



Bulletin of the

TEXAS ORNITHOLOGICAL SOCIETY

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The Bulletin and Newsletter are each issued four times a year and mailed to all members of the Texas Ornithological Society not in arrears for dues. Annual dues for active members is \$3.00, for sustaining members, \$5.00. Inquiries regarding membership should be addressed to Mr. W. Russell Weil, Treasurer, 3429 Lovers Lane, Dallas, Texas 75225. Individual issues of the Bulletin may be purchased for fifty cents a copy. Original articles, reports and news items should be sent to Dr. Michael Kent Rylander, Editor, Department of Biology, Texas Technological College, Lubbock, Texas 79409. Conservation items should be submitted to Mr. Edward Fritz, Conservation Editor, 909 Reliance Life Building, Dallas, Texas 75201. The art director for the Bulletin is Mr. Dick Cheatham. The Texas Ornithological Society was organized in 1953 and membership is open to anyone having an interest in Texas birds, their study and conservation. The president of the TOS is Dr. William Graber, Beaumont; the vice-president is Mr. Charles Crabtree, Fort Worth; and the Secretary is Mrs. Cleve Bachman, Beaumont.

In This Issue

Dr. Alexander Skutch, a world authority on life histories of birds, particularly tropical species, offers in this issue an outline of his views on tropical ornithology — what needs to be done, and how one goes about doing it. He is the author of numerous papers which have appeared in all major ornithological journals and he is particularly noted for his LIFE HISTORIES OF CENTRAL AMERICAN BIRDS, two volumes of which have been published to date.

Dr. Pauline James, who studied ornithology at Cornell University, teaches at Pan American College at Edinburg. She is a dynamic ornithologist and has influenced the ornithological careers of many students. In this issue she has written a description of the Rio Grande Valley and its bird life. Dr. James is the author of many articles

on South Texas Birds.

Dr. Eric Bolen, who has taught at Texas A & I and who now teaches wildlife management at Texas Tech, has studied the ecology and behavior of the black-bellied tree ducks for several years. His papers have appeared in the WILSON BULLETIN, AUK, SOUTHWESTERN NATURALIST, and other journals. He has written an article in this issue of the Bulletin about a unique project in South Texas to increase the number of surviving tree ducks.

Edward (Ned) Fritz is a Dallas attorney whose contribution to Texas conservation is truly remarkable. He has travelled and written extensively in support of conservation projects and birds (his most recent article appearing in BIO-SCIENCE, "Let's Make Bird Names Helpful!"). In this issue of the TOS Bulletin he reports on current efforts to save the Big Thicket from devastation by lumber companies.

Dr. Keith Arnold, who has stated his views on the TOS in a letter (p. 38), studied under Dr. Lowery at LSU and has worked extensively in tropical ornithology. He now teaches ornithology at Texas A. & M.

Dr. W. B. Davis, who is Professor Emeritus at Texas A. & M. and who is particularly well-known for his contributions to mammalogy, wrote a letter concerning a subject which, frankly, the Editor never thought of — that is, the investment of TOS funds. TOS members having an aptitude and interest in finance should read Dr. Davis' comments and consider the feasibility of his suggestions.

Dr. Travis Meitzen is a physician in Refugio whose ornithological interests are reminiscent of the "doctor-naturalists" in American ornithology who contributed so much to our basic knowledge of native species. Dr. Meitzen has contributed several articles to the TOS Bulletin. In this issue (p. 38) he describes a possible nesting of the western flycatcher in Texas.

Dr. Andrew O'Neil, who has supplied information regarding the forthcoming TOS meeting, (inside back cover), is a physician in Falfurrias. He has spent considerable time and effort organizing the fall meeting and field trip and we appreciate his contribution to the Society.



THE CHALLENGE OF TROPICAL AMERICA

I inamou, curassow, hummingbird, quetzal, motmot, jacamar, puffbird, toucan, antbird, manakin, cotinga, honeycreeper, oropendola — these names call up visions of the marvellously rich and colorful bird life of tropical America. Yet even to those amateur ornithologists whose interest in birds reaches beyond their own state or country, they tend to be associated with pictures in books rather than with the birds themselves.

By the late 1920's, when on my first long visit to continental tropical America I fell under the spell of its wonderful bird life, practically all of its thousands of species had been collected, named, and classified. Myriads of "skins" of tropical American birds filled the cabinet drawers of the great museums of Europe and North America, their ranges had been outlined with considerable accuracy, and species had been minutely divided into races or subspecies. Very little, however, was known about the living birds. Much of the available information on their habits had been gathered incidentally by collectors busy shooting the birds and preparing their skins. These collectors had described the nests and eggs of a fair number of species, but in many instances they had attributed a nest to the wrong bird, doubtless in consequence of having hastily assumed that the first bird they could shoot close to it was its builder or attendant. The collectors had also supplied brief notes that sometimes gave fascinating glimpses into the lives of the birds they encountered. But careful, sustained observations on the habits of tropical American birds in the free state were almost non-existent.

The earliest detailed, systematic life-history stu-

dies from tropical America, such as those of Frank M. Chapman on Wagler's Oropendola and of Josselyn Van Tyne on the Short-keeled Toucan, were in the late 1920's just coming off the press. For scarcely any tropical American birds had anyone learned which sex builds the nest, which incubates the eggs and attends the young, how long the eggs take to hatch, or how long the young remain in the nest. Information on the feeding habits of all these birds was fragmentary, and the many interesting biological problems that they presented remained to be clarified. Indeed, for the majority of species in continental tropical America, the form of the nest, the number and color of the eggs, were still unrecorded.

I desired intensely to know these fascinating birds as living creatures rather than lifeless specimens; such knowledge seemed to me the greatest need of ornithol-Since someday somebody would concentrate on the task of gathering it, why not I? Chapman, who had made such a good start, was already old; Van Tyne produced no more life-history studies of tropical birds to compare with his doctoral dissertation on the toucan; and William Beebe, who had made important contributions to tropical orinthology at his biological stations in British Guiana, was turning to the exploration of the depths of the ocean. I should have this immensely rewarding field almost to myself. On the other hand, the time was not propitious, as the United States was in the grip of the Great Depression and support for an undertaking such as I contemplated was difficult to enlist. But I had youth, enthusiasm, and some savings, and I would not be deterred.

I chose for the scene of my studies Central

America, as, for a North American, the most accessible portion of the great Neotropical region, where a rich representation of its varied bird life was concentrated in a relatively small area, where one could carry on field work most economically and under the most favorable conditions. The great fruit companies operating in this area, especially the United, were generous to visiting scientists, providing transportation on their steamships and living quarters on their plantations or research stations; and like many another naturalist of the period, I at first stayed on or close to their domains. Later, with increasing familiarity with the language and customs of the Central American countries, I broke away from their sphere of influence along the coasts and worked chiefly in the interior, living in thatched cabins or rented cottages, collecting and selling botanical specimens to pay my way, and learning all I could about the habits of the birds. Finally, I bought a farm, newly carved from the wilderness in a part of Costa Rica then so isolated that it was readily accessible only by air, built my own house, and continued my studies here.

While I worked chiefly in Central America, a few other ornithologists studied the habits of birds in other parts of the American tropics, notably Helmuth O. Wagner in Mexico, Ernst Schafer in Venezuela, F. Haverschmidt in Surinam (Dutch Guiana), David W. Snow in Trinidad, Helmut Sick and more recently Cory T. de Carvalho in Brazil, Jean Dorst in the highlands of Peru, Edwin Willis in British Honduras and Panama and northern South America. There have been others, but the field is vast and the harvesters have been few and scattered. Some could give only their spare time to the birds, and others remained in the tropics only for a short while.

Now, after four decades of effort by others and myself, we know far more about the habits of tropical American birds than was known in the early years of this century. For those who take the time to read the published reports of our studies, quetzal, jacamar, puffbird, cotinga, manakin, and many another names of exotic birds, signify more than a pretty picture in a bird book. We have begun to understand how these birds live; how they win their mates, make their nests, and raise their families; the problems they face; how their life cycles resemble, and how they differ from those of the birds of the temperate zones that have been more extensively, and intensively, studied. Popular books on the birds of the world are now appearing with accounts of the Neotropical families far more detailed and accurate than they could have been made a quarter of a century ago.

In recent years, with greater speed and ease of travel, better living accommodations, less danger from tropical diseases, greater wealth, more research stations and organizations for scientific study in the tropics, there has been a vast increase in the number

of people who visit tropical America to study its birds. as amateurs or as professional ornithologists. latter tend to concentrate on special problems, such as ethology, ecology, censusing, territorial relations, tensions between individuals of the same or different species. But in my opinion, the greatest desideratum of ornithology in tropical America is the same today as it was forty years ago: to learn the life histories or basic patterns of life of more and more species. Despite the advances that have been made, this work has only been well started. Of the approximately 37 species of toucans in tropical America, we have studies, by no means complete, of about half a dozen. Of 30 species of puffbirds, three or four have been studied in some detail. Of 15 species of jacamars, we know a little about the lives of two or three. Of 238 species of antbirds, apparently less than two score have ever been watched at the nest. Of many other families, our knowledge is equally fragmentary. Many exciting discoveries await investigators in this field. Detailed knowledge of the life histories of a far larger number of tropical birds seems the indispensable foundation for meaningful studies in specialized fields.

Ecology, or the understanding of the relation of every organism to its total environment, including not only its inorganic milieu but all the other organisms with which it interacts, is certainly one of the high ideals of biological investigation. But without the basic information about individual organisms, such as life-history studies provide, ecological research, especially in the biologically less-explored parts of the earth, too often resolves itself into compiling lists of names of animals or plants that are essentially unknown — lists of x's, y's, and z's, we might say, with no indication of the values of these symbols. And, even more, bare lists of species, with no attempt to describe their habitats, fail to make interesting reading or to be enlightening. Censusing birds amid heavy tropical vegetation is attended by the greatest uncertainty; I should be surprised if an accuracy of 50 per cent could be achieved.

Recently, in the Caribbean lowlands of Costa Rica, I had the opportunity to watch, from a single observation post, the burrows of two species of motmots. One, the small Broad-billed Motmot, was nourishing its nestlings exclusively with animal food, chiefly insects and other invertebrates, with rarely a tiny frog or lizard. Its neighbor, the larger Rufous Motmot, was delivering to its broad many fruits in addition to insects. Facts of this sort are essential to the understanding of the ecology of any biological community, but they generally come to light through the detailed study of selected species rather than the broad surveys that yield impressive lists.

I believe that the bird-watcher, whether amateur or professional, who can settle for a few months, or even a few weeks, in a spot where some birds are nesting, can make no better use of his time than by intensively studying one or a few selected species, paying attention to such features as diet, the building of the nest, number and appearance of the eggs, how incubation is performed and how long it lasts, the food of the nestlings and how long they remain in the Some knowledge of what has already been published would help in the selection of a bird to study; but scarcely any tropical American bird has been studied so thoroughly, and in such widely separated parts of its often extensive range, that no more remains to be discovered about it. Almost any locality with a fairly abundant bird life is likely to support species whose habits are practically unknown and would well repay study. Especially in the arid parts of the tropics, where the openness of the vegetation makes nests far easier to locate than in the humid regions, is there a great opportunity to make original contributions to knowledge, for much less life-history work has been done in the dry than in the wet tropics. Similarly, less has been done at high than at low altitudes. The lowland rain forests, with their vast variety of exotic birds, have been most attractive to visiting ornithologists, but even here a tremendous amount remains to be done by those who have the perseverance to find nests excellently concealed amid exuberant vegetation and too often promptly lost to preda-

On one's first hurried visit to the tropics, doubtless the most important thing he can do is to become acquainted with its birds, without pretending to make

know a few birds — or other things — well rather than to have fleeting glimpses of many; but that is a matter of personal taste. One thing the novice should avoid doing is trying to extend the known range of a species. In most of the accessible parts of tropical America, the distribution of the birds is already so well understood that the beginner who thinks he sees a bird much beyond its already-known range should suspect the accuracy of his identification. One must have thorough familiarity with an avifauna before he dares to publish a range extension without a corroborating specimen.

A more promising field of study for the amateur with a fair knowledge of a local avifauna in a mountainous country is the altitudinal, as opposed to the geographical, distribution of the birds. We would like to know much more about their vertical ranges even in such an ornithologically well-known region as Middle America. How does the altitudinal range of a species vary on slopes of different exposure, as on the windward and leeward sides of a mountain chain? How is it affected by various types of vegetation? Does it fluctuate seasonally? With the presence or absence of closely related species? To study these questions one needs only good binoculars, a reliable altimetel (aneroid barometer), and, of course, sufficient time. We need to know much more about the vertical distribution of birds in mountainous countries in order to set/more precise limits to their life zones.

Likewise/we/should know much more about the movements of birds which brees in the tropics. Espe-



year around in the area where they nest; but others disappear after the breeding season, and we are not sure where they go. In severely arid regions, the avian population as a whole is much more nomadic. The clarification of the movements of birds within the tropics requires more resident bird-banders, and media for the interchange of their records. Another important question that can hardly be answered without resident bird-banders is that of the longevity of tropical birds in their natural habitats, about which scarcely anything has been published.

In recording the voices of tropical birds, Irby Davis has made an excellent beginning in Middle America, and Paul Schwartz in Venezuela. But many bird sounds are hard to catch on the tape recorder, whereas others are more difficult to identify than to record; so that the elusive voices of tropical birds will long continue to offer a challenge to the enthusiastic ornithophonographer, if I may coin a new but necessary term. For the photographer, there remain innumerable species whose portraits have never been taken in the wild, even in neighboring Mexico.

Too many people still come to tropical America to collect birds. In such long-explored regions as Middle America, the chances of finding a new species are practically nil; even a well-marked new subspecies is exceedingly difficult to uncover. The excuse for collecting is often that one's college or university or museum needs a representation of the birds of this or that country; but if each of the many colleges and museums that now exist in the North insists upon having a large collection of tropical American birds, a tremendous slaughter will ensue. With the present mobility of nearly everyone, it seems that a few comprehensive collections accessible to serious students, such as those already existing in centers like Washington, New York, Cambridge, and Chicago, should be adequate for the needs of ornithologists. Aside from the always lamentable destruction of life, continued bird collecting is to be deplored because of its impact on the people of the countries where it is done. On the one hand, we North Americans preach the conservation of wildlife to the people of tropical America; on the other hand, some of us come to kill their birds, especially the rarer ones. This must be very confusing to the local people, and they may question our sincerity.

It would be wrong to suppose that, even with the best field guide, the best binoculars, and the most favorable conditions of observation, the beginner can identify with certainty every bird he meets in a rich tropical avifauna. But for scarcely any part of tropical America do we yet have a field guide equal to the best that are now available for temperate North America and Europe, and tropical birds present more puzzles than the *Empidonax* flycatchers and fall wood warblers in the North. But is it necessary to identify

every bird that we glimpse in the treetops in the countries we visit, even at the price of shooting them? It seems best for the newcomer to become familiar with the many readily identifiable species he will meet. As his knowledge of the birds increases, the baffling ones will gradually fall into place.

When I started to study the birds of tropical America, I did not wish to deprive any of their lives, but as a concession to scientific accuracy, I decided that if I made important observations on a species that I could not otherwise identify, I would collect a specimen. But as time passed, I discovered that after I had carefully watched a bird at its nest, or made sustained observations of any sort, I knew it well enough to identify it with confidence by reference to published descriptions or museum specimens. In consequence. I have never intentionally killed a bird — for which I am thankful. Even now, after many years in Central America, I do not pretend to identify every bird that I glimpse flitting elusively through the high treetops or flying rapidly overhead; but this ignorance does not worry me, since I am not preparing to write a regional avifauna. If I could discover anything of consequence about these difficult birds, I have little doubt that I could name them without a gun.

In the present state of tropical American ornithology, continued general collecting, except possibly in a few of the most remote and inaccessible districts in the interior of the continent, is more likely to distract one from profitable observations than to contribute anything of importance to our science.

As our knowledge of the way of life of tropical birds grows, we should be able to give more confident answers to the many biological problems of wide scope which their study raises. It is well known that many tropical birds lay fewer eggs than the most closely related forms at higher latitudes. Is this because, as some students contend, they could not adequately nourish larger broods, or is it because they do not need to raise more young in order to maintain their population in a continuously favorable environment? Tropical birds tend to have longer incubation periods, longer nestling periods, and to attend their fledged young longer, than related northern birds. The losses of eggs and nestlings in tropical forests are notoriously high, but are they higher than those in temperate-zone woodlands which have been little altered by man? Why are the sexes of tropical birds so often equally brilliant, even in families, such as orioles and wood warblers, in which, among migratory northern representatives, the males are much more brightly colored than the females? When we know more about the lives of tropical American birds, we may be able to solve some of these challenging problems. — El Quizarra, San Isidro del General, Costa Rica, September 9, 1968.

NEWS AND NOTICES:

The National Wildlife Federation (1412 16th St., N.W., Washington, D. C. 20036) has just issued the 1968 edition of the Conservation Directory, which is available from the Federation for \$1.50. This directory is "a listing of organizations, agencies and officials concerned with natural resource use and management." It lists the following agencies and groups from Texas: Bureau of Economic Geology; Department of Agriculture; State Department of Health; Forest Service; General Land Office; Parks and Wildlife Department; State Soil and Water Conservation Board; Water Quality Board; Water Rights Commission; Sportsmen's Clubs of Texas; Texas Advisory Committee on Conservation Education; Texas Conservation Council, Inc.; Texas Council for Wildlife Protection; Texas Forestry Association; Texas Ornithological Society.

The Arkansas Audubon Society held its fall meeting October 6-7 at Hope. Among the events of this meeting was a talk by Cecil M. Bittle of the University of Arkansas Experiment Station on "Oddities of Nature." In addition, Dr. B. A. James reported on the 1968 Roadside Breeding Census and Freeman Thomas showed slides of Grassy Lake. For information, write Mr. and Mrs. Syd McMath, 411 West Avenue C, Hope, Arkansas 71801

There is now available a very attractive Decal for attachment to your automobile windows or other prominent places. Such displays of your membership in T. O. S. always attract attention and often lead to interesting new acquaintances and some times open new areas for birding that would otherwise be closed.

These will be on display during the coming meeting at Brownsville but in the meantime they can be obtained from our Treasurer, W. Russell Weil, 3429 Lovers Lane, Dallas, Texas 75225.

They will cost 50c each and all members should have one for their cars. Receipts from their sale will add to our income, and we need that always.

"State and federal officials have smashed a ring, headquartered in Maryland but operating also in some neighboring states, in which game and song birds were illegally shot and mounted for sale to home owners and decorators. About half of Maryland's taxidermists were implicated."—Nat. Aud. Soc.

In order to qualify for Non-Profit Organization status with the U. S. Post Office, it is necessary that the T.O.S. restate its objectives as an organization. This is nothing more than a technical detail; the current activities and functions of the T.O.S. fully qualify it for this status. The manner in which the objectives are stated in the current constitution, however, are, from a legal point of view, unsatisfactory. It is therefore necessary that we amend the constitution so we may mail our bulletins and newsletters at the appropriate reduced rate. The following amendment to our constitution is proposed, and according to Article X of the constitution, must be published 60 days before voting commences. Hence, Edward Fritz, the sponsor of the amendment, submits the following amendment: Amend Article II of the Constitution to read as follows: "ARTICLE II—OBJECTIVE. The objective of the Society shall be to educate the members and the public about birds, the other species in their environment, and the conservation of such environment."

"A new guidebook, Manual of Outdoor Interpretation, edited by Joseph J. Shomon, is the sixth in a series published by the Society's Nature Centers Division. The book covers the entire field of modern outdoor interpretation, from the philosophical point of view and the need for outdoor interpretation and education, to the practical aspects of how interpretive programs should be carried out. Fourteen well qualified authors cover various aspects of outdoor interpretation, including wildlife areas, parks and forests, caves, and interpretation of the underwater world. The attractive, full color, 104-page guidebook is available at \$3.00 a copy from the Nature Centers Division, National Audubon Society."

-Aud. Leader's Conserv. Guide

It costs $3\frac{1}{2}\phi$ to mail each TOS Bulletin. If, however, a TOS member moves without giving his new address before the Bulletins are mailed, the cost to mail that member's Bulletin is 24ϕ , which includes the cost of returning the Bulletin with the new address and the cost to send him the Bulletin the second time (which costs more than the first time because it is not sent bulk rate). At each mailing, between ten and fifteen Bulletins or Newsletters are returned. If you anticipate moving, please notify the Editor as soon as you know your new address. In the future a member's address will be changed on the mailing list ONLY after the Editor has been notified by the member, and not when the Post Office returns the undelivered Bulletins with the member's new address.

Local newsletters received by the Editor indicate that the following local groups have scheduled the Audubon Wildlife films for the coming year: Dallas County Audubon Society, Fort Worth Audubon Society, Midland Naturalists, San Antonio Audubon Society and Travis Audubon Society.

Dr. Jed J. Ramsey, at Lamar State College of Technology, is engaged in some research concering the Cattle Egret and would like information about nesting sites, range, and relative abundance in Texas during 1967, 1968, and 1969. He has also marked some with red dye on the wings. If anyone has any information concerning the Cattle Egret, please contact Dr. Ramsey at Lamar State College of Technology, Department of Biology, Beaumont, Texas

Pelican Island and adjacent spoil banks along the Corpus Christi Ship Channel between Corpus Christi and Port Aransas have been made into a wildlife sanctuary jointly supervised by National Audubon Society and Corpus Christi Outdoor Club. Built up through the years by dredgings from the ship channel, the islands have become an important breeding site for herons, gulls, terns, skimmers and other birds, including brown pelicans at times. Also, sooty terns have nested on Pelican Island the past two seasons, at least.

Title to the spoil banks is held by Nueces County Navigation District and the sanctuary designation was achieved by a single telephone call to a sympathetic port director. Prior rights of the U. S. Corps of Engineers and two oil companies which have pipe lines through the track were reserved, but the activities of none of these agencies is expected to disturb the birds, since they usually will be timed in non-breeding months.

Sanctuary sponsors are concerned, however, about the activities of some birders, of all people! In their eagerness to add sooties to their life lists, some went ashore despite the "No Landing" signs. Future visitors are advised to watch offshore from a boat — a much better bet to see the sooty terns except for a short period when they are sitting tight on their eggs.—Kay McCracken, 11544 UpRiver Road, Corpus Christi, Texas 78410.

BIG THICKET:

The National Park Service is supposed to be about to release a second report on a Big Thicket National Area. The following facts give reason for hope that this report will favor the extensive environmental corridor approach which 20 Texas and national conservation organizations recommend.

- 1) July 1: Wall Street Journal carries front-page article favorable to a large National Area.
- Secretary of the Interior Stewart B. Udall 2) July 3: stated publicly he was inclined toward an area of at least 75,000 acres.
- 3) July 14: Izaak Walton League national convention supports Big Thicket National Preserve along lines of TCONR policy.
- 4) The National Riverways approach, incorporating all ecological units thus far recommended, and also following mainly the Neches River, Village Creek and Pine Island Bayou, is the most adaptable to an area pocked with towns, oil fields, pipelines and highways.

As this is written, no hearing has yet been requested on the subject on either Senate Bill 4 or the House Bill. The Izaak Walton League will carry an article by the TCONR chairman supporting the environmental corridor approach, in Outdoor America for October 1968.

SCENIC RIVERS:

TCONR has drafted a Texas Scenic Rivers Bill and will ask key legislators to sponsor it in the next session. The following rivers are recommended for preservation in a freeflowing state:

- 1) THE NECHES RIVER from U.S. Interstate 20 downstream to the boundary line of Jefferson County
- 2) BIG SANDY-VILLAGE CREEK form the Alabama-Coushatta Indian Reservation to its confluence with the Neches River.
- 3) KICKAPOO CREEK from its headwaters to Lake Chand-
- 4) THE GUADALUPE RIVER from Clopton Crossing Dam to the city limits of Victoria.
- 5) HOG CREEK from its headwaters to its confluence with
- 6) THE SAN MARCOS RIVER from its headwaters to its confluence with the Guadalupe River.
- 7) THE LITTLE RIVER from its headwaters to its confluence with the Brazos River.
- 8) THE NORTH FORK, SOUTH FORK AND MAIN STREAM OF THE SAN GABRIEL RIVER from the headwaters to the confluence with the Little River.
- 9) THE PECOS RIVER from Red Bluff Dam to Amistad Reservoir.
- 10) INDEPENDENCE CREEK from its headwaters to its confluence with the Pecos River.
- 11) THE RIO GRANDE RIVER from New Mexico to Langtry.
- 12) THE BRAZOS RIVER from Possum Kingdom Dam to Lake Whitney.
- 13) THE BRAZOS RIVER from the headwaters of both the North Fork and the South Fork to Lake Waco.
- 14) THE SAN BERNARD RIVER from the south boundary of Colorado County to the Gulf of Mexico.
- 15) THE PALUXY RIVER from its headwaters to its confluence with the Brazos River.
- 16) THE PEDERNALES RIVER from the east boundary of the LBJ Ranch to Lake Travis.
- 17) THE LAMPASAS RIVER from its source to its confluence with the Little River, except for Stillhouse Hollow Lake.
 - -from Conservation Progress, Sept., 1968

Local and State Publications:

The following is a list of all the ornithological bulletins and newsletters received by the editor, with their addresses and yearly dues.

LOCAL

AMARILLO: The Prairie Horned Lark, 2709 S. Fairfield, Amarillo, Texas 79103 (write the editor, Kenneth Seyffert for fees).

AUSTIN: Travis Audubon Society, Signal Smoke, Mrs. J. M. McDermott, 3905 Jefferson, Austin, Texas, \$1.50.

CORPUS CHRISTI: Corpus Christi Outdoor Club, Inc., P.O. Box 3352, Corpus Christi, Texas 78404, \$2.00.

DALLAS: Dallas County Audubon Society, Woods, Wings, Water, Stella LaMond, Circulation Mgr., 3211 Westminster, Dallas 75205 (write for details).

DENNISON: Texoma Outdoor Club, The Warbler, Mrs. Bob Fienning, 1820 W. Scott, Sherman, Texas 75090, \$2.00.

FORT WORTH: Fort Worth Audubon Society, Betty Crabtree, Editor, 5717 Rockhill, Fort Worth, Texas 76112, \$3.00.

HOUSTON: Outdoor Nature Club, The Spoonbill, Miss Sarah Gordon, Treasurer, 1746 Wroxton Court, Houston, Texas

Outdoor Nature Club, Nature Club Notes, Raymond H. McDavid, 702 Marshall, Houston, Texas 77006, (write for details).

LUBBOCK: Lubbock Audubon Society, Kathy Johnson, 4921 17th Place, Lubbock, Texas 79409, \$3.00.

MIDLAND: Midland Naturalists, Inc., The Phalarope, 1906 Hughes, Midland, Texas, \$2.00.

SAN ANTONIO: San Antonio Audubon Society, c/o Witte

Memorial Museum, San Antonio, Texas 78209, \$3.00. SHERMAN: Texoma Outdoor Club, The Warbler, Mrs. Bob

Fienning ,1820 W. Scott, Sherman, Texas 75090, \$2.00. TYLER: Tyler Audubon Society, *The Pine Warbler*, 226 E. 1st Street, Tyler, Texas 75701, (write for details).

WACO: Waco Ornithological Society, Mrs. Herbert Schwetman, 519 Edgewood, Waco, Texas 76208, (write for details).

STATE

ARKANSAS:

Arkansas Audubon Society, 5809 N. Country Club, Little Rock, Arkansas 72207, \$2.00.

LOUISIANA:

Louisiana Ornithological Society, Mrs. Helga Cernicek, 4541 Avron Boulevard, Metairie, Louisiana 70002, (write for details).

NEW MEXICÓ:

New Mexico Ornithological Society, Mrs. Patricia R. Snider, Box 2411, Santa Fe, New Mexico 87501, (write for details).

OKLAHOMA:

Oklahoma Ornithological Society, *The Scissortail*, Mrs. Frank Humphrey, Treasurer, 8405 Arlington Drive, Oklahoma City, Okalhoma 73132, \$2.00.

TEXAS:

Texas Parks and Wildlife Department News, John H. Reagan Building, Austin, Texas 78701, (write for details).

NEW MEMBERS:

James H. Pierce, Box 446, Harlingen, Texas 78550

Steve E. Labuda, Jr., 416 E. Shelton Avenue, Kingsville, Texas 78363

The Natural Science for Youth Foundation, Inc., c/o United Mrs. Florelle C. Wilson, Box C, Italy, Texas 76651
States Trust Company, 45 Wall Street, New York, N. Y. 10005 (SUSTAINING)

Dr. George A. Newman, Dept. of Biology, Drawer N, Hardin-

Simmons University, Abilene, Texas 79601

Mr. and Mrs. Denton Belk, 1601 Bouldin Ave., Austin, Texas 78704

Thomas S. Schulenberg, 705 Brock, Corpus Christi, Texas 78412

Mrs. James F. Lee, 4012 Southwestern Blvd., Dallas, Texas 75225

Mrs. J. B. Payne, Jr., 326 Camellia, Corpus Christi, Texas 78404

Joe Terry, 1605 Red River, Austin, Texas 78701

Dr. Robert Packard, Department of Biology, Texas Tech, Lubbock, Texas 79409

BORDER BIRDING: THE VALLEY

From the broad expanse of open waters in Falcon Reservoir to the winding brush-lined resacas of Brownsville, and from the dry gravel hills of Starr County to the mud flats and "spoil" bands of the coast, birding is a rewarding hobby in the Lower Rio Grande Valley. In the late 1800's Sennett and others sent their collectors to Brownsville and from there upstream by riverboat as far as Fort Ringgold (Rio Grande City). The collections and reports that these men sent back reflected the diversity of bird life in this region at that time. Since then the "development" of the area, most of it in the last 50 years, has been phenomenal. Brushlands have given way to winter gardens and citrus groves, to cities, towns, and villages all connected by thousands of miles of paved roads and highways. And in more recent years, agricultural pesticides, along with even more destruction of brushland, have added their undiminishing threat to all wildlife. And in September, 1968, Beulah, the third most devastating hurricane ever recorded, scored a direct hit on the area.

Nevertheless, birding in South Texas along the Mexican Border is still good — and you don't have to go by riverboat to get to Rio Grande City from Brownsville! Although the total acreage of brushland has become alarmingly low, the diversity of habitats in the region is undoubtedly greater than it was at the turn of the century. Considering this, along with the geographic location of the "valley" adjacent to Mexico, it is little wonder that birders in the area tend to expect the unexpected. And many of them have not been disappointed. In fact, within

less than twenty years some ten birds new to the U.S. have ben reported and verified, and a number of others have been listed as sight records. Some have been reported nesting; others appear to have been accidentals.

Luther Goldman and Irby Davis reported the Ruddy Ground Dove in the Harlingen area in the early fifties. Terry Gill and Samuel Grimes first found the Lichtenstein's (Alta Mira) Oriole nesting in the heavy river brush near Santa Maria. Goldman, the Luhe McConnells and others reported the Gray Robin in Bentsen State Park. Harcourt's Petrel was blown inland during a tropical storm in the mid-fifties. Ned Hudson and others have found exotic hummingbirds and R. Fleetwood observed a Hook-beaked Kite nesting in Santa Ana Refuge in the early sixties. James and Blankinship found the Fork-tailed Flycatcher in 1961; and the tiny Elf Owl, unreported in the "valley" since 1892, was rediscovered in Bentsen State Park in 1960. In fact, for recent birders 1960 will long be remembered as THE YEAR OF THE MIGRATION: on May 1, 1960, on the Annual Spring Bird Count 260 species were reported!

Areas such as this one, which are subject to rapid changes both in temperature and in moisture, are likely to reflect these changes in their wildlife. In addition to the destruction of an undetermined amount of wildlife, Hurricane Beulah literally covered vast areas of South Texas with millions of tons of water. Much of this, augmented by an unusual amount of rain in the spring of 1968, is still standing. Ponds, pools, lakes, charcos, roadside ditches, and resacas

that had held little if any water for years have remained full, providing food, cover, and nesting habitat for all kinds of marsh birds. Under such circumstances, it is hardly surprising that the diminutive Least Grebe is nesting as far north as Karnes City and that the Jacana has been seen nesting in the Kingsville area. A number of Ruddy Ducks and Blue-winged Teal have nested in South Texas and both the Fulvous and the Black-bellied Tree Duck appear to have had good seasons. Some fulvous nested as late as November, 1967, while some still had downy young as late as September of this year. Both species of gallinules as well as Coots have been unusually common and Pied-billed Grebes were observed nesting throughout the nesting season this year. Least Grebes have likewise taken the advantage of an opportunity to increase their numbers. A brief stop beside a shallow pond of water lilies and arrowhead will often reveal the shining amber eye or the loud "Peet" alarm of a pair of these, our smallest grebes. Further observation frequently reveals downy young peeping out through the feathers of the adult or a flotilla of juveniles dodging around the vegetation in an effort to heed the alarm note.

Not only birds with aquatic affinities but also terrestrial forms have reaped countless benefits from a land unduly saturated with moisture. For instance, the Dickcissel, at best an infrequent nester here, has become especially common. In the early summer of 1968 a person could travel for miles along weedy fence rows or canal banks and never be out of sight or sound of a male singing from the top of a sunflower or clump of weeds. Painted Buntings have likewise responded to the optimum conditions of their habitat.

With the superabundance of food and cover that is now available everywhere in the border counties, the rodents are also enjoying a tremendous population upsurge. And with it the large owls appear to be following the expected pattern of increase both in number of eggs laid and in the frequency of nesting.

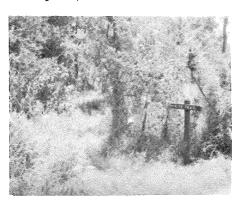
In the Lower Rio Grande Valley, as elsewhere, birds are where you find them. However, certain areas are more readily accessible and more likely to produce desired birds than are others. There are two state parks, two national wildlife refuges, several

county parks and several tracts of World Wildlife property, as well as a number of state wildlife management areas within the limits of the Rio Grande Valley.

Along the coast, Padre Island at Port Isabel, Laguna Atascosa Wildlife Refuge, Bayview, and the Boca Chica area offer good habitats for shore and marsh birds and other aquatic forms. In the same general area the Noriega Wildlife Management Unit, the Valley Christian Encampment, the Olmito State Fish Hatchery, the Girl Scout Camp, the Palm Jungle and the various resacas and reservoirs of the county provide excellent opportunities for the enterprising birder. A little further north and east, to be more specific, from the Boy Scout Camp Perry to Wilamar and eastward toward the coast at Port Mansfield lies an especially good birding section. It has water, brush, grass flats along the coast, and innumerable lakes, ponds, pools, reservoirs, weed fields, and some range land.

To the west of Raymondville stretches an area of cultivated lands interspersed with numerous bodies of water, including La Sal Vieja. This section has much surface water now, some including permanent reservoirs but much is in the form of temporary ponds and pools. It is in this area that the Masked Duck has been most often seen in the last five years. Several unusually good nesting marshes are located here.

Birders more interested in woodland forms have several alternatives. On the Old Military Highway just at the Cameron-Hidalgo County line (near Santa Maria) the World Wildlife Association has purchased several hundred acres of larger trees and brush near the river. This area, the Santa Ana National Wildlife Refuge south of Alamo, Anzalduas tract (World Wildlife), a few miles west of Hilalgo-Reynosa, and Bentsen State Park, about five miles southwest of Mission, make up the bulk of the so-called "riverbrush." Birding is usually good in these areas — Kiskadees and Alta Mira Orioles; Chachalacas and White-fronted Doves; Green Jays and Black-headed Orioles; Lomita Wrens (the South Texas race of the Carolina wren) and Beardless Flycatchers; and maybe a Black Hawk among the larger trees or a Ringed Kingfisher rattling up the river.







LETTERS:

If T.O.S. contemplates a long, active existence, it occurs to me that the Society should develop plans now to set up a Permanent Fund invested mainly in common stocks that have a potential for appreciation in value and for increased dividends over the years. The American Society of Mammalogists did this in the 20's with a fund no larger than your savings account \$2,231.33). Market value of that fund today is more than \$200,000 and annual income, which is turned over to the Society for operational expenses, will exceed \$10,000 this year. I believe there are enough people in Texas interested in birds to provide a \$10,000 kitty to get such a fund off the ground.—W. B. Davis, Professor Emeritus, Texas A&M University, College Station 77843.

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Some friends of mine residing in Refugio, Texas, were building a summer home on Lake Travis near Austin, Texas. Much of the work they did themselves on weekends. Three times during the spring of 1966 and two times during the spring of 1967 they brought me nests and eggs of what, I feel sure, were the productions of Western Flycatchers. All nests were placed on beams inside the building and had to be removed before further construction could be done. Incidentally, one nest of the Eastern Phoebe also was evicted in 1967. All five flycatcher nests were similar being built on a substructure of finishing nails, some up to one and one half inches long, which the birds carried to the location themselves. The first nest had easily one half pound of nails in its base. The other four nests, my friends told me, had an equal amount; but they did not bring them to me as they were needed on the job. On top of this base, construction was with small cedar twigs, small dry grasses, and weed stems interlaced with bits of moss and built up to a height of about four inches. The inner lining was of rock wool felted together neatly and used so generously that the outer rim extended down over the twigs and stems like a mantle so as to virtually conceal them all the way to the nails. Two or three animal hairs adorned the inner lining of each nest. They were, indeed, very exquisite examples of bird architecture.

These nests are probably unique in that so much manmade material was utilized in their constructions. Even so, they fall well within the known nest pattern of this bird and offer a fine example of the bird's ability to take advantage of the products of civilization and adapt them to their own use.

One of the nests stood ten centimeters high and nine centimeters at the outside diameter on top. The inside diameter was five centimeters and the depth was four centimeters. The other four nests were not measured but appeared to have similar dimensions

Two of the nests held five eggs and the other three held four. Unfortunately, most of the eggs were broken in transit but enough were salvaged to compare them to authentic eggs of this species. And they compare favorably in size, shape, texture, and markings.

Some readers, I am sure, will be unable to accept this account as a bona fide nesting record. I wish to point out, however, that the nest, nest location and eggs, in combination, are virtually diagnostic of the species and could hardly be confused with any other flycatcher, Empidonax or otherwise. A possible exception might be the Yellowbellied Flycatcher, but it would be even more remote from its known breeding range than the species under discussion. The Empidonax are notoriously hard to identify in the field and many would present problems even if you could hold a bird in your hand.

Lacking an actual skin identified by an expert, I consider the data presented here as very close to an iron-clad identification District and the sanctuary designation was achieved by four hundred miles east of their previously known breeding range. The Fifth Edition of the A. O. U. Checklist gives the Guadalupe and Chisos Mountains of West Texas as the eastern limit of their breeding range.—Travis C. Meitzen, M.D., P.O. Box 220, Refugio, Texas 78377.

As I have only been in Texas for two years perhaps what I have to say will seem like heresay coming from such a neophyte to Texas birding. However, I hope you will bear with me as I relate to you some of my thoughts and ideas regarding the Texas Ornithological Society. This letter is also prompted by a letter appearing in the June newsletter.

For background to my comments, let me add that I have enjoyed long associations with the Michigan Audubon Society and the Louisiana Ornithological Society. These two organizations represent the extremes, respectively, of highly organized and non-organized state groups.

In the two years of my membership in T.O.S., it seems to me that the society has been floating somewhere in the limbo between organization and non-organization, without a clear concensus as to which way the membership prefers to go. Within recent years the society hinted towards the organized status by raising the dues and promoting a state journal, The Texas Ornithological Society Bulletin. Yet, the dues increase has not been sufficient to properly finance this state organ.

At the same time, I would agree that there is also a need for a second publication such as the newsletter. Much of the information such as announcements of meetings, field trips, etc., might better be placed in such a newsletter. I also agree that the Bulletin should not compete with the national journals. Indeed, Texas has sufficient diversity to provide plenty of material for a state journal. However, I strongly support the policy of summarizing information in the Bulletin from articles appearing in the national journals that are of interest to birders, and to Texas in particular. Many of our members would not otherwise have the opportunity to read this material.

I emphatically endorse the editorial endeavors of Kent Rylander. I believe that the society can and should publish both the *Bulletin* and the *Newsletter*. However, Kent cannot go it alone! The success of such an undertaking must depend upon the cooperation and aid of the membership. I believe that the publications can be strengthened in several ways. First, the *Bulletin* should serve as an outlet for interesting and important observations on the Texas avifauna. For example, I had to learn about the Masked Ducks at the Anahuac NaI had to learn about the Masked Ducks at the Anahuac Secondly, I would like to see the president of the society write a letter to the society at least twice a year, stating his ideas on some specific topic or goal (or dream) for the T.O.S. Thirdly, every local group in the state should try to see that Kent receives information regarding meetings and field trips to be published in the newsletter.

One goal that seems obvious is that of conservation (or perhaps I should say preservation). Even here, however, I feel there is a great deal of confusion within the society. Our policies and aims in the field of conservation ought to be clearly spelled out for all to see. Frankly, there are several conservation groups within our state and I am not sure just how much overlap occurs. It is my belief that we are neglecting our best chance for making the people of Texas aware of the need for conservation and this chance is within the schools. In those states where conservation groups have concentrated their efforts for years in the schools, results are now showing whereby the people in those states realize the need for conservation of the natural resources and also recognize the diverse recreational needs of the people.

What other goals does our society have? I would like to see them stated, either in the *Bulletin* or the *Newsletter*. With our goals clearly defined, perhaps we can then better utilize our resources.

In summary, where are we headed as a society and is this the direction in which the membership wishes to proceed? When so much apathy exists today, I hope that we can arouse our members to the point whereby they will give to the society as well as derive benefits from it.—Keith A. Arnold, Assistant Professor, Department of Wildlife Science, Texas A&M University, College Station.

T.O.S. Conservation Editor

BUNCHES BACK BIG THICKET

The following groups have joined TOS and 14 other organizations in supporting a 100,000 acre combined recreational and preservational plan for the Big Thicket, connected by the Neches River, Village Creek and Pine Island Bayou:

Dallas County Audubon Society Sierra Club, Lone Star Chapter Big Thicket Association East Texas Nature Club (Beaumont) Waco Ornithological Society Izaak Walton League of America

If you belong to a conservation group which has not endorsed our policy statement, write me, Edward C. Fritz, Conservation Chairman, 909 Reliance Life Building, Dallas, 75201, and I will send you a form resolution to present to your group.

HELP FROM THE LUMBER INDUSTRY

As timber-harvesting by Kirby Lumber Company reached the edge of one of the oldest forests along Village Creek, a key area for important wildlife species, Geraldine Watson cried. This started the salvation of this area, and opened the possibility of a partnership between the forest products industry and government to protect the great environmenal corridors of the Big Thicket.

The Texas Chapter of the Nature Conservancy approached George Stanley, chief forester of Kirby Lumber Company and chairman of the Big Thicket policy committee of the Texas Forestry Association. Mr. Stanley immediately arranged a temporary stop

to Kirby cutting there. Other owners in the old Village Creek Forest have promised likewise. The moratorium will continue at least until a plan for this area can be worked out by Kirby and the other private owners.

HOPE FOR MORE AGREEMENT

Moreover, Mr. Stanley suggested a meeting between key lumber company executives and key conservationists to see whether any points of agreement can be worked out. This meeting is set for August 16 in Dallas. Dr. W. Frank Blair, Clarence Cottam, Edward C. Fritz, Allene Bachman, Jim Bowmer, and Geraldine Watson are among the conservationists selected to attend. Orrin Bonney and Dr. Frederick R. Gehlbach were also invited but will be out of the state. If the forest products industry continues to develop a rapport with conservationists the results augar to be far greater than anything we could accomplish through the federal government alone. We shall report to you the results of this meeting.

IZAAK WALTON LEAGUE ADOPTS BIG THICKET POLICY

Your conservation chairman went to Denver July 9-12 to push the Big Thicket before the national convention of the Izaak Walton League. This prestigious body joined the Citizen Committee on Natural Resources and the Sierra Club as national organizations endorsing our Big Thicket Policy Statement.

TREE DUCK HOUSING PROJECT IN SOUTH TEXAS

Misnamed as a duck, tree ducks are really kin to geese; but unlike their larger cousins, the black-bellied tree duck nests in tree cavities. When the eggs hatch, the fluffy ducklings scramble up the cavity wall and drop gently to the ground below. Very few, if any, accidents befall the ducklings on their departure, no matter how high above the ground the nest may be. The young tree ducks are then taken to water by their parents. Some eight weeks later, the brood is safely a-wing.

In studying this interesting bird, workers at the Welder Wildlife Foundation in Sinton have followed the progress of many nests since 1962. Too often, we found that predators claimed the nests. A smashed tangle of egg shells is all that remains when a raccoon or opossum finds a tree duck nest. Snakes are also a problem. In all, fewer than half of the nests in trees ever hatch eggs.

We decided to follow the lead of other management programs for cavity-nesting waterfowl. Biologists in Illinois and Massachusetts learned long ago that wood ducks — a species unrelated to tree ducks — quickly adapted to man-made nesting houses. If eastern wood ducks were good tenants, we reasoned that black-bellied tree ducks might follow suit in Texas.

Public interest was keen, and contributions for materials came forth from businessmen, conservation clubs, and other sources. Boy Scouts in Sinton and Mathis adopted the project. The ball was rolling. Boxes were constructed of plywood, mounted on 9 foot sections of well pipe, and erected on the shores of several ponds and lakes. The inside of each box was covered with a thick layer of sawdust and wood shavings for a nest bed. We also attached small strips of rough wood to the inside of the box beneath the entrance hole to insure the ducklings a firm toehold when they departed. In some cases, a strip of wire window screening was used for this purpose instead of the rough wooden "stairs."

The most important feature of the boxes was outside, however. Again, we followed a lesson learned elsewhere. For years, metal cones have been attached to the mooring lines of ships to prevent the passage of rats. The biologists who constructed wood duck nesting boxes also used this method to keep predators from gaining access to the nests. A large, sheetmetal cone attached to the pole directly beneath the box would keep even the cleverest of raccoons from a dinner of duck eggs. Each of our nesting boxes was thus outfitted with this protective device.

We hoped our prospective tenants would find their houses both safe and well furnished. And indeed they did! The black-bellied tree ducks in no time set up house-keeping in the nesting boxes.

We continued to check the success of these nests as well as those in hollow trees. The results were encouraging. Whereas only 44 percent of the nests in trees hatched, fully 77 percent of those in the boxes were successful. Moreover, none of the box nests was destroyed by predators.

Nesting box management requires more than just placing the boxes, however. Each site should be carefully inspected at least once before the nesting season begins. Regular maintenance includes adding fresh sawdust, removing sparrow trash, and checking the predator guard. Winds sometimes loosen the predator guard or even the box's lid. It is important, however, that the boxes are not disturbed unnecessarily when the ducks are nesting. Furthermore, landowners must be encouraged to protect the boxes from vandals and curiosity seekers.

With a minimum of attention, the tree duck housing project helps provide predator-free nesting each year. One of Texas' rarer and more colorful birds is thus insured a continued place in our wildlife heritage. — Department of Wildlife Management, Texas Tech, Lubbock 79409.

BOOKS:

WHITEWINGS—THE LIFE HISTORY, STATUS, AND MANAGEMENT OF THE WHITEWINGED DOVE

Published by D. van Nostrand Company, Inc., 120 Alexander Street, Princeton, New Jersey 08540; 1968. Price \$7.50.

Although extensive studies have been made on the Whitewinged Dove by the Federal Fish and Wildlife Service and the State Game Commissions of Arizona and Texas, no complete treatise on this unique wildlife species has been published prior to this publication.

Some may feel that the monograph was written for the wildlife technician, but this is not true. This book should be of interest to all — the naturalist, bird lover, wildlife manager, and general reader. Edited by T.O.S. member Dr. Clarence Cottam and James B. Trefeth of Wildlife Management Institute, Whitewings is extremely interesting reading. It was well co-authored by a team of biologists from the Arizona Game and Fish Commission, Texas Parks and Wildlife Department, and the U. S. Fish and Wildlife Service, and in view of the number of authors involved, there is surprisingly very little repetition and duplication of material.

Twelve chapters are expertly organized in an easy flowing style into an attractive monograph which your reviewer found enjoyable reading. Only one chapter deals with hunting. Chapters relative to "man's earliest recorded sightings", bird's range and distribution and research and management needs are paramount.

In addition to over 80 attractive illustrations in both photos and drawings, there are two full colored plates which represent the eastern and western sub-species of the Whitewinged Dove. These were done by Bob Hines, U. S. Bureau of Sports and Wildlife staff artist. While seemingly lacking complete ornithological accuracy, they are attractive and artistic illustrations.

This excellent new book is highly recommended to the members of the T.O.S.

Reviewed by Warren M. Pulich

SCREECH OWLS:

Fred Gehlbach's inquiry relative to color phases of Screech Owls (Otus asio) in eastern and central Texas prompts this note. My data on this species do not support his observations.

One cannot sex screech owls by sight observations. Most screech owls are dimorphic; the other plumage called the red phase is apparently caused by a dominant autosomal gene. There is, however, evidence of sex-linkage in other arboreal nocturnal birds of dimorphic red and gray types.

Of my seventeen specimens of screech owls from central Texas 11 are females, two in red phase and 9 in gray; and six are males, one in red phase and five in gray.—Warren M. Pulich. 2021 Rosebud Drive, Irving, Texas 75060

RECENT LITERATURE:

Two MALLARD hens were found using one nest site at Lower Souris National Wildlife Refuge near Upham, North Dakota, on June 1. The two birds incubated, side by side, a total of 20 mallard eggs. By mid-June, eight mallard ducklings were seen with two hens in attendance. Wilson Bull. 80: 102, 1968.

Vermeer found that LESSER SCAUPS and GAD-WALLS, nesting in a colony of CALIFORNIA and RING-BILLED GULLS at Miquelon Lake, Alberta, Canada, had a hatching success of 90 and 89.5 percentages, respectively. But the fledgling success of both species was nil due to gull predation. Wilson Bull., 80: 78-83, 1968.

During a 40-day observation period at least 17 prey items were deposited in a food cache by a SPARROW HAWK near Santa Barbara, California. Prey species included mammals and lizards; all mammals but one had been decapitated. The cache location was in the secondary branches, on needles, or along the trunk of a Canary Island Pine, four feet tall and adjacent to a parking lot. Condor 70: 187, 1968.

Warren Pulich recently reported the first occurrence of the CRESTED HUMMINGBIRD in the United States. It had been captured alive by two small boys on Galveston Island, Texas, February 1, 1967. Auk 85: 322, 1968.

Jay Sheppard reported the first U. S. record of the BERYLLINE HUMMINGBIRD photographed in Pamsey Canyon in the Huachuca Mountains of Arizona on July 3, 1967. Auk 85: 329, 1968.

Solitary female BROWN-HEADED COWBIRDS, found to range over an area of 12 to 40 (mean of 25) acres at Otter Lake, Pontiac, Michigan, were found sometimes to specialize on certain hosts while others did not. McGeen found that one female cowbird laid 18 eggs all in YELLOW WARBLER nests. Wilson Bull. 80: 84-93, 1968.

Richard Graber's study of nocturnal migration in Illinois showed that migrants continued flight until daylight, although they reduced their flight altitude to 1500 feet or less after midnight and increased their rate of calling as dawn approached. Data supported the concept of elliptical migration for many species; examples are western warblers that move north, well east of their fall routes while eastern warblers reverse this pattern. Wilson Bull. 80: 36-71, 1968.

J. David Ligon reported that the RED-COCKADED and ARIZONA WOODPECKERS demonstrate sexual differences in foraging behavior. Male Red-cockaded Woodpeckers forage exclusively on the trunk, often at low elevations. The differences may be due to limited food supplies with the dominant male having first choice, or due to compatibility in mates resulting in a more efficient utilization of the habitat. Auk 85: 203-215, 1968.

-Roland Wauer



BULLETIN OF THE

TEXAS ORNITHOLOGICAL SOCIETY

MICHAEL KENT RYLANDER, Editor Dept. Biology, Texas Technological College LUBBOCK, TEXAS 79409 BULK RATE
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1968 Fall TOS Meeting and Field Trip

RIO GRANDE VALLEY

November 28 through December 1

Headquarters: Fort Brown Hotel, Brownsville

Chairman of the Meeting: Dr. A. W. (Andy) O'Neil Box 586 Falfurrias, Texas 78355

The meeting will be held Nov. 28th thru Nov. 30th, at the Fort Brown Motor Hotel, 1900 E. Elizabeth St., Brownsville, Texas 78520. People planning on going to the meeting should make reservations right away directly with the Fort Brown Motor Hotel. The hotel has blocked 60 rooms for us and more are available if needed, as well as furnished a complimentary penthouse for our president. They have also blocked the Cavalry Room for a Thursday night (Nov. 28) Border Buttermilk Party and the Fortress Room for Friday night's banquet. The Buttermilk Party is sponsored by the Chamber of Commerce for all visitors in the Valley during Thanksgiving. Registration will begin about 3:30 P.M.-4:00 P.M. on Thursday, Nov. 28th and hosts for the T.O.S. meeting will be the "Lower Rio Grande Valley Audubon Society". Mr. Henry John Roelofs of McAllen, Texas is president of the society.

Field trips will be held on Friday and Saturday and the banquet will be held Friday night about 7:30 P.M. Dr. Clarence Cottam of the Welder Wildlife Foundation will be our speaker. — A. W. O'Neil.