

WESTERN TANAGER

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Special Concern For The Snowy Plover

by Nancy L. Spear

It is a soft warm winter day in Southern California. The santa anas have blown the smog out to sea. Walking along the beach you notice a sudden movement in front of you but you see nothing. Moving forward, you see slight movement from one of the pale brown mounds of sand. Suddenly you notice another and still another moving and then there are about fifteen little birds spread out all around you, some facing and glaring at you. All have at least one eye on you. If you pass on by calmly they will slowly walk away, keeping about ten meters distant, shortly settling back down into small depressions in the sand, blending perfectly in form and color and eventually disappearing. If you happen to move more quickly they will fly a greater distance away. Unwittingly, you have chanced to meet some of your wary but bold and trusting neighbors, a flock of Snowy Plovers.

The Snowy Plover is listed by the California Department of Fish and Game as a "Species of Special Concern," and it is featured on the National Audubon Society Blue List. Because of widespread concern over its ability to maintain breeding populations with increasingly heavy recreational use of beaches, I and others at Point Reyes Bird Observatory began to study this bird in more depth. Gary Page, Lynne Stenzel, John and Ricky Warriner, Susan Peaslee, Phil Henderson, Bob Ramer, Carolyn Fredericksen and over 120 volunteer fieldworkers have been involved in these studies.

Our studies have had three main foci, designed to answer the following questions: How many Snowy Plovers breed in California and where do they breed? What is their breeding biology? Where do they winter, and what are their migration patterns? In the following article I will share with you details about the bird's presence on beaches which some of you may visit.

The Snowy Plover, *Charadrius alexandrinus*, is a worldwide species. It is called the Kentish Plover in Europe and Asia. There are at least four Holarctic subspecies: the nominate race in Europe, one in Asia, and two in North America. The subspecies which we are studying, *Charadrius alexandrinus nivosus*, breeds on the Pacific Coast from Washington to Baja California and in isolated saline sinks in the interior of the western half of the North American continent; it winters along the Pacific Coast south to Baja California and Mexico and along the Gulfs of California and Mexico.

The word, "plover," is from the Latin *pluvia* meaning "rain," for an association of the occurrence of plovers with rain, though

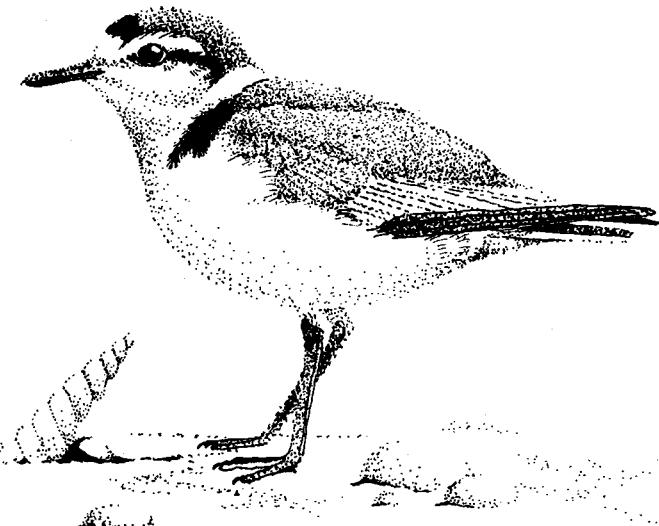


Illustration by Keith Hansen

no justification seems to be known for this association. *Charadrius* is from the Greek and means "gully-dwelling." *Alexandrinus* is the species name because the first specimen came from Alexandria, Egypt, and the subspecies name, *nivosus*, is from the Latin meaning "full of snow."

Snowy Plovers are small with pale brown upperparts and white underparts. They have no breastband but do have dark patches at the shoulders. The bill is black and slender, and the legs are usually dark but can appear pinkish, gray, tan or black. Under some conditions, the legs can appear very light. The adult male in breeding plumage has forehead, cheek and shoulder patches that are usually large and black or blackish-brown. The cap often has a rusty cast to it, which contrasts with the pale brown back coloration. The adult female in breeding plumage has forehead, cheek and shoulder patches that are usually brown, and sometimes the cheek and forehead patches are absent. Her cap is usually not rusty. There is much variation and there are birds intermediate in plumage that cannot be identified to sex even in the breeding season. However, we have learned that the presence of a crisply-delineated dark cheek patch generally indicates the bird is a male, even if other marks are indistinct or missing. While most birds are in breeding plumage from April to July, there is also much individual variation in timing. I have observed birds in breeding plumage in November, December and January. In winter the sexes look alike, similar to the spring female, only duller. Juveniles lack forehead and cheek patches and the rusty tinge on their heads. Their wing coverts and back feathers are tipped and margined with a pale buff or whitish color, giving the mantle a scalloped appearance.

Snowy Plovers are bold, gentle, tame, even friendly birds. Bent, in his *Life Histories*, refers to them as a "child of the sand." The Snowy depends on the blending of its colors with the sand to protect itself. When crouched in a hollow, footprint, tire track, or next to a piece of driftwood or kelp, it seems to be just one more of the numerous inconspicuous objects which one passes unnoticed on the beach. When a person walks near, the birds will wait to see whether the person is unaware of their presence. If disturbed, they will first get up and attempt to run further away, then quickly crouch in another hollow, flying only when startled or quickly pursued. More than once I have looked closely at a beach and decided that no Snowies were present, only to be surprised by a large flock hiding among the kelp, driftwood, and sand. During the breeding season, they are much more skittish and sensitive to intruders. Often, if one passes close to a nest of chick, the birds will fly around the person's head with rapid "prrrt" and "tuwheel" calls, or attempt to lead the intruder away from the area by decoying with a broken-wing act.

The Snowy Plover's favorite places are the broad expanses of flat, dry sand above the tide line on ocean beaches, or the dry mud-flats around a lagoon, and it is also found in the interior along the shores of salt or alkaline lakes. It feeds on insects and marine organisms along the water's edge on the lake or ocean beach, on exposed mudflats in an estuary, or along the shores of a creek. When feeding, it tends not to go into the water, though some will. Plovers, with relatively short bills, tend to be surface and above-surface feeders, compared with sandpipers which generally use their longer bills to probe beneath the surface. The Snowies do not chase the waves back and forth as do the Sanderlings, but stay further back on the beach, appearing slower and more dignified as they stoop to catch a fly or pick up food. They walk or run and stop — stopping more frequently than Sanderlings — and in stopping extend their necks out and back in a quick movement typical of most plovers.

Breeding Biology Studies Conducted

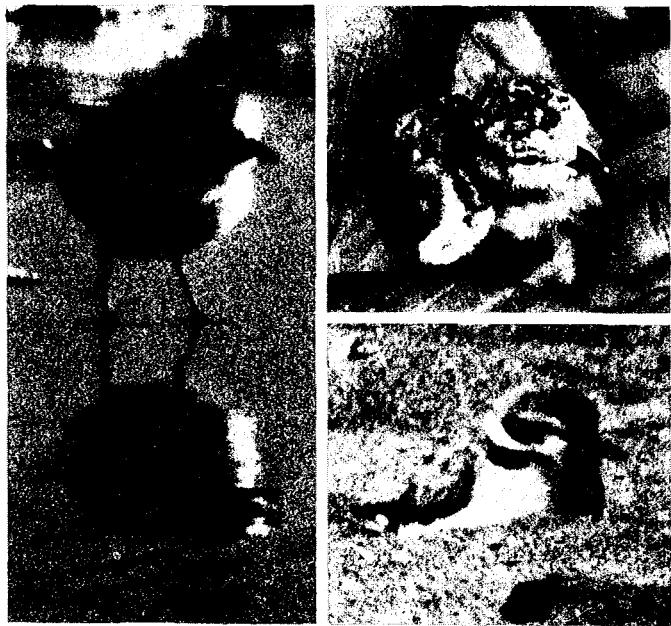
John and Ricky Warriner have been studying the *breeding biology* of the Snowy Plover at Pajaro Dunes in Santa Cruz County, and Gary Page has been conducting studies at Point Reyes and Mono Lake. They have learned that Snowy Plovers spend four to eleven days "scraping" — that is, constructing scrapes, which are small depressions in the sand or dry mud which the bird makes by crouching down and extending its legs out behind it quite rapidly, thus digging out small saucer-like hollows. A pair may make more than one, but they choose one for a nest, in which two or three eggs are laid within a period of about five days. The female bird does most of the incubating of the eggs, and they hatch in 26-27 days. Then the male tends the chicks until they fledge in about 31-32 days. Thus, it takes about nine to eleven weeks for a successful nesting cycle. While the height of the breeding season occurs between mid-April and mid-June, the earliest date on which a nest has been found was in mid-March and the latest date on which a young bird has been known to fledge is mid-September. (I found a nest at McGrath State Beach in Ventura County on 22 September 1979 which contained three moist but cold eggs.) These birds will often re-nest, even after successfully fledging chicks.

Most Snowy Plovers are monogamous, each pair staying together through at least the incubation period, and in some cases until the young are fledged. But the longer we study these birds the more variation we see in their behavior. A few birds are polygamous, and the following example of serial polygamy shows much deviation from the above behavior description: A male,

while his mate was incubating eggs on one territory, defended a non-contiguous territory. Shortly after his first nest hatched, he deserted the brood and mated with a new female in his second territory. Eventually this union produced young. The deserted female tended her brood until a few days before they fledged, then she drove them from her territory, mated with a different male, and subsequently produced a second brood.

The California *breeding survey* began in 1977 when Gary Page and Susan Peaslee walked all beaches and potential breeding sites along the coast from the Golden Gate to the Oregon border. In 1978 Susan and Lynne Stenzel did the same in Southern California, covering all areas between the Mexican border and the Golden Gate. At the same time Phil Henderson surveyed selected inland locations. I surveyed San Clemente Island, and Hal Spear and I surveyed San Nicolas Island. In 1979 Hal and I surveyed San Miguel Island and in 1980 we surveyed Santa Rosa Island. About 3,400 Snowy Plovers were found (and partly estimated) on these surveys: roughly 270 on the Channel Islands, 1000 on the mainland coast, and 2,200 in the interior. Thus, the California interior is currently the stronghold for the species.

Between 8 May and 9 July 1978, 834 adult Snowy Plovers were found at 31 coastal locations between the Mexican border and the Golden Gate; 121 adults had been found the previous year in Northern California coastal locations. Snowy Plovers were found in all coastal counties except Los Angeles and San Francisco. San Diego County supported 31 percent of the breeding population along the southern and central coast with major concentrations at the Santa Margarita River mouth, Agua Hedionda Lagoon, the Tijuana River mouth, and Western Salt Works on San Diego Bay. Santa Barbara County supported the next largest concentration, 19 percent, mainly on the Vandenberg Air Force Base beaches at the Santa Ynez River mouth and Purisima Point. Ventura County's 136 adults represented 17 percent of those found on the coast, and were primarily concentrated on the beach at Mugu Lagoon but also occurring along undeveloped portions of the beach as far northwest as the Santa Clara River mouth. Monterey County had 14 percent of the coastal breeding population. Eighty of the 86 adult birds seen in San Luis Obispo County were on the Morro Bay sandspit. Santa Cruz, Orange and San Mateo Counties supported small numbers of plovers. (Nineteen adults were probably



photographs by Hal Spear

nesting on the Bolsa Chica Oil Fields, the only nesting location in Orange County.)

Snowy Plovers breed on three and possibly four of the Channel Islands; 133 adults were found on San Nicolas Island, 84 on San Miguel Island, and 43 on the east end of Santa Rosa Island. (Some more may breed on the west end of Santa Rosa.) They may also breed on Santa Cruz Island, though it is doubtful, because of the lack of wide, sandy beaches with appropriate habitat characteristics. No birds were found on San Clemente Island, where they were previously noted as breeding; this is possibly caused by beach washout from winter storms.

In 1978, 2,194 adult Snowy Plovers were found at 19 locations in the interior of California. Historic information on the number of Snowy Plovers breeding in the interior is largely lacking; the survey provided the first definite record of breeding at eight locations. At South San Francisco Bay, where salt evaporators have been constructed, and at the Salton Sea, plover habitat has been created by man's intervention. Collectively these two areas accounted for 26 percent of the plovers found in the interior. Whether the habitat that the plovers have acquired at these two locations offsets the probable loss of habitat at others is a question which cannot be answered because of the lack of a historic record. Lakes inhabited by plovers were distributed over the entire length of the state; the main breeding locations were shallow lakes bordered by unvegetated flats and the salt evaporators in South San Francisco Bay. Owens Lake (399 adults), Mono Lake (384 adults), South San Francisco Bay (336 adults), Upper Alkali Lake (230 adults), Salton Sea (216 adults), and Honey Lake (208 adults) were found to be the breeding strongholds in the interior.

Mono and Owens Lakes support a good number of these birds. It is not known whether the factor which limits the breeding of Snowy Plovers at Mono Lake is food or breeding territory availability. While this species may benefit in the short run (from an increase in availability of breeding territory) as the level of Mono Lake recedes, they will not benefit in the long run if the total ecosystem of the area deteriorates. It is assumed that the brine fly is the major food supply, but they may eat other insects around the lake also.

Volunteers Survey Western Beaches

The question arose as to whether there is a mixing of coastal and interior populations. Biologically, this would further diversify the gene pool of the species and provide opportunity for replacement of coastal breeding birds by interior ones, or vice versa, thus providing for greater survival probability for the species. This question led to our 1979-80 survey in which we studied winter distribution and migration habits, mounted a search for banded birds, and attempted to confirm breeding locations along the coast. In doing this, we involved over 120 volunteer fieldworkers, who conducted monthly surveys in about 112 locations along the Pacific Coast from Washington to Baja California (probably well over 1000 hours of volunteer field work). These volunteers counted Snowy Plovers, particularly looking at their legs for bands, and sent us a report on their location and general activities. During the winter portion of this study, over 2,600 Snowy Plovers were counted and about 92 percent of these were checked for colorbands. Most of these birds, about 2,500, were in California.

About the color bands: at the places where the breeding biology studies have been conducted (Mono Lake, Point Reyes and Pajaro Dunes), about 400 birds, both chicks and adults, have been color-marked so that we can trace *individual* birds in their movement. (Up to two differently colored bands were placed on each leg.)

Finding these banded birds was an important part of our surveys. Last winter about 40 banded birds were sighted — ten in Oregon, 20 around the Monterey Bay area, and nine in Southern California.

From these sightings, we tentatively believe that a large part of the coastal population winters somewhere near where they breed, moving around within ten miles or so. However, we know that some birds move south a good distance: a Point Reyes-banded bird was at the Santa Maria River mouth in Santa Barbara County; a few Pajaro-banded birds turned up in the Morro Bay area (more than 100 miles south); two Oregon birds wintered in Point Reyes (about 380 miles south). Just to confuse the issue though, one bird traveled *north* to winter, moving from Pajaro to Point Reyes (about 100 miles).

What about inland birds? We have seen about 2,500 during the winter survey, so interior birds must be wintering along the coast in good numbers. We have seen only two birds banded at Mono Lake: a female has wintered at Malibu Lagoon in Los Angeles County (in fact, for the past two winters and roosting in the exact same spot!) and another female spent this last winter at Pismo Beach. Our winter survey did not include many inland areas, though we know they don't winter where there is snow and cold. A few reports showed them to be wintering along the shores of the Salton Sea, but spread out along many miles of shoreline, and a more careful study would tell us more. It is also possible that Snowies travel further south and winter along the coasts of Baja California and Mexico. So, while there is no clear pattern to the movement of the California Snowy Plovers, there is some interchange between *all* banding locations.

A major concentration of wintering Snowies were along the stretch of coastline between San Simeon Point and Point Conception in San Luis Obispo and Santa Barbara Counties; they used the long stretches of sandy beaches and dunes particularly from the Morro Bay sandspit down through the Nipomo Dunes and Pismo Beach to the beaches at Vandenberg Air Force Base and the mouth of the Santa Maria River. In addition, the lagoons in north San Diego County provided other important wintering areas.

Why do Snowy Plovers winter where they do? We know they winter in places in which they breed. But they also winter in places in which they don't breed and often for reasons that are not clear to us. For example, why is there a flock every winter on heavily-used (and 'groomed') Hermosa Beach (do they know I'm studying their behavior?) and on dog-and-people-trampled Malibu Lagoon beach? And although the Morro Bay sandspit and the Silverstrand in San Diego both do have wintering flocks, they are not as large as the apparent potential territory would suggest. Perhaps the Snowies return to traditional wintering areas and tenaciously hold to these patterns in spite of moderate disturbance.

In addition to the information from the winter study described above, there are a few incidents of breeding birds moving to new areas: a Point Reyes bird was seen at Mono Lake during breeding season, though we don't know that it actually bred there. And there is the "Mono Female": banded as a chick at Pajaro in May 1977; she was seen from March through early April 1978 at Pajaro Dunes. In mid-April, she was at Mono Lake where she successfully nested and hatched her brood, but she left at the end of May. In early June, she reappeared at Pajaro Dunes and stayed to winter! She traveled 370 miles, nested and produced a brood, all within 2½ months! Another incident, reported by a Morro Coast Audubon Society member while working on this survey is of interest: Nathan Sweet was doing his usual monthly survey on a beach just north of San Simeon Point in San Luis Obispo County when he again spotted a female which had been banded at Pajaro Dunes in 1979,

and which he had previously seen during his March survey on the same beach. This time she was with her mate. He watched the birds fly around him excitedly and try to distract him with "broken-wing" decoy behavior. Suddenly the banded female flew off a short distance, landed, and laid an egg! Nate's observations documented a new breeding location. In addition we know this bird spent the winter at Pajaro Dunes with the last sighting of her there by Ricky Warriner on March 22. Since Nate first saw her on March 23, that means she had traveled over 100 miles in one day, in a *southerly* direction, to breed!

Rewarding Relationship

It is important that man and Snowy Plovers work out a relationship that is beneficial to both, and it is quite interesting to watch as both species are in the process of adapting to each other. It has also been quite rewarding to work with over 50 volunteers in Southern California who diligently and generously contributed of their time and skills.

Snowy Plovers certainly count on California beaches both for overwintering and for breeding. All information will help us to learn more about the habits and life of this lovely little friend, and I welcome receiving any of your observations and field notes on Snowy Plovers. (You can send them to me at 218 The Strand, Hermosa Beach, California 90254, or call me at (213) 372-7653.) I would especially like to hear about any banded birds that you see.

The studies which I described above were sponsored by Point Reyes Bird Observatory. The breeding surveys were conducted for the California Department of Fish and Game, and are extensively reported in "The Breeding Status of the Snowy Plover in California," Gary W. Page and Lynne E. Stenzel, editors, January 1979. Some of the information in this article was taken from parts of this publication. The 1979-80 survey was supported by the U.S. Fish and Wildlife Service, and a report to them will be written this fall. An article summarizing findings from the breeding survey in detail will soon be published in *Western Birds*.

Meanwhile, I invite you to become further acquainted with the Snowy Plover, share in "special concern" for its welfare, and take delight in the existence of such a trusting and gentle creature. ☺

Alliance for Wildlife

The Alliance for Wildlife is a non-profit organization for rehabilitation and education made up of veterinarians, wildlife compound operators, rehabilitators and concerned citizens. The organization is supported financially by membership and donations; the California Department of Fish and Game and the United States Department of Fish and Wildlife assist with technical and legal information. The main goals of the Alliance are:

- to educate and train individuals and groups in wildlife rehabilitation techniques
- to seek out and promote efficient rehabilitation facilities and to refer injured and distressed wildlife to such facilities
- to establish a network of volunteers willing to help in the event of a local wildlife disaster (such as an oil spill)

A general meeting of interested persons will be held in September. Alliance for Wildlife is also organizing a seminar on the techniques of dealing with oiled birds — watch for more details in upcoming issues of the TANAGER. For further immediate information, contact Peter Rasmussen at the Alliance: (213) 769-8388, days, or Greg Wolley, Coordinator of Volunteers, at (213) 631-3977, evenings.

Mono Lake Update

Negit Abandoned Second Year in a Row

Biologists from the Bureau of Land Management, Los Angeles Department of Water and Power and the University of California documented that Negit Island, once the breeding ground of 38,000 California gulls, was used by only 12 nesting gulls this year. July's census indicates that the half-mile fence erected between Negit peninsula and the mainland was unsuccessful in preventing the passage of predators into the Negit rookery.

It was estimated, however, that about half the previous breeding population, or some 22,000 gulls, crowded onto the small islands — some newly emerged — surrounding Negit. While this record is far better than last year's record, it represents less than half that of previous years. And it seems obvious that these islands too will soon be attached to the mainland, and increasing salinity in the lake will eventually prove toxic to wildlife.



Photograph courtesy Susan Gilbert

Bike-A-Thon and Second Annual Bucket Walk

In an attempt to reverse the laws of gravity, bicyclists left Los Angeles on August 27th and arrived at Mono Lake on September 1st, each carrying a bottle of L.A. water back to Mono Lake. Water which made all or part of the 350-mile journey across deserts and mountains mingled with waters from Lee Vining Creek on Labor Day as other Mono Lake friends walked four miles from the creek down to the lake in a gesture symbolizing commitment to the lake's preservation.

Mount St. Helens Losses Recalculated

The Los Angeles TIMES reported "staggering animal losses" on June 24, from the Mount St. Helens eruption — among these 5,250 Roosevelt Elk, 6,000 Black-tailed Deer, 200 Black Bear, 200 Mountain Goat, 15 Mountain Lion and 1.5 million birds and small mammals.

In a note to the TANAGER, Greg Wolley comments that although these numbers may seem large, the Washington State Game Department reports the following numbers for wildlife killed by hunters during the 1979 season: 27,279 elk, 66,000 deer, 2,750 bear, 222 goats and 140 mountain lion. And, he continues, who knows how many birds and small mammals die annually from habitat destruction caused by logging operations and housing and commercial development?

The Mount St. Helens eruption would represent a poor hunting season indeed, concludes Wolley.

President's Page

by Jean Brandt

It has been an exciting year for L.A.A.S. I have been very pleased with my first year as President of L.A.A.S. I think the most exciting innovation of the year was the February general meeting which generated much enthusiasm and response and gained us at least one new volunteer. For those of you who did not attend, after a brief word from all our board members (by way of a status report and introduction for those who did not know them), the meeting was opened to general discussion from the floor. This general discussion was very profitable; the issues aired were all well taken. In fact, response was overwhelmingly in favor of repeating the general meeting annually — so next February along with our banquet we will also have a general meeting, open to all, at the regular meeting time.

The 1980 February banquet was a huge success. Our annual appreciation award — long overdue in this case — went to the much deserving Ruth Lohr for all her hard work at Audubon House.

One new event of this past year was **Birdathon**. Birdathon netted us one-fifth (\$2,200) of our commitment to the Mono Lake fund, and L.A. Audubon was awarded a telescope and tripod for raising the most money of any chapter in our area. We are planning to raffle this telescope at next February's banquet — watch for details in upcoming issues of the **TANAGER**. L.A. First Vice-President Kimball Garrett also won an identical scope and tripod for raising the most money of any birder in our area. Thanks again, Kimball. For those of you who have been planning ahead and have started early gathering commitments from sponsors, there will be a nationwide Birdathon on J.J. Audubon's birthday weekend — April 25-26, 1981.

Another exciting event was reaching our goal of \$10,000 to fulfill our commitment to the **Mono Lake** fund. We plan to continue our commitment to Mono Lake this coming year. I am sorry to say donations to the **Condor Fund**, however, were not as generous as usual. We were nevertheless able to meet our commitment to the Fund for \$2,500, and we will do so next year as well. It is becoming ever more important that we show our support of the condor programs and I hope this upcoming fiscal year will be a more successful one in terms of donations.

The 1979 **Christmas Counts** were both a smashing success — it was a record year for the Malibu count. Our Count chairpeople, Art and Janet Cupples and Kimball Garrett, are already getting ready for the 1980 census and we hope for even more enthusiastic counters to turn out at Audubon House this Christmas. If you have never participated in a Christmas Count, I can guarantee you will come away with a great sense of camaraderie and achievement.

There is a constant need of more volunteers to help out with L.A.A.S. business — nothing gets done without volunteers, don't forget. If you have a free day, a free afternoon, or even just a free few hours, and want to help out, please let us know. I want to thank all of you who helped get everything done this year. The volunteers are all invaluable, of course. But so is the House itself. As you know, there are plans to rid the House of the termites that have been eating away at the foundations; we have just happily found out that the County's budget will cover the cost. After this, however, we would like to start restoring the interior of Audubon House. After all, our House is a State landmark.

We have dropped the ten percent discount for members at the **bookstore**, but even so sales were at a record high — our bookstore

is doing better than ever, and has gained international recognition as one of the few places in the country people can get the books they want on birding. We all thank you, Olga Clarke.

Another financial plus — we were able to award four scholarships to **Audubon Camp** in the Rockies this summer.

I have been actively supporting the Southern California Chapters' **Coordinating Council** — representatives from all the Southern California Audubon chapters meet in different local areas four times a year to discuss important matters and hear updates on many topics relative to both administration and conservation. Also present, along with the Presidents of these chapters, are Conservation Committee chairpeople and representatives from each chapter. I think this Committee is indeed a worthwhile one. It is very important that we strengthen the ties that hold all of our regional groups together. We're a long way from New York City.

On that note, L.A.A.S. had at least six representatives at the Western Regional Conference at **Asilomar** this year. Willabelle Mahony gave a seminar in which she demonstrated her techniques for teaching about birds and conservation in the elementary schools — she handed out a lot of information to interested teachers, and her materials are no doubt being implemented this fall in many western schools. There was plenty of opportunity to talk with President Petersen and other members of National Audubon's Board of Directors. Unfortunately, the message we all got is that National is suffering the same financial crunch that the chapters are. So *please* renew if your membership is running out. We need your continued support.

Again, thank you, all you volunteers, for a great year. I hope we are going to duplicate the good and do even better in 1980-81. ☺

In answer to a plea for help when L.A. Audubon's "bird tape" recorder was broken early this summer, the J.B. and Emily Van Nys Charities of California responded with a generous contribution. The Van Nys fund has also given L.A. Audubon \$5,000 in the past. We all heartily thank Van Nys Charities for their concern and interest.



THE LOS ANGELES AUDUBON SOCIETY
DEDICATED DEC. 2nd 1937
PLUMMER PARK BIRD SANCTUARY
BIRDS PROTECTED BY FEDERAL & STATE LAW

Research in Review

by Kimball Garrett



This is the first in a regular series of monthly articles by Kimball Garrett profiling some of the fascinating and important research being conducted by local ornithologists and naturalists. This month we feature a major, local research institution which may be unknown to many of our readers.

The raw materials of ornithologic research consist not only of living birds in their natural habitats and captive birds in experimental laboratories and aviaries, but also of carefully prepared and preserved bird specimens. The eggs and nests of birds are intimate extensions of the adaptive state that comprises the machinery of an individual bird; nest and egg specimens, therefore, are also invaluable material for bird research. This all helps to explain what half a million bird eggs and thousands of bird nests are doing in a simple building behind a handsome Brentwood residence, above the western part of Los Angeles. For this is the home of the **Western Foundation of Vertebrate Zoology**, founded in 1956 by Ed Harrison and several other businessmen who were also serious amateur naturalists. Originally designed to house its founders' private collections of eggs, nests and skins, the W.F.V.Z. has evolved into a major ornithologic research center.

The W.F.V.Z. has grown primarily by the acquisition of existing private collections, having now incorporated some 115 such collections. Nearly 30 percent of all of North America's egg specimens are now housed here; over 90 percent of the specimens were collected prior to 1940. Virtually no egg collecting now occurs in North America, except to a small degree as an adjunct to ecologic, physiologic and taxonomic research.

In addition to the egg and nest collections, the W.F.V.Z. houses an extensive collection of bird skins (with Middle America especially well-represented), a large research library, archives of field notes of old collectors (especially valuable in historic research), and a photo/transparency library. These varied collections underscore the institution's value to the researcher.

Headed by Ed Harrison, the Western Foundation collections are curated by Lloyd Kiff, who in turn is aided by six regular employees and several volunteers. The foundation's casual and informal atmosphere belies its importance as a center of learning and research. Over 200 research projects have employed its collections

to date. The W.F.V.Z. sponsors field research in such diverse areas as Argentina, Samoa, East Africa, Borneo, and Costa Rica; most of its early field endeavors were in Mexico. The foundation has also sponsored a major symposium on the vultures of the world (Santa Barbara, 1979), as well as numerous lectures and film series. Three series of publications are produced by the W.F.V.Z., and major anticipated publications include a comprehensive reference work on the eggs of North American birds and a work on the history of egg collecting in North America. While the museum has no regular programs or exhibits for the public, it is open to researchers (both professional and amateur). Interested birders are encouraged to make use of its facilities for legitimate research purposes. It also serves as a gathering place for local ornithologists.

Specimens and Data Invaluable to Researchers

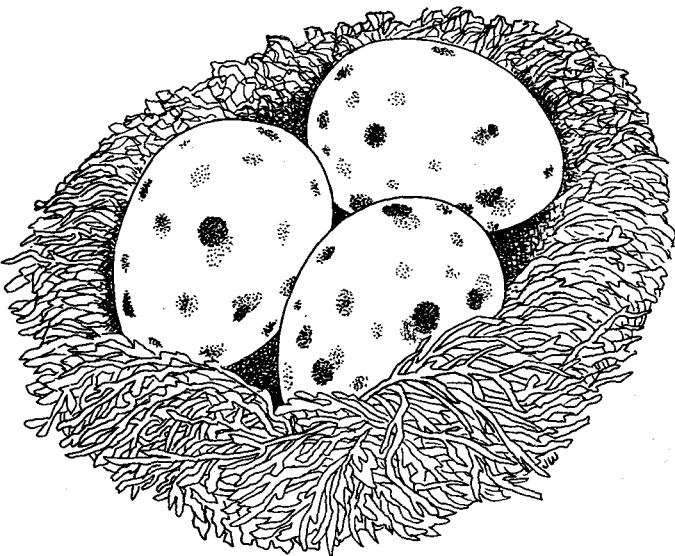
How is such a large and important collection put to use? Both the specimens and the data accompanying them are utilized by the researcher; the former is virtually worthless without the latter. Here are some examples of how, in tandem, they can be useful.

- Historic breeding distributions can be reconstructed with the help of old nest data. The W.F.V.Z., for example, contains numerous egg sets of Yellow-billed Cuckoos, Least Bitterns, Fulvous Whistling-Ducks, and other such species from the coastal lowlands of Los Angeles County; these egg sets supply positive evidence of local nesting for these species (which have long since disappeared from the region).

- Geographic variation in clutch size and egg characteristics can be studied with the large sample that the W.F.V.Z. collections provide. Lloyd Kiff, for example, is investigating geographic trends in egg size and egg color of the Scrub Jay.

- Birders can utilize the collections for identification purposes by comparing unknowns against samples which have been previously identified. Some species (including many *Empidonax* flycatchers) are actually more easily differentiated by their nests and eggs than by field characteristics of the adults! Avian taxonomists often use characteristics of eggs and nests to help unravel problems of species relationships (although it should be remembered that egg and nest traits are highly responsive to natural selection and are not necessarily good taxonomic characters).

- Undoubtedly the most important applied research to come out of the W.F.V.Z. has centered around eggshell thinning resulting from pesticide residues. Peregrine Falcons, along with vultures, other raptors, Brown Pelicans, etc., have been the subject of much investigation along these lines. Careful study of eggshell fragments can help monitor the health of natural populations; new techniques have been developed for field measurement of the thickness of living eggs. The W.F.V.Z. has helped advance our knowledge to the point that biologists can determine in the field the chances of failure of Peregrine eggs from eggshell thinning. If eggs are more than 15 percent thinner than normal, they are removed to an incubator; they are replaced in the nest with normal eggs laid by captive birds. If less than 15 percent below normal thickness, eggs can be left in the wild with some assurance of successful hatching. Additionally, historic trends in the effects of pesticide residues on eggshell thickness can be confidently determined because of the W.F.V.Z.'s large collections dating back to, and beyond, the early part of this century.



Topics of Conservation

by Sandy Wohlgemuth



THE tides of history ebb and flow. Yesterday's bright slogans may quickly become today's cliches — and tomorrow's dead letters. How ephemeral is the environmental movement? Active concern for the environment began with Rachel Carson's *Silent Spring* in 1962. The concerns proliferated as the years went by; a new sensitivity was stimulated. We began to see things we hadn't noticed before. Smog rolled into all the major cities and we began to worry about it. What was it doing to our health? Where were our clear vistas of mountains and sea? And what could we do? We stopped burning trash in our incinerators and thought that would help. Then we jumped on Detroit and insisted on emission controls on the hydrocarbons and nitrogen oxides. You still couldn't see the difference because more people moved into the cities with more cars. Like the Red Queen, we were running as fast as we could just to stay in the same place.

Progress Almost Gets the Best of Us

Our chemical education proceeded apace through the sixties and seventies. Reluctantly we learned about 2,4,5-T and polychlorobiphenyls and trichloroethylene and dioxins and fluorocarbons and the rest of the delectable compounds we were brewing. We learned to read the fine print and worried about any ingredient with more than five letters or initials like BHT. "Don't drink the water" became more than a funny line when you traveled abroad; were we getting carbon tetrachloride cocktails when we turned on the kitchen faucet?

A whole new world of adventure opened before us when the nuclear plants began to appear and some of us scaldy-cats complained petulantly about leakage and meltdowns and for godsake where do we stash the spent fuel? Cancer stalked us in the newspapers and deformed newborns haunted the dreams of pregnant women. To avoid contemplating Love Canal and Three-Mile Island we fled to the mountains and the seashore to watch the birds, breathe real air and smell the flowers. We found traffic congestion and clearcut redwoods and oiled seabirds. We learned about DDT and the diminishing habitat and began to wonder about the Holy Grail of Progress. How much was it *really* costing us to be the most affluent, the most wasteful nation on earth? Were our great-grandchildren going to get a piece of the action? The "Environmental Movement" was no longer the preserve of a handful of ecofreaks; a host of hitherto quiet, undemonstrative people began to see what was happening to their inexhaustible Wild America.

Even Congress got the message. In a great wave of astonishing virtue it passed the National Environmental Policy Act, the Clean Air Act, the Clean Water Act, the Endangered Species Act, the Toxic Substances Control Act, the Insecticide, Fungicide and Rodenticide Act — and more. Forward-looking states enacted their own environmental quality laws. We were on our way to a cleaner, more rational America.

Then the OPEC iceberg hit the Titanic and we nearly sank with all hands. Panic! Energy at all costs. We needed more offshore oil, more strip-mines, synthetic fuel from shale and sand. Damn the environment, full speed ahead. We needed an Energy Mobilization Board to bury all the hard-won legislation that gave some protection to wilderness and open space and wildlife. And our health. (Damned elitist environmentalists want to lock up all our precious resources so we can't run our dune-buggies.)

So here we are at the dawn of the eighties with the auto giants whimpering about pollution controls and the oil companies insisting they must drill in Santa Monica Bay and over Georges Bank. The Alaska mafia is out to torpedo a decent wilderness bill again in the Senate. (It was passed twice overwhelmingly in the House.) The Pentagon is madly in love with the MX missile system — playing an elaborate shell game with 12,000 square miles of Utah and Nevada. The synthetic fuel program would not only butcher huge chunks of the west but the amount of water needed for the process would take two Colorado Rivers.

Public Opinion Polls Show Support for the Environment

Has the tide turned? Are our backs to the wall? Possibly. The big question is: have we been part of a passing fad, an idealistic nostalgic yearning for a clean world and an untrammeled wilderness that will never be ours again? I think not. I think there has been a fundamental change in our attitudes that will not be wiped away by momentary hysteria. Public opinion polls by every reputable polling organization have shown broad support for environmental regulation.

One such poll was taken at a particularly interesting time. A few weeks before, Proposition 13 had pointed up a national tax revolt. Zooming inflation was affecting everyone and some Washington officials were saying that environmental restrictions were mainly responsible. The Supreme Court had just held up Tellico Dam because of the much-ridiculed snail darter. Yet, though only five percent of the people surveyed belonged to an environmental organization, the poll found support for environmental protection as strong as it had been in previous years. When asked by phone (with emphasis added), "Protecting the environment is so *important* that requirements and standards cannot be too high, and continuing improvements must be made *regardless* of cost." Fifty-three percent agreed! Only ten percent accepted the statement that "Pollution control requirements and standards have gone *too far*" and already cost more than they are worth. Sixty-two percent preferred paying higher prices to protect the environment, while only 18 percent chose lower prices and more pollution. When asked, which is more important, producing energy or protecting the environment? 47 percent chose the environment and 31 percent energy, while 17 percent said both were important. Asked about campaigns of environmental groups to "protect and expand the national parks and wilderness areas," 62 percent of the interviewees felt that they and their families benefited from a "fair amount" to a "great deal" from such efforts.

In this same survey (by Resources for the Future) the myth that the environment is the baby of rich elitists was neatly exploded. While 68 percent of the respondents who earned more than \$30,000 a year said they were "sympathetic" to the environmental movement, so were 60 percent of those earning from just under \$14,000 down to \$6,000 or less.

In a three-year study by the U.S. Fish and Wildlife Service to determine public attitudes toward wildlife, 89 percent were in favor of protection of the bald eagle and even the little-known American crocodile received a 70 percent vote. In response to the statement, "I see nothing wrong with farmers shooting golden eagles if the eagles kill their sheep," 61 percent of the public disagreed. And more than two-thirds approved a tax on furs and off-road vehicles.

So we are not alone. When we lose a battle or two we can't lay down our arms and say the hell with it. With the reservoir of public support to draw upon we can win the war. Gung ho!

Condor Program

by John Borneman



By the end of May 1980, following approval of a State permit for captive breeding and radio telemetry approved by the California Fish and Game Commission, the Condor Research staff felt the need to get on with the research they were hired to conduct. Several questions needed to be answered if we were going to know what was happening to the condor population. These questions included such issues as the role of nest parasites in nestling mortality, food stress on the nestling and the question of pesticide contamination in condors.

As a result of the tragic death of the condor nestling there have been certain other questions that need to be addressed. Following are answers to some of the most frequently asked questions.

Why was it necessary to check the nests at this time?

It has been suggested that one important environmental factor that may be limiting condor numbers, or responsible for overall declines, is a shortage of food. The best way of evaluating this possibility is to measure growth rates in pre-flight condor chicks. If food is in short supply during this period in the species' annual cycle when food requirements are greatest, then the chick and not the adults will most likely be adversely affected. Because condor chicks have relatively slow development rates and are capable of surviving on an irregular food supply, most underfed chicks may reach fledging age, underweight and poorly prepared to survive as free-flying birds. Such food-stressed condors could be detected by measuring growth rates, and comparing differences between several chicks and the different rates of development of several growth parameters on a single chick. We have no other dependable, quantitative means of assessing the food shortage question.

It is important to collect shell fragments to be able to run tests on egg shell thickness. Both adults and the young bird at one nest site were observed consuming egg shells. Even though there was a chance of still finding egg shell fragments after fledging took place, it was important to find shell fragments with membranes still attached. The membranes are an important source of information on the pesticide content in the condors' foods.

Didn't you know you might lose a chick?

Based on the previous research conducted by biologists John Ogden and Noel Snyder, this did not seem to be a probability. Each has handled over 1,500 nestlings of other species of large raptorial and water birds. Less stressful, more gentle handling than has sometimes been employed was opted for in this case.

Was nest entry legal?

The nest entry and chick handling were permitted under both Federal and State permits. The State permit was requested in mid-June and issued prior to the nest entries. Every attempt was made by the Condor Research Office to insure that all actions taken in the field related to the condor nest visits were legal by both State and Federal standards. Both the Federal and State permits are different documents and cover different aspects of condor research than the permit for captive breeding and telemetry approved by the Commission on 30 May 1980.

The Department of Fish and Game, the U.S. Forest Service, the U.S. Fish and Wildlife Department, and the National Audubon Society were notified that the nest visits were taking place.

What is the status of the first chick that was checked?

It is strong and healthy and under observation. The adults came and fed it following the nest check; the chick continues to thrive.

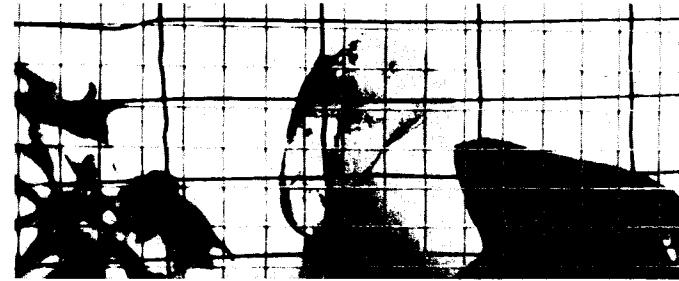
What is the future of the program?

The research program is going forward. As far as the telemetry and captive breeding goes, we remain committed to that program as the best program to avoid the extinction of the California Condor. Our reasons for not wanting the program to be delayed remain the same. It would be doubly tragic if the loss of this chick brought about a serious delay of the whole program. What if the initial losses of Whooping Cranes and Nene Geese and Masked Bob-whites had sealed the fate of those now successful programs? *Scraping the present program is akin to scraping the condor.*

As we look ahead we are going to have some successes and some failures, but we are determined not to let the condor slip into extinction because of one setback. Through our nest surveillance over the past 4½ months, we have already accumulated a wealth of information on condor nesting behavior that has been heretofore unknown. More strides have been made toward nest site protection than ever before.

The autopsy may never reveal the cause of the chick's death; some birds have been known to die during handling from dieldrin releases into the system or from calcium-phosphorus deficiency. We wish we knew.

We are convinced that we have the most competent staff of field biologists we could ever hope for. Our hindsight has taught us some valuable lessons. Despite the tragic loss of the chick, much information will be obtained through autopsy, tissue samples collected, and artifacts from the nest site. It is hoped that in some small way the information we gain may contribute to a better understanding of the species. ☺



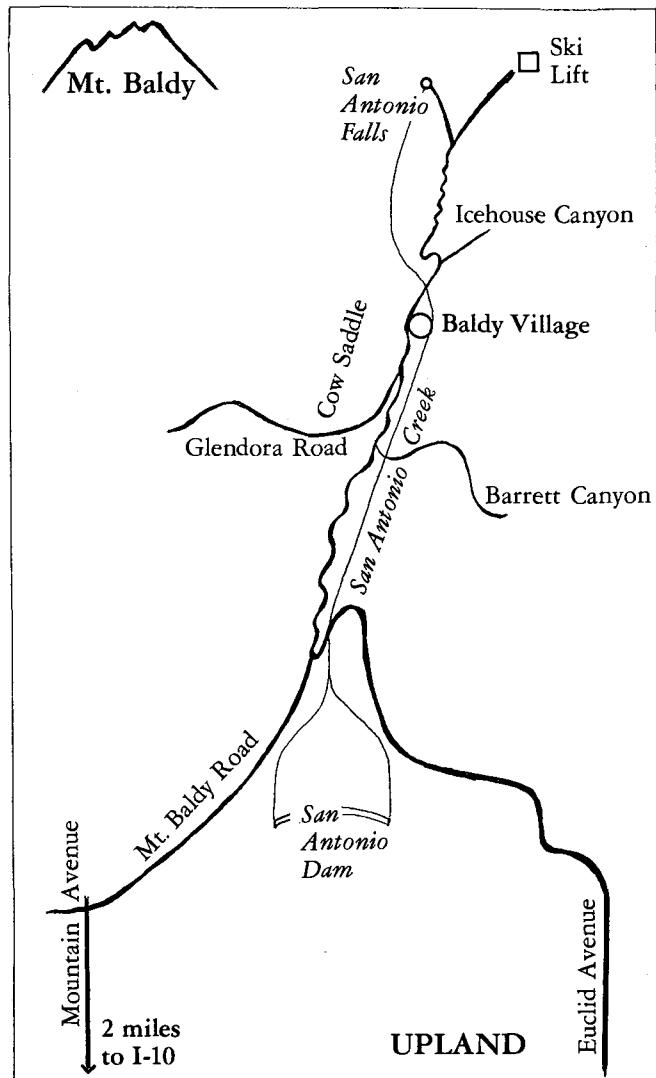
Local Institutions Offer Birding Classes

U.C.L.A. Extension is offering a **Birding Tour of West Mexico** — Mazatlan, San Blas and the Sierra Madre Occidental, 22-30 December 1980. The tour is to be led by Kimball Garrett and Lee Jones. Cost of \$750 includes tuition, meals and all accommodations and transportation from Los Angeles. For further information, contact U.C.L.A. Extension, Dept. of Sciences: (213) 825-7093.

A new class which includes one classroom meeting and three local field trips — taught by Roger Cobb — is being offered this fall for beginning birders through Santa Monica College Community Services. Titled **Introduction to Birdwatching**, the course will meet on four consecutive Saturdays 9 a.m. to noon — September 20 and 27 and October 4 and 11. The first session will meet at Santa Monica College in the Science Building, Room 175. Field trip locations to be announced. Cost for the class is only \$17.00 per person. For further information or to enroll, call Santa Monica College Community Services, (213) 450-5150.

Birding in San Antonio Canyon

by Henry E. Childs, Jr.



CCWC Defends California's Wetlands

California's coastal wetlands are the richest habitat in the State; the wetlands are feeding and resting habitats for approximately 70 percent of the birds which use the Pacific Flyway. The coastal wetlands are in danger of being destroyed.

These are just a few of the facts that the newly formed California Coastal Wetlands Coalition is trying to get across. Aims of the group include educating the public about the value of coastal wetlands and increasing public awareness of the threats to wetlands and of the programs of government agencies. As a coalition, the CCWC exists as a clearinghouse for local groups concerned with the same issues to exchange news and information, and it provides a way to coordinate efforts on regional and State issues.

Increasing the membership roster is vital to the success of the CCWC. If you are interested in finding out more, write to P.O. Box 1075, Orange, CA 92668.

Located north of Upland on the Los Angeles/San Bernardino County line, is the magnificent San Antonio Canyon leading to the base of Mt. Baldy. The walls of the canyon are generally precipitous and most of the trails are a challenge to the hiker. However, a few areas are accessible to the general birder who will be rewarded by seeing "mountain" birds.

Entrance to the canyon is made from I-10 by taking either Mountain Avenue or Euclid Avenue. *Caution:* Birding or sightseeing is not recommended on skiing weekends.

Barrett Canyon

Elevation 3600 feet; marked by a street sign several miles above San Antonio Dam. Park and check the deep gorge a few hundred yards below on the old road. This is a good spot for *Dippers* and *Canyon Wrens*. Barrett Canyon is situated across the creek, which may present a problem during flooding. The road passes several houses about a half-mile in and continues into good coniferous and mixed hardwood forest. Look for *Townsend's Solitaire*, *Hairy Woodpecker*, *Williamson's Sapsucker*, *Cassin's* and *Purple Finches*.

Cow Canyon Saddle

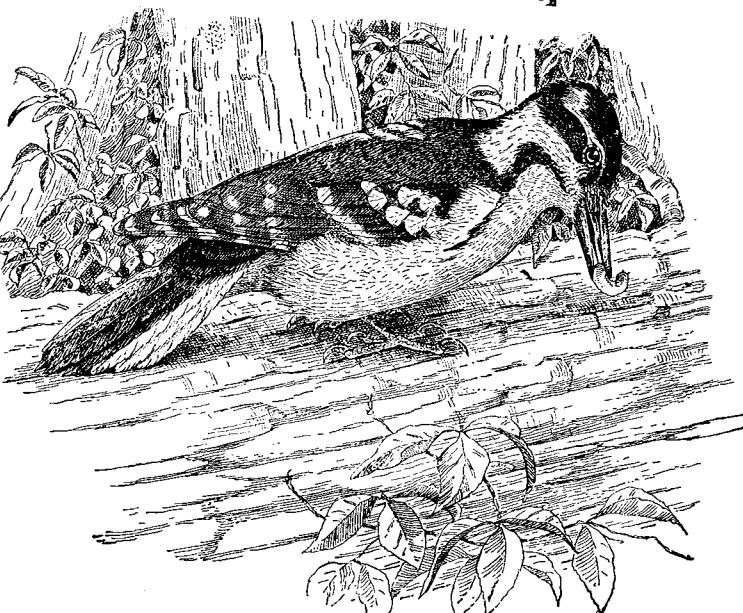
Elevation 4000 feet. Take the Glendora Road just south of Baldy Village to the gap about one-half mile. Easy walking trails are found on both the north-facing slope in Big-cone Spruce, and on the south-facing slope in chaparral. Look for *Mountain Quail*, *Blue-grey Gnat-catcher*, *Cassin's Finch*, *Pygmy Owl*, *Black-chinned Sparrow* and *California Thrasher*. Big-horned Sheep may also be found on the south-facing slope.

Icehouse Canyon

Elevation 4800 feet; above Baldy Village, well marked. Trail is beside the restaurant. *Mountain Chickadees*, *Cassin's Finches* and an occasional *Spotted Owl* make this a place worth the rather strenuous climb.

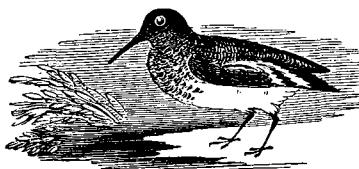
San Antonio Falls

Elevation 5800 feet; located just past the Snowcrest Lodge, Falls Road is blocked, so one must walk in to see the Falls. A dripping water pipe located on the left about fifty yards from the gate attracts migrants and resident *Mountain Chickadees*, *Pygmy* and *White-breasted Nuthatches* which can be photographed at close range. Below the falls, *Dippers* are regularly seen. Hikers continuing on to higher elevations may be treated to *Green-tailed Towhees*, "Red-breasted" *Sapsuckers* and *Clark's Nutcrackers*.



Birds of the Season

by Shum Suffel



September belongs to the migrants — not only the northern-nesting birds passing through on their southward journey, but also our summer residents leaving for warmer areas, and winter visitors arriving from the north or the mountains — including two common and much-loved species, White-crowned Sparrows and "Audubon's" Warblers, both of which arrive before October 1st.

Early in the month, the shorebirds will dominate the scene, as birders search for three uncommon species — Baird's, Pectoral and Solitary Sandpipers — which sometimes arrive as early as July. Then there are the real rarities — Buff-breasted, Sharp-tailed and Curlew Sandpipers and Red-necked Stints; one or two of these each fall is our usual quota. For the most part, the more unusual passerine migrants and the vagrants come later in the month, or in October, although the handsome Eastern Kingbird is usually seen early in the month.

A dozen or so L.A.S. members, including past presidents Small and Maisel, and Audubon House faithfuls Lohr and Dimsdale, spent the last week of June at the American Birding Association's convention in Bangor, Maine, as did over 300 enthusiastic birders from every part of the United States and Canada.

For those of us who had not birded the northeast before, the field trips provided a bonanza of new birds — Greater and Cory's Shearwaters, Razorbills, Common Puffins, Spruce Grouse, Black-backed and Red-headed Woodpeckers, and a host of warblers and fringillids which we knew in California only as vagrants. Even for the "700+" birders, there were super rarities to chase. A Little Stint in Massachusetts tempted fifteen conventioners to charter planes, only to find they were one day too late. Those who traveled north to the marshes along the St. Lawrence River in nearby Canada were generally successful in finding the Little Egret, an Old World counterpart of our Snowy Egret. There is a previous specimen of the Little Egret in Canada (BIRDS OF CANADA, page 39).

The best news of the nesting season comes from Cambridge, England, in the International Council for Bird Preservation Newsletter: "For the first time in over three decades, scientists have observed the hatching of a California Condor in the wild. Biologists at the Condor Research Center in Ventura, California, say the chick hatched sometime before dawn on 14 May. In addition, during June a second nest with a chick was found in the coastal range; this chick is believed to be about two weeks older than the first one discovered." Unfortunately, one of these chicks died after the newsletter was written.

Next in nesting season interest was the return of the Zone-tailed Hawks to the Santa Rosa Mountains, where they nested successfully and hatched two chicks (one of which subsequently died). The return of a pair of Hepatic Tanagers to Arrastral Creek in the San Bernardino Mountains was noted by many observers (Bob McKernan, et al). Hepaticas nested there several years ago, but were not reported in 1978 or 1979. The pair of Spotted Owls which nested at Switzer's Picnic Area in the San Gabriel Mountains in 1978 and 1979 was seen in the area again (Ruth Lohr, 14 July), but apparently did not utilize the old nest this summer. Blue-

winged Teal were present at McGrath State Beach and were presumably nesting; they apparently nested there in 1979, when a female (very difficult to separate from female Cinnamons) was followed by several ducklings.

Between the convention, summer vacations, and a normally dull season for local birders, there were a few reports during late June and early July. Jerry Johnson keeps his eye on the sky along the coast, and finds Magnificent Frigatebirds: near Laguna Beach on 30 June, and at Marina del Rey on 3 July and 12 July. An early one was at the Salton Sea about 20 June.

Flamingos fascinate us because of their size and striking colors, even though we realize that they are escaped exotics. They are to be expected at the south end of San Diego Bay, at Buena Vista Lagoon, and at the Salton Sea; in addition, two flamingos (of unknown species) were at Lake Matthews, Riverside County (Dept. of Fish and Game, 13 June), and a Chilean Flamingo was at McGrath (Bruce Broadbooks).

It is difficult to tell whether the earliest shorebirds are migrants or non-breeding birds which remained locally through the summer. Wilson's Phalaropes, along with a few Northern, at McGrath on 15 June (Bruce Broadbooks) are in the questionable category, but a Baird's Sandpiper at the Santa Maria River Mouth on 10 July (Louis Bevier) and five Baird's at McGrath on 12 July (Don Sterba) were definitely migrants, as Baird's are very early migrants and are virtually unknown here in spring. A Stilt Sandpiper near Goleta on 6 July and a Lesser Golden Plover there on 14 July (Louis Bevier) were undoubtedly early fall migrants in this well-covered area. Two Marbled Murrelets at Pt. Sal, west of Santa Maria (Louis Bevier) were well south of their normal summer range.

Kimball Garrett's coverage in the local mountains produced Whip-poor-will for the fourth consecutive year at Table Mountain near Big Pines in the San Gabriels. MacGillivray's Warblers were summering, and presumably nesting, in nearly every willow thicket above 5500 feet; Hermit Warblers were found in late June and early July at Buckhorn Flat and near Dawson Saddle; and a Nashville Warbler (no documented nesting in Southern California) was at Cortelyou Spring along the Angeles Crest Highway on 18 June. Singing male Ruby-crowned Kinglets in two different areas near Big Bear Lake in June are among the very few recent summer records of this formerly common breeder in our local mountains.

Previous comments in this column on the lack of Rufous Hummingbird reports elicited a well-documented letter from Sally Pearce of La Verne who sees 25-50 hummers in the flowering eucalyptus near her home. In the early spring more than half are Rufous/Allen's (i.e., *Selasphorus*, sp?). Her earliest *Selasphorus* date was 20 February, and the last date was 26 March, when the trees stopped flowering. Her first southward-bound *Selasphorus* hummer was seen on 30 June. The L.A.S. picnickers at Charlton Flats on 13 July saw many *Selasphorus* in the red penstemon and scarlet delphinium. It should be pointed out that only adult male Rufous, with red backs, are certainly identifiable in the field, as all Allen's, plus immature and female Rufous, have green blacks.

Except from the mountains, there were very few reports of passersines. Art and Jan Cupples found two Bendire's Thrashers near Big Pine in the Owens Valley (north of their usual range), and a

male Rose-breasted Grosbeak at Glacier Lodge in the High Sierras, both on 8 June. A male Wilson's Warbler at the Arcadia Arboretum on 24 June, and a female at the same place the next day (Shantanu Phukan) suggest the possibility of nesting; the riparian type habitat appears suitable. Except for recent summer records from the Santa Maria River mouth, this species has been eliminated as a breeder in the lowlands of Southern California. A male Summer Tanager, calling and feeding in the sycamores above Zuma Beach on 5 July brightened the day for Terry and Barry Clark.

There is seldom enough time in the early fall for birders to cover all the promising areas. In addition to the previously-mentioned shorebirds, the Salton Sea should provide Wood Storks, Laughing Gulls, Gull-billed Terns, and Black Skimmers, four species not usually found elsewhere in the state. Then there is the possibility of rarities — southern herons, spoonbills, or Black-bellied Whistling-Ducks, and we are long overdue for an invasion of Blue-footed or Brown Boobies in late summer or early fall. The coastal canyons and promontories will furnish the best land birding, as they provide water, cover and food for migrants. Fennel is attractive to warblers because of the aphids which infest the plants.

Lastly, there are almost weekly pelagic trips. Those from San Diego feature Red-billed Tropicbirds, Least Storm-Petrels, and Craveri's Murrelets. Morro Bay trips found Cook's and Stejneger's Petrels last fall, and there is also a possibility of Red-tailed Tropicbirds. Monterey Bay trips seek the rafts of Ashy and Black Storm-Petrels off Moss Landing, which may include a few Fork-tailed or Wilson's Storm-Petrels. Four species of Shearwaters, including New Zealand and Short-tailed, are expected. Any of these trips may yield Black-footed Albatross, fulmars, Red Phalaropes, three species of jaegers, South Polar Skuas, Sabine's Gulls, and any one of several species of alcids. It will be a busy season, and we birders are very impatient. ☺

Send any interesting bird observations to:
Shum Suffel, 1105 No. Holliston Ave., Pasadena, CA 91104



WESTERN TANAGER

EDITOR Mary Lawrence Test

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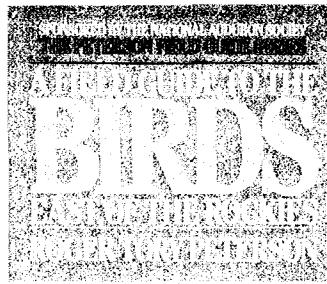
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Books

Briefly Noted:

NEW from L&P Press, Distributors of "Birders' Guides," A BIRDER'S GUIDE TO NORTH DAKOTA by Kevin Zimmer. Late this fall, a new guide will be available for Florida.

Roger Tory Peterson, the June 1980 recipient of the Medal of Freedom, the nation's highest civilian honor, has completed his long-awaited A FIELD GUIDE TO THE BIRDS (Fourth Edition). This is a completely new and updated guide to all the birds of eastern and central United States and Canada, to be published by Houghton Mifflin Company, 14 October 1980. Every illustration is newly drawn and every species has been completely repainted in color — 136 plates feature 575 species of birds found west to the 100th meridian. There are also 390 range maps, researched by Dr. Peterson and his wife, Virginia, and drawn and painted by her. The book follows a new, more convenient format — species descriptions and illustrations are on facing pages. And of course the book utilizes the famous Peterson Identification System, which shows each species in schematic illustration, emphasizing distinctive features, and groups together with similar species for ready comparisons. Three editions of this 384-page field guide will be published simultaneously: clothbound, paperback, and a signed and slipcased limited edition.



COMPLETELY NEW!

The Boxwood Press announces the publication of THE BIRD YEAR, A Book for Birders, by John Davis, Research Zoologist at the Museum of Vertebrate Zoology, Berkeley, and Alan Baldridge, of the Hopkins Marine Laboratory of Stanford University, located in Pacific Grove. Making special reference to the Monterey Bay area, this book presents in a clear and readable scientific style the important aspects of bird biology, with chapters on bird names, reproduction, breeding behavior, molts and plumages, nesting and migration. For those of us on the Pacific Coast, the sections on Monterey Bay habitats are particularly relevant. But the bulk of the text describes principles applicable to birds everywhere. Bibliographic references are given throughout the text and a 14-page bibliography is appended, along with lists of local Monterey flora and fauna. The 224-page book is nicely illustrated with black and white photos taken in the Monterey area. A good addition to your library as an ornithologic text or to update your Monterey collection.

BIRDS OF SOUTHERN CALIFORNIA by Kimball Garrett and Jon Dunn will be published this fall.

CALENDAR

Los Angeles Audubon Headquarters, Library, Bookstore, and Nature Museum are located at Audubon House, Plummer Park, 7377 Santa Monica Blvd., Los Angeles, CA 90046. Telephone: (213) 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 two weeks 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. Please send a separate check for each trip.



Important: Because of the rapidly rising cost of motor fuel, all listed trip prices are subject to change. Please bring an extra \$5 with you in one dollar bills for possible fuel surcharge, should such prove necessary. Boats will not leave port until trips have been paid in full, including any surcharge.



I recall a field trip to the Morongo Valley. I was pleased to see dozens of Cactus Wren swarming from bush to bush. I found that if I approached slowly, one or two brave individuals would stay behind and watch me alertly, before flying off. It is one of these wary fellows that I have depicted here. — D.M.

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SATURDAY, SEPTEMBER 6 — Malibu Lagoon. Meet in the parking lot between Pacific Coast Highway and the Market Basket at 8 a.m. Beginners welcome! Leader: Bob Pann.

SATURDAY, SEPTEMBER 6 & SUNDAY, SEPTEMBER 7 — Morro Bay. Departure at 9 p.m. Saturday aboard the *Princess* from Virg's Landing, returning at 8 p.m. Sunday. Price approximately \$35. There is a galley aboard. Leaders: Bruce Broadbooks and Jon Dunn.

SUNDAY, SEPTEMBER 7 — Harbor Lake. Meet at the Boat House at Harbor Lake at 8 a.m. Beginners welcome! Leader: Cliff Pollard.

TUESDAY, SEPTEMBER 9 — Evening Meeting. 8 p.m. Plummer Park. The 1980-1981 year begins in style as Herb Clarke challenges us with an all-new *California Bird Quiz*. Beginners and hard-core birders alike will benefit from Herb's expertise and reknowned bird photographs.
Conservation Committee Meeting, 6:45 p.m. The first meeting of the new season. Everyone welcome.

SATURDAY, SEPTEMBER 13 — Beginner's Trip to Ballona Wetlands, Playa del Rey. Meet at the Ballona Creek Bridge at the north end of Pacific Ave. (reached off the west end of Culver Blvd.), at 8 a.m. Observing and identifying the common waterbirds, including migrant terns and shorebirds. Leaders: Bob and Roberta Shanman (213) 545-2867 (after 6 p.m.).

SUNDAY, SEPTEMBER 14 — San Pedro to Osborne Bank. Departure at 6 a.m. aboard the *Vantuna* from the USC dock in San Pedro. Returning at 6 p.m. Price approximately \$18. Leaders: Olga Clarke and Kimball Garrett.

SATURDAY, SEPTEMBER 20 — Monterey Bay. Departure at 8 a.m. aboard the *Miss Monterey* from Sam's Fisherman's Wharf, returning at 3 p.m. Price: approximately \$20. There is no galley. Leaders: Herb Clarke and Bruce Broadbooks.

MONDAY, OCTOBER 6 — Malibu Lagoon to McGrath. Meet at 7:30 a.m. at Malibu Lagoon in the market parking lot. After birding Malibu Lagoon, the group will head up the coast to Big Sycamore Canyon for lunch, then to Pt. Mugu, ending the day at McGrath State Beach. Spend all or part of the day. Ed Navojosky (938-9766) leads this popular trip for the ninth year.

SATURDAY, OCTOBER 11 — Monterey Bay. Same details as 20 September. Leaders: Kimball Garrett and Arnold Small.

TUESDAY, OCTOBER 14 — Evening Meeting. 8 p.m. Plummer Park. Condor Naturalist John Borneman will detail the Captive Breeding Program which is now underway and show photos of the condors.
Conservation Committee Meeting. 6:45 p.m.



AUDUBON HOUSE

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September 1980

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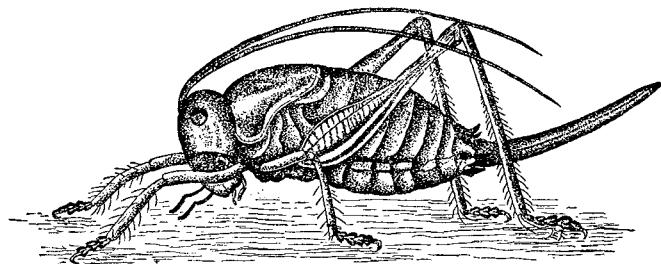
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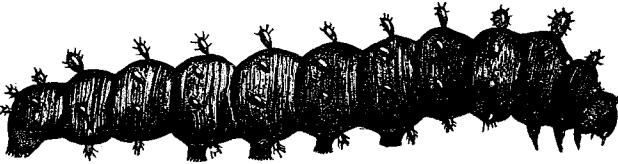
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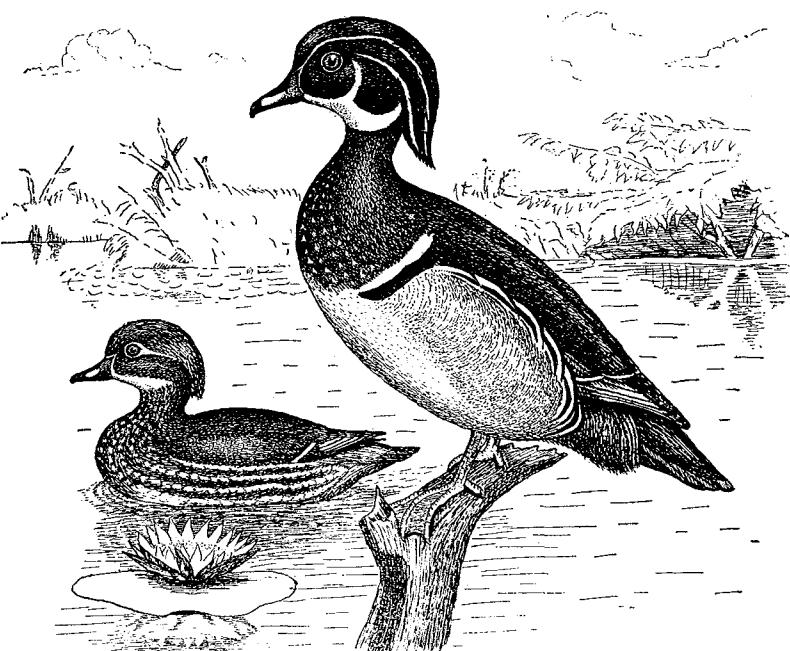
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