail are absent from the surrounding urbanized lowlands. They were considered "common" in the Ballona Wetlands area and adjacent uplands at least through the 1970s (Schreiber 1981); however, the species now appears to be very scarce or perhaps even extirpated from the Ballona region (Robert Shanman, pers. comm.)

ORDER GRUIFORMES

Family Gruidae (cranes)

Sandhill Crane (*Grus canadensis*). Willett (1941) noted that flocks of this species "wintered on the Baldwin Hills" around the 1880s; he wrote that "their wintering grounds [were] taken over by real estate subdivisions and oil fields."

Family Rallidae (rails, coots)

American Coot (*Fulica americana*). Fairly common visitor to ponds. Small numbers breed along the marshy borders of the fishing lake at KHSRA (confirmed by LACBBA).

ORDER CHARADRIIFORMES

Family Charadriidae (plovers)

Black-bellied Plover (*Pluvialis squatarola*) A flock of 35 was on lawns at Holy Cross Cemetery on 28 October 1984 (KLG); this migratory shorebird is common on the Ballona Wetlands to the west, but rarely occurs farther inland in the Los Angeles Basin.

Killdeer (*Charadrius vociferus*). Fairly winter visitor around lawns, temporary ponds, artificial lakes. A few pairs remain to breed, e.g. a pair with a downy young at KHSRA on 15 April 1995 and other confirmations during LACBBA field work.

Family Scolopacidae (sandpipers)

Greater Yellowlegs (*Tringa melanoleuca*). Two were at the fishing pond at KHSRA on 10 November 2000 (Kimball L. Garrett).

Spotted Sandpiper (*Actitis macularia*). Probably a scarce transient through the area, with individuals stopping on the shores of ponds.

Whimbrel (*Numenius phaeopus*). Scarce spring migrant on lawns, open field. Noted in April 1947 and April 1948 by R. Mall (*Audubon Field Notes*).

Least Sandpiper (*Calidris minutilla*). Uncommon transient and winter visitor along Ballona Creek adjacent to the Baldwin Hills and probably also on the shores of ponds within the hills.

Long-billed Dowitcher (*Limnodromus scolopaceus*). One observed on a temporary rain pond on 4 August 1975 (County of Los Angeles 1982).

[Common Snipe (*Gallinago gallinago*). Probably a scarce transient and winter visitor in the wet, grassy borders of ponds.]

Family Laridae (gulls, terns)

Ring-billed Gull (*Larus delawarensis*). Probably an uncommon visitor to ponds, mainly from August through April. Greatly outnumbered by California and Western gulls.

California Gull (*Larus caifornicus*). Common winter visitor (mainly October through March), commuting over the Baldwin Hills area between roosting sites along the shore and foraging sites at inland parks, schoolyards, and refuse dumps.

Western Gull (*Larus occidentalis*). Fairly common resident, often seen in flight over the Baldwin Hills and foraging where garbage accumulates (parks, schoolyards, shopping centers). This normally marine species has greatly increased in the urban areas of the Los Angeles basin in the past 10-15 years.

ORDER COLUMBIFORMES

Family Columbidae (pigeons, doves)

Rock Dove or Feral Pigeon (*Columba livia*). Common resident. Originally native to Eurasia, this species has spread as a human commensal and now occupies a cosmopolitan range. It occurs in urban areas, and is abundant in the urban lowlands surrounding the Baldwin Hills; smaller numbers occur in the

parklands and natural areas of the Hills. Breeding widely confirmed during LACBBA field work.

Band-tailed Pigeon (*Columba fasciata*). Uncommon and sporadic visitor, possibly breeds in residential areas with tall trees (display flights noted in June 1996 near the intersection of Rodeo Rd. and Hauser Ave). Noted foraging in native elderberry shrubs in KHSRA in June 1999.

Spotted Dove (*Streptopelia chinensis*). Fairly common resident in residential areas and KHSRA. Breeding widely confirmed during LACBBA field work.. This species was introduced to the Los Angeles area from southeastern Asia around 1915 and has spread over most urban regions, although sharp population declines have been noted recently in many areas (Garrett and Walker *in press*).

Mourning Dove (*Zenaida macroura*). Common breeding resident in all habitats; breeding widely confirmed by LACBBA data. Numbers are augmented in fall and winter by migrant birds.

ORDER PSITTACIFORMES

Family Psittacidae (parrots)

[Budgerigar (*Melopsittacus undulatus*). Escapees sporadically seen in park areas, e.g. one with starlings at KHSRA on 17 March 2000 (Kimball L. Garrett).]

Red-masked Parakeet (*Aratinga erythrogenys*). Noted flying over KHSRA in 2000 by Richard Barth; this South American species and the similar and closely related Mitred Parakeet (*A. mitrata*) have established populations in the greater Los Angeles area and are frequently seen in the Los Angeles Basin (Garrett 1997). A Northern Mockingbird in KHSRA was heard giving an imitation of a Red-masked or Mitred parakeet on 1 May 2000 (Kimball L. Garrett).

Yellow-chevroned Parakeet (*Brotogeris chiriri*). A South American species now established as a fairly common resident in the Los Angeles Basin (Garrett 1997); frequently seen around the base of the Baldwin Hills (e.g. Fox Hills and the Exposition Blvd. corridor), and small numbers often noted flying over the hills (e.g. at KHSRA).

ORDER CUCULIFORMES

Family Cuculidae (cuckoos)

Greater Roadrunner (*Geococcyx californianus*) "Possible tracks" were noted on 29 July 1990 west of the intersection of La Cienega and Stocker (Kimball L. Garrett). There are no specific historical records of this species from the Baldwin Hills, but roadrunners were widespread in the Los Angeles Basin and

surrounding hills prior to urbanization and a small population might have remained until recently in the study area. Grinnell (1898) termed this species a "common resident of the brush and cactus-covered washes and mesas." Bradley (1980) considered it uncommon and declining on the Palos Verdes Peninsula. The WFVZ contains egg sets taken between 1898 and 1915 in San Pedro, "near Redondo Beach", "Angeles Mesa", and "Los Angeles". Specimens were taken 25 February 1928 at the Inglewood Cemetery just southeast of the Baldwin Hills and 29 December 1908 at Playa del Rey (LACM collections).

ORDER STRIGIFORMES

Family Tytonidae (barn owls)

Barn Owl (*Tyto alba*). Probably an uncommon permanent resident in residential areas. A downy young was found on Nicolet St., just east of KHSRA, on 5 May 1996, confirming breeding in residential habitats in the Baldwin Hills. A specimen was taken 3 October 1925 at Inglewood Cemetery (LACM collections).

Family Strigidae (typical owls)

[Western Screech-Owl (*Otus kennicottii*). Undated records cited in environmental reports (County of Los Angeles 1982) are best disregarded; this species breeds in foothill areas as close as the Santa Monica Mountains and Elysian Park, but is not currently found in the urbanized Los Angeles Basin and is unrecorded from the Palos Verdes Peninsula (Bradley 1980)].

Great Horned Owl (*Bubo virginianus*). Uncommon resident. Noted in eucalyptus groves west of La Cienega by County of Los Angeles (1982). At least one pair was noted during Breeding Bird Atlas field work, but breeding was not confirmed.

Burrowing Owl (*Athene cunicularia*). Former resident, but now extirpated as a breeding species in the Los Angeles Basin. Occasional transients may appear, but there are no specific recent records for the Baldwin Hills proper; recent salvaged specimens nearby come from Culver City 17 November 1994 and 8 December 1981 (LACM collections). Former breeding localities as documented by Western Foundation of Vertebrate Zoology egg collections include "near Culver City" in 1934 and numerous additional sites in the Los Angeles basin. Grinnell (1898) called it an "abundant resident on the lowlands and mesas" of the coastal slope of Los Angeles County; it occurred in the Ballona Wetlands/Westchester area at least into the 1980s (Schreiber 1981). The decline of this species may be traced to loss of open field habitat, a decline in burrowing squirrels (which provided nest burrows), and probably a reduction in the owl's prey base.

ORDER CAPRIMULGIFORMES

Family Caprimulgidae (nightjars)

Lesser Nighthawk (*Chordeiles acutipennis*). Noted by County of Los Angeles (1982) as being an uncommon summer visitor, arriving in May. However, this species was not detected in the Baldwin Hills during current field work or during the 1995-1999 Los Angeles County Breeding Bird Atlas project; it has virtually disappeared as a breeding species on the coastal slope of Los Angeles County, being limited now mainly to alluvial scrub at the mouths of major canyons of the San Gabriel Mountains. It is recorded only as a casual spring and fall transient on the Palos Verdes Peninsula (Bradley 1980). Formerly it was an "abundant summer resident" of "mesas and dry washes" on the coastal slope (Grinnell 1898).

Common Poorwill (*Phalaenoptilus nuttallii*). Scarce fall migrant; one was in KHSRA on 12 October 2000 (Beth Nordeen, LACM Education staff), and another was there on 29 October (Richard Barth). There is no indication that this species breeds in the Baldwin Hills.

ORDER APODIFORMES

Family Apodidae (swifts)

Vaux's Swift (*Chaetura vauxi*). Fairly common spring (April-May) and fall (September-October) transient; occasionally noted later in fall and winter, e.g. 2 at KHSRA 24 November 1998 (Kimball L. Garrett).

White-throated Swift (*Aeronautes saxatalis*). Year round visitor, with numbers varying with season and weather conditions; breeds in artificial situations (such as freeway underpasses) in some of the surrounding urban infrastructure.

Family Trochilidae (hummingbirds)

Black-chinned Hummingbird (*Archilochus alexandri*). Fairly common summer visitor and transient, mainly April through early September); breeding confirmed by LACBBA data (also breeds in sycamores in landscaped areas such as the Village Green, Raintree condominium complex, and KHSRA).

Costa's Hummingbird (*Calypte costae*). Uncommon transient and winter visitor in coastal scrub and residential areas. Considered "possibly" breeding in the northwestern portion of the Baldwin Hills during LACBBA work. This species breeds in arid scrub habitats, but non-breeding birds may also visit residential and landscaped park areas.

Anna's Hummingbird (*Calypte anna*). Abundant resident, breeding in parklands, residential areas, coastal scrub and willows. Breeding widely confirmed by LACBBA. This species and hummingbirds in general are attracted to many exotic plant species, including winter-flowering *Eucalyptus* spp., bottlebrush, and tree tobacco. Favored flowering shrubs of coastal scrub (e.g. *Salvia*, *Ribes*) are scarce or absent in the Baldwin Hills, although hummingbirds are numerous within coastal scrub areas.

Rufous Hummingbird (*Selasphorus rufus*). Uncommon transient, mainly in March and April (e.g. two adjacent to West Los Angeles College 21 March 2000; Kimball L.Garrett); probably migrates through the area in fall (July-September) also, but most individuals at that season are indistinguishable from the resident Allen's Hummingbird.

Allen's Hummingbird (*Selasphorus sasin*). Common resident in residential areas, parklands, coastal scrub. Breeding confirmed by LACBBA. This species has undergone a dramatic increase in range and population size in the region (Mitchell 2000); it was formerly limited as a breeder to the Palos Verdes Peninsula (and Channel Islands), and to the coast from Ventura County northward (with migrants from that population passing through from late January to March and again from late June to September).

ORDER CORACIIFORMES

Family Alcedinidae (kingfishers)

Belted Kingfisher (*Ceryle alcyon*). Uncommon non-breeding visitor around ponds. One was Holy Cross Cemetery 11 October 1993 (Kimball L. Garrett). Seven specimens were taken at the Inglewood Cemetery between 22 August 1925 and 29 March 1928, presumably to control predation on ornamental fish (LACM collections).

ORDER PICIFORMES

Family Picidae (woodpeckers)

Red-naped Sapsucker (*Selasphorus nuchalis*). Rare late fall visitor (one noted in 1999 in KHSRA by Richard Barth). Another bird, thought to be an intergrade between this species and the next, was at KHSRA 8 March to 1 April 1999 (Richard Barth).

Red-breasted Sapsucker (*Sphyrapicus ruber*). Uncommon fall and winter visitor, e.g. one at Holy Cross Cemetery on 11 October 1993 (Kimball L. Garrett).

Nuttall's Woodpecker (*Picoides nuttallii*). A female was at The Village Green on 15 September 2000 (Richard Barth), and 1-2 birds were present there through the remainder of fall 2000 (KLG). Primarily an inhabitant of oak woodland and mixed oak-conifer, oak-riparian, and oak-chaparral, this species is generally absent from heavily urbanized areas, but does occur locally within the Los Angeles Basin.

Downy Woodpecker (*Picoides pubescens*). Uncommon resident, mainly in well-planted residential areas in and around the Baldwin Hills.

Northern Flicker (*Colaptes auratus*). Common transient and winter visitor in all habitats. Considered resident in late 1970s environmental inventory (County of Los Angeles 1982), but recent nesting records lacking. The presence of a single bird 1 August 1996 in the northwestern Baldwin Hills near West Los Angeles College (LACBBA data) suggests the possibility of recent nesting (fall transients normally do not appear until September; Garrett and Dunn 1981). Our birds are "Red-shafted Flickers", although a small percentage of wintering and transient brids show signs of intergradation with eastern/boreal "Yellow-shafted" birds.

ORDER PASSERIFORMES

Family Tyrannidae (tyrant flycatchers)

Olive-sided Flycatcher (*Contopus cooperi*). Scarce transient; e.g. one noted in a eucalyptus grove southwest of the intersection of Fairfax and Stocker 11 May 2000 (Kimball L. Garrett).

Western Wood-Pewee (*Contopus sordidulus*). Uncommon spring (May) and fall (September) transient.

Willow Flycatcher (*Empidonax traillii*). Uncommon spring (May-June) and fall (August-September) transient, e.g. single birds on 30 May and 13 June 1999 at KHSRA (Richard Barth); these birds represent migrants of the northerly subspecies *brewsteri*, rather than the Endangered southwestern subspecies *extimus*.

Hammond's Flycatcher (*Empidonax hammondii*). Uncommon spring transient, e.g. 19 April 1991 at the "Vista Pacifica" hill property (KLG); probably occurs in fall also.

Gray Flycatcher (*Empidonax wrightii*). One was on the "Vista Pacifica" hill property on 19 April 1991 (KLG).

Pacific-slope Flycatcher (*Empidonax difficilis*). Fairly common spring (March-May) and fall (September-October) transient. An apparently territorial bird present in late May 1995 in willows at the northeast corner of Holy Cross

Cemetery (LACBBA data) suggests possible breeding in riparian habitat, although the possibility that this bird was a late spring transient cannot be ruled out. One winter record, a bird in a residential area along Don Miguel Dr., east of KHSRA, 2-3 December 2000 (Eric Brooks, Kimball L. Garrett).

Black Phoebe (*Sayornis nigricans*). Common resident in parklands, residential areas, and around ponds. This is one of the most urban adapted of our native birds, breeding throughout the Los Angeles basin; in the Baldwin Hills breeding was widely confirmed by the LACBBA. Surprisingly late was a nest with young at KHSRA 24 November 1998 (Kimball L. Garrett).

Say's Phoebe (*Sayornis saya*). Uncommon to fairly common winter visitor (September to March) in all open areas with grassland, lawns, or low scrub (e.g. KHSRA, Holy Cross Cemetery).

Ash-throated Flycatcher (*Myiarchus cinerascens*). Uncommon transient (mainly April-May and August-September). Considered a summer resident by County of Los Angeles (1982); LACBBA data show this species to be a "probable" breeder in the Baldwin Hills.

Cassin's Kingbird (*Tyrannus vociferans*). Uncommon resident where tall planted trees occur, e.g. KHSRA. Often noted on tall transmission towers and pylons (and may nest on those structures). An occupied nest was found on 4 June 1995 at Holy Cross Cemetery (LACBBA).

Western Kingbird (*Tyrannus verticalis*). Uncommon spring and fall transient. May nest (or formerly nested?) in open areas with scattered trees; a specimen taken 19 June 1927 in Culver City was undoubtedly breeding (LACM collections).

Family Laniidae (shrikes)

Loggerhead Shrike (*Lanius ludovicianus*). Uncommon winter visitor to open areas; bred at least formerly, and one or two pairs may still do so. Egg sets were taken 20 April 1907 in a willow at "Baldwin's Cienega" by H. A. Edwards, 1 June 1934 in the Baldwin Hills by G. B. Thomas, Jr., and 15 May 1964 in Inglewood "oil fields" by F. Truesdale (WFVZ collections). Breeding was confirmed both west and east of La Cienega Blvd. in the mid 1970s (County of Los Angeles 1982), and shrikes were considered to be "probably" breeding in the western part of the Baldwin Hills during the 1995-1999 Los Angeles County Breeding Bird Atlas project. A nesting pair was on the Westchester Bluffs, to the west of the Baldwin Hills, in June 1998. Two birds at KHSRA on 18 August 2000 might have been from a local breeding population or early fall migrants. Grinnell (1898) considered this species to be an "abundant resident in lowlands and mesas" on the coastal slope of Los Angeles County; its dramatic decline in the region may be due to a combination of loss of open habitats, reduction in prey base (large insects, small vertebrates), and the effects of pesticides.

Family Vireonidae (vireos)

Plumbeous Vireo (*Vireo plumbeus*). Scarce fall transient. One was at Holy Cross Cemetery on 11 October 1993 (KLG).

Cassin's Vireo (*Vireo cassinii*). Uncommon spring (April-May) and fall (September-October) transient, e.g. 6 May 2000 at KHSRA (Kimball L. Garrett).

Hutton's Vireo (*Vireo huttoni*). One was at the Village Green on 25 October 2000 (Richard Barth).

Warbling Vireo (*Vireo gilvus*). Fairly common spring (March to May) and fall (August to September) transient. High counts include 20+ at KHSRA on 2 May 2000 (Richard Barth).

Family Corvidae (jays, crows)

Western Scrub-Jay (*Aphelocoma californica*). Common breeding resident in all habitats with shrubs and trees, including natural coastal scrub habitats as well as parklands and residential areas (and surrounding lowland urban areas). Breeding widely documented during LACBBA field work. This species and the following two, all members of the family Corvidae, prey extensively on eggs and nestlings of smaller birds. The scrub-jay has expanded from areas dominated by oaks into all urban and suburban habitats in the greater Los Angeles area; the crow and raven have expanded their ranges and numbers phenomenally in the past several decades. Although local quantitative studies are lacking, it is widely believed that the impact of these corvids on nesting success of native songbirds is substantial.

American Crow (*Corvus brachyrhynchos*). Common breeding resident; greatly increasing in numbers throughout the Los Angeles basin. Breeding confirmed by LACBBA and present field work.

Common Raven (*Corvus corax*). Fairly common breeding resident. Like the crow, this species has increased in numbers in the Los Angeles Basin in recent years. It was considered "uncommon" in the 1970s by County of Los Angeles (1982). Most often uses tall transmission pylons or other artificial structures for nest sites in the Baldwin Hills.

Family Alaudidae (larks)

Horned Lark (*Eremophila alpestris*). Probably a common resident prior to urbanization of the area; now at best an occasional non-breeding visitor to open grasslands (no specific recent records). Specimens of the declining coastal

subspecies *actia* have been taken as near as Culver City and Playa del Rey (LACM collections).

Family Hirundinidae (swallows)

Tree Swallow (*Tachycineta bicolor*). Uncommon transient in spring (February to April) and fall (August-September).

Violet-green Swallow (*Tachycineta thalassina*). Uncommon transient in spring (mainly March and April) and fall (September-October).

Northern Rough-winged Swallow (*Stelgidopteryx serripennis*). Fairly common summer visitor (late February to August), breeding around drain pipes, culverts, and other similar situations along canyon bottoms or concrete channels (e.g. Ballona Creek Channel adjacent to the northwest portion of the Baldwin Hills). Breeding widely confirmed during LACBBA field work.

Cliff Swallow (*Petrochelidon pyrrhonota*). Fairly common summer resident (March to August). Breeds under building eaves, bridges. Nested at least formerly on a bridge over La Cienega Blvd. north of Stocker, and on the dam face of the old Baldwin Hills Reservoir (County of Los Angeles 1982).

Barn Swallow (*Hirundo rustica*). Fairly common transient in spring (February to April) and fall (July to October). Uncommon breeder; e.g. a nest noted in 1999 on the outside of the restroom building in the upper portion of KHSRA.

Family Aegithalidae (bushtits)

Bushtit (*Psaltriparus minimus*). Common breeding resident (widely confirmed by LACBBA) in coastal scrub, landscaped park areas, and residential areas. Although considered a bird of native brush and woodlands, the Bushtit has adapted well to urbanization and breeds in the urban lowlands surrounding the Baldwin Hills as well as in the hills themselves.

Family Paridae (titmice)

Mountain Chickadee (*Poecile gambeli*). Scarce and erratic winter (September to March) visitor in planted pines, e.g. noted at KHSRA 24 November 1998 (Kimball L. Garrett).

[Oak Titmouse (*Baeolophus inornatus*) The absence of this species from the Baldwin Hills reflects the lack of oak and chaparral habitats; it is common in such habitats in the Santa Monica Mountains. The Oak Titmouse has apparently never occurred in the lowlands of the Los Angeles Basin, although it occurs in well-planted residential areas (with oaks) as near to the Baldwin Hills as

Brentwood, Beverly Hills, and Griffith and Elysian Parks. It has never been recorded on the Palos Verdes Peninsula (Bradley 1980).]

Family Sittidae (nuthatches)

Red-breasted Nuthatch (*Sitta canadensis*). Scarce and erratic winter visitor (September to March) around planted pines, e.g. two in KHSRA on 24 November 1998 (Kimball L. Garrett) and one there 11 May 1999 (Richard Barth).

Family Troglodytidae (wrens)

Cactus Wren (*Campylorhynchus brunneicapillus*). Although not afforded Threatened or Endangered status by State or Federal agencies, coastal populations of this desert-adapted species have declined greatly and face serious threats (Rea and Weaver 1990). There are few historical data on the population of Cactus Wrens in the Baldwin Hills, but this species has long been known to be present in and around *Opuntia* cactus patches throughout the undeveloped portions of the hills. It has been recorded from the Baldwin Hills on the Los Angeles Christmas Bird Count since at least 1952, and its failure to be recorded on the count prior to that year probably reflects lack of coverage rather than the species' absence. It was considered "common wherever there are large stands of prickly-pear cactus" in the Baldwin Hills in the mid-1970s (County of Los Angeles 1982). Approximate locations of sightings of Cactus Wrens in the Baldwin Hills between 1975 and 1996 are indicated in Fig. 10 (derived from the author's field notes and LACBBA data).

Christmas Bird Counts (conducted in late December or early January) do not reflect population trends of this species. Only a small portion of suitable habitat in the Baldwin Hills is covered on the Los Angeles count, and coverage effort varies from year to year.

The count of 20 birds on the 1973 CBC is was either inaccurate or reflected much greater effort in finding this species than in other count years; apart from 1973, no more than six Cactus Wrens have ever been counted on the Los Angeles CBC.

Table 1. Number of Cactus Wrens from the Baldwin Hills area during the Los Angeles Christmas Bird Counts, 1950-1999.

FIVE-YEAR PERIOD	HIGH COUNT, L. A. C.B.C.
1995-1999	3
1990-1994	3
1985-1989	4
1980-1984	6
1975-1979	6
1970-1974	20
1965-1969	6
1960-1964	0
1955-1959	4
1950-1954	4

It appears from intensive survey work during the present study that the Cactus Wren has either been extirpated from the Baldwin Hills or is now restricted to a very few sites on inaccessible private land. As the most extensive and intact native habitat was surveyed in 2000 with the use of tape-playbacks, it is unlikely that this species survives. Prior to these unsuccessful surveys, birds were found in KHSRA in 1996 (three individuals on west-facing slope, including an adult with young on 22 June; LACBBA), in the hills immediately above Holy Cross Cemetery in April 1995 and 1996 (LACBBA), and in the scrub east of West Los Angeles College in May 1995 and 31 March 1996 (LACBBA).

Bewick's Wren (*Thryomanes bewickii*). Fairly common resident in coastal scrub (and to a limited extent in adjacent exotic scrub and park plantings, though largely restricted to natural *Artemisia/Baccharis* habitats). All accessible coastal scrub areas were surveyed for this species in 2000, and an estimated 32 singing males or pairs were noted. Localities of these territories are marked in Fig. 9. Because some territorial birds may have been missed and some areas of suitable habitat on Stocker Industries property could not be surveyed, an estimate of 40-45 pairs of Bewick's Wrens for the entire Baldwin Hills is reasonable. Bewick's Wrens are generally absent from surrounding urban lowlands, and thus represent (along with Spotted Towhee) one of two coastal scrub obligate species still numerous in the Baldwin Hills which are isolated from other such populations.

House Wren (*Troglodytes aedon*). Fairly common transient and winter visitor in natural scrub and park and residential plantings. Possibly breeds in landscaped park areas with dense undergrowth; one present in KHSRA 6 May 1999 might have represented a nesting population (LACBBA data).

Family Regulidae (kinglets)

fall; a window-killed specimen was taken 20 September 1987 near the intersection of Stocker and La Brea (LACM collection).

Hermit Thrush (*Catharus guttatus*). Fairly common winter visitor, mainly October through April. A window-killed specimen taken 5 November 1987 near the intersection of Stocker and La Brea is assignable to nominate *guttatus* or closely related *C. g. nanus*.

American Robin (*Turdus migratorius*). Fairly common resident in landscaped park and residential areas with open lawns, e.g. at KHSRA. Breeding widely confirmed by LACBBA. This species was formerly restricted as a breeder to the higher mountains (Grinnell 1898), but colonized lowland areas with the advent of imported water, landscaping, and lawns. There is some indication (Walter 2000) of recent population declines in urban Los Angeles populations. Numbers are augmented by nomadic groups of migrants from October through April.

[Family Timaliidae (babblers)]

[Wrentit (*Chamaea fasciata*). This chaparral/coastal sage-inhabiting species was apparently never found in the Baldwin Hills; it is also unrecorded from the Palos Verdes Peninsula (Bradley 1980). The apparent historical absence of this coastal scrub and chaparral obligate species from both of these upland areas indicates that coastal scrub was probably never sufficiently continuous in the Los Angeles Basin to facilitate the widespread dispersal of this species. Populations of Wrentits penetrated coastward in the dense understory of floodplain woodlands (for example, an egg set at WFVZ from Artesia), but were apparently never near the immediate coast south of Santa Monica.

Family Mimidae (thrashers)

Northern Mockingbird (*Mimus polyglottos*). Common resident in coastal scrub and all landscaped and residential habitats. Breeding widely confirmed during LACBBA field work.

California Thrasher (*Toxostoma redivivum*). Status uncertain. One was seen and heard in the western portion of KHSRA on 17 September 1991 (KLG); another was there on 2 January 1998 (Larry W. Allen, L. A. County Breeding Bird Atlas files). Two singing birds thought to be of this species were heard in the coastal scrub east of West Los Angeles College on 31 May 1995 (LACBBA). This species is considered to be quite sedentary, so the presence of one or more individuals in the Baldwin Hills might reflect a relict of a formerly larger population; it appears from field work in 2000 that any such population has now been extirpated. It is also possible that these sightings represent wanderers from resident populations to the north (e.g. Santa Monica Mountains, Hollywood Hills); this species has wandered to the Palos Verdes Peninsula (Bradley 1980).

Family Sturnidae (starlings)

European Starling (*Sturnus vulgaris*). Common introduced breeding resident in all habitats, though not usually found in pure coastal scrub areas. Breeding widely confirmed during LACBBA field work. Can occur in very large flocks, e.g. 500 at Holy Cross Cemetery on 28 October 1984 (Kimball L. Garrett).

Family Motacillidae (pipits)

American Pipit (*Anthus rubescens*). Fairly common transient and winter visitor, mainly from October to March; occurs in open grasslands and lawns (e.g. Holy Cross Cemetery).

Family Bombycillidae (waxwings)

Cedar Waxwing (*Bombycilla cedrorum*). Common winter visitor and transient, mainly September to May; numbers vary from year to year. Primarily frugivorous when present in our region, this species occurs in landscaped park and residential areas, but may also take toyon berries and elderberries in natural scrub habitats.

Family Ptilogonatidae (silky-flycatchers)

Phainopepla (*Phainopepla nitens*). Fairly common summer resident (April to September); breeds in elderberries and other tall shrubs within coastal scrub, e.g. in KHSRA and on the hillside east of West Los Angeles College; breeding confirmed in all but the southeastern quadrant of the Baldwin Hills during LACBBA field work.

Family Parulidae (wood-warblers)

Orange-crowned Warbler (*Vermivora celata*). Present year round, with numbers highest in migration and winter (August through April). There is a small breeding population in canyons with coastal scrub and elderberries in the eastern portion of KHSRA (e.g. adults feeding a fledged young Brown-headed Cowbird on 30 June 1996, and 1-2 singing birds 11-18 June 1999; LACBBA data); these breeding birds appear to be of the widespread Pacific coast subspecies *lutescens*, although the possibility they are *sordida* (of the Channel Islands and Palos Verdes Peninsula) needs further study. *Lutescens* is also the predominant transient and wintering subspecies, although small numbers of the subspecies *sordida* and *orestera* likely occur.

Nashville Warbler (*Vermivora ruficapilla*). Uncommon spring (April-May) and fall (August-September) transient.

Yellow Warbler (*Dendroica petechia*). Common spring (April-May) and fall (August-September) transient.

Magnolia Warbler (*Dendroica magnolia*). Vagrant from eastern North America; one was at The Village Green on 22-24 October 1999 (Richard Barth).

Yellow-rumped Warbler (*Dendroica coronata*). Very common winter visitor (September to April) in all habitats. Most are of the *audubonì* ("Audubon's Warbler") group, but small numbers of "Myrtle Warblers" (*coronata* group) are found as well.

Black-throated Gray Warbler (*Dendroica nigrescens*). Uncommon spring (March-April) and fall (September-October) transient; a few may winter on occasion in well-landscaped areas such as The Village Green.

Townsend's Warbler (*Dendroica townsendi*). Common spring (April-May) transient; uncommon fall transient and winter visitor in well-planted areas with mature trees.

Hermit Warbler (*Dendroica occidentalis*). Fairly common spring transient (April-May), e.g. 10 on 24 May 2000 and 7 on 9 May 2000 at KHSRA (Richard Barth), and scarce fall transient (September-October).

Blackburnian Warbler (*Dendroica fusca*) Vagrant from eastern North America; a male was in Ladera Park on 11 October 2000 (Richard Barth).

Blackpoll Warbler (*Dendroica striata*). One was at Ladera Park on 29 September 2000 (Richard Barth).

Black-and-white Warbler (*Mniotilta varia*). A male was at the Village Green residential complex from 12 October to at least 27 November 2000 (Kimball L. Garrett, Richard Barth).

MacGillivray's Warbler (*Oporornis tolmiei*). Uncommon spring (April-May) and fall (August-September) transient.

Common Yellowthroat (*Geothlypis trichas*). Common breeding resident, with numbers augmented in migration (March-April, August-October). Confirmed breeding in all but the souteastern quadrant of the Baldwin Hills during LACBBA field work. Although this is typically a bird of damp or marshy areas, territorial males in the Baldwin Hills are also found in areas dominated by annual weeds (e.g. mustard, wild radish) and in coastal scrub that has some annual weeds or rye grasses.

Wilson's Warbler (*Wilsonia pusilla*). Common spring and fall transient, mainly late March through May and late August through early October. One bird was

present 11-23 June 1999 in the willow drainage below the fishing lake at KHSRA (Kimball L. Garrett), but no evidence of recent breeding. This species formerly bred in lowland willow thickets in the region, e.g. an egg set taken in Gardena 1 June 1913 by I. D. Nokes (WFVZ collections) and other eggs sets from "Los Angeles" (Grinnell 1898).

Yellow-breasted Chat (*Icteria virens*). Scarce transient, mainly in April and May. Possibly bred formerly; an egg set taken 20 May 1936 in "Venice" by J. H. Baumgardt was perhaps within the Ballona Creek drainage west of the Baldwin Hills; this species was formerly common in dense riparian bottomland tangles within the Los Angeles Basin (Grinnell 1898). A singing bird atop the ridge in the northern part of KHSRA 13-29 June 1999 appeared to be on territory (Richard Barth), but there are no recent breeding records for the Baldwin Hills (and few for the Los Angeles Basin).

Family Thraupidae (tanagers)

Western Tanager (*Piranga ludoviciana*). Common spring (April-May) and fall (August-October) transient, with small numbers occasionally wintering in well-planted parklands and residential areas.

Family Emberizidae (sparrows)

Spotted Towhee (*Pipilo maculatus*). Fairly common breeding resident in coastal scrub habitats. Along with the Bewick's Wren, this is the only coastal sage obligate species that still maintains significant populations in the Baldwin Hills and is absent as a breeder from the surrounding urbanized lowlands. This species was found in several canyons with coastal scrub and occasional taller growth (notably elderberry); a total of approximately 19 singing males or mated pairs (mapped in Fig. 9) was found in the Baldwin Hills in 2000; because some territorial birds might have been missed and some areas of suitable habitat on private property could not be surveyed, a realistic estimate for the Baldwin Hills is 25 pairs. Occasional transients of this species (not necessarily of the local breeding subspecies *megalonyx*) are noted in the lowlands.

California Towhee (*Pipilo crissalis*). Common breeding resident (breeding widely confirmed by LACBBA). Although found in coastal scrub (generally in more open situations than the Spotted Towhee), this species also occurs in landscaped parklands and residential areas (although it is generally absent from the surrounding urbanized lowlands). As a ground forager that constructs its nest in a low shrub or on the ground, it is susceptible to predation by cats and other feral predators, and for this reason populations have declined in some urban areas.

Rufous-crowned Sparrow (*Aimophila ruficeps*). Status uncertain. Possibly a rare (and nearly extirpated?) resident, but the few records might also pertain to

non-breeding wanderers from other areas. A single bird was at the foot of the west-facing slope in KHSRA on 29 September 1999 (Kimball L. Garrett), and it or another was seen on the same slope in early October 1999 and again on 15 December 1999 (Richard Barth). Two birds were seen together near the top of this slope on 9 February 2000 (Kimball L. Garrett). No singing was noted, and there was no evidence of nesting. Rufous-crowned Sparrows inhabit coastal sage scrub on steep slopes, but occur locally also on sparsely vegetated road cuts and other disturbed areas. Suitable habitats (steep slopes with a mixture of grasses and low shrubs) exist locally within the Baldwin Hills, but there is no record of this species occurring there prior to the 1999-2000 sightings; these sparrows do occur (in small and declining numbers) on the Palos Verdes Peninsula (Bradley 1980). This species is generally thought to be quite sedentary (Garrett and Dunn 1981).

Chipping Sparrow (*Spizella passerina*). Fairly common transient and winter visitor, September through April; found mostly on park lawns with scattered trees and shrubs.

Clay-colored Sparrow (*Spizella pallida*). One was at KHSRA 14 November 1999 (Richard Barth).

Brewer's Sparrow (*Spizella breweri*). Probably a scarce fall (August-September) transient; one was at KHSRA 22 August 1999 (Richard Barth).

Vesper Sparrow (*Pooecetes gramineus*). One was at KHSRA 21 September 1999 (Richard Barth).

Lark Sparrow (*Chondestes grammacus*). Egg sets taken between 1896 and 1917 in nearby localities such as "Hollywood", "Florence", "Slauson Ave.", and "Redondo" (WFVZ collections), suggesting former breeding in or near the Baldwin Hills. Now an uncommon migrant and winter visitor, e.g. one at Holy Cross Cemetery 24 October 1984 (Kimball L. Garrett).

Black-throated Sparrow (*Amphispiza bilineata*). Two records of this desert/interior breeding species: one was in the Baldwin Hills 27 December 1953 (*Audubon Field Notes* 8:272; 1954), and a juvenile was in the upper part of KHSRA on 12 September 2000 (Richard Barth).

Savannah Sparrow (*Passerculus sandwichensis*). Fairly common winter visitor (mainly September through March) in grasslands and other open habitats. Note: The endangered subspecies *P. s. beldingi* (Belding's Savannah Sparrow) is resident in salt marshes at the Ballona Wetlands to the west of the Baldwin Hills, but does not occupy upland habitats.

Fox Sparrow (*Passerella iliaca*). Uncommon transient and winter visitor in brushy areas. One "Red" Fox Sparrow, *P. i. zaboria*, was in KHSRA on 24

November 1998 (KLG). Most or all other records pertain to the "Sooty" Fox Sparrow (*P. i. unalaschcensis* subspecies group), e.g. one at KHSRA on 10 November 2000 (Kimball L. Garrett). One apparent "Sooty" Fox Sparrow was at KHSRA on the late date of 2 May 2000 (Richard Barth).

Song Sparrow (*Melospiza melodia*). Common breeding resident in brushy areas throughout the Baldwin Hills; breeding widely confirmed during LACBBA field work. Especially common at the landscaped edges of coastal scrub in KHSRA but also throughout other coastal scrub areas and in willow riparian habitat. Although common in the Baldwin Hills, this species is largely absent from adjacent urban lowland areas; the nearest important breeding populations are in the Ballona Wetlands (and adjacent bluffs) and in larger, wooded parks such as Rancho Park to the north.

Lincoln's Sparrow (*Melospiza lincolnii*). Uncommon to fairly common transient and winter visitor, September through April. Favors damp brushy or weedy areas.

White-throated Sparrow (*Zonotrichia albicollis*). One was at KHSRA 14 November 1999 (Richard Barth).

White-crowned Sparrow (*Zonotrichia leucophrys*). Common winter visitor in all brushy habitats, including residential areas; occurs mainly from late September through April. Most birds are of the widespread subspecies *Z. l. gambelii*, but the subspecies *pugetensis* of the Pacific Northwest probably occurs uncommonly over the same time period; the latter subspecies is most common in maritime sage scrub.

Golden-crowned Sparrow (*Zonotrichia atricapilla*). Fairly common winter visitor from October through April in a variety of brushy and weedy habitats, including coastal scrub.

Dark-eyed Junco (*Junco hyemalis*). Common winter visitor, mainly October through April. Found in a variety of brushy and wooded areas, including residential areas.

Family Cardinalidae (cardinals, grosbeaks)

[Northern Cardinal (*Cardinalis cardinalis*). An immature bird seen on 14 January 2000 at West Los Angeles College (Mary Semsky) was certainly an escapee.]

Black-headed Grosbeak (*Pheucticus melanocephalus*). Fairly common spring and fall transient (April and May, August and September). Small numbers breed where tall planted trees (e.g. eucalyptus, sycamore, white alder) are adjacent to natural scrub or willow habitats (e.g. at KHSRA).

Blue Grosbeak (*Guiraca caerulea*). Currently a scarce spring and fall transient, e.g. KHSRA 12-14 September 1999 (Richard Barth). Formerly nested in willows; egg sets from "Baldwin Hills" taken 20 May 1934, 27 June 1937 and 2 July 1937 by G. B. Thomas, Jr. (WFVZ collections). Also bred formerly in riparian habitat near the mouth of Ballona Creek ("breeding" male taken 16 June 1929 at Playa del Rey -- LACM collections); two nesting pairs found near the eastern end of the Hughes airport, just west of the Baldwin Hills, in June 1997 (LACBBA) confirm recent nesting in this area as well.

Indigo Bunting (*Passerina cyanea*). A singing male was at Kenneth Hahn State Park on 10 July 2000 (Richard Barth).

Lazuli Bunting (*Passerina amoena*). Common spring transient and uncommon fall transient; former (?) breeder. Concentrations of singing males in weedy annual growth on slopes in KHSRA, above West Los Angeles College, the "Vista Pacifica" hill property, etc., suggest breeding, but most or all of these birds seem to move out before nesting occurs. In May and June of 1996 two singing males and at least one female were present and presumably nesting on the Westchester bluffs below the Kentwood Bluffs housing tract just west of the Baldwin Hills (LACBBA). One certain nesting record, an egg set taken 19 June 1937 in the "Baldwin Hills" by G. B. Thomas, Jr. (WFVZ collections).

[Painted Bunting (*Passerina ciris*). A female-plumaged bird visiting a feeder on Don Miguel Dr. east of KHSRA in late November 2000 (Eric Brooks) was likely an escapee. This species of Mexico and the southern border states occurs casually as a natural wanderer to California, mainly in fall; however, it is also a popular cage bird, and escapees are frequently noted.]

Family Icteridae (blackbirds, orioles)

Red-winged Blackbird (*Agelaius phoeniceus*). Uncommon transient and winter visitor in marshy areas and open weedy fields, e.g. at KHSRA. This species breeds in weedy fields and marshes in the Ballona Wetlands area to the west, and may occasionally nest in fields with tall annual growth or marshy borders of artificial ponds within the Baldwin Hills.

Tricolored Blackbird (*Agelaius tricolor*). Sporadic non-breeding visitor to open lawns and fields. A flock of 150 at Holy Cross Cemetery on 28 October 1984 (Kimball L. Garrett) was the largest recorded recently. Recent salvaged specimens at LACM include single birds from Inglewood in 1984 and Culver City in 1993 (urban areas adjacent to the Baldwin Hills). This highly specialized California near-endemic breeds in marshes or other dense annual vegetation over damp ground; it is considered a Species of Special Concern in California and is a candidate for Federal listing as a Threatened species. Flocks often

occur in urban parklands with open lawns during the non-breeding season and may be expected to occur occasionally in and adjacent to the Baldwin Hills.

Western Meadowlark (*Sturnella neglecta*). Uncommon to fairly common winter visitor, mainly September to March. Formerly nested, e.g. an egg set taken "in one foot high grass" on 9 April 1934 in the Baldwin Hills by G. B. Thomas, Jr. (WFVZ collections). Meadowlarks nest fairly commonly in open grassy areas of the Ballona Wetlands (LACBBA data); this species was common there in the 1970s (Schreiber 1981).

Brewer's Blackbird (*Euphagus cyanocephalus*). Common resident in urban areas and landscaped parklands. Breeding was widely confirmed by LACBBA.

Brown-headed Cowbird (*Molothrus ater*). Uncommon resident. This brood-parasitic species has been responsible for population declines of some native open cup nesting bird species; host relations in the Baldwin Hills are unknown, but breeding species in the hills that commonly host cowbirds elsewhere in the region include the Common Yellowthroat and Song Sparrow.

Hooded Oriole (*Icterus cucullatus*). Fairly common summer resident (late March to September) in landscaped parklands and residential areas; particularly likely to be found in areas with numerous palm trees (in which the species nests). Up to ten recently fledged young noted in KHSRA on 11 July 2000 (Kimball L. Garrett). Status in the Baldwin Hills similar to that in surrounding urban areas.

Bullock's Oriole (*Icterus bullockii*). Common summer resident (late March to September); breeds (widely confirmed by LACBBA) in landscaped park areas (such as KHSRA) and sometimes forages in natural coastal scrub and annual grasslands where trees are nearby. This species' hanging pouch-like nests, usually constructed in April, often make use of the green plastic Easter basket "grass" which is readily available at KHSRA at that season.

Family Fringillidae (finches)

Purple Finch (*Carpodacus purpureus*). Scarce winter visitor, mainly October to March.

House Finch (*Carpodacus mexicanus*). Abundant resident; forms large flocks in areas dominated by exotic annuals, e.g. 300 at KHSRA on 11 June 1999 (Kimball L. Garrett). Nesting widely confirmed during LACBBA field work. Also common in residential areas (and throughout the urbanized lowlands of the Los Angeles basin).

Pine Siskin (*Carduelis pinus*). Uncommon (to irregularly fairly common) winter visitor, mainly October to March.

Lesser Goldfinch (*Carduelis psaltria*). Common resident in landscaped park areas, hillsides dominated by exotic annuals, coastal scrub and riparian areas. Nesting widely confirmed by LACBBA data.

Lawrence's Goldfinch (*Carduelis lawrencei*). Uncommon and sporadic non-breeding visitor, primarily in fall, winter and spring (e.g. 6 at KHSRA on 29 February 2000; Kimball L. Garrett). An egg set (WFVZ) was taken 23 April 1909 in "Baldwin's Hills" by G. K. Snyder; the nest was on a "cypress limb", typical of this species' affinity for nesting in exotic junipers and cypresses.

American Goldfinch (*Carduelis tristis*). Common resident in landscaped parklands and residential areas, and along willow-lined streambottoms.

European Goldfinch (*Carduelis carduelis*). Recorded in the 1990s at KHSRA, possibly indicating a naturalized population. Up to five were present in spring 1999, with an active nest found in a low ornamental shrub near the entrance kiosk on 19 May (Richard Barth); the nest contained five eggs on 30 May and young fledged by 22 June. One or two birds were seen at KHSRA during spring 2000 field work.

Family Passeridae (Old World sparrows)

House Sparrow (*Passer domesticus*). Eurasian species, introduced into North America in the late 1800s. Abundant breeding resident in residential and urban areas, and in the landscaped portions of KHSRA where human activity is greatest. Nesting widely confirmed during LACBBA field work.

Family Estrildidae (estrildid finches)

Nutmeg Mannikin (*Lonchura punctulata*). Southeast Asian and Indian species, becoming naturalized in southern California in the early 1990s (Smithson 2000). Fairly common breeding resident, with nests noted in spring 1999 at KHSRA in small planted trees. A flock of 7 was found adjacent to West Los Angeles College on 21 March 2000. Found in weedy fields, especially where exotic seeding grasses are prevalent; nests in trees.

ACKNOWLEDGMENTS

In addition to the Natural History Museum of Los Angeles County (LACM), I obtained data from several other specimen collections, and I thank the staff of those institutions: Museum of Vertebrate Zoology at the University of California at Berkeley (MVZ), the University of California at Los Angeles (UCLA), and the University of Michigan Museum of Zoology (UMMZ). Historical breeding records from the Western Foundation of Vertebrate Zoology, Camarillo (WFVZ) were used for this study; I thank Jon Fisher and Rene Corado for facilitating my visit

there. Field notes and recent sighting information from several people were helpful in determining the status of many species. I especially thank Richard Barth, who shared numerous important records. I am also grateful to Jonathan Alderfer, Ronald Coombs, Daniel S. Cooper, Mickey Long, Beth Nordeen, Eleanor Osgood, Mary Semsky, Don Sterba, and Diane Stewart. Larry Allen provided data from the Los Angeles County Breeding Bird Atlas project, sponsored by the Los Angeles Audubon Society.

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APPENDIX 1. Checklist of the birds of the Baldwin Hills, Los Angeles County, California

This list contains 166 bird species known to have occurred within the Baldwin Hills (bounded on the north by Rodeo Rd., on the east by Crenshaw Blvd., on the south by Florence/Centinela Aves., and on the west by Ballona Creek and Sepulveda Blvd.). Of these, 158 are native species and 8 are naturalized non-natives.

The list is based on field work conducted in 2000 for the present study, specimen collections, published accounts, unpublished environmental documents, and the personal field notes of K. L. Garrett and various other other field ornithologists. Species names are followed by annotations describing abundance and seasonal status. The nomenclature and taxonomy used in this list follows the American Ornithologists' Union Check-List of North American Birds, 7th Edition (1997).

Abundance codes:

c = common (always encountered in proper habitat at proper season, usually in large numbers)
u = uncommon (usually encountered in proper habitat at proper season, generally in low numbers)
r = rare (small numbers recorded annually or nearly annually)
x = only one or a very few records; not normally expected

Status codes:

R = year-round resident
S = summer visitor
T = transient (usually spring/fall)
W = winter visitor
V = vagrant or sporadic visitor
(eR) = extirpated (formerly resident)
(e?R) = former resident, probably extirpated
(eW) = former winter visitor, now extirpated
I = naturalized non-native ("introduced") species

Breeding codes:

b = breeding confirmed
b? = breeding suspected
(eb) = extirpated breeder (still occurs in other seasonal roles)

Species written in **bold print** are found only in natural coastal scrub or riparian habitats and should be especially closely monitored; some of these species may already be extirpated from the Baldwin Hills.

GREBES		
Pied-billed Grebe	*Podilymbus podiceps*	rV
Eared Grebe	*Podiceps nigricollis*	rV
CORMORANTS		
Double-crested Cormorant	*Phalacrocorax auritus*	rV
HERONS		
Great Blue Heron	*Ardea herodias*	rV
Great Egret	*Ardea alba*	rV
Snowy Egret	*Egretta thula*	rV
Green Heron	*Butorides virescens*	rRb
Black-crowned Night-Heron	*Nycticorax nycticorax*	uV
NEW WORLD VULTURES		
Turkey Vulture	*Cathartes aura*	uV
WATERFOWL		
Canada Goose	*Branta canadensis*	(eW)
American Wigeon	*Anas americana*	rW
Mallard	*Anas platyrhynchos*	cRb
Cinnamon Teal	*Anas cyanoptera*	uT
Northern Shoveler	*Anas clypeata*	rTW
Northern Pintail	*Anas acuta*	rTW
Green-winged Teal	*Anas crecca*	rTW
Canvasback	*Aythya valisineria*	rW
Ring-necked Duck	*Aythya collaris*	uW
Hooded Merganser	*Lophodytes cucullatus*	xW
Ruddy Duck	*Oxyura jamaicensis*	uTW
HAWKS AND EAGLES		
Osprey	*Pandion haliaetuas*	rT
White-tailed Kite	*Elanus leucurus*	uRb?
Northern Harrier	*Circus cyaneus*	rT
Sharp-shinned Hawk	*Accipiter striatus*	uWT
Cooper's Hawk	*Accipiter cooperii*	uRb
Red-shouldered Hawk	*Buteo lineatus*	uRb?
Red-tailed Hawk	*Buteo jamaicensis*	cRb
FALCONS		
American Kestrel	*Falco sparverius*	cRb
Merlin	*Falco columbarius*	uW
Peregrine Falcon	*Falco peregrinus*	rV
NEW WORLD QUAIL		
California Quail	***Callipepla californica***	uRb

CRANES		
Sandhill Crane	*Grus canadensis*	(eW)
RAILS		
American Coot	*Fulica americana*	cRb
PLOVERS		
Black-bellied Plover	*Pluvialis squatarola*	rT
Killdeer	*Charadrius vociferus*	cRb
SANDPIPERS		
Greater Yellowlegs	*Tringa melanoleuca*	rT
Spotted Sandpiper	*Actitis macularia*	rT
Whimbrel	*Numenius phaeopus*	rT
Least Sandpiper	*Calidris minutilla*	rTW
Long-billed Dowitcher	*Limnodromus scolopaceus*	rTW
Common Snipe	*Gallinago gallinago*	rT
GULLS		
Ring-billed Gull	*Larus delawarensis*	rW
California Gull	*Larus californicus*	cWT
Western Gull	*Larus occidentalis*	cR
PIGEONS		
Rock Dove	*Columba livia*	cRb-I
Band-tailed Pigeon	*Columba fasciata*	uV
Spotted Dove	*Streptopelia chinensis*	cRb-I
Mourning Dove	*Zenaida macroura*	cRb
PARROTS		
Red-masked Parakeet	*Aratinga erythrogenys*	rV-I
Yellow-chevroned Parakeet	*Brotogeris chiriri*	uV-I
CUCKOOS		
Greater Roadrunner	***Geococcyx californianus***	(eR)
OWLS		
Barn Owl	*Tyto alba*	uRb
Great Horned Owl	*Bubo virginianus*	uRb?
Burrowing Owl	*Athene cunicularia*	(eR)
NIGHTJARS		
Lesser Nighthawk	*Chordeiles acutipennis*	rTb?
Common Poorwill	*Phalaenoptilus nuttalli*	rT

SWIFTS		
Vaux's Swift	*Chaetura vauxi*	cT
White-throated Swift	*Aeronautes saxatalis*	cRb?
HUMMINGBIRDS		
Black-chinned Hummingbird	*Archilochus alexandri*	uSb
Costa's Hummingbird	*Calypte costae*	uRb?
Anna's Hummingbird	*Calypte anna*	cRb
Rufous Hummingbird	*Selasphorus rufus*	uT
Allen's Hummingbird	*Selasphorus sasin*	cRb
KINGFISHERS		
Belted Kingfisher	*Ceryle alcyon*	rT
WOODPECKERS		
Red-naped Sapsucker	*Sphyrapicus nuchalis*	rV
Red-breasted Sapsucker	*Sphyrapicus ruber*	uW
Nuttall's Woodpecker	*Picoides nuttallii*	uRb?
Downy Woodpecker	*Picoides pubescens*	uRb
Northern Flicker	*Colaptes auratus*	cWTuSb?
TYRANT FLYCATCHERS		
Olive-sided Flycatcher	*Contopus cooperi*	uT
Western Wood-Pewee	*Contopus sordidulus*	cT
Willow Flycatcher	*Empidonax traillii*	uT
Hammond's Flycatcher	*Empidonax hammondi*	uT
Gray Flycatcher	*Empidoniax wrightii*	rWT
Pacific-slope Flycatcher	*Empidonax difficilis*	cTxW
Black Phoebe	*Sayornis nigricans*	cRb
Say's Phoebe	*Sayornis saya*	cW
Ash-throated Flycatcher	*Myiarchus cinerascens*	uST
Cassin's Kingbird	*Tyrannus vociferans*	cRb
Western Kingbird	*Tyrannus verticalis*	cTSb?
SHRIKES		
Loggerhead Shrike	*Lanius ludovicianus*	uW(eb)
VIREOS		
Cassin's Vireo	*Vireo cassinii*	uT
Plumbeous Vireo	*Vireo plumbeus*	xV
Hutton's Vireo	*Vireo huttoni*	rT
Warbling Vireo	*Vireo gilvus*	cT
JAYS AND CROWS		
Western Scrub-Jay	*Aphelocoma californica*	cRb
American Crow	*Corvus brachyrhynchos*	cRb

Common Raven	*Corvus corax*	cRb
LARKS		
Horned Lark	*Eremophila alpestris*	Rw
SWALLOWS		
Tree Swallow	*Tachycineta bicolor*	cT
Violet-green Swallow	*Tachycineta thalassina*	cT
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	cSTb
Cliff Swallow	*Petrochelidon pyrrhonota*	cSb
Barn Swallow	*Hirundo rustica*	cSb
BUSHTITS		
Bushtit	*Psaltriparus minimus*	cRb
TITMICE		
Mountain Chickadee	*Poecile gambeli*	rW
NUTHATCHES		
Red-breasted Nuthatch	*Sitta canadensis*	rWT
WRENS		
Cactus Wren	***Campylorhynchus brunneicapillus***	(e?Rb)
Bewick's Wren	***Thryomanes bewickii***	cRb
House Wren	*Troglodytes aedon*	uTWb?
KINGLETS		
Golden-crowned Kinglet	*Regulus satrapa*	xV
Ruby-crowned Kinglet	*Regulus calendula*	cW
GNATCATCHERS		
Blue-gray Gnatcatcher	*Polioptila caerulea*	cW
THRUSHES		
Western Bluebird	*Sialia mexicana*	uW
Swainson's Thrush	*Catharus ustulatus*	cT
Hermit Thrush	*Catharus guttatus*	cW
American Robin	*Turdus migratorius*	cRb
THRASHERS		
Northern Mockingbird	*Mimus polyglottos*	cRb
California Thrasher	***Toxostoma redivivum***	(e?Rb?)
STARLINGS		
European Starling	*Sturnus vulgaris*	cRb-I

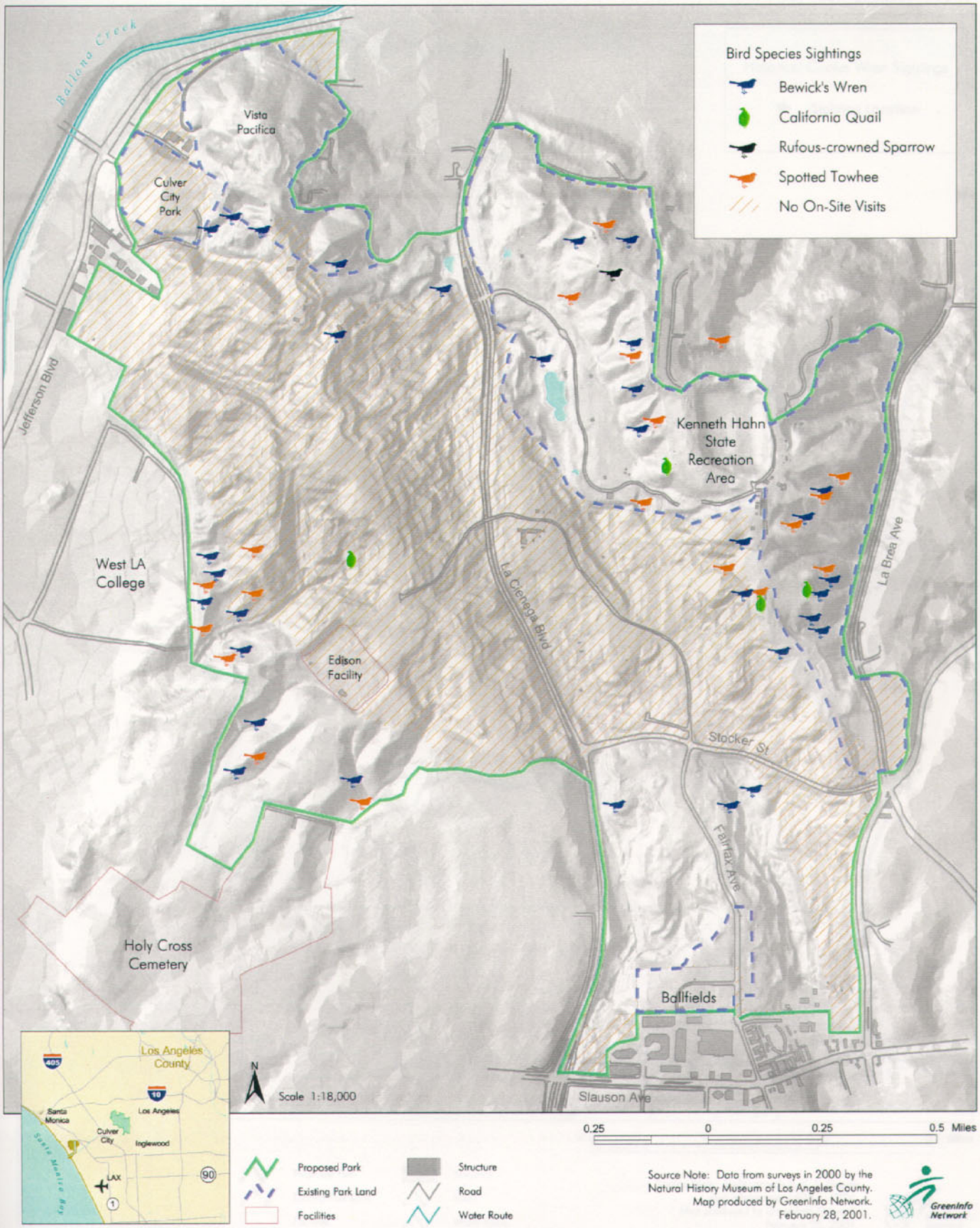
PIPITS		
American Pipit	*Anthus rubescens*	cW
WAXWINGS		
Cedar Waxwing	*Bombycilla cedrorum*	cW
SILKY FLYCATCHERS		
Phainopepla	*Phainopepla nitens*	cSb
WOOD-WARBLERS		
Orange-crowned Warbler	*Vermivora celata*	cTW uSb
Nashville Warbler	*Vermivora ruficapilla*	cT
Yellow Warbler	*Dendroica petechia*	cT
Magnolia Warbler	*Dendroica magnolia*	xV
Yellow-rumped Warbler	*Dendroica coronata*	cW
Black-throated Gray Warbler	*Dendroica nigrescens*	cT
Townsend's Warbler	*Dendroica townsendi*	cTuW
Hermit Warbler	*Dendroica occidentalis*	cT
Blackburnian Warbler	*Dendroica fusca*	xV
Blackpoll Warbler	*Dendroica striata*	xV
Black-and-white Warbler	*Mniotilta varia*	xV
MacGillivray's Warbler	*Oporornis tolmiei*	cT
Common Yellowthroat	*Geothlypis trichas*	cRb
Wilson's Warbler	*Wilsonia pusilla*	cTxS
Yellow-breasted Chat	*Icteria virens*	rTxS
TANAGERS		
Western Tanager	*Piranga ludoviciana*	cTuW
NEW WORLD SPARROWS		
Spotted Towhee	***Pipilo maculatus***	cRb
California Towhee	*Pipilo crissalis*	cRb
Rufous-crowned Sparrow	***Aimophila ruficeps***	rRb?
Chipping Sparrow	*Spizella passerina*	uTW
Clay-colored Sparrow	*Spizella pallida*	xV
Brewer's Sparrow	*Spizella breweri*	xV
Lark Sparrow	*Chondestes grammacus*	uTW
Vesper Sparrow	*Pooecetes gramineus*	rV
Black-throated Sparrow	*Amphispiza bilineata*	xV
Savannah Sparrow	*Passerculus sandwichensis*	cW
Fox Sparrow	*Passerella iliaca*	uTW
Song Sparrow	*Melospiza melodia*	cRb
Lincoln's Sparrow	*Melospiza lincolnii*	cW
White-throated Sparrow	*Zonotrichia albicollis*	xV
White-crowned Sparrow	*Zonotrichia leucophrys*	cW

Golden-crowned Sparrow	*Zonotrichia atricapilla*	cW
Dark-eyed Junco	*Junco hyemalis*	cW
GROSBEAKS AND BUNTINGS		
Black-headed Grosbeak	*Pheucticus melanocephalus*	cSTb
Blue Grosbeak	***Guiraca caerulea***	rT(eb)
Lazuli Bunting	*Passerina amoena*	cSTb
Indigo Bunting	*Passerina cyanea*	rS
BLACKBIRDS AND ORIOLES		
Red-winged Blackbird	*Agelaius phoeniceus*	cRb?
Tricolored Blackbird	*Agelaius tricolor*	uW
Western Meadowlark	*Sturnella neglecta*	cW
Brewer's Blackbird	*Euphagus cyanocephalus*	cRb
Brown-headed Cowbird	*Molothrus ater*	cRb
Hooded Oriole	*Icterus cucullatus*	cSb
Bullock's Oriole	*Icterus bullockii*	cSb
FINCHES		
Purple Finch	*Carpodacus purpureus*	rW
House Finch	*Carpodacus mexicanus*	cRb
Pine Siskin	*Carduelis pinus*	uW
Lesser Goldfinch	*Carduelis psaltria*	cRb
Lawrence's Goldfinch	*Carduelis lawrencei*	uWT(eb)
American Goldfinch	*Carduelis tristis*	cRb
European Goldfinch	*Carduelis carduelis*	rRb-I
OLD WORLD SPARROWS		
House Sparrow	*Passer domesticus*	cRb-I
ESTRILDID FINCHES		
Nutmeg Mannikin	*Lonchura punctulata*	uRb-I

Community Conservancy International

NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY

Observations of Coastal Scrub Bird Species



Source Note: Data from surveys in 2000 by the Natural History Museum of Los Angeles County. Map produced by GreenInfo Network. February 28, 2001.

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NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY

Cactus Wren Locations, 1975 - 1996

Source Note: Sight records by K. L. Garrett and others from 1975 to 1996.
Map produced by GreenInfo Network.
February 28, 2001.

GreenInfo Network