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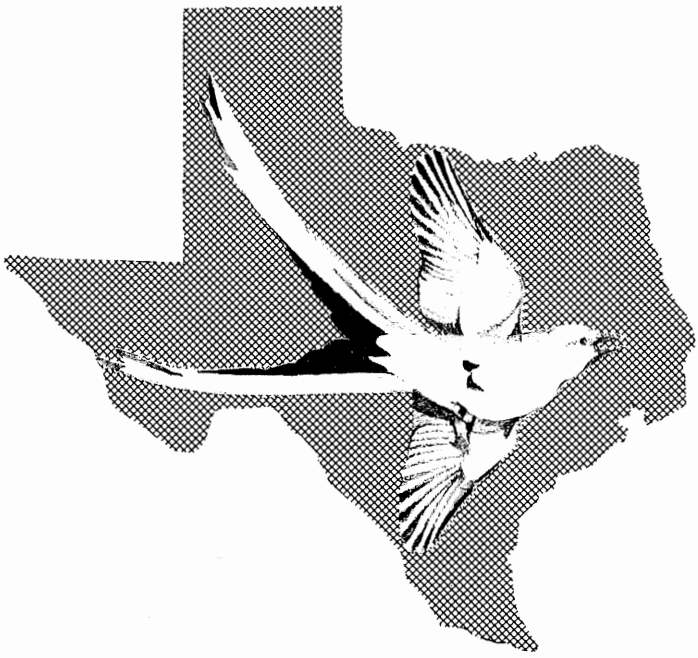

1996

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Contents

Texas Bird Records Committee Report for 1995

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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 1995. For information on previous actions of the TBRC, see Arnold (1984, 1985), Lasley (1988, 1989, 1990, 1991), and Haynie (1992a, 1992b, 1993, 1995). The committee requests and reviews documentation on any record of a TBRC Review List species (see end of report) as well as any record of any species if requested to do so by a member of the TBRC. The TBRC reached a final decision on 94 records during 1995: 68 records of 40 species were accepted and 26 records of 22 species were not accepted, an acceptance rate of 72% for this report. There were 123 observers who submitted documentation (to the TBRC or to other entities) that was reviewed by the committee during 1995.

This report officially adds 3 species to the Texas state list: Collared Forest-Falcon, Green Parakeet, and Red-crowned Parrot. The TBRC voted to add Green Parakeet and Red-crowned Parrot since it was agreed that populations of these two species in the Lower Rio Grande Valley meet the strict criteria for well-established species, whether as a result of natural occurrence, introduction, or both. During 1995, the committee also accepted a photographic record of "Common" Teal, the Palearctic race of Green-winged Teal (see "Accepted Review List C Records" below). The above actions brought the official Texas state list at the end of 1995 to 593 species in good standing, while the official Presumptive Species List remained at 5 species. Several records which should complete circulation through the TBRC in 1996 will represent new Texas species. In addition, several anticipated species "splits" by the American Ornithologist's Union will result in a larger state list as well.

The TBRC solicits reports of any species on the Review List as well as any species not previously accepted for Texas. The committee desires written descriptions as well as photographs, video, and audio recordings if available. If anyone has information concerning a Review List 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 consult "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 1995. 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 known returnees are excluded. The number(s) will be listed for all species which appear on Review Lists A and C as currently amend-

ed (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** but only if 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 or video recordings are on file with the TBRC, the Texas Photo Record File (TPRF) (Texas A&M University) number is also given. If an audio 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 this information has been supplemented with a full range of dates the bird(s) was present if that information was made available to the TBRC later. All locations in *italics* are counties.

TBRC Membership.—Members of the TBRC during 1995 who participated in decisions listed in this report are: John Arvin, Chair, Keith Arnold, Academician, Greg Lasley, Secretary, Carl Haynie, Martin Reid, Chuck Sexton, David Wolf, Gail Diane Yovanovich, and Barry Zimmer. During 1995, David Wolf and Barry Zimmer retired from the committee, and Mark Lockwood and Willie Sekula were elected new members. The Chair, Academician and Secretary were all re-elected.

Contributors.—David Arbour, Rich & Nanette Armstrong (R&NA), John Arvin, Audrey Ashcraft, Mike Austin, Jeanne Ayers (JAy), Sue Barton, Giff Beaton, Bob Behrstock, Mike Bishop, Lori Black, Hazel Bluhm, Johnny Boerjon (JoB), Julie Boone, David Bradford (DaB), Tim Brush, John Buckman (JBu), Frank Bumgardner, Winnie Burkett, Sheriton & Dorothy Burr (S&DB), Alan Byboth, Dawn Carrie (DCa), Ronnie Carroll, Mason Cloud, Don Connell, Mel Cooksey (MCo), Chris Corben, Scott Crabtree, Wesley Cureton, Scott Cutler (SCu), David Dauphin, Don Delnicki (DDe), Elizabeth Dumont, Lewis Dumont, Mark Elwonger, Sterling Essenmacher, Steve Feil, Phyllis Frank, Tony Frank, Charles & Louise Gambill (C&LG), John Gee (JGe), Jeff Gordon, Peter Gottschling, William Graber, Mary Gustafson, Bruce Hallett, Peggy Harding, Jim Haw, Carl Haynie, Jim Holmes (JHo), Ronald Huffman, Lisa Hug, James Hunter (JHu), Bob Johnson, Tom Johnson, Jane Kittleman, Sanford Komito, Greg Lasley, Mark Lockwood, Barry Lowes, Guy Luneau (GLu), Donna & Ed Maddox (D&EM), James & Betsy Massey (J&BM), Brad McKinney, Charles Mills, Mary Ann Moore (MAM), Robert Moore, Jim Morgan, Jack & Elaine Morman (J&EM), John Muldrow (JMu), Ken Nanney, Bruce Neville, Nancy Newfield, Darrin O'Brien, Vicki O'Brien, Andy O'Neil, Brent Ortego, Jim Paton, Mike Patterson, Michael Pawlick (MPa), Dwight Peake, Bruce Peterjohn, Nick Pulcinella, Warren Pulich, Joel Reese, Martin Reid, Will Risser, K. C. Roberts (KCR), Phil Rostron, Will Russell (WRu), John & Betsy Searight (J&BS), Willie Sekula, Larry Semo, Chuck Sexton, Ken Seyffert, J.W. Sifford (JWS), Richard C. Sims (RCS), Richard M. Sims (RMS), Ruth Ann & Clyde

Smith (R&CS), Evelyn Solomon (ESo), Alexander & Elizabeth Spencer (A&ES), Ernest Stokely, Peder Svingen, Elliot Tramer, Ed Wetzel, W. G. Whitcomb (WGW), Matt White, John Whittle, Sue Wiedenfeld, Dalton Willis (DWi), David Wolf, Alan Wormington, Gail Diane Yovanovich (GDY), and Barry Zimmer.

Acknowledgments.—The TBRC is very grateful to the many contributors listed above, without whom this report would not be possible. The author would especially like to thank Greg Lasley for reviewing a draft of this article.

Additional Abbreviations.—*AFN* = *Audubon Field Notes*; BBNP = Big Bend National Park; FM = Farm to Market road; GMNP = Guadalupe Mountains National Park; NWR = National Wildlife Refuge; SNA = State Natural Area; SP = State Park; SR = State Route; UTEP = University of Texas, El Paso.

Accepted Records

Pacific Loon (*Gavia pacifica*) (47). One was at the HL&P Cooling Ponds, *Chambers* on 18 December 1993 (**DD**; 1994-35). One was on Lake Murvaul, *Panola* on 26 December 1993 (**KN**, **HB**; 1994-18). One adult was photographed on Lake O' the Pines, *Marion* during its stay 20–26 March 1994 (**GLu**, **GDY**, MW, KN; 1994-52, TPRF #1230). One adult was photographed in the Rockport harbor, *Aransas* on 30 Mar 1994 (**JHo**, **JB**; 1994-106, TPRF #1231). One was on Lake Livingston, *San Jacinto* and *Polk* on 7 May 1994 (**AW**; 1994-105).

Red-necked Grebe (*Podiceps grisegena*) (10). Two were photographed on Lake Wright Patman, *Bowie* during their stay 31 December 1993–27 February 1994 (DA, GLu, GDY, DO, GL, HB, CM, KN; 1994-23; TPRF #1221). A photograph documenting this record was published in *AFN* 48:224.

Sooty Shearwater (*Puffinus griseus*) (10). One was photographed 82 miles off Port O'Connor, *Calhoun* on 23 July 1994 (CS, BO, GL, CH, DaB, J&EM; 1994-129; TPRF #1275).

Audubon's Shearwater (*Puffinus lherminieri*) (13). Sixteen birds, some videotaped, were 70 miles off Port O'Connor, *Calhoun* on 28 May 1994 (ME, DP, DaB, TF, PF; 1994-98; TPRF #1268).

Leach's Storm-Petrel (*Oceanodroma leucorhoa*) (9). One was 50 miles off Port Isabel, *Cameron* on 12 September 1992 (MR, DP, RC; 1992-121). Four birds, some videotaped, were 65–85 miles off Port O'Connor, *Calhoun* on 28 May 1994 (ME, DP, DaB, MA, TF, PF; 1994-95; TPRF #1267). Four birds, some photographed, were 85 miles off Port O'Connor on 23 July 1994 (BO, GL, CH, DaB, J&EM, DP, ME; 1994-127; TPRF #1277). Between six and ten were 80 miles off Port O'Connor on 20 August 1994 (ME; 1994-139).

Band-rumped Storm-Petrel (*Oceanodroma castro* (10). Twenty-five birds, some videotaped, were 65–85 miles off Port O'Connor, *Calhoun* on 28 May 1994 (ME, DP, DaB, MA, TF, PF; 1994-96; TPRF #1266). Ten birds, some photographed, were 85 miles off Port O'Connor on 23 July 1994 (BO, GL, J&EM; 1994-128, TPRF #1276). Four were 80 miles off Port O'Connor on 20 August 1994 (ME; 1994-138). The committee continues to be surprised by the relative abundance of Band-rumped Storm-Petrels in Texas waters while Wilson's Storm-Petrels are virtually absent.

Glossy Ibis (*Plegadis falcinellus*). This species was recently removed from the

Review List. One adult was near Fannett, *Jefferson* on 21 March 1993 (**JW**; 1994-28). One adult was near Norias, *Kenedy* on 5 February 1994 (**BO**; 1994-44). One adult was in *Chambers* from 16–22 April 1994 (**MA**, BB; 1994-109). One adult was at Anahuac NWR, *Chambers* on 7 May 1994 (**AW**; 1994-104). One to two were photographed at Mitchell Lake, *Bexar* during their stay 17–31 May 1994 (**WS**; 1994-124, TPRF #1281). One to two adults were photographed at Anahuac NWR during their stay 10 July–4 September 1994 (**JW**, GL; 1994-130, TPRF #1278). Two adults were at Attwater Prairie Chicken NWR, *Colorado* on 5 September 1994 (**GL**; 1994-144).

Masked Duck (*Oxyura dominica*) (32). One female was collected near Hargill, *Hidalgo* on 9 January 1977, but the specimen was only recently documented and photographed (**DDe**; 1994-48, TPRF #1235). One female-plumaged bird was at Riviera, *Kleberg* from 11–22 September 1993 (**DWi**, NN; 1994-45). One to five female-plumaged birds were photographed at Attwater Prairie Chicken NWR, *Colorado* during their stay 11–25 December 1993 (**JM**, BH; 1994-32, TPRF #1224). Two to eight birds (including up to two drakes) were photographed at Brazos Bend SP, *Fort Bend* during their stay 11 December 1993–28 April 1994 (**PG**, TF, PF, JBu, GDY, DCa, JM; 1994-2, TPRF #1218). A photograph of one of these birds was published in *AFN* 48:225.

Short-tailed Hawk (*Buteo brachyurus*) (2). One light-morph adult was photographed at Bentsen SP, *Hidalgo* on 8 March 1994 (**BM**; 1994-49, TPRF #1229). Several reports of single birds in 1994 and 1995 are in circulation.

Collared Forest-Falcon (*Micrastur semitorquatus*) (1). One light-morph adult was videotaped and tape recorded at Bentsen SP, *Hidalgo* during its stay 22 January–24 February 1994 (**G&LG**, ED, CC, LH, JMu, GL, JAy, JK, SK, GDY, CS, JG, MA, CH, BM, ME, BO; 1994-40, TPRF #1227, TBSL #206-01). In addition, a photograph documenting this first record for North America was published in *AFN* (48:225).

Northern Jacana (*Jacana spinosa*) (21). Two adults and one immature, the latter of which was photographed, were in Olmito, *Cameron* from 15 March–18 April 1993 (MPa, NP; 1994-118, TPRF #1233). One adult was photographed at Santa Ana NWR, *Hidalgo* during its stay 5 April–10 May 1994 (BM, LS; 1994-92, TPRF #1264).

Surfbird (*Aphriza virgata*) (4). One was photographed at Port Aransas, *Nueces* during its stay 4–11 April 1975 (S&DB; 1994-87, TPRF #1263).

Purple Sandpiper (*Calidris maritima*) (12). One was in Freeport, *Brazoria* on 19 December 1993 (**DD**; 1994-43).

Curlew Sandpiper (*Calidris ferruginea*) (5). One breeding plumaged adult was photographed at Pintail Lake, Santa Ana NWR, *Hidalgo* during its stay 3–7 May 1994 (**TB**, ML, BM, MPa; 1994-85, TPRF #1262). One basic-plumaged bird was photographed at Bolivar Flats, *Galveston* during its stay 24 June–7 July 1994 (**WB**, BB, GDY, DaB, WR; 1994-120, TPRF #1274).

Ruff (*Philomachus pugnax* (19/16). One reeve was near Anahuac NWR, *Chambers* on 21 April 1994 (**JHu**; 1994-88).

Little Gull (*Larus minutus*) (23/19). One adult was photographed at Lake Wright Patman, *Cass & Bowie* during its stay 31 December 1993–9 February 1994 (**CM**, GLu, GDY, GL, PH, HB, KN; 1994-22, TPRF #1222). One adult was

at Lake Waco, *McLennan* from 12 December 1993–9 January 1994 (**FB**, JMu; 1994-1).

Black-headed Gull (*Larus ridibundus*) (7/6). One adult was photographed at Lake Wright Patman, *Bowie & Cass* during its stay 31 December 1993–18 February 1994 (**CM**, GL, GLu, JGe, PH, HB; 1994-31, TPRF #1223). A photograph of this bird was published in *AFN* 48:226.

Mew Gull (*Larus canus*) (5). One adult was found in Arlington and photographed in Fort Worth, *Tarrant* during its stay 22 January–6 February 1994 (**CH**, JWS; 1994-39, TPRF #1226).

California Gull (*Larus californicus*) (28). One adult was at North Padre Island, *Kleberg* on 30 January 1992 (**MCo**; 1992-53). One adult was at the Arlington Landfill, *Tarrant* on 12 February 1994 (**R&NA, PR**; 1994-47).

Thayer's Gull (*Larus thayeri*) (21). One adult was at High Island, *Galveston* on 16 April 1994 (**WRu, BB**; 1994-108).

Lesser Black-backed Gull (*Larus fuscus*) (64/51). One adult was photographed southwest of Sea Rim SP, *Jefferson* during its stay 23–26 April 1994 (GL, PS, SB; 1994-103, TPRF #1271).

Glaucous Gull (*Larus hyperboreus*) (56). One first- or second-winter bird was photographed at Boca Chica, *Cameron* on 26 April 1994 (**BM**; 1994-93, TPRF #1265). One first-summer bird was photographed at Bolivar Flats, *Galveston* during its stay 2–22 May 1994 (**KN**, AW, JW; 1994-100, TPRF #1270).

Great Black-backed Gull (*Larus marinus*) (18/14). One third-year bird was at Sea Rim SP, *Jefferson* on 20 March 1994 (**WG**; 1994-53).

Black-legged Kittiwake (*Rissa tridactyla*) (43). One first-winter bird was photographed on Mustang Island, *Nueces* on 1 December 1993 (**CC, LH**; 1994-16, TPRF #1234).

Bridled Tern (*Sterna anaethetus*) (12). One immature and one adult bird were off Port Mansfield, *Willacy* on 26 September 1993 (**RC**; 1994-125). Eighteen to twenty birds, some photographed and videotaped, were 65–85 miles off Port O'Connor, *Calhoun* on 28 May 1994 (ME, DP, DaB, TF, PF; 1994-97, TPRF #1269).

Northern Saw-whet Owl (*Aegolius acadicus*) (14). One adult was tape recorded at Tejas campsite, GMNP, *Culberson* on 11 May 1994 (**GL**; 1995-81, TBSL #215-01).

Green Violet-ear (*Colibri thalassinus*) (14). One female was mist netted and photographed in Driftwood, *Hays* on 14 May 1994 (**MB**, DC, JA; 1994-119, TPRF #1272). One was in Helotes, *Bexar* between 16–17 May 1994 (**RH**; 1994-107).

Green-breasted Mango (*Anthracothorax prevostii*) (3). One female plumaged bird, exhibiting an iridescent green belly stripe, was videotaped in Falfurrias, *Brooks* during its stay 22–27 September 1993 (JoB, ESo, AO; 1994-30, TPRF #1273). Female and immature Green-breasted Mangos can be confused with Black-throated Mango in that both species have long ventrally-located dark central stripes. Initially, this record was accepted only as "mango sp.". However, research by Arvin demonstrates that such mangos can be safely identified if blue/green iridescence is seen in the central stripe. Thus, the present record was accepted on second review. Additionally, at the TBRC annual meeting on 16 September 1995, the committee voted 7-1 to elevate Texas' first record of a "mango sp." (1988-

272) to a Green-breasted Mango based not on central stripe color (which was not evident in the photos or description) but on geographic probability. Therefore, the number of accepted Green-breasted Mango records increased by two for this annual report.

White-eared Hummingbird (*Hylocharis leucotis*) (5). One adult male was photographed near Fort Davis, *Jeff Davis,* during its stay 24 July–31 August 1994 (**R&CS**, JGe; 1994-131, TPRF #1280). This bird was seen from the same two homes where 2–3 female/immature birds were photographed the previous year. This site is located at an elevation of about 6000 feet in the Davis Mountains.

Tropical Kingbird (*Tyrannus melancholicus*) (6). Two were tape recorded in Port Isabel, *Cameron* during their stay 17 May–7 July 1994 (**BM**, CS, GL; 1994-110, TBSL #216-03). Two to four were tape recorded and photographed at Rancho Viejo, *Cameron* where they've remained since 5 June 1994 (**BM**, CS, GL, JBu; 1994-111, TPRF #1232, TBSL #216-04).

Thick-billed Kingbird (*Tyrannus crassirostris*) (11). One was 7 miles east of Presidio, *Presidio* on 21 August 1994 (**D&EM**; 1994-142).

American Dipper (*Cinclus mexicanus*) (6). One was photographed in Austin, *Travis* on 5 March 1994 (**SF**, R&NA, CS; 1994-51, TPRF #1236).

Clay-colored Robin (*Turdus grayi*) (46/41). One was photographed at Bentsen SP, *Hidalgo* during its stay 30 January–10 March 1994 (GL; 1994-46, TPRF #1228).

Rufous-backed Robin (*Turdus rufopalliatus*) (4). One was found dead on the UTEP campus in El Paso, *El Paso* on 27 October 1993 (SCu, BZ; 1994-36, TPRF #1225, *UTEP #1439). The bird was found under a window at the Centennial Museum on a day following extremely strong winds.

Red-faced Warbler (*Cardellina rubrifrons*) (11). One was at Boot Spring, BBNP, *Brewster* on 7 August 1993 (**J&BS**; 1994-19). One was in El Paso, *El Paso* on 16 August 1994 (**JP**, BN; 1994-137).

Baird's Sparrow (*Ammodramus bairdii*) (11). One was along FM 505, 2.5 miles east of SR 90, *Jeff Davis* on 19 Jan 1992 (**BP**, **MG**; 1992-40).

Henslow's Sparrow (*Ammodramus henslowsii*). This species was removed from the Review List in 1994, but two records submitted before that time recently completed circulation. One was in Houston, *Harris* on 30 December 1972 (**RM**, **MAM**, **WGW**; 1992-109). Up to four were at Camp Tyler, *Smith* from 21 November 1993–31 March 1994 (GLu, DO, VO, AB; 1993-148).

Gold-crowned Sparrow (*Zonotrichia atricapilla*) (12). One immature was photographed at Hueco Tanks SP, *El Paso* during its stay 19 December 1993–2 May 1994 (**BJ**, BN, BZ, AW, LD; 1994-17, TPRF #1219).

Common Redpoll (*Carduelis flammea*) (4). One adult male was photographed in Dallas, *Dallas* during its stay 8–31 January 1994 (**A&ES**, WP, EW; 1994-24, TPRF #1220).

Accepted Review List C Records

Green-winged ("Common") Teal (*Anas crecca crecca/A. c. nimia*) (1). One adult male was photographed in east Fort Worth, *Tarrant* during its stay 30 January–1 February 1994 (**MR**, JWS, EW, MP; 1994-135). Lacking any evidence of captivity, this bird was unanimously considered to be a naturally occurring vagrant

and, as such, provided the first fully documented Texas record of "Common" Teal.

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 the simple act of not accepting a particular record should by no means indicate that the TBRC or any of its members 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.

Pacific Loon (*Gavia pacifica*). One (1994-42) at Amistad Reservoir, *Val Verde* on 28 December 1993.

Audubon's Shearwater (*Puffinus lherminieri*). One (1994-126) off Port Mansfield, *Willacy* on 26 September 1993. The committee continues to vote conservatively on purported Audubon's Shearwater records when indisputable features in separating the species from Manx Shearwater are absent from the documentation.

Glossy Ibis (*Plegadis falcinellus*). One (1994-121) near Winnie, *Chambers* on 27 April 1994. One (1994-84) at Norias, *Kenedy* on 7 May 1994.

Trumpeter Swan (*Cygnus buccinator*). One (1994-38) at Buffalo Lake NWR, *Randall* on 24 December 1993. While this swan had been tagged with a green and white neck collar, there was no additional information available to prove it wasn't a similarly marked Tundra Swan. One (1994-37) at Lake Marvin, *Hemphill* on 26 December 1993.

Northern Goshawk (*Accipiter gentilis*). One (1994-34) at Chisos Basin, BBNP, *Brewster* on 6 April 1993. One (1994-82) near Fort Davis, *Jeff Davis* on 7 May 1994.

Eskimo Curlew (*Numenius borealis*). One (1994-79) at Crystal Beach, *Galveston* on 18 April 1994. While intriguing, the description fell well short of documenting a species whose existence *anywhere* hasn't been proven in 30 years.

Long-tailed Jaeger (*Stercorarius longicaudus*). One (1994-112) at Bolivar Flats, *Galveston* on 23 April 1994.

California Gull (*Larus californicus*). One (1994-83) at Lake Balmorhea, *Reeves* on 8 May 1994.

Lesser Black-backed Gull (*Larus fuscus*). One (1993-127) on North Padre Island, *Kleberg* on 9 October 1993.

Ruddy Ground-Dove (*Columbina talpacoti*). One (1994-123) at Rio Grande Village, BBNP, *Brewster* on 13 May 1994.

Northern Pygmy-Owl (*Glaucidium gnoma*). One (1994-115) at GMNP, *Culberson* on 29 May 1994.

Broad-billed Hummingbird (*Cynanthus latirostris*). Four (1993-112) at Kickapoo Caverns SNA, *Edwards* on 24 April 1993.

Rose-throated Becard (*Pachyramphus aglaiae*). Two (1994-122) in Houston, *Harris* on 23–24 April 1994.

Black-billed Magpie (*Pica pica*). One (1993-152) in the Davis Mountains, *Jeff Davis* on 21 November 1993. A confusingly similar partial albino Great-tailed Grackle was described in this same area at about the same time, thus bringing this magpie report under question.

Bridled Titmouse (*Parus wollweberi*). One (1994-41) at Panther Junction, BBNP, *Brewster* on 26 September 1993.

Blue Bunting (*Cyanocompsa parellina*). One (1993-120) along Window Trail, BBNP, *Brewster* on 29 July 1993.

Yellow-faced Grassquit (*Tiaris olivacea*). One (1994-89) at Sarita, *Kenedy* on 22 February 1994.

Five-striped Sparrow, (*Amphispiza quinquestriata*). One (1994-90) south of Alpine, *Brewster* on 18 April 1994.

Baird's Sparrow (*Ammodramus bairdii*). One (1993-104) at Chisos Basin, BBNP, *Brewster* from 8–10 May 1993. One (1994-133) at Buffalo Lake NWR, *Randall* on 30 April 1994.

Shiny Cowbird (*Molothrus bonariensis*). One (1994-113) on Bolivar Peninsula, *Galveston* on 16 April 1994.

Streak-backed Oriole (*Icterus pustulatus*). One (1994-99) at Falcon SP, *Starr* on 6 February 1994. Photographs taken of this bird indicate it was, in fact, an immature Altamira Oriole.

White-winged Crossbill (*Loxia leucoptera*). Multiple birds (1994-26) in *Llano* on 19 November 1993.

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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.

Red-throated Loon, Pacific Loon, Yellow-billed Loon, Red-necked Grebe, Yellow-nosed Albatross, White-chinned Petrel, Greater Shearwater, Sooty Shearwater, Manx Shearwater, Audubon's Shearwater, Wilson's Storm-Petrel, Leach's Storm-Petrel, Band-rumped Storm-Petrel, Red-billed Tropicbird, Blue-footed Booby, Brown Booby, Red-footed Booby, Glossy Ibis, Jabiru, Greater Flamingo, Trumpeter Swan, Brant, American Black Duck, White-cheeked Pintail, Garganey, Eurasian Wigeon, Harlequin Duck, Barrow's Goldeneye, Masked Duck, Snail Kite, Northern Goshawk, Crane Hawk, Roadside Hawk, Short-tailed Hawk, Paint-billed Crake, Spotted Rail, Double-striped Thick-Knee, Collared Plover, Northern Jacana, Wandering Tattler, Eskimo Curlew, Surfbird, Sharp-tailed Sandpiper, Purple Sandpiper, Curlew Sandpiper, Ruff, Red Phalarope, Long-tailed Jaeger, Little Gull, Black-headed Gull (formerly Common Black-headed Gull), Heermann's Gull, Mew Gull, California Gull, Thayer's Gull, Iceland Gull, Lesser Black-backed Gull, Slaty-backed Gull, Western Gull, Glaucous Gull, Great Black-backed Gull, Black-legged Kittiwake, Sabine's Gull, Elegant Tern, Bridled Tern, Brown Noddy, Black Noddy, Ruddy Ground-Dove, Mangrove Cuckoo, Snowy Owl, Northern Pygmy-Owl, Mottled Owl, Northern Saw-whet Owl, White-collared Swift, Green Violet-ear, Green-breasted Mango, Broad-billed Hummingbird, White-eared Hummingbird, Violet-crowned Hummingbird, Costa's Hummingbird, Allen's Hummingbird, Elegant Trogon, Lewis' Woodpecker, Ivory-billed Woodpecker (presumed extirpated in Texas), Greenish Elaenia, Tufted Flycatcher, Greater Pewee, Dusky-capped Flycatcher, Sulphur-bellied Flycatcher, Tropical Kingbird, Thick-billed Kingbird, Gray Kingbird, Fork-tailed Flycatcher, Rose-throated Becard, Masked Tityra, Gray-breasted Martin, Clark's Nutcracker, Black-billed Magpie, American Dipper, Clay-colored Robin, White-throated Robin, Rufous-backed Robin, Varied Thrush, Aztec Thrush, Black Catbird, Bohemian Waxwing, Gray Silky-flycatcher, Yellow-green Vireo, Black-whiskered Vireo, Yucatan Vireo, Connecticut Warbler, Gray-crowned Yellowthroat, Red-faced Warbler, Golden-crowned Warbler, Rufous-capped Warbler, Olive Warbler, Crimson-collared Grosbeak, Blue Bunting, Yellow-faced Grassquit, Baird's Sparrow, Golden-crowned Sparrow, Yellow-eyed Junco, Snow Bunting, Shiny Cowbird, Black-vented Oriole, Pine Grosbeak, White-winged Crossbill, Common Redpoll, Lawrence's Goldfinch.

Review List B.—Species under special study by sub-committee 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 Semipalmated 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), Semipalmated Sandpiper (December-January), Pomarine Jaeger, Parasitic Jaeger, Spotted Owl, Williamson's Sapsucker, Northern Shrike.

Review List C.—Recognizable subspecies which, if they were elevated to full species status, would qualify for placement under Review List A: Reports of these subspecies will always be solicited and formally reviewed.

Green-winged ("Common") Teal, Yellow ("Mangrove") Warbler, Dark-eyed ("White-winged") Junco.

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, video, or audio recording for at least one record).

White-crowned Pigeon, Berylline Hummingbird, Social Flycatcher, Crescent-chested Warbler, Slate-throated Redstart.

Woodland Birds in Three Different Forest Types in Eastern Texas

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ABSTRACT.—Birds were censused along three routes through relatively mature forest in eastern Texas using the fixed circular plot technique. The routes sampled three forest types (based on tree species composition): (1) longleaf pine (*Pinus palustris*) savannah, (2) mixed pine-hardwood forest, and (3) bottomland hardwood forest. Each route consisted of 20 plots censused twice monthly for one year. Censusing began at sunrise, included all birds seen or heard during a 3-min period at each plot and was completed within three hours. This paper includes 78 species that are regularly associated with forests (woodland species). Nearctic-Neotropical migrant birds comprised two-thirds (52) of these woodland species. Only eight species were recorded in all three forest types during all four seasons. Three species were observed only in the longleaf pine savannah, one only in the mixed pine-hardwood forests and two only in the bottomland hardwood forests.

Introduction

The Pineywoods vegetational zone in eastern Texas is a forested area dominated by three native species of pines and numerous species of hardwoods (McWilliams and Lord 1988). This zone is divided into many different forest communities depending on various aspects of soil type, topography, vegetation cover, etc. (Gould 1969). Numerous studies have been conducted on abundances of forest or woodland birds in specific forest types (Odum 1950; Noble and Hamilton 1975; Dickson 1978; Shugart et al. 1978; Dickson et al. 1980; Johnson and Landers 1982; Conner et al. 1983). A comparison of the avian communities among the three dominant forest communities or forest types in eastern Texas might be useful in understanding why certain species are associated with a specific community or forest type and provide insight into what species components of vegetation are associated with avian habitat selection.

Study Areas and Methods

The point counts within 300 m radius circular plots were conducted in relatively mature forests in eastern Texas (Fig. 1). We selected three routes with 20 plots per route. Each plot had fairly homologous forest characteristics of that forest type. Adjacent census plots were separated by a 50 m buffer zone or by an area of disturbed forest. The routes were categorized into three forest types: (1) longleaf pine (*Pinus palustris*) savannah, (2) mixed pine-hardwood forest, and (3) bottomland hardwood forest.

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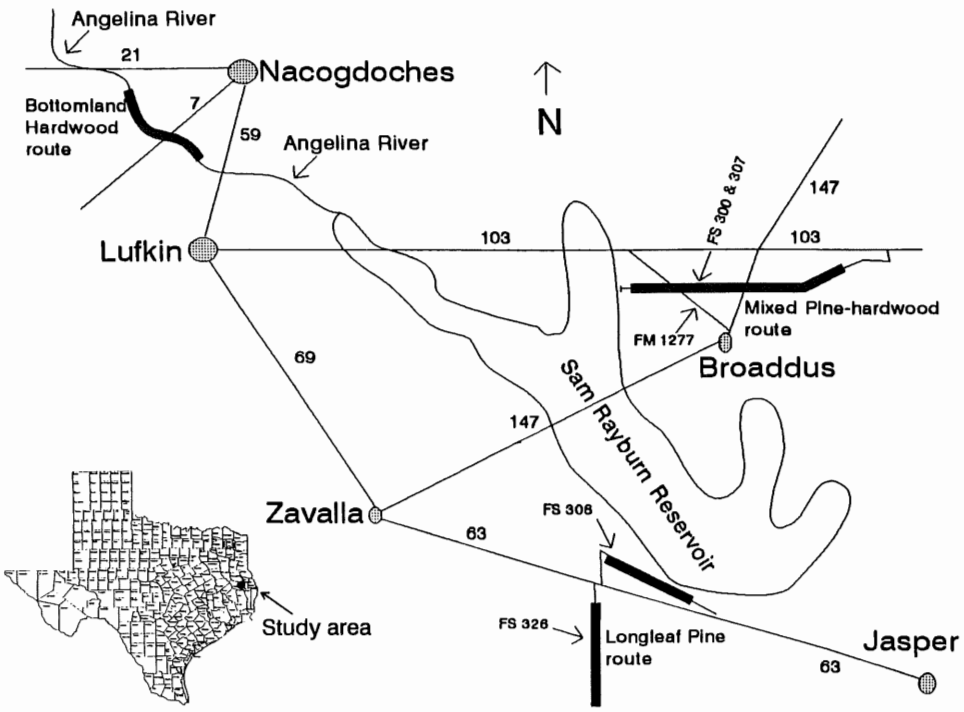

Fig. 1. Map of the study areas in eastern Texas.

We used the point count method (Bibby et al. 1992) for censusing all birds seen or heard within the 300 m radius plot for a 3-min period. Censusing commenced at sunrise and continued for approximately 3 hr until all 20 plots from one route were censused in a single morning. Each of the three routes was censused twice a month for one year for a total of six counts during each season (spring, summer, fall, and winter). A census was not conducted during inclement weather, for example wind over 12 mph or rain, since it can decrease the detectability and activity of birds (International Bird Census Committee 1970).

The longleaf pine savannah route was located in the south end of the Angelina National Forest in Jasper County (Fig. 1). The overstory of this forest is almost a pure longleaf pine type and is managed as an open, park-like, fire-climax ecosystem for Red-cockaded Woodpeckers (*Picoides borealis*). We censused this route from fall 1992 to fall 1993 at fixed roadside points along U.S. Forest Service roads 306 and 326 (Fig. 1).

The mixed pine-hardwood forest route was located in San Augustine County in both the Bannister Wildlife Management Area and Turkey Hill Wilderness Area on the north end of the Angelina National Forest. Forests consisted of a mixed overstory of loblolly (*Pinus taeda*) and shortleaf (*P. echinata*) pines and numerous species of hardwoods (mostly *Quercus, Liquidambar,* and *Nyssa*). The forest had a fairly dense midstory level, but usually a sparse understory. Censusing of this route took place from spring 1991 to spring 1992 at fixed roadside points along U.S. Forest Service roads 300 and 307 (Fig. 1).

The bottomland hardwood forest route was located along the upper Angelina

River between Nacogdoches and Angelina counties (Fig. 1). On this route, travel was completed by either motor boat or all-terrain vehicle (ATV), depending on the water level of the river. When water levels in the summer and fall impeded motor boat passage over logs that stretched across the narrow river, we used ATVs in the relatively dry river bottom along the edge of the river. The forest along this river was almost pure hardwoods (mostly *Quercus, Liquidambar* and *Nyssa*) in the overstory and midstory and almost no understory, but a ground cover comprised of leaf litter and logs which were typically washed away by periodic flooding. We censused this route from fall 1992 to fall 1993 at fixed points along the river bank.

Results and Discussion

One hundred and two species of birds of which only 78 were considered woodland birds were detected in all forest types combined (Table 1). Woodland birds were those species that utilize the forest (e.g. woodpeckers, warblers, vireos, etc.) for foraging and other daily activities (e.g. nesting, resting, etc.). Birds which were flying overhead (e.g. swallows, vultures, geese, etc.) or aquatic species (e.g. cormorants, wading birds, etc.) were not considered forest-users and will not be discussed in this paper.

Only eight species of birds occurred in all three forest types year-round: Red-bellied (*Melanerpes carolinus*) and Pileated woodpeckers (*Dryocopus pileatus*), Blue Jay (*Cyanocitta cristata*), American Crow (*Corvus brachyrhynchos*), Carolina Chickadee (*Parus carolinensis*), Tufted Titmouse (*Parus bicolor*), Carolina Wren (*Thryothorus ludovicianus*), and Northern Cardinal (*Cardinalis cardinalis*).

Nearctic-Neotropical migrant birds comprised 61 of the original 102 species; 52 of these are woodland species. Therefore, 67% of the woodland species of birds detected were Nearctic-Neotropical migrant birds, while the majority of the rest were permanent residents.

Only a few of the more common species were detected exclusively in one forest type. Both the Northern Parula (*Parula americana*) and Yellow-throated Warbler (*Dendroica dominica*) occurred only in the bottomland hardwood forests, indicating their association with very wet mesic woodland forests. In the mixed pine-hardwood forests, the Cooper's Hawk (*Accipiter cooperii*) was the only species not detected elsewhere. The Northern Bobwhite (*Colinus virginianus*), Red-cockaded Woodpecker, and Bachman's Sparrow (*Aimophila aestivalis*) were detected only in the longleaf pine savannah, suggesting a strong association with open pine forest habitat. None of the other regularly occurring avian species selected only a single forest type.

Of the 78 woodland species detected in the three forest types, the bottomland hardwood forests contained the greatest number of species (66). We detected almost as many species in the mixed pine-hardwood forests (63), but the longleaf pine savannah (44) had the lowest diversity of species. Both bottomland hardwood and longleaf pine forest types are among the most rapidly disappearing forest communities in North America (Noss et al. 1995). Many of the remaining longleaf pine ecosystems are severely degraded because of management practices that have excluded natural regimes of fire. Also, a short timber rotation has truncated the age distribution of pines. This is particularly significant for relatively long-lived species such as longleaf pine which can attain ages in excess of 400 years.

Table 1. Woodland birds detected in longleaf pine forests (L), mixed pine-hardwood forests (M) and bottomland hardwood forests (B) in eastern Texas.

Species	Spring			Summer			Fall			Winter		
	L	M	B	L	M	B	L	M	B	L	M	B
Yellow-crowned Night-Heron *Nyctanassa violacea*		S*	C		S*	S						
Wood Duck *Aix sponsa*		U	S			S			U		S*	U
Sharp-shinned Hawk *Accipiter striatus*†		S										
Cooper's Hawk *Accipiter cooperii*†		U			S							
Red-shouldered Hawk *Buteo lineatus*†		U	C		U	S		C	U		U	C
Broad-winged Hawk *Buteo platypterus*†	S	U			U	S		S				
Red-tailed Hawk *Buteo jamaicensis*†												S
American Kestrel *Falco sparverius*†	S	S		U			U	S		S		
Northern Bobwhite *Colinus virginianus*	S			C								
Mourning Dove *Zenaida macroura*†	S	S		U	C			S			S	
Yellow-billed Cuckoo *Coccyzus americanus*†	S	C	U	S	A	A		U	S			
Eastern Screech-Owl *Otus asio*											S	
Great Horned Owl *Bubo virginianus*								S				
Barred Owl *Strix varia*		A	A		A	C		A	A		A	C
Ruby-throated Hummingbird *Archilochus colubris*†		S	U	S	S	S						
Red-headed Woodpecker *Melanerpes erythrocephalus*	A		U	A		S	U	S	A		S	A
Red-bellied Woodpecker *Melanerpes carolinus*	A	A	A	A	A	A	A	A	A	A	A	A
Yellow-bellied Sapsucker *Sphyrapicus varius*†			S				S	S		U	U	A
Downy Woodpecker *Picoides pubescens*		U	A		U	A	S	U	A		U	A
Hairy Woodpecker *Picoides villosus*	S	U	S		U	S	S	U	U	U	U	U
Red-cockaded Woodpecker *Picoides borealis*	C			C			C			A		
Northern Flicker *Colaptes auratus*†	S	C	S	S	S		A	A	A	U	A	A
Pileated Woodpecker *Dryocopus pileatus*	A	C	A	A	C	C	A	C	A	A	C	C
Eastern Wood-Pewee *Contopus virens*†		S	S		S	U		U				
Acadian Flycatcher *Empidonax virescens*†		C	A		C	A		S	U			
Eastern Phoebe *Sayornis phoebe*†		S	S		S		U	C	A	S	C	A
Great Crested Flycatcher *Myiarchus crinitus*†	S	C	C	S	U	S	S	S	S			
Blue Jay *Cyanocitta cristata*	A	A	A	A	A	C	A	A	A	U	C	A
American Crow *Corvus brachyrhynchos*	A	A	A	A	A	A	A	A	A	A	A	A
Carolina Chickadee *Parus carolinensis*	U	A	A	C	A	A	C	A	A	C	A	A
Tufted Titmouse *Parus bicolor*	C	A	A	S	A	A	S	A	A	U	A	A
White-breasted Nuthatch *Sitta carolinensis*		S	S				S	S	S	S		S
Brown-headed Nuthatch *Sitta pusilla*	A	S		A	U		A	U		A	U	
Brown Creeper *Certhia americana*†								S			S	S

Table 1. Continued.

Species	Spring			Summer			Fall			Winter		
	L	M	B	L	M	B	L	M	B	L	M	B
Carolina Wren *Thryothorus ludovicianus*	A	A	A	A	A	A	A	A	A	A	A	A
Winter Wren *Troglodytes troglodytes*												S
Golden-crowned Kinglet *Regulus satrapa*			S				S	U	U		S	C
Ruby-crowned Kinglet *Regulus calendula*†	U	U	C				C	A	A	A	A	A
Blue-gray Gnatcatcher *Polioptila caerulea*†	S	S	C		S	U	S	U				
Eastern Bluebird *Sialia sialis*†	S			S			U	C	S	C	U	
Swainson's Thrush *Catharus ustulatus*†		S	S									
Hermit Thrush *Catharus guttatus*†									S		C	S
Wood Thrush *Hylocichla mustelina*†	S	U	S	S	S							
American Robin *Turdus migratorius*†							U*	C	C	A*	C	C
Gray Catbird *Dumetella carolinensis*†			S									
Brown Thrasher *Toxostoma rufum*			S					U	U		S	S
Cedar Waxwing *Bombycilla cedrorum*†	S	S	U					S	S	S	S	S
White-eyed Vireo *Vireo griseus*†	S	C	A	S	U	A		U	U			S
Solitary Vireo *Vireo solitarius*†								S	S			S
Yellow-throated Vireo *Vireo flavifrons*†		U	S		U	U		S	S			
Red-eyed Vireo *Vireo olivaceus*†	S	A	A	S	A	A		U	S			
Tennessee Warbler *Vermivora peregrina*†			S									
Nashville Warbler *Vermivora ruficapilla*†			S									
Northern Parula *Parula americana*†			A			C						
Yellow-rumped Warbler *Dendroica coronata*†	U	S	U				U	U	S	A	C	A
Yellow-throated Warbler *Dendroica dominica*†			A			S						
Pine Warbler *Dendroica pinus*	A	A	S	A	A		A	A		A	A	U
Black-and-white Warbler *Mniotilta varia*†		C	U									
American Redstart *Setophaga ruticilla*†			S									
Prothonotary Warbler *Protonotaria citrea*†		S	U			C						
Worm-eating Warbler *Helmitheros vermivorus*†					S							
Swainson's Warbler *Limnothylpis swainsonii*†						S						
Louisiana Waterthrush *Seiurus motacilla*†		S	S									
Kentucky Warbler *Oporornis formosus*†		U	S		U							
Common Yellowthroat *Geothylpis trichas*†						S						
Hooded Warbler *Wilsonia citrina*†	U	A	A	S	A	C		U	S			
Yellow-breasted Chat *Icteria virens*†	C	U	S	U	S	S		S				
Summer Tanager *Piranga rubra*†	S	A	C	S	A	U		U	S			

Table 1. Continued.

Species	Spring			Summer			Fall			Winter		
	L	M	B	L	M	B	L	M	B	L	M	B
Northern Cardinal *Cardinalis cardinalis*	A	A	A	A	A	A	C	A	C	C	A	A
Indigo Bunting *Passerina cyanea*†	A	S	S	A	U	U						
Bachman's Sparrow *Aimophila aestivalis*	A			A			S					
Chipping Sparrow *Spizella passerina*†	S			S								
White-throated Sparrow *Zonotrichia albicollis*†	S		S				S	S		S	S	U
Dark-eyed Junco *Junco hyemalis*†								S			S	
Common Grackle *Quiscalus quiscula*	S*		S					S*	S		S*	S
Brown-headed Cowbird *Molothrus ater*†		S	A		S	U						S*
Northern (Baltimore) Oriole *Icterus galbula*†									S			
American Goldfinch *Carduelis tristis*†	U*	S	U	A*			U*	U	U		A	A

Season codes: Spring = March–May, Summer = June–August, Fall = September–November, Winter = December–February.

Relative abundance codes: A = Abundant (detected on 20 or more census dates), C = Common (detected on 11–19 census dates), U = Uncommon (detected on 6–10 census dates), S = Seldom seen or heard (detected on 1–5 census dates), * = Individuals not utilizing the forest (i.e. flying overhead), † = Nearctic-Neotropical migrant birds.

The availability and distribution of intact ecosystems of these three forest types throughout the landscape of eastern Texas directly affects the distributions of the avian communities associated with them. Current forest management and land use planning in eastern Texas should encourage a diversity of bird species as well as other animals and plants by leaving a diversity of ecologically intact forest types. This would include restoration of longleaf pine ecosystems to areas where type conversion to other tree species had occurred and protection of bottomland hardwood and riparian areas from lake impoundment and channelization projects. Only by providing and maintaining adequate amounts of a diversity of forest cover types will we provide a diverse avifauna for future generations.

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A Partial Evaluation of the "Checklist of the Birds of the Central Coast of Texas"

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Introduction

This paper evaluates the "Checklist of Birds of the Central Coast of Texas" by Conger N. Hagar (1962), hereinafter referred to as the "Checklist." The Checklist has a number of records that conflict with a checklist that Hagar had prepared previously (undated). Other entries conflict with known occurrences in the Central Coast and/or surrounding areas and states. The main purpose of this paper is to provide corrections to the Checklist. A secondary purpose is to relate the events leading to the origin of the Checklist.

The Checklist represents a summary of Hagar's records of observations 1928–1962. The data are shown as bar charts developed by Fred M. Packard (now deceased), an International Specialist with the National Park Service.

Background of the Checklist

In the 1962 Checklist, Packard's introductory remarks give no indication of the scope of the data. The reader is left with the impression that all the data are Hagar's. In actuality, some data are not. There is an original checklist of the same title (Hagar 1952) in the library of the Welder Wildlife Foundation, Sinton, Texas. The introductory remarks in it reveal that data other than Hagar's were used. The following is quoted from that introduction:

> "The increase of interest in the study of birds throughout the country has led many visitors to Mrs. Hagar's door and to Rockport. It is especially for these people that this checklist has been prepared. The data presented here are based on a more elaborate study of '*The Birds of the Central Coast of Texas*', to be published in the near future (Packard 1968). It reflects conditions not only at Rockport but also at Corpus Christi and elsewhere within the central coast counties. The information is derived to a major degree from Mrs. Hagar's notebooks as well as from published literature and other sources including the junior author's observations at Corpus Christi and Rockport."

The above quotation explains part of the reason for conflicting data.

The bar charts in the 1962 revision are the same as the ones in the 1952 edition. However, additional species found since 1952 are appended at the end of the 1962 edition. Presumably Packard made these additions.

The Birds of the Central Coast of Texas

Packard wrote a magnificent work entitled "The Birds of the Central Coast of Texas" (1968 unpublished). It is hereinafter referred to as the "Manuscript." He presented it to the Welder Wildlife Foundation library on 30 September 1968. The title does not reflect its enormous scope. Besides summarizing Hagar's

records and other available records, it deals with geology, topography, meteorology and flora, and with changes in the last century. He defined the Central Coast of Texas as seven counties: Aransas, San Patricio, Nueces, Kleberg, Jim Wells, Bee and Refugio.

Packard was in the Navy when hostilities in the Pacific ended abruptly in August 1945. He requested assignment for a year to the flag staff of the Naval Station in Corpus Christi. To better understand what transpired after that the following excerpts are quoted from the Manuscript:

"The outstanding experience of that year was meeting Mrs. Jack A. Hagar at Rockport and going afield with her."

"It happened that on the day the present author first met Mrs. Hagar, Mr. Guy Emerson was staying in one of her cottages. Mr. Emerson remarked on the need for publication of Mrs. Hagar's field notes. . . ."

"The preparation of this data for publication seemed to be a useful way to employ free evening hours at the naval air station. . . ."

". . . after discharge from naval duty (ca. 1946), the author devoted evenings and weekends for more than 6 years to reading books and papers on the birds and ecology of the Texas coast in the library of the United States National Museum. . . ."

". . . that the information is fairly complete [in the Manuscript] is due in large measure to the kindness and generosity of Dr. Oberholser. His cooperation has strengthened the value of the observational data presented by enabling the author to ascertain the forms [sub-species] of the birds that have been collected on the Central Coast. . . ."

"A considerable number of the records that follow in the text are of birds that were considered unusual on the central coast until constant observation over many years demonstrated that they are actually of regular occurrence, but had been overlooked for one reason or another. . . ."

Conflicts

I laboriously read Hagar's notebooks to try to find the sources of conflicting data in the Checklist (Hagar 1928–1962). Karen Harden McCracken, who wrote the biography of Connie Hagar, had previously transcribed these handwritten notebooks in what can only be called a massive and heroic undertaking.

In the Checklist the one species whose occurrence is outstandingly at odds with historical data is the Rough-legged Hawk (*Buteo lagopus*). For this reason it will be the only one critically evaluated.

The following is quoted from Packard's Manuscript. The parenthetical lower case letters following the paragraph below refer to my comments regarding those preceding statements. These comments follow the quotation.

"The occurrence of American Rough-legged Hawks on the central coast of Texas in groups of twenty-five to one hundred individuals seems almost incred-

ible, (a). The species is distinctly northern, and has been considered to be a casual visitant to Texas. Mrs. Hagar recorded her first American Rough-leg at Rockport on September 27, 1942, and has found that it is a regular spring and autumn migrant and that it winters in small numbers. The spring flight is conspicuous, occurring between March 11 and April 27. During that period a number of competent observers have accompanied Mrs. Hagar on field trips during which sizeable flocks have been seen, (b). The American Rough-leg has now reached the lower Rio Grande Valley, (c). The birds return in numbers to the vicinity of Rockport from September 27 to November 11 and are seen infrequently during the winter months. Ford, E. R., 1938; Saunders, W. E., 1909; Williams, G. G., 1941–1950."

(a). Hagar does not show any count in excess of 20.

(b). The observers who saw rough-legs with her, that she mentions are:

4/27/46—Joe Heiser, Edna Minor, Lillian G., Fred Packard.
3/19/55—Jack Stevens
4/15/56—Howard Dean, the Lunds.
3/23/57—Joe O'Hearn, Bessie Dodd.

(c). Packard's reference, Ford, 1938, The Auk, 55–132, Notes from the Lower Rio Grande Valley mentions no rough-legs. John Arvin, who birded the Valley from 1957–1983, never saw a Rough-legged Hawk (pers. comm.). Hagar shows one Valley record, 11/4/50.

Packard's second reference, Saunders, 1909, Wilson Bulletin, 21:97–98; Old Series Vol. XXI, New Series Vol. XVI, deals with rough-legs around Pt. Pelee, Ont., Canada.

Packard's third reference, Williams, 1941–1950, Audubon Magazine, Vols. 43–48 and Audubon Field Notes 1–5, both in "The Seasons" section of the Texas Region, states (May–June/44, p. 93): "A migration of American Roughlegs passed over Rockport 3/29. They came in groups of 15–20, until 200 had passed." Hagar's notes for this date read "hawks migrating, Am. rough-legged, Swainson's, Ferruginous, about 100 near Lamar." And quote from May–June/45, p. 26: "American Rough-legs, Rockport, 3/11/45." Hagar's notes for this date only read "rough-leg by Tivoli. . . ."

For completeness all of Hagar's Rough-legged Hawk records are listed in Table 1.

The Auk indices from 1940–1970 were checked for Rough-legged Hawk reports from South Texas. None were found.

None of the checklists from areas near the Central Coast of Texas support the occurrence of Rough-legged Hawk:

Birds of Bexar Co., San Antonio Audubon Society, 1986;
Birds of Kerr Co., Ernest and Kay Mueller, 3/1/78;
Birds of the Austin Region, Travis Audubon Society, 5/78;
Checklist of the Birds of Jim Wells Co., by Richard O. Albert;

"Birds of the Texas Coastal Bend," Rappole and Blacklock (1985). Rare winter resident, approximately 10/20–3/10. They base this entirely on Hagar's records (pers. comm.). Blacklock, who has birded the Coastal Bend since 1956 to the present, has only seen several individuals. None were documented.

Table 1. Hagar's Rough-Legged Hawk records (where Hagar stated only "rough-legs" without giving a number, then 1+ is noted.)

Year	Date	Number of individuals	Comments
1942	3/1	1	
	9/27	1+	
	11/16	1	At Rincon (near Rockport), TX
1944	2/28	1+	
	3/29	1+	
	4/3	1+	
	11/9	1	
	11/19	1	
1945	3/11	1	At Tivoli, TX
	5/13	1	
1946	4/27	1	
1947	10/12	1	On loop
1948	2/13	1	
1949	4/18	1+	At George West, TX
	4/19	20	Sitting on posts at Sinton, TX
	10/30	1	
1950	1/23	1+	
	3/2	1+	
	3/11	3	
	3/12	1	
	11/4	1	(in the) Valley
	11/25	1	Dark Am. Rough-leg; Refugio, TX
	12/28	1	
1951	4/1	1+	
	5/7	1	
1952	8/8	8	By Rincon, TX
	8/11	1+	By causeway
	9/3	1	
	9/8	2	
	10/9	1	Light Am. Rough-leg; Woodsboro, TX
	10/8	1	Bayside, TX
1953	1/11	1+	
	3/4	1	
	9/20	1+	
	10/2	1	
1954	3/16	1	
1955	3/19	1	
	11/12	1	
1956	4/5	1	
	4/15	2	On Ransom Island
1957	3/23	1	
	4/26	3	

There is no doubt that other hawks were mistaken for American Rough-legged Hawks. Gene Blacklock, William P. Clark (raptor authority), Dr. Andrew W. O'Neil and the author are in agreement. The true identity of the hawks remains unknown. Likely candidates are the immature White-tailed Hawk (*Buteo albicaudatus*) and Swainson's Hawk (*Buteo swainsoni*).

Other species in conflict are listed below. Given first is the status from the Checklist followed by actual present day occurrence, in parentheses. The status is derived from Hagar's records except for the Common Merganser (*Mergus merganser*). She shows it as occasional; Packard states that it is fairly common. But his Manuscript does not give data to substantiate this.

Horned Grebe (*Podiceps auritis*). Fairly common winter visitant, as common as Eared Grebe (*Podiceps nigricollis*). (*P. auritis* is rare but regular, while *P. nigricollis* is common).

Black-bellied Whistling-Duck (*Dendrocygna autumnalis*). Hagar did not see the first one until April 30, 1958. She had only a handful of records after that. It is now a common summer resident. This represents a true range expansion.

Common Merganser. (*Mergus merganser*). Fairly common winter resident. (Very rare).

Lesser Golden-Plover (*Pluvialis dominica*). Fairly common fall migrant. (Rare in fall). This species is now known as American Golden-Plover.

Semipalmated Sandpiper (*Calidris pusilla*). Fairly common winter resident. (Does not occur in the U.S. in winter except sparsely in south Florida).

Baird's Sandpiper (*Calidris bairdii*). Rare in winter. (Does not occur in winter).

American Woodcock (*Scolopax minor*). Uncommon permanent resident. (Rare winter resident; one breeding record).

Broad-tailed Hummingbird (*Selasphorus platycercus*). Uncommon fall migrant. (Rare in winter).

Connecticut Warbler (*Oporornis agilis*). Fairly common spring migrant. (Casual).

Rusty Blackbird (*Euphagus carolinus*). Fairly common winter resident. (Very rare).

Other species could be added to this list. I have not done so because conflict with the known status becomes increasingly blurred as the number of species is increased. The interested reader is referred to the Checklist (Hagar 1962).

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Sharp-shinned Hawks Nesting in the Pineywoods of Eastern Texas and Western Louisiana

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ABSTRACT.—While monitoring the Red-cockaded Woodpecker (*Picoides borealis*) in eastern Texas and western Louisiana, the authors incidentally found nesting pairs of Sharp-shinned Hawks (*Accipiter striatus*). All nesting pairs were located in similar stands with an overstory of either longleaf pine (*Pinus palustris*), or a mix of loblolly (*P. taeda*) and shortleaf pine (*P. echinata*). Most of these areas were maintained by frequent prescribed burning and had an open understory of little bluestem (*Schizachyrium scoparium*). Four of the five areas with hawk nests were on national forests and are managed for the endangered Red-cockaded Woodpecker. The fifth area was on private timber industry land managed for timber production. These probably constitute the first confirmed nests ever of this species in the pineywoods region of eastern Texas and the first in many decades in the pineywoods region of western Louisiana.

Introduction

Records of nesting Sharp-shinned Hawks (*Accipiter striatus*) in the forested regions of eastern Texas and western Louisiana are noteworthy, because nesting records of this species are sparse in these areas (Lowery 1974; Oberholser 1974; T.O.S. 1995). Records of nesting in this species are also rare throughout the entire southeastern United States (Meyer and Mueller 1982; James and Neal 1986; Mitchell and Pitts 1992).

In addition, Oberholser (1974) reports no summer or nesting records of Sharp-shinned Hawks in the "Pineywoods" region of Texas. The Pineywoods occurs in the eastern portion of the state and is dominated by loblolly (*Pinus taeda*), shortleaf (*P. echinata*), and longleaf (*P. palustris*) pines (Gould 1969; Correll and Johnston 1970). The Texas Breeding Bird Atlas (in prep.) also failed to record nesting Sharp-shinned Hawks. In Louisiana, records of nesting are said to occur "sparingly . . . and date back many years" (Lowery 1974). In addition, no recent sightings of nesting Sharp-shinned Hawks in Louisiana appear in Lowery's revised "Louisiana Birds" (J. Van Remsen, Jr., in prep.).

We located five nesting pairs of Sharp-shinned Hawks when adults vocalized with a constant "kik kik kik" and circled low overhead. On one occasion an individual hawk stooped on the second and third authors. Pairs use these vocalizations when alarmed and near the nest (Oberholser 1974), while migrants and winter residents, by our experience, are virtually silent.

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Table 1. Sharp-shinned Hawk nest habitat data from the pineywoods of Texas and Louisiana.

Habitat variable	Location of nest				
	Louisiana[a]	Louisiana[b]	Texas[c]	Texas[d]	Texas[e]
DBH of nest tree (cm)	44.0	24.0	38.0	36.0	43.0
DBH of stand (cm)	39.4 (1.29)[f]	23.8 (2.11)[f]	38.6 (1.21)[f]	39.6 (1.44)[f]	48.8 (2.22)[f]
Height of nest (m)	15.0	15.0	16.0	18.0	24.5
Canopy height of stand (m)	18.0 (1.10)[f]	18.0 (0.84)[f]	20.0 (0.95)[f]	19.0 (0.71)[f]	28.0 (0.37)[f]
Basal area of stand (m^2/ha)	19.6 (0.93)[f]	17.3 (0.60)[f]	19.1 (0.71)[f]	24.6 (2.34)[f]	18.6 (0.94)[f]
Canopy closure (%)	65.0	75.0	65.0	75.0	80.0
Dominant canopy species (pine)	Longleaf	Loblolly-Shortleaf	Longleaf	Longleaf	Loblolly-Shortleaf

[a] Vernon Ranger District, Kisatchie National Forest, Vernon Parish, LA. (1992)
[b] International Paper, Inc., Bienville Parish, LA. (1995)
[c] Ebenezer area, Angelina National Forest, Jasper Co., TX. (1994 and 1996)
[d] Upland Island Wilderness Area, Angelina National Forest, Jasper Co., TX. (1994)
[e] Norwood area, Angelina National Forest, San Augustine Co., TX. (1996)
[f] Mean (SE), $n = 5$.

We located the initial pair and their nest in the Vernon Ranger District of the Kisatchie National Forest, Vernon Parish, Louisiana (31°00′N, 93°06′W) on 11 May 1992. Two downy-white nestlings were seen from the ground on 23 June 1992.

Two years later in the 1994 breeding season, we located two more breeding pairs about 50 km apart in the Angelina National Forest, Jasper County, Texas. One pair and their nest were located on 10 May 1994 near the community of Ebenezer, Texas (31°04′N, 94°09′W). A second pair was observed in the Upland Island Wilderness Area of the Angelina National Forest (31°03′N, 94°20′W) on 19 May 1994. No nest was found on four visits to this area, although the adults consistently vocalized and circled the observers during all of our attempts to locate a nest. On 7 July 1994, this pair and at least one juvenile were observed in a tree 5 m from a stick nest that was similar to the other Sharp-shinned Hawk nests observed. This nest was less than 50 m from where we always observed the pair and was likely the nest used by the Upland Island pair.

The first nest that was found outside of a longleaf pine forest was in the 1995 breeding season when a pair was found incubating on 6 May 1995 in a mixed loblolly-shortleaf pine forest. The structure of the forest was very similar regardless of the species of dominant canopy pine (Table 1). This pair was located on a private tract belonging to International Paper, Inc. in the western part of Bienville Parish, Louisiana (32°20′N, 93°06′W).

The final pair was discovered when a male vocalized and circled overhead on 17 May 1996 near the community of Norwood in the Angelina National Forest, San Augustine Co., Texas (31°25′N, 94°11′W). A nest was found four days later with an incubating female. This nest was found in an open, mature mixed loblolly-shortleaf pine forest maintained with prescribed fire for the Red-cockaded Woodpecker (*Picoides borealis*), which nested less than 100 m away.

Time constraints precluded us from collecting more detailed information on the actual breeding activities at each nest. We could not, therefore, determine when eggs hatched or when nestlings fledged. All nests were located in forests with similar habitat characteristics (Table 1). Three nests were located in national for-

ests dominated by longleaf pine savannah, which is a fire-climax community with a longleaf pine overstory, a sparse midstory, and an understory dominated by little bluestem (*Schizachyrium scoparium*). The other two nests were located in mixed loblolly-shortleaf pine forests; one on national forest land and the other on private timber company land. All five forests can collectively be classified as open, mature pine forests. Canopy hardwood species were not present in any of the areas, probably due to a history of prescribed fires and, in some cases, mechanical hardwood removal.

All of the nests, except the Upland Island nest, were in pine stands that are burned regularly, providing habitat for the endangered Red-cockaded Woodpecker, threatened Bachman's Sparrow (*Aimophila aestivalis*), and sensitive American Kestrel (*Falco sparverius*). The Upland Island Wilderness Area was formerly managed using prescribed fire, but the designation as a wilderness area in 1985 prohibited continued use of prescribed fire in the area.

The forest type (Table 1) where the nests were located could be important for nesting Sharp-shinned Hawks in this region, and perhaps throughout the southeast. A pair of Sharp-shinned Hawks returned in May 1996 and nested 25 m from the Ebenezer nest of 1994 and was presumably the same pair.

Collectively, we have spent hundreds of field hours in other forest types in the area (mixed pine-hardwood forests and bottomland hardwood forests), but have not found Sharp-shinned Hawks in late spring or summer. This species may nest regularly in open mature stands of pines in eastern Texas and western Louisiana. If this forest type appeals to nesting Sharp-shinned Hawks, then management of the Red-cockaded Woodpecker should benefit this hawk as well. Additional observations are needed to determine their nesting abundance and habitat preference.

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Martinez-Del Rio, C. 1990. Sugar preferences in hummingbirds: The influences of subtle chemical differences on food choice. Condor 92(4):1022–1030. Hummingbird-pollinated flowers secrete nectar rich in sucrose. Passerine-pollinated flowers secrete nectar containing a mixture of glucose and fructose. Differences in digestive efficiency account for the differences in choice of nectar component sugars.

Mays, N. A., C. M. Vleck, and J .W. Dawson. 1991. Plasma luteinizing hormone, steroid hormones, behavioral role, and nest stage in cooperatively breeding Harris' Hawks (*Parabuteo unicinctus*). Auk 108(3):619–637. Hormone levels of breeders and helpers.

Merchant, M. E., S. S. Shukla, and H. A. Akers. 1991. Lead concentrations in wing bones of the Mottled Duck. Envir. Toxicol. Chem. 10(11):1503–1507. *Anas fulvigula*; Anahuac NWR (Texas), Louisiana, and Florida.

Middleton, A. L. A. 1991. Failure of Brown-headed Cowbird parasitism in nests of the American Goldfinch. J. Field Ornithol. 62(2):200–203. *Molothrus ater, Carduelis tristis*; baby cowbirds do not thrive on goldfinch chow.

Midura, A. M., S. M. Beyers, and H. J. Kilpatrick. 1991. An observation of human-induced adoption in Piping Plovers. J. Field Ornithol. 62(4):429–431. *Charadrius melodus,* hatched by Least Terns, fostered by Piping Plovers.

Mills, G. S., J. B. Dunning, Jr., and J. M. Bates. 1991. The relationship between bird density and vegetation volume. Wilson Bull. 103(3):468–479. An index of total vegetation volume was strongly correlated with breeding bird density in shrub and desert habitats.

Moore, F. R., and W. Young. 1991. Evidence of food-based competition among passerine migrants during stopover. Behav. Ecol. Sociobiol. 28(2):85–90. Concentrated, fat-depleted migrants face increased competition when energy demand is high and replenish energy reserves more slowly; trans-Gulf of Mexico migrants depress food abundance during stopovers.

Moorman, A. M., T. E. Moorman, G. A. Baldassarre, and D. M. Richard. 1991. Effects of saline water on growth and survival of Mottled Duck ducklings in Louisiana (USA). J. Wildl. Mgmt. 55(3):471–476. *Anas fulvigula,* duckling mortality increases with salinity.

Mora, M. A. 1991. Organochlorines and breeding success in Cattle Egrets from the Mexicali Valley, Baja California, Mexico. Colonial Waterbirds 14(2): 127–132. *Bubulcus ibis,* compared with Texas birds.

Olsen, P. D., and A. Cockburn. 1991. Female-biased sex allocation in Peregrine Falcons and other raptors. Behav. Ecol. Sociobiol. 28(6):417–424. *Falco peregrinus* sex ratios are female-biased and first eggs laid in the season are likely to produce females.

Ortega, C. P., and A. Cruz. 1991. A comparative study of cowbird parasitism in Yellow-headed Blackbirds and Red-winged Blackbirds. Auk 108(1):16–24. *Xanthocephalus xanthocephalus, Agelaius phoeniceus, Molothrus ater:* Brown-headed Cowbirds parasitize Red-winged but not Yellow-headed Blackbirds.

Owens, L. Karolee. 1991. Recent literature about Texas birds. TOS Bull. 24(2): 49–52.

Page, G. W., L. E. Stenzel, W. D. Shuford, and C. R. Bruce. 1991. Distribution and abundance of the Snowy Plover on its western North American breeding grounds. J. Field Ornithol. 62(2):245–255. *Charadrius alexandrinus,* habitat and numbers declining.

Pearson, S. M. 1991. Food patches and the spacing of individual foragers. Auk 108(2):355–362. Field Sparrow (*Spizella pusilla*) and White-throated Sparrow (*Zonotricha albicollis*) spacing varies with food patch size.

Peterson, A. T. 1991. Gene flow in Scrub Jays: Frequency and direction of movement. Condor 93(4):926–934. Gene flow in *Aphelocoma coerulescens* greater from *woodhouseii* group to *californica* group.

Peterson, Jim J. 1991. City of Dallas water treatment plant produces three un-

usual North Central Texas nest records. TOS Bull. 24(1):25–27. White-faced Ibis, Anhinga, and Black-necked Stilts were confirmed breeders; Tricolored Heron and Mottled Ducks were observed.

Peterson, Jim J., et al. 1991. Additions to the breeding avifauna of the Davis Mountains. TOS Bull. 24(2):39–48. Twelve species, including Gray Flycatcher, were documented during June 1991.

Petit, L. J. 1991. Adaptive tolerance of cowbird parasitism by Prothonotary Warblers: A consequence of nest-site limitation? Anim. Behav. 41(3):425–432. *Molothrus ater, Protonotaria citrea.*

Pinxten, R., M. Eens, and R. F. Verheyen. 1991. Response of male starlings to experimental intraspecific brood parasitism. Anim. Behav. 42:1028–1030. Both male and female *Sturnus vulgaris* remove Brown-headed Cowbird, *Molothrus ater,* eggs.

Rave, D. P., and G. A. Baldassarre. 1991. Carcass mass and composition of Green-winged Teal wintering in Louisiana and Texas. J .Wildl. Mgmt. 55(3): 457–461. *Anas crecca carolinensis,* similarities and differences in mass and lipid reserves.

Rudolph, D. C., and R. N. Conner. 1991. Cavity tree selection by Red-cockaded Woodpeckers in relation to tree age. Wilson Bull. 103(3):458–467. *Picoides borealis* prefers older trees.

Schmutz, J. K., R. W. Fyfe, U. Banasch, and H. Armbruster. 1991. Routes and timing of migration of falcons banded in Canada. Wilson Bull. 103(1):44–58. Gyrfalcons (*Falco rusticolus*), Prairie Falcons (*F. mexicanus*), Peregrine Falcons (*F. peregrinus*), Merlins, (*F. columbarius*), and American Kestrels, (*F. sparverius*) generally moved through the middle of the North American interior; Peregrines displayed "leap-frog" migration as *F. p. tundrius* flew farther south than did *F. p. anatum.*

Schnase, J. L., W. E. Grant, T. C. Maxwell, and J. J. Leggett. 1991. Time and energy budgets of Cassin's Sparrow (*Aimophila cassinii*) during the breeding season: Evaluations through modelling. Ecol. Modelling 55(3–4):285–320. Behavior of the little brown bird that escapes before the binoculars reach the eye.

Scott, D. M. 1991. The time of day of egg laying by the Brown-headed Cowbird and other icterines. Can. J. Zool. 69(8):2093–2099. *Molothrus ater* lays earlier than hosts, often before sunrise.

Seyffert, Kenneth D. 1991. Does the Cedar Waxwing nest in the Texas Panhandle? TOS Bull. 24(2):55–57. Reviews the documented sightings of this species.

Shutler, D., and P. J. Weatherhead. 1990 (1991). Targets of sexual selection: Song and plumage of wood warblers. Evolution 44(8):1967–1977. The paper analyzes song complexity and plumage dimorphism in 56 species of warblers.

Smith, J. W., and R. B. Renken. 1991. Least Tern nesting habitat in the Mississippi River Valley adjacent to Missouri. J. Field Ornithol. 62(4):497–504. *Sterna antillarum,* nesting habitat conservation recommendations.

Steidl, R. J., and C. R. Griffin. 1991. Growth and brood reduction to mid-Atlantic Coast Ospreys. Auk 108(2):363–370. *Pandion haliaetus* intercolony differences reflect prey availability.

Szymczak, M. R., and E. A. Rexstad. 1991. Harvest distribution and survival of

a gadwall population. J. Wildl. Mgmt. 55(4):592–600. Colorado *Anas strepera* recovered on Texas coast.

Thompson, C. W. 1991. The sequence of molts and plumages in Painted Buntings and implications for theories of delayed plumage maturation. Condor 93(2): 209–235. *Passerina ciris,* eastern birds molt before leaving the breeding grounds and western birds molt in areas along migration routes.

Thompson, C. W. 1991. Is the Painted Bunting actually two species? Problems determining species limits between allopatric populations. Condor 93(4): 987–1000. *Passerina ciris,* abstract says they lack gene flow but the two populations do not reflect current subspecies.

Tucker, V. A. 1991. The effect of molting on the gliding performance of a Harris' Hawk (*Parabuteo unicinctus*). Auk 108(1):108–113. Loss of molted wing feathers drops lift-to-drag ratio of a gliding hawk.

Vleck, C. M., N. A. Mays, J. W. Dawson, and A. R. Goldsmith. 1991. Hormonal correlates of parental and helping behavior in cooperatively breeding Harris' Hawks (*Parabuteo unicinctus*). Auk 108(3):638–648. Hormone levels of breeders and helpers.

Watson, J. W., M. G. Garrett, and R. G. Anthony. 1991. Foraging ecology of Bald Eagles in the Columbia River Estuary (USA). J. Wildl. Mgmt. 55(3): 492–499. *Haliaeetus leucocephalus* used tidal flats at low tide and first light with differences in diets among pairs.

Wiedenfeld, D. A. 1991. Geographical morphology of male Yellow Warblers. Condor 93(3):712–723. *Dendroica petecha* geographic variation does not follow rules; wing length reflects migration length.

Wiggins, D. A. 1991. Foraging success and aggression in solitary and group-feeding Great Egrets (*Casmerodius albus*). Colonial Waterbirds 14(2):176–179. In a Texas salt marsh.

Winker, Kevin. 1991. Dew bathing near surface water. TOS Bull. 24(1):21–22. Documents the occurrence of dew bathing even when surface water is nearby; observations took place at Welder Wildlife Refuge near Sinton, Texas.

Wong, P. L., and R. C. Anderson. 1991. Distribution of gizzard nematodes (Habronematoidea, Acuarioidea) of New World shorebirds (Charadriiformes), with special reference to localities of transmission. Can. J. Zool. 69(10): 2579–2588. Gulf coast of Texas.

Yokel, D. A., and S. I. Rothstein. 1991. The bases for female choice in an avian brood parasite. Behav. Ecol. Sociobiol. 29(1):39–46. Brown-headed Cowbird, *Molothrus ater;* each female chose one male.

Young, B. E. 1991. Annual molts and interruption of the fall migration for molting in Lazuli Buntings. Condor 93(2):236–250. *Passerina amoena* molt during migration interruptions and differently from congeners.

Zink, R. M., D. L. Dittmann, and W. L. Rootes. 1991. Mitochondrial DNA variation and the phylogeny of *Zonotrichia.* Auk 108(3):578–584. Relationships of Golden-crowned, White-crowned, White-throated, Harris', and Rufous-collared Sparrows.

Zink, R. M., W. L. Rootes, and D. L. Dittmann. 1991. Mitochondrial DNA variation, population structure, and evolution of the Common Grackle *Quiscalus quiscula.* Condor 93(2):318–329. High gene flow reduces mtDNA variation between Purple and Bronzed Grackles; the relationship with the

Greater Antillean Grackle (*Q. niger*) is closer than that with Boat-tailed (*Q. major*) and Great-tailed (*Q. mexicanus*) which are sister taxa.

1992

Arcese, P., J. N. M. Smith, W. M. Hochachka, C. M. Rogers, and D. Ludwig. 1992. Stability, regulation, and the determination of abundance in an insular Song Sparrow population. Ecology 73(3):805–822. *Melospiza melodia* nest failure increased with the rate of nest parasitism by Brown-headed Cowbirds (*Molothrus ater*).

Arnold, T. W. 1992. Continuous laying by American Coots in response to partial clutch removal and total clutch loss. Auk 109(3):407–421. *Fulica americana* responded to partial clutch removal by laying supernormal sized clutches and to complete clutch removal by laying additional clutches.

Ball, R. M., Jr., and J. C. Avise. 1992. Mitochondrial DNA phylogeographic differentiation among avian populations and the evolutionary significance of subspecies. Auk 109(3):626–636. Most subspecies of Downy Woodpecker (*Picoides pubescens*), Mourning Dove (*Zenaida macroura*), Brown-headed Cowbird (*Molothrus ater*), and Song Sparrow (*Melospiza melodia*) show little difference; Rufous-sided Towhee (*Pipilo erythrophthalmus*), and Common Yellowthroat (*Geothlypis trichas*) showed deeper separation between western and eastern populations.

Benkman, C. W. 1992. White-winged Crossbill (*Loxia leucoptera*), No. 27. *In:* Poole & Gill (1992).

Best, T. L., T. E. Garrison, and C. G. Schmitt. 1992. Ingestion of lead pellets by Scaled Quail (*Callipepla squamata*) and Northern Bobwhite (*Colinus virginianus*) in southeastern New Mexico. Texas J. Sci. 44(1):99–107. Although there is a large amount of lead available to gamebirds (including Mourning Dove, *Zenaida macroura*), relatively few contained significant amounts of lead.

Best, T. L., T. E. Garrison, and C. G. Schmitt. 1992. Availability and ingestion of lead shot by Mourning Doves (*Zenaida macroura*) in southeastern New Mexico. Southwest. Nat. 37(3):287–292. Though large amounts of lead were shown available for ingestion by soil sampling, doves had a low incidence of lead consumption.

Bielefeldt, J. R. N. Rosenfield, and J. M. Papp. 1992. Unfounded assumptions about diet of the Cooper's Hawk. Condor 94(2):427–436. Direct observation of deliveries of prey to *Accipiter cooperii* nestlings leads to questioning previous reports of avian prey being majority of deliveries and biomass.

Briskie, J. V., S. G. Sealy, and K. A. Hobson. 1992. Behavioral defenses against brood parasitism in sympatric and allopatric host populations. Evolution 46(2):334–340. American Robins (*Turdus migratorius*) ejected parasitic eggs from all experimentally parasitized clutches while Yellow Warblers (*Dendroica petechia*) exhibited greater nest defense in the area of sympatry on seeing models of a female Brown-headed Cowbird (*Molothrus ater*).

Brittingham, M. C., and S. A. Temple. 1992. Does winter bird feeding promote dependency? J. Field Ornithol. 63(2):190–194. There was no evidence in this study that bird feeding promotes dependency.

Brown, C. R., A. M. Knott, and E. J. Damrose. 1992. Violet-green Swallow (*Tachycineta thalassina*), No. 14. *In:* Poole & Gill (1992).

Brown, B. T., G. S. Mills, R. L. Glinski, and S. W. Hoffman. 1992. Density of nesting Peregrine Falcons in Grand Canyon National Park, Arizona. Southwest. Nat. 37(2):188–193. The park hosts the largest nesting population of *Falco peregrinus anatum* on a single land unit in the contiguous United States.

Bruning-Fann, C., J. Kaneene, and J. Heamon. 1992. Investigation of an outbreak of velogenic viscerotropic Newcastle's disease in pet birds in Michigan, Indiana, Illinois, and Texas. J. Amer. Vet. Med. Assn. 201(11):1709–1714. Source of infection was Yellow-headed Parrots illegally imported into Texas.

Butler, R. W. 1992. Great Blue Heron (*Ardea herodias*), No. 25. *In:* Poole & Gill (1992).

Calder, W. A., and L. L. Calder. 1992. Broad-tailed Hummingbird (*Selasphorus platycercus*), No. 16. *In:* Poole & Gill (1992).

Casto, Stanley D. 1992. Loggerhead Shrike kills Common Ground-Dove. TOS Bull. 25(1):27–28. Describes the attack which occurred in La Salle County, Texas.

Casto, Stanley D. 1992. Texan contributors to the Mississippi Valley Migration Study of 1884–1885. TOS Bull. 25(2):51–63. Provides information on the 15 observers from Texas who participated in the A.O.U. sponsored study.

Castro, G., J. P. Myers, and R. E. Ricklefs. 1992. Ecology and energetics of sanderlings migrating to four latitudes. Ecology 73(3):833–844. *Calidris alba* spent significantly more time satisfying their food needs in Texas than in New Jersey, Panama, or Peru.

Clark, W. S., and R. C. Banks. 1992. The taxonomic status of the White-tailed Kite. Wilson Bull. 104(4):571–579. American *Elanus leucurus* differ from their closest Old World relatives in greater size and weight, in proportions (longer tail and smaller bill and feet), plumage pattern, and in behavior.

Crick, H. Q. P. 1992. Load-lightening in cooperatively breeding birds and the cost of reproduction. Ibis 134(1):56–61. Helpers face little risk as they allow breeders to decrease their efforts.

Confer, J. L. 1992. Golden-winged Warbler (*Vermivora chrysoptera*), No. 20. *In:* Poole & Gill (1992).

Csada, R. D., and R. M. Brigham. 1992. Common Poorwill (*Phalaenoptilus nuttallii*), No. 32. *In:* Poole & Gill (1992).

Custer, T. W., G. W. Pendleton, and R. W. Roach. 1992. Determination of hatching date for eggs of Black-crowned Night-Herons, Snowy Egrets, and Great Egrets. J. Field Ornithol. 63(2):145–154. The mean incubation period was 22.8 days for *Nycticorax nycticorax,* 23.7 days for *Egretta thula,* and 27.3 days for *Casmerodius albus.*

Delotelle, R. S., and R. J. Epting. Reproduction of the Red-cockaded Woodpecker in Central Florida. Wilson Bull. 104(2):285–294. Reproductive success of *Picoides borealis* was correlated with breeder experience, outside intrusion rate, and territorial size.

Demaso, S. J., F. S. Guthery, G. S. Spears, and S. M. Rice. 1992. Morning covey calls as an index of Northern Bobwhite density. Wildl. Soc. Bull. 20(1):94–

101. Morning covey calls of *Colinus virginianus* in southern Texas were a weak index of density.

Derrickson, K. C., and R. Breitwisch. 1992. Northern Mockingbird (*Mimus polyglottos*), No. 7. *In:* Poole & Gill (1992).

Dittmann, D. L., and G. W. Lasley. 1992. How to document rare birds. Birding 24:145–159. Authors give instructions on sighting sheets.

Dufty, A. M., Jr., and R. McChrystal. 1992. Vocalizations and copulatory attempts in free living Brown-headed Cowbirds. J. Field Ornithol. 63(1):16–25. Males sing and give flight whistles during attempts.

Eaton, S. W. 1992. Wild Turkey (*Meleagris gallopavo*), No. 22. In: Poole & Gill (1992).

Edwards, H. H., G. D. Schnell, R. L. Dubois, and V. H. Hutchison. 1992. Natural and induced remanent magnetism in birds. Auk 109(1):43–56. Compares differences between species.

Ellison, W. G. 1992. Blue-gray Gnatcatcher (*Polioptila caerulea*), No. 23. In: Poole & Gill (1992).

Emlen, J. T., and M. D. Dejong. 1992. Counting birds: The problem of variable hearing abilities. J. Field Ornithol. 63(1):26–31. Variable hearing abilities can be compensated for.

Esler, D. 1992. Habitat use by piscivorous birds on a power plant cooling reservoir. J. Field Ornithol. 63(3):241–249. Densities of piscivorous birds were compared among habitats on a Texas reservoir with warm-water effluent and *Hydrilla verticillata*; Pied-billed Grebe (*Podilymbus podiceps*), cormorants (*Phalacrocorax* spp.), American White Pelicans (*Pelecanus erythrorhynchos*), Great Blue Heron (*Ardea herodias*).

Farquhar, C. C. 1992. White-tailed Hawk (*Buteo albicaudatus*), No. 30. In: Poole & Gill (1992).

Fedynich, A. M., and D. B. Pence. 1992. *Sarcocystis* in Mallards on the Southern High Plains of Texas. Avian Dis. 36(4):1067–1069. A new locality for *Sarcocystis* spp. was established in both migratory and breeding populations of *Anas platyrhynchos.*

Francis, C. M., M. H. Richards, F. Cooke, and R. F. Rockwell. 1992. Changes in survival rates of Lesser Snow Geese with age and breeding status. Auk 109(4):731–747. Adult *Chen caerulescens* that did not nest or failed were much less vulnerable than adults that nested; much of juvenile mortality occurred on the breeding grounds or early in migration with survival rates for those reaching migratory stopovers or wintering grounds only slightly less than adults.

Fritz, B. A., C. B. Thoams, and T. M. Yuill. 1992. Serological and microbial survey of *Mycoplasma gallisepticum* in Wild Turkeys (*Meleagris gallopavo*) from six western states. J. Wildl. Dis. 28(1):10–20. Apparently healthy Wild Turkeys can carry pathogenic mycoplasmas and should be screened prior to relocation.

Gibbs, J. P., S. M. Melvin, and F. A. Reid. 1992. American Bittern (*Botaurus lentiginosus*), No. 18. In: Poole & Gill (1992).

Gibbs, J. P., F. A. Reid, and S. M. Melvin. 1992. Least Bittern (*Ixobrychus exilis*), No. 17. In: Poole & Gill (1992).

Grand, J. B. 1992. Breeding chronology of Mottled Ducks in a Texas coastal

marsh. J. Field Ornithol. 63(2):195–202. Late initiation of *Anas fulvigula* nesting at San Bernard NWR was influenced by low rainfall and water levels.

Grant, V., and E. J. Temeles. 1992. Foraging ability of Rufous Hummingbirds on hummingbird flowers and hawkmoth flowers. Proc. Natl. Acad. Sci. USA 89(20):9400–9404. Hummingbird suitability for feeding on and pollinating of bird-pollinated and moth-pollinated flowers.

Gratto-Trevor, C. L. 1992. Semipalmated Sandpiper (*Calidris pusilla*), No. 6. In: Poole & Gill (1992).

Guthery, F. S., and N. E. Koerth. 1992. Substandard water intake and inhibition of bobwhite reproduction during drought. J. Wildl. Mgmt. 56(4):760–768. Under field conditions in the Rio Grande Plains, forbs provided water and water supplementation had no apparent effects in either rainy or drought years.

Gutzwiller, K. J., and S. H. Anderson. 1992. Interception of moving organisms: Influences of patch shape, size, and orientation of community structure. Landscape Ecol. 6(4):293–303. Mean and total number of cavity nesting species and nest abundances for migrants were significantly associated with patch orientation or a patch area time orientation interactions, but not patch shape. This was not true for permanent residents.

Haggerty, T. M. 1992. Effects of nestling age and brood size on nestling care in the Bachman's Sparrow (*Aimophila aestivalis*). Amer. Midl. Nat. 128(1): 115–125. Effects of nestling age and brood size on parental food delivery and brood attention time; both parents feed.

Haig, S. M. 1992. Piping Plover (*Charadrius melodus*), No. 2. In: Poole & Gill (1992).

Hansen, A. J., and D. Urban. 1992. Avian response to landscape pattern: The role of species' life histories. Landscape Ecol. 7(3):163–180. Life histories of species within communities may differ among geographic locations and that communities from distinct biomes may respond uniquely to a given trajectory of landscape change.

Haynie, Carl B. 1992. Texas Bird Records Committee Report for 1991. TOS Bull. 25(1):2–12. This report officially adds 8 species to the Texas state list.

Haynie, Carl B. 1992. Texas Bird Records Committee Report for 1992. TOS Bull. 25(2):30–41. This report officially adds 3 species to the Texas state list.

Honig, Robert A. 1992. Western Kingbird (*Tyrannus verticalis*) utilization of electric power substations in Houston (Harris County), Texas, and vicinity. TOS Bull. 25(1):13–19. Documents kingbird use of the open, grassy areas of electric power substations and rights-of-way.

Hunt, W. G., J. M. Jenkins, R. E. Jackman, C. G. Thelander, and A. T. Gerstell. 1992. Foraging ecology of Bald Eagles on a regulated river. J. Raptor Res. 26(4):243–256. Habitat, foraging behaviour, and prey of nesting *Haliaeetus leucocephalus* varied with seasonal changes in prey availability.

Jackson, N. H., and D. D. Roby. 1992. Fecundity and egg-laying patterns of captive yearling Brown-headed Cowbirds. Condor 94(3):585–589. Yearling *Molothrus ater* females provided with nests containing eggs and/or mock

eggs produced 1–40 eggs and averaged 16.4 eggs over a 68 day nesting period.

Johnston, R. F. 1992. Evolution of the Rock Dove: Skeletal morphology. Auk 109(3):530–542. American ferals developed from domestic stocks in North America no earlier than 400 ybp and are genealogically closer to domestics than to European ferals or wild Rock Doves. But skeletons of American ferals have converged on European ferals (which developed shortly after domestics were derived by artificial selection perhaps 5,000 ybp) and wild Rock Doves.

Johnston, R. F. 1992. Rock Dove (*Columba livia*), No. 13. In: Poole & Gill (1992).

Kennedy, E. D., and D. W. White. 1992. Nest building in House Wrens. J. Field Ornithol. 63(1):35–42. Nest boxes for *Troglodytes aedon* should have slot rather than hole entrances (to facilitate males entering carrying sticks) and small rather than large cavities; males fill cavity with sticks and females add the cup lining.

Kralovec, M. L., R. L. Knight, G. R. Craig, and R. G. McLean. 1992. Nesting productivity, food habits, and nest sites of Bald Eagles in Colorado and southeastern Wyoming. Southwest. Nat. 37(4):356–361. A population of *Haliaeetus leucocephalus* had reproductive success of 63% with 1.21 young fledged per occupied territory; mammals were the most important prey.

Kushlan, J. A., and K. L. Bildstein. 1992. White Ibis (*Eudocimus albus*), No. 9. In: Poole & Gill (1992).

Lasley, G. W., and C. W. Sexton. 1992. The autumn migration: August 1–November 30, 1991. Texas Region. Am. Birds 46(1):117–123.

Lasley, G. W., and C. W. Sexton. 1992. The winter season: December 1, 1991–February 29, 1992. Texas Region. Am. Birds 46(2):286–290.

Lasley, G. W., and C. W. Sexton. 1992. The spring migration: March 1–May 31, 1992. Texas Region. Am. Birds 46(3):446–451.

Lasley, G. W., and C. W. Sexton. 1992. The nesting season: June 1–July 31, 1992. Texas Region. Am. Birds 46(5):1153–1156.

LeBaron, G. S. (ed.). 1992. 92nd Christmas Bird Count. Am. Birds 46(4):508–1058.

Lockwood, Mark W. 1992. First breeding record of *Aechmophorus* grebes in Texas. TOS Bull. 25(2):64–66. Documents breeding of a mixed-species pair of Western and Clark's grebes on Lake Balmorhea in Reeves County, Texas in October 1991.

Longmire, J. L., G. F. Gee, C. L. Hardenkopf, and G. A. Mark. 1992. Establishing paternity in Whooping Cranes (*Grus americana*) by DNA analysis. Auk 109(3):522–529. Determinations of paternity are required for effective genetic management of this captive flock. Paternity was determined in six of seven cases with an unknown sire.

Love, J., and P. Deininger. 1992. Characterization and phylogenetic significance of a repetitive DNA sequence from Whooping Cranes (*Grus americana*). Auk 109(1):73–79. Whooper is more closely related to Common Crane (*G. grus*) than Sandhill Crane (*G. canadensis*).

Lowther, P. E., and C. L. Cink. 1992. House Sparrow (*Passer domesticus*), No. 12. In: Poole & Gill (1992).

Marti, C. D. 1992. Barn Owl (*Tyto alba*), No. 1. In: Poole & Gill (1992).

Rassey, B. W., D. W. Bradley, and J. L. Atwood. 1992. Demography of a California Least Tern colony including effects of the 1982–1983 El Nino. Condor 94(4):976–983. Survival of breeding adults was found to be age-related with younger breeders showing lower return rates than older. The El Nino of 1982–1983 had major adverse effects on the colony for five years.

McKitrick, M. C. 1992. Phylogenetic analysis of avian parental care. Auk 109(4): 828–846. Biparental care is primitive for birds. Various shared care steps were variably decoupled as birds evolved.

Meanley, B. 1992. King Rail (*Rallus elegans*), No. 3. In: Poole & Gill (1992).

Mitchell, C. A., T. W. Custer, and P. J. Zwank. 1992. Redhead duck behavior on lower Laguna Madre and adjacent ponds of southern Texas. Southwest. Nat. 37(1):65–72. *Aythya americana* fed almost exclusively on shoalgrass while dipping and tipping in declining shoalgrass meadows.

Moldenhauer, R. R. 1992. Two song populations of the Northern Parula. Auk 109(2):215–222. Eastern and western populations of *Parula americana* have distinctly different songs.

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Authors of papers on Texas birds published in the 1990s whose citations have not appeared in the Bulletin of the Texas Ornithological Society are encouraged to send copies to the compiler of this list for inclusion.

SHORT COMMUNICATIONS

Noteworthy Avian Breeding Records From Zapata County, Texas

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We documented breeding by the Plain Chachalaca (*Ortalis vetula*), Altamira Oriole (*Icterus gularis*), White-collared Seedeater (*Sporophila torqueola*) and Common Yellowthroat (*Geothlypis trichas*) along the Rio Grande River, near San Ygnacio, Texas.

On 12 August 1995 we observed five adult chachalacas and a juvenile feeding on sugarberry (*Celtis laevigata*) fruits in a brushy corridor near the Rio Grande. Breeding activity of chachalacas upriver from Falcon Reservoir has not been documented since its construction in 1953 (Marion 1974).

In the same area on 12 August 1993, we observed a male Altamira Oriole perched on a pendulous nest in a sugarberry tree. Likewise the Altamira Oriole has not been known to nest upriver from Falcon Reservoir (Texas Ornithological Society 1995; Brush and Bray 1996).

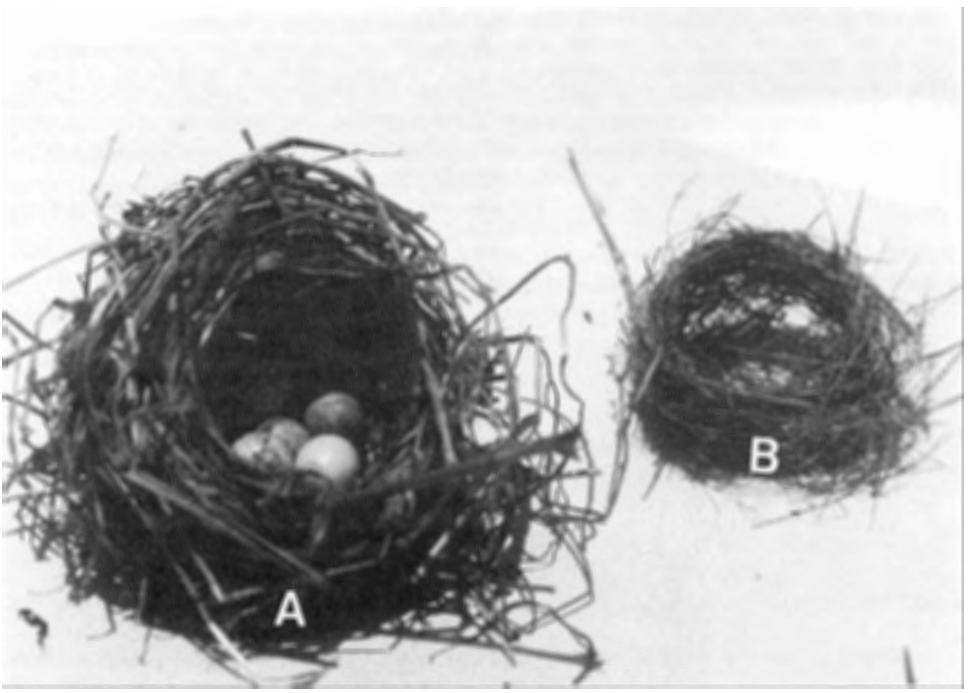

Fig. 1. (A) Parasitized nest of Common Yellowthroat. (B) White-collared Seedeater nest. Both nests discovered near San Ygnacio, Texas, during July of 1995. Photo by Jack Clinton Eitniear.

On 9 July 1995 approximately 1.5 km downstream from San Ygnacio we discovered a nest of a White-collared Seedeater (Fig. 1B) in a field of spiny aster (*Aster subulatus*) (Richardson 1995). The seedeater nest contained one recently hatched chick; however, by 13 July it had been depredated. The seedeater nesting represents only the second documented breeding occurrence in Texas since 1946 (Eitniear and Rueckle 1995; Eitniear and Baccus *In press*).

In the same field of spiny asters a Common Yellowthroat nest (Fig. 1A) was located. While breeding activity by Common Yellowthroats is not particularly noteworthy, the nest had been simultaneously parasitized by Bronzed (*Molothrus aeneus*) and Brown-headed (*M. ater*) Cowbirds. It contained two Common Yellowthroat eggs, two Bronzed Cowbird eggs and a single Brown-headed Cowbird egg. We observed no activity at the nest. Although Brown-headed and Bronzed Cowbirds are sympatric throughout south Texas (Oberholser 1974) few records exist for simultaneous parasitism of a host's nest (Carter 1986; Friedmann et al. 1977).

Acknowledgments

We wish to thank John T. Baccus, Clifford E. Shackelford and Karen L. P. Benson for their comments on this note.

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Some Observations on Common Poorwill Foraging Techniques

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Common Poorwills (*Phalaenoptilus nuttallii*) hunt insects by flying and plucking them from the air, sitting on the ground and flying upward to catch insects, and taking them from the ground. Bent (1940) reported that Dr. R. W. Shafelt (1885) noticed poorwills "making short jumps of two feet or more in the air, then resting on the road to repeat the performance in a moment or so." Bent further reports A. Brazier Howell (1927) saw poorwills hawking moths about a powerful arc light in a railroad yard by "fluttering up in their quest for insects, not just some where near the light but apparently right against the glass globe which enclosed the arc, returning each time to their respective stations for observation." Bent also quotes Mrs. Bailey (1928), "When hunting for food the poor-will skims swiftly and noiselessly close over the ground with irregular turning and winding and rests between." Brigham and Barclay (1992) observed poorwills foraging by sallying from the ground.

Brigham and Barclay (1992) note they "never observed poorwills flying continuously while foraging" in their study done in South-central British Columbia. In a study of Common Poorwills in the rolling plains area of west Texas (Freemyer 1993), I observed eight instances of poorwills foraging by the typical erratic flight necessary to catch insects on the wing.

On 29 April 1995, I observed a poorwill foraging from a ranch road. The road was in Klein grass (*Panicum coloratum*) bounded on one side by mesquite (*Prosopis juliflora*). It was quite dark, as there was no moon and the sky was mostly cloudy. I observed the bird from a distance of 10 m in the glow of my truck lights for 12 minutes. During that time it caught six insects by sallying or upward flights of 0.2 to 1.5 m. Brigham and Barclay report poorwills sallying to a maximum height of 3 m at the rate of five sallies per minute. The bird returned each time to almost the same spot on the road. It faced the north each time, which was into a 25 km/h wind. I observed it most of the 12 minutes with binoculars, and it had almost continuous head movement to observe passing insects. It was selective about the insects taken as it seemed to observe more insects than it attempted to catch. At the end of the observation time the poorwill flew towards and around behind my truck. This pattern is typical of poorwills when flushed.

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Use of Dog Food by Birds in Southern Texas

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For the past five years, John and Eva Casto, parents of the author, have fed the birds at their ranch home near Millett, La Salle County, Texas. This regular feeding of maize, corn, and commercial bird seed has attracted a variety of resident and seasonal species. The Castos also feed their ranch dogs PMI Premium 22 Dog Formula *ad libitum* in a three gallon bucket about 46 meters from the house. PMI dog biscuits weigh, on the average, about 0.45 grams (n = 10) and are about 1.0 centimeter square.

Previous authors have commented on the suitability of cracked dog biscuits as food for birds (Barton 1961; Weber 1982) but have given no details on their use by different species. It is therefore the purpose of this paper to provide a list of species observed to eat PMI dog biscuits and to describe some of the behaviors involved in the feeding process.

It was first noted in May 1993 that birds were taking biscuits from the bucket in which the dogs were being fed. To facilitate closer observation, a shallow pan was set on the top of a fence post about 9 meters from the kitchen window, and a table feeder set at about an equal distance further away. Each day the pan was filled with dog food and grain was placed on the table feeder.

During the period from May 1993 through June 1995, ten different species of birds were observed to eat dog biscuits. Golden-fronted Woodpeckers were the first species observed to use the dog food. The woodpeckers initially carried the biscuits to a nearby tree stump where they were placed in a small depression and then broken with 3–4 rapid pecks. Later the biscuits were carried to nearby trees where they were broken. After a few months the woodpeckers were often seen swallowing the biscuits whole. The two resident pairs of Golden-fronted Woodpeckers visited the feeder several times each day during the entire study period. On 21 June 1995 a juvenile golden-front was seen taking a biscuit. The juvenile was later joined by an adult female who was twice observed to break a biscuit and feed the pieces to the juvenile.

Curve-billed Thrashers initially carried the biscuits away, but later they swallowed them before leaving the feeder. The 4 to 6 resident thrashers visited the feeder daily during the study period. On 22 June 1995 a thrasher was twice observed carrying a biscuit to its chicks in a nest about 15 meters from the feeder. A male and female Northern Cardinal were observed to take biscuits during February 1994 and, on two occasions, a thrasher was seen chasing the male cardinal away from the feeder.

House Sparrows visited the feeder regularly to eat fragments of the dry biscuits. White-crowned Sparrows and Lark Buntings were also seen eating biscuits that had become softened by the rain during March 1995.

Common Grackles were observed during December 1994 removing biscuits

from the pan and then flying to the ground where they walked around carrying the biscuits in their beaks. Most of the birds soon dropped the biscuits and flew away but two birds were seen to swallow their biscuits. In contrast, the Great-tailed Grackles that visited the feeder during March through May 1995 always swallowed the biscuits before leaving the feeder.

The meadowlarks that visited the feeder during February through April 1995 generally carried the biscuits to the ground where they were broken by a series of pecks. On one occasion, a Northern Mockingbird flew directly to the feeder where it took a biscuit and immediately swallowed it. Although this behavior suggests a familiarity with dog food, the mockingbird was never again seen at the feeder.

Other species occasionally investigated the dog food. A Cactus Wren used its bill in a side-to-side sweeping motion to knock several biscuits from the pan and, on two occasions, biscuits were taken into the bill but later dropped. Brown-headed Cowbirds often examined the dog food but made no attempt to eat. The Bronzed Cowbirds and Mourning Doves that came regularly to the table feeder paid no attention to the dog food. A nearby rancher reported that Green Jays, an uncommon species in La Salle County, routinely took dog biscuits from a bucket kept on his porch during March 1994.

The daily quantity of dog food eaten during the winter of 1994–1995 was determined by placing a known number of biscuits in the feeder in the morning and counting the number remaining at the end of the day. The number of biscuits removed in a single day varied from as few as 100 to as many as 240. Thus, in addition to the grain being eaten by the birds, they consumed from 45 to as much as 108 grams of dog food per day.

These observations indicate that a wide variety of birds will use dog food as a supplemental food source. The year-round consumption of dog food by the resident Golden-fronted Woodpeckers and Curve-billed Thrashers suggests that it was a significant part of the food economy of these individuals.

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Unusual Behavior Of Wintering Louisiana Clapper Rails

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Louisiana Clapper Rails (*Rallus longirostris saturatus*) prefer coastal salt marsh habitat (Eddleman and Conway 1994) using primarily dense smooth cordgrass (*Spartina alterniflora*) (Sharpe 1976) during the breeding season. Habitat use by Clapper Rails after nesting is poorly understood, but is thought to depend on wind, temperature, and tides (Meanley 1985:81). Basic life history aspects, including habitat use has been identified as a research priority for wintering Clapper Rails (Eddleman and Conway 1994). In this paper we report previously unreported observations of habitat use by Louisiana Clapper Rails.

On two occasions, we flushed two Clapper Rails from a hole in the ground about 2-km southeast of Indianola in Calhoun County, Texas. The hole was located next to a metal culvert and appeared to be formed by soil eroding from around the pipe. A gravel road passed over the metal culvert and divided the coastal salt marsh into two areas. The entrance to the hole was 15 cm high, 23 cm wide, and about 1.5-m deep, with an inclining slope from the entrance. The terminal end of the hole appeared wider than the entrance.

This behavior was noted on 23 November 1992 and 15 January 1993 between 1200 and 1600 hours. Temperature on both occasions was about 17 C. The wind ranged from 32–48 km/h with no precipitation. The culvert was located in a estuarine intertidal emergent persistent wetland dominated by smooth cordgrass (Cowardin et al. 1979). Most of the substrate was exposed (i.e., not covered by water) as both observations occurred when the tide was low. In the ditch, where the culvert was located, the water was about 10-cm deep. We visited the hole on two more occasions in February (18 C, wind <10 km/h) and March (19 C, wind <10 km/h), but no Clapper Rails were flushed.

We have not found any reports of similar behavior in Clapper Rails. However, in North Carolina a Clapper Rail was flushed from under a pile of drift, after a tide had receded (Adams and Quay 1958). A King Rail (*Rallus elegans*) has been observed passing through a hole in a rice field dike, but both sides of the hole were open (Meanley 1985:46).

Eddleman and Conway (1994) state that there is lack of data on Louisiana Clapper Rails. Many aspects of basic biology and basic life history of Clapper Rails are currently unknown. We hypothesize that Clapper Rails may be using the underground hole because it appears structurally similar to the canopy closure of dense stands of vegetation, a preferred habitat. An alternative hypothesis is that high wind speed during the obervations may account for the use of the hole. Less energy would be expended by the presence of a windbreak as shown in several studies (Francis 1976; Thompson and Fritzell 1988).

We present our explanations as possible hypotheses to explain this unusual behavior of Clapper Rails. We suggest that a detailed study using an experimental approach will answer the questions; is this behavior common and what is the significance of this behavior.

Acknowledgments

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Bird Skeleton Specimens Collected by Albert J. Kirn: County Records Not Reported in Oberholser's "The Bird Life of Texas"

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Additional bird specimens which represent county records not reported in Harry C. Oberholser's "The Bird Life of Texas" continue to be found, as reported in the following papers: Barr et al. 1975; Bryan and Moldenhauer 1977; Dowler et al. 1978; Gallucci and Scudday 1978; and Gallucci 1979. Sometimes these specimens may be found in museums outside Texas (Messerly 1995). For many years field naturalists from all over the country exchanged specimens for comparison with forms found in their area. They also sent specimens to professional ornithologists and to museums. Albert J. Kirn was one of these field naturalists.

On 25 May 1928 Kirn wrote to Charles D. Bunker (at that time, Assistant Curator in Charge of the Recent Vertebrates in the University of Kansas Museum) (Hall 1951): "I still have a box of skeletons that the bugs are hard at work on. I'll try to get them out to you this coming week." Neither the date these specimens were received nor the accession number can be found, (Mark Robbins, *pers. comm.*), but there are 176 bird skeletons collected by Kirn in Texas, and one in Oklahoma, at the museum. The following 25 specimens represent county records not reported in Oberholser's "The Bird Life of Texas." This list follows the order and nomenclature of "The A. O. U. Check-list of North American Birds" (1983, 6*th* edition and subsequent supplements). The Oberholser nomenclature, where it differs, follows in parenthesis.

Kirn Skeleton Specimens

Species	*County*	*Date*	*UKMNH*
Podiceps nigricollis	Callahan	12/10/27	17281
Eared Grebe			
(Proctipus caspicus)			
Buteo swainsoni	Callahan	04/24/26	15340
Swainson's Hawk			
(Craxirex swainsoni)			
Buteo jamaicensis	Callahan	04/15/26	15338
Red-tailed Hawk			
Falco sparverius	Bexar	12/21/25	15346
American Kestrel			
(Tinnunculus sparverius)			
Rallus longirostris	San Patricio	05/18/28	17790
Clapper Rail			
Porzana carolina	Callahan	04/24/26	15253
Sora			
Fulica americana	Callahan	04/17/26	15254
American Coot			
Charadrius vociferus	Bexar	12/10/25	15328
Killdeer			
(Oxyechus vociferus)			
Zenaida macroura	Bexar	02/07/26	15347
Mourning Dove			
Speotyto cunicularia	Callahan	04/24/26	15252
Burrowing Owl			
Tyrannus verticalis	Callahan	04/22/26	15276
Western Kingbird			
Tyrannus forficatus	Callahan	04/12/26	15275
Scissor-tailed Flycatcher			
(Muscivora forfiicata)			
Certhia americana	Atascosa	02/03/26	15308
Brown Creeper			
(Certhia familiaris)			
Thryothorus ludovicianus	Victoria	no date	16588
Carolina Wren			
Regulus calendula	Callahan	04/10/26	15277
Ruby-crowned Kinglet			
Hylocichla mustelina	Atascosa	11/16/27	20109
Wood Thrush			
Lanius ludovicianus	Callahan	04/23/26	15272
Loggerhead Shrike			
Pipilo erythrophthalmus	Callahan	03/18/26	15291
Rufous-sided Towhee			
(Hortulanus erythrophthalmus)			
Spizella pallida	Callahan	04/29/26	15270
Clay-colored Sparrow			

Pooecetes gramineus Vesper Sparrow	Callahan	03/18/26	15300
Chondestes grammacus Lark Sparrow	Callahan	03/20/26	15292
Melospiza lincolnii Lincoln's Sparrow	Callahan	02/18/26	15304
Zonotrichia querula Harris' Sparrow	Callahan	03/18/26	15295
Junco hyemalis Dark-eyed Junco	Callahan	04/10/26	15267
Xanthocephalus xanthocephalus Yellow-headed Blackbird	Callahan	04/28/26	15259

I want to express my appreciation to Marion Jenkinson (deceased) who sent me a computer printout of the data from the 177 Kirn skeleton specimens at the University of Kansas Museum of Natural History and to Mark Robbins, Collection Manager of Ornithology at the University of Kansas Museum of Natural History, who checked records for the accession number and the date the Kirn skeletons were received and answered my questions about Charles D. Bunker.

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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 8½ × 11 inch (22 × 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.

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