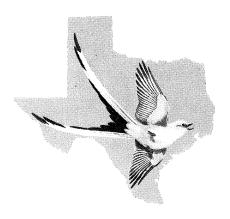
Bulletin of the TEXAS ORNITHOLOGICAL SOCIETY





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COVER: Wood Pewee, by G. M. Sutton, water-color, September 15, 1913. Illustrations, pages 17, 18, 19, 20, 24, 27 by Barbara White; page 29, by Dick Cheatham.

BULLETIN OF THE

TEXAS ORNITHOLOGICAL SOCIETY

April-June Volume II, Number 2

GEORGE MIKSCH SUTTON:

An interview -



One hot, steamy Sunday afternoon last May the editor crossed Lake Texoma by motor boat and docked at the University of Oklahoma Biological Station, whose expansive, grassy lawns stretch down to the shore. For almost two hours he enjoyed a stimulating conversation and interview with Dr. George Miksch Sutton, who had agreed to have this interview taped for the Texas Ornithological Society. A few students in bikinis were relaxing on the grass, a pair of nesting scissortails were nervously chattering in a nearby tree and a warm breeze from the lake was blowing gently through the post oaks which surround the Station. On this hot, but peaceful, afternoon we sat comfortably on the dormitory porch, gazed across the lake at the Texas shore and drank cokes while Dr. Sutton skillfully formulated and articulated his ideas on birds and art. What follows is a transcription of the interview, taken directly from the tapes. So that the informality and spontaneity of the interview might be preserved, we have only casually and minimally edited the tapes.—ED.

1. How did your interest in painting birds develop?

Ans. As far as I know, I was always interested in birds. Even as a very small voungster I liked to watch them and when I found one dead, I was interested in the way the feathers folded over each other. There was a time when I found church tolerable largely because it was possible for me to sit back of some woman's hat where I could make the drawings of a spread wing or something of this sort, part of the decoration of a hat. With this as a beginning, I found I could make drawings from birds that neighbors gave me or birds that I caught alive. As I have developed as an artist I have become more and more convinced that working with live birds is extremely important; in fact, I don't see how a person can hope to do good bird portraiture without spending a certain amount of time working directly from the living bird.

2. How old were you then?

Ans. It was in the period in Nebraska when my father was teaching. I was well under ten. When we moved to Oregon and my father was connected with Eugene Bible University (now defunct), I saved a set of drawings that I made in pencil, and while these are ridiculously poor, they are nevertheless interesting because they show how sincerely tied up with the whole process of bird portraiture I was. I had these all attached to one another in a long scroll.

3. Was your father teaching natural history and did he help to develop your interest in birds?

Ans. As far as I know, he never taught anything having to do with the natural sciences. He taught church history and elocution and something called exegesis. When I talked to him about his own boyhood, he told me interesting things about the great number of shorebirds that passed through Illinois. He was always interested in outdoor things just as my mother was, so I had a sort of natural history background.

4. You studied for a while under Fuertes. Does any one thing he taught you stand out over all the rest?

Ans. At first I studied with Fuertes from afar, so to speak. I sent material on from West Virginia. My first contact with him was, of course, a Texas contact because the Roadrunner drawing that I made in 1912 was made in Ft. Worth, near the T.C.U. campus. Fuertes was favorably impressed with this drawing and it led to an extremely interesting correspondence. When we moved to West Virginia, I began sending him things regularly. I sent drawings, sometimes eight or ten at once, every two or three weeks. I re-

ceived the finest kind of criticism, encouraging letters, and so on from him and eventually (1916) went to study with him for a summer. The thing that convinced me that I wanted to study with Fuertes was that he had what I continue to feel is a kind of remarkable authenticity. His work is so remarkably clear cut and the appeal is so direct that even something completely erroneous can be convincing. Now this may seem a left-handed kind of compliment but to show what I mean, examine Furetes's drawings of the Common Merganser. This species, Mergus merganser, is redeyed in the Old World and brown-eyed in the New World. Even Fuertes showed red-eyed birds in his drawings of the American form despite the fact that, so far as I know, he never handled a red-eyed bird. He must have got the idea of red eyes from something he saw in a European publication. At any rate, his red-eyed birds are so convincing that it is almost shocking to us when we realize that our American birds don't have red eyes! This is what I am trying to analyze—his remarkable authenticity. You have the feeling that since Fuertes showed red eyes, they must therefore be right. Fuertes would be the first person to admit that he had never seen the redeyed bird on which he based this part of his drawing. Fuertes interested me greatly because of this quality of authenticity. I remember, in early discussions, my talking in a very derogatory way about John James Audubon. Fuertes defended



Audubon even as I defend Audubon today because Fuertes realized what a wonderful frontiersman Audubon was and what a genius he was. When you consider the ground Audubon covered and the difficulties under which he worked, he really was a wonderful man and a wonderful bird artist. I can remember also criticizing adversely Archibald Thorburn, the British artist. Fuertes, somewhat to my surprise, rose stoutly to Thorburn's defense and said, "Thorburn has done some beautiful things and I am a great admirer of him." Well, this taught me something about what might be called magnanimity. In other words, Fuertes had real feelings, almost of affection, for these people who were facing the same problems he was in making bird drawings. He was always very generous in his comments about the work of others.

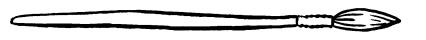
5. Do you paint your birds from life?

Ans. The bird pictures that I have most enjoyed right along are those which impressed me as being the result of a direct relationship between the bird and the painter. Some pictures give me the impression that the painter has studied a specimen, or a painting done by others, or possibly a photograph, and has come up with something that is the result of that, rather than of an experience with a real bird. When I see a drawing that obviously represents a man's attempt to understand a living bird studied carefully. I nearly always respond to it. In fact, I have felt for years that I could

recognize instantly something done direct from a living bird.

I am a great believer in working direct from life. The paintings I have made directly from life often have been of birds that habitually stand still, in other words, stay quiet. Thus a Barred Owl by day will be quite tractable, often docile. You can pet it, stroke it on its feet; it won't even snap its bill. This makes an ideal model because it just stays put. I think some of my most successful drawings have been of baby birds. I remember making a picture of a baby Blue Jay once and all we needed to do was fill it up full of food. It stayed very quiet, making a perfect model.

Sometimes I use bird skins as models. The trouble with using the average cabinet skin is that patterns of plumage are sometimes distorted. To draw only from a skin very often really misrepresents the bird-misrespresents the species. I remember making a drawing of a Nightjar of some sort (from Africa). I had been given a photograph showing the shapes of some of the leaves and I had a beautiful specimen to work with but I had the feeling that \hat{I} was to some extent dishonest because I had never seen the bird alive. I felt even worse when I did a drawing for the American Museum showing a new bower-bird from New Guinea. I had never seen the species alive. The Museum seemed to be quite happy with the drawing but I had the feeling that it was not authentic and I have just about decided never to



try such a drawing again. I'll just say no! "Let somebody else do it who has seen the area and the bird and the material in the background."

6. How critical are artist's supplies?

Ans. Of course, every artist develops liking for certain things. I think it was probably through Fuertes that I learned about what was called "Royal Crest Illustration Board." He must have shown me a drawing that was made on "Royal Crest." Well, I got quite a supply of "Royal Crest" and for many years drew on almost nothing else. One whole series of paintings that I made of Alleghany County, Pa. birds was on "Royal Crest." Then I found that I could get very good results from Strathmore two-ply or three-ply bond, a smooth-surface watercolor paper; and even today I thoroughly enjoy using this paper if I am working with what is called a dry brush. Just recently I have developed a great interest in the technique required in using Whatman's Rough Board. This paper requires very special handling. You can get some very beautiful washes with it. The only trouble is that sometimes you have to do the wash over and over before you get exactly the color you want. This is because the color seems to change a little while drying. In doing some recent arctic drawings, I found that I had to put the background wash on several times before I caught exactly the shade I wanted. I don't mean that I put a color on and took it off; I put it on, then when it dried, I added another color. A Ruddy Turnstone drawing that

I did in 1962 may, I believe, have taken a dozen background washes before I was really satisfied with the color, simply because each wash turned out to be a little too pink, or too green, or too blue. I added complementary washes to off-set tones that seemed to be too strong. Eventually I got the effect I wanted.

7. Are brushes critical, also?

Ans. Yes. One of the first things I learned when I was working directly with Fuertes was that it is not the size of the brush that matters but the extent to which a very sharp point may form. A big brush with a good, sharp point is far preferable to a little brush that seems to have an extremely fine point but that can flare out into a kind of round, bristly end and actually would be very difficult to use in getting the effects that you want.

8. What about the quality of watercolor or paints?

Ans. I have used so many kinds that I hardly know if I have a favorite brand. I have one box of paints that my Aunt Montie gave me. In this box are two or three unusual shades, and one of them is a warm brown which is among the best browns I have ever used. This was an already mixed tone; I have used it often in getting the basic brown that I want in a background. Prang, Devoe and Windsow-Newton paints all have certain colors which seem to me to be good. I have worked up a collection of all sorts from many different sources. I think that Fuertes did the same thing. Although he had two or three standard boxes of paints, he supplemented these with things that he got from just any old place.

9. Do you prefer any particular media over the others?

Ans. The media you use may depend on what you want to do-what you feel like doing. I think maybe this should determine it more than anything else. But, for me, when I know that something is going to be used as an illustration I realize that it is usually far simpler to get a good reproduction of a watercolor painting than it is of an oil painting. The oil painting has reflection problems. The roughness of the canvas creates a lot of little glittery spots that reflect the light. The original may have to be photographed over and over is making the engraving. So, from the standpoint of reproduction, I think that watercolor painting is best and I have developed a considerable interest in watercolor technique. Some of my most recent watercolors have what I would call an average watercolorist's technique; rather broad handling of the subject matter with proper respect for highlights and deep shadows.

10. Would you comment on state bird books?

Ans. At the recent annual meeting of the Wilson Ornithological Society in Carbondale, several of us discussed bird books of the future. I was asked to participate in this symposium for two reasons. One, I recently brought out an Oklahoma bird book, not heavily illustrated, but nevertheless covering the birds of the state. Then, of course, the fact that I have made many drawings for several state books meant that they expected to hear me say some-

thing about what I thought bird books of the future should be. The principal point I made was that with the excellent field guides we have today, more of them coming out right along, we can refer to these composite plates and find out just how birds differ from each other. My feeling is that state books should not do this sort of thing at all. State books should emphasize ecological matters which reflect the habitats found in the state. Therefore, an Oklahoma book properly illustrated should show possibly a characteristic bird of cypress swamps such as are found in the s.e. partof the state and a characteristic bird, such as the Common Raven, Golden Eagle, or Brown Towhee which is a characteristic bird of the n.w. corner. Then maybe a Prairie Chicken picture showing the shinnery oak country or the Greater Prairie Chicken showing the grassland of Osage County. We are very proud of the Scissor-tail in Oklahoma, so that would be a logical bird to illustrate. Instead of trying to show the Scissor-tail and the Western Kingbird. Cassin's Kingbird, and East-ern Kingbird all on one plate, we should be happy to show the Scissor-tail in its habitat and emphasize the fact that it likes scattered trees rather than forests and that it can get along beautifully in a big pasture that has only one tree. The place should emphasize not differences between related species, regardless of their status within the state, but habitat preferences, or the reproduction problems of special birds of the state.

11. Do you have some idea of the number of paintings you have done to date?

Ans. I have no idea. I have done a good many. I have scores of field sketches and finished pictures in my species file. In fact I often go through this file just to remember some of the experiences I have had. Sometimes I come up with something really important. For instance, The Living Bird, at Cornell, not long ago had a major article on the Hudsonian Godwit. I did not realize until I looked at the Hudsonian Godwit folder in my file that I had made direct (from freshly killed specimens) sketches of both the male and female bird on the breeding ground at Churchill, Manitoba. They instantly showed how yellow the mandible of the male was and how pink or flesh-colored the mandible of the female was by comparison. Material of this sort can conceivably be got through carefully taken Kodachromes, but I was painting long before there was anything like a Kodachrome. Not long ago I was asked about the coloration of the baby Kirkland's Warbler. What did it look like when it left the nest? Young birds had been photographed a number of times but never, as far as I know, drawn directly from life until I happened to capture a baby. I made a direct from life drawing of this baby about the time it left the nest. The drawing will be reproduced in The Living Bird.

12. Do you have any favorite bird?

Ans. My feelings about favorite birds vascillate terribly, often according to the latest experiences I have had. For instance, it is hard for me to imagine anything more beautiful than a Scissortailed Flycatcher when it is sitting out in the sun—the white plumage of the head and so on. Yet think of the special beauty of a Common Egret on display with its great fountain of plumage shooting









up over its back; or the majesty of a Golden Eagle coming in with a jackkrabbit to the nesting ledge; or a Wood Ibis circling above the colony; or Black Rails scooting through the Sedge, or Reb-breasted Mergansers in their strange courtship display. I could mention any number of birds in this connection. It would be very difficult to say which one I like best.

13. Does that answer how you would decide what to paint other than those paintings you do as an illustration for a book or paper?

Ans. In 1966 on Jenny Lind Island, I worked particularly with the most common arctic birds. My plan was to make a series of paintings that would be saleable, because I thought it would be a good idea to award them to persons making sizeable donations to our museum building fund at the University of Oklahoma. We have never gone ahead with this, but I have the paintings ready to award to those who donate, say \$10,000 or up to the building project. So it would not be a matter of selling the picture for that much but of awarding it to a donor. We may go ahead with this plan at any moment.

14. Do you go into the field expressly as an artist or more as a scientist?

Ans. I never have gone on an expedition solely as an artist. Fuertes did. Fuertes often went as the official artist for the expedition. But even under some of the most difficult circumstances, he put up a great many bird skins too; in fact, he made such beautiful bird skins, that his associates expected

him to make skins and paintings too. On my expeditions I have made a point of equipping myself with paper and paints and have brought back a good many birds too. On the 1920 expedition down to Labrador I made several pencil and watercolor drawings, not only of birds but of mammals, plants, insects, and landscapes. During more recent years I have worked especially on getting color records of birds that are not very well known. For instance, on all the Mexico trips I made a point of making drawings either of live birds caught in nets or of freshly killed birds so as to let the scientific world know exactly what the colors of the fleshy parts were in the eyes and the mouth lining and the feet and so on.

15. Do you anticipate experimenting in any particular art form in the future?

Ans. I really don't expect to. Once or twice, for the heck of it, I have tried some abstractions. They don't have any real appeal to me at all. It would be sheer affectation for me to try to do an abstract bird or an abstract brood of young birds. I don't have any particular desire to do oils. I am not so sure why, but for one reason it is hard to take oils into the field and it is particularly hard in country which has very varied temperatures and weather conditions. I would much rather have material that I can carry conveniently into the field. I cannot imagine having oils in the field without at

some time sooner or later sitting in the palette or something like that.

16. How do you feel about artists who argue that if you want a realistic picture, take a photograph. These artists often believe that everyone knows the number of toes so they can be legitimately abstracted, etc.

Ans. If you are going to be annoyed by someone's trying to put down the correct number of toes, why should you be annoyed if the feet have any toes at all? A respect for accuracy must be a relative matter. There ought, even in an abstraction, to be some respect for physics and dynamics. A bird has a center of gravity; if it leans far over, then something has to work to keep the bird on the perch, namely its toes. If a bird had only one toe or two toes it might not function nearly so well as an average perching bird does with three toes in front and one behind. This calls to mind an extremely amusing situation. One of our best-known ornithologists made a picture of a three-toed woodpecker showing four toes. He realized that a good many people had noticed this mistake. He said to me, "What do you think about that three-toed woodpecker that I made that had four toes?" I replied, "That bird is the joke of the century." He said, "I'm glad you feel so light-hearted about it." I have quit arguing with the people who follow the abstractionists' lead. It is up to every person who has any aesthetic sense at all to go ahead and do what he considers to be his best work. If he sees beauty in a bird's color, shape, or behavior, and he wants to record this so that other people can enjoy it too, it is up to him to do it in the way that seems to him to be best. If he wants to simplify his bird to the point of not showing any toes, why o.k., let him do that. If he wants to exaggerate some point by way of making clear that a soaring bird has very wide wings, let him draw the wings extra wide. In other words, just do whatever he feels is necessary. For us who are satisfied with the bird as we see it, it is perfectly natural for us to think of what is called a representational drawingsomething that really looks like the bird. To my way of thinking, it is not an adverse criticism of a person's art. Any person may come along, look at the picture and say, "I know what that is. That is a mallard duck." Now, the abstractionists might say that is the worse kind of comment. In other words, that if a thing is recognizable it is therefore not art at all. To be worried about whether the thing is going to be acceptable to that kind of artist seems to me to be a waste of energy. I do not bother myself about satisfying that element in the world at all. Those who care to look at my stuff can enjoy it; I will draw for them and those who don't like it don't need to.

17. What advantage, if any, do you think illustrations like this would actually have over photography?

Ans. There are two points here worth mentioning. For one thing, photography, although it is supposed to be accurate, actually can be full of distortions. For instance, whatever is closest to the camera, to the lens, may become over emphasized in size. Anybody knows this from looking

at a picture of some senator pointing his finger right at the audience. The camera can, in a sense, lie. The more important thing as I see it is that the artist, in darwing, does a certain amount of interpreting. He does a certain amount of autobiographical writing, so to speak, every time he makes a drawing. This is something the camera cannot do because the camera has no self to express. It is a perfectly objective handling of subject matter and the fact that an artist makes a drawing implies from the very beginning of the work that he is expressing his beliefs or views and putting down a record of his experiences. This is not to say, for a minute, that the camera is useless. For instance, when Dave Parmalee and I were studying the eye color and bill color of gulls, if I had attempted to make a drawing of every bird that we caught in our muted steel traps, I would not have done anything else. It would have taken just hours and hours of work and even with all of this work, we might not have had strictly comparable material such as we were able to obtain through kodachrome photos. We took the pictures of the live birds that we had caught in the traps at exactly the same distance with their heads in exactly the same position so that it is possible to compare now the bills and the eyes and the eyelids and the head shape and so on right through a whole series of birds. That is something that would have been impossible to draw with the time we had. This is an example of the real usefulness of photography.

18. Would you care to list or name a few of the contemporary bird artists today whose work seems to appeal to you, a few whom you think succeeded greatly in accomplishing what they set out to accomplish?

Ans. I have been very much interested in this whole business for many years. I made a point of doing what Fuertes did for me, namely, to try to help younger bird artists see the light with regard to certain things. Some artists are doing excellent work today. I would like to mention first Robert Verity Clem, whose illustration for the recent book on shorebirds of North America are certainly an outstanding piece of work. There are several reasons why they are so good. For one thing, although in some of these plates he shows several species (something which I was berating a little bit ago because I don't like composite plates), nevertheless he has chosen birds that could be found in the very same habitat on the same day and there is nothing improbable about the arrangement. He will have a couple of Dunlins and two or three Semipalmated Sandpipers and a Least Sandpiper and a Pectoral all right there together, something which is perfectly possible. These are not arranged artificially, but lined up on the beach with some beach grass and a piece of driftwood and so on, all very convincingly done and beautiful. One of the most prolific painters of the day is Don Eckleberry who not very long ago started working direct from living birds. Some of his direct from life things were quite beautiful examples of bird portraiture. One, as I remember now, is a South American Puff Bird. Another is a Toucan. I think I remember his writing to me from Argentina or somewhere in South America to the effect that he was astounded to find that the iris shape was not circular, as he expected it tobe, but was somewhat asymetrical or ovoid or something of that sort—in other words, something that he had just not supposed was true of living birds. Things of this sort are interesting to anybody because it shows how easily it is to follow a traditional drawing made say, 100 or 200 years ago, and just assume that that is accurate. Well, my word, many of the people who made drawing for the British Museum Catalog of Birds, with all those lithographic drawings, many of those birds they had never seen alive at all. They had no idea what the living bird looked like. As a result they have given quite the wrong impression of eye color, iris shape and things of this sort.

19. Are you working on any particular project right now, now that your Birds of Oklahoma has been finished, either in art or with birds?

Ans. I am working on two or three things that will take book form. But as now planned, they don't have an illustrative program. My book on the arctic will deal not only with birds but with phenomena having to do with overwintering of insects, hibernation and accommodation or adaptation to cold, and problems of great inter-zonal migration. Then I have been almost persuaded to do an autobiography. I have done several biographical pieces such as the "Story of the Hollow Log" when I was a youngster, and my work with Fuertes, the thing which I read at the dedication of Cornell not very long ago. Things of this sort can be put into something which might eventually become an autobiography. I don't have any state work in mind. I don't definitely plan to go ahead with a series of big Mexican paintings that I started many years ago, although I might go ahead with this.

20. Do you anticipate anything in Mexico in the next couple of years?

Ans. I had thought of going down to an area that has been leased in favor of the University of Oklahoma, a place in the state of Colima. I tried to work a brief visit down there between scenes this spring but this did not work out very well. Possibly, when the summer session here is finished I will go down for awhile and continue with a series of paintings there. I have about 100 big Mexican paintings, each one 22 x 29 inches. Some of them have been reproduced in color and four of them have been reproduced as prints. I really would like to go ahead with that series but, it is up to me to decide if I am going to do them.

21. What is your program in ornithology at the University of Oklahoma as it concerns work in ornithology? Do you take graduate students and so forth?

Ans. I am officially retiring this year. I don't like the sound of it very well but I guess it is going to be possible for me to go right ahead with many of the things I have wanted to do. Taking graduate students turn out to be not as simple as you might think. It continues longer than you think it is going to and it is kind of a mean way to put it, but it ties you down, in a way. The University is going tomake it possible for me to go ahead and do what I can do best. I hope this will include some future work in the Black Mesa Country and it may include a paper of the birds of Lake Texoma and things of this sort.





NEWS AND NOTICES:

Two TOS members have made an outstanding contribution to American ornithology by their contributions to the final volumes of Bent's Life Histories of North American Birds (U.S. Government Printing Office, Washington, D.C., \$8.25). Frances Williams and Anne LeSassier from Midland wrote the chapter on Cassin's Sparrows and both are quoted in other parts of the book.

We announce with pleasure the formation of the Texoma Outdoor Club which was organized at Sherman last March. This organization, which issues a newsletter, The Warbler, draws members from the entire Sherman-Dennison-Lake Texoma area. The organization sponsors field trips, natural history programs, conservation projects, etc. It got off to a unique and energetic start with the initiation of a Texoma hiking trail. The president of the club is Nana Rylander; the vice president, Bill Armstrong; and the secretary-treasurer, Rosemond Fienning. Interested persons should contact Rosemond Fienning, 1820 W. Scott, Sherman.

Interest in birds and bird organizations never, of course, is limited to one's own state. We want to encourage more communication between birders in Texas and the adjoining states. After all, the political boundaries are quite arbitrary. The membership list of the Louisiana Ornithological Society, for instance, lists the following Texans as members: Mr. & Mrs. H. A. J. Evans, Patron (Houston); Mr. & Mrs. R. B. Moore (Houston); Mrs. Babette M. Odom (Orange); Mr. Rucie E. Odom (Orange); Dr. Keith A. Arnold (College Station); Mrs. Allene Bachman (Beaumont); Mrs. Therese Barry (Beaumont); Mrs. Glen E. Cornelius (Beaumont); Mr. Hubert O. Davis (Webster); Mr. Richard C. Davis (Houston); Mrs. Grace Hackhey (Nacogdoches); Mr. & Mrs. F. P. Kokesh (Houston); Cack-ney (Nacogdoches); Mrs. Sam Lyons (Beaumont); Mrs. L. M. Levingston (Orange); Mrs. Sam Lyons (Beaumont); Mrs. Harvey Norvell (Houston); Mr. & Mrs. B. D. Orgain (Beaumont); Mrs. O. C. Sheffield (Tyler); Mrs. S. T. Wier (Beaumont); Mr. John J. Morony (Alamo).

The Corpus Christi Outdoor Club reports that the second census of large fish-eating birds was successful: "Early results indicate that the brown pelican population is down to 13 birds (a drop of seven from last year's figure) and only two nests were spotted on the second chain of islands. This contrasts with 4 nests which were sighted on last year's count. The heavy rains of Beulah created a large number of fresh water ponds and this seems to have brought about a scattering of Tentative compilations show that the total bird counts are about the same as last year but they are distributed more evenly over the area covered."

Texas bird watchers may be puzzled by the strange call of an unknown bird; stranger still will be the sighting of a bird not found in the hand books of American birds.

On your next trip afield you may have this experience. The Texas Parks and Wildlife Department have been cautiously testing a few foreign species. A few years ago it was the Corturnix quail, later the Red-legged Partridge and currently, various species of pheasants and the Gray Francolin. 1968 releases will see Afghan white winged pheasants released in the high plains area of West Texas; the Ringneck-Iranian cross pheasants in the south east coastal plains; the Korean ringneck in Chambers and Jefferson counties. Wild trapped California ringnecks are being released in Matagorda and Jackson counties. The Gray Francolins, a native of India and Pakistan, are being released in Howard, Hill and Limestone counties. Current observations indicate that the bird may need to be tried further south.

All foreign game bird releases by the Parks and Wildlife Department are planned to establish a game bird in game deficient areas. No attempt is being made to introduce a bird to compete with native game birds.

Anyone hearing or seeing any of these birds should report such information to their local Game Management Officer. — Joe B. Davidson, Biologist, Texas Parks and Wildlife Department.

The Texas Parks and Wildlife Department has announced that Mr. and Mrs. Ty Hotchkiss of Williamsburg, Virginia, who have produced movies in the Everglades, Grand Teton, Glacier, Mt. McKinley, and Mt. Rainier National Parks, have turned their attention and talents to Benson State Park. The film of this park which they are now shooting will be shown to more than a quarter of a million people in 300 cities and will emphasize conservation. They will be filming the Rio Grande Valley for the next three years.

Warren Pulich has published (Auk, April, 1968), an account of the occurrence on Galveston Island of the Crested Hummingbird (Orthorhyncus cristatus). This constitutes the first occurrence of this tropical species in the U.S.

The Texas Parks and Wildlife Department and the University of Texas System have joined forces to build a science park. This park, which will be at Buescher State Park, will serve such varied functions as providing a research area for work in insecticides, pollution, epidemiology, ecology and introduction of exotic animals. They will also develop a "think tank" center for "students, physicians, scientists and interested clubs seeking refuge for philosophical contemplation."

Fred Gehlbach (Department of Biology, Baylor University, Waco, Texas 76703), a TOS member who, among other things, is known for his outstanding efforts in Texas conservation, has observed that in eastern and central Texas all of the red Screech Owls he has seen have been females and all of the gray owls, males. He wishes to substantiate or disprove his observations and would like very much to correspond with persons who have made observations along these lines.

Marjorie Adams is compiling a checklist for Hayes and Blanco Counties and would appreciate receiving reports from people who have birded in these counties. Please write her at Box 2124, Austin, Texas 78767.

Edgar Kincaid has compiled a preliminary checklist for Wichita County which is available from Marjorie Adams for 15c and a stamped, self-addressed envelope.

In May the Oklahoma Ornithological Society issued Volume I, Number 1 of its *Bulletin*. This bulletin will be issued in addition to the Newsletter. The Bulletin publishes outstanding scientific contributions to ornithology and this first number includes accounts of oriole hybridization in Oklahoma, the capture of a Prairie Chicken by a Prairie Falcon, birds of the Black Mesa Country, Whistling Swans wintering in central Oklahoma, spring arrival date for the wintering in central Oklahoma, spring arrival date for the American Avocet in Oklahoma, early nesting of a Whitenecked Raven in Oklahoma, and a record of the Canyon Wren in Woodward County, Oklahoma. The editor of the Bulletin is Sophia C. Mery, 345 S.E. Boston Ave., Bartlesville, Ok. 74002. The Newsletter will continue to provide information on coursel activities pages of members etc. of information on current activities, news of members, etc. of the O.O.S.

Mrs. Anne Pulich has 15 bird paintings on exhibit in the Hall of Texas Wildlife and Ecology of the Witte Memorial Museum in San Antonio for the duration of the HemisFair. The exhibition is comprised of paintings of some birds typifying Texas, such as the Harris' Hawk, Blackbilled and Yellow-billed Cuckoo, Swallow-tailed Kite, Scissortailed Flycatcher, Vermilion Flycatcher, Groove-billed Ani, Purple Martin, Screech Owl, Roadrunner, and Mockingbird.

Anne Pulich is the wife of Warren M. Pulich of the University of Dallas. Warren, assistant professor of Biology and an ornithologist, has written the natural history writeups which go with each painting. Although she has done work in other areas of art, Mrs. Pulich is best known for her bird portraits. She began to concentrate her art efforts on bird subjects to complement her husband's research and writing in the ornithological field. Not only are her paintings artistically pleasing but ornithologically accurate.

Prior to the HemisFair exhibition her work has been

shown at the Riverside Municipal Museum in California, Loyola University, University of Dallas and the Fort Worth Museum of Science and History.

LET'S LET TEXAS ROADSIDES & PARKS BLOOM AGAIN: Many of you probably are familiar with the now famous 18-plank conservation platform for Texas which was adopted unanimously at the TOS Fall meeting in Beaumont, along with the Conservation Federation of Texas. Plank #14 concerns itself with the preservation of native flowers and vegetation along our roadsides and in our parks, and reads:

#14 Save both money and natural beauty by restricting to non-flowering seasons the non-essential mowing and grading of street and highway shoulders and park open spaces, and by eliminating the use of herbicides in such areas.

Peggy Amerson, Norma Stillwell, and the writer have been appointed by our Conservation Chairman to implement this plank. Anyone who rides over our Texas roads knows that the roadsides are being mowed and cut, and scraped and plowed to death. And now that the Parks Department has some money to use, our Parks are being mowed and cut and "developed" almost to death.

In one week, recently, I had letters from three persons in different areas lamenting depredations along the roadsides. The day after the dedication of the President's Ranch Trail by high dignitaries of the Federal, State, and local Governments, I found the highway boys busily mowing down the beautiful Evergreen Sumac and Agarita, to name only two, in the Devil's Backbone area of the "President's Country". The period of March 8 to March 17 I was in areas of the Upper Gulf Coast and found the roadsides cut down to the ground, and even in the areas historically noted for an abundance of our dominant Bluebonnet and Paint Brush, there were none in evidence either by blooms or plants. In Goose Island State Park great areas and all roadsides were clipped low and only the Pink Phlox was blooming about 2 inches high.

The Highway Department tells us that "conservation to us is one in which vegetative growth is managed or controlled . . " But you and I know that in many places control has amounted to eradication of many of our dominant wildflowers, flowering trees and shrubs, and trees.

We solicit your help in our efforts to save our roadside wildflowers and vegetation by suggesting that:

- 1. Reports be made to me of any instances of violation of the integrity of our roadsides and parks. Or, send a letter deploring the incident to Mr. J. C. Dingwall, Chief Highway Engineer, Austin, Texas 78701, or to Mr. J. R. Singleton, Executive Director of Parks & Wildlife Deparement, Austin, Texas 78701, with copy to me.
- 2. Letters be written about the fact that too much vegetation is being destroyed on our highways and roadsides, mowing is too frequent and at the wrong times, too much litter is left lying; that any planting should be of an indigenous nature, etc. That our parks are being too much "developed" and kept mowed clean in too many open areas, etc.
- 3. Information be sent us from all areas of Texas on (a) dominant species of wildflowers and shrubs and trees (b) first blooming date (c) approximate end of bloom and seeding date.
- 4. Suggestions and your thoughts on this endeavor be sent to me

Hazel C. Green
TOS Conservation Committee
member
Box 136, Wimberly, Texas 78676

TEXAS ORNITHOLOGICAL SOCIETY

ANNUAL FINANCIAL STATEMENT

Year Ending March 31st, 1968

Total Cash Assets as of April 1st, 1967	\$3,883.71
PRECEIPTS \$3,208.94 Dues to 3/31/68 \$3,208.94 Shoulder Patch Sales 13.00 Button Sales 4.00 Back Bulletin Sales 7.00 Balance from Fall Meeting 155.75 Interest on Savings Account 87.06	3,475.75
,	\$7,359.46
DISBURSEMENTS Committee Expenses:	
Postage	\$2,612.76
Total Cash Assets as of 3/31/68	\$4,746.70
DISPOSITION OF ASSETS Savings in First National Bank of Ft. Worth Checking A/C Hillcrest State Bank, Dallas	
	\$4,746.70

W. RUSSELL WEIL, Treasurer Texas Ornithological Society

BULLETIN OF THE TEXAS ORNITHOLOGICAL SOCIETY

DR. MICHAEL KENT RYLANDER	Editor
MR. EDWARD FRITZ	Conservation Editor
MISS BARBARA WHITE	Editorial Assistant
MR. DICK CHEATHAM	Art Director

THE TEXAS ORNITHOLOGICAL SOCIETY

Founded 1953

DR. W. J. GRABER, III	President
MR. CHARLES F. CRABTREE	
MRS. CLEVE BACHMAN	Secretary
MR. W. RUSSELL WEIL	Treasurer

THE BULLETIN OF THE TOS is 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 W. Russell Weil, Treasurer, Texas Ornithological Society, 3429 Lovers Lane, Dallas, Texas 75225. The BULLETIN is issued four times a year. Individual issues may be purchased for fifty cents a copy. Original articles, reports and news of interest to TOS members are solicited for inclusion in the BULLETIN. All articles and letters for publication should be submitted to the Editor, Department of Biology, Texas Technological College, Lubbock, Texas 79409. Editorials are by invitation, but the Editor welcomes correspondence and suggestions regarding subject matter. Sight records and regional news should be sent to the appropriate Regional Director for forwarding to the Editor.



Observations on the Habits of Nest Care in the Red-Winged Blackbird

JED J. RAMSEY

During June, 1961, I observed a nest of Red-winged Blackbirds (Agelaius phoeniceus) from a time shortly after the eggs were hatched until the young birds left the nest. Many short observations and three of longer duration were made at the nest, which was observed from tall grass approximately 100 yards away (Fig. 1).

The nest, found on the morning of June 13, contained four young. These four birds were probably recently hatched since the feather sheaths of the primary feathers were not evident until the second day of observation and the birds were fairly well feathered on the sixth day. When first noticed the young were helpless and, during slight examination, did not move even their heads. This was also noted and recorded by Allen (1914): "At hatching the young were blind and helpless . . . scarcely able to raise their heads for food . . . On the sixth day the feather sheaths of the wing break open."

During the nestling period the nest experienced three severe rain storms, but no apparent damage resulted.

A fence, which was not maintained, passed through the area and within ten feet of the nest. The male of the pair used certain posts as perches for his singing. This helped to locate two edges of the boundry of his territory. The other edges were determined by noting the distance from the nest which other males were tolerated if the sang. Nero and Emlem (1951) pointed

out that if intruding males are quiet they may be tolerated in the territory. Other males came and sat on fence posts nearer the nest than the male parent and were not repulsed by him. Others, however, taking positions only at the edge of the territory would be driven from the area almost immediately if they sang. These flights in defense of the territory were maintained for approximately 50 feet on one side of the nest and 60 to 70 feet on the other. I used these active defense displays to give me the approximate extent of the territory in these two directions. I believe this is a valid approximation because Nero and Emlen (1951) also state that "Males do not extend their aggressiveness beyond their territory boundaries even in defense of mates." The female took no part in the defense of the territory other than from my own invasion.

Emlen (1941) and Bent (1958) and others reported that both sexes feed the young. F. H. Herrick (in Bent 1958) states: "In the space of four hours on the first day . . . fifty-four visits were made and the young were fed forty times. The female fed her young twenty-nine times, and cleaned the nest thirteen times. The male made eleven visits, attending to sanitary matters but twice . . . On the following day . . . in the course of nearly three and one-half hours, fifty-five visits were made, and the young were fed collectively or singly forty-three times . . . The male bird served food eleven times and attended to sanitary matters once."

During the three periods of observation reported here, the female fed exclusively. The male visited the nest only once, but did not carry food, as far as could be observed. During the total of eleven hours and twenty minutes of close observation the female visited the nest and fed the young 112 times and was absent from the nest an average of 5.6 minutes. The longest period she remained away from the nest was 23 minutes, and in four instances returned within one minute.

The female was ordinarily silent and uttered no call either in approaching or in leaving the nest site. During the late evening and the early morning, however, she was observed to give an excited repeated call as she flew from the nest. In fact it was because of this habit that the feeding visits were noted in the late evening when it was so dark that the nest could not readily be seen. Thorpe (1956) states that "the sounds that birds make have two functions: to arouse an emotional state (by way of warning, wooing, etc.) and to convey precise information." Which of these types of sounds were made by the female here reported was undetermined. Presumably it was of the emotional type.

The male, although he was not absorbed in feeding the young, was conspicuous a great deal of the time on posts near the nest. Occasionally he flew to cattails or into the grass some distance (greater than forty yards) from the nest but returned to the post usually. During this eleven hour and twenty minute total time he was watchful at the nest an average of 13.8 minutes at a time and was gone from the territory area an average of 6.9 minutes at a time. The longest time he was watchful at the nest, he was in the territory for 47 minutes and six visits to the territory were of one minute or less. (See data tables I, II, III, and IV).

The sanitation of the nest was, as far as my investigation shows, the sole responsibility of the female. She was observed a total of 24 times leaving the nest with fecal material. Fifteen of these times she dropped down in the grass in a particular open watery area and deposited the fecal sac in the water, seven times she drop-

Table I GENERAL INFORMATION ABOUT THE NEST Date Time June 13 6:40 am Located one nest of Red-winged Blackbirds. Four very weak, very naked young. Parent birds much in evidence. June 14 6:00 am Rain during the night, but nest is still in good order. The young are beginning to get feather sheaths on the feather tracts. Parents still quite vociferous. 6:15 am Nest much as noted yesterday. June 15 First observation of the nest for a longer period of time. 12:55 pm (See Table II) June 16 6:44 am Nestings show very large primary sheaths. First observation of opening eyes in the young. 1:26 pm Second observation of the nest for a longer period of time. (See Table III) June 17 4:58 am Third observation of the nest for a longer period of time. June 19 6:10 am Primaries almost all out on the tracts. Birds are stronger and much larger than at last observation. June 20 6:30 am Both parents met me much farther from the nest than usual and scolded. Flight feathers are quite evident on the young. Rain during the night. June 21 6:20 am Young birds appear almost ready to fledge. Evidence of feeding slight. Female visited the nest only once during the half hour of observation. June 22 6:10 am Heavy rain during the night, but young still in the nest. They were excitable and I don't go entirely to the nest. June 23 6:30 am Nest empty. Both male and female still scolding in the vicinity of the nest. No young found near the nest.

ped the excretia on the wing, and twice she visited a different watery area. She left the nest with excretions an average of every 28.3 minutes.

On the eleventh day of observation, the nest was empty at 6.00 a.m., and the fledglings were not located in the grass near the nest. The parent birds, however, scolded vehemently upon close approach to the nest.

Summary

After observation of a nest of Red-winged Blackbirds over a period of eleven days and close continuous watching for a total of 11 hours and 20 minutes, the following conclusions were drawn:

- 1. Males defend the territory both by song and by active flight.
- 2. The territory is rather well defined and is defended from other birds and males of the same species, but only if these males are singing.
- 3. The female fed exclusively and attended to sanitary matters herself, feeding an average of every 5.6 minutes and removing wastes an average of every 28.3
- 4. The male, although he was observed to visit the nest only once, was near the nest 67% of the time and absent only 33%.

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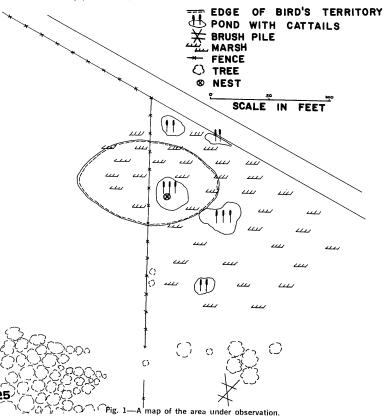


Table II NOTES FROM THE FIRST TRIP OF LONGER DURATION			Time	Male Activity	Female Activity
	June 15	5	3:48	Returns to post	
Time	Male Activity	Female Activity	3:50		Fed young
12:55 pm	On perch near nest	On perch near nest	3:56	Flew to grass near post then back to post	
12:57	Left the area Returned to post in area		3:57	Away to reeds	Fed young
1:01 1:05	Returned to post in area	Left the area	3:58	Grackle removed from the	
1:06	Into grass			territory	
1:15 1:21	Left the area	Near the nest Fed Young	4:00	Returned to post	
1:23	Returned to post		4:01	Grackle very near nest	
1:27 1:31	To grass near post	Fed Young		Male ousts the intruder and returns to post	
1:35	Returned to post	Fed Young	4:04	Away to grass	
1:38	To grass again		4:05	Amay to glass	Fed young
1:40 1:42	Returned to post Left the area	Fed Young	4:05.25	Another male enters the	
1:45		Fed young—Removed fecal sac		rushes and sings	
1:46	Returned to post	(dropped it).	4:05.5	Second male ousted by resident	
1:50	Returned to post	Fed young	4:08	Away to grass	
1:54 2:03	Left the area	Fed young Fed young	4:09 4:15	Deturned to most	Fed—Fecal sac removed to w Fed young
2:07		Fed young	4:15	Returned to post	Fed young
2:10	Returned to post		4:20.5	Left the area	red Journe
2:13 2:14	Left the area	Fed young	4:23	Returned to post	The same of the sa
2:17	Returned to post—male and	Fed young	4:25	Away to grass	
2:19	female flew off together (?)	Fed young	4:26	Returned to post	
2:23	Returned to post	red young	4:28	Away to grass (near)	
2:24	14. <u>25. 14. 25. 25. 2</u> 5. 25. 26. 26. 26. 26. 26. 26. 26. 26. 26. 26	Fed young-Removed fecal sac	4:31	D-1111	Fed young
2:25 2:27	Left the area Returned to post	(into grass).	4:40 4:41	Returned to post	Fed young
2:28	Left the area		4:44		Fed—dropped excrecia
2:30 2:31	Returned to post	Fed young	4:45	Away from the area	rea dropped exercis
2.31		rea young	4:47		Fed young
			4:51		Fed—Fecal sac to water
			4:59	Returned to post	Fed—Dropped fecal sac
			5:03	Left—swoops at a flying	
				Grackle who detours and	
	Table III		5:04	Grackle who detours and male left	Fed—Fecal sac to water
	Table III NOTES FROM THE FIRST TRIP		5:04 5:09	male left	Fed—Fecal sac to water Fed—away to grass near
		OF LONGER DURATION			Fed—Fecal sac to water Fed—away to grass near Fed young
	NOTES FROM THE FIRST TRIP June 16	OF LONGER DURATION	5:09 5:15 5:16	male left	Fed—away to grass near
Time	NOTES FROM THE FIRST TRIP June 16 Male Activity	OF LONGER DURATION	5:09 5:15 5:16 5:18	male left Returned to post Away to rushes near	Fed—away to grass near
	NOTES FROM THE FIRST TRIP June 16	OF LONGER DURATION	5:09 5:15 5:16 5:18 5:21	male left Returned to post Away to rushes near To grass near nest	Fed—away to grass near
Time 1:26 pm 1:30 1:32	NOTES FROM THE FIRST TRIP June 16 Male Activity Present on post Left the area	OF LONGER DURATION Female Activity	5:09 5:15 5:16 5:18 5:21 5:22	male left Returned to post Away to rushes near To grass near nest Returned to post	Fed—away to grass near
Time 1:26 pm 1:30 1:32 1:33	NOTES FROM THE FIRST TRIP June 16 Male Activity Present on post	OF LONGER DURATION Female Activity Circled nest but no visit	5:09 5:15 5:16 5:18 5:21 5:22 5:24	male left Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post	Fed—away to grass near
Time 1:26 pm 1:30 1:32 1:33 1:37 1:40	NOTES FROM THE FIRST TRIP June 16 Male Activity Present on post Left the area Returned to post Flew to nearby grass	OF LONGER DURATION Female Activity	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26	male left Returned to post Away to rushes near To grass near nest Returned to post	Fed—away to grass near
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Time 1:26 pm 1:30 1:32 1:33 1:37 1:40 1:42 1:46 1:47	NOTES FROM THE FIRST TRIP June 16 Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post	OF LONGER DURATION Female Activity Circled nest but no visit Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31	male left Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed	Fed—away to grass near Fed young
Time 1:26 pm 1:30 1:32 1:33 1:37 1:40 1:42 1:42 1:46 1:47	NOTES FROM THE FIRST TRIP June 16 Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak	OF LONGER DURATION Female Activity Circled nest but no visit	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38	male left Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed	Fed—away to grass near Fed young
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Time 1:26 pm 1:30 1:32 1:33 1:37 1:40 1:42 1:46 1:47 1:50 1:52 1:56	NOTES FROM THE FIRST TRIP June 16 Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak Returned to post Grackle (Common) in rushes, male in rushes, Grackle out and away, male out into	OF LONGER DURATION Female Activity Circled nest but no visit Fed young Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38 5:42 5:45 5:45	male left Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed Left the area	Fed—away to grass near Fed young Fed young Fed—Fecal sac to water Fed young Fed—Left a different way
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Time 1:26 pm 1:30 1:32 1:33 1:37 1:40 1:42 1:46 1:47 1:50 1:52 1:56	NOTES FROM THE FIRST TRIP June 16 Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak Returned to post Grackle (Common) in rushes, male in rushes, Grackle out and away, male out into grass nearby. Returned to post Away to grass To cattail near nest	OF LONGER DURATION Female Activity Circled nest but no visit Fed young Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38 5:42 5:45 5:53 5:55 5:55 6:02 6:10	male left Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed Left the area Returned to post Left the area	Fed—away to grass near Fed young Fed young Fed—Fecal sac to water Fed young Fed—Left a different way Fed—Fecal sac to water Fed—Dropped fecal sac Fed—Dropped fecal sac
Time 1:26 pm 1:30 1:32 1:33 1:37 1:40 1:42 1:46 1:47 1:50 1:52 1:56 1:58 1:59 2:01 2:02 2:03 2:06 2:09	NOTES FROM THE FIRST TRIP June 16 Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak Returned to post Grackle (Common) in rushes, male in rushes, Grackle out and away, male out into grass nearby. Returned to post Away to grass To cattail near nest Away to grass Returned to post	OF LONGER DURATION Female Activity Circled nest but no visit Fed young Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38 5:42 5:43 5:43 5:45 5:53 6:02 6:10 6:12	Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed Left the area Returned to post Left the area Returned to post	Fed young Fed young Fed—Fecal sac to water Fed young Fed—Left a different way Fed—Fecal sac to water Fed—Dropped fecal sac
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Time 1:26 pm 1:30 1:32 1:33 1:37 1:40 1:42 1:46 1:47 1:50 1:52 1:56 1:58 1:59 2:01 2:02 2:03 2:06 2:09 2:12 2:20 2:28	Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak Returned to post Grackle (Common) in rushes, male in rushes, Grackle out and away, male out into grass nearby. Returned to post Away to grass To cattail near nest Away to grass Returned to post Left the area Returned to post	Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38 5:42 5:45 5:53 5:45 5:55 5:55 6:02 6:10 6:12 6:19 6:21 6:22	male left Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed Left the area Returned to post Left the area Returned to post Returned to post Returned to post Left the area	Fed—away to grass near Fed young Fed—young Fed—Fecal sac to water Fed young Fed—Left a different way Fed—Fecal sac to water Fed—Dropped fecal sac Fed—Dropped fecal sac Fed young
Time 1:26 pm 1:30 1:32 1:33 1:37 1:40 1:42 1:46 1:47 1:50 1:52 1:56 1:58 1:59 2:01 2:02 2:03 2:06 2:09 2:10 2:20 2:20 2:28 2:34	NOTES FROM THE FIRST TRIP June 16 Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak Returned to post Grackle (Common) in rushes, male in rushes, Grackle out and away, male out into grass nearby. Returned to post Away to grass To cattail near nest Away to grass Returned to post Left the area	Female Activity Circled nest but no visit Fed young Fed young Fed young Fed young Fed—removed feces to water Fed—removed feces to water Fed young Fed young Fed young Fed young Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38 5:45 5:45 5:53 5:55 5:58 6:02 6:10 6:12 6:19 6:21	male left Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed Left the area Returned to post Left the area Returned to post Left the area Returned to post, then to grass	Fed—away to grass near Fed young Fed—young Fed—Fecal sac to water Fed young Fed—Left a different way Fed—Fecal sac to water Fed—Dropped fecal sac Fed—Dropped fecal sac Fed young
Time 1:26 pm 1:30 1:32 1:33 1:37 1:40 1:42 1:46 1:47 1:50 1:52 1:56 1:58 1:59 2:01 2:02 2:03 2:03 2:09 2:10 2:12 2:20 2:28 2:34 2:38 2:45	Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak Returned to post Grackle (Common) in rushes, male in rushes, Grackle out and away, male out into grass nearby. Returned to post Away to grass To cattail near nest Away to grass Returned to post Left the area Returned to post Away to grass	OF LONGER DURATION Female Activity Circled nest but no visit Fed young Fed young Fed young Fed—removed feces to water Fed—removed feces to water Fed—removed feces to water Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38 5:42 5:43 5:43 5:45 5:53 5:55 5:58 6:02 6:10 6:12 6:19 6:21 6:22 6:23	Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed Left the area Returned to post Left the area Returned to post Returned to post, then to grass	Fed young Fed young Fed—Fecal sac to water Fed young Fed—Fecal sac to water Fed young Fed—Left a different way Fed—Fecal sac to water Fed—Dropped fecal sac Fed—Dropped fecal sac Fed young
Time 1:26 pm 1:30 1:32 1:33 1:37 1:40 1:42 1:46 1:47 1:50 1:52 1:56 1:58 1:59 2:01 2:02 2:03 2:06 2:09 2:10 2:12 2:20 2:28 2:38 2:34 2:38 2:48	Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak Returned to post Grackle (Common) in rushes, male in rushes, Grackle out and away, male out into grass nearby. Returned to post Away to grass To cattail near nest Away to grass Returned to post Left the area Returned to post	Female Activity Circled nest but no visit Fed young Fed young Fed young Fed—removed feces to water Fed—removed feces to water Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38 5:42 5:45 5:53 5:45 5:55 5:55 6:02 6:10 6:12 6:12 6:21 6:22 6:23 6:30 6:32 6:30 6:32 6:33	Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed Left the area Returned to post Left the area Returned to post Left the area Returned to post, then to grass Returned to post, then to grass Returned to post, then to grass Returned to post, then to grass Returned to post, then to grass	Fed—away to grass near Fed young Fed—young Fed—Fecal sac to water Fed young Fed—Left a different way Fed—Fecal sac to water Fed—Dropped fecal sac Fed—Dropped fecal sac Fed—oung Fed—away to grass (50 yds.) Fed—Fecal sac to water
Time 1:26 pm 1:30 1:32 1:33 1:37 1:40 1:42 1:46 1:47 1:50 1:52 1:56 1:58 1:59 2:01 2:02 2:03 2:03 2:09 2:10 2:12 2:20 2:28 2:34 2:38 2:45	Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak Returned to post Grackle (Common) in rushes, male in rushes, Grackle out and away, male out into grass nearby. Returned to post Away to grass To cattail near nest Away to grass Returned to post Left the area Returned to post Away to grass	Female Activity Circled nest but no visit Fed young Fed young Fed young Fed—removed feces to water Fed—removed feces to water Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38 5:42 5:43 5:45 5:53 5:55 5:58 6:02 6:10 6:12 6:19 6:21 6:22 6:23 6:30 6:32 6:33 6:34	Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed Left the area Returned to post Left the area Returned to post, then to grass Away to grass (50 yds.) Returned to post, then to grass Returned to post, then to grass	Fed—away to grass near Fed young Fed—young Fed—Fecal sac to water Fed young Fed—Left a different way Fed—Fecal sac to water Fed—Dropped fecal sac Fed—Dropped fecal sac Fed young Fed—away to grass (50 yds.) Fed—Fecal sac to water Fed—recal sac to water
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Time 1:26 pm 1:30 1:32 1:33 1:37 1:40 1:42 1:46 1:47 1:50 1:58 1:59 2:01 2:02 2:03 2:06 2:09 2:10 2:12 2:28 2:34 2:38 2:45 2:48 2:48 2:48 2:48 3:04 3:08 3:14	Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak Returned to post Grackle (Common) in rushes, male in rushes, Grackle out and away, male out into grass nearby. Returned to post Away to grass To cattail near nest Away to grass Returned to post Left the area Returned to post Away to grass Returned to post Left the area Returned to post Away to grass	Female Activity Circled nest but no visit Fed young Fed young Fed young Fed—removed feces to water Fed—removed feces to water Fed young Fed—removed feces to water Fed young Fed young Fed—removed feces to water Fed young Fed—removed feces to water Fed young Fed—removed feces to water Fed young Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38 5:42 5:43 5:45 5:55 5:58 6:02 6:10 6:12 6:21 6:22 6:23 6:30 6:32 6:33 6:34 6:34 6:37 6:40	Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed Left the area Returned to post Left the area Returned to post, then to grass Returned to post, then to grass	Fed—away to grass near Fed young Fed—young Fed—Fecal sac to water Fed young Fed—Left a different way Fed—Fecal sac to water Fed—Dropped fecal sac Fed—Dropped fecal sac Fed young Fed—away to grass (50 yds.) Fed—Fecal sac to water Fed—recal sac to water
Time 1:26 pm 1:30 1:32 1:33 1:37 1:40 1:42 1:46 1:47 1:50 1:58 1:59 2:01 2:02 2:03 2:06 2:09 2:10 2:12 2:20 2:28 2:34 2:34 2:38 2:45 2:45 3:04 3:08 3:14 3:19 3:26	Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak Returned to post Grackle (Common) in rushes, male in rushes, Grackle out and away, male out into grass nearby. Returned to post Away to grass To cattail near nest Away to grass Returned to post Left the area Returned to post Away to grass Returned to post Left the area Returned to post Away to grass	Female Activity Circled nest but no visit Fed young Fed young Fed young Fed—removed feces to water Fed—removed feces to water Fed young Fed—removed feces to water Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38 5:42 5:43 5:45 5:55 5:58 6:02 6:10 6:11 6:21 6:22 6:23 6:30 6:32 6:33 6:34 6:34 6:37 6:40 6:42	Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed Left the area Returned to post Left the area Returned to post Left the area Returned to post, then to grass Returned to post, then to grass Returned to post, then to grass Returned to post, then to grass Returned to post, then to grass	Fed—away to grass near Fed young Fed—young Fed—Fecal sac to water Fed young Fed—Left a different way Fed—Fecal sac to water Fed—Dropped fecal sac Fed—Dropped fecal sac Fed young Fed—away to grass (50 yds.) Fed—Fecal sac to water Fed young Fed young Fed young Fed young Fed young
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Time 1:26 pm 1:30 1:32 1:33 1:40 1:42 1:46 1:47 1:50 1:52 1:56 1:58 1:59 2:01 2:02 2:03 2:06 2:09 2:10 2:12 2:20 2:28 2:38 2:48 2:48 2:55 3:04 3:08 3:14 3:26 3:28 3:34	Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak Returned to post Grackle (Common) in rushes, male in rushes, Grackle out and away, male out into grass nearby. Returned to post Away to grass To cattail near nest Away to grass Returned to post Left the area Returned to post Away to grass Returned to post Left the area Returned to post	Female Activity Circled nest but no visit Fed young Fed young Fed young Fed—removed feces to water Fed—removed feces to water Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38 5:42 5:43 5:45 5:55 5:58 6:02 6:12 6:19 6:21 6:22 6:30 6:32 6:30 6:32 6:34 6:37 6:40 6:44 6:50	Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed Left the area Returned to post Left the area Returned to post, then to grass Returned to post Away from the area Returned to post Away from the area Returned to post Away to grass nearby Returned to post	Fed—away to grass near Fed young Fed—young Fed—Fecal sac to water Fed young Fed—Left a different way Fed—Fecal sac to water Fed—Dropped fecal sac Fed—Dropped fecal sac Fed young Fed—away to grass (50 yds.) Fed—Fecal sac to water Fed young Fed young Fed young Fed young Fed young
Time 1:26 pm 1:30 1:32 1:37 1:40 1:42 1:46 1:47 1:50 1:52 1:56 1:58 1:59 2:01 2:02 2:03 2:03 2:06 2:09 2:10 2:22 2:20 2:28 2:34 2:38 2:48 2:55 3:04 3:08 3:14 3:19 3:26	NOTES FROM THE FIRST TRIP June 16 Male Activity Present on post Left the area Returned to post Flew to nearby grass Flew farther away Returned to post Visited the nest—no food noticed in beak Returned to post Grackle (Common) in rushes, male in rushes, Grackle out and away, male out into grass nearby. Returned to post Away to grass To cattail near nest Away to grass To cattail near nest Away to grass Returned to post Left the area Returned to post Left the area Returned to post Left the area Returned to post	Female Activity Circled nest but no visit Fed young Fed young Fed young Fed—removed feces to water Fed—removed feces to water Fed young	5:09 5:15 5:16 5:18 5:21 5:22 5:24 5:26 5:27 5:30 5:31 5:38 5:42 5:43 5:45 5:53 5:55 5:58 6:02 6:10 6:12 6:19 6:21 6:22 6:23 6:30 6:30 6:32 6:33 6:34 6:37 6:44 6:42 6:42 6:42 6:42 6:42 6:42	Returned to post Away to rushes near To grass near nest Returned to post To grass at base of post Returned to post Singing male near nest— Removed Left the area Returned to post Left the area Returned to post, then to grass Returned to post Away form the area Returned to post Away from the area Returned to post	Fed—away to grass near Fed young Fed—young Fed—Fecal sac to water Fed young Fed—Left a different way Fed—Fecal sac to water Fed—Dropped fecal sac Fed—Dropped fecal sac Fed young Fed—away to grass (50 yds.) Fed—Fecal sac to water Fed young Fed young Fed young Fed young Fed young Fed Fecal sac to water
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T!	Male Activity	Female Activity	Time	Male Activity	Female Activity
Time	Male Activity			male Activity	
7:00	Poturned to post their away	Fed—Away to grass nearby	6.19	Data and the same	Fed—Fecal sac to water
7:01	Returned to post, then away	Fed young	6:20	Returned to post	
7:04			6:22.5	Off to grass	
7:08 7:09		Fed young Fed—Fecal sac to new water	6:23	Returned to post	
7:09	Daturned to neet	reu—recal sac to new water	6:25	Left the area	Fed young
7:11	Returned to post		6:27		Fed young
7:12	Left the area	Fed—Fecal sac to water	6:30	Returned to post	
7:15			6:32	Away to grass	
7:22		Fed young	6:36	Returned to post	
7:24		Fed young	6:39	Away to grass	
7:25	Returned to post	End value	6:41		
7:26	turn the sum	Fed young	6:43	Returned to post	Fed young
7:27	Left the area	Fed young	6:44	Away from area	and the second second
7:28	Returned to post	red young	6:46		Fed young
7:29	Left the area		6:48		Fed—to nearby grass
7:36	Returned to post, then away		6:50	Returned to post	Fed young
7:43	Returned to post		6:53	Followed female into grass	Fed—Away to grass (75 yrs
7:51	Male follows female to grass	Fed—Away to grass	6:54	Returned to post	
7:54	요즘 등 회사들이는 사람은 경기자 결과	Fed young	6:56		Fed young
7:55	Returned to post		6:59	Away to tall rushes (50 yds.)	
7:56	Left the area		7:06	Returned to post	
3:02	그 그 그 그들은 존재 강화 경우를		7:09	Circled the territory and	
3:08	Returned to post	Returned to nest (Stayed?)		came back to post	
8:18	Flew to distant post or		7:10	Off 25 yds. to tall reeds	Fed young
	into the grass (?)		7:10.5	Returned to post	
			7:14	Away to grass	
			7:17	Returned to post	
			7:18	Away to grass	
			7:19		Fed-Dropped fecal sac
			7:20		Fed young
	Table IV		7:21	Returned to post	
	NOTES FROM THE THIRD TRIP	OF LONGER DURATION	7:24	Away from area (330 yds.)	
			7:25		Fed young
	June 17		7:29	Returned to post	
Time	Male Activity	Female Activity	7:30	Away from area	
			7:35		Fed—away to nearby grass
4:58 am	On post near nest		7:37		Fed young
5:00	Into grass near post	기그는 맛있는 맛을 하면 살아가 있다.	7:40	Returned to post	
5:01	Returned to post	Fed young	7:45		Fed—Fecal sac to water
5:02	Another male on post a little		7:48		Fed young '
	closer to nest. Silent.		7:50		Fed—Fecal sac to different
5:03		Fed—into grass near nest			watery region
5:05		Fed—dropped fecal sac			the major and the state of the
5:06	Foreign (?) male left	보면하다 하는 그리고 있다. 현존 사람들은			
5:10	Left the territory	Fed young			
5:14	Returned to cattail near nest	Fed—remained in nest			
5:15.5	Second male came to post very				
	near nest — sang — both				
	males into grass	Left the nest			
5:15	Both males flew into air —				
	one left — other returned to				1
	post				at ia
5:22	그는 그는 이 경험하다 위한	Fed young			
5:24	Left to grass (75 yds.)				尼 ····
5:28	Returned to post	Fed young			以
5:31		Fed young		1 m	\$ 3
5:32	Drove away another bird of	그 그 네트 내용하다 하나 걸었다.			
	unknown species in the			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	grass near nest — returned				W ASY
	to post				
5:33		Fed young			
5:34	Away from area				
5:35	Returned to post	Fed young			
5:36		Fed young		The state of the s	
5:40		Fed young			277/02
5:44 5:44		Fed young			
5:44 5:46					
	Paturned to green near neat	Fed young			
5:47	Returned to grass near post	401000			
5:49	Returned to post	Fed young			
	Away to grass			1301 ~	CHECK TO PARTITION
5:51.5	Back to post				
5:51.5 5:55		Fed young			
5:51 5:51.5 5:55 5:58 5:59.5	Back to post	Fed young Fed—remained longer than L Left the nest	ısual		

Fed young Fed—remained longer than usual Left the nest

Fed young Fed—fecal sac to water

Fed young

Fed young

5:59.5 6:01 6:04 6:05 6:07

Returned to post

Left the area



Communications

REPORT OF AN ESKIMO CURLEW FROM TEXAS COAST:

On the morning of April 30 I was walking through a clearing in the nearby woods between Rockport and Fulton when four Curlews flew over. I had the impression they might be Whimbrels. When some time later I stepped out of the woods onto the flats adjacent to Canoe Lake, I noticed that the four birds had come down and were standing in the mudflat at the edge of the water. Through my binoculars I determined that they were indeed Whimbrels. They were very shy and when I came too close they took off. I then noticed a lone Long-billed Curlew to one side which was not a bit shy and held its ground. I then looked over the other shorebirds, of which there were a great many, including several Wilson's Phalaropes, when my eye suddenly came to rest on a diminutive curlew with a long, very thin curved bill and a body of about half the bulk of that of a Whimbrel. I immediately realized I was looking at an Eskimo Curlew. I failed to check the color of its legs but noticed that its head markings were not anywhere near as pronounced as those of the Whimbrels, that its plumage was more marbled or scaled and when it finally flew I clearly saw that the underwing feathers were a rich reddish brown. I was most fortunate to see all three Curlew species together at one time so that there was no room for error. — John E. Lieftinck, P.O. Box 1002, Rockport, Texas, 78382.

NESTING OF WESTERN KINGBIRD (Tyrannus verticalis) In REFUGIO, TEXAS: The Western Kingbird has been observed for many years as a migrant in late April and early May in Refugio but none were known to breed locally prior to 1966. In that year two pairs nested in the city, One nest was placed among the lights at the Little League ball park, a spot of considerable noise and activity as well as artificial illumination until 10:00 p.m. on so many nights weekly. The other nest was placed thirty feet from the ground on the top of a transformer box. Both pairs were in some measure successful as they were later seen feeding well feathered young.

The following year two more nests were located. One was built on a horizontal arm supporting a street light on a utility pole where the light burned all night no more than five feet from the nest and slightly above it. These birds, I feel sure, brought off a successful hatch, as I later saw four young sitting side by side on a wire. The other nest was situated in the upper-most small branches of a Hackberry tree, about thirty feet high across the street from the transformer box nest of 1966. Incubation seemed to be normal, but I was unable to follow it closely and cannot say if young were raised. Dr. Clarence Cottam, of the Welder Wildlife Refuge at Sinton verified the identification of the birds.

This year two more nests have been found. One is at the exact location on the street light, and the other is in the same yard but in a different hackberry tree. At this writing (May 14, 1968), incubating birds are on both nests.

Other Kingbirds have been seen at various points about the town, well divorced from the two nesting localities. This leads me to believe that more than two pairs are breeding within the city.

Oddly, I cannot find these birds in the local rural areas nor can I find them as breeding birds at points west of here such as Cotulla, Laredo, Eagle Pass, Del Rio or Uvalde. — Travis C. Meitzen, P.O. Box 220, Refugio, Texas, 78377.

OLIVACSOUS FLYCATCHER IN THE DAVIS MOUNTAINS OF TEXAS—The Olivaceous Flycatcher (Myiarchus tuberculifer) is known from Texas by three specimens, one from the Chisos Mountains and two near El Paso (Peterson, 1960. A Field Guide to the Birds of Texas, pp. 273-4). One specimen was taken in May, the other two in June.

On 9 May 1968 I was in Madera Canyon in the Davis

Mountains with a party from the Department of Wildlife Science, Texas A&M University. We stopped near a road-side park to inspect an area as a potential study-site for ecological studies of vertebrates in the Trans-Pecos.

I was attracted by a call note that was vaguely familiar, yet unfamiliar. I finally located the bird in a grove of trees and soon was able to identify it as *Myiarchus tuberculifer*, a species I knew well from field work in Costa Rica. Viewed for several minutes in good light with 7 x 50 binoculars, the bird distinctly showed a uniform gray thoat and upper breast and a tail almost totally lacking in rufus. This crested flycatcher was very similar in size to a *contopus sordiulus* present in the same area.

An attempt to collect the bird failed.

Considering that all records for this species are for the months of May and June, it seems to me that this flycatcher is probably an uncommon resident in the Trans-Pecos region.

Keith A. Arnold, Department of Wildlife Science, Texas A&M University, College Station, 77843.

RECENT LITERATURE

Of 228 RED-WINGED BLACKBIRD nests studied by Holcomb and Twiest, nesting success varied between 17.2 per cent for nests built under 24 inches elevation to 34.8 per cent for those above 48 inches. The mean depth of nests built over 42 inches was significantly greater than in nests below 42 inches, although nest size had no bearing on nest success. They found that nest-building required an average of three days which was followed by a delay of one to five days between nest completion and egg laying. Bird-Banding, 39: 14-22.

The peak rate of feeding of EASTERN KINGBIRDS came 8 to 16 days after the young were out of the nest, according to Morehouse and Brewer. Their observations in Michigan showed that a long decline followed, leading to apparent cessation of feeding of young by adults about 35 days after fledgling. During the period when young are leaving the nest, feeding effort is concentrated on the nestlings. Since the fall molt of kingbirds occurs after the southward migration, they hypothesised that the energy demands of caring for the young over an extended period of time, combined with the need to migrate southward before food and weather conditions become unfavorable, do not allow an aerial forage a sufficient interval for molting. Auk, 85: 44-51.

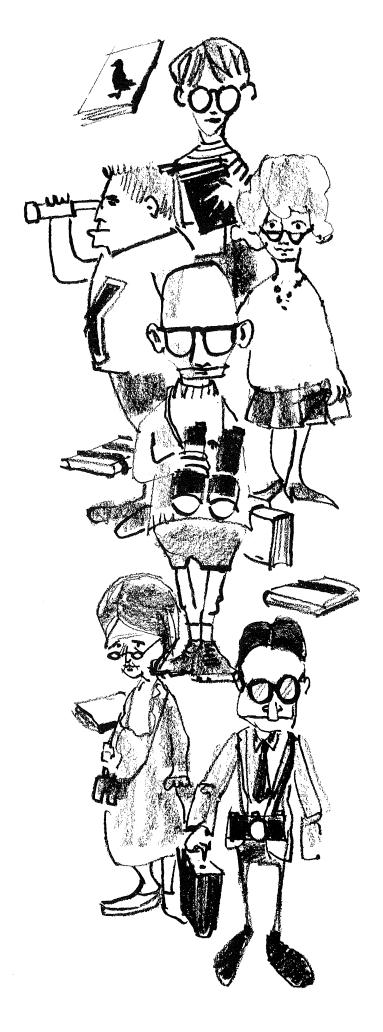
In a study of the diurnal activity of the ROADRUNNER, William Calder found that they were most active from 7:30 to 8:30 and 4:30 to 5:30 and least active during a period from 10:30 to 3:30 Standard Times. Roadrunners reduced their activity by slightly less than one-half during the hottest hours. Laboratory birds followed about the same pattern. Condor, 70: 84-85.

In recent years the range of the GROOVE-BILLED ANI has been extending northward. A photographed bird at Albuquerque, New Mexico, last December, represented the third sighting of the species for that state. Condor, 70: 90.

Ron Ryder's summary of distribution, migration and mortality of the WHITE-FACED IBIS in North America points out that they nest in isolated colonies from east-central Oregon to Kansas and southward to the Texas and Louisiana coasts. He found that extra-limital wandering seems to be more pronounced before the nesting season than afterwards and may result from drought conditions on the normal nesting areas. Bird-Banding, 38: 257-277.

Studies of orientation of migration using radar on Cape Cod during 85 nights in May and early June, 1959-1961, by Nesbit and Drury, revealed that directions of migrations were less diverse in spring than in autumn. The species which migrate south over New England in autumn must return by a more westerly route in spring. They also found that orientation appeared to be unimpaired by overcast skies. Bird-Banding, 38: 173-186.

Anderson and Maxfield banded 1370 warblers of 26 species in southeastern Massachusetts between May 1960 and October 1966. They found that males outnumbered females 49 to 10 among individual returnees. Also captured were two OVENBIRDS at least 7 years of age and a BLACK AND WHITE WARBLER, a YELLOWTHROAT and a CANADA WARBLER that had each reached a minimum of 6 years of age. Bird-Banding, 38: 218-233.



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BULLETIN OF THE

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