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Birding the Tar Pits — 12,000 B.C.

by Richard Webster



With a scream the Grinnell Eagle drove the Fragile Eagle from a snag, harrying the smaller bird as it chased it off across the junipers. Somewhere a large woodpecker hammered on a rotting trunk. Pygmy Geese drifted behind the reeds, and a solitary spoonbill rose toward the thin tracings of cumulus, building in the western sky. Occidental Vultures circled. Ducks dropped. Two ravens croaked. The tar oozed. It was the stuff of which history is made.

The sheer majesty of it all was not lost upon the observer, viewing the morning's ritual from the vantage point of the expedition's base camp. A mylodont ground sloth lumbered past. A couple of bloated Sabre-tooth Cats reclined in the dawn's light; the rising sun silhouetted a string of camels heading for the water hole. But what most excited me was the realization that today, without a doubt, I would at last leave behind the birding legends of McCaskie and Dunn, and become number one in California.

As the staff doctor for the Foundation for Advanced Research, I was not unconscious of the fact that I was following in the footsteps of such imminent physician/ornithologists as Coues, Heermann, Cooper, and Gambel—not to mention Maisel and Bergman. The authorities, in their inscrutable wisdom, had determined that we, a motley team of experts and attendants, would undertake this perilous journey back through time, to study the life of the La Brea tar seeps, as it existed thousands of years ago, in the late Pleistocene. While my primary assignment was to keep the crew in passable health (who knew what diseases the ticks from a



La Brea Stork (hypothetical reconstruction)

Dan Leavitt

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Smilodon might carry?), and to mend any tooth marks set in human flesh by errant carnivores, my *private* plan was to *list, list, list*.

In fact, unknown to the authorities, I had already done just that, in the week before the expedition set out, by secretly checking out the time machine for a whirlwind tour of a handful of choice California sites, as they existed in still earlier epochs.

Those trips, I must admit, were somewhat frustrating. For among the numerous unidentifiable forms were but a few "countable" items. Much of our current coastline was then submerged, but the waterbirds that haunted that lonely shore were definitely something special. Del Rey Gannets, diving off the mouth of Ballona Creek, were one of the highlights of my late Pleistocene jaunt, while the rafts of Diving Geese provided me with my first flightless species tick for the state. An hour later, while poking around in the Miocene, some 10 millions years ago, I turned up a Van Rossem's Godwit, along with such near-mythical birds as the Calabasas Cormorant and the Concinnate Loon—species I had long dreamed of seeing. Then, while hovering over the continental shelf, above the spot which would one day be called Goleta, I spied alcids—almost certainly Dubious Auklets, since the identification of any alcid from Goleta Point must be judged a dubious enterprise. But I had stationed myself over these waters not to watch the auklets, nor even to see Kennell's or Rogers' Cormorants (both of which I'd already ticked off in the Pleistocene); rather, I longed to catch a glimpse of *Osteodontorhis orri*, the fifteen-foot monstrosity that resembled an albatross. I would certainly trade such a sight for all of the Short-Tailed Albatrosses I had seen in Monterey Bay.

My brief excursion into the earlier epochs had produced lifers galore, but all of this was mere prelude to birding Rancho La Brea, where our

hale-hearted group was now encamped. In a musty book I had found the following account of the site, set down by the Spaniard Jose Longinos Martinez in 1792:¹

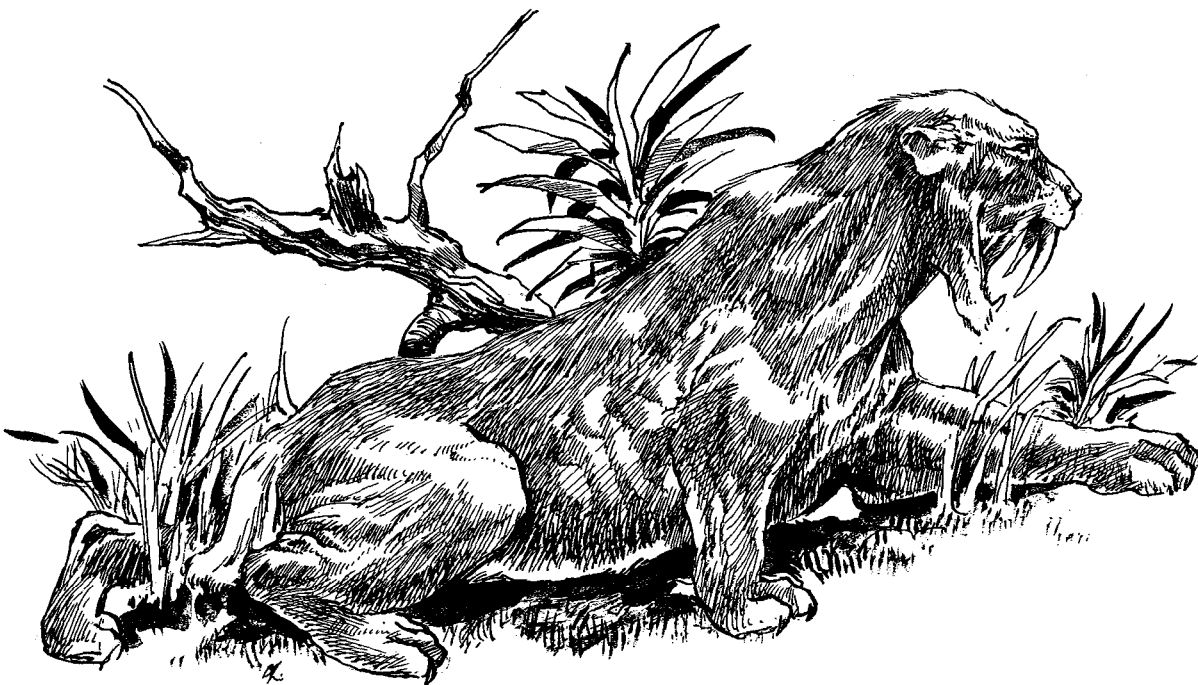
"Near the Pueblo de Los Angeles there are more than twenty springs of liquid petroleum, pitch, etc. Further to the west of the said town, in the middle of a great plain of more than fifteen leagues in circumference, there is a great lake of pitch, with many pools in which bubbles or blisters are continually forming and exploding. In hot weather animals have been seen to sink in it, and when they tried to escape they were unable to do so, because their feet were stuck, and the lake swallowed them. After many years their bones have come up through the holes, as if petrified. I have brought away several specimens.

"For a great distance round about these volcanoes there is not water, and when the heat of the sun forces birds to seek water, they fall into the lake, which seems to them to be water. All the birds that come thus are caught by the feet and wings until they die of hunger and thirst. The same disillusionment overtakes rabbits, squirrels, and other animals. For this reason the gentiles are very careful to explore these places in order to hunt without work."

Another reference to the bituminous seeps appeared in an antique copy of *The Western Tanager*—a chronicle of California birding during the Golden Age, now long departed. Here was told the tale of the two young biology instructors, John Merriam and Loye Miller, who in 1907 began the sticky task of systematically probing the pits for fossils—a mission heroically carried forward by the avian paleontologist Hildegarde Howard.

Even in our day these petroleum pits are renowned for the assortment of creatures whose remains they contain. Many of the larger, heavier mammals are represented; but, most significantly, the La Brea deposits boast one of the world's greatest assemblages of avian fossils, their fragile bones well preserved in the glutinous pools.

By the late 1970's, paleontologists had discovered about



Don Leavitt

Sabre-tooth Cat

1800 species of fossil birds, about half of which were by then extinct; and of the 230 avian fossils known from California, no fewer than 125 were disinterred from the tar at Rancho La Brea. Since the average lifetime of an avian species is something like 40,000 years, it should come as no surprise that the majority of the birds of Rancho La Brea are still present in California today. Indeed, of 180 species recorded from the Pleistocene of California, only 31 have no living descendants. Worldwide, the totals are similar: Of 750 Pleistocene fossil species, 600 have living representatives..

As my researches revealed, extrapolation of the fossil record suggests that some 150,000 avian species have lived since *Archaeopteryx*—the earliest bird as yet unearthed (vintage 150 mya). This total, when compared with the 1800 known fossil species, demonstrates the paucity of the avian fossil record. Extant fossil birds are principally non-passerine, presumably because they evolved earlier and possess more substantial bones: Witness the fact that 40% of the non-passerine genera are represented by fossils, whereas only 11% of the 1400+ passerine genera have been found. The fossil record also shows that the more recent of the past epochs were probably richer in birds than the present day, with approximately 10,600 species coexisting in the Pleistocene, relative to the approximately 8600 species which linger with us today.

After *Archaeopteryx*, the Cretaceous period saw the emergence of such curious species as *Hesperornis*, a toothed diving bird which flourished in the days when an inland sea flooded most of mid-America. The late Cretaceous brought the flowering trees—the magnolia, the palms, the oaks—and soon after occurred the major radiation of modern birds, in the Eocene epoch, some 50 million years ago. From this period 20 modern orders are known, as well as such modern genera as *Limosa* (godwits) and *Totanus* (yellowlegs). The succeeding epochs, the Oligocene and the Miocene (40-11 mya), were to see the appearance of many more modern non-passerine genera, including *Phoenicopterus* (flamingos), *Haliaeetus* (sea eagles), and *Numenius* (curlews), as well as a few modern genera of passerines, among which may be counted *Lanius* (shrikes), *Motacilla* (wagtails), and our beloved *Passer*. It is believed that by the Miocene the majority of modern families and genera were in existence, and that the Pliocene (11-½ mya), with its changing climates and diverse habitats, saw the inventory of avian species reach an all-time peak. By the Pleistocene (500,000 to 15,000 years ago), nearly all the modern families of birds were represented, as well as the majority of the modern genera.

I must confess that it was this element of familiarity which appealed to me, and which prompted me, in the first place, to sign on with the La Brea Expedition. In more than a few respects, however, the habitat in which I would be birding differed substantially from that of present-day Hollywood. I knew from my readings that neither freeways nor fast-food franchises were then to be found in the Los Angeles Basin, and that the climate of prehistoric Rancho La Brea was slightly warmer and wetter than it is today, with drier summers.

At the time of my visit, the forests which clothed the hills and the lowlands were in a transitional stage: Open, grassy meadows interrupted groves of coast live oaks and junipers, with here and there a few remnant stands of pines and cyp-



Ground Sloth

resses. To this observer, the resemblance of the ancient flora to that of certain areas in the present day Tehachapis was inescapable. Such xerophilous species as the Desert Night Lizard and the Desert Scaly Lizard would not be expected today along Wilshire Boulevard. And the same may be said of the Vesper, Sage, and Black-throated Sparrows. The Evening Grosbeak and the Pileated Woodpecker seemed especially incongruous—remnants of the avifauna of the retreating lowland conifer forests. And, as I pulled off my socks, I realized that the paleobotanists were quite correct in their contention that *cockleburrs* were present at Pleistocenic La Brea.

In contrast to the grassy oasis at Rancho La Brea, the more northerly seeps at Carpenteria preserved evidence of the forest type found today on the Monterey Peninsula, while to the east, the pit now called McKittrick (barely fit today for a Le Conte's Thrasher) held Cactus Wren and Bendire's Thrasher—evidence of a wetter desert biome. For that matter, if further proof is needed of how this world has changed, 15 million years ago France had trogons; and South Dakota was home to a guan.

As it turned out, birding the Pleistocene was neither easy nor simple. For one thing, the logistical problems were not entirely those to which the modern-day birder is accustomed: One soon learned not to get between a mother mammoth and her young, and to keep a wary eye out for the Dire Wolf and the surly Short-faced Bear. The presence of the Western Rattlesnake was another irritant—if only because the species was not even a life herp, merely good ol' *Crotalus viridis* of our own day.

Such minor annoyances aside, I quickly discovered that the *in situ* study of ancient birds presents a couple of really thorny problems for the ardent time-lister. The first of these is the challenge of identifying a bird previously known only from the fossil record. It is all very well to stand in the Page Museum and scrutinize mounted bones. But one can't help wondering whether the bird is *red* or *gray*. Does it possess a *pale superciliary*? Or is there, perhaps, a *faint buffy wash* along the flanks? Unfortunately, the *de Schauensee* of the Pleistocene would have to read, "Like No. 52, but with thicker vertebrae."

Of course, once in the field I found the listing easier than I had feared—for, in all modesty, I must allow that I am adequately imbued with the traits common to every good lister: a vivid imagination, and a bare minimum of scruples.

Yet the nagging questions remained: Once a bird was identified, could it really be counted as a *lifer*? The biological species concept, drafted in a less-adventurous age, applies to *one* time frame only—a frozen moment during which specific populations find themselves reproductively isolated from others. But how do we compare populations across the millennia? On the basis of a single fossil, a bird from 100,000 years ago might be classified as a full species, though it could well be the direct ancestor of a modern species. If the two were brought together in some natural situation, they might prove to be reproductively isolated—or they might not. Stretch the two out over time and you have a phyletic line. The problem is *where to draw the line*; indeed, many reasonable lines have been drawn because of gaps in the fossil record, and because of the necessities of taxonomy. I dealt with the dilemma in the only way I could: Let others dispute the records. I counted every unfamiliar form that I saw.

Before my first time-trip, my state list had been languishing at a mortifying 538, barely good enough to qualify as 23rd in the all-time California state tick sweepstakes. Now, thanks to such goodies as the Diatomite Shearwater, Sinclair Owl (larger than the Great Gray), the Kern Vulture, and two species of flamingo from Manix Lake east of Barstow, I was ready to tackle the tar pits.

Unquestionably the most exciting avian denizens of Rancho La Brea were the raptors. In accordance with the Pleistocene motto of “bigger is better” (soon to be rescinded), eagles and other large Falconiformes predominated. Most impressive among these was the Merriam Teratorn, a vulturine bird with a 12-foot wingspan, weighing in at a brutish 40-50 pounds. Bald and Golden Eagles were common (over 170 of the former and 900 of the latter have been excavated at the tar traps); but the real treats were five eagles that are now extinct. Grinnell and Fragile Eagles were common around our camp, as was the majestic Daggett Eagle, a species which, despite its name, belonged in Los Angeles rather than Barstow. A wayward Woodward Eagle—a La Brea fossil endemic—drifted over from the Baldwin Knolls, and an Errant Eagle (a term I had heretofore reserved for any eagle in downtown L.A.) swooped down one morning and carried off the camp’s mascot.

The leavings of the predators were soon cleaned up by the avian scavengers, among them the rare Turkey Vulture, the more common Occidental Vulture, the foot-high La Brea Caracara, and the American Neophron—a bird related to the Old World vultures, none of whose members resides today in the Western Hemisphere. Also present in good numbers was the colossal Brea Condor, forerunner of the recently-extinct California Condor—a species which appears on my list thanks solely to modern technology.

Most of the waterbirds which frequent the L.A. Basin were depressingly similar to those of today. Mallards were all too familiar, and the Gadwalls and Shovelers were scarcely more enticing. But there were more than enough

Great Egrets to delight any L.A. County lister, plus plenty of La Brea Storks to boot. And the Whooping Cranes would convincingly replace those from Furnace Creek on my state list: Nobody could claim that these were part of a “planted” population.

But the most numerous resident bird in the environs of our camp was the California Turkey. In fact, we soon discovered that the best way to secure our evening meal was to chase a Turkey into the tar. Or, to add an exotic touch to dinner, we might toss in an extinct peafowl or two, of the genus *Parapavo*.

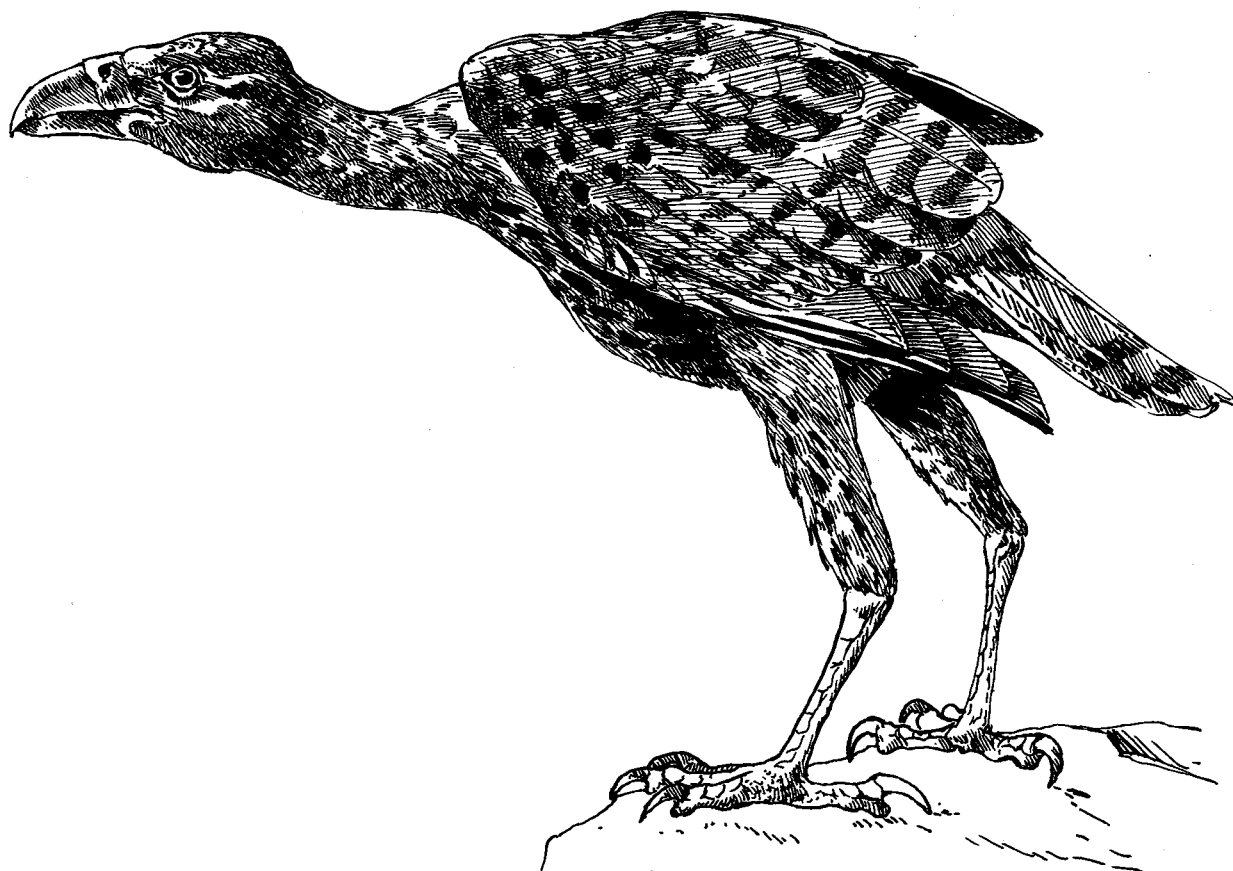
On the first day of the expedition I became the first person presently alive to see a Passenger Pigeon—perched in a sycamore at the corner of Sunset and Vine. It was, however, a novelty which, I recognized, might easily wear off, should I ever encounter a flock of a million or more. But one thing is certain: I would gladly have done without the Mourning Dove, the Brown Towhee, and the ubiquitous California Quail.

Fossils of 37 species of passerines are known from Rancho La Brea. Of these, 34 still survive somewhere. Of course, in the 21st century, “somewhere” is, more often than not, elsewhere than Los Angeles. Thus the Yellow-billed Magpie qualified as a bonus for my county list. White-necked Raven was a state bird for me, since the sole state record was a bird picked up on the Farallons back in 2010, well before my time. It remains a matter of opinion whether Northwest Crow is or is not specifically distinct from the Common Crow; but both types were undeniably present at La Brea. Without a moment’s hesitation, I ticked them off.

Matching the birds around me to known fossils was relatively easy, but my greatest excitement and, concomitantly, my greatest frustration, was discovering and then attempting to label previously undescribed species. For one little parulid I would propose the name “Western Warbler” (*Cardiffor aba*). Other warblers, though less distinct, showed relationships to modern-day species. I placed two of these, the “Black-cheeked” and the “Gray-throated Black” in the Hermit/Townsend’s/Golden-cheeked/Black-throated Green complex.

One of the first new birds I found was also, perhaps, my most memorable. While stalking the borders of a fetid slough near the corner of Santa Monica and Rodeo, in the heart of Beverly Hills, my attention was attracted to a crake calling in the reeds. Curious, I crept closer; and then, with an ungainly leap, I dove headlong into the mire—only to experience the inexorable tug of the tar as it began to pull me down. Writhing in the goo, I caught a fleeting glimpse of my quarry: clearly a *Laterallus*, and definitely a species new to science! As I slowly subsided into the slime, I managed a desperate holler for help, and to my relief, was pulled from the pit in the nick of time by one of my cohorts, who railed at me for being a dissolute lister. Stoically I endured the remonstrance, for I was well aware that had it not been for him, I would in time have joined *Gymnogyps amplus* in the great hall of the Page Museum.

After a bath in carbon tet, I gamely sallied forth again, this time to explore one of the rambling streams that swept down from the Hollywood Hills. In the lush riparian I was overjoyed to encounter a most extraordinary bird—an obvi-



Dan Leavitt

La Brea Caracara (hypothetical reconstruction)

ous *Empid*, with a bill which seemed both long and short, and at the same time broad and thin. The tail wagged every which way, was perhaps notched, and had a white outer web on one side only. In short, it was an *Empid* for all seasons—an *Empid* I would normally have called whatever I needed. In violation of tradition, and in recognition of the ordeals I had endured, I named it for myself.

Ah, it was a day to remember; a day to savor for years to come! How the records fell! Without a whimper, Don Roberson's 1980 year list passed into oblivion, while Fred Heath's L.A. County list was reduced to an asterisk in the record book. And Doug Morton's record for "The Most New Birds in a Very Short Period of Time" was now mine. The Fragile Eagle had put me in a tie for number one; the Grinnell Eagle which had chased it away had put me over the top. And still my list soared! Number 598 was the Pygmy Goose. Number 599 was the La Brea Caracara. And then, joy of all joys, a blackbird plopped at my feet. It must be. Why, yes it was! *Euphagus magnirostris*, the Pleistocene icterid. My 600th bird!! Of course, I later discovered that what I thought was *Euphagus magnirostris* was merely a forerunner of an embarrassingly common blackbird of today. But I was ecstatic then, and that was all that mattered. Besides, number 601, the Los Angeles Towhee, would qualify nicely as number 600—even if it did bear a disturbing resemblance to the bird named for Major Abert.

Oh, I knew full well that the loneliness of being at the top was to be evanescent. In time, when others got hold of the time machine, my list would quickly lose its luster, and I would be back with the pack, chasing the super-birders. But to be Number One, with over 600 (even if I *did* count mist-netted birds and Black Duck) was a thrill I shall never forget.

As the sun set behind the site which the Ticor Building was one day to occupy, I watched yet another lifter, *Strix brea*, drift silently over a clearing. The last line of mammoths slipped behind the darkening fringe of trees. A lone sabretooth trotted past, heading toward the setting sun. Bats whirled overhead. And the tar still oozed. ♡

The author wishes to thank Hildegard Howard for reviewing the article. He also wishes to point out that any factual errors or flights of fancy are solely his responsibility.

References

1. Stock, Chester, 1956. "Rancho La Brea" *Science Series* 20, Los Angeles County Museum of Natural History.
2. Howard, Hildegard, 1962. "Fossil Birds." *Science Series* 58, Los Angeles County Museum of Natural History.
3. Brodkorb, Pierce, 1971. "Origin and Evolution of Birds." *Avian Biology* 1 (Ch.2), Farner, D.S., and King, J.R., eds., Academic Press, New York.
4. -----, 1964-1978. "Catalogue of Fossil Birds." *Bull. Florida State Museum* (1-5).

Gene Anderson

Beijing and Delhi

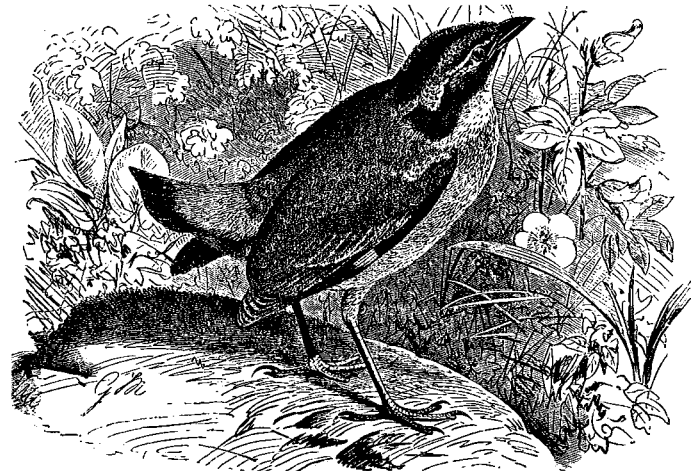
Last year, on anthropological business, I traveled through India and China—two and three weeks respectively—and although I was able to devote no more than a couple of hours a day to birding, I managed to form an impression of the avifauna in and around the major cities—principally Beijing (Peking) and Delhi.

Of the two capitals, Delhi is by far the better for birding; in a couple of brief visits I have seen about 100 species in the area, versus about a dozen for Beijing (in a shorter time). Much of the difference is due to Delhi's more southerly and much lusher setting, with a large river (the Yamuna) close at hand, plus much woodland and wasteland. Beijing, by contrast, is located in a dry and northerly part of China. But a large part of the difference in the bird life of the two cities must be ascribed to human agency. What is best for humans is not necessarily better for birds. In China, and especially in the North China Plain, every millimeter of ground seems to be intensively employed for living or farming, and to be worked-over carefully every day or so. Over thousands of square miles, no birds but the most thorough human-commensals can exist. India, on the other hand, has much unused and neglected land that could be more intensively exploited. People do poorly; birds do well. Yet another difference: the Indian veneration for life protects the birds; the Chinese tend to use everything, eating larger birds and making pets of the smaller ones, in spite of a growing awareness of ecology and conservation.

Beijing is familiarly called Yanjing, "the swallow capital;" it was once the capital of a state called Yan, but the name is appropriate in any case, for swifts and swallows ("yan" refers to them both) abound there, nesting in thousands of buildings. Otherwise, besides the Eurasian Tree Sparrows that replace House Sparrows in East Asia, the common birds in summer include Brown Shrikes, Black Drongos, magpies, and not much else. But on the obligatory visit to the Great Wall and the Ming Tombs, one is likely to see the Japanese Meadow Bunting, Black-naped Oriole, Jungle Crow, Kestrel, Great Tit, and perhaps other common birds. Farther south in China the birding is much better. Canton is similar to Hong Kong, which I have discussed here before.¹ More interesting to me was Zhengzhou (Chengchow), a lovely and friendly city some 3500 years old, in Henan Province. In the market there one finds pottery almost identical to pieces 3000 years old in the nearby museum. The Azure-winged Magpie—the same species that is found in Spain and Portugal—is common here, and Red Turtle Doves sweep through the trees. Among many other birds I noted in the area was a Black-winged Kite—apparently a very good record.

Like Beijing, Delhi has a large zoo; but while Beijing's is better for the caged animals, Delhi's is better for wild ones. It boasts a colony of Painted Storks, perfectly free, but as tame as their captive neighbors, nesting noisily in the zoo's busiest area. Other waterbirds occur with them, and the Large Pied Wagtail forages along the slough below the zoo.

Delhi Ridge, a rocky outcrop covered with thorny trees, and rather like a mesquite thicket in Texas, cuts through the city. Francolins ("partridges") and wild peacocks abound there, and a vast variety of small birds breed—larks in open places, warblers in the scrub, finches on the roadsides, and so on. More come in winter, especially warblers from Siberia (Lesser Whitethroats and Yellow-browed Warblers feed in almost every tree). Great flocks of Rose-ringed Parakeets reel overhead, while scattered ponds hold Moorhen, White-breasted Waterhen, and other birds. The vivid Red-wattled Lapwing, with its blood-red facial adornment, is the true spirit of such pools, filling about the same niche as the Killdeer



Blue-winged Pitta

does here; it is often observed foraging on the wet lawns.

Within the city itself Hoopoes frequent areas of short grass; several species of babblers flock in the shrubbery; Green Barbets and Koels call from the taller trees; and tailorbirds and wren-warblers skulk in the bushes. In winter the Chiffchaff moves in from Siberia. Swallows fly among the ruins. The Dusky Crag-Martin is confined to ruins and large buildings—perhaps one pair per structure. But the most exciting birding in Delhi, for me, was along the Yamuna River. This stream is almost half a mile wide in places, and may flood to overflow its mile-wide floodplain. Reedbeds, grassfields, sand shores, and mudflats attract a vast variety of birds, especially in winter. The Indian River Tern, with its large gold-orange bill, flies past enormous wintering flocks of Black-headed, Brown-headed, and Herring Gulls, Whiskered Terns, ducks, and shorebirds—including Avocets and Redshanks—while Laggar Falcons and Kestrels hover overhead. Now and then a Great Black-headed Gull wings by, huge even in comparison to the Herring Gulls, and flashing a vividly-patterned yellow/black/orange bill. Egrets and Gray Herons fish the shallows. In flooded fields near the river I found the Indian Skimmer—much like our Black Skimmer—and many storks, including the White-necked. Pairs of Sarus Cranes, tall as Whooping Cranes but soft gray like our Sandhills, seem to prefer village ponds and tanks.

Any walk in Delhi is apt to produce new birds, especially in the cool season. Seek out parks and the riverbank. A huge new park on Delhi Ridge holds woodpeckers, Treepies, Crested Serpent-Eagles, and rare wintering birds. There is a superb bird guide to the city: *Birds of Delhi* by Uma Shankar—in addition to the *Guide to the Birds of the Delhi Area* by Ganguli. Salim Ali's *Book of Indian Birds* is also valuable, but don't go without the Shankar guide, which is found in all local bookstores, and will probably be sold at your hotel.

For China there is nothing much in English; but guides to Hong Kong birds and Ben King's excellent *Field Guide to the Birds of Southeast Asia* will prove helpful. Etchecopar and Hùe's new *Les Oiseaux de Chine* thoroughly covers the non-passerines; but you will need one book in Chinese: *Zhong-guo Niao-lei Fen-bu Ming-lu*, by Cheng Tso-Hsin.² This is a check list and distribution study equivalent to the AOU Checklist. Scientific names and English names are given, and range maps are shown for all the common species (and most of the others). The book is thus quite useful to those not knowing Chinese. Seek it in technical bookstores. It is very cheap too: China is a last stronghold of low book prices. ♡

¹Anderson, Gene. 1977 "Birdwatching in Hong Kong" *Western Tanager* 43 (6): 1-4.

²See interview with Dr. Cheng by Robert J. Grimm, 1979, *Condor* 81 (1): 104-109.

Jon Dunn/FIELD NOTES

Northern and Louisiana Waterthrushes

The identification of Northern and Louisiana Waterthrushes has been the cause of considerable confusion, due in large part to the inadequate treatment of the species in the standard field guides. Recently, two excellent articles have helped to correct the problem.^{1,2} What follows is a summary of the information in those articles.

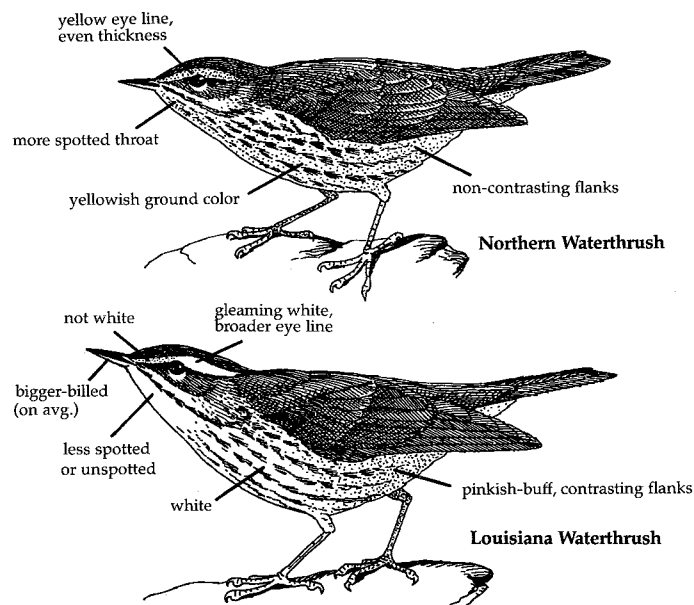
In California the **Northern Waterthrush** occurs during migration as a rare but regular transient, particularly at the desert oases in the eastern part of the state. Although the species winters in good numbers in Western Mexico, including the Pacific side of Baja Calif. (coastal mangrove swamps), in winter it is rare in California—though still recorded annually, especially in San Diego Co. The **Louisiana Waterthrush**, on the other hand, has been recorded only once in California—at Mecca, on Aug. 17, 1908—but there are about 10 fall and winter records for Arizona and extreme northern Sonora. The species winters regularly along mountain streams from central Sinaloa south (late July-early March), and additional Calif. records are therefore to be anticipated. For a detailed discussion of the distribution of these two species in Calif. see Binford.²

It is strongly recommended that observers employ a *combination of characters* whenever attempting to identify these closely-related birds, since most of the distinctions between the two tend to overlap, and are therefore not, in themselves, diagnostic.

The Louisiana Waterthrush averages somewhat *larger* and proportionately *bigger-billed* than the Northern, and tends to display *less bold streaking* underneath; but these characters are difficult to perceive, and there is some overlap. Of these marks, probably the larger bill is the most useful.

Another useful key is the color and pattern of spotting on the throat—though this character can prove misleading. The standard field guides state that the Louisiana has a pure white throat, devoid of any spots, as opposed to the Northern's yellowish throat, with considerable spotting. Unfortunately, some Northerns may show almost no trace of spotting, particularly on the upper throat, while some Louisianas display fairly extensive throat spotting. As a result, some Louisianas appear more spotted on the throat than some Northerns. The extent of throat spotting, then, is only a percentage character, and is thus of minor value—though it is true that Louisianas on the average are less-spotted on the throat than the Northerns. The *pattern* of spots, however, may be a more reliable character: If the spots are *closely clustered* on the lower throat and the upper breast, then the bird is almost certainly a Northern, since the Louisiana lacks this cluster pattern. Another useful mark is the *background color* of the throat: The Louisiana displays a throat whose background is *gleaming white*, while the background hue of the throat of most Northerns is *yellowish*. Unfortunately, some Northerns from western populations are much paler underneath and can show whitish throats. Only an exceptional Northern, however, would exhibit the combination of a *white throat without spots*.

One of the most reliable characters to use in separating the two birds is the *color*, and particularly the *shape*, of the *eye stripe*. In the case of the Northern, the eye stripe is of an *even thickness* throughout; and it is normally *yellow* (although some pale individuals may show whitish eye lines). The eye stripe of the Louisiana, on the other hand, *broadens behind the eye*, accentuating the overall contrast of the superciliary to the rest of the face. In addition, the eye stripe of the Louisiana *extends a bit further back* than does that of the Northern, standing out more prominently—since the part behind the eye is *gleaming white*. Although Wallace³ notes that about 20% of Louisianas show some buff or olive markings on this part of the eye stripe, the background color always remains white. Contrary to



statements in the field guides, the eye line of the Louisiana is not pure white throughout—for the part from the bill to the eye is invariably washed with grayish-olive or grayish-buff. Thus the *forward part* of the eye line is not noticeably different from that of the Northern.

Another good differentiating character is the color and degree of contrast of the flanks. On the Northern, the flanks are normally *washed with yellow*—or, in pale individuals, whitish. In either case the ground color of the flanks does not normally contrast with the rest of the underparts (though a very few individuals show yellowish flanks which contrast with a more whitish belly). The Louisiana, on the other hand, has *pinkish-buff to dull buff flanks* that usually *contrast strongly* with the whitish ground color of the belly. Wallace notes that an occasional Louisiana lacks this character, showing uniform underparts, and even, at times, a very pale yellow shade to the flanks. Again, the characters overlap, but if the bird shows *contrasting pinkish-buff flanks* it may safely be called a Louisiana.

Finally, the loud metallic *chink* call of the Louisiana is said to be louder and sharper than the call of the Northern—though this distinction is likely to be detectable only by an observer well familiar with the calls of both species.

In summation, there are a number of keys that an observer may use to identify these species, but most are of a percentage value, and are not in themselves diagnostic. The best characters on which to rely are the shape of the superciliary and the color of the flanks. ♡

¹Binford, L.C. 1971 "Identification of Northern and Louisiana Waterthrushes" *California Birds*, 2: 1-10.

²Binford, L.C. 1971. "Northern and Louisiana Waterthrushes in California" *California Birds*, 2:77-92.

³Wallace, D.I.M. 1976 "A Review of Waterthrush Identification with Particular Reference to the 1968 British Record" *British Birds*, 69:27-33.

Jean Brandt/BIRDING at

Santa Ana Regional Park

Southern California's largest river, the Santa Ana, after emerging from the San Bernardino Mts., flows through a flood plain of varying width, much of it covered with good riparian growth. There are miles of trails throughout this habitat; and two widely separated areas here are well worth birding.

On Riverview Drive, about 1½ miles south of the town of Rubidoux, in Riverside Co., is the **Louis Robidoux Nature Center**, surrounded by large groves of cottonwoods (nesting Northern and Hooded Orioles), grassy fields (Blue Grosbeaks and goldfinches), and brushland (listen for the tell-tale "rattle" of the Nuttall's Woodpecker).

A small **stream** is lined with willow and mulefat thickets, which host migrating flycatchers and warblers, while Black-chinned, Costa's, and Anna's Hummingbirds nest nearby. The few **ponds** with cattails harbor herons, egrets, bitterns, waterfowl, rails (Virginia, Sora, and Common Gallinule), shorebirds (both yellowlegs, Dunlin, Western Sandpipers, Marbled Godwits, American Avocets, and Black-necked Stilts), and three blackbirds: Yellow-headed, Red-winged, and Tri-colored.

White-tailed Kites and Red-shouldered Hawks are resident, and Spotted Doves are found near the entrance. There is a Nature Center with informative displays, and interpretive birdwalks are scheduled regularly. Restrooms and picnic tables are also provided.

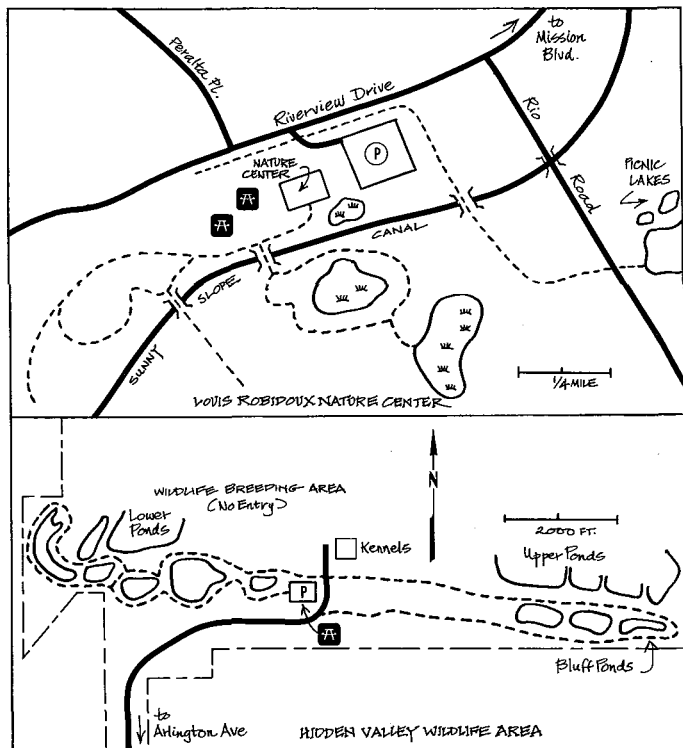
Nearby, at the **Picnic Lakes** (see map), Black Phoebes are resident, and this is a good place to look for ducks in winter. Also in winter, check the grassy fields nearby for sparrows; and look for Blue Grosbeaks in late spring and summer.

The **Hidden Valley Wildlife Area** is reached by one mile of unimproved road north from Arlington Ave., four miles west of Van Buren Ave. (opposite the Westlawn Cemetery). This former property of a hunting club, consisting of almost 1500 acres adjoining the Santa Ana River, has several diked ponds (some of them in a heavily-wooded area) that attract many species of birds.

As shown on the map, the parking and picnic area is in the center, with loop trails (2½ miles each) leading east and west. While traversing these loops, be sure to stay on the trails. The area to the north of them and extending to the Santa Ana River is a wildlife breeding area, and no entry is permitted. The **western loop** follows the road from the kennel area along the north side of the stream. This is a good place to look for Blue Grosbeaks, Lazuli Buntings, and Northern Orioles from spring through summer; and you may see the resident (introduced) Ring-necked Pheasants.

Continuing west, the trail encircles several ponds, which in winter host thousands of ducks and shorebirds. Here you will find nesting Cinnamon Teal, American Avocets, Black-necked Stilts, Black Phoebes, Long-billed Marsh Wrens, and perhaps some shorebirds.

At the extreme western end the trail passes through an area of willows and riparian growth. This is an excellent place to check for migrants in season, and, in late spring, for



nesting Common Yellowthroats.

On your return, check the weedy flats south of the trail for hovering White-tailed Kites.

The **eastern loop**, from the parking area, follows the horse trail. Grosbeaks and goldfinches are found in the sunflowers on the right; and on the left, in the dense vegetation along the stream, one may find resident Long-billed Marsh Wrens and Common Yellowthroats.

Further along on your right are river bluffs favored by Red-tailed Hawks; and still further on, Barn and Great Horned Owls have nested in holes in the cliffs.

A good place to look for Roadrunners is in the quailbush just before reaching the bluff ponds. The first of the ponds is surrounded by mature willows, which frequently have roosting Black-crowned Night Herons and Great Blue Herons, and are favored by woodpeckers. These ponds are also good for Kingfishers and Green Herons.

East of here and beyond the granite pit, the trail climbs to the top of the bluff, affording the hiker a view of the upper pond complex. On your right as you come back down the hill is a rocky outcropping favored by American Kestrels and Barn Owls; and near the kennels there are tall cottonwoods where kites have nested.

Picnic tables and restrooms are located near the parking area, while hotels, gasoline, and supplies may be found in nearby Riverside.

Good birding! 🐦

Map by Glenn Cunningham

Sandy Wohlgemuth

Looking Back/Looking Ahead

This month sees the completion of my three-year term as President of L.A. Audubon; and the occasion seems appropriate for a brief assessment of where we are and how we got there. First, we're healthy. With some 3500 members, we're birders, conservationists, lovers of the outdoors, and optimists.

Our greatest passion is still the delightful, intriguing pursuit of birds, whether close at hand in our backyards and parks, or over the vast reaches of our country—and, indeed, the world. The *Western Tanager* reflects this undiminished interest: Shum Suffel's *Birds of the Season*, Jean Brandt's *Birding Locations*, and Jon Dunn's *Field Notes*. It is a tribute to Barry Clark's magnificent four years as editor that the *Tanager* has over 400 non-member subscriptions all over the country, and is widely reprinted in other birding publications.

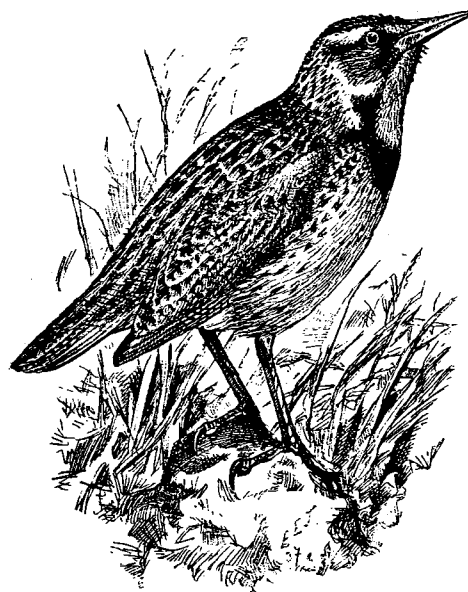
But alas, we've found it difficult to spend all our free time engaged in this quiet, non-consumptive avocation. For the natural world is shrinking all around us, and many of our favorite birding spots are among the casualties. Some of us have said, "This far but no further!" and have found ourselves, of necessity, recast in the role of environmentalists. Los Angeles Audubon, I think, discovered its own strength in the Great Whittier Narrows Victory. Our lawsuit, with an injunction issued by Supreme Court Justice William O. Douglas, produced the three lakes at Whittier Narrows Nature Center—one of the prime wildlife sanctuaries in Southern California.

Since then we have grown more aware and more involved. The list of our labors is long, representing, as it does, the time, the dedication, the gasoline, and the hard work of many people. But let me attempt a quick review. Malibu Lagoon: Three years of hearings, workshops, and petitions resulted in the decision to declare the area a Natural Preserve, with plans to restore the marsh and protect the site for birds and birders. More work will be needed to implement this decision. The Santa Monica Mountain Parks: Again, three years of testifying at hearings, fighting off the ORV's, helping to save three large sections of prime chaparral from roads, motorcycles, tennis courts, and rifle ranges. And again, strenuous efforts will be needed to insure that the plans come to fruition.

We helped with the formation of the "Friends of Ballona Wetlands," taking our case to the Board of Supervisors in behalf of birds, open space, and endangered habitat. And we are part of the "Coalition to Save Sepulveda Basin," the group that defeated the proposed racetrack. At the moment we are doing our best to develop a wildlife sanctuary on the site, to keep out inappropriate development.

The California Community Foundation has appointed us as their advisers in dispersing proceeds from the Ora Leeper Fund. In this way we have been able to help the nature centers at Whittier Narrows and Santa Fe Dam, and, most recently, National Audubon's Starr Ranch Sanctuary in Orange County.

And now, with National Audubon, the Mono Lake Com-



mittee, and the Friends of the Earth, we are co-plaintiffs in what may be an epoch-making lawsuit against the Los Angeles Dept. of Water and Power. If diversion of water from streams feeding Mono Lake is not curtailed the lake will die and this beautiful refuge for millions of birds will become a sterile, chemical cesspool. We believe our cause is just and worth the cost to our chapter. We hope you agree.

For me, this has been a strenuous three years. It has taken much time and energy—planning meetings, spending hours on the phone, writing innumerable letters, attempting to solve a variety of problems. Without the help of the Board of Directors, the Conservation Committee, and the energetic volunteers at Audubon House, very little would have been accomplished. It has been a stimulating, productive three years and I shall miss the excitement and the headaches. Thanks to all of you for your support and encouragement. And welcome to Jean Brandt and the new Board. The past President is on the Board and will continue to help out. Join us.

Onward and upward. ♡

New Tanager Editor

Commencing with the September issue of the *Western Tanager*, Lee Jones will assume the post of editor. Lee received his Ph.D. in Ornithology from UCLA, and is well known as a birder, wildlife illustrator, and photographer. The outgoing editor wishes to express his heartfelt thanks to all those who have contributed to the success of the publication over the past four years—the authors of the articles, the artists, Fotoset, Artisan Press, and all the rest—too numerous to name—who have worked long and hard behind the scenes to insure that each issue was received in timely fashion by our growing roster of members and subscribers.

Kimball Garrett

BIRDS of the Season



It has become customary, in recounting birdwatching events during the month of May in So. Calif., to lament the unspectacular nature of the passage of our normal western migrants, while rejoicing over the surprising showing of misguided eastern vagrants. That misplaced easterner, flitting onto one list or another in an unfamiliar habitat, deservedly captures the attention of any birder spending this season afield. But, through the years, the "accidental" occurrence of vagrants has become predictable and routine. Almost tedious. This spring saw another sprinkling of **Rose-breasted Grosbeaks**, a handful of **Tennessee Warblers**, a dash of **Black-and-White Warblers**, and the now-expected liberal dose of **American Redstarts**. Even yesteryear's super-rarities, while still exciting to see, no longer amaze. There was another **Common Grackle** (ho-hum) at Scotty's Castle in Death Valley on May 22 (Paul Lehman *et al*); another **Yellow-throated Vireo** at Ft. Piute (n.w. of Needles) on the 31st (Guy McCaskie and Eliz. Copper); this year's **Prothonotary Warblers** at Oasis, Mono County, on the 23rd, and Pt. Loma on June 1st; a brilliant male **Scarlet Tanager** at the Cabrillo Monument at the tip of Pt. Loma on May 26-28 (Linda Delaney *et al*) and a **Golden-winged Warbler** at Scotty's on the 24th (Kent Van Vuren). An "invasion" of **Hooded Warblers** brought two to the desert oases (Ft. Piute and Tollhouse Spring) and one to the unlikely locale of Jack Fisher Park in downtown Santa Ana (a singing male on May 23rd—Sylvia Ranney *et al*). Similarly, after two **Yellow-throated Warblers** were found in San Diego Co. in April, a third appeared briefly at the foot of San Vicente Blvd. in Santa Monica, where a bicycling, binocular-less birdwatcher found it flitting from palm to palm, on the 12th (KG). Completing the "wave," two more **Yellow-throateds** were on Pt. Loma the first few days of June.

In any year, a few ultra-rarities stand out. My vote this spring would be split several ways. So. Calif.'s first **White-eyed Vireo**, found at Oasis on the 31st (until June 2nd) by Paul Lehman *et al*, was certainly the rarest in terms of number of records; but perhaps surpassing it in significance was the female **Scissor-tailed Flycatcher** which was incubating a nest full of eggs on the Needles golf course in late May and early June (Doug Morton, the Cardiffs, *et al*). This nesting is several hundred miles west of the species' known breeding range, and the eggs, if fertile, may be the responsibility of one of the numerous Western Kingbirds on the golf course (the two species are closely related). A female **Cerulean Warbler** at the tip of Pt. Loma on the 26th and 27th (Claude Edwards) was only the fifth for So. Calif.; it refused to oblige the group of hard-core birders who left the Deep Springs area a day early (and at the height of the gas crisis) to pursue it on Memorial Day. Insult was then added to injury that same day when Richard Webster found So. Calif.'s fifth **Upland Sandpiper** at Deep Springs. A **Black-throated Blue Warbler** at Scotty's on the 26th (John MacDonald *et al*) was only the second to be seen in spring in So. Calif. (the first was a banded bird on San Nicolas Is. 15-17 June 1976). A singing **Coues' Flycatcher** at Morongo Valley on the 14th (Bill Clow, Doug Wilson) provided our first spring record of this species. Finally, a **Wilson's (Thick-billed) Plover** on the Naval Base at Pt. Mugu (Richard Webster, of course) was only the fifth to be found in Calif. It was present from at least 21 April into early June. This species, which breeds in coastal estuaries as far north as central Baja Calif., is certainly to be looked for in our area.

The roll call of spring vagrants primarily reflects the spatial and temporal bias of observers in the region. One can be assured that no shrub went unchecked in the Death Valley/Deep Springs area over the Memorial Day weekend. But the same shrubs were virtually ig-

nored two weeks prior to Memorial Day, when the bulk of the "normal" western migrants passed through. For knowledge of the passage of our expected western birds, we have relied on the systematic surveys sponsored by agencies such as the Bureau of Land Management and the U.S. Fish and Wildlife Service, plus intensive local coverage by individuals. Russ and Marion Wilson, for example, once again covered Morongo Valley through the spring, reporting "business as usual" among the land migrants there.

Significant among our "western" migrants were 4 **Common Nighthawks** over Pt. Mugu on June 3rd (RW). While this species nests commonly (though locally) in the northwest, it is very rarely encountered as a transient (the Pt. Mugu birds represent only the 2nd spring record for the So. Calif. coast). Two very late transient **Varied Thrushes** were noteworthy: one at Buckhorn Campgrnd. on the 26th (Fred Heath), and one at Deep Springs June 1-3 (RW). A **Harlequin Duck**, first found in January in Carlsbad, was refound on Memorial Day at the same location—where it may take up residence, as did our Ballona Creek bird a few years back.

May pelagic trips have proven rewarding in the past, and this year's LAAS trip on the 20th was no exception. Though difficulties with the charter co. unfortunately kept several birders off the boat, those lucky enough to go were treated to a dazzling display of seabirds along the Santa Rosa/Cortez Ridge. Tens of thousands of **Sooty Shearwaters** and hundreds of **Pink-footed Shearwaters** were joined by 2 **Manx Shearwaters** and 2 obliging **Black-footed Albatrosses**. **Xantus' Murrelets** were almost constantly in view, and other alcids were well-studied on the glassy waters: among them, 2 **Horned Puffins** and 2 **Tufted Puffins** (both rare and sporadic in our area), **Rhinoceros Auklets**, **Cassin's Auklets**, and **Pigeon Guillemots**. Four **South Polar Skuas** (regular in late spring) and some 30 **Sabine's Gulls** were also seen. And, for good measure, a visit was paid to the Anacapa Island **American Oystercatcher**. Who would have guessed, upon this bird's discovery in 1964, that it would still be present 15 years later, even outlasting one of the massive rock arches on the eastern tip of the same island? But the real highlight of the trip was the sighting of a pair of Blue Whales lolling alongside our boat just off San Nicolas Island. Common Dolphins, Risso's Dolphins, and Dall Porpoise also were encountered.

The search for transients and vagrants usually overshadows the study of nesting species in our region; at the whirlwind height of migration it is all too easy to lose sight of the fact that May represents the peak of nesting activities for many species. Numerous pairs of the expanding **Cattle Egret** were found nesting in the So. Wilbur Flood Area in so. Kings Co. in May (RW, Bob Barnes). In this extensive wetland area, RW also found three unusual transient shorebirds: **Red Knot**, **Sanderling** (3), and **Semipalmated Sandpiper**. **Wood Ducks** were nesting at Lake Sherwood in early May (RW) and along the So. Fork of the Kern River (Bob Barnes). A pair of **Ring-necked Ducks** on Lake Elizabeth on the 31st (Curt Wohlgemuth) was unusually late: This species nests well to the north (but local nesting should be watched for). We now know that **Snowy Plovers** nest locally (sometimes in large numbers) around lake beds in the interior; nine birds at Tecopa Marsh in May (Jan Tarble) suggest an additional locality. **Long-eared Owls** were again nesting in several ranchyards in the Antelope Valley, along with at least one pair of **Swainson's Hawks**. The elusive **Flammulated Screech-Owl** was heard on Mt. Pinos on the 18th (RW), and a nesting pair of **Spotted Owls** obliged scores of birders at Switzer's Canyon in the San Gabriels during May.

Nuttall's Woodpeckers seem very much established as breeding birds in desert riparian areas. Jan Tarble found a pair along the

Owens River at Lone Pine; birds were also present through the spring along Big Rock Creek north of Pearblossom, and (as usual) at Morongo Valley. In all of these areas the closely related **Ladder-backed Woodpecker** nests nearby. A nesting pair of **Wrentits** was being monitored and filmed near Valyermo by Terry Clark; her documentation of behavior (such as mutual preening) may help to elucidate the taxonomic relationships of this unique, babbler-like species. A singing male **Ruby-crowned Kinglet** at Table Mtn. in the San Gabriels on the 26th (KG) was in an area where few have nested in recent years. **Bell's Vireos** were found in many areas, including San Francisquito Cyn, on the 9-11th (KG). Because of Brown-headed Cowbird parasitism, however, nesting success of this species in our area is usually quite low.

Summer Tanagers were widely noted. In addition to their usual localities (Morongo Valley, Colorado R., Mohave Narrows, etc.), birds were found along the So. Fork of the Kern River (Bob Barnes), in Cherry Cyn. near Beaumont (Lee Jones), in San Andreas Cyn. near Palm Springs (LJ), and near Tecopa (Jan Tarble). **Indigo Buntings** continue to colonize So. Calif.: males apparently on territory were along the So. Fork of the Kern River near the east end of Lake Isabella (Bob Barnes) and in Morongo Valley (Mitch Heindel, Doug Willick, Pam Oetzel, *et al*). The very local **Grasshopper Sparrow** was located at a traditional site in La Jolla Valley near Pt. Mugu on May 1st (4 birds: RW), and also at Moorpark in Ventura Co. on the 6th (also RW). **Black-chinned Sparrows** were nesting quite visibly at Morongo Valley (Russ and Marion Wilson *et al*), and at other scattered localities. Information on this little-known species is being avidly collected by Jerry Johnson and Fred Ziegler as part of a project which should serve as a model for applied work by amateur ornithologists.

The above is just a sampling of the intriguing results of a spring of active field work by the So. Calif. birding community. The excitement level will likely diminish in July and August, but it need not. Those months will witness the height of fledging of our montane nesters, and the peak southbound passage of hummingbirds through mountain meadows of pentstemon, columbine, etc. Shorebird migration will be in full swing by late July, with areas such as McGrath State Beach and Malibu Lagoon deserving full attention. The annual ritual of condor watching will once again be upon us, and our forthcoming August boat trip out of Morro Bay holds much promise. Post-breeding dispersal will bring unusual birds into the region (remember last summer's Thick-billed Kingbird near Blythe), giving impetus to vagrant-chasers who are accustomed to living in limbo between the May and October rushes of lost birds. ♀



WESTERN Tanager

EDITOR Barry Clark

ASSISTANT EDITOR Corliss Kristensen

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Audubon membership (local and national) is \$18 per year (individual), \$21 (family), or \$13.50 (student or senior citizen), including AUDUBON Magazine, and THE WESTERN Tanager. To join, make checks payable to the National Audubon Society, and send them to Audubon House. Subscriptions to THE WESTERN Tanager separately are \$6.00 per year (Third Class), or \$9.00 (First Class, mailed in an envelope). To subscribe, make checks payable to Los Angeles Audubon Society.

Action on Mono Lake

Mono Lake is currently one of the most critically threatened natural areas in the state, as a result of depletion of its fresh water sources by the Calif. Dept. of Water and Power. Without public efforts to force protection of this prime nesting, resting, and feeding site for millions of shorebirds, gulls, grebes, and other waterfowl, this crucial habitat may be irreversibly ruined for wildlife and recreation.

The urgency of the situation became obvious this May when the water level in the lake reached a new low. Despite efforts to dynamite the land bridge connecting the mainland with Negit Island (where 40,000 California Gulls are nesting), the channel between the island and the mainland is still only eight feet wide and three inches deep. Coyotes can and are moving easily onto the island to reach nesting gulls. Late in May, approximately 28-to-31,000 gulls abandoned their nests (possibly due to coyote disturbance), and UC biologists have noted that only a small percentage of the fleeing birds have resettled in the area.

During May, L.A. Audubon joined with National Audubon, Friends of the Earth, the Mono Lake Committee, and several individual plaintiffs, in a legal suit charging the D.W.P. with violation of the public trust, threatening public health and local tourism, endangering a scenic recreation area, and jeopardizing the survival of a unique and valuable natural resource. A San Francisco law firm has volunteered its services; the plaintiffs will raise incidental expenses.

At the same time, L.A. Audubon is working with the Mono Lake Committee and other conservation groups to publicize the plight of Mono Lake, and to educate the public regarding the necessity of water conservation. The Calif. Dept. of Water Resources has stated that a 15-20% water conservation program will be necessary by the year 2,000. But if we wish to save precious wildlife resources, this program must be implemented now. Both legal and grass-roots community action will be required if a statewide plan is to be put into effect.

Each of us may promote this effort by reminding our fellow Southern Californians that we live in an arid land, and that the water we waste is water lost from already-stressed habitats such as Mono Lake and the Colorado River. These losses adversely affect agriculture and riparian biota, while depleting water resources needed for California's future. Your help is needed. A meeting of persons concerned about Mono Lake will be held at the Plummer Park Auditorium, Saturday, July 21, 1:00 p.m. For details, please contact conservation chairman, Corliss Kristensen, 213-824-3131.

Los Angeles Audubon ANNUAL PICNIC

Saturday, August 4th
Vermont Canyon, Griffith Park

10 a.m. — 5 p.m.

The picnic area is located just north of the Greek Theatre, on the left. Bring frisbees, baseball mitts, footballs, food, and friends.

CALENDAR

Los Angeles Audubon Headquarters, Library, Bookstore, and Nature Museum are located at Audubon House, Plummer Park, 7377 Santa Monica Blvd., Los Angeles 90046. Telephone: 876-0202. Hours: 10-3, Tuesday through Saturday.

Audubon Bird Reports:

Los Angeles 213-874-1318
Santa Barbara 805-964-8240

Pelagic Trip Reservations

To make reservations for pelagic trips, send a check payable to LAAS plus a self-addressed, stamped envelope, your phone number, and the names of all those in your party to the Reservations Chairman, Audubon House. No reservations will be accepted or refunds made within 4 days of departure. To guarantee your space, make reservations as early as possible. Trips will be cancelled 30 days prior to departure if there is insufficient response. If you wish to carpool, please so indicate, and you will be contacted two weeks prior to the trip.

SATURDAY, JULY 21—Antelope Valley. Meet at 7:00 a.m. at Avenue D (Hwy. 138) and the Antelope Valley Fwy. (14). The group will spend the day checking ranches and desert habitat for characteristic nesting species, and will also look for marsh birds and fall migrant shorebirds. Be prepared for hot temperatures. Bring liquids. Leader: Tom Frillman, 856-8779.

SATURDAY, JULY 21—Mono Lake Action Meeting, 1:00 p.m., Plummer Park Auditorium. David Gaines of the Mono Lake Committee will chair this meeting of persons interested in learning more about Mono Lake, or joining the effort to save this embattled habitat. For information call Corliss Kirstensen, 213-824-3131.

SATURDAY, AUGUST 4—Los Angeles Audubon Annual Picnic. 10 a.m.-5 p.m., Vermont Canyon, Griffith Park (just north of the Greek Theatre, on the left). Everyone welcome.

SATURDAY, AUGUST 18—Beginner's Trip: Malibu Canyon and Lagoon. Meet at 8:00 a.m. at Tapia Park, along Malibu Cyn. Rd. (Las Virgenes Rd.) south of Mulholland Drive. The group will cover Tapia Park, Malibu Creek State Park, and Malibu Lagoon, with an emphasis on developing identification skills. Leaders: Art and Jan Cupples, 981-4746.

SATURDAY, AUGUST 25—Mt. Pinos. Meet at 8:00 a.m. at Iris Meadow at the end of the paved road. Go north on I-5 to the Frazier Park offramp, and turn west, continuing past the town of Frazier Park to Lake of the Woods. Turn right on Cuddy Valley Rd. and follow the pavement uphill to its end. We will walk to the summit and spend much of the day looking for California Condors; late arrivals should meet at the summit. Migrants should be numerous in the forest and meadows. Leader: to be announced.

SUNDAY, AUGUST 26—Morro Bay Pelagic Trip. Departure at 7:30 a.m. from Virg's Landing at Morro Bay, with return at 3:00 p.m. Price: \$22.00 per person. Leaders: Jon Dunn and Bruce Broadbooks.



SUNDAY, SEPTEMBER 9—Pelagic Trip to Osborne Banks and Catalina Channel. Departure at 6:00 a.m. aboard the *Vantuna*, from USC Landing in San Pedro, with return at 6:00 p.m. Price: \$18 per person. Leaders: Herb Clarke and Shum Suffel.

SATURDAY, SEPTEMBER 22—Monterey Bay Pelagic Trip. Departure at 8:00 a.m. aboard the *Miss Monterey* from Sam's Fisherman's Wharf in Monterey, returning at 3:00 p.m. Price: \$16.00 per person. Leaders: Arnold Small and Kimball Garrett.

SATURDAY, OCTOBER 13—Monterey Bay Pelagic Trip. Departure at 8:00 a.m. aboard the *Miss Monterey* from Sam's Fisherman's Wharf in Monterey, returning at 3:00 p.m. Price: \$16.00 per person. Leaders: Bruce Broadbooks and Shum Suffel.

California Native Plant Society Trips

These leisurely and informative walks are open to all who are interested in our native plants. Bring a sack lunch and water. For additional information call 213-346-4925.

SATURDAY, JULY 21—Idylwild. Meet at 10 a.m. Take the Banning exit from I-10, so. at Idylwild, 8th St., Hwy. 243 Exit. Meet on road shoulder just south of the RR, to carpool in search of gentians, orchids, lillies. Some field-trippers will camp in the area overnight.

SATURDAY-SUNDAY, AUGUST 4-5—Kern Plateau. Meet at 10 a.m. at Riverside Park in Kernville. If you prefer not to camp, there are accommodations in motels nearby. The group will tour Horse Meadow, Big Meadow, and Siretta Peak. The meadows are wet, and the peak trail is steep, but the flowers are fantastic!

A Week at Rancho del Cielo, August 5-11

A unique opportunity to explore Mexico's northernmost tropical cloud forest, on the eastern flank of the Sierra Madre Occidental, 265 miles below Brownsville, Texas. Cost per person = \$200, including room and board at the renowned field station operated by Texas Southmost College. For information, contact trip coordinator Fred Webster, in Austin, Texas, 512-451-1669.

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WESTERN TANAGER

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Prepared for Los Angeles Audubon Society by Kay Nakamura July 1979

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 THE 1975 CHRISTMAS COUNT. 1976 Jan.-Feb., 3.
 THE CHRISTMAS COUNTS. 1977 Jan.-Feb., 7.
 RECORD CHRISTMAS COUNTS. 1978 Feb., 4.
 THE CHRISTMAS COUNTS. 1979 Feb., 3.
 CHURCHILL: A FAMOUS NAME. By Hyrum Strong, 1973 Oct., 1.
 CLAPPER RAIL VS. BUREAU OF RECLAMATION. 1971 Oct., 7.
 CLIPPERTON ISLAND, THE BIRDS OF. By Kenneth E. Stager, 1974 Oct., 1.
 COAST, BIRDING THE OTHER. 28½ LIFE BIRDS IN TWO YEARS.
 By Hal Ferris, 1978 Dec.-1979 Jan., 1.
 COLD CREEK CANYON. CONSERVATION. 1976 Mar., 3.
 COLLECTOR, SOME WORDS ON BEHALF OF THE SCIENTIFIC. By Thomas Howell, 1971 Nov., 1.
 COLOMBIA. BIRDING AT ITS BEST. By Clyde Bergman, 1976 Jan.-Feb., 1.
 COLORADO RIVER, BIRDING THE. By Jean Brandt, 1977 Mar., 4.
 COLORADO RIVER, BIRDING ALONG THE. PART II. By Jean Brandt, 1979 Mar., 4.
 COLORADO, THE. CHANGING TIMES ALONG THE RIVER. By Jon Dunn, 1978 Oct., 1.
 CONDOR. 1972 Jan., 8.
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 CONDOR CHALLENGE, THE. By John Borneman, 1973 Jul.-Aug., 3.
 CONDOR FUND DRIVE. SEEING THE CALIFORNIA CONDOR. 1974 Nov., 1.
 CONDOR, MAN AND THE. By Ian McMillan, 1975 Oct., 1.
 CONDOR STATUS BEING CLARIFIED. CONSERVATION. 1973 Jan., 6.
 CONDOR, THE CALIFORNIA. YEAR OF DECISION. By John Borneman,

1976 Oct., 3.
 CONDOR, THE YEAR OF THE. By John Borneman, 1978 Oct., 4.
 CONDOR, TO SAVE THE. By Barry Clark, 1977 Nov., 3.
 CONDORS IN PASADENA, LOOKING FOR. By Bradford Torrey, 1977 Nov., 1.
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 CONSERVATION. By Peter Skipper, 1977 Jan.-Feb., 5.
 CONSERVATION. By Bill Turner, 1976 Jul.-Aug., 3.
 CONSERVATION. COLD CREEK CANYON. 1976 Mar., 3.
 CONSERVATION. CONDOR STATUS BEING CLARIFIED. 1973 Jan., 6.
 CONSERVATION. LEGG LAKE: MITIGATION OR LITIGATION. By Barry Clark, 1974 Jul.-Aug., 2.
 CONSERVATION. PERSISTENT PESTICIDES IN THE ENVIRONMENT. 1973 Feb., 6.
 CONSERVATION. SHOWDOWN AT BUTTERBREAD SPRING. By Pamela Axelson, 1975 Sep., 3.
 CONSERVATION. THE PUSH FOR WATER QUALITY. PRIORITY: UPPER NEWPORT. By Peter Skipper, 1977 Nov., 4.
 CONSERVATION GOALS. By Peter Skipper, 1976 Nov., 7.
 CONVENTION, THE. By Sandy Wohlgemuth, 1977 Sep., 3.
 CONVERGENCE QUIZ. 1979 Mar., 5. 1979 Apr., 7.
 CORTEZ STEPPED HERE. By Terry Clark, 1975 Jun., 1.
 COSTA RICA. AN A.B.A. PILOT EXPEDITION. By Hank Brodtkin, 1976 Nov., 1.
 COWAN AVENUE, THE BIRDS OF. By Julianne Beaudin; Whitney Davis; Tiffany Dever; Miles Durfee; Phillip Estenson; Neal Golub; Deon Jones; Tracy Ross; Milton Todd; and Kenneth Wheeler, 1976 May, 3.
 CRANES TO GET ISLAND FROM AIR FORCE, WHOOPING. By John W. Finney, 1975 Feb., 5.
 CREEK, BIRDING AT MALIBU. By Jean Brandt, 1977 Apr., 4.
 CREEK, BIRDING AT VALYERMO AND BIG ROCK. By Jean Brandt, 1979 Jun., 10.

D

DAM, BIRDING AT LITTLE ROCK. By Jean Brandt, 1976 Apr., 4.
 DAM, THE SANTE FE. SOMETHING FOR EVERYONE? By Barry Clark, 1975 Nov., 3.
 DAY, THE BIG. By Terry Clark, 1976 Jul.-Aug., 1.
 DAY, THE REALLY BIG. By Terry Clark, 1978 Jun.-Jul., 9.
 DEATH VALLEY DAYS. By Don Roberson, 1978 Aug., 7.
 DEATH VALLEY LOOP, BIRDING THE. By Jean Brandt, 1979 May, 11.
 DESERT TORTOISE, THE. By Richard Spotts, 1977 Apr., 5.
 DOVES... THREE SCRUB JAYS, TWO SPOTTED. By Sandy Wohlgemuth, 1975 Dec., 5.
 DOWITCHER, THE SHORT-BILLED. By Janet Witzeman, 1974 May, 5.
 DRY TORTUGAS, THE. 1973 Nov., 1.
 DUCK, THE MEXICAN. By Bonnie Swarbrick, 1975 Jun., 5.

E

ECOLOGICAL PERSPECTIVE, AN. THE CHIRICAHUAS. By Kimball Garrett, 1976 Jun., 1.
 EGG COLLECTOR COLLECTED. By W.R.P. Bourne, 1974 Oct., 5.
 ELEGANT TERNS, ROYAL AND. FIELD NOTES. By Jon Dunn, 1976 Dec., 5.
 EMPIDONAX, THE GENUS. FIELD NOTES. By Jon Dunn.
 (Western Flycatcher). 1977 Apr., 5.
 (Hammond's, Dusky, and Gray Flycatchers). 1977 May-Jun., 5.
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 ENDANGERED. By J. Richard Hilton, 1975 Jul.-Aug., 5.
 ENDOMYCHURA MURRELETS, THE. FIELD NOTES. By Jon Dunn, 1978 May, 8.
 ENTROPY AND DESTINY. By Philip Broughton, 1977 Mar., 5.
 ESTUARY, THE SANTA ANA. By Richard Spotts, 1977 Aug., 3.
 ETHIC, TOWARD A BIRDING. By Arnold Small, 1978 Dec.-1979 Jan., 4.
 EVOLUTION, THE QUEERNESS OF SOCIAL. By Edward O. Wilson, 1973 Feb., 8.
 EYE OF THE BEHOLDER, THE. By Dorothy Dimsdale, 1976 Mar., 5.
 EYE OF THE BEHOLDER, THE. By Dorothy Dimsdale, 1977 Nov., 7.

F

FALCONRY HARVESTING. By J. Richard Hilton, 1975 Dec., 11.
 FALCONRY? WHAT FUTURE FOR. By J. R. Hilton, 1974 Apr., 1.
 FEMALE GROSBELLS. FIELD NOTES. By Jon Dunn, 1977 Mar., 5.
 FIELD GUIDE AUTHOR TURNS TO PAINTING. FORTIETH ANNIVERSARY OF PETERSON'S FIELD GUIDE. 1974 Sep., 5.
 FIELD NOTES. By Jon Dunn.
 SANDPIPERS (Least and Baird's). 1975 Sep., 5.
 WARBLERS (Blackpoll, Bay-breasted, and Pine). 1975 Oct., 5.
 SPARROWS (Chipping, Brewer's, and Clay-colored). 1975 Nov., 4.
 THE IDENTIFICATION OF IMMATURE ORIOLES. 1975 Dec., 7.
 THE IDENTIFICATION OF LONGSPURS. 1976 Jan.-Feb., 4.
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 THE CARPODACUS FINCHES (House, Purple, and Cassin's). 1976 Jun., 4.
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 THE RACES OF THE SOLITARY VIREO. 1976 Sep., 5.
 PECTORAL AND SHARP-TAILED SANDPIPERS. 1976 Oct., 5.

THE IDENTIFICATION OF PIPITS. 1976 Nov., 5.
 ROYAL AND ELEGANT TERNS. 1976 Dec., 5.
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 THE GENUS EMPIDONAX (Western). 1977 Apr., 5.
 THE GENUS EMPIDONAX (Hammond's, Dusky, and Gray). 1977 May-Jun., 5.
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 THE GENUS EMPIDONAX (Willow Flycatcher). 1977 Aug., 5.
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 THE CATHARUS THRUSHES (Veery). 1977 Oct., 5.
 THE CATHARUS THRUSHES (Gray-cheeked and Wood). 1977 Nov., 5.
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 THE ENDOMYCHURA MURRELETS. 1978 May, 8.
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 PLAIN-WINGED VIREOS (Philadelphia and Warbling). 1978 Aug., 9.
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 THE MYIARCHUS FLYCATCHERS (Great Crested and Olivaceous). 1978 Dec.-1979 Jan., 5.
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 IMM. RED-SHOULDERED AND BROAD-WINGED HAWKS. 1979 May, 13.
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 FIELD NOTES—FOR FUN AND PROFIT. By Kimball Garrett, 1979 May, 9.
 FIELD TRIP REPORTS. By Gail Gifford.
 1976 Jan.-Feb., 7.
 1976 Mar., 7.
 1976 Apr., 7.
 1976 May, 7.
 1976 Jul.-Aug., 5.

FINCHES, THE CARPODACUS (House, Purple, and Cassin's). FIELD NOTES. By Jon Dunn, 1976 Jun., 4.
 FIVE YEARS IN A BOX. By Russell Wilson, 1971 Oct., 1.
 FLYCATCHERS, THE MYIARCHUS (Ash-throated and Wied's Crested). FIELD NOTES. By Jon Dunn, 1978 Nov., 4.
 FLYCATCHERS, THE MYIARCHUS (Great Crested and Olivaceous). FIELD NOTES. By Jon Dunn, 1978 Dec.-1979 Jan., 5.
 FLYCATCHERS, THE TYRANNUS (Western, Cassin's, and Tropical Kingbirds). FIELD NOTES. By Jon Dunn, 1979 Feb., 5.
 FORK-TAILED STORM-PETREL. FIELD NOTES. By Jon Dunn, 1978 Jun.-Jul., 8.

G

GALAHs, OF WATTLEBIRDS, MEGAPODES, AND. By Les Wood, 1977 Aug., 1.
 GALAPAGOS, THE. NOTES FROM A WORLD APART. By Gerry Haigh, 1979 Feb., 1.
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 GRIFFITH PARK, BIRDING AT. By Jean Brandt, 1976 Nov., 4.
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 GULL, MORE ON THAYER'S. By J.T. Leverich, 1974 Apr., 5.
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 GYMNOGYPS (Concluded). By J. Richard Hilton, 1971 Sep., 3.

H

HARBOR, BIRDING AT THE. By Jean Brandt, 1975 Dec., 6.
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 HAVASU, BIRDING AT LAKE. By Jean Brandt, 1979 Apr., 8.
 HAWK, SWAINSON'S. FIELD NOTES. By Jon Dunn, 1976 Mar., 4.
 HAWK WATCHING IN THE EASTERN UNITED STATES. By J. Richard Hilton, 1973 Mar., 1.
 HAWKS, IMM. RED-SHOULDERED AND BROAD-WINGED. FIELD NOTES. By Jon Dunn, 1979 May, 13.
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IMMATURE ORIOLES, THE IDENTIFICATION OF (Northern: Bullock's and Baltimore; Hooded, Scott's, and Orchard). FIELD NOTES. By Jon Dunn, 1975 Dec., 7.
 IMMATURE RED-SHOULDERED AND BROAD-WINGED HAWKS. FIELD NOTES. By Jon Dunn, 1979 May, 13.

IMPERILED BIRDS, CALIFORNIA'S SPECIES OF SPECIAL CONCERN. By Van Remsen, 1979 May, 1.
 INTRODUCED BIRDS IN L.A. By Jean Brandt, 1976 Jul.-Aug., 4.
 INTRODUCED VEGETATION OF LOS ANGELES, A SYMPATHETIC VIEW OF THE URBAN EXOTICA. By Leslie Wood, 1975 Nov., 1.
 ISLAND, SAN CLEMENTE. By Robert M. Stewart, 1975 Jul.-Aug., 2.
 ISLAND, SANTA BARBARA. By John Smail and Robert M. Stewart, 1975 Feb., 2.
 ISLAND, SANTA CRUZ. A NEW SANCTUARY? 1978 Mar., 7.
 ISLAND, THE BIRDS OF CLIPPERTON. By Kenneth E. Stager, 1974 Oct., 1.
 ISLANDS, BIRDS OF THE CALIFORNIA CHANNEL. By Lee Jones, 1974 Sep., 1. Part II, 1975 Mar., 1. CONCLUSION, 1975 Apr., 2.

J

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 JAYS, TWO SPOTTED DOVES...., THREE SCRUB. By Sandy Wohlge-muth, 1975 Dec., 5.

K

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 LESSER KNOWN FACTS. By Dorothy Dimsdale, 1975 Sep., 4.
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 LITTLE ROCK DAM, BIRDING AT. By Jean Brandt, 1976 Apr., 4.
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 LOGGERHEAD/NORTHERN SHRIKES. FIELD NOTES. By Jon Dunn, 1979 Mar., 5.
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 LONGEVITY RECORDS. 1975 Apr., 3.
 LONGSPURS, THE IDENTIFICATION OF (Lapland, Chestnut-collared, and McCown's). FIELD NOTES. By Jon Dunn, 1976 Jan.-Feb., 4.
 LOS ANGELES, A SYMPATHETIC VIEW OF THE INTRODUCED VEGETATION OF URBAN EXOTICA. By Leslie Wood, 1975 Nov., 1.
 L.A., INTRODUCED BIRDS IN. By Jean Brandt, 1976 Jul.-Aug., 4.

M

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 MALIBU LAGOON: A BRIGHT FUTURE? By Sandy Wohlge-muth, 1977 May-Jun., 7.
 MALIBU: TIME OF DECISION. PRESIDENT'S MESSAGE. By Sandy Wohlge-muth, 1977 Dec.-1978 Jan., 2.
 MARINA, BIRDING AT THE. By Jean Brandt, 1975 Nov., 5.
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 MEXICAN DUCK, THE. By Bonnie Swarbrick, 1975 Jun., 5.
 MEXICO: THE TROPICAL CONNECTION, WEST. By Kimball Garrett, 1977 Jul., 1.
 MIGRATION, SPRING SEABIRD. OBSERVATIONS FROM GOLETA POINT. By Paul Lehman, 1979 Jun., 5.
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 MURRELETS, THE ENDOMYCHURA. FIELD NOTES. By Jon Dunn, 1978 May, 8.
 MYIARCHUS FLYCATCHERS, THE (Ash-throated and Wied's Crested). FIELD NOTES. By Jon Dunn, 1978 Nov., 4.
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N

NARROWS, BIRDING AT MOJAVE. By Jean Brandt, 1978 Apr., 7.
 NARROWS, WHITTIER—A HOPEFUL BEGINNING. By David W. Foster, 1975 Dec., 1.
 NARROWS REVISITED, WHITTIER. By David W. Foster, 1977 Mar., 3.
 NEW ORLEANS, THE TRAIL OF THE LONE DELEGATE. By Dorothy Dimsdale, 1975 Jun., 2. Conclusion, 1975 Jul.-Aug., 2.
 NEWFOUNDLAND, WINTER BIRDING IN ST. JOHN'S. By Robert Turner, 1974 Jun., 1.
 NEWPORT, BIRDING AT UPPER. By Jean Brandt, 1977 Oct., 4.
 NIGHTINGALES AND OTHER STORIES, THE NIGHT OF THE. By Barry Clark, 1977 Oct., 1.
 NIGHT-VISION SCOPE USED FOR WILDLIFE STUDIES. 1971 Oct., 3.

1973, A YEAR OF MANY VISITORS. By Shumway Suffel, 1974 Feb., 1.

O

OIL SUMPS. THE DECEPTIVE KILLERS. By Philip P. Schaeffer, 1973 Mar., 3.
 OISEAUX, CHERCHEZ LES. By Guy Commeau, 1976 Oct., 1.
 O.O.C., THE—A REMINISCENCE. By Harold Swanton, 1976 Jun., 3.
 ORIOLES, THE IDENTIFICATION OF IMMATURE (Northern: Bullock's and Baltimore; Hooded, Scott's, and Orchard). FIELD NOTES. By Jon Dunn, 1975 Dec., 7.
 OSPREYS RETURN, THE. 1972 Jul.-Aug., 7.
 OWLS, LOOKING FOR. By Shumway Suffel, 1978 May, 7.
 OXBOWS & ANTIBIRDS. ADVENTURE ON THE AMAZON. By Hank and Priscilla Brodtkin, 1978 Jun.-Jul., 1.
 PAISANO, THE VOYAGE OF THE. By Dorothy Dimsdale, 1976 Sep., 3.
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 PIPING GUAN, THE WHITE-HEADED. OR HOW I FOUND MY 4,000th LIFE BIRD IN SURINAM. By Arnold Small, 1976 May, 1.
 PIPITS, THE IDENTIFICATION OF (Water, Red-throated, and Sprague's). FIELD NOTES. By Jon Dunn, 1976 Nov., 5.
 PLACERITA CANYON, BIRDING IN. By Jean Brandt, 1976 Mar., 4.
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 PLANTING FOR THE BIRDS. By Les Wood, 1977 Jul., 5.
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 PORTRAIT OF A RIVER. By Barry Clark, 1975 Sep., 1.
 PRESIDENT'S MESSAGE. By Sandy Wohlge-muth, 1976 Sep., 4.
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RAIL, THE BLACK. By Barry Clark, 1976 Mar., 5.
 RAIL VS. BUREAU OF RECLAMATION, CLAPPER. 1971 Oct., 7.
 RARE BIRD, A WORD ON BEHALF OF THE. By Arnold Small, 1971 Sep., 1.
 REPTILE-WATCHING, THE REWARDS OF. By Bill Turner, 1976 Sep., 1.
 REVIEW OF '72. By Shumway Suffel, 1973 Feb., 1.
 RIVER, BIRDING ALONG THE COLORADO. PART II. By Jean Brandt, 1979 Mar., 4.
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SALTON SEA, BIRDING AT THE. By Jean Brandt, 1977 Jan.-Feb., 4.
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 SANDPIPERS (Baird's and Least). FIELD NOTES. By Jon Dunn, 1975 Sep., 5.
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 SANTA BARBARA, BIRDING IN. By Brad Schram, 1977 May-Jun., 1.
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 SANTA MONICA MOUNTAINS, DISCOVERING THE. By Steve Maskel, 1977 Apr., 1.
 SAPSUCKER, THE RACES OF THE YELLOW-BELLIED. By Jon Dunn, 1978 Apr., 1.
 SEABIRD DIE-OFF, THE GREAT. By Steve Maskel, 1976 Nov., 4.
 SEABIRD MIGRATION, SPRING. OBSERVATIONS FROM GOLETA

POINT. By Paul Lehman, 1979 Jun., 5.
 SEABIRD WATCHING SITES. 1979 Jun., 8.
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 By T.R. Howell, A Response to Bourne, 1975 Jul.-Aug., 3.
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 SOUTH AMERICA, SPECIES DIVERSITY IN. By Richard Webster, 1978 Feb., 1.
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 SO. CALIF. GNATCATCHERS (Blue-gray and Black-tailed). FIELD NOTES. By Jon Dunn, 1978 Feb., 5.
 SOUTHERN CALIFORNIA, THE BEST OF BIRDING IN. 10 TOP BIRDING SPOTS. By Jean Brandt and Glenn Cunningham, 1978 May, 1.
 SPARROW, SAGE. By Barry Clark, 1975 Nov., 5.
 SPARROWS (Chipping, Brewer's, and Clay-Colored). FIELD NOTES. By Jon Dunn, 1975 Nov., 4.
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 SPECIES DIVERSITY IN SOUTH AMERICA. By Richard Webster, 1978 Feb., 1.
 SPECIES OF SPECIAL CONCERN. CALIFORNIA'S IMPERILED BIRDS. By Van Remsen, 1979 May, 1.
 STORM-PETREL, FORK-TAILED. FIELD NOTES. By Jon Dunn, 1978 Jun.-Jul., 8.
 SURINAM, OR HOW I FOUND MY 4,000th LIFE BIRD IN. THE WHITE-HEADED PIPING GUAN. By Arnold Small, 1976 May, 1.
 SURINAM, THE BIRDER'S. By Hank and Priscilla Brodtkin, 1979 Jun., 1.
 SURVIVAL, IMPROVING THE ODDS FOR. CONDOR. By John Borneman, 1975 Oct., 3.
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T

TAHITI, SEABIRDS OFF By Gene Anderson, 1978 Sep., 6.
 TANAGER, FORTY YEARS OF THE WESTERN. By Leslie Wood, 1974 Jul.-Aug., 1.
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 TERNS, ROYAL AND ELEGANT. FIELD NOTES. By Jon Dunn, 1976 Dec., 5.
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 THAYER'S GULL. 1973 Dec.-1974 Jan., 6.
 THAYER'S GULL, MORE ON. By J.T. Leverich, 1974 Apr., 5.
 THICKET, A DAY IN THE BIG. By Werner Schumann, 1973 Oct., 3.
 THOREAU AND THE WONDER OF BIRDS. By Henry David Thoreau, 1976 Apr., 1.
 THRASHERS, THE (Bendire's and Curve-billed). FIELD NOTES. By Jon Dunn, 1976 Jul.-Aug., 4.
 THRUSHES, THE CATHARUS (Hermit and Swainson's). FIELD NOTES. By Jon Dunn, 1977 Sep., 5.
 THRUSHES, THE CATHARUS (Veery). FIELD NOTES. By Jon Dunn, 1977 Oct., 5.
 THRUSHES, THE CATHARUS (Gray-cheeked and Wood). FIELD NOTES. By Jon Dunn, 1977 Nov., 5.
 TIKAL LANDS OF ETERNAL SPRING. GUATEMALA—By Betty Jenner, 1973 Jan., 1. CONCLUSION, 1973 Feb., 6.
 TORTOISE, THE DESERT. By Richard Spotts, 1977 Apr., 5.
 TORTUGAS, THE DRY. 1973 Nov., 1.
 TUNDRA BIRDS, ALASKAN. Part 1. By Alan Baldrige, 1971 Dec., 1. Part 2, 1972 Jan., 1.
 TYRANNUS FLYCATCHERS, THE (Western, Cassin's, and Tropical Kingbirds). FIELD NOTES. By Jon Dunn, 1979 Feb., 5.

U

UPPER NEWPORT, BIRDING AT. By Jean Brandt, 1977 Oct., 4.
 URBAN EXOTICA. A SYMPATHETIC VIEW OF THE INTRODUCED VEGETATION OF LOS ANGELES. By Les Wood, 1975 Nov., 1.

V

VALYERMO AND BIG ROCK CREEK, BIRDING AT. By Jean Brandt, 1979 Jun., 10.
 VEGETATION OF LOS ANGELES, A SYMPATHETIC VIEW OF THE INTRODUCED. URBAN EXOTICA. By Les Wood, 1975 Nov., 1.
 VIREO, THE RACES OF THE SOLITARY, FIELD NOTES. By Jon Dunn, 1976 Sep., 5.
 VIREOS, PLAIN-WINGED (Philadelphia and Warbling). FIELD NOTES. By Jon Dunn, 1978 Aug., 9.
 VIREOS, PLAIN-WINGED (Red-eyed and Yellow-green). FIELD NOTES. By Jon Dunn, 1978 Sep., 9.
 VISITORS, 1973, A YEAR OF MANY. By Shumway Suffel, 1974 Feb., 1.

W

WAKES, THE. 1974 Jun., 5.
 WALES EXPRESS, THE BOSTON-TO-. By Lee Jones, 1979 Jun., 9.
 WARBLERS (Blackpoll, Bay-breasted, and Pine). FIELD NOTES. By Jon Dunn, 1975 Oct., 5.
 WATERTHRUSHES, NORTHERN AND LOUISIANA. FIELD NOTES. By Jon Dunn, 1979 Jul.-Aug., 7.
 WATTLEBIRDS, MEGAPODES, AND GALAHs, OF By Les Wood, 1977 Aug., 1.
 WEST MEXICO: THE TROPICAL CONNECTION. By Kimball Garrett, 1977 Jul., 1.
 WEST, THE DISCOVERY OF THE BIRDS OF THE. By Barry Clark, 1979 Apr., 1.
 WESTERN TANAGER, FORTY YEARS OF THE. By Leslie Wood, 1974 Jul.-Aug., 1.
 WHITEWATER MARSH, THE. 1978 Sep., 8.
 WHITTIER NARROWS—A HOPEFUL BEGINNING. By David W. Foster, 1975 Dec., 1.
 WHITTIER NARROWS REVISITED. By David W. Foster, 1977 Mar., 3.
 WHOOPIING CRANES TO GET ISLAND FROM AIR FORCE. By John W. Finney, 1975 Feb., 5.
 WINTER BIRDING, THE JOYS OF By Shumway Suffel, 1975 Dec., 4.
 WOODPECKER LURES A LOUISIANA EXPERT, IVORY-BILLED. By Roy Reed, 1972 May, 6.
 WOODPECKER, THE RED-COCKADED. By Harley Kemp Jones, Jr. and Frederick T. Ott, 1974 Sep., 5.
 WREN, THE CANYON. BIRD OF THE MONTH. By Barry Clark, 1975 Oct., 4.

BOOKS REVIEWED: AUTHORS

A

ALDEN, PETER: *Checklist for Venezuela*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.

B

BELLROSE, FRANK: *Ducks, Geese, and Swans of North America*. Reviewed by Steve Strann, 1979 Jun., 13.
 BLAKE, EMMET R.: *Birds of Mexico*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
 BLAKE, EMMET R.: *A Manual of Neotropical Birds. Vol. 1*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
 BRUDENELL-BRUCE, P.G.C.: *The Birds of the Bahamas*. Reviewed by Barry Clark, 1975 Oct., 4.
 BRUUN, BERTEL AND ARTHUR SINGER: *British & European Birds*. Reviewed in 1972 Jun., 8.
 BULL, JOHN AND JOHN FARRAND, JR.: *The Audubon Society Field Guide to North American Birds: Eastern Region*. Reviewed by Richard Webster, 1977 Dec.-1978 Jan., 4.
 BUTLER, THOMAS: *Checklist for Ecuador*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
 BUTLER, THOMAS Y.: *Checklist of the Birds of Mainland Ecuador*. Reviewed by Olga Clarke, 1975 Dec., 9.

C

CAMERON, AD: see C.J.O. Harrison.
 CHALIF, EDWARD L.: see Roger Tory Peterson.
 CHRISTMAN, GENE: see Howard L. Cogswell.
 CODY, MARTIN L.: *Competition and the Structure of Bird Communities*. Reviewed by Barry Clark, 1976 Apr., 5.
 COGSWELL, HOWARD L., illus. by GENE CHRISTMAN: *Water Birds of California*. Reviewed by Lee Jones, 1978 Aug., 8.
 COLLETT, ROSEMARY K., with CHARLIE BRIGGS: *My Orphans of the Wild*. Reviewed by Carol Stone, 1975 Dec., 9.
 COOPER, WILLIAM T. AND JOSEPH M. FORSHAW: *The Birds of Paradise and Bower Birds*. Reviewed by Steve Strann, 1978 Sep., 11.

D

DAVIS, L. IRBY: *A Field Guide to the Birds of Mexico and Central America*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
 DELACOUR, JEAN: *The Pheasants of the World*. Reviewed by Steve Strann, 1978 Oct., 7.
 DELACOUR, JEAN: *Waterfowl of the World*. Reviewed by Steve Strann, 1979 Jun., 13.
 DICKENSON, EDWARD C.: see Ben F. King.
 DUNNING, JOHN S.: *Portraits of Tropical Birds*. Reviewed by Olga Clarke, 1975 Dec., 9.

E

EDWARDS, ERNEST P.: *A Field Guide to the Birds of Mexico*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
 ELLIOTT, HUGH: see James Hancock.

F

FARRAND, JOHN JR.: see John Bull.
 FERNANDEZ, JUAN ANTONIO: *Donana—Spain's Wildlife Wilderness*. Reviewed by Charles J. Sutton, 1975 Nov., 4.
 FRENCH, RICHARD: *A Guide to the Birds of Trinidad and Tobago*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
 FLEMING, ROBERT L., SR., ROBERT L. FLEMING, JR., AND LAIN SINGH BANGDEL: *The Birds of Nepal*. Reviewed by George W. Venatta, 1977 Jul., 7.
 FORSHAW, JOSEPH M.: see William T. Cooper.

G

- GODINE, DAVID R.: see S. Dillon Ripley.
GOODWIN, DEREK: *Crows of the World*. Reviewed by Barry Clark, 1977 Sep., 7.

H

- HALLIDAY, TIM: *Vanishing Birds: Their Natural History and Conservation*. Reviewed by Steve Strann, 1979 May, 15.
HANCOCK, JAMES AND HUGH ELLIOTT. PAINTINGS BY ROBERT GILLMOR AND PETER HAYMAN: *The Herons of the World*. Reviewed by Steve Strann, 1979 Mar., 7.
HARDY, J.W., compiler: *Voices of Neotropical Birds* (record). Reviewed by Olga L. Clarke, 1976 Apr., 5.
HARRIS, MICHAEL: *A Field Guide to the Birds of Galapagos*. Reviewed by Keith Axelsson, 1975 Sep., 4.
Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
HARRISON, C.J.O. (Consultant ed.). Illust. Ad Cameron: *Bird Families of the World*. Reviewed by Steve Strann, 1979 Apr., 11.
HAVERSCHMIDT, FRANCOIS: *Birds of Surinam*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
HAWAII AUDUBON SOCIETY: *Hawaii's Birds*. Reviewed by Robert L. Pyle, 1976 Sep., 7.
HEINTZELMAN, DONALD: *North American Ducks, Geese, and Swans*. Reviewed by Steve Strann, 1979 Jun., 13.
HILTY, STEVE: *Checklist for Colombia*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.

J

- JOHNSGARD, PAUL: *Ducks, Geese, and Swans of the World*. Reviewed by Steve Strann, 1979 Jun., 13.
JOHNSGARD, PAUL: *Waterfowl of North America*. Reviewed by Steve Strann, 1979 Jun., 13.

K

- KING, BEN F AND EDWARD C. DICKENSON: *A Field Guide to the Birds of South-East Asia*. Reviewed by James F. Clements, 1975 Nov., 4.
KOEPECKE, MARIA: *The Birds of the Department of Lima, Peru* (in Spanish). Reviewed by Richard Webster, 1978 Jun.-Jul., 7.

L

- LAND, HUGH C.: *Birds of Guatemala*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
LANE, JAMES A.: *A Birder's Guide to the Rio Grande Valley of Texas*. Reviewed by Lewis Garrett, 1971 Sep., 3.

M

- MACKENZIE, JOHN P.S. ILLUS. TERENCE SHORTT: *Birds in Peril*. Reviewed by Steve Strann, 1979 May, 15.
MATELSON, Helen and Teri Matelson: *The Birds Come Flocking: A Field Guide to Santa Barbara County for Birders and Other Travelers*. Reviewed by Steve Strann, 1978 Nov., 7.

O

- OGILVIE, M.A.: *Wild Geese*. Reviewed by Steve Strann, 1978 Nov., 7.
OLROG, C.C.: *Las Aves Sudamericanas. Vol. 1. Non-passerines* (in Spanish). Reviewed by Richard Webster, 1978 Jun.-Jul., 7.

P

- PALMER, RALPH: *Handbook of North American Birds. Vols. 2 & 3*. Reviewed by Steve Strann, 1979 Jun., 13.
PASQUIER, ROGER F.: *Watching Birds: An Introduction to Ornithology*. Reviewed by Kimball Garrett, 1977 Aug., 7.
PENNY, MALCOLM: *The Birds of the Seychelles and the Outlying Islands*. Reviewed by James F. Clements, 1975 Sep., 4.
PETERSON, ROGER TORY AND EDWARD L. CHALIF: *A Field Guide to Mexican Birds and Adjacent Central America*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
PHELPS, WILLIAM, JR. See R. Meyer de Schauensee.

R

- RICKERT, JON E.: *A Guide to North American Bird Clubs*. Reviewed by Steve Strann, 1978 Nov., 7.
RIDGLEY, ROBERT S.: *A Guide to the Birds of Panama*. Reviewed by George W. Venatta, 1976 Nov., 7.
Reviewed by Richard Webster, 1978 Jun.-Jul., 6.
RIPLEY, S. DILLON & DAVID R. GODINE: *Rails of the World*. Reviewed by Barry Clark, 1977 Sep., 7.

S

- SCHAUENSEE, RUDOLPHE MEYER DE: *A Guide to the Birds of South America*. Reviewed by Richard Webster, 1978 Jun.-Jul., 6.
SCHAUENSEE, R. MEYER DE: *The Species of Birds of South America with Their Distribution*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
SCHAUENSEE, R. MEYER DE AND WILLIAM PHELPS, JR.: *Guide to the Birds of Venezuela*. Reviewed by Richard Webster, 1978 Jun.-Jul., 6.
SCOTT, PETER: *Colored Key to the Waterfowl of the World*. Reviewed by Steve Strann, 1979 Jun., 13.
SINGH, LAIN: see Robert L. Fleming.
SINGER, ARTHUR: see Bertel Bruun.
SMALL ARNOLD: *Birds of California*. Reviewed in 1974 Sep., 3.

- SMITHE, FRANK B.: *The Birds of Tikal*. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
SOOTHILL, ERIC AND PETER WHITEHEAD: *Wildfowl of the World*. Reviewed by Steve Strann, 1979 Jun., 13.
STRESEMANN, ERWIN: *Ornithology—From Aristotle to the Present*. Reviewed by Barry Clark, 1976 Apr., 5.

T

- TODD, FRANK: *Waterfowl: Ducks, Geese, and Swans of the World*. Reviewed by Steve Strann, 1979 Jun., 13.

U

- UDVARDY, MIKLOS: *The Audubon Society Field Guide to North American Birds: Western Region*. Reviewed by Richard Webster, 1978 Jan., 4.

W

- WATSON, GEORGE E.: *Birds of the Antarctic and Sub-Antarctic*. Reviewed by Glenn Cunningham, 1976 Sep., 7.
WILBUR, SANFORD R.: *The Literature of the California Black Rail*. Reviewed in 1975 Feb., 3.

BOOKS REVIEWED: TITLES

A

- ANTARCTIC AND SUB-ANTARCTIC, BIRDS OF THE. By George E. Watson. Reviewed by Glenn Cunningham, 1976 Sep., 7.
ASIA, A FIELD GUIDE TO THE BIRDS OF SOUTH-EAST. By Ben F. King and Edward C. Dickenson. Reviewed by James F. Clements, 1975 Oct., 4.
AUDUBON SOCIETY FIELD GUIDE TO NORTH AMERICAN BIRDS, THE. EASTERN REGION: By John Bull and John Farrand, Jr. WESTERN REGION: By Miklos D. E. Udvady. Reviewed by Richard Webster, 1977 Dec.-1978 Jan., 4.

B

- BAHAMAS, THE BIRDS OF THE. By P.G.C. Brudenell-Bruce. Reviewed by Barry Clark, 1975 Oct., 4.
BIRD CLUBS, A GUIDE TO NORTH AMERICAN. By Jon E. Rickert. Reviewed by Steve Strann, 1978 Nov., 7.
BIRD FAMILIES OF THE WORLD. C.J.O. Harrison, consultant ed. Illus. Ad Cameron. Reviewed by Steve Strann, 1979 Apr., 11.
BIRDS IN PERIL. By John P.S. Mackenzie. Illus. Terence Shortt. Reviewed by Steve Strann, 1979 May, 15.
BIRDS OF CALIFORNIA. By Arnold Small. Reviewed in 1974 Sep., 3.
BIRDS OF PARADISE AND BOWER BIRDS, THE. By William T. Cooper and Joseph M. Forshaw. Reviewed by Steve Strann, 1978 Sep., 11.
BOWER BIRDS, THE BIRDS OF PARADISE AND. By William T. Cooper and Joseph M. Forshaw. Reviewed by Steve Strann, 1978 Sep., 11.
BRITISH & EUROPEAN BIRDS. By Bertel Bruun and Arthur Singer. Reviewed in 1972 Jun., 8.

C

- CALIFORNIA, BIRDS OF. By Arnold Small. Reviewed in 1974 Sep., 3.
CALIFORNIA, WATER BIRDS OF. By Howard L. Cogswell. Illus. Gene Christman. Reviewed by Lee Jones, 1978 Aug., 8.
CENTRAL AMERICA, A FIELD GUIDE TO THE BIRDS OF MEXICO AND. By L. Irby Davis. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
CENTRAL AMERICA, A FIELD GUIDE TO MEXICO BIRDS AND ADJACENT. By Roger Tory Peterson and Edward L. Chalif. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
CHECKLIST FOR COLOMBIA. By Steve Hilty. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
CHECKLIST FOR ECUADOR. By Thomas Butler. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
CHECKLIST FOR VENEZUELA. By Peter Alden. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
CHECKLIST FOR THE BIRDS OF MAINLAND ECUADOR. By Thomas Y. Butler. Reviewed by Olga Clarke, 1975 Dec., 9.
CLUBS, A GUIDE TO NORTH AMERICAN BIRD. By Jon E. Rickert. Reviewed by Steve Strann, 1978 Nov., 7.
COLOMBIA CHECKLIST FOR. By Steve Hilty. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
COMMUNITIES, COMPETITION AND THE STRUCTURE OF BIRD. By Martin L. Cody. Reviewed by Barry Clark, 1976 Apr., 5.
CROWS OF THE WORLD. By Derek Goodwin. Reviewed by Barry Clark, 1977 Sep., 7.

D

- DONANA — SPAIN'S WILDLIFE WILDERNESS. By Juan Antonio Fernandez. Reviewed by Charles J. Sutton, 1975 Nov., 4.
DUCK, GEESE, AND SWANS, NORTH AMERICAN. By Donald Heintzelman. Reviewed by Steve Strann, 1979 Jun., 13.
DUCK, GEESE, AND SWANS, NORTH AMERICAN. By Frank Bellrose. Reviewed by Steve Strann, 1979 Jun., 13.
DUCK, GEESE, AND SWANS, NORTH AMERICAN. By Paul Johnsgard. Reviewed by Steve Strann, 1979 Jun., 13.
DUCK, GEESE, AND SWANS OF THE WORLD, WATERFOWL. By Frank Todd. Reviewed by Steve Strann, 1979 Jun., 13.

E

- ECUADOR, CHECKLIST FOR. By Thomas Butler. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
ECUADOR, CHECKLIST OF THE BIRDS OF MAINLAND. By Thomas Y. Butler. Reviewed by Olga Clarke, 1975 Dec., 9.

EUROPEAN BIRDS, BRITISH &. By Bertel Bruun and Arthur Singer. Reviewed in 1972 Jun., 8.

F

FIELD GUIDE TO MEXICAN BIRDS AND ADJACENT CENTRAL AMERICA, A. By Roger Tory Peterson and Edward L. Chalif. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
FIELD GUIDE TO NORTH AMERICAN BIRDS, THE AUDUBON SOCIETY. EASTERN REGION: By John Bull and John Farrand, Jr. WESTERN REGION: By Miklos D. E. Udvardy. Reviewed by Richard Webster, 1978 Dec.-1978 Jan., 4.
FIELD GUIDE TO THE BIRDS OF MEXICO, A. By Ernest P. Edwards. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
FIELD GUIDE TO THE BIRDS OF MEXICO AND CENTRAL AMERICA. By L. Irby Davis. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
FIELD GUIDE TO THE BIRDS OF SOUTH-EAST ASIA, A. By Ben F. King and Edward C. Dickenson. Reviewed by James F. Clements, 1975 Oct., 4.
FIELD GUIDE TO THE BIRDS OF THE GALAPAGOS. By Michael Harris. Reviewed by Keith Axelsson, 1975 Sep., 4.
Reviewed by Richard Webster, 1978 Jun.-Jul., 7.

G

GALAPAGOS, A FIELD GUIDE TO THE BIRDS OF THE. By Michael Harris. Reviewed by Keith Axelsson, 1975 Sep., 4.
Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
GUATEMALA, BIRDS OF. By Hugh C. Land. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
GEESE, AND SWANS, NORTH AMERICAN DUCKS. By Donald Heintzelman. Reviewed by Steve Strann, 1979 Jun., 13.
GEESE, AND SWANS OF NORTH AMERICA, DUCKS. By Frank Bellrose. Reviewed by Steve Strann, 1979 Jun., 13.
GEESE, AND SWANS OF THE WORLD. By Paul Johnsgard. Reviewed by Steve Strann, 1979 Jun., 13.
GEESE, AND SWANS OF THE WORLD, WATERFOWL: DUCKS. By Frank Todd. Reviewed by Steve Strann, 1979 Jun., 13.
GEESE, WILD. By M. A. Ogilvie. Reviewed by Steve Strann, 1978 Nov., 7.
GUIDE TO NORTH AMERICAN BIRD CLUBS, A. By Jon E. Rickert. Reviewed by Steve Strann, 1978 Nov., 7.
GUIDE TO THE BIRDS OF PANAMA, A. By Robert S. Ridgley. Reviewed by George W. Venatta, 1976 Nov., 7.
Reviewed by Richard Webster, 1978 Jun.-Jul., 6.
GUIDE TO THE BIRDS OF SOUTH AMERICA, A. By Rudolphe Meyer de Schauensee. Reviewed by Richard Webster, 1978 Jun.-Jul., 6.
GUIDE TO THE BIRDS OF TRINIDAD AND TOBAGO. By Richard French. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
GUIDE TO THE BIRDS OF VENEZUELA. By R. Meyer de Schauensee and William Phelps, Jr. Reviewed by Richard Webster, 1978 Jun.-Jul., 6.
GUIDE TO THE RIO GRANDE VALLEY OF TEXAS, A BIRDER'S. By James A. Lane. Reviewed by Lewis Garrett, 1971 Sep., 3.

H

HANDBOOK OF NORTH AMERICAN BIRDS. VOLS. 2 & 3. By Ralph Palmer. Reviewed by Steve Strann, 1979 Jun., 13.
HAWAII'S BIRDS. Compiled by the Hawaii Audubon Society. Reviewed by Glenn Cunningham, 1976 Sep., 7.

L

LIMA, PERU, THE BIRDS OF THE DEPARTMENT. By Maria Koepeke (in Spanish). Reviewed by Richard Webster, 1978 Jun.-Jul., 7.

M

MANUAL OF NEOTROPICAL BIRDS, A. VOL. 1. By Emmet R. Blake. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
MEXICAN BIRDS AND ADJACENT CENTRAL AMERICA, A FIELD GUIDE TO. By Roger Tory Peterson and Edward L. Chalif. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
MEXICO, A FIELD GUIDE TO THE BIRDS OF. By Ernest P. Edwards. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
MEXICO AND CENTRAL AMERICA, A FIELD GUIDE TO THE BIRDS OF. By L. Irby Davis. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
MEXICO, BIRDS OF. By Emmet R. Blake. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.

N

NEOTROPICAL BIRDS, A MANUAL OF. VOL. 1. By Emmet R. Blake. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
NEOTROPICAL BIRDS, VOICES OF (record). Compiled by J. W. Hardy. Reviewed by Olga L. Clarke, 1976 Apr., 3.
NEPAL, THE BIRDS OF. By Robert L. Fleming, Sr., Robert L. Fleming, Jr., and Lain Singh Bangdel. Reviewed by George W. Venatta, 1977 Jul., 7.
NORTH AMERICAN BIRD CLUBS, A GUIDE TO. By Jon E. Rickert. Reviewed by Steve Strann, 1978 Nov., 7.
NORTH AMERICAN BIRDS, THE AUDUBON SOCIETY FIELD GUIDE TO. EAST REGION: By John Bull and John Farrand, Jr. WESTERN REGION: By Miklos D. E. Udvardy. Reviewed by Richard Webster, 1977 Dec.-1978 Jan., 4.
NORTH AMERICA, WATERFOWL OF. By Paul Johnsgard. Reviewed by Steve Strann, 1979 Jun., 13.
NORTH AMERICAN BIRDS, HANDBOOK OF VOLS. 2 & 3. By Ralph Palmer. Reviewed by Steve Strann, 1979 Jun., 13.
NORTH AMERICAN DUCKS, GEESE, AND SWANS. By Donald Heintzelman. Reviewed by Steve Strann, 1979 Jun., 13.

O

ORNITHOLOGY —FROM ARISTOTLE TO THE PRESENT. By Erwin Stresmann. Reviewed by Barry Clark, 1976 Apr., 5.
ORNITHOLOGY, WATCHING BIRDS: AN INTRODUCTION TO. By Roger F. Pasquier. Reviewed by Kimball Garrett, 1977 Aug., 7.
ORPHANS OF THE WILD, MY. By Rosemary K. Collett with Charlie Briggs. Reviewed by Carol Stone, 1975 Dec., 9.

P

PANAMA, A GUIDE TO THE BIRDS OF. By Robert S. Ridgley. Reviewed by George W. Venatta, 1976 Nov., 7. Reviewed by Richard Webster, 1978 Jun.-Jul., 6.
PARADISE AND BOWER BIRDS, THE BIRDS OF. By William T. Cooper and Joseph M. Forshaw. Reviewed by Steve Strann, 1978 Sep., 11.
PERU, THE BIRDS OF THE DEPARTMENT OF LIMA. By Maria Koepeke (in Spanish). Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
PHEASANTS OF THE WORLD, THE. By Jean Delacour. Reviewed by Steve Strann, 1978 Oct., 7.

R

RAIL, THE LITERATURE OF THE CALIFORNIA BLACK. By Sanford R. Wilbur. Reviewed in 1975 Feb., 3.
RAILS OF THE WORLD. By S. Dillon Ripley and David R. Godine. Reviewed by Barry Clark, 1977 Sep., 7.
RIO GRANDE VALLEY OF TEXAS, A BIRDER'S GUIDE TO THE. By James A. Lane. Reviewed by Lewis Garrett, 1971 Sep., 3.

S

SANTA BARBARA COUNTY FOR BIRDERS AND OTHER TRAVELERS, THE BIRDS COME FLOCKING: A FIELD GUIDE TO. By Helen Matelson and Teri Matelson. Reviewed by Steve Strann, 1978 Nov., 7.
SEYCHELLES AND THE OUTLYING ISLANDS, THE BIRDS OF THE. By Malcolm Penny. Reviewed by James F. Clements, 1975 Sep., 4.
SOUTH AMERICA, A GUIDE TO THE BIRDS OF. By Rudolphe Meyer de Schauensee. Reviewed by Richard Webster, 1978 Jun.-Jul., 6.
SOUTH-EAST ASIA, A FIELD GUIDE TO THE BIRDS. By Ben F. King and Edward C. Dickenson. Reviewed by James F. Clements, 1975 Oct., 4.
SPAIN'S WILDLIFE WILDERNESS. By Juan Antonio Fernandez. Reviewed by Charles J. Sutton, 1975 Nov., 4.
SUB-ANTARCTIC, BIRDS OF THE ANTARCTIC AND. By George E. Watson. Reviewed by Glenn Cunningham, 1976 Sep., 7.
SUDAMERICANAS, LAS AVES. VOL. 1: NON-PASSERINES (in Spanish). By C. C. Olog. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
SURINAM, BIRDS OF. By Francois Haverschmidt. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
SWANS, NORTH AMERICAN DUCKS, GEESE, AND. By Donald Heintzelman. Reviewed by Steve Strann, 1979 Jun., 13.
SWANS OF NORTH AMERICA, DUCKS, GEESE, AND. By Frank Bellrose. Reviewed by Steve Strann, 1979 Jun., 13.
SWANS OF THE WORLD, DUCKS, GEESE AND. By Paul Johnsgard. Reviewed by Steve Strann, 1979 Jun., 13.
SWANS OF THE WORLD, WATERFOWL: DUCKS, GEESE, AND. By Frank Todd. Reviewed by Steve Strann, 1979 Jun., 13.

T

TEXAS, A BIRDER'S GUIDE TO THE RIO GRANDE VALLEY OF. By James A. Lane. Reviewed by Lewis Garrett, 1971 Sep., 3.
TIKAL, THE BIRDS OF. By Frank B. Smithe. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
TOBAGO, A GUIDE TO THE BIRDS OF TRINIDAD AND. By Richard French. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
TRINIDAD AND TOBAGO, A GUIDE TO THE BIRDS OF. By Richard French. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
TROPICAL BIRDS, PORTRAITS OF. By John S. Dunning. Reviewed by Olga Clarke, 1975 Dec., 9.

V

VANISHING BIRDS: THEIR NATURAL HISTORY AND CONSERVATION. By Tim Halliday. Reviewed by Steve Strann, 1979 May, 15.
VENEZUELA, CHECKLIST FOR. By Peter Alden. Reviewed by Richard Webster, 1978 Jun.-Jul., 7.
VENEZUELA, GUIDE TO THE BIRDS OF. By R. Meyer de Schauensee and William Phelps, Jr. Reviewed by Richard Webster, 1978 Jun.-Jul., 6.
VOICES OF NEOTROPICAL BIRDS (record). Compiled by J. W. Hardy. Reviewed by Olga L. Clarke, 1976 Apr., 5.

W

WATCHING BIRDS: AN INTRODUCTION TO ORNITHOLOGY. By Roger F. Pasquier. Reviewed by Kimball Garrett, 1977 Aug., 7.
WATER BIRDS OF CALIFORNIA. By Howard L. Cogswell. Illus. Gene Christman. Reviewed by Lee Jones, 1978 Aug., 8.
WATERFOWL: DUCKS, GEESE, AND SWANS OF THE WORLD. By Frank Todd. Reviewed by Steve Strann, 1979 Jun., 13.
WATERFOWL OF NORTH AMERICA. By Paul Johnsgard. Reviewed by Steve Strann, 1979 Jun., 13.
WATERFOWL OF THE WORLD. By Jean Delacour. Reviewed by Steve Strann, 1979 Jun., 13.
WATERFOWL OF THE WORLD, COLORED KEY TO THE. By Peter Scott. Reviewed by Steve Strann, 1979 Jun., 13.
WILDFOWL OF THE WORLD. By Eric Sutherland and Peter Whitehead. Reviewed by Steve Strann, 1979 Jun., 13.