

Salton Sea California's Little Orphan Ocean

by Martin Goldsmith

WHAT could be more improbable? Bounded by arid desert landscape, where only the import of fresh water permits life and wealth, there exists a large salt water lake, beloved of campers, water skiers, hunters, and fishermen seeking selected, prized oceanic species. The Salton Sea, ten by thirty miles in extent, occupies the floor of a broad valley, several hundred feet below the level of the ocean. It was formed by the hand of man, is sustained by man's activities, and its predicted doom can only be avoided through works of man. That it has ever provided a wildlife sanctuary and a recreational resource is but a fortuitous accident. What is the story?

The Salton trough is a deep valley, ranging to 278 feet below sea level, and bounded on three sides by hills and mountains. Its southern reach ends in the delta of the Colorado River, which separates it from the Gulf of California. In ages past, it was covered by this arm of the Sea, but more recently it has either been an arid plain, or sometimes covered by a fresh water lake. The Colorado river, in building its delta, would alternately dump its flow into the trough, creating the ancient Lake Cahuilla, or flow into the Gulf directly, allowing the Lake to evaporate to dryness. The last Lake cycle is believed to have occurred about 500 years ago. When non-native travelers first visited the area, it was an arid plain, but by the end of the last century, some men of vision could see the area differently. They brought water from the Colorado River through an unlined gravity canal, reclaimed the land, and began a wonderfully productive agriculture, nurtured by the warm low desert climate. Though the summer climate, then untempered by air conditioning, was brutal, and the conditions in the isolated Imperial Valley were harsh, the area boomed. Among other important works, a railroad had been built through the valley by the Southern Pacific, and was to play a significant role in future events.

The original private canal company would tap the waters of the Colorado River through cuts in its banks, near the Mexican border. During the flood season on the river, the banks would be refilled and protected from the water's force. In 1905, however, the Colorado rose early and with large flows. The canal diversion, despite the desperate efforts of the irrigation company, was eroded, ruptured, and destroyed by the river's force. As the waters rushed through the breach, erosion further widened the path of escape, and soon the full flow of the Colorado in flood was pouring into the canal route, leading directly to the Imperial Valley. Efforts to stem the flow were unavailing, and the waters, following the route of the New River,

began to fill the Salton Sink. It would seem as though the resurrection of Lake Cahuilla was at hand. The ruined irrigation company and the hapless settlers turned to the Esspee railroad, whose tracks were being inundated, and sought help—engineers, equipment, and transport. The railroad interests were also at stake, and it began remedial measures at the breach in the river banks. Trestlework was built, and trainloads of rock were dumped into the water to dam the flow. The efforts met with setbacks, but were finally successful in 1907, and the flow could be regulated. By this time a huge lake had formed in the Salton Sink, whose surface was over 30 feet higher than the present Salton Sea. Of course the water was fresh, as it came from the river, but in a few years the salts from the ancient lake bed redissolved, and the Salton Sea became ever more brackish. The mark of the disaster is still on the land, for the New River now flows in a deep wide gully, cut in those years.



View of the Southern End of the Salton Sea, near Obsidian Butte.

Meanwhile normal activity resumed—the canal was reconstructed and irrigation continued. The great lake began to shrink, for the dry desert air and the constant sun in that region will evaporate more than five feet of water each year. As the evaporation leaves the salt behind, the Salton Sea became nearly as salty as the ocean. It reached its minimum size about 1925, about 20 feet below its present level. Now a new phase in its history began.

It is a fact that all irrigation waters carry salts, and that if the fields receive no flushing from natural rainfall, the salts will accumulate in the soil, poisoning it. Civilizations have fallen through inability to cope with this phenomenon. The Colorado is a particularly salty river, but the Imperial Valley agriculturists were well able to cope with the problem. They applied excess water to the land, thereby flushing the salts out in drainage streams. Natural percolation would not suffice, so a system of drains, as elaborate as the irrigation canal system itself, and just as vital, was constructed. These drains led to the natural water courses of the valley, the New and Alamo Rivers, and these waters, now brackish with the flushed salt, flowed into the Salton Sea.

The canal company, taken over by the Esspee, had been reformed and its final successor is the present Imperial Irrigation District. The District, recognizing the necessity of being able to dispose of the drain water, obtained rights to use the land forming the bed of the Salton Sea as a sump, which rights it still enjoys. The continued expansion of irrigation, with the consequent drain flow, now caused the Salton Sea to begin to grow again, and this steady increase in size continued until the mid-1960's. At the beginning of this growth period, the Sea was approximately as saline as the ocean. The evaporation, combined with the inflow of water, relatively fresh, but still bearing an enormous load of salts, permitted the Sea to grow in size, and still maintain a relatively constant salinity. That is, while there was more salt being added all the time, there was also more water, and all stayed in balance.

The Sea attracted life of course, but mostly forms passing into it from the River. Again the hand of man enters, sometimes only by chance. For example, in World War II, the use of the Sea as a seaplane base introduced ocean barnacles, now a characteristic of the Sea. Other additions were deliberate. The Department of Fish and Game (State of Califor-

nia) set about experiments which would lead to the establishment of an oceanic fishery in the inland lake. Reasoning that fish from the nearby Gulf of California might find the Sea most congenial, both sport and forage species in modest numbers were introduced. To the delight of everyone, the experiment succeeded brilliantly. The growing population of Southern California, always seeking outdoor recreation, turned to the Salton Sea. The sport fisherman was soon joined by the camper, the water skier, and those seeking peaceful retirement. Resort towns were laid out, hotels built, homes planned, and the future seemed assured. Unfortunately, not many had really thought through the unusual hydrology of the Sea.

The story is not terribly complex. Agriculture could not expand forever; the allocation of water from the Colorado River (about 3 million acre-feet/year) is fixed. Thus the drainage flow reached a maximum, and the Sea grew until the evaporation from its surface just balanced the inflow. This relatively fresh feed water, which nourishes the Sea, also bears the seeds of its destruction. The salt in the drainage water (5 million tons/year) continues to enter, but now the Sea does not grow, and the evaporation concentrates the brine. Since about 1965 the salinity has increased, and now exceeds that of the ocean. (The ocean contains about 3.4% salts, and the Salton Sea in 1972 reached 3.8%.) The salinity increases about 0.08% per year. Tests have indicated that the fish will cease to spawn successfully at 4.0% salinity. First the fishery will dwindle; then the water will become too briney for comfortable swimming; boat machinery will be damaged; the entire ecology will be upset. The Sea will cease to have recreational value. All seems lost!



View of the Southern Shores of the Salton Sea, near Red Rock.

About the Author

Martin Goldsmith has been on loan from the Aerospace Corporation to the Environmental Quality Laboratory at the California Institute of Technology in Pasadena. His professional interest in environmental engineering began with reviews of the salinity situation of the Colorado River, and led him to conduct an extensive study of the Salton Sea and its predicament. At the EQL he has prepared a review of the geothermal resources of California for the Technical Advisory Council to the House Assembly, his interest in geothermal having been sparked during the Salton Sea investigation. The major study he has conducted at EQL is on the siting of nuclear power plants in California.

On going to press we learn Dr. Goldsmith has accepted a permanent appointment at the California Institute of Technology.

As in the Perils of Pauline, however, salvation may be waiting in the next reel.

See your next issue of "The Western Tanager."

Pelicans Gain on Texas Coast After Drop in Use of Pesticides

By MARTIN WALDRON

Special to The New York Times

ROCKPORT, Tex. — The brown pelican with its seven-foot wingspread, one of the nation's largest birds, may be starting a comeback along the Texas Coast. Experts say that a decline in the use of certain pesticides may help.

From an estimated 80,000 pelicans in Texas in the nineteen-thirties, the number declined to 20 in 1967 and now is estimated to be about 55. Eleven fledglings were raised this year, the largest in many years. "It is enough new birds to be hopeful," said John Smith, a biologist with the Texas Parks and Wildlife Department.

Last year, only one pelican fledgling survived in Texas, and the year before only three.

David Blankinship, a biologist for the Audubon Society in Rockport, said that farmers' past use of chlorinated hydrocarbon pesticides was believed to be the major reason for the decline in Texas pelican population in the last 35 years.

Eggshells Too Thin

Research indicated that the residue from the pesticides was washed into the Gulf of Mexico, where it was ingested by the small fish that make up the pelicans' diet.

Mr. Blankinship said studies had shown that the pesticides caused pelican hens to lay eggs with shells too thin to withstand the mother's weight during incubation and that some eggs were caused to be infertile.

There is some evidence that recent prohibitions against the



A brown pelican

indiscriminate use of certain pesticides such as DDT may be contributing to the growth of the Texas pelican population. Mr. Blankinship said that eggs laid last year had shells thicker than those of the previous several years.

A national census of pelicans has not been made since 1967 and the migratory birds population station at Laurel, Mr. Blankinship said that it had no up-to-date estimates of the current number. The pelicans are considered endangered species.

At the Federal wildlife refuge at Cone Romain, S.C., Burkett Neely, a Federal bird expert, said that pelican flocks along the Atlantic Coast had not been thinned as much as those along the Gulf of Mexico and on the California Coast because less pesticide residue drains into the Atlantic.

Radar Study Seeks Bird Hazard Data

Analysis of radar data on migratory birds, with the objective of establishing signatures for various species and mapping migration habits, is being undertaken by RCA Corp.'s Missile & Surface Radar Div. under a National Aeronautics and Space Administration contract.

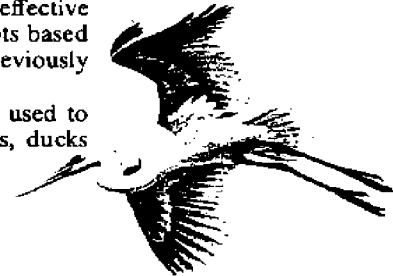
The project may produce more effective bird-hazard warnings for aircraft pilots.

RCA is attempting to utilize magnetic tape data gathered by a hand-held coherent Doppler radar built by the company and convert it into graphic information.

The company hopes to establish individual radar signatures for specific groups and possibly single types of birds, making the mapping of migration patterns easier and more accurate. This, in turn, may lead to special radar displays that could show bird flocks and large single birds that present hazards in and around airports, according to RCA officials.

Accurate forecasting of bird flight paths could also produce more effective warnings of bird hazards for pilots based on more accurate data than previously available.

The hand-held radar has been used to track swallows, blackbirds, crows, ducks and other birds.



Dear Les:

I would like to personally thank you and the members of the Los Angeles Audubon Society for your very generous support for the California Condor Fund this year as well as past years. I also appreciate the warm personal support you have given me in my work as Condor Naturalist.

Looking forward to seeing you on Mt. Pinos this summer, if not before.

Warmest regards,

John Borneman
Condor Naturalist

Chances for Survival Of Rare Ibis Improve

BIRECIK, Turkey, June 23 (Reuters)—The first half a dozen young of one of the world's rarest birds have hatched, allaying fears that the bald-headed ibis was doomed.

The ibis has only one known nesting place—a split in the sandstone cliff in the center of this little town on the banks of the Euphrates River.

A combination of indifference and the vandalism of children over the last few years had all but driven the ibis from its ancient nesting place, and last year, only four nesting couples were recorded. The eggs they laid suffered an 86 per cent loss.

This year, however, 67 birds, including 25 nesting couples, have been recorded and are being protected by a representative of the World Wildlife Fund, and last month, the half dozen eggs hatched.

The ibis is bald, with a bluish pate, ruddy jowls and long curved beak. It has a black body.

NATIONAL AUDUBON SOCIETY

950 THIRD AVENUE, NEW YORK, N.Y. 10022 (212) 832-3200

Mr. Leslie Wood, President May 3, 1973

Dear Mr. Wood:

Allow me to express the deep gratitude of the National Audubon Society to you and to the Los Angeles Audubon Society for your generous support of our condor program.

I had a chance to see John Borneman at a meeting in California last month and to catch up on the latest details of the program. John's work is as exciting as ever.

Sincerely,

3 Elvis J. Stahr
President

audubon activities

DONALD ADAMS

MT. PINOS, June 23. The weather was most pleasant and the group which gathered at Lebec was a nice size. Birding was good, if not spectacular. We stopped to bird near Frazier Park, in Cuddy Valley, near the Organization Camps and along Fir Ridge Road, arriving at Iris Point in time for lunch. In the parking lot there was a young man with a small astronomical telescope which he obligingly focused on a male CALLIOPE HUMMINGBIRD perched in the top of a tree. None of us had ever had a better view of the bird. After lunch we proceeded to the summit of Mt. Pinos. For us natives there were no real thrills on this trip, but for our two visitors, Paul Bauer of St. Louis and Tony Salvadori of Guelph, Ontario, it produced several life birds each. And, of course, the thrill of thrills for them was the sight of two CONDORS, first spotted by Paul Emery. Bob Blackstone, leader.

BUCKHORN FLAT, July 7. It was a bright, crisp morning with the bluest of blue skies when the 15 members of the Audubon Society started down the Buckhorn trail. Almost immediately we saw TOWNSEND'S SOLITAIRE. CASSIN'S FINCH and VIOLET-GREEN SWALLOWS were at the next stop. As a matter of fact, the finches sang all morning. Later the FOX SPARROW literally drowned them out. The TITMOUSE sang sporadically. There was a great gathering of ORANGE-CROWNED WARBLERS the most I have seen in years. The ROBIN and BLACK-HEADED GROSBEAK sang at both Buckhorn and Chilao, where we had lunch. PURPLE MARTINS were life birds for several members, so we did accomplish this much. The WOODPECKERS were at both sites, WHITE-HEADED, ACORN and RED-NAPED SAPSUCKER. The penstemon and yucca are particularly abundant this year and they have brought in the RUFOUS and ALLEN'S HUMMINGBIRDS. Below the Buckhorn exit the tiger lilies are really fine and the chamise and manzanita are also in bloom. The various flycatchers are having field day around those attractors of bugs. There were 33 species for the day. Otto Widmann, leader.

MT. PINOS, July 28. A total of 19 sightings of CONDOR made this comfortable summer day at Mt. Pinos worthwhile. A number of these observations were made as the great birds soared over the peak within excellent viewing range. A walk in Iris Meadow, filled with beautiful wildflowers, produced an abundance of the undistinguishable RUFOUS-ALLEN variety of hummingbirds and male CALLIOPE. A total of 63 birds was seen and those of us who attended had the pleasure of the lovely day and good company. Pamela Greene, leader.

BOOK STORE

We have just acquired a long awaited regional birdbook entitled BIRDS OF BIG BEND NAT'L PARK & VICINITY by R. Wauer. Because of the large variety of bird wildlife, this Nat'l Park is fast becoming one of the most popular places to visit. Secondly, BIRDS OF BRITAIN & EUROPE by Heinzel and Fitter has just arrived, hopefully in time for that planned vacation. This is a mine of information covering North Africa and the Middle East as well.

Finally we have a variety of up to date check lists of birds in Alaska for those of you who will be making that worthy trip this summer. These include Checklist Birds of Alaska, Field checklist Birds of Interior Alaska and Birds of the Kodiak Nat'l Wildlife Refuge. Also BIRD FINDING IN INTERIOR & SOUTHCENTRAL ALASKA and BIRDS OF ALASKA by Gabrielson will add a lot more information to what you will be seeing and anticipating.

With so much emphasis on conserving our natural resources, don't forget we do carry a fine line of American Wildlife ecology cards using 100% recycled paper. If you can't come in to Audubon House, please remember you can always give us a jingle and we will gladly mail your order to you.

STATE TO ACQUIRE 3,000-ACRE MARSH

Will Make Sullivan County
Swamp a Nature Refuge

Special to The New York Times

Westbrookville, N.Y., Aug. 11 —The states' Department of Environmental Conservation has decided to acquire and develop most of the 3,000-acre Basherkill fresh-water marsh in Sullivan County as a state nature preserve and wildlife refuge.

A department official in Albany said state officials had decided to acquire "somewhat less" than the originally proposed 2,850 acres in the swamplands.

It is estimated that about 2,400 acres will be acquired at a cost of more than \$1-million. The funds will come from the state's \$1.15-billion Environmental Quality Bond Act, passed last November along with accompanying Federal funds.

The Basherkill marsh has resident and transient wildlife populations unequaled elsewhere in the state. As many as 90 species of birds have been observed in one day in a single section, according to the Sullivan County Audubon Society.

A network of underground caves offer experienced spelunkers a chance to explore beneath the earth.

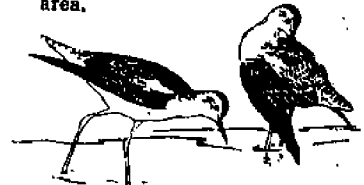
Thousands of ringed-neck ducks stop by on their migration each year, and wood ducks and black ducks attract hunters to the swamp each fall. Rare bald eagles make temporary residence in the winter and spring.

Travelers on Route 17 from New York City to the Catskills can see the marsh as they cross the Shawangunks on their way to the Catskill Mountains.

Although no specific plan for developing the swamp has been disclosed by the state, some officials predict that the swamp may be divided. The southern section would be a wildlife management area where row-boat and canoe-launching sites and natural campsites would be available. Public hunting and fishing would also be permitted.

The northern section would be a wildlife refuge where entrance during wildlife nesting seasons would be restricted, hunting prohibited and fishing allowed in a limited basis. The pathways along the abandoned Delaware and Hudson Canal, which borders the Basherkill shores, might be utilized as hiking or bicycle trails.

Experts have termed the marsh "the most extensive fresh-water marsh between Montezuma and the salty Jamaica Bay." Area environmentalists have declared that it must be protected from pressures for developments which are already mounting in the area.



HEADQUARTERS, LIBRARY AND NATURE MUSEUM LOCATED AT AUDUBON HOUSE
PLUMMER PARK, 7377 SANTA MONICA BLVD., LOS ANGELES 90046 876-0202

Audubon
Bird Reports
874-1318

Dr. Gerald Maisel, PRESIDENT

Agnes Evans, EXECUTIVE SECRETARY

- Sept. 6 Thursday - Executive Board Meeting, 8 p.m., Audubon House.
- Sept. 8 Saturday Pelagic trip on the Vantuna, on board at 5:30 a.m. Directions to Vantuna's berth will be sent with confirmation of reservations. Reservations are limited to 30 persons and will be accepted by mail only. Fare: \$15. Make check payable to Los Angeles Audubon Society and send with a self-addressed stamped envelope to Joann Gabbard, 823 19th St., Apt. D, Santa Monica, CA 90403. Leader: Arnold Small.
- Sept. 11 Tuesday - Evening Meeting, 8 p.m., Plummer Park. Two extraordinary National Geographic slide sound films, The Way of a Bird and The Mystery of Migration, will be presented by Arnold Small.
- Sept. 15 Saturday Pelagic Trip - San Diego, sponsored by the California Field Ornithologists. Write or call Clifford Lyons, P.O. Box 369, Del Mar, CA 92014; 714 453-1000, ext. 1450 (before 5 p.m.) or 714 276-8628 (after 6 p.m.).
- Sept. 16 Sunday Malibu Lagoon - 8:00 a.m. Meet in the supermarket parking lot adjacent to the lagoon. Leader will meet group there.
- Sept. 22 Saturday Mt. Pinos. Group will meet at 8:30 a.m. at the summit. There will be no specific leader as most of the birding will be done from the Condor observation point. Look for Red Crossbill, Purple and Cassin's Finch, Calliope Hummingbird and Condor. For further information call Pamela Greene, 398-2955.
- Sept. 24 Monday - Malibu Lagoon. Meet in Malibu Inn parking lot opposite Malibu Pier between 8:00 and 8:30 a.m. Group will bird along coast to Mugu and Santa Clara, if there is time. Leader: Ed Navajosky, 938-9766.
- Sept. 30 Sunday Cabrillo Beach. Meet at 7:30 a.m. at the southwest parking lot of Harbor Lake off Anaheim Blvd. in Wilmington. The group will go to Averill Park and Pt. Fermin for fall migrants. Leader: Shirley Wells, 831-4281.
- Oct. 4 Thursday Executive Board Meeting, 8 p.m., Audubon House.
- Oct. 6 Saturday Pelagic Trip Monterey, sponsored by the California Field Ornithologists. Same information as listed above Sept. 15.
- Oct. 6 Saturday Malibu Lagoon) For details check the
- Oct. 9 Tuesday Evening Meeting, 8 p.m., Plummer Park)
- Oct. 13 Saturday Tijuana Riverbottom) October Western Tanager.
- Oct. 14 Sunday Mt. Pinos)
- Oct. 21 Sunday Newport Backbay)
- Oct. 27 Saturday - Butterbread Spring)
- Oct. 15 Monday - Newport Backbay)

THE WORLD OF THE WILD - Lecture/film series at UCLA. Films include "Birds in New Zealand", "The Incredible Hummingbirds", "Mallee Fowl". THE WORLD OF THE WILD: A Reprise. 2-Sunday presentation from first film/lecture series. Films include: "Private Life of a Starling", "Private Life of the Kingfisher". For information write P.O. Box 24902, Dept. of Biological and Physical Sciences, 6105 Math-Sciences Bldg., Univ. Ext. UCLA, 90024 or phone 825-3839.

NOTICE

AUDUBON HOUSE WILL BE CLOSED SATURDAY, SEPT. 1, MONDAY, SEPT. 3 (LABOR DAY) AND SATURDAY, SEPT. 8 FOR STAFF VACATION.

Los Angeles Audubon Society

The Western Tanager

EDITOR	Gilbert W. King
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The New Names

The following extracts are from letters received by Earle Greene, Secretary of the 600 Club, regarding the 32nd Supplement in The Auk of April 1973.

Dr. Alexander Wetmore, U. S. National Museum, Washington, D.C. "For the present I suggest that you operate in the 600 Club as before."

Whitney Eastman, Minneapolis, Minn. - "It is my opinion that we should continue as we have to use the AOU Check-List, Fifth Edition, until the 6th Edition has been published. Then and only then will we be sure what we are going by."

Dr. Jean Piatt, University of Pennsylvania - "My advice at this time would be to defer any alterations in listing for the 600 Club til the actual 6th Edition of the Check-List is published. I see no necessity to change our lists until everything is firmly and irrevocably established, to wit the 6th Edition. There must be one final authoritative list and that should be the Check-List itself, not "Day by Day" supplements and changes."

Dr. Ira N. Gabrielson, Consulting Biologist, Oakton, Va. (Dr. Gabrielson was Chief of the U.S. Biological Survey for many years, until his retirement). "In reply to your letter of June 9, by all means stick to the 1957 Check-List until the Taxonomists get through playing games which at times seem to border on the ridiculous."

Dr. Gordon Meade, Pittsford, N. Y. - "I very much favor keeping status quo: I would feel the same about the name changes some of which are ridiculous. My conclusion is to ignore this supplement until the Check-List is finished."

Dr. Robert O. Paxton, New York, N. Y. - "I would go ahead with the 600 Club on the basis of the 5th Edition of the Check-List until the 6th is published. For one thing, this supplement is provisional. It may well be that a few species now lumped will be resurrected in the 6th Edition, though I doubt that many will. The 6th Edition will also change areas, so it seems to me best to postpone frequent and confusing minor changes until we decide what to do about the big changes when the 6th Edition appears."

Alexander Sprunt IV (Sandy), Research Director, Natl. Audubon Society - "I certainly agree with the majority here. I think we ought to leave things just as they are until the next published version of the Check-List comes out. Of course, Lord knows when that is going to be but until it does show up let's leave things with the '57 Edition."

Dr. Clarence Cottam, Director, Welder Wildlife Foundation - "In my judgment we would be wiser to hold off making any changes until the 6th Edition comes out."

Richard H. Pough, Pelham, N. Y. Author of Bird Books and a great Conservationist. - "I agree with you. Let's stick to the 1957 Check-List until the 6th Edition."

Dr. C. S. Marvel, University of Arizona - "I agree completely with the plan to keep the 600 Club on the basis of the 5th Edition of the AOU Check-List. When the 6th Edition does come out we can talk about necessary changes."

Horned Puffins in Santa Barbara Channel May 1973

Lee Jones

On a trip to Santa Barbara Island aboard the Channel Islands National Monument boat The Cougar, I saw two adult Horned Puffins approximately 18 miles NNW and 25 miles NW of Santa Barbara Island. These observations were made on 20 May 1973. These two observations, together with the one seen on the L. A. Audubon trip near Santa Cruz Island on 13 May, indicate that there may have been a "mini-invasion" of Horned Puffins into areas along the Pacific Coast south of Alaska where it normally winters.

Since The Cougar never deviated from a straight course (Oxnard to Santa Barbara Island and SBI to Anacapa Island), it was either a sheer miracle that we passed by the only two puffins out there, or there were others out there in the vast expanse of ocean. The dates are typical for such vagrants from the north which are undoubtedly unable to fly and thus drift south with the currents all winter, arriving in Southern California waters in late spring.

Perhaps one can expect other alcids of the far north to show up occasionally, and with more and more people out looking, the chances of finding one are increased. The Horned Puffin is abundant in the Aleutians and is one of the more likely ones to turn up. Some other possibilities, though some of these are much less common than the Horned Puffin, are Thick-billed Murre, Parakeet Auklet, Kittlitz' Murrelet, Least Auklet, Crested Auklet, and if you're a real dreamer, Whiskered Auklet, all of which breed along the Alaska coast. There are already a handful of records of the Thick-billed Murre and Parakeet Auklet for Northern California and a record for Kittlitz' Murrelet from San Diego. The possibility of finding such rarities is one of the excitements of pelagic birding trips.

Don Bleitz, President, Bleitz Wildlife Foundation - "I would concur with my friends Alex Wetmore and Whitney Eastman that we should continue as we have been until such time as the Sixth Edition is actually published since there may be considerable change and resultant Confusion between this time and the time the Sixth Edition actually appears. Some of the proposed changes are, in my opinion, not valid ones, and I am sure that there will be additional changes prior to publication."

Earle R. Greene, St. Simons Island, Ga. - "The above letters represent my own feelings. I remember that during the time the 5th Edition was being prepared, several supplements, three or four, were in The Auk up to almost the publication of the 5th Edition. There is No Date set for publication of the 6th Edition. This is Final. All Members of the 600 Club should continue with the present 5th Edition, 1957, until the 6th Edition is off the press."

SOUTHERN CALIFORNIA BIRDS

Continued from back page

ER, three BLUE-WINGED TEAL and a WOOD DUCK. There were three early reports of OSPREYS in our area - one at West Pond above Yuma on July 1 and July 17 (probably summering), one in Los Angeles harbor on July 20, and one at Finney Lake near Brawley on July 22. The BLACK SKIMMERS which nested for the first time at the Salton Sea last summer were apparently flooded out at the mouth of the New River this summer, but at least one pair found a suitable nest site on a small island nearby. The only Skimmer seen away from the Sea was photographed at Pt. Mugu in late May (Cmdr. Baker, U. S. N.). ALCIDS were seen from shore more often than usual this summer. There were several reports of COMMON MURREs locally, two sightings of XANTU'S MURRELETS inside Los Angeles Harbor (Elizabeth Copper), and an immature PIGEON GUILLEMOT just outside the breakers at Pt. Mugu (Charles Collins). A pair of SPOTTED OWLS which roosted in a tree beside Cabin #26 in Icehouse Canyon, Mt. Baldy, proved easy to find, and provided an excuse for an hour's hike up a rugged, flower filled valley.

All four Swifts were reported in mid-July, but at widely separated locations. Four or five BLACK SWIFTS were seen in Santa Anita Canyon by those who stayed until early evening, and there was a probable report by Joan Mills, of two with the Cliff Swallows in Upper Franklin Canyon.

Hank Brodtkin found two or three pairs of VAUX'S SWIFTS in the big trees of Sequoia Park on July 7, which is considerably south of their known nesting range. A few CHIMNEY SWIFTS are seen with some regularity on cloudy days in late May at Encino Reservoir, but are seldom reported elsewhere in our area. This accounts for Richard Webster's excitement in mid-July when he found one flying with a flock of Cliff Swallows in the Santa Ynez Mts. and when in a nearby canyon, he found a moulting male HEPATIC TANAGER (both are first records for Santa Barbara County.)

A CURVE-BILLED THRASHER at the Brock Ranch (between El Centro and Yuma) on June 24 (Rich Stallcup) was one of the few California records. There were very few reports of laggard warblers in June - a male BLACKPOLL (rare in spring here) and a REDSTART at Palos Verdes about June 20 (Dave and Rich Bradley), while the HERMIT and MACGILLIVRAY'S WARBLERS at Buckhorn Flats (Andrew Hazi et al) may have been laggards, both species are suspected of nesting in our mountains. GREAT-TAILED GRACKLES are apparently expanding their range in southeastern California, as we have had reports this summer of single birds at Furnace Creek Ranch and Panamint Springs in Death Valley, at Yucca Valley, and at Ramer Lake near Brawley, in addition to the Colorado River above Yuma, where there is a prosperous and spreading colony.

By early August it was obvious that the first migrants were moving through. There were

clouds of SWALLOWS at the Salton Sea - thousands of CLIFFS, with hundreds of BARNS and ROUGH-WINGS and a few BANKS, while along the lower Colorado River the big flocks were mostly TREE SWALLOWS. Although she had seen a few late July migrants in San Pedro, Shirley Wells reported "a wave" of grosbeaks and flycatchers, including Empidonax and Olive-sided on Aug. 7, and in Brentwood near the San Diego Freeway Abigail King reported numbers of Black-tailed Gnatcatchers in the chaparral. LEAST BITTERNS are seldom reported along the coast, but they were seen at both San Elijo and Buena Vista Lagoons in San Diego County (Hank Brodtkin).

There will be no lack of places to go or birds to see in September - with migration in full swing, and three pelagic trips planned - the only problem will be lack of time. The shorebirds are here by the thousands and we already have our first report of twenty STILT SANDPIPERS and two BAIRD'S SANDPIPERS at the south end of the Salton Sea on July 22, with a single "Bairds" seen at McGrath State Park, west of Ventura on Aug. 6 (Ed Navojosky). Two other early fall shorebirds which should be looked for are the Solitary and Pectoral Sandpipers, and while you're looking, don't forget that fall is the time when the very rare Sharp-tailed and Buff-breasted Sandpipers have been found here.

Fall is the time for a post-graduate course in bird identification. Not only are most adult migrants in confusing winter plumage now, but about half of them are even duller immatures on their first migration, which are liable to show up anywhere if they become disoriented, and many of them do. This of course is what makes fall birding so fascinating, because that puzzling bird may be thousands of miles south or west of its traditional migration route - an Eastern warbler, an Asiatic shorebird or even a European stray like Ruff or Little Gull. While they may show up anywhere, they tend to concentrate at places where there is water, food and little prospect of better conditions ahead - an oasis in the desert, a promontory on the ocean, or an island off the coast. Many of these places are known and intensively birded and this is the reason that the same place names appear here month after month. The desert oases are good in the fall, but better in spring, so we'll leave them until then. The coastal promontories are much better in fall than in spring, because the southward bound migrants hit our southwesterly slanting coast which tends to concentrate them there. From north to south the traditional spots are Pt. Reyes Peninsula, Pt. Pinos near Monterey, Morro Bay State Park (because of the pines), the U. C. Santa Barbara campus (in the tamarisks), Pt. Dume and Tuna Canyon in Malibu, Pt. Fermin Park, Pt. Loma Cemetery and the Old Lighthouse area and the Tijuana River Valley (in the tamarisks).

SOUTH CALIFORNIA

Birds

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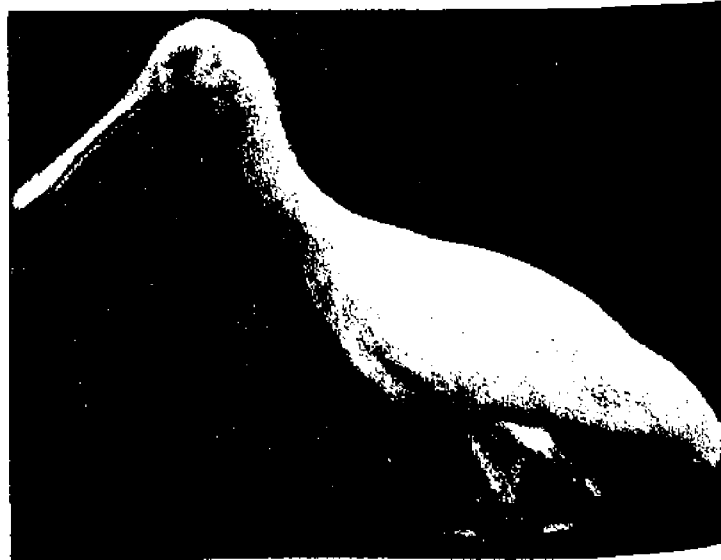
SEPTEMBER finds us with fall migration well underway, yet it seems only yesterday that spring migration wound down in early June. In the interim June and July were anything but dull, for this was the SUMMER OF THE ROSEATE SPOONBILLS - earlier, more numerous, and wider spread than ever before. It all started with a report from Don Tiller at the Salton Sea Refuge that four Spoonbills had been seen there on June 14 (earliest arrival), by the 17th there were seven more at the north end of the sea, and by July their numbers had increased to fourteen there (Guy McCaskie et al), but that wasn't all - there were more than twenty along the lower Colorado River near Yuma (all time high counts). The real shocker came when Dave Vleck of U. C. L. A. found three Spoonbills on June 20 in the tiny pond at Zuma Beach State Park, which is normally inhabited only by small human waders, too young to go in the surf (first record for the Pacific Coast of the U. S.) One of these three was injured during the week and the remaining two apparently moved north to the Pt. Mugu lagoon where Cmdr. Baker, U. S. N. Public Information Officer, photographed them in mid-July. Then, by early August two Spoonbills (probably the same two) were reported at Coleta, just above Santa Barbara. Another Spoonbill reached the coast in the Ballona Creek Channel at Marina del Rey on July 17, Bess Hoffman). All of these birds were immatures - white, or blush pink in good light, with yellow, spatulate bills and yellow legs. The climax of the Spoonbill story came right back to Don Tiller who started it all. He found thirty-three Spoonbills together on Aug. 2 in the same area where he had found the first four Spoonbills seven weeks ago.

Even more widely sought after were the pair of FLAMMULATED OWLS which nested at Buckhorn Flats in the San Gabriel Mts. They were found by the Jesse Mortons of San Pedro on May banded by Shirley Wells on the 28th, and seen by dozens of birders thereafter. Although not a rare owl, "Flammulateds" are one of the most difficult owls to see, because they are small, timid and strictly nocturnal (see Jon Winter's article, "Birding" N-D'71). Despite disturbance by banders, photographers and just plain bird-watchers, the owls apparently fledged two owlets. Those who were fortunate enough to see the adults in daylight noted particularly the reddish feathers on the facial discs and crown which give these owls their name.

Despite the popularity of the Spoonbills and Flammulated Owls, it was "virtue rewarded" that led to the finding of the rarest bird of the year. After completing Kim's Breeding Bird Census on June 14, Kim Garrett, Lee Jones and Jon Dunn stopped at Buckhorn to look for the owls. Upon hearing a warbler song, they searched out

a singing male RED-FACED WARBLER in the firs and alders along a tiny stream. Unfortunately the warbler could not be found that evening or the next morning despite intensive searches. The only other California record is of a very worn specimen at a desert oasis near the Mexican border on May 30, 1970.

We have learned to expect a few YELLOW-BILLED LOONS along the Northern California coast during the past seven winters, but last winter there were virtually none. However, this summer, when they should be in the high arctic, one was "apparently summering at Half Moon Bay, south of San Francisco" (Van Remsen), and a breeding plumaged adult was reported at San Felipe, on the Gulf of California in Mexico (Dave Simon)! Although FULMARS were not reported at sea by the pelagic trips in May and June, at least two recently dead Fulmars were picked up on the beaches - a light phase bird at San Onofre on June 11 (Ed Navojosky) and a dark phase bird at Pt. Mugu on July 14 (Charles Collins). Single FRIGATEBIRDS were reported at the Salton Sea early in July, at Seal Beach in mid-July, near Oceanside on July 26 (Pat Doheny), and, we understand, two were seen at Goleta, above Santa Barbara on the 28th. This may presage an invasion such as we had in August 1972. A LITTLE BLUE HERON at the north end of the Salton Sea on July 16 was rare there, and the first occurrence of a "Little Blue" in the "calico plumage" of a sub-adult (G. McC. et al). WOOD STORKS, as expected, arrived near Red Hill, Salton Sea, in late June and by July there were more than one hundred around the south end of the Sea. Richard Webster had an unexpected (both as to place and season) assortment of water fowl at the north end of the Sea on July 2 - two WHITE-WINGED and one SURF SCOT.



Roseate Spoonbill, photographed by Commander R. O. Baker, USN, Mugu Lagoon, 7 July 1973.