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This report contains the decisions of the Texas Bird Records Committee (hereafter "TBRC" or "committee") of the Texas Ornithological Society reached during 1992. For information on previous actions of the TBRC, see Arnold (1984, 1985), Lasley (1988, 1989, 1990, 1991), and Haynie (1992). The TBRC requests and reviews documentation on any record of a Texas Review Species (see end of report) as well as any record of any species if requested to do so by a member of the TBRC. Some of the records submitted to the TBRC during 1992 were gleaned from old American Birds or Christmas Bird Count files; thus some portion of the work of the committee during 1992 was to catch up on older records. The TBRC reached a final decision on 166 records during 1992: 126 records of 51 species were accepted and 40 records of 36 species were not accepted, an acceptance rate of 76% for this report. There were 187 observers who submitted documentation (to the TBRC or to other entities) that was reviewed by the committee during 1992.

This report officially adds 3 species to the Texas state list: Sharp-tailed Sandpiper, Tufted Flycatcher, and Bohemian Waxwing. The latter species was elevated from the Presumptive Species List (see end of report) when photographs were recently uncovered and the submitted record was accepted. During 1992, the committee also accepted a sight record of Berylline Hummingbird. As a result, this previously unrecorded species constituted a new addition to the Presumptive Species List. The above actions brought the official Texas state list at the end of 1992 to 585 species in good standing. And with the removal of Bohemian Waxwing and the addition of Berylline Hummingbird, the official Presumptive Species List remained at 4 species. There were several records that will complete circulation through the TBRC in 1993 that will represent new Texas species.

The TBRC solicits reports of any species on the Review List as well as any species not previously accepted for Texas. We desire written descriptions as well as photographs and tape recordings if available. If anyone has information concerning a Review Species but is unsure how to submit that information please contact any member of the TBRC or contact the committee secretary, Greg Lasley, 305 Loganberry Court, Austin, Texas 78745-6527. For guidelines on preparing rare bird documentation, readers are encouraged to review "How to Document Rare Birds" (Dittmann and Lasley 1992).

The records in this report are arranged taxonomically following The AOU Checklist of North American Birds (AOU 1983) as currently supplemented. A number in parentheses after the species name represents the total number of accepted records in Texas for that species at the end of 1992. In instances where birds were known to return from previous years, this number will be followed by a slash and a second number. The second number denotes the total number of accepted records if returnees are excluded. The number(s) will be listed for all Review Species, but not for certain other species (see end of report). Within each

species the records are listed chronologically. All observers who submitted written documentation or photos of accepted records are listed by initials. If known, the initials of those who discovered a particular bird are in boldface (assuming the discoverers submitted a description). There has been no attempt to list all observers who saw a particular bird. The TBRC file number of each accepted record will follow the observers' initials. This number consists of the year the record was originally submitted to the committee followed by a dash then a number. If photos are on file with the TBRC, the Texas Photo Record File (TPRF) (Texas A&M University) number is also given. If a tape recording of the bird is on file with the TBRC, the Texas Bird Sounds Library (TBSL) (Sam Houston State University) number is also given. Specimen records are denoted with an asterisk (*) followed by the institution where the specimen is housed and the catalog number if available. The information in each account is usually based on the information provided in the original submitted documentation; however, in some cases we have supplemented this with a full range of dates the bird(s) was present if that information was made available to us later. All locations in italics are counties.

TBRC Membership.—Members of the TBRC during 1992 who participated in decisions listed in this report are: Ted Eubanks, Chairman, Keith Arnold, Academician, Greg Lasley, Secretary, John Arvin, Carl Haynie, Jim Morgan, Chuck Sexton, Bret Whitney, David Wolf, and Barry Zimmer. During 1992, Jim Morgan and Ted Eubanks retired from the committee, Barry Zimmer was elected to a second term, and David Wolf was elected as a new member.

Contributors.—Lynne Aldrich, Tony Amos, Ben Archer, Nanette Armstrong, Rich Armstrong, John Arvin, Ann Atkins, Mike Austin, Alma Barrera, Lorraine Bartlett, Bob Behrstock (BBe), Anne Bellamy (ABe), Charles Bender, Steve Bentzen, Peter Billingham, Nancy Bird, Gene Blacklock, Dave Blankenship (DBl), Beth Blount, Doug Booher (DBo), David Bradford, Charles Brown (CBr), Kelly Bryan, John Buckman, Frank Bungardner, Harold Burgess, Beth Caldwell, Dawn Carrie, Mike Champagne (MCh), Allan Chaney (ACh), Mary Ann Chapman, R. D. Coggeshall (RDC), Sherry Collins, Arlie Cooksey, Mel Cooksey (McC), Marion Corder (MCO), Jim Culbertson, Pat Culbertson, David Dauphin, Paul De-Benedictis, Jack Dennett (JDe), Sandy Dillard, Larry Ditto, Jon Dunn, Barbara Duplisea, Charles Easley, Kim Eckert, Tom Edwards, Victor Emanuel, Ted Eubanks (TEu), Mike Farmer, Shawnen Finnegan, Don Francis, Phyllis Frank, Tony Frank, Brush Freeman, Karen Galley, Tony Gallucci, Hugh Garnett, John Gee (JGe), Brian Gibbons, Jeff Gordon, Peter Gottschling, Martha Grace (MGr), Mary Gustafson, Paul Haddox (PaH), Bruce Hallet (BHa), Laurens Halsey, Robert Hanson, Peggy Harding, Tyrrell Harvey, Vicki Hatfield, Steve Hawkins, Carl Haynie, Harold Hedges, Linda Hedges (LHe), Dick Heller, Rhandy Helton, Kelly Himmel, Buddy Hollis, P. D. Hulce (PDH), Joe Ideker, Pete Isleib, George jury, Greg Keiran, John Kendall (JKe), Laura Kickline, Kirke King, Jeff Kringery, Jane Kittleman (JaK), Ed Kutac, Leon Lalonde, H. P. Langridge, Greg Lasley, Paul Lehman (PLE), Mark Lockwood, Sue Lower, Gail Diane Luckner (GDL), Phyllis Lund, Guy Luneau (GLu), Art MacKinnon, Michael Manson, Curtis Marantz, Terry Massey, David Matson, Brad McKinney, John Messerly (JMe), Dorothy Metzler, Kip Miller, G. Scott Mills (GSM), Pete Moore, Arnold Moorhouse (AMo), Jim Morgan, Elaine Mormon, Jack Mormon (JMo), Gretchen Mueller, John Muldrow (JMu), Derek Muschalek (DMu), Kenneth Nanney, John O'Brien, Mitchell
Acknowledgments. — The TBRC is very grateful to the many contributors listed above, without whom this report would not be possible. We would also like to offer our sincere thanks to the following consultants who provided the TBRC with expert opinion, advice, or other information concerning records reviewed during 1992: David Ainley, Harold Burgess, Roger Clapp, Steve Howell, Kenn Kaufman, Dave Lee, Guy McCaskie, Burt L. Monroe, Will Russell, Dave Stejskal, the Trumpeter Swan Society, and Kevin Zimmer. The author would also like to thank Greg Lasley for reviewing the draft of this article and for making several helpful comments and suggestions.

Additional Abbreviations. — AB = American Birds magazine; BBNP = Big Bend National Park; GMNP = Guadalupe Mountains National Park; LSUMZ = Louisiana State University Museum of Zoology; NWR = National Wildlife Refuge; SP = State Park; TCWC = Texas Cooperative Wildlife Collection (Texas A&M University); sp. = species; UTC = Upper Texas Coast.

Accepted Records

Red-throated Loon (Gavia stellata) (15). One was photographed on Lake O' The Pines, Marion during its stay 1 January–19 February 1992 (KN, RR, BG, GLu, CH; 1992-7, TPRF #1021).

Pacific Loon (Gavia pacifica) (33). One was on Lake Sam Rayburn, San Augustine from 12–18 March 1991 (DW, NB; 1991-57). At least four were on Offat’s Bayou, Galveston from 16 March–25 April 1991 (CH, JA; 1991-39). One was photographed on Lake Worth, Tarrant during its stay 4–7 January 1992 (MR, CH; 1992-9, TPRF #1022).

Greater Shearwater (Puffinus gravis) (4). One was picked up dead on the Gulf side of Padre Island, Kleberg in mid August 1980 following Hurricane Allen. This specimen was originally mislabeled as a jaeger (GB, GL, CS; 1991-12, *WWF #2270, TPRF #949).

Sooty Shearwater (Puffinus griseus) (5). One was picked up still alive on the beach at Padre Island, Kleberg on 12 May 1990, but it died 3 days later (ACH, GL, CS; 1991-11, *WWF #2402, TPRF #939). One was found dead near San Luis Pass, Brazoria on 2 January 1991 (TH, TEu, CM; 1991-45, *LSUMZ #151916, TPRF #988).

Audubon's Shearwater (Puffinus lherminieri) (10). One unusually dark-mantled
individual was picked up still alive in Port Aransas, *Nueces* on 23 July 1990, but it died several days later (TA, GL; 1990-158, *TCWC #12499, TPRF #938).

**Leach's Storm-Petrel** (*Oceanodroma leucorhoa*) (5). One was 36 miles east-southeast of Port Aransas, *Nueces* on 1 June 1991 (CS, PR, RA, NA; 1991-69). One was 52 miles east of Port Aransas on 15 June 1991 (MA, TF, PF, WS; 1991-78).

**Band-rumped Storm-Petrel** (*Oceanodroma castro*) (7). One was 52 miles east of Port Aransas, *Nueces* on 15 June 1991 (MA, CS, PF, TF, PG; 1991-79).


**Trumpeter Swan** (*Cygnus buccinator*) (2). One immature was photographed below Falcon Dam, *Starr* during its stay 28 December 1989–14 January 1990 (MCo, CT, PI, HB, CS, JMu; 1990-9, TPRF #936).


**Barrow's Goldeneye** (*Bucephala islandica*) (2). One adult male was in LaPorte, *Harris* from 3–31 December 1991 (LL, BH, GDL, TF, PF, MA, RV, GL, JD, LA, DF; 1991-140, TPRF #1006). Photographs of this bird, only the second record for Texas, were published in *AB* 45:1036.


**Northern Jacana** (*Jacana spinosa*) (13). At least four were at Maner Lake, *Brazoria* on 22 December 1972 (PD; 1991-103). One adult was photographed at Santa Ana NWR, *Hidalgo* in July 1975 (JA; 1991-96, TPRF #1010).

**Sharp-tailed Sandpiper** (*Calidris acuminata*) (1). One breeding-plumaged adult was seen by over 100 observers in east Fort Worth, *Tarrant* on 17 & 18 May 1991 (MR, RDC, CH, CS, GL, JWS, CE, JMu, LH, KN; 1991-56, TPRF #993). A photo of this bird, a first record for Texas, was published in *AB* 45:512.

**Purple Sandpiper** (*Calidris maritima*) (10). One to two were photographed in Freeport, *Brazoria* from 16 December 1990–25 April 1991 (JM, TEu, GL, CS, DD, CH, PF, TF; 1990-154, TPRF #947). One was photographed at Boca Chica, *Cameron* during its stay 28 February–10 March 1991 (BZ, PM, BM; 1991-41, TPRF #986). A photo of this bird was published in *AB* 45:341.

**Red Phalarope** (*Phalaropus fulicaria*) (19). One to two were photographed in Austin, *Travis* 25–29 September 1980 (GL; 1991-18, TPRF #943). One was in San Antonio, *Bexar* on 6 May 1984 (WS; 1991-99). One was photographed in


**Mew Gull** (*Larus canus*) (3). One first-winter bird was photographed at Calaveras Lake, *Bexar* during its stay 10 December 1990–7 January 1991 (WS, BWh, GL, FB; 1990-153, TPRF #942). A photo of this bird was published in *AB* 45:290.

**California Gull** (*Larus californicus*) (17). One adult was photographed at the Fort Bliss Sewage Ponds, *El Paso* on 26 May 1987 (BZ; 1991-125, TPRF #991). One adult was photographed at Calaveras Lake, *Bexar* on 15 March 1991 (WS; 1991-44, TPRF #979).

**Thayer’s Gull** (*Larus thayeri*) (16). One first-winter bird was photographed at the Brownsville City Landfill, *Cameron* on 18 March 1983 (JA; 1991-23, TPRF #944). One first-winter bird was photographed at Brownsville on 4 January 1991 (JD; 1991-26, TPRF #996). One adult was photographed at High Island, *Galveston* on 21 April 1991 (MR, PR, JM, TEu; 1991-47, TPRF #1004).


One first-winter bird was photographed in Austin, *Travis* on 1 December 1990 (RA, NA, JR, BR; 1991-2, TPRF #940). One second-winter bird was photographed at Port Aransas, *Nueces* on 17 December 1990 (TA; 1991-98, TPRF #1012). One second-winter bird was photographed at the Brownsville City Landfill during its stay 4 January–23 February 1991 (JD, JO, BM; 1991-17, TPRF #1002). One first-winter bird was at Freeport, *Brazoria* from 16–19 March 1991 (JWS, CH, DB; 1991-64, TPRF #1024). One first-winter bird was at High Island, *Galveston* on 21 April 1991 (JM, TEu; 1991-59).


**Sabine's Gull** (*Xema sabini*) (24). Two juvenal plumaged birds were photographed at Lake Balmorhea, *Reeves* during their stay 25–29 September 1991 (ML; 1991-126, TPRF #992). A photo of one of these birds was published in *AB* 46: 120. Onejuvenal plumaged bird was at Braunig Lake in San Antonio, *Bexar* from 31 October–7 November 1991 (WS, GL, CS, TF, PF; 1991-131).

**Bridled Tern** (*Sterna anaethetus*) (7). Between 13 and 20 were found, and several were photographed, 42.5 miles east southeast of Port Aransas, *Nueces* on 1 June 1991 (CS, PR; 1991-70, TPRF #995).

**Mangrove Cuckoo** (*Coccyzus minor*) (5). One was at Santa Ana NWR, *Hidalgo* on 26 & 27 August 1982 (JA, TP; 1991-142). One was at Laguna Atascosa NWR, *Cameron* on 11 June 1991 (BA, DBo, LK; 1991-80).

**Northern Saw-whet Owl** (*Aegolius acadicus*) (11). One was photographed in the Davis Mountains, *Jeff Davis* 3–4 June 1991 (ML; 1991-84, TPRF #976).

**Green Violet-ear** (*Colibri thalassinus*) (12). One was photographed in a backyard in San Benito, *Cameron* on 21 April 1991 (SB; 1991-68, TPRF #980). One was photographed at a feeder in Helotes, *Bexar* on 21 May 1991 (SS, CaS; 1991-89, TPRF #977).

**Broad-billed Hummingbird** (*Cynanthus latirostris*) (10). One was in BBNP, *Brewster* on 18 May 1991 (ML; 1991-90).

**White-eared Hummingbird** (*Hylocharis leucotis*) (3). One was photographed near...
Rio Grande City, Starr during its stay 14-16 July 1990 (LD, DH, DBL; 1991-76, TPRF #973). It provided a very unusual lowland record for this species. One was in GMNP, Culberson on 7 June 1991 (MR, GK, MiP; 1991-88).

Tufted Flycatcher (Mitrephanes phaeocercus) (1). One was taped, photographed, and seen by many in BBNP, Brewster from 3 November 1991-17 January 1992 (BD, JPh, BZ, CH, CS, MA, TF, PF, JD, GL, JMo, EM, BHa, EV, KB, MeC, AC, MaP, ML, JDe, MG, JMu, FB, PG; 1991-132, TPRF #1000, TBSL #203-08). Photographs documenting this first record for the United States were published in AB 46:167 and 46:1036. Also see Zimmer and Bryan (1993).

Greater Pewee (Contopus pertinax) (2). One was in San Antonio, Bexar on 7 April 1991 (GSM; 1991-62). As was the case for the only other accepted record in Texas (in Big Spring), this bird was far from favorable habitat.

Dusky-capped Flycatcher (Myiarchus tuberculifer) (4). One was photographed and tape recorded in BBNP, Brewster on 6 May 1991 (CS; 1991-52, TPRF #1005, TBSL #203-07). Up to two birds were photographed and taped on Mt. Livermore, Jeff Davis 4-19 June 1991 (GL, JP, KB, ML; 1991-74, TPRF #1020, TBSL #208-02). One was in BBNP on 6 September 1991 (Ge; 1991-122). More than a dozen unsubmitted reports of this species exist (mostly from BBNP).

Brown-crested Flycatcher (Myiarchus tyrannulus) One was photographed in Freeport, Brazoria on 15 December 1991 (JM, BB, GM; 1992-6, TPRF #1019). This is not a review species, but given its rarity at this location (only the second UTC record), its review was requested.

Tropical Kingbird (Tyrannus melancholicus) (2). Two to five birds have been present off and on in Brownsville, Cameron since 9 February 1991 when two were photographed and taped (DSi, JK, GL, PL, SF, SH, PF, TF, BM, DB, JA, JMu, TG, FB, MeC, AC, GDL; 1991-51, TPRF #989, TBSL #203-06). One was at Rio Grande Village, BBNP from 25 May to early June 1991 (Ge; 1991-77). The only other accepted record for Texas is of a specimen taken in 1909.

Thick-billed Kingbird (Tyrannus crassirostris) (10). Up to two birds were photographed and tape recorded at Cottonwood campground, BBNP, Brewster 23 April-26 July 1991 (CS, ES, MeC, AC, GW, HH, LHe, AB, GL, PL; 1991-51, TPRF #989, TBSL #203-06). One was at Rio Grande Village, BBNP from 25 May to early June 1991 (PR, MCh, KM, JSe, JPo; 1991-77).

Fork-tailed Flycatcher (Tyrannus savana) (7). One was photographed near Gilchrist, Galveston during its stay 23-25 April 1991 (MWy, JMu, JA, FB; 1991-66, TPRF #1001). A photo of this bird was published in AB 45:472.


Varied Thrush (Ixoreus naevius) (12). One was picked up dead in Los Fresnos, Cameron on 28 October 1990 (AM; 1991-53, *LSUMZ #15912, TPRF #981). One was in Smith Point, Chambers from 22 February-3 March 1991 (WR, JA, DB, RU, PD, PF, TF, J&JW; 1991-26).

Bohemian Waxwing (*Bombycilla garrulus*) (3). One was photographed in Lubbock, *Lubbock* during its stay 18 December 1977–19 March 1978 (GJ, DSt; 1991-43, TPRF #978). These recently uncovered photographs were enough to elevate the species to full status on the Texas list. As a result, the two other records of this species, formerly categorized as “accepted presumptive species,” now share full status as well.

Yellow-green Vireo (*Vireo flavoviridis*) (6). One to two birds were at Laguna Atascosa NWR, *Cameron* from 11 May–13 July 1991 (TF, PF, TG; 1991-85). This species is often reported but seldom well-documented in Texas.


Red-faced Warbler (*Cardellina rubrifrons*) (8). One was photographed in BBNP, *Brewster* on 17 August 1991 (ML; 1991-113, TPRF #1015).


Pine Grosbeak (*Pinicola enucleator*) (4). One was outside Lewisville, *Denton* on 28 December 1990 (GBr; 1991-10).

Accepted Presumptive Species

Red-necked Grebe (*Podiceps grisegena*) (5). One was seen at White River Lake, *Crosby* on 21 & 22 January 1978 (KH, DSt; 1990-11).

Berylline Hummingbird (*Amazilia beryllina*) (1). One was seen in the Chisos Mountains of BBNP, *Brewster* on 18 August 1991 (JT; 1991-121).

Unaccepted Records

A number of factors may contribute to a record being denied acceptance. It is quite uncommon for a record to not be accepted because the bird was obviously misidentified. More commonly, a record is denied acceptance because the material submitted to the TBRC was incomplete, insufficient, superficial, or just too vague to properly document the reported occurrence while eliminating all other similar
species. Also, written documentation or descriptions prepared entirely from memory weeks, months, or years after a sighting are seldom voted on favorably. It is important that we stress here that the simple act of not accepting a particular record should by no means indicate that the TBRC or any of its members necessarily feels the record did not occur as reported. The non-acceptance of any record simply reflects the opinion of the TBRC that the documentation, as submitted, did not meet the rigorous standards appropriate for adding data to the formal historical record. The TBRC makes every effort to be as fair and objective as possible regarding each record. If the committee is unsure about any particular record, it prefers to err on the conservative side and not accept a good record rather than validate a bad one. All records, whether accepted or not, remain on file and can be re-submitted to the committee if additional substantive material is presented.

Red-throated Loon \( (Gavia stellata) \). One to three birds (1991-67) on Lake Texoma, \( Grayson \) from 4 January–31 March 1991.

Pacific Loon \( (Gavia pacifica) \). Two (1990-140) at Offat’s Bayou, \( Galveston \) on 29 April 1984.

Red-necked Grebe \( (Podiceps auritus) \). One (1990-144) on Lake Theo, \( Briscoe \) on 18 November 1991.

Cory’s Shearwater \( (Calonectris diomedea) \). One (1989-237) off Port Aransas, \( Nueces \) on 4 November 1989. This species has been removed from the regular Review List, but documentation is still solicited (see end of report).

Audubon’s Shearwater \( (Puffinus lherminieri) \). One (1992-17) off South Padre Island, \( Cameron \) on 20 December 1991.

Brown Booby \( (Sula leucogaster) \). One (1990-147) off Matagorda, \( Matagorda \) on 21 April 1985.

Glossy Ibis \( (Plegadis falcinellus) \). One (1991-72) in San Antonio, \( Bexar \) on 6 May 1991. This was considered to be a different individual than the one described by 1991-55.

Muscovy Duck \( (Cairina moschata) \). Thirteen (1989-235) in \( Starr \) on 6 October 1989. This species has been removed from the regular Review List, but documentation is still solicited (see end of report).


White-cheeked Pintail \( (Anas bahamensis) \). One (1991-137) in Austin, \( Travis \) from 31 August-5 September 1991. The origin of this bird was questioned especially when consideration was given to its odd plumage (probably hybridism).

Eurasian Wigeon \( (Anas penelope) \). One (1991-30) in Austin, \( Travis \) on 17 February 1991.


Sharp-tailed Sandpiper \( (Calidris acuminata) \). One (1991-75) in Austin, \( Travis \) on 4 May 1991.

Parasitic Jaeger \( (Stercorarius parasiticus) \). One (1989-185) on South Padre Island, \( Cameron \) on 8 June 1989. Some argue that photos taken of this (possibly lost!) specimen are of a Long-tailed Jaeger, a much rarer species in Texas.

Bull. Texas Ornith. Soc. 25(2). 1992


Western Gull (*Larus occidentalis*). One (1990-149) at Lake Balmorhea, *Reeves* from 29 November-3 December 1990. Photos revealed this to be a third-year Lesser Black-backed Gull (see accepted record 1992-14 above).


Aztec Thrush (*Ridgwayia pinicola*). One (1990-127) at Big Bend Ranch, *Presidio* on 13 May 1990.


White-collared Seedeater (*Sporophila torqueola*). One (1989-229) in El Paso, *El Paso* on 27 August 1989. This is not a review species but was requested for review by a TBRC member. Following 4 circulations, it was finally rejected at the annual meeting due to questions about origin. It was intriguing, however, that the bird’s plumage fitted that of the west Mexican race.


**Literature Cited**


**TBRC Review List**

The TBRC requests details, including descriptions and photos if possible, of all records of the following species.

*Review List A.*—Rarities: These species, in general, include birds that have occurred four or fewer times per year anywhere in Texas over a ten-year average. The TBRC requests documentation for review for any new or any previously unsubmitted record of the below species no matter how long ago the record occurred. The TBRC also requests details on any record of a species not yet accepted on the Texas State List.


Review List B.—Species under special study by subcommittee of TBRC concerning their distribution and status in Texas: Records of these species will not be formally reviewed by the TBRC (except for winter Swainson’s Hawk and Semipalmed Sandpiper records which will be reviewed), but documentation is requested to assist in these studies.

Clark's Grebe, Cory’s Shearwater, Muscovy Duck, Common Black-Hawk, Swainson's Hawk (December–January), Aplomado Falcon (reintroduction program in progress), Semipalmed Sandpiper (December–January), Pomarine Jaeger, Parasitic Jaeger, Spotted Owl, Williamson’s Sapsucker, Northern Shrike.

Presumptive Species List.—The following is the official TBRC list of species for which written descriptions of sight records have been accepted by the TBRC but the species has not yet met the requirements for full acceptance on the Texas List (specimen, photo, or tape recording for at least one record).

Red-necked Grebe, White-crowned Pigeon, Berylline Hummingbird, Slate-throated Redstart.
Birds of the Heronry Site at the University of Texas Southwestern Medical Center at Dallas

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ABSTRACT. — Heronries are generally known only for their breeding heron and egret populations. This paper details the monthly distribution and relative abundance of 111 species observed in an old established inland downtown heronry in north central Texas. The site has some importance as a local migrant stopover in the downtown Dallas area.

Introduction

The mixed heronry in downtown Dallas has been present on the campus of the University of Texas Southwestern Medical Center at Dallas since 1966, when it moved there from the nearby Record Crossing area due to construction work (W. M. Pulich pers. comm.). The heronry, since the move to the present site, has contained five breeding species of egret and heron in varying numbers and is thought to be the longest continually used inland egret colony in Texas.

The heronry remained relatively undisturbed at the present site until the spring of 1988, when some trees, containing active egret nests, were removed to allow the development of campus facilities. After vigorous protests by local conservation groups, members of staff, students and faculty, the construction was halted for the breeding season. As a result the heronry eventually settled down and appeared to breed normally.

At the time of the incident, little was known about the ornithological value of the site, except for the presence of the heronry. This paper is the result of an intensive study of the heronry site carried out predominantly between January 1989 and May 1990. Some occasional observations have been included prior to this period, from September 1987 to December 1988, but constitute only 7% of the total observational time.

Study Site Description

The 5.1 hectare (12.6 acre) site was located 6.8 km (4.2 miles) northwest of the downtown mixmaster in Dallas at the southern corner of the Harry Hines Boulevard and Inwood Road intersection. Located 1.9 km (1.2 miles) north of the Trinity River, the recording area (Fig. 1) includes 2.8 hectares (6.9 acres) of mixed deciduous woodland that is predominantly composed of cedar elm (Ulmus crassifolia) and post oak (Quercus stellata).

The study area includes a small pond and an adjacent area of natural seepage that is wet for about eight months of the year. These two adjoining areas are surrounded by stands of giant ragweed (Ambrosia trifida) from spring to late fall which also form the understorey for the surrounding cedar elms that tend to create a region similar to that of a river bottom. On the drier areas of the site, the trees tend to be post oak with no understorey, but with a ground cover of regularly mown grass. The intervening area contains a mixture of these trees as well as a
Fig. 1.—Map of the study area: the herony site at the University of Texas Southwestern Medical Center at Dallas. □ Cedar Elm/Hackberry predominant. □ Giant Ragweed/Willow Scrub. □ Post Oak predominant. □ Open Cultivated Grassland. ——— Recording area boundary. ——— Treeline Boundary. ———— Approximate Post Oak/Cedar Elm Boundary. P Pond. S Store. SP Sports Pavilion. TC Tennis Court. ——— Pathways.
liberal spread of American elm (Ulmus americana), osage orange (Maclura pomifera), honey locust (Gleditsia triacanthos), eastern red cedar (Juniperus virginiana) and chinaberry (Melia azedarach). The chinaberry was a recent introduction to the site, probably through seed dispersal on twigs brought in by the egrets for nest material (Telfair 1983). The understory consists of various shrubs and saplings; however one shrub, a privet (Ligustrum sp.) was used quite extensively for nesting by the smaller nesting egrets and herons.

The actual study area is bounded on three sides by campus roads and by parking facilities on the fourth side. The unwooded area is grassed and regularly mowed.

Data Recording Methods

Counts of birds within the study area were carried out by various observers while walking around the periphery of the site. During the observation period, the highest count of a species was recorded as the maximum for that species during that period. Time of observation and the number of observers was also recorded. This method of recording is rather conservative, but considering the small size of the site and the relative mobility of the subjects it was felt to be justified to minimize errors due to multiple counts of individual birds. Bird banding studies were also carried out and the species totals compared with those of the observations during that period. Only if the banding total for a species was greater than that by observation was it included in the totals. This was usually the case for the more cryptic species.

The greatest number for a species seen during a period of observation in a given month was taken as that month's maximum. The maxima for each species in each month were then scored as a relative abundance similar to that of the Dallas County Audubon Society Field Checklist of Birds of Dallas County (Pulich 1990). The breeding data were recorded according to the criteria of the Texas Breeding Bird Atlas Project based upon recommendations from a regional atlas meeting held at the Vermont Institute of Natural Science in 1981 (Laughlin 1981).

The majority of observations were made between January 1989 and May 1990 by a total of 9 observers. A total of 440 observer hours (an observer hour = number of observers in the group during the observation period × number of hours of observation by the group) were recorded during this study. Further observations from 3 observers over the period August 1987 to December 1988 were included (an extra 35 observer hours) to give better coverage in months that were poorly covered. These hours do not include netting statistics which were 467 net hours (1 net hour = one 18 m \{60\}' mist net open to catch birds for 1 hour) over the period January 1989 to May 1990.

Results and Discussion

Table 1 gives the monthly distribution and relative abundance of the species during the period of study. However, only 9 species could be considered as permanent residents, 10 as summer residents, 10 as winter residents and 49 as passage migrants, giving a total of 111 species recorded on the site during the study—slightly less than 37% of the Dallas county Field Checklist (Pulich 1990). The rest occur irregularly on the site throughout the year, mainly due to the site forming a small part of their normal territory.

Although the list in Table 1 conforms with the American Ornithological Union

Table 1. The monthly distribution and relative abundance at the University of Texas Southwestern Medical Center at Dallas.

<table>
<thead>
<tr>
<th>Species and status</th>
<th>Month</th>
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<tbody>
<tr>
<td></td>
<td>J</td>
</tr>
<tr>
<td>Anhinga Anhinga anhinga M</td>
<td></td>
</tr>
<tr>
<td>Great Blue Heron Ardea herodias Ir</td>
<td></td>
</tr>
<tr>
<td>Great Egret Casmerodius alba *S</td>
<td>I</td>
</tr>
<tr>
<td>Snowy Egret Egretta thula *S</td>
<td></td>
</tr>
<tr>
<td>Little Blue Heron Egretta caerulea *S</td>
<td></td>
</tr>
<tr>
<td>Cattle Egret Bubulcus ibis *S</td>
<td></td>
</tr>
<tr>
<td>Green-backed Heron Butorides striatus Ir</td>
<td></td>
</tr>
<tr>
<td>Black-crowned Night-Heron Nycticorax nycticorax *S</td>
<td></td>
</tr>
<tr>
<td>White-faced Ibis Plegadis chihi M</td>
<td></td>
</tr>
<tr>
<td>Sharp-shinned Hawk Accipiter striatus Ir</td>
<td></td>
</tr>
<tr>
<td>Red-shouldered Hawk Buteo lineatus Ir</td>
<td></td>
</tr>
<tr>
<td>Red-tailed Hawk Buteo jamaicensis Ir</td>
<td></td>
</tr>
<tr>
<td>American Kestrel Falco sparverius Ir</td>
<td></td>
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<tr>
<td>Killdeer Charadrius vociferos Ir</td>
<td></td>
</tr>
<tr>
<td>American Woodcock Scolopax minor Ir</td>
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</tr>
<tr>
<td>Rock Dove Columbia livia *P</td>
<td></td>
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<tr>
<td>Mourning Dove Zenaida macroura *P</td>
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</tr>
<tr>
<td>Barn Owl Tyto alba Ir</td>
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<td>Common Nighthawk Chordeiles minor S</td>
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<tr>
<td>Chuck-will's-widow Caprimulgus carolinensis Ir</td>
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<td>Chimney Swift Chaetura pelagica Ir</td>
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<td>Belted Kingfisher Ceryle alcyon Ir</td>
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<td>Yellow-bellied Sapsucker Sphyrapicus varius Ir</td>
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<td>Downy Woodpecker Picoides pubescens Ir</td>
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<td>Least Flycatcher Empidonax minimus M</td>
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<td>Eastern Phoebe Sayornis phoebe M</td>
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<tr>
<td>Great Crested Flycatcher Myiarchus crinitus *S</td>
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</tr>
<tr>
<td>Species and status</td>
<td>Month</td>
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<td>------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Western Kingbird * Tyrannus verticalis</td>
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<tr>
<td>Blue Jay * Cyanocitta cristata</td>
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<tr>
<td>American Crow * Corvus brachyrhynchos</td>
<td>U</td>
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<tr>
<td>Carolina Chickadee * Parus carolinensis</td>
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<tr>
<td>Brown Creeper * Certhia americana</td>
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<td>House Wren * Troglodytes aedon</td>
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<td>Marsh Wren * Cistothorus palustris</td>
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<td>Golden-crowned Kinglet * Regulus satrapa</td>
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<tr>
<td>Ruby-crowned Kinglet * Regulus calendula</td>
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<tr>
<td>Swainson's Thrush * Catharus ustulatus</td>
<td>U</td>
</tr>
<tr>
<td>Hermit Thrush * Catharus guttatus</td>
<td>U</td>
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<tr>
<td>American Robin * Turdus migratorius</td>
<td>U</td>
</tr>
<tr>
<td>Gray Catbird * Dunetella carolinensis</td>
<td>C</td>
</tr>
<tr>
<td>Northern Mockingbird * Minimus polyglottos</td>
<td>C</td>
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<tr>
<td>Brown Thrasher * Toxostoma rufum</td>
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<td>Water Pipit * Anthus spinolaeta</td>
<td>R</td>
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<tr>
<td>Sprague's Pipit * Anthus spraguei</td>
<td>R</td>
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<tr>
<td>Cedar Waxwing * Bombycilla cedrorum</td>
<td>C</td>
</tr>
<tr>
<td>Loggerhead Shrike * Lanius ludovicianus</td>
<td>R</td>
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<tr>
<td>European Starling * Sturnus vulgaris</td>
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<tr>
<td>Solitary Vireo * Vireo solitarius</td>
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</tr>
<tr>
<td>Blue-winged Warbler * Vermivora pinus</td>
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<tr>
<td>Tennessee Warbler * Vermivora peregrina</td>
<td>R</td>
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<tr>
<td>Orange-crowned Warbler * Vermivora celata</td>
<td>R</td>
</tr>
<tr>
<td>Nashville Warbler * Vermivora ruficapilla</td>
<td>R</td>
</tr>
<tr>
<td>Yellow Warbler * Dendroica petechia</td>
<td>U</td>
</tr>
<tr>
<td>Chestnut-sided Warbler * Dendroica pensylvanica</td>
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Table 1. Continued.
<table>
<thead>
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<th>Species and status</th>
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<td>Black-throated Green Warbler <em>Dendroica virens</em> M</td>
<td>R R R R R R U R</td>
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<tr>
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<td>R R R R R R R R</td>
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<tr>
<td>Bay-breasted Warbler <em>Dendroica castanea</em> M</td>
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<td>Black-and-white Warbler <em>Mniotilta varia</em> M</td>
<td>R R R R U R U</td>
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<tr>
<td>American Redstart <em>Setophaga ruticilla</em> M</td>
<td>R R R R R R U</td>
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<tr>
<td>Ovenbird <em>Seiurus aurocapillus</em> M</td>
<td>R R R R R R U</td>
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<tr>
<td>Northern Waterthrush <em>Seiurus noveboracensis</em> M</td>
<td>R R R R R R U</td>
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<tr>
<td>Mourning Warbler <em>Oporornis philadelphia</em> M</td>
<td>R R R R R R U</td>
</tr>
<tr>
<td>Common Yellowthroat <em>Geothlypis trichas</em> M</td>
<td>R R R R R R U</td>
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<tr>
<td>Wilson's Warbler <em>Wilsonia pusilla</em> M</td>
<td>R R R R R R U</td>
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<tr>
<td>Yellow-breasted Chat <em>Icteria virens</em> M</td>
<td>R R R R R R U</td>
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<tr>
<td>Summer Tanager <em>Piranga rubra</em> M</td>
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<tr>
<td>Northern Cardinal <em>Cardinalis cardinalis</em> <em>P</em></td>
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</tr>
<tr>
<td>Rose-breasted Grosbeak <em>Pheucticus ludovicianus</em> Ir</td>
<td>R R R R R R U</td>
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<tr>
<td>Blue Grosbeak <em>Guiraca caerula</em> M</td>
<td>R R R R R R U</td>
</tr>
<tr>
<td>Indigo Bunting <em>Passerina cyanea</em> M</td>
<td>R R R R R R U</td>
</tr>
<tr>
<td>Painted Bunting <em>Passerina ciris</em> M</td>
<td>R R R R R R U</td>
</tr>
<tr>
<td>Rufous-sided Towhee <em>Pipilo erythrophthalmus</em> W</td>
<td>R R R R R R U</td>
</tr>
<tr>
<td>Chipping Sparrow <em>Spizella passerina</em> M</td>
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</tr>
<tr>
<td>Clay-colored Sparrow <em>Spizella pallida</em> M</td>
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</tr>
<tr>
<td>Field Sparrow <em>Spizella pusilla</em> M</td>
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<tr>
<td>Vesper Sparrow <em>Poecetes gramineus</em> M</td>
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</tr>
<tr>
<td>Lark Sparrow <em>Chondestes grammacus</em> M</td>
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</tr>
<tr>
<td>Grasshopper Sparrow <em>Ammodramus savannarum</em> M</td>
<td>R R R R R R U</td>
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<tr>
<td>Fox Sparrow <em>Passerella iliaca</em> M</td>
<td>R R R R R R U</td>
</tr>
<tr>
<td>Song Sparrow <em>Melospiza melodia</em> M</td>
<td>R R R R R R U</td>
</tr>
<tr>
<td>Lincoln's Sparrow <em>Melospiza lincolni</em> W</td>
<td>R R R R R R U</td>
</tr>
<tr>
<td>Swamp Sparrow <em>Melospiza georgiana</em> M</td>
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</tr>
<tr>
<td>White-throated Sparrow <em>Zonotrichia albicollis</em> W</td>
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<tr>
<td>White-crowned Sparrow <em>Zonotrichia leucophrys</em> W</td>
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</tr>
<tr>
<td>Harris' Sparrow <em>Zonotrichia querula</em> M</td>
<td>R R R R R R U</td>
</tr>
</tbody>
</table>
Table 1. Continued.

<table>
<thead>
<tr>
<th>Species and status</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>J</td>
</tr>
<tr>
<td>Dark-eyed Junco <em>Junco hyemalis</em> W</td>
<td>U</td>
</tr>
<tr>
<td>Red-winged Blackbird <em>Agelaius phoeniceus</em> W</td>
<td>R</td>
</tr>
<tr>
<td>Eastern Meadowlark <em>Sturnella magna</em> Ir</td>
<td>U</td>
</tr>
<tr>
<td>Great-tailed Grackle <em>Quiscalus mexicanus</em> *P</td>
<td>R</td>
</tr>
<tr>
<td>Common Grackle <em>Quiscalus quiscula</em> Ir</td>
<td>U</td>
</tr>
<tr>
<td>Brown-headed Cowbird <em>Molothrus ater</em> (*)S</td>
<td>C</td>
</tr>
<tr>
<td>Orchard Oriole <em>Icterus spurius</em> M</td>
<td>R</td>
</tr>
<tr>
<td>Northern Oriole <em>Icterus galbula</em> M</td>
<td>R</td>
</tr>
<tr>
<td>American Goldfinch <em>Carduelis tristis</em> W</td>
<td>C</td>
</tr>
<tr>
<td>European House Sparrow <em>Passer domesticus</em> *P</td>
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</tr>
<tr>
<td>Probable escapes:</td>
<td></td>
</tr>
<tr>
<td>Ringed Turtle-dove <em>Streptopelia risoria</em> Ir</td>
<td>I</td>
</tr>
</tbody>
</table>

Abundance codes: A = greater than 50 birds seen in one observation period, C = between 5 and 49 birds seen in one observation period, U = between 1 and 4 birds seen in one observation period, R = less than 5 birds recorded in one month, I = not recorded every year, Ir = present in the area but occurs irregularly on the site.

Status codes: * = breeding species, P = permanently resident species, S = summer resident species, W = winter resident species, M = passage migrant species, ( ) = species of uncertain status, i.e., any of the above codes in these brackets.
ckelist (AOU 1983) one departure from it has been included, viz., the classi-
ification of Alder and Willow Flycatchers (*Empidonax alnorum* and *E. trailli* respectively) as the superspecies complex Traill's Flycatcher (*E. trailli*). Two birds were observed briefly and were not singing. They were caught on separate occasions and were, from their biometrics, of the average size that overlaps both species (Canadian Wildl. Serv. 1977), thus disallowing taxonomic identification based on the biometrical data. As no definite identification was obtainable, it was felt that the superspecies classification was the best solution since it would not bias the list towards one or the other of the species since both occur in the county (Pulich 1988).

Breeding species on the site include the 9 permanent and 7 of the summer resident species. The most notable are the herons and egrets for which the site is known. By mid-summer the site is host to 1,000+ birds, mostly the egrets, herons and their young. During the winter of 1987/88 similar numbers of grackles (*Quiscalus* spp.) and European Starlings (*Sturnus vulgaris*) used the site as a roost, until in later years they started to roost elsewhere. This may have been a result of attempts by the University to dissuade the roost from forming after complaints were received about guano deposits on the parked cars of the staff and employees of the medical center.

The site has also attracted its own share of unusual species including a freshly dead first year female American Woodcock (*Scolopax minor*), aged and sexed according to known techniques (Prater et al. 1977), a 'Lawrences' Warbler hybrid (*Vermivora pinus × V. chrysoptera*), Barn Owl (*Tyto alba*), Anhinga (*Anhinga anhinga*) (1989), and a White-faced Ibis (*Plegadis chihi*) entering the heronry to roost for at least a week during the spring migration of 1988. The latter two observations are more relevant since active nesting of these species has been recorded in a newly established heronry in southeast Dallas county (Peterson, 1991).

From aerial photographs (UTSW 1990) of the area in the 1950s, the present site was the core of what used to be a much larger area. This core has remained undisturbed for a long time and probably become associated as a migration stop-over site for the passage migrants. Over the years, construction that has occurred around this core site probably has not caused too much disturbance to the heronry since it moved to the site in 1966. However, any further encroachment may cause desertion of the site by the herons and egrets. For the other species the site provides food, water and shelter much more suitable than that in the surrounding city. These factors also make the site attractive to passage migrants in need of food and water. Due to the expansion of the city around this site, the concurrent decrease in natural vegetation has also caused the site to become more of a focal point for species who reside in the area for longer periods than the passage migrants.

A few mammals also use the site: eastern fox squirrel (*Sciurus niger*), eastern cottontail (*Sylvilagus floridanus*), feral cat (*Felis domesticus*), and unidentified small rodents.

The variety of bird species observed on this site and the predominance of one group of species, namely the passage migrants, would tend to suggest the relative importance of this site for this group. The location of the site, in a densely urban area that has undergone rapid development over the past 40 years, also plays an important role for the species that remain in the area for extended periods and

has probably acted as a focal point for both groups. In recognition of the diversity of the avifauna that utilize this site, the University of Texas Southwestern Medical Center at Dallas and the Texas Parks and Wildlife Department have cooperated to manage the site as an important urban wildlife habitat (TPWD 1992).

Acknowledgments

I would like to thank Mr. Kirby Vahle and his staff at the University’s Physical Plant department for their help and cooperation. Also, Warren Pulich for answering my questions and Ray C. Telfair II, Ph.D. for his encouragement and constructive comments about this manuscript. Finally to the observers for their time and effort: Dr Dorothy Croall, Dr. Pete Dunten, Ms. Kim Orth, Messrs. Jim Peterson, Jeff Rouse, Robert Smith, Bryan Sutton, and Allen E. Valentine.

Literature Cited

Texan Contributors to the Mississippi Valley Migration Study of 1884–1885

Stanley D. Casto

Department of Biology, University of Mary Hardin-Baylor, Belton, Texas 76513

ABSTRACT.—Biographical information is presented for each of the fifteen observers from Texas who participated in the A.O.U.-sponsored migration study of 1884–1885. William Lloyd, G. H. Ragsdale, H. F. Peters, Ira B. Henry, Walter Negley, and H. P. Attwater were the major contributors. The observations of these pioneer naturalists have been widely cited in the literature and provide a unique perspective on the birdlife of Texas prior to the ecological alterations of the 20th century.

Organization and Publication of the Migration Study

The idea of an organized study of bird migration originated in 1881 with Wells Woodbridge Cooke. His original plan was to limit the study to Iowa, but following a change of his residence to Minnesota, the scope was enlarged to include the entire Mississippi Valley, including Texas. There were, however, no contributions from Texas during 1881–1882.

Data were obtained from observers in ten states during the spring of 1883. Some species accounts were published in *The Ornithologist and Oologist* and the full notes from the St. Louis, Missouri, and Jefferson, Wisconsin, stations were published in *American Field*. Thomas W. Florer from Waxahachie was the only correspondent from Texas during 1883.

A committee to study the migration of North American birds was formed at the first meeting of the American Ornithologists' Union in September 1883. This committee, chaired by C. Hart Merriam, assumed supervision of Cooke's study and expanded its scope to include all of the United States, British America, and Alaska. This area was then divided into fourteen districts, each under the charge of its own superintendent. The Mississippi Valley District remained under the supervision of Cooke, and work under the auspices of the A.O.U. began in December 1883.

The observations made in 1884 were to have been published immediately, but the A.O.U. did not have the necessary funds. Authority to publish the manuscript was then given to the Department of Agriculture where it was decided to combine the 1884–1885 data into a single publication. Reporting forms for the spring of 1885 asked the observer to answer six questions regarding each species: When was it first seen, and how many were observed? When was it next seen? When did it become common? When was it last seen? Is it common or rare? Does it breed near your station?

W. W. Cooke, assisted by Otto Widemann and David E. Lantz, analyzed the data and prepared the manuscript. C. Hart Merriam, Chief of the Division of Economic Ornithology, served as the editor. The study was published in 1888 as

*Bull. Texas Ornith. Soc. 25(2): 1992*
Table 1. Texas observers and stations for 1884–1885.

<table>
<thead>
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<th>Observer</th>
<th>Station</th>
<th>Year of participation</th>
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<td>Henry P. Attwater</td>
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<td>X X</td>
<td>8</td>
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<tr>
<td>Nathaniel P. Ball</td>
<td>Fort Worth</td>
<td>X</td>
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<td>Gotthilf Birkmann</td>
<td>Fedor</td>
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<td>Denison</td>
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<td>Ira B. Henry</td>
<td>Mason</td>
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<td>0</td>
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<tr>
<td>Henry F. Peters</td>
<td>Bonham</td>
<td>X</td>
<td>61</td>
</tr>
<tr>
<td>George H. Ragsdale</td>
<td>Gainesville</td>
<td>X X</td>
<td>115</td>
</tr>
<tr>
<td>Thomas W. Scott</td>
<td>Del Rio</td>
<td>X</td>
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</table>

Bulletin No. 2 of the USDA, Division of Economic Ornithology. The correspondence from participants was originally kept at the Patuxent Wildlife Research Center in Laurel, Maryland, but has recently been transferred to the National Archives (Anon. 1992).

Observers from Texas

Fifteen individuals from thirteen different stations served as official observers from Texas (Table 1). William Lloyd, G. H. Ragsdale, H. F. Peters, Ira B. Henry, Walter Negley, and H. P. Attwater provided the majority of the data used in the published study. The contributions of Anna Houts and T. W. Florer were negligible. The correspondence of Ball, Birkmann, Burhans, Grasso, Jermy, Newell, and Scott was not located, and it is assumed that either they did not submit reports or that their observations were of little value since they are not mentioned in the published study.

HENRY PHILEMON ATTWATER (1854–1931) was born in Brighton, England, 28 April 1854. In 1873, Attwater emigrated to Ontario, Canada, where he engaged in farming and beekeeping (Judd 1976). During the spring and summer of 1884, Attwater and John Morden collected in Bexar County, Texas, and made at least one trip to the Rio Grande. Morden returned to Canada in mid-1884, leaving Attwater at the home of Gustave Toudouze, a naturalist and taxidermist who lived at Losoya Crossing on the Medina River south of San Antonio. From late November 1884 until early February 1885, Attwater and Toudouze supervised the Texas natural history exhibit at the World’s Fair in New Orleans. Attwater originally described himself to Cooke as “not much of an ornithologist,” but indicated that his knowledge of birds was increasing and that he had begun to keep daily records. His report for the spring of 1885 contained notes on thirty-one species including the Verdin (Attwater 1885). Attwater’s description of the habits of this little known species was later published in the final report.

Attwater is cited at least eight times in the published report. Twenty-seven
additional species accounts mention San Antonio, and several of these may also represent his observations. There is no evidence that Attwater knew or communicated with Gustave Jermy or Matthias Newell, who were the other observers in San Antonio. Attwater's migration report was mailed from Hyde Park, Ontario, on 10 August 1885. In December of that year, he married Lucy May Watts. In 1886, the Attwater family moved to London, Ontario, and Henry opened a small museum at the Mechanics' Institute. This enterprise did not prove successful and the museum was closed in the summer of 1887 (Judd 1976). In early 1889, Attwater moved to Sherman, Texas, where he lived briefly before moving to San Antonio. During April, he sent C. H. Merriam the skins of 27 species of birds, along with the news that he had located the Golden-cheeked Warbler in the hills west of the city and had obtained the skins of five males (Attwater 1889). In August 1889, he also sent Merriam a list containing nesting and migration data on all of the birds that he had seen in San Antonio.

During the 1890s, Attwater collected throughout the state as well as lecturing and writing on natural history and agricultural subjects. He was also employed at various times to prepare exhibits of Texas natural history products and wildlife at fairs and exhibitions. In 1900, he moved to Houston to become the agricultural and industrial agent for the Southern Pacific Railroad. He was later involved in the efforts of the Audubon Society and the Texas Sportsmens Association to gain protection for Texas wildlife, particularly birds (Casto 1983, 1984, 1985). In 1913 Attwater retired and devoted his entire time to the study of natural history. Much of his collection is now in the Witte Museum in San Antonio and his papers are found in the Houston Public Library and the Center for American History at the University of Texas in Austin. Attwater's Greater Prairie-Chicken and four types of small mammals are named in his honor. He died on 25 September 1931.

NATHANIEL PORTER BALL (1863–?) lived on a farm near Reeds, Missouri, where he served as an observer during 1884. By 1885, he was living in Fort Worth, where he was the station observer. The Fort Worth City Directory for 1896–1897 lists him as an attorney. Ball practiced law in Fort Worth until at least 1899 but is not listed in the 1900 census, and his further whereabouts are unknown. N. P. Ball is cited at least eight times for observations made at Reeds, Missouri, but there is no mention of observations made by him at Fort Worth.

GOTTHILF BIRKMANN (1854–1944) was born on 4 July 1854 at Waterloo, Illinois. He was agraduate of Concordia College in Fort Wayne, Indiana, and Concordia Theological Seminary in St. Louis, Missouri. He came to Texas in 1876, where he served as pastor of the Trinity Lutheran Church at West Yegua (Fedor) in Lee County. In 1879, he was called to the Zion Lutheran Church in Dallas but returned in 1882 to Fedor, where he remained until his retirement in 1922 (Burke 1981; Strandtmann 1950). Birkmann was the observer at Fedor for 1885. His correspondence has not been located and neither he nor Fedor are mentioned in the published report. The activity for which Birkmann is best remembered is his collection of hymenopterous insects made during the period from 1885 until 1922. He died on 17 May 1944 in Giddings, Texas.

RICHARD POLK BURHANS (1857–?) was born in New York, but by 1880 was working as a journalist in Denison, Texas. The City Directory for 1888 lists Burhans as an editor of the Denison Morning News. Burhans died sometime prior to 1929. Neither Burhans nor Denison are mentioned in the published report.

THOMAS WILSON FLORE (1822-1907) was born near Waynesville, Ohio, on 25 November 1822. As a young man, he became interested in natural history and in alleviating the suffering of both animals and humans (McAfee 1939). He read medicine with Dr. A. B. James of Brookville, Indiana, and later graduated

from the Ohio Medical College. Florer served as a surgeon during the Civil War. He later purchased a plantation near Meridian, Mississippi, where he lived for five years. After moving to Waxahachie, Texas, he practiced medicine and served two terms as postmaster (Anon. 1892). In 1903, he moved to Corsicana where he lived until his death on 10 May 1907. At the time of his death, he had a small collection of birds that he left to his daughter (McAfee 1939).

Florer initiated the “Bobolink controversy” with his claim that he had seen the species in Waxahachie during the spring of 1883 (Florer 1883). This claim was doubted by Cooke, who believed that Florer was “not much of an ornithologist” (Cooke 1885). There is no reference to either Florer or the Waxahachie station in the published report.

FRITZ GRASSO (1829–1908) was born on 14 June 1829 in Beverungen, Prussia. During the Civil War, he served with the First Texas Cavalry Volunteers (Grasso 1907). By 1870, he was living in Bexar County and working as a merchant. In that same year he moved to Kendall County where by 1880 he owned over 1,200 acres on Curry’s Creek near Sisterdale.

Grasso is included in Cooke’s list of observers under the name “F. Grasst,” an obvious error since no person named “Grasst” was then living in Kendall County. None of Grasso’s correspondence has been located and neither he nor Sisterdale are mentioned in the published report. Grasso moved in late 1884 to a small farm in Gillespie County where he died on 25 September 1908.

IRA BELKNAP HENRY (1839–1890) was born in Erie County, Pennsylvania, on 2 August 1839. In 1842, his family moved to a farm near Polo, Illinois. As a young man he attended the seminaries at Mt. Morris and Aurora, Illinois. Following service in the Civil War, he enrolled at Northwestern University and the Garrett Biblical Institute. After graduation, he married Nellie Lavillia Case. He served various churches in Illinois until failure of his health due to a respiratory disorder. In December 1878, hoping to find a more favorable climate, he moved to San Antonio. In the summer of 1880, he purchased a farm near Mason, Texas. He preached at the local church until September 1882, when a health crisis forced him to resign (Galeener and Hobbs 1890; Anon. 1890). While recovering, he turned to the study of natural history as a means of therapy.

Ira Henry was a skilled taxidermist with an interest in both birds and mammals. His health was so poor that he could not climb trees to examine nests (Henry 1884). Therefore, he was unable to provide complete information about breeding; yet, the published report contains his observations for 23 species or subspecies of birds. Henry was credited with the rediscovery of the Mexican subspecies of the Lesser Goldfinch which had not been seen since collection of the type nearly 40 years earlier. The precious specimen was almost lost to a hungry mouse that ate a small portion of the head (Henry 1885).

In 1885, Henry provided information on the occurrence of the House Sparrow at Mason, Texas, to the Division of Economic Ornithology and Mammalogy (Barrows 1889). Specimens of mammals in the U.S. National Museum collected by Ira Henry include the types of the Plains Pocket Gopher, Mearns’ Hog-nosed Skunk, and the Spotted Skunk (Poole and Schantz 1942).

In 1887, Henry resumed his work at the Methodist Church in Mason. In June 1890, he was appointed census enumerator, a job that quickly taxed his strength and resulted in his death on 11 August 1890.
ANNA GLIDDEN HOUTS (1848–c. 1887) was the only woman in Texas and one of only eight in the entire district to participate in the migration study (Cooke 1888). She was born in Scioto County, Ohio, and married Frank M. Houts around 1875. In late 1879, Frank and Anna purchased a farm near Decatur, Wise County, Texas. In March 1884, Anna wrote to Cooke that she wished to participate in his study. Disappointingly, her report of June 1884 contained the names of only nine species of birds. Anna admitted that she had little knowledge of birds. She indicated that she would do better next season and would soon begin collecting meteorological data (Houts 1884). There is no record of further correspondence, and the published study contains only a single reference to Wise County, the occurrence of Eskimo Curlew on 2 April 1884.

GUSTAVE JERMY (1833–1908) was born into a prominent Hungarian family on 31 August 1833. He received his doctorate while still in his 20s and in 1862 accepted a position as director and professor of natural history in the gymnasium at Kis Ujszallas, Hungary. In 1864, he became the director of the gymnasium at Iglo, where he remained until 1880. Although botany and geology were his specialties, he also lectured on chemistry, mineralogy, astronomy, and anatomy. He reportedly spoke fluent Latin as well as fourteen other languages (Jermy 1936a).

Gustave and his sons immigrated to the United States in 1883, bringing with them a large collection of natural history specimens. They were unable to find a location for a museum in New York so, in November 1883, the collection was moved to San Antonio. In April 1885, the Museum of Natural History at San Pedro Park was incorporated with Jermy as its superintendent. Jermy’s European specimens formed the nucleus of the museum inventory, which eventually included 2,000 plants, 3,000 insects, 200 mounted birds and other animals such as 400 preserved reptiles native to the state. Unfortunately, the failure of the museum resulted in Jermy losing everything except his plant and mineral collections. The plants were later sold to the Missouri Botanical Gardens in St. Louis. Jermy worked for the Geological Survey of Texas from 1888 until 1890 and later made his living by consulting and selling specimens. He was assisted by his son Julius, a pharmacist, who was also an active collector and retailer of avian specimens (Jermy 1936a, 1936b).

Gustave Jermy played only a minor role in the history of ornithology in Texas. In August 1885, he obtained a collection of eggs and bird skins for the museum from Gabriel Marnock who lived at Helotes (Anon. 1885). He also provided information on the occurrence of the House Sparrow in San Antonio to the Division of Economic Ornithology (Barrows 1889). Jermy is not cited in the published migration report, his work apparently being overshadowed by that of H. P. Attwater. Jermy died on 12 July 1908.

WILLIAM LLOYD (1854–1937) was born of English parents in Cork, Ireland, and immigrated to the United States in 1876. By 1880 he reportedly lived in San Antonio, and was involved in the development and incorporation of the Alamo Cement Company (Geiser 1956). However, the only William Lloyd listed in the 1880 census of Bexar County was a herder for the sheep company of Joseph Devine and William Smith. It is not known if the corporate director and the sheep herder were the same or different persons. However, it is known that in later years Lloyd worked as a herder on the Silvercliff Ranch.

Perhaps in search of employment, Lloyd arrived at the Silvercliff Ranch near
WILLIAM LLOYD
From a photograph in the Ruthven Deane Collection,
Library of Congress

Paint Rock, Texas, in the fall of 1881 just as the owner, John Loomis, and two of his ranch hands were preparing for an extended hunt to Zavala County (Loomis 1982). The young Englishman was invited to accompany the group and, if the recollections of John Loomis are believed, this hunting trip was the pivotal experience that stimulated Lloyd to become a naturalist.

Samuel Geiser (1956) believed that Lloyd was formally educated in the zoological sciences. In contrast, Loomis (1982) claimed that Lloyd knew nothing about the outdoors when he arrived at Silvercliff. Supporting this assertion, Loomis related that while on the hunting trip to Zavala County, he shot a Red-tailed Hawk which he told Lloyd was a young turkey. The “turkey” was then cooked and eaten. When told of the ruse, Lloyd became so angry that he hardly spoke for days. In spite of this hostile response, Loomis took a liking to Lloyd and later instructed him on the preparation of bird skins. Lloyd stayed on at Silvercliff, where he herded sheep while learning about birds from Loomis and from the books and natural history journals in the ranch library. By early 1884, Lloyd was sending specimens of birds to Everett Smith of Portland, Maine, for verification (Lloyd 1884a). Working in virtual isolation, he claimed to know of no other ornithologists in Texas except Professor William Hudson at Trinity University in Limestone County. Included in one of his first reports was a list of the winter birds of the area and a mention of the “myriads” of whooping cranes and passenger pigeons seen in the Frio and Nueces canyons during the winter of 1881–1882 (Lloyd 1884b). Lloyd also contributed information on the natural history of the Black-capped Vireo (Lloyd 1884c) and the vocalizations of the White-rumped Shrike (Lloyd 1885). His observations are mentioned for 226 species and subspecies of birds in the published report.

In 1885, Lloyd was elected an associate member of the A.O.U. During the summer of 1886, Cooke proposed to Lloyd that they jointly publish a work on Texas birds. Lloyd declined this proposal, indicating that he was already working on a similar project with John Loomis (Lloyd 1886). His desire to publish on the birds of the Concho Valley was realized when his annotated list of 253 species and subspecies was published in the July 1887 issue of The Auk.

Lloyd spent much of 1887 collecting in West Texas for G. B. Sennett, and during 1888–1889 he collected in Mexico for F. D. Godman. From July 1890 until March 1892, he worked as a collector for the Division of Economic Ornithology and Mammalogy (Maxwell 1979). His activities for the next six years are unknown. Although he reportedly opened a business in New Orleans in 1898 known as “The Old Curiosity Shop,” the city directory for that year gives his occupation as “engineer.” Later directories list him as a “machinist” (1900) and “clerk” (1906). He died in New Orleans on 29 October 1937.

WALTER NEGLEY (1850–1890s) was born in Hagerstown, Maryland. His father was a banker and financier, but Walter and his younger brother, William, chose to become ranchers in Texas. About 1875, William bought land in Maverick and Dimmit counties. He was later joined by Walter and they developed a large sheep ranch about 25 miles from Eagle Pass (Grobe and Grobe n.d.).

In 1882, Edgar Small of Hagerstown, Maryland, published a paper describing the abundance and nesting of the Great Horned Owl near Eagle Pass. The collector credited by Small as his source of information was Walter Negley. Negley was an eager participant in the migration study, declaring that he would take “daily notes,
which if not full, will be accurate” (Negley 1884a). His first field notes were sent in March 1884 and he promised to send Cooke the notes on eggs that he had collected for Edgar Small (Negley 1884b). Negley’s observations on plant growth and animal activity during the spring of 1884, as well as his dates for 20 species and subspecies of birds, are cited in the published report. Walter Negley died sometime in the early 1890s while on a return visit to Hagerstown.

MATTHIAS NEWELL (1854–1939) was born in Zerf, Bavaria, where his father was a forest warden. The Newell family immigrated to the United States while Matthias was still a child. In 1868 he joined the Society of Mary at Dayton, Ohio. In 1870, he was sent to San Antonio where he remained until 1873. He was then sent to Baltimore and New Orleans before returning to San Antonio in 1881, where he taught at St. Mary’s College until August 1885 (Anon. 1939; Elbert 1939).

Newell’s contribution to the migration study is unknown. Although the published report contains several references to San Antonio, Newell is not mentioned. His main interest may have been entomology, for Julius Jermy later recalled that he and Newell used to meet regularly at San Pedro Park to catch butterflies (Jermy 1936b).

Newell was transferred from San Antonio to Stockton, California, and then to the Hawaiian Islands where he remained for 38 years. In Hawaii, he supervised the importation of plants, fruits, seeds, and vegetables at the Port of Hilo. He was also involved in a reforestation project and assisted the Association of Planters in combating infestations of sugarcane (Anon. 1939; Elbert 1939).

In 1924, Newell returned to the University of Dayton where he taught until his retirement. His collection of plants, birds and insects went to the Bishop Museum in Honolulu. A subspecies of Townsend’s Shearwater, Puffinus auricularis newelli, was described from a specimen collected by Newell in Hawaii (Mearns and Mearns 1992). Newell died in Dayton, Ohio, on 12 October 1939.

HENRY F. PETERS (1825–1911) was born in England on 29 January 1825. He came to the United States in 1849 and, by 1850, was living in Texas. Peters moved to New Orleans in 1853 but returned in 1857 to Gilmer, Texas, where he worked as a gunsmith. During 1863, he served for a six-month period in the confederate army. By 1870, Peters was living at Bonham in Fannin County where he was again working as a gunsmith. He also supplemented his income during the mid-1880s by hunting birds for the millinery trade.

Peters did much of his birding at his residence in Bonham, a location so good that “Almost every passing bird [gave him] a visit” (Peters 1885a). When uncertain of an identification, he would collect the bird and prepare a skin for verification by Cooke. His correspondence is filled with stories of the birdlife of Fannin County and northeast Texas. Amazingly, he related that there were no mockingbirds in Fannin County in 1850. By 1857 they were present, but rare, becoming by 1885 the most common resident species (Peters 1885b). Peters’ stories about the Great Horned Owl and Painted Bunting were so well-written that they were included verbatim in the published report (Cooke 1888, pp. 122 & 220).

Peters’ records are given for 61 species and subspecies of birds. His report of two Scaled Quail being killed near his home is controversial. This species had not been seen before, nor has it been seen since, in Fannin County. Another unusual observation was the occurrence of Mountain Bluebirds during three or
four successive winters before 1880 (Peters 1886). Peters reported that Bobolink had been increasing since the 1870s, and that in the spring of 1884, he had prepared about 300 of their skins for a millinery firm in New Orleans. Cooke was reluctant to accept this claim, believing instead that Lark Bunting had been mistaken for Bull. Texas Ornith. Soc. 25(2): 1992
Bobolink. When questioned on this issue, Peters sent George Ragsdale the fragmented skin of a bird that he believed to be a Bobolink (Peters 1888). The skins sent to Cooke for identification were usually returned; thus, there are no voucher specimens to document questionable records. Peters died in Bonham on 14 January 1911.

GEORGE HENRY RAGSDALE (1846–1895) was born in Knox County, Tennessee, on 1 April 1846. In 1867, the Ragsdale family moved to a farm three miles southeast of Gainesville, Texas. Ragsdale began to collect ornithological specimens around 1877 and by the early 1890s had amassed a collection of 600 eggs and skins of 165 types of birds (Casto 1980). Ragsdale was in poor health during the spring of 1884 and most of his observations were made near the city limits of Gainesville or at a small tract of land on the family homestead (Ragsdale 1884). The list of spring migrants sent during June 1884 contained the names of 122 species and subspecies of birds. Impressed by Ragsdale’s knowledge of birds, Cooke nominated him in the fall of 1885 for an associate membership in the A.O.U. (Ragsdale 1885a). Local attention was also focused on Ragsdale’s work when one of the city newspapers included portions of his 1885 report in a special promotional issue for their county.

Ragsdale did not initially know any of the other participants, but later corresponded with both H. F. Peters and Ira Henry. His letters suggest a skepticism regarding the identification of the Bobolink by Peters and Florer. Significantly, Cooke mentions neither of these observers in his treatment of this species (Ragsdale 1885b).

Cooke’s published report contains Ragsdale’s observations for 115 species and subspecies of birds. Much of his migration data is found in The Bird Life of Texas in which Oberholser (1974) acknowledges Ragsdale for his “valuable encouragement and information.” The strangeness of this acknowledgment becomes apparent when it is realized that Oberholser did not join the Division of Economic Ornithology and Mammalogy until the autumn of 1894 (Mearns and Mearns 1992). By this time, Ragsdale was in a state of declining health that seriously hindered his work and resulted in his death on 25 March 1895. Since Oberholser did not visit Texas until March 1900, it is obvious that the two men never met. It is also unlikely that they corresponded, and it must be concluded that Oberholser’s high regard for Ragsdale was based on the published work of the older man rather than on a personal relationship.

THOMAS W. SCOTT (?–?) is a person of unknown identity. Although he was titled “Dr.,” it is not known whether he was a medical doctor or a dentist. The deed records for Val Verde County show a Thomas Scott to have purchased a lot in Del Rio in June 1883 only to sell it in April 1884. The only Thomas W. Scott listed in the 1886 edition of Polk’s Medical and Surgical Directory was an 1884 graduate of Missouri Medical School who was practicing in Rushville, Illinois. Scott’s correspondence has not been located, and neither he nor Del Rio are mentioned in the published report.

Significance of the Migration Study

The migration study of 1884–1885 represents the first organized effort to gather statewide information on birds. The observations made by these pioneer naturalists provide a unique perspective on the natural history of the birdlife of Texas.
before the ecological alterations of the 20th century. Both the published and unpublished observations of the study were extensively used by Oberholser (1974) in preparing *The Bird Life of Texas*.

The search for volunteers to participate in the study was instrumental in identifying those Texans with ornithological talent. *Coale's Hand List of Ornithologists and Oologists in the United States and Canada*, published in 1887, includes the names of ten of the observers from Texas. William Lloyd and George Ragsdale, the most frequently cited observers, later collected commercially for ornithologists outside Texas. Many of the observations made by H. P. Attwater were incorporated into his papers on the nesting habits of Texas birds and the birds occurring in the vicinity of San Antonio (Attwater 1887, 1892).

**Acknowledgments**

This study was made possible through the assistance of Lynda Garrett of the Patuxent Wildlife Research Center who supplied copies of the reports and correspondence from the observers in Texas. I am also grateful to Lee Milazzo of the Southern Methodist University Archives for the use of material from the Samuel Geiser Collection. Mary-Louise Mussell of the General Commission on Archives and History of the United Methodist Church and Julius DeVoss of the Mason County Historical Commission provided information on Ira B. Henry. Ralph Thayer, S.M., and Charles Neumann, S.M., of St. Mary's University graciously provided biographical material on Matthias Newell. This study was supported by a Summer Development Leave granted by the University of Mary Hardin-Baylor.

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First Breeding Record of *Aechmophorus* Grebes in Texas

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The genus *Aechmophorus* contains two sibling species confined to North America, the Western Grebe, *A. occidentalis* (Lawrence), and the Clark’s Grebe, *A. clarkii* (Lawrence). The separation of *A. occidentalis* into these two entities was based on Ratti’s (1979) work, with the American Ornithologist’s Union elevating them to species status in 1985.

Balmorhea Lake, Reeves County, is one of the primary wintering areas in Texas for *Aechmophorus* grebes. The lake is small, approximately 573 acres (232 ha), and is divided into two unequal parts by an extensive peninsula. The number and species of wintering grebes on the lake can be determined by making surveys of the two parts of the lake with a telescope. The summer of 1991 was a particularly wet year and as a result the water levels at Balmorhea were well above normal. This resulted in water extending back into the surrounding vegetation and providing potential nesting habitat for grebes.

**Status of *Aechmophorus* Grebes in Texas**

Western Grebes regularly winter in the Trans-Pecos region of Texas and are sporadic winter visitors throughout the entire state. The number of individuals present at Balmorhea Lake during a given winter usually varies between 10 and 15 birds. Wintering individuals arrive in mid-September and remain until late May. There are two summer records for *A. occidentalis* in Texas. Five birds spent the summer at Balmorhea Lake in 1988 (Lasley and Sexton 1988) and two individuals summered at the same location in 1991.

Clarke’s Grebes also appear to be regular winter visitors in Trans-Pecos Texas. However, thorough documentation in Texas did not occur until after the taxonomic split. Currently no records exist for this species in Texas outside of the Trans-Pecos. Clark’s Grebes usually arrive in mid-September with the Western Grebes and depart in late April, about a month earlier than the Westerns. The number of *A. occidentalis* found in a typical winter far exceeds the number of *A. clarkii* present in the Trans-Pecos. The largest number of Clark’s Grebes recorded at Balmorhea Lake from 1986 to 1992 was three. During the same time period the highest number of Westerns was 21. As with the Western Grebe, there are two summer records for Clark’s Grebe in Texas. These records pertain to lingering wintering birds or late migrants. The first summer record was two individuals that remained until 27 June 1988 at Fort Hancock Res., Hudspeth County (Lasley and Sexton 1988). The second was a single bird photographed at Balmorhea Lake 10 June 1991 (Lasley and Sexton 1991).
Successful Breeding of *Aechmophorus* Grebes

On 20 October 1991, I observed an adult Western Grebe with two downy chicks riding on its back at Balmorhea Lake. During the observation of these birds an adult Clark’s Grebe brought a small fish to the Western and fed one of the chicks. For the next 45 minutes this behavior continued with the Clark’s repeatedly catching small fish and feeding the chicks. The adult birds called to each other frequently during this period. Approximately one hour after the initial discovery the chicks dismounted the Western parent and climbed onto the back of the Clark’s. After the exchange the Western began feeding the chicks. The chicks were downy and ash gray in color with dark eyes and a black bill. During this time two other Western Grebes were present on the lake. Neither of the other grebes attempted to assist with feeding the chicks and the feeding of young by non-parental adults in *Aechmophorus* grebes is not known to occur (Storer pers. comm.). This strongly suggests that the Clark’s was one of the parent birds. On 4 November, the chicks were seen primarily in the water and the Clark’s would not allow them on its back. By 10 November the chicks were no longer riding on either parent. In late November the chicks’ plumage began to resemble a muted version of the adults’, white below and blackish-gray above. The chicks were about two-thirds the size of the parent birds and the chicks were actively seeking food. In addition, by this date the family group would remain away from the other wintering Western Grebes on the lake. This behavior continued throughout the winter.

By late December the chicks had attained adult plumage. They were still being fed by the parent birds. The young were still somewhat smaller than the adults and had grayer plumage. Both of the chicks had intermediate plumage characteristics similar to those described by Ratti (1979). However, the young strongly resembled Western Grebes. Careful examination was required to determine plumage differences between the young and the numerous Western Grebes on the lake. The bill color of the chicks was like that of a typical Western Grebe: yellowish-green. The dark cap extended to the eye, including the lores, but not below as in a typical Western Grebe. Except at close range these birds could not be separated from typical Western Grebes. The similarities between these birds and Western Grebes may explain the small numbers of intermediate birds reported.

The chicks, when originally discovered, were probably less than two weeks old based on plumage differences between older chicks described by Ratti (1979). This suggests that the birds hatched in early to mid-October. The incubation time for Western Grebes is about 23 days (Terres 1980). Therefore, the eggs were probably laid in mid-September. This time frame coincides roughly with the normal arrival time of wintering individuals. Visits to the area by several observers from July through September did not reveal the presence of the Clark’s Grebe, even though incubation is usually shared in Western Grebes (Bent 1919). This suggests the possibility that the Clark’s Grebe was an early migrant that paired with one of the summering Western Grebes upon arrival. The successful nesting upon the Clark’s Grebe’s arrival suggests that the two summering Western Grebes were the same sex.

Hybridization between Western and Clark’s Grebes has been previously documented (Ratti 1979). Ratti’s observations were made prior to the official recognition of Clark’s Grebe as a species. Ratti observed mixed pairs at Bear River National Wildlife Refuge in Utah during the summers of 1975 and 1976. The

occurrence of mixed pairs represented only 1.2% of the 1,185 pairs observed (Ratti 1979). Of these 1.2% only one third were successful breeders. This may account for the low number of intermediates seen in large nesting colonies (Nuechterlein 1981).

Western Grebes regularly breed in northwestern New Mexico (Hubbard 1978). Nesting has been reported as far south as Elephant Butte Lake in south-central New Mexico (Hubbard 1986). Clark's Grebes are sporadic breeders in southern Colorado (Kingery 1987). Clark's Grebes have also been recorded annually in the summer in several northern New Mexico locations (Hubbard 1986, 1987, 1988) and have been documented nesting at Elephant Butte Lake (Hubbard 1986). Caballo Lake, the closest documented nesting location of both *Aechmophorus* grebes, is approximately 400 km NW of Balmorhea Lake (Hubbard pers. comm.). This represents an unexpected first breeding record for Texas.

Acknowledgments

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NOTES AND NEWS

Information for Contributors

ATTENTION AUTHORS.—The *Bulletin of the Texas Ornithological Society* is a semi-annual journal which publishes original research reports and short communications in the field of ornithology. Articles on a wide range of subjects are accepted, including documentation of new Texas records, interpretations of laboratory and field studies, historical perspectives on Texas ornithology, and developments in theory and methodology. Although the emphasis is on Texas birds, the *Bulletin* accepts papers which advance the knowledge of birds in general.

Manuscripts, including tables, should be typed and double-spaced on one side of \(8\frac{1}{2}\times 11\) inch (22 \(\times\) 28 cm) white paper. Allow 3 cm margins on all sides. Manuscripts may be printed using a high-resolution dot-matrix or letter-quality printer. The last name of the first author must be at the top of each page of the manuscript and on the back of every figure. Submitted articles should follow the format observed in this and subsequent issues of the *Bulletin of the Texas Ornithological Society*. Feature articles should include an abstract and a “Literature Cited” section. Short Communications do not need an abstract.

Scientific and common names of North American birds must follow the 1983 A.O.U. Check-list and supplements. The 24-hour clock (0730), the continental dating convention (3 January 1989), and the metric system should be used.

Submit an original and two complete copies of the manuscript. Each manuscript will be subject to editing and will normally be reviewed by at least two persons who are knowledgeable in the subject. The reviewers will provide the editor with advice on the article’s acceptability and accuracy. If the article passes review and is correct in form, it will be scheduled for publication. A voluntary page charge of $35 per printed page will be assessed. Payment of complete page charges will normally result in earlier publication. Accepted articles will be published on a “space available” basis if the page charges are not paid. Authors will be sent proofs of their articles prior to the final printing; information on ordering reprints will be supplied at that time.

Articles, reports and other items submitted for inclusion in the *Bulletin* should be sent to the editor, Karen L. P. Benson, Department of Wildlife & Fisheries Sciences, Texas A&M University, College Station, Texas 77843-2258.

ARTISTS.—The *Bulletin* encourages submission of original artwork and photographs of Texas birds to be used on the inside front cover of the publication. Send art and photos to Karen L. P. Benson, Department of Wildlife & Fisheries Sciences, Texas A&M University, College Station, Texas 77843-2258.

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