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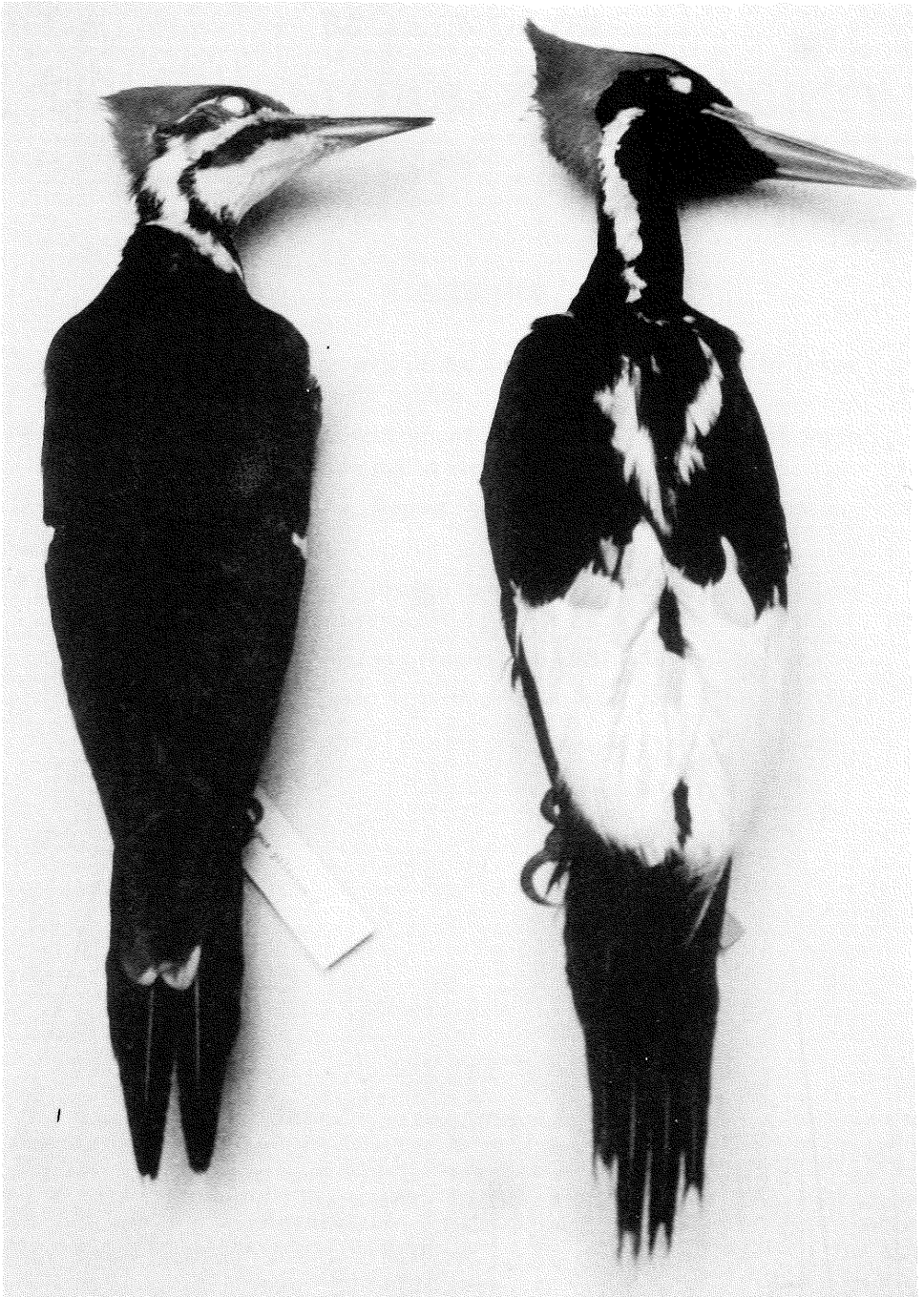
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FRONTISPIECE. A dorsal view of two adult male woodpeckers: Pileated on the left and Ivory-billed on the right. Compare the amount of white versus black between the throats and back (folded wings), plus the size and color of the bills. Although there have been numerous reports of this species in Texas, the last documented record of an Ivory-bill in Texas was two specimens from 26 Nov 1904 in Liberty Co. (see accompanying paper). Specimens courtesy of LSU Museum of Natural Science. Photo by C. E. Shackelford.

A COMPILATION OF PUBLISHED RECORDS OF THE IVORY-BILLED WOODPECKER IN TEXAS: VOUCHER SPECIMENS VERSUS SIGHT RECORDS

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ABSTRACT.—I reviewed all published reports of the Ivory-billed Woodpecker (*Campephilus principalis*), including specimen and sight records from Texas. A total of 25 published records and two U. S. Biological Survey unpublished reports revealed three specimen records and 44 sight records. Also, a sound voucher of the “double-knock” of a presumed Ivory-bill in Texas appears on an album of bird songs. This compilation reveals additional reports not published in Oberholser (1974), which is considered to be the main source of historical data for Texas. The intent of this paper, many decades later, is not to determine the validity of each sight record, but problems discriminating Ivory-bills from similar Pileated Woodpeckers (*Dryocopus pileatus*) was prevalent in the past thus warranting additional documentation of purported Ivory-billed records.

The Ivory-billed Woodpecker (*Campephilus principalis*) was never a common species in Texas (Oberholser 1974). It is reported to have been a resident of mature forests in remote swampy, bottomlands (Tanner 1942, Oberholser 1974). Some authors postulated that the mainland, nominate subspecies (*C. p. principalis*) may have been a bird exclusive to open pine forests, but the logging practices in the southeastern U.S. from ca. 1850 until ca. 1930 of rapid clearcutting with little or no replanting efforts may have pushed remaining Ivory-bills into the river bottoms (Short 1982). This statement arose after the examination of the habitat preference of the now extinct (Lammertink 1995, Lammertink and Estrada 1995) insular subspecies the Ivory-bill (*C. p. bairdi*) of Cuba and the Mexican endemic Imperial Woodpecker (*C. imperialis*); both were apparently “pine specialists” (Dennis 1948, Tanner 1964). It is my belief that the Ivory-bill was distributed somewhat “evenly” throughout the forested landscape, much like the Pileated Woodpecker (*Dryocopus pileatus*) of present day (Shackelford and Conner 1996, 1997). The Ivory-bill may have been able to survive until the early 1900s in more remote, swampy sites that both loggers and collectors could not access readily. Although numerous reports of Ivory-bills accumulated in the Southeastern U.S. in the mid-1900s, the last official documentation of the mainland form was from the Singer Tract (present day Tensas National Wildlife Refuge) near Monroe, Louisiana in 1942 by James Tanner et al. (Jackson 1988).

RESULTS AND DISCUSSION

A total of 25 published records, two unpublished field reports from the U.S. Biological Service and one audio voucher that appears on an album of Cuban bird songs were gathered and reviewed as reports of Ivory-billed Woodpeckers in Texas (Table 1). This woodpecker formerly occurred east of the Brazos River (Fig. 1) where preferred forest cover once dominated. Specimen and sight records

Table 1. Published records, in chronological order, of Ivory-billed Woodpeckers in Texas.

Record	Date	County	Location	Observer	Citation	Notes
1	9 May 1837	Harris	near the mouth of Buffalo Bayou near the San Jacinto battleground	Collected by J. J. Audubon	Audubon 1839; Chapman 1930; Geiser 1948; Oberholser 1974	Audubon states that he "secured several specimens," but specimens were not located (probably lost when shipped to the Old World)
2	1849	Cooke	7.5 miles south of Gainesville	J. Gorham	Oberholser 1974	
3	1851	Cooke	7.5 miles south of Gainesville	J. Gorham	Oberholser 1974	
4	pre-1853	--	--	--	Woodhouse 1853	
5	May 1864	Brazos	along lower Brazos River bottoms	H. E. Dresser	Dresser 1865; Oberholser 1974	Nest with young; same citation briefly mentions a second individual along the Trinity River the same year (county?)
6	1865	--	Brazos and Trinity river bottoms	--	Dresser 1865; Ridgway 1914	
7	ca. 1875	Cooke	Red River bottoms	G. H. Ragsdale	Hasbrouck 1891	
8	ca. 1880	Tyler	Russell Creek area	F. Pope	Baker 1956	
9	ca. 1880	Harris	northern part of county	H. Nehrling	Nehrling 1882	
10	ca. 1880	--	Brazos River bottoms	R. M. Conway	J. H. M. 1885	
11	1880-1881	Harris	Spring Creek in northern part of county	--	Oberholser 1974	
12	1880-1881	Montgomery	northern part of the county	H. Nehrling	Nehrling 1882; Ridgway 1914	Encountered several times in dense pine forests
13	3 May 1885	Jasper	Neches River bottoms	Collector?	Hasbrouck 1891; Allen and Kellogg 1937; Oberholser 1974	3 eggs collected; in B. F. Goss egg collection in Milwaukee Public Museum, #338
14	1890	Fannin	Bonham area	H. F. Peters	Oberholser 1974	
15	1900	Dallas	Bois d'Arc Isl., Trinity River bottoms	Collected by W. A. Mayer	Oberholser 1974 says Kaufman Co.; Pulich 1988 corrects to Dallas Co.	Specimen at Dallas Museum of Natural History, #6216
16	1900	--	near San Antonio	--	Phillips 1926	Killed but not preserved
17	26 November 1904	Liberty	six miles east of Tarkenton near Gaylor Lake, Trinity River bottoms	Collected by V. Bailey	Phillips 1926; Cottam and Knappen 1939; Peterson 1960; Oberholser 1974	Specimens at USNM, #195199 & 195200; 6 birds in one day; 2 specimens and 4 others seen

Table 1. Continued.

Record	Date	County	Location	Observer	Citation	Notes
18	6 March- 11 April 1905	Hardin	eight miles northeast of Sour Lake	J. H. Gaut	Gaut 1905a	
19	24 April 1905	Liberty	Tarkington road, four miles east of Cleveland	J. H. Gaut	Oberholser 1974; Gaut 1905b	
20	pre-1910	--	Neches River bottoms	R. Gann	Baker 1956	
21	1910	Dallas	Trinity River bottoms	W. A. Mayer	Oberholser 1974	
22	1910-1915	Angelina	near Lufkin	J. Shotwell	Baker 1956	
23	June 1913	Harris	Spring Creek area in north- ern part of county	F. Schneider	Oberholser 1974	
24	12 and 15 March 1918	Harrison	about 10 miles southeast of Marshall	A. D. Martin	Oberholser 1974	
25	ca. 1920	Kaufman or Dallas	Bois d'Arc Isl., Trinity River bottoms	Collected by J. E. Stillwell	Oberholser 1974; Pulich 1988	One said to have been shot, but specimen not located
26	winter 1927	Kaufman	at mouth of east fork of Trinity River	Caught in trap by B. C. Hays, examined by E. R. Huck	Oberholser 1974; Pulich 1988	Specimen not preserved; Pulich 1988 says "R. E." Huck
27	29 May 1927	Brazoria	near Brazoria in Brazos River bottoms	One found freshly killed by F. C. Clarkson	Oberholser 1974	Specimen not preserved
28	14 April 1929	Tyler	--	B. M. Reid	Oberholser 1974	
29	1 Novem- ber 1933	Hardin	at junction of Village Creek and Neches River	C. H. Hooks and B. M. Reid	Oberholser 1974	
30	1934	Jasper	along Angelina River in extreme northern part of county	B. M. Reid	Oberholser 1974	
31	19 May 1937	Jefferson/Or- ange county line	lower Neches River bot- toms	B. M. Reid	Oberholser 1974	
32	1938	Orange	--	B. M. Reid	Oberholser 1974	
33	prior to October 1938	Jefferson	Bunn Bluff area	B. M. Reid	Oberholser 1974	
34	March 1956	--	Big Thicket National Pre- serve area	B. M. Reid	Eastman 1958	Last sighting from the span of 1901-1956 by Ms. B. M. Reid

Table 1. Continued.

Record	Date	County	Location	Observer	Citation	Notes
35	1960-1963	--	between the Trinity and Neches rivers	W. Eastman	Oberholser 1974	2 pairs, one lone female, and others noted
36	19 February 1966	Tyler and Jasper	Neches River bottoms; Dam B Reservoir area	J. V. Dennis and A. Yra-mategui	Dennis 1967	
37	3 and 10 December 1966	Tyler and Jasper	near Evadale in the Neches River bottoms	J. V. Dennis and A. Yra-mategui	Dennis 1967; Moser 1972; Oberholser 1974; Dennis 1979	Follow-up on an initial sighting by O. H. Lloyd
38	27 April 1967	Jasper	north of Evadale in the Neches River bottoms	K. Newsom	Dennis 1967	Observer written as Mrs. C. Newsom
39	February 1967	--	Neches River bottoms	J. V. Dennis	Dennis 1967	
40	25 February 1968	Hardin	Sternberg Tract on Village Creek in the Neches River bottoms	J. V. Dennis and M. E. Is-leib; G. Watson	Hardy 1975; Dennis 1979	Recorded by Dennis; analyzed by J. W. Hardy (deemed inconclusive); two separate reports on same day
41	7 December 1968	Hardin	Pine Island Bayou area	G. Watson and D. Watson	Moser 1972	
42	1968	Hardin	Village Creek area of Big Thicket National Preserve	J. V. Dennis	Moser 1972	
43	1969	--	Big Thicket National Preserve area	G. Reynard	Appears on the "Bird Songs in Cuba" album by Reynard and Garrido 1988	Recorded a "double-knock", but upon review, Tanner said "not an Ivory-bill"
44	12 July 1972	Liberty	Tanner Bayou of lower Trinity River bottoms	L. Risner	Fisher et al. 1972	
45	21-22 May 1976	Jasper	near Wolf Creek by Steinhagen Reservoir	W. Mounsey and "The University of the Wilderness" students from CO.	Dennis 1979	
46	--	--	somewhere between the San Marcos and Guadalupe River bottoms near New Braunfels	J. M. H.	Anonymous 1885 ^a	
47	--	--		F Roemer	Roemer 1849 ^a ; Tanner 1942	
48	--	--	near the Brazos River bottoms	R. M. Conway	Anonymous 1885	

Dashed lines or incomplete dates are missing data from the literature available.
^a Tanner (1942) concluded that these were mistaken identifications.

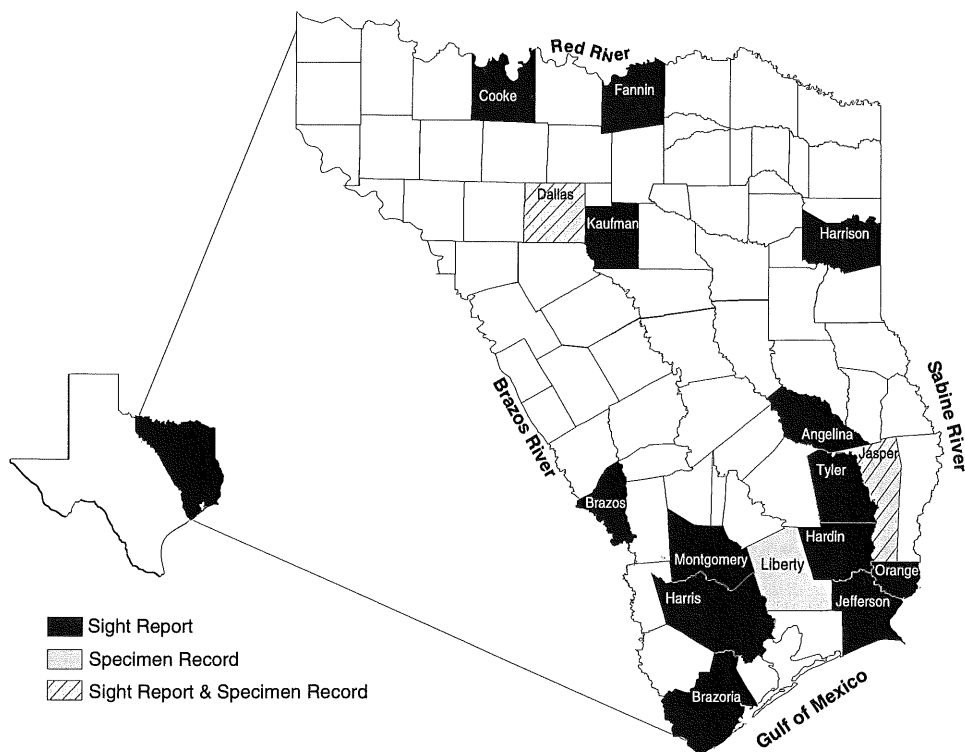


Fig. 1 Shaded counties in Texas with specimen records, sight records or both of Ivory-billed Woodpeckers from 1837–1976.

were from a 141-year span from 1837–1976 in Texas. The three specimen records are from different Texas counties, while 44 sight records were from 16 different counties (Fig. 1). A lack of information in the literature resulted in 12 sight records with no county name given (Table 1). Hardin County had the most sight records with a total of five reports (11%), while 10 counties (23%) had single sight records (Table 1). The majority of sight records and two of the three specimen records were from what was historically known as “the big thicket” (Parks et al. 1936, McLeod 1972), not to be confused with the present day Big Thicket National Preserve, a tiny remnant of a once vast forested landscape.

In the majority of accounts, little or no discussion was made regarding the forest type or surrounding habitat where birds were reported or collected; most merely report the bird in a list of species encountered. Comments by others regarding the presumed habitat preference of this species to upland pine forests then shifting to bottomlands to avoid logging and collecting make it difficult to believe that a bird adapted to open pine forests could suddenly adapt to a completely different lifestyle in the bottomlands. In modern terms, it would seem virtually impossible for the woodpecker that is the true southeastern U.S. pine specialist, the Red-cockaded Woodpecker (*Picoides borealis*), to make such an adjustment in habitat preference. The loss of adequate mature habitat played a key role in the extinction of this species throughout its range (Jackson 1988).

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POPULATIONS AND HABITAT REQUIREMENTS OF BREEDING HENSLOW'S SPARROWS IN HARRIS COUNTY, TEXAS

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ABSTRACT.—We studied the small breeding population of Henslow's Sparrow in Harris County, Texas, in 1980 and 1981. Color-marked sparrows allowed us to determine territory sizes and early and late dates for the presence of this population. We also characterized the vegetation of the sparrow territories. Invasion of Chinese tallow (*Sapium sebiferum*) and red imported fire ants likely played important roles in the extinction of this isolated population.

The Henslow's Sparrow, *Ammodramus henslowii*, breeds in the eastern parts of North America, from North Carolina and West Virginia north to southern Vermont, southern New Hampshire and southern Ontario, west to central Minnesota, eastern South Dakota, eastern Kansas, central Missouri and southern Illinois (Amer. Ornithol. Union, 1983). The A.O.U. (1957: 493) recognized two subspecies and referred to breeding of the western subspecies, *A. h. henslowii*, in "north-eastern Texas", without reference to a specific location. Watson (*in* Goldman & Watson 1952) found 6 singing males on 27 May 1952 on a prairie near Deer Park, Harris County, Texas (now a suburb of Houston), and counted 21 singing males a few days later; he did not confirm breeding. This report may represent the above A.O.U. (1957) basis for citing breeding of *A. h. henslowii* in Texas. Oberholser (1974: 902) cites the report of a singing male in southeast Houston on 8 April 1973 by Mike Braun; on 31 July 1973 Noel Pettingell sighted an immature bird and on 12 August 1973 a census of the field produced 71 Henslow's Sparrows, 9 immatures and 62 adults. In 1978, Pettingell (pers. comm) recorded 7 birds on 12 August and 18 birds on 13 August. This population represented an extension of the breeding range of about 832 km (520 mi) south of the then known breeding range for the western subspecies in southeastern Missouri. The species has recently been found breeding in northeastern Oklahoma (*fide* Clifford Shackelford).

Although Oberholser (1974) also allocated the Harris County population to the western subspecies, this was done without benefit of specimens. The isolation of this population suggested the possibility of a group genetically distinct from the western subspecies. Two specimens collected by Arnold on 12 July 1975 did not resolve this taxonomic question because of the worn condition of their feathers.

More importantly, the distance of this breeding population from the primary range of the species suggested probable differences in habitat requirements when compared to those populations in the remainder of the species' range. Knowledge of specific habitat requirements might have allowed for management of this Texas population and aided in a search for additional populations.

Because of the isolation and potential differences in habitat requirements, it seemed appropriate to determine the taxonomic status of the Texas population

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Fig. 1. An adult *Ammodramus henslowii houstonensis* in the hand.

and to understand any habitat preferences. Arnold (1983) described the Harris county population as a new subspecies, *A. h. houstonensis* on the basis of two additional specimens collected in 1981. Here we describe our efforts to determine the status of the Harris County population and to describe the breeding habitat.

STUDY AREA

The field in which the Henslow's Sparrows bred was a 105 ha (260 ac) site in southeast Houston, Harris County, Texas. The land, then owned by the Atchison, Topeka and Santa Fe Railway Company, lies south of the railway switchyard. Hobby Airport borders to the east and residential developments to the west. Brush and a pasture bordered the land on the south. A drainage canal divided the tract. The western part of the tract was higher and dryer than the eastern part; the sparrows used only the western parts of the tract. Security personnel of the railway company granted limited access to the tract.

We initiated field work on 5 July 1980. We completed work in August 1981. With the exception of November and December 1980, parties of three to 12 individuals worked at this area at least once each month.

METHODS

Populations estimates.—Because the Henslow's Sparrow is a territorial species that occupies a wet meadow habitat (Oberholser 1974), we used two census meth-

Table 1. Banding and color-marking of Henslow's Sparrows on the Houston study site.

	Date	No. banded	No. color-marked	Recaptures
1980	5 July	0	0	0
	12 July	5	4	0
	20 September	1	1	0
	25 October	1	1	0
1981	24 January	0	0	0
	14 February	0	0	0
	7 March	0	0	0
	28 March	0	0	0
	4 April	1	1	0
	25 April	3	2	2
	9 May	0	0	1
	23 May	1	1	1
	13 June	0	0	2
	20 June	0	0	0
	11 July	1	1	0
	18 July	1	1	1
	25 July	0	0	0
	15 August	0	0	1
Totals		14	12	8

ods. First, we counted singing males which provided an estimate of occupied territories.

In order to identify individual territorial males, we attempted to capture each singing male and mark it with a U.S. Fish and Wildlife Service aluminum band and three colored plastic leg-bands; each color band had two colors (Table 1). We used one color combination with the aluminum band to indicate month of banding.

Secondly, we estimated total population size by traversing the habitat with teams of observers spread along a line at regular intervals and making sweeps across the area under study. We made this estimate after the young have fledged and before the arrival of migrants. Because of time restraints, we made no census in the first summer of study (1980), but we conducted a census in May 1981. Attempts to census the area in July and August 1981 failed for lack of sufficient personnel.

Permanence of the population.—Because the Henslow's Sparrow is also a wintering bird in Texas, we felt it necessary to determine the stability of the breeding population throughout the year, i.e., do these birds remain on the area as permanent residents or do they migrate elsewhere for the winter months? To answer this question, we attempted to visit the study area at least once every month and net any Henslow's Sparrows encountered. This allowed 2 ways in which overwintering by the breeding birds could be documented: capture of birds banded in 1980 as breeding adults, or marking of wintering birds which provided an estimate of occupied territories.

Territory size.—We determined territory size in order to (1) evaluate the potential population which the habitat could maintain and (2) evaluate the relationship of male success in attracting females to territory size. In addition, we determined the relationship of territory size and female productivity. Because of color-marked males, we could determine which male held which territory. We marked each singing post, then flushed the male and marked each spot where it stopped,

Table 2. Frequency of occurrence for the most common plants based on 24 Plots

	Numbers/plots		Stems/plot	Frequency
* Ambrosia	115/6	=	19.16	25.0
* Little bluestem	635/16	=	39.68	66.6
* Dewberry	25/3	=	8.33	12.5
* Indian grass	115/6	=	19.16	25.0
* Brownseed	198/8	=	24.75	33.3
* Dichanthelium #1	385/15	=	24.75	62.5
* Muhlenbergia	145/3	=	25.66	12.5
* Dichanthelium (Per)	90/3	=	48.3	12.5
* Big bluestem	205/6	=	34.16	25.0
* Florida Paspalum	120/3	=	40.00	12.5
Myrica	250/6	=	41.66	25.0

until the male turned back into the then-delineated territory. Based on these marked spots, we could draw a minimum area polygon that approximated the bird's territory.

Habitat vegetation.—We characterized vegetation through territories to assess plant composition and structure of the species in Texas. We established transect lines through known territories of the sparrows at the Houston site. Four lines, 100 m each, were sighted with a compass at 150° from north, using a surveyor's table and peepsite. We took line intercept values for canopy cover of shrubs. Using a 50 × 50 cm frame, we took 24 samples, 6 on each line, at 15 m intervals for frequency and percent cover of grasses and forbs.

RESULTS AND DISCUSSION

Vegetation: Tables 2–5 summarize the vegetation from the four survey lines through Henlow's Sparrow territories. Note the high incidence of grasses and forbs in the plots on these survey lines that indicates the vegetative structure of the habitat, especially of bunched grasses (Tables 2, 4 and 5). Barrows (1912, p. 494) characterized the habitat of this species as "... wet grounds, often overgrown with long grass, weeds and shrubs." He also commented on the wetness of much Henslow's Sparrow habitat. This description fits very well the situation on our study area (Fig. 2). The presence of nesting Northern Harriers (*Circus cyaneus*) and Mottled Duck (*Anas fulvigula*) in the wetter parts of the field also indicate moist nature of the vegetation. At the same time, Lark Sparrows (*Chondestes grammacus*) and Common Yellowthroats (*Geothlypis trichas*) commonly advertised throughout much of the field.

Note also, however, the intrusion of woody plants into the sparrow habitat

Table 3. Percent canopy cover of woody vegetation on line transects through Henslow's Sparrow habitat.

Transect Line	Myce ^a	Baha ^a	Casa ^a
I	3.4	—	—
II	3.0	9.1	—
III	8.35	5.4	0.55
IV	1.6	5.2	—

^a Myce = Southern Wax Myrtle; Baha = Baccharis; Casa = Chinese Tallow.

Table 4. Frequency of occurrence (percent) of grasses and forbes on line transects through Henslow's Sparrow habitat.

Grasses		
Big Bluestem	<i>Andropogon gerardii</i>	25.0
Dichanthelium #1	<i>Dichanthelium</i> sp.	62.5
Perennial Dichanthelium	<i>Dichanthelium</i> sp.	12.5
Muhley	<i>Muhlenbergia</i> sp.	12.5
Florida Paspalum	<i>Paspalum floridanum</i>	12.5
Brownseed Paspalum	<i>Paspalum plicatulum</i>	33.3
Little Bluestem	<i>Schizachyrium scoparium</i>	66.6
Indian Grass	<i>Sorghastrum nutans</i>	25.0
Forbs		
Ragweed	<i>Ambrosia</i> sp.	25.0
False Indigo	<i>Baptisia</i> sp.	*
Sedge	<i>Carex</i> sp.	*
Yellowroot Carex	<i>Carex</i> sp.	*
	<i>Fimbristylis</i> sp.	*
Wax Myrtle	<i>Myrica cerifera</i>	25.0
Yellow Sensitive Brier	<i>Neptunia lutea</i>	*
Dewberry	<i>Rubus</i> sp.	12.5
Coneflower	<i>Rudbeckia hirta</i>	*
Sensitive Brier	<i>Schrankia</i> sp.	*
Rosin Weed	<i>Silphium</i> sp.	*
Devil's Shoestring	<i>Tephrosia</i> sp.	*
Miscellaneous		
Unidentified Blue Forb		*
Unidentified Narrowleaf Forb		*
Brownseed litter		*

* Less than 1 per cent.

Table 5. Percent cover on 24 plots in Henslow's Sparrow habitat.

Plant species	Transect quadrant											
	I						II					
	A	B	C	D	E	F	A	B	C	D	E	F
<i>Ambrosia</i> sp.	20	—	—	—	—	—	—	—	—	—	—	10
Little Bluestem	40	—	—	—	—	60	—	15	80	20	70	20
Dewberry	10	—	—	—	10	—	—	—	—	—	—	—
Indian Grass	20	—	—	—	—	—	—	—	—	—	15	30
Brownseed Paspalum	—	50	—	—	30	—	40	13	—	—	15	—
Narrowleaf Forb	—	20	—	—	—	—	—	—	—	—	—	—
Dichanthelium #1	—	30	10	100	—	—	30	10	—	20	—	—
Muhley	—	—	20	—	—	—	—	50	—	—	—	—
Sedge	—	10	—	—	—	—	—	—	—	—	—	—
Perennial <i>Dichelium</i>	—	—	60	—	—	—	—	—	—	—	—	—
Perennial Dichanthelium	—	—	—	10	—	—	—	—	—	—	—	—
Big Bluestem	—	—	—	—	10	40	—	—	20	—	—	15
Little Bluestem	—	—	—	—	—	60	—	15	80	20	70	20
Florida Paspalum	—	—	—	—	—	—	10	—	—	—	—	—
6-merous Blue Forb	—	—	—	—	—	—	15	—	—	—	—	—
<i>Rudbeckia hirta</i>	—	—	—	—	—	—	—	—	5	—	—	—
Wax Myrtle	—	—	—	—	—	—	—	—	—	70	—	—
<i>Tephrosia</i> sp.	—	—	—	—	—	—	—	—	—	—	—	10
Other	10	—	—	—	—	5	5	5	5	5	—	—
Totals	100	100	100	110	50	105	100	93	110	105	100	85

Table 5. (Continued).

Plant species	III						IV					
	A	B	C	D	E	F	A	B	C	D	E	F
<i>Ambrosia</i> sp.	30	0	20	0	5	10	0	10	10	0	0	0
Big Bluestem	40	0	80	0	0	0	0	0	0	0	0	0
Little Bluestem	20	30	0	0	30	30	50	80	60	20	0	30
Florida Paspalum	10	0	0	0	100	0	0	0	0	0	0	0
<i>Myrica</i> sp.	0	20	0	100	5	30	0	0	0	0	0	0
Brownseed Paspalum	0	15	0	0	0	0	30	0	0	0	0	0
Indian Grass	0	20	0	0	0	0	0	0	20	0	0	10
Dicanthelium #1	0	0	5	5	0	5	30	10	5	5	0	40
<i>Shrankia</i> sp.	0	0	0	5	0	10	0	0	0	0	0	0
<i>Fimbustylis</i> sp.	0	0	0	0	0	10	0	0	0	0	0	0
Sedge	0	0	0	0	0	0	0	10	0	0	0	0
<i>Sylphum</i> sp.	0	0	0	0	0	0	0	5	0	0	0	0
<i>Rudbeckia hirta</i>	0	0	0	0	0	0	0	0	5	0	0	5
Dewberry	0	0	0	0	0	0	0	0	5	0	0	0
<i>Muhlenbergia</i> sp.	0	0	0	0	0	0	0	0	0	75	0	0
Long-leaf Dichanthelium	0	0	0	0	0	0	0	0	0	20	0	0
<i>Baptisia</i> sp.	0	0	0	0	0	0	0	0	0	0	0	10
<i>Neptunia</i> sp.	0	0	0	0	0	0	0	0	0	0	0	10
Yellow-root Carex	0	0	0	0	0	0	0	0	0	0	0	5
Other	0	0	0	0	10	0	5	0	0	0	0	0
Totals	100	85	105	110	150	95	115	115	105	120	0	110



Fig. 2. Looking across a territory of Henslow's Sparrow in Harris County, Texas.

(Table 3); this reflects the even greater intrusion in parts of the field by Chinese tallow (*Sapium sebiferum*) in parts of the field occupied by the sparrows in 1973 and 1978, but not during our study. This may constitute one of the major factors in the decline of this population.

Banding and Color-marking: We banded seven birds, all adults and probably all males, in 1980. We also banded seven sparrows in 1981: five adult males, an adult female and one fledgling. We also recaptured two 1980 males in 1981 [Table 1]. One of the birds recaptured as a singing male in April 1981 was banded in September 1980, establishing both early and late dates for the breeding population. Over the period of 23 May through 15 August, we identified several birds by unique color combinations. Through recaptures and sighting of color-marked birds, we identified the male on five of the six territories that we measured.

Territory size: We determined the sizes of six territories. After calculating the area of each polygon 6 times, we threw out the high and low numbers and took the average of the remaining four. The averages for the territories (m^2) in ascending order were: A-1490, C-4617, B-6664, E-14059, F-14434 and D-19131. We banded the female on territory A on 23 May and located a female on territory C on 23 April, 7 May and 10 July. On 18 July we located a female near territory D and netted a fledgling in territory C. From 23 May through 15 August, we identified the occupants of territories A-E, but failed to identify the male on territory F, the last of the territories we had delineated.

Population estimates: In July 1980, we estimated a minimum of 12 singing males on each of two visits. Field work in March and April 1981 suggested a population of no more than 15 singing males. Since our field work covered no more than 20 per cent of the entire field, we remained hopeful that a census of the entire field would produce higher numbers. On 23 May we censused approximately one-third of the field and identified six territories; later that day we identified two additional territories contiguous to the six determined earlier. Of the known territories in 1981, at least three had females associated with them. One territory produced two fledglings and, based on observed behavior of the adults, a second territory may have had at least one young fledge. In considering this low reproductive effort, the presence of red imported fire ants, *Solenopsis invicta*, may represent an important factor. The sparrow population existing in 1980 and 1981 obviously was much below the 71 birds censused in 1973. On a visit in June 1982 we failed to locate any Henslow's Sparrows in this field.

In 1983, Arnold conducted surveys in eastern Harris County and adjacent parts of western Liberty and Chambers counties in an effort to locate other Texas populations of this sparrow. He heard one singing male in a field in Deer Park, the original site for the Henslow's Sparrow as a breeding bird in Harris county, Texas. Arnold identified several areas that seemed to offer potential habitat for this species, i.e., moist fields with bunched grasses and forbs. Additional searching in 1984 failed to detect any Henslow's Sparrow in these same areas, including the field in Deer Park. Thus, the only known population of *Ammodramus henslowii houstonensis* likely became extinct before publication of its description!

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TEXAS BIRD RECORDS COMMITTEE REPORT FOR 1997

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The Texas Bird Records Committee (hereafter "TBRC" or "committee") of the Texas Ornithological Society requests and reviews documentation on any record of a TBRC Review List species (available from the author; see Haynie 1996 or TBRC web page at <http://members.tripod.com/~tbrc/>). Annual reports of the committee's activities have appeared in the Bulletin of the Texas Ornithological Society since 1984. The committee reached a final decision on 229 records during 1997: 189 records of 68 species were accepted and 40 records of 30 species were not accepted, an acceptance rate of 82.5% for this report. Included under the accepted category were 14 records of 9 species pertaining to specimens located by the author that were collected prior to 1988. There were 235 observers who submitted documentation (to the TBRC or to other entities) that was reviewed by the committee during 1997.

The Forty-first Supplement to the American Ornithologists' Union Check-list of North American Birds (AOU 1997) outlined revisions to the sequence of higher taxa as well as a few species level changes. Only one species level change resulted in additions to the Texas state list. The Solitary Vireo (*Vireo solotarius*) was split into three species, all of which occur in Texas: Blue-headed Vireo (*V. solotarius*), Cassin's Vireo (*V. cassinii*), and Plumbeous Vireo (*V. plumbeus*). In addition, the TBRC accepted first records of Red-necked Stint, Kelp Gull, Roseate Tern, Ruddy Quail-Dove, Stygian Owl, Orange-billed Nightingale-Thrush, and Flame-colored Tanager. A sight record of a murre was accepted during 1997 and *Uria* species was added to the presumptive list. There was also one species removed from the state list; Saltmarsh Sharp-tailed Sparrow. The species previous acceptance was based on a specimen record. That specimen was examined by the committee and determined to be a Nelson's Sharp-tailed Sparrow. These actions brought the official Texas state list to 606 species in good standing and the Presumptive Species List includes 6 additional species.

In addition to the review of previously undocumented species, any committee member can request that a record of any species be reviewed. The committee desires written descriptions as well as photographs, video, and audio recordings if available. Information concerning a Review List species may be submitted to the committee secretary, Greg Lasley, 305 Loganberry Court, Austin, Texas 78745-6527 (email: glasley@earthlink.net). Guidelines for preparing rare bird documentation can be found in Dittmann and Lasley (1992).

The records in this report are arranged taxonomically following the AOU Check-list of North American Birds (AOU 1983) as currently supplemented. The total number of accepted records of each species at the end of 1997 is found in parentheses after the species name. For species where individual birds were known to have returned in subsequent years, a second number denotes the total number of accepted records if known returnees are excluded. Pacific Loon, Audubon's Shearwater, Band-rumped Storm-Petrel, Lesser Black-backed Gull, Glau-

cous Gull and Bridled Tern have been recently removed from Review List A. All reports of these species made prior to the date they were removed from the review list will be reviewed. All observers who submitted written documentation or photographs of accepted records are listed by initials. If the discoverers submitted supporting documentation, their initials are in boldface. The TBRC file number of each accepted record will follow the observers' initials. If photographs 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. 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 1997 who participated in decisions listed in this report were: John Arvin, Chair, Keith Arnold, Academician, Greg Lasley, Secretary, Carl Haynie, Mark Lockwood, Terry Maxwell, Martin Reid, Willie Sekula, and Barry Zimmer. During 1997, Carl Haynie retired from the committee, and Brush Freeman was elected as a new member. The Chair, Academician and Secretary were all re-elected.

Contributors.—Mark Adams (MAd), Lynne Aldrich, Tony Amos, Carol D. V. Anderson, Mike Armer (MAr), Frank Armstrong, Rich & Nanette Armstrong, Eddie Arnold, Keith Arnold, Mike Austin (MAu), Robby Bacon (RBa), Ebbe Banstorp, Wylie Barrow, Bob Behrstock (BBe), Charles Bender (CB), Chris Benesh (CBe), Steve Bentsen, Peter Billingham, Diane Birsner (DBi), Bill Blakeslee (BBi), Lou Bliss, Hazel Bluhm, David Bradford (DBra), Roger & Barbara Breedlove, David Brewer, Charles & Mary Brown, Barbara Bruns (BBr), Tim Brush, John Buckman, Frank Bumgardner, Susan Cage, Rose Campbell, Oscar Carmona, Ross & Dawn Carrie, Jack Chiles, Charlie Clark, Therese Clawson (TC1), Will Cook, Mel & Arlie Cooksey, Tim Cooper (TC), Dennis Coulos, E. Cowan, Gina Crowder, Jim & Pat Culbertson, David Dauphin (DDa), Billy Davidson, Chris Davis (CDa), Michelle Davis (MDa), Donna Dittmann (DDi), Mike Dillon (MDi), Andy Donnelly, Paul DuBow, Charles Duncan (CDu), Jon Dunn, Charles Easley (CEa), Carol Edwards (CEd), Carl Ekroth (CEk), Vince Elia (VEI), Victor Emanuel, Doug Emkalms, Steve Emmons, Gordon Ewing, Mike Farmer (MFa), Andrew Farnsworth (AFa), Alan Fedynich (AFe), Rob Fergus, Terry Ferguson (TFe), Carol Findora, Mark Flippo (MFI), Jim Flynn, Tony & Phillis Frank, Brush Freeman, Terry Fuller (TFu), Lawrence Gardella, John Gee (JGe), Brian Gibbons, Elaine Giessel, Ralph Godfrey, Jeff Gordon (JGo), Peter Gottschling, Gerry Green (GeG), Greg Griffin (GGr), Gwen Grigsby (GGw), Joe Halbrook, Peggy Harding, George Harmon (GHa), Jill Haukos, Carl Haynie, David & Linda Hedges, Tom & Jo Heindel, Dick Henderson, Bernie Heyman, Wally Hill, Nancy Hillstrom, Petra Hockey, Garrett Hodne (GHo), Joan & Scott Holt, Lee Hoy, P. D. Hulce, David Hurt, Pete Isleib, Bob Johnson (BoJ), Brian Johnson (BrJ), Dan Jones, George Jury, Per Kaijser, Richard Kinney, Walt Kittleberger, Jane Kittleman, Ed Kutac, Linda Laack, Steve Labuda, Greg Lasley (GL), Harry LeGrand, Tony

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Additional Abbreviations.—ANSP = Philadelphia Academy of Natural Sciences; AOU = American Ornithologists' Union; BBNP = Big Bend National Park; CAS = California Academy of Sciences; CMNH = Carnegie Museum of Natural History; LSUMZ = Louisiana State University Museum of Zoology; MVZ = Museum of Vertebrate Zoology, University of California-Berkeley; NWR = National Wildlife Refuge; ROM = Royal Ontario Museum; SHSU = Sam Houston State University; SMNH = Slater Museum of Natural History; SP = State Park; TCWC = Texas Cooperative Wildlife Collection (Texas A&M University); TTU = Texas Tech University, Wildlife Sciences Collection; UMMZ = University of Michigan Museum of Zoology; UTEP = University of Texas at El Paso; WMP = Warren M. Pulich collection at the University of Dallas.

ACCEPTED RECORDS

Red-throated Loon (*Gavia stellata*) (30). One was at Lake Tawakoni, *Rains*, from 16 December 1995–23 January 1996 (RR, M&KW; 1995–60). One was at Cooper Lake, *Delta/Hopkins*, 17–22 December 1995 (RR, MW; 1995–159). One near Port Bolivar, *Galveston*, 28 March 1996 (KM; 1996–82). Two were at Canyon Lake, *Comal*, 8–31 December 1996 (WS, GL; 1996–182). One was at Balmorhea Lake, *Reeves*, 15 December 1996–3 May 1997 (G&JLu, KB, GL, CS, MAu, ML, MAd, GR; 1996–173, TPRF 1526).

Pacific Loon (*Gavia pacifica*) (61). Two at Aransas Bay, *Aransas*, on 13–20 March 1994 (BO; 1994–50). One was at Imperial Reservoir, *Pecos*, on 2 December 1995 (BF, PH; 1995–148). One at Lake Tawakoni, *Rains*, from 25 December 1995 to 12 May 1996 (M&KW, BF, PH, RR; 1996–4). One was at Goose Island SP, *Aransas*, on 30 January 1996 (WC; 1996–38). This species was removed from the Review List on 19 October 1996, reports made prior to this date were reviewed.

Yellow-billed Loon (*Gavia adamsii*) (4). One at Balmorhea Lake, *Reeves*, from 21 December 1996 to 3 January 1997 (KB, MAd, ML, GL, CS; 1997–5, TPRF 1528).

Red-necked Grebe (*Podiceps grisegena*) (12). One at Cooper Lake, *Delta/Hopkins*, on 28 November 1996 (M&KW; 1996–163).

Audubon's Shearwater (*Puffinus lherminieri*) (20). An astounding 206 individuals were recorded on a pelagic trip out of Port O'Connor, *Calhoun*, on 30 September 1995 (DPe, BF; 1995–141, TPRF 1513). This is by far the largest concentration of this species ever found in Texas waters. One was found alive, but died shortly after discovery near the Bob Hall Pier, *Kleberg*, on 28 October 1996 (TA; 1997–132, TPRF 1542, *TCWC 13328). Another was found dead 6 mi. south of Bob Hall Pier, *Kleberg*, on 21 July 1997 (M&AC; 1997–128, TPRF 1540, *TCWC 13333).

Leach's Storm-Petrel (*Oceanodroma leucorhoa*) (13). Two were found on a pelagic trip out of Port O'Connor, *Calhoun*, on 30 September 1995 (DPe, BF; 1995–140, TPRF 1512).

Brown Booby (*Sula leucogaster*) (13). One near Laguna Atascosa NWR, *Cameron*, on 23 January 1994 (WK, ST, TCo, ML; 1995–143, TPRF 1437).

Brant (*Branta bernicla*) (16). One "Black" Brant remained at Lubbock, Lubbock, from 26 February to 20 April 1996 (CS; 1996–60, TPRF 1485). One at Lake Ray Roberts, Denton, on 23 December 1996 (BF; 1997–1).

Trumpeter Swan (*Cygnus buccinator*) (2). An immature female was recovered near Vega, *Oldham*, on 8 April 1993 (DSw, KS, ML; 1996–15, TPRF 1521, *TTU). It was banded as a cygnet in Du Noir, Wyoming in 1992.

Eurasian Wigeon (*Anas penelope*) (25). All of the following were of adult males. One at Amarillo, *Potter*, from 13 November 1995 to 21 March 1996 (EK, KS, GLu, PG, TSh; 1995–146, TPRF 1429). One at El Paso, *El Paso*, on 2 December 1995 (JSp; 1996–47). One at Lake Marvin, *Hemphill*, 2–14 December 1995 (KS; 1996–57). One at Tornillo Reservoir, *El Paso*, from 12 December 1995 to 19 January 1996 (BZ, MAu; 1995–162, TPRF 1405). One at Fort Bliss, *El Paso*, on 24 April 1997 (BZ; 1997–97, TPRF 1503).

Barrow's Goldeneye (*Bucephala islandica*) (5/4). A male at Tornillo Reservoir, *El Paso*, on 20 December 1995 (GL, BZ; 1995-163, TPRF 1406).

Masked Duck (*Nomonyx dominica*) (47). Two at Anahuac NWR, *Chambers*, on 23 November 1989 (JWh; 1994-27). At least eight were at Brazos Bend State Park, *Fort Bend*, 12 November 1995 to late April 1996 (BeM, JuW, FB, GL, ML, R&DC, JRa; 1996-34, TPRF 1466). One male at Santa Ana NWR, *Hidalgo*, on 25–26 April 1996 (TB, CDa; 1996-90, TPRF 1494). One at Corpus Christi, *Nueces*, on 15–20 June 1996 (GSw; 1996-112). Up to four were at Brazos Bend State Park, *Fort Bend*, 22 December 1996 to 2 March 1997 (AD, RW; 1997-28, TPRF 1502).

Northern Goshawk (*Accipiter gentilis*) (8). One at Hornsby Bend, *Travis*, on 11 November 1995 (AFa; 1995-147).

Short-tailed Hawk (*Buteo brachyurus*) (7). One adult at Santa Ana NWR, *Hidalgo*, from 4 June to 27 July 1996 (TB, SB, OC, TFu, DJ; 1996-80, TPRF 1500).

Northern Jacana (*Jacana spinosa*) (27). Two specimens collected in *Cameron*, one on 25 February 1897 (*CAS 44120) and the other on 24 March 1897 (*CAS 44119), were located in 1997.

Red-necked Stint (*Calidris ruficollis*) (1). One alternate plumaged adult at Fort Bliss, *El Paso*, from 17–22 July 1996 (BZ, VE, JPa, EW, GE, CA, SWe, MC, JGe, T&PF, WS, WH; 1996-94, TPRF 1447). This represented the first record for Texas.

Purple Sandpiper (*Calidris maritima*) (13). One at Port Aransas, *Nueces*, from 16–28 April 1996 (AC, BF, PH; 1996-58, TPRF 1508).

Curlew Sandpiper (*Calidris ferruginae*) (6). One adult in alternate plumage at Santa Ana NWR, *Hidalgo*, on 22 May 1996 (SB, TB, JK; 1996-79, TPRF 1499).

Red Phalarope (*Phalaropus fulicaria*) (23). One at Cooper Lake, *Delta*, on 11 May 1996 (M&KW; 1996-73, TPRF 1509). This represents only the third spring record for the state.

Long-tailed Jaeger (*Stercorarius longicaudus*) (13). One was picked up alive, but later died, at South Padre Island, *Cameron*, on 8 June 1989 (MFa, DDi; 1997-35, TPRF 1453, *LSUMZ 159931). One salvaged at Port Isabel, *Cameron*, on 17 June 1992 (DDi, DTu; 1997-36, TPRF 1454, *LSUMZ). One at McNary Reservoir, *Hudspeth*, from 12–14 June 1996 (JP; 1996-85, TPRF 1510). One adult at Lake Tawakoni, *Rains/Van Zandt*, on 5 November 1996 (MW; 1996-162).

Little Gull (*Larus minutus*) (26/22). One adult at White Rock Lake, *Dallas*, on 2 December 1995 (KR; 1996-49). One at Lake Arlington, *Tarrant*, on 15–16 March 1996 (CH; 1996-46). One first-winter bird at Cooper Lake, *Hopkins*, from 6–12 December 1996 (M&KW; 1996-188, TPRF 1478).

Black-headed Gull (*Larus ridibundus*) (10/8) One at Lake Tawakoni, *Rains*, on 10 December 1995 (M&KW, BF, PH; 1995-153). One at Cooper Lake, *Delta*, from 12 February to 25 March 1996 (MW, KL, MPat, RR; 1996-20, TPRF 1478). One at Cooper Lake, *Delta/Hopkins*, from 2 November 1996 to 13 February 1997 (M&KW, RW, JD; 1996-161, TPRF 1555).

Mew Gull (*Larus canus*) (11). One at San Antonio, *Bexar*, from 2 December 1995 to 12 January 1996 (WS, PH, BF; 1996-5, TPRF 1400). One adult at White Rock Lake, *Dallas*, on 6 December 1995 (GHo; 1995-158). One at Austin, *Travis*, from 12–16 March 1996 (AFa, BL, BMc, WS; 1996-51, TPRF 1473). One at White Rock Lake, *Dallas*, on 22 November 1996 (RR; 1996-158). One at Braunig

Lake, *Bexar*, from 24 November to 14 December 1996 (WS; 1997-8, TPRF 1529).

California Gull (*Larus californicus*) (43). One at Port Aransas, *Nueces*, 3–4 May 1990 (TA; 1997-158, TPRF 1552). One First-winter bird at Austin, *Travis*, from 20 November 1995 to 29 February 1996 (BF, WS; 1995-145, TPRF 1530). One winter plumage adult at San Antonio, *Bexar*, from 28 December 1995 to 10 January 1996 (WS, BF, PH, MAu; 1996-6, TPRF 1401). One at Bolivar Flats, *Galveston*, on 7 February 1996 (AFa; 1996-50). One first-winter bird at Cooper Lake, *Delta*, from 20 February to 5 March 1996 (MW; 1996-48). One at Galveston, *Galveston*, on 7 March 1996 (DPe, LV; 1996-33, TPRF 1465). One second-winter bird at Corpus Christi, *Nueces*, on 8 March 1996 (WS; 1996-40, TPRF 1464). One at various reservoirs in *Hudspeth* from 5 May to 2 August 1996 (JD, JP, BZ; 1996-104, TPRF 1541). Another first winter bird at North Padre Island, *Kleberg*, 17 September 1996 (M&AC; 1996-185, TPRF 1547). One adult at Mustang Island, *Nueces*, on 25 October 1996 (WS; 1997-9, TPRF 1504).

Thayer's Gull (*Larus thayeri*) (31). One first-winter bird at San Antonio, *Bexar*, on 15 December 1995 (PH; 1995-157). One pale first-winter bird at Eagle Mountain Lake, *Tarrant*, 16 to 22 December 1995 (CH; 1996-7, TPRF 1402). One first-winter bird was at Austin, *Travis*, from 5–7 February 1996 (WS; 1996-39, TPRF 1463). Another first-year individual was at Arlington, *Tarrant*, 8 February 1996 (CH; 1996-19, TPRF 1417). One first-winter bird was at Lake O' The Pines, *Marion*, from 23 November 1996 through 18 January 1997 (Glu, HB, MDi, CMi; 1996-159, TPRF 1525). One first-winter bird at White Rock Lake, *Dallas*, on 5 December 1996 (BG, RR; 1996-186). Another first-winter bird was at Lake Tawakoni, *Rains*, on 6 December 1996 (MW; 1996-189).

Lesser Black-backed Gull (*Larus fuscus*) (80/59). One adult near Sea Rim State Park, *Jefferson*, on 27 March 1994 (T&PF; 1994-101, TPRF 1539). One adult at Bolivar Flats, *Galveston*, on 27 January 1995 (GDY; 1995-31, TPRF 1398). One at Bolivar Flats, *Galveston*, from 4 February to 8 March 1996 (BBe, DDA, JD; 1996-16). One at Laguna Atascosa NWR, *Cameron*, on 5 February 1996 (SMi; 1996-44). One adult on Padre Island National Seashore, *Kleberg*, on 24 February 1996 (WS; 1996-42, TPRF 1471). One at Mustang Island, *Nueces*, on 3 April 1996 (BZ; 1996-61, TPRF 1486). One at Aransas NWR, *Calhoun*, on 2 December 1996 (PH; 1996-171). One at Padre Island National Seashore, *Kleberg*, from 1 October to mid-December 1996 (M&AC; 1996-184, TPRF 1550).

Western Gull (*Larus occidentalis*) (2). One at Boca Chica, *Cameron*, on 6 April 1995 (J&BRI; 1995-51, TPRF 1495).

Glaucous Gull (*Larus hyperboreus*) (71). One at Bolivar Flats, *Galveston*, in December 1981 (PMi; 1996-97, TPRF 1554). One at San Luis Pass, *Galveston*, on 28 September 1995 (RK, GHa; 1995-154, TPRF 1410). Up to two were at Bolivar Flats, *Galveston*, from 2 December 1995 until late April 1996 (PG, T&PF, GM, GL; 1996-9, TPRF 1396). One at Port Arthur, *Jefferson*, on 29 December 1995 (K&LN; 1996-32, TPRF 1470). One at Amarillo, *Potter*, on 20 January 1996 (KS; 1996-11). One at Corpus Christi, *Nueces*, on 8 March 1997 (WS; 1997-67, TPRF 1507). One at Corpus Christi, *Nueces*, on 1 April 1997 (WS; 1997-68, TPRF 1506). One at North Padre Island, *Kleberg*, on 5 April 1997 (WS; 1997-70, TPRF 1505).

Great Black-backed Gull (*Larus marinus*) (24/15). One first-winter bird at Cor-

pus Christi, *Nueces*, on 2 January 1993 (PI, DBi; 1994-60). One first-winter bird at Galveston, *Galveston*, on 28 December 1993 (TL, VEL; 1994-64). One at Boliver Flats and East Beach, *Galveston*, from 4 February to 10 August 1996 (JD, BBe, T&PF, GM, GL, CS, TC1, PG, RPi, BMc, JWh, DSa, JRa, FB; 1996-10, TPRF 1397). One at Brownsville, *Cameron*, on 5 February 1996 (SMI; 1996-45). One first-summer bird at North Padre Island, *Kleberg*, on 27 April 1996 (M&AC; 1996-98, TPRF 1553). One second-winter bird was at East Beach, *Galveston*, from 22 November to 26 April 1997 (JSt, KA, DPc, ML, DSa, AW; 1996-169, TPRF 1533).

Kelp Gull (*Larus dominicanus*) (2/1). One third-winter bird was at East Beach, *Galveston*, from 15 January to 5 April 1996 (BBe, JD, PG, LA, T&PF, SMa, MS, MAu, PSy, BBI, GM, GL, CS, TCI, JB, PDH, DPc, HB, AFa, E&JM, RPi, BMc, SE, FB; 1996-17, TPRF 1393). Apparently the same bird returned to East Beach, *Galveston*, from 30 November 1996 to 21 April 1997 (DPc, JWh, BBe, KA, JRa, DSa, ML, JMo, PDH, AW; 1996-180, TPRF 1523). A photograph of this first record for Texas was published in Field Notes 50:190 and on the cover of Field Notes 51(4).

Black-legged Kittiwake (*Rissa tridactyla*) (62). One first-winter bird was at Lake Bob Sandlin, *Titus*, from 18–25 November 1995 (M&KW, HB; 1995-152). One first-winter bird was at White Rock Lake, *Dallas*, from 3–6 December 1995 (M&KW, BG; 1996-8). One first-winter bird was at Lake Tawakoni, *Rains/Van Zandt*, from 25–26 December 1995 (M&KW, BF, PH; 1996-3). One was found dead at Port Aransas, *Nueces*, on 1 January 1996 (TA, GL; 1997-131, TPRF 1538, *TCWC 13332). One first-winter bird at Galveston, *Galveston*, on 10 February 1996 (R&BB, RBa; 1996-18). One first-winter bird was at Padre Island National Seashore, *Kleberg*, on 24–28 February 1996 (WS, MC; 1996-43, TPRF 1472). One first-winter bird at Austin, *Travis*, on 3 March 1996 (LH; 1996-103). One first-winter bird at Imperial Reservoir, *Pecos*, on 13 November 1996 (BF, PH; 1996-150). One first-winter bird at Bryan, *Brazos*, on 20 November 1996 (KA; 1996-156). Another first-winter bird was at Cooper Lake, *Hopkins*, on 23 November 1996 (M&KW; 1996-164). One was at Lake Wright Patman, *Bowie/Cass*, on 30 November 1996 (CMi, GL, BF, M&KW; 1996-155, TPRF 1484). One first-winter bird at Greenville, *Hunt*, from 1–2 December 1996 (M&KW; 1996-165). Another first-winter bird was at Michell Lake, *Bexar*, from 7–8 December 1996 (WS; 1997-10, TPRF 1477). One first-winter bird at Surfside, *Brazoria*, from 21–22 December 1996 (RW, DDA; 1996-178). One first-winter bird was at Red Bluff Lake, *Reeves*, on 30 December 1996 (BF; 1997-2). One picked up alive, but later dies, at Port Aransas, *Nueces*, on 13 March 1997 (TA, GL; 1997-127, TPRF 1537, *TCWC 13331). Another first-winter bird was at Padre Island National Seashore, *Kleberg*, on 9 November 1997 (PD, GC; 1997-160).

Sabine's Gull (*Xema sabini*) (44). An adult was at McNary Reservoir, *Hudspeth*, from 13–15 July 1996 (JPa, BZ; 1996-95, TPRF 1440). Another adult was in *Harrison* on 8 September 1996 (GLu; 1996-117). One was at Imperial Reservoir, *Pecos*, on 29 September 1996 (BJP; 1996-120). One at Lake Tawakoni, *Van Zandt*, on 5 October 1996 (JWS, RK; 1996-124).

Roseate Tern (*Sterna dougallii*) (2). A specimen collected by Frank Armstrong in Corpus Christi, *Nueces*, on 10 April 1901 was located at ROM (FA, ML; 1996-111, TPRF 1535, *ROM 39704). One at Cooper Lake, *Delta*, on 25 June 1995

(M&KW; 1995-92). Armstrong's specimen had been previously examined by Oberholser, however as with all of the specimens he examined he did not note the collection in which the specimen was housed. As a result Texas' first record was not accepted until 96 years after it was collected.

Bridled Tern (*Sterna anaethetus*) (16). Twenty-two were recorded on a pelagic trip out of Port O'Connor, *Calhoun*, on 30 September 1995 (DPe, BF; 1995-142, TPRF 1514).

Brown Noddy (*Anous stolidus*) (4). One on North Padre Island, *Kenedy*, on 28 June 1996 (MC, BSa; 1996-99).

Murre species (*Uria species*) (1). One at Lake O'The Pines, *Marion*, from 19–20 March 1994 (KN, HB, FB, GY; 1994-70). This sight record was originally submitted as a Common Murre (*U. aagle*) and was unaccepted. The committee thought the distance from which the observations were made and the lack of inland Common Murre records in North America precluded at positive species level identification.

Ruddy Ground-Dove (*Columbina talpacoti*) (10). A pair at El Paso, *El Paso*, from 20–23 April 1996 (JPa, BZ; 1996-62, TPRF 1487).

Ruddy Quail-Dove (*Geotrygon montana*) (1). One at Bentsen-Rio Grande SP, *Hidalgo*, from 2–6 March 1996 (BrJ, CP, SB, BMc, TB, FB, WS, BF, T&PF, MAu, GL, TS; 1996-28, TPRF 1468). A photograph of this first record for Texas was published in Field Notes 50:303.

Stygian Owl (*Asio stygius*) (1). One at Bentsen-Rio Grande SP, *Hidalgo*, on 26 December 1996 (J, P&NW, J&PC, JK, SB, LM, CDu; 1997-4, TPRF 1527). A photograph of this most unexpected first U.S. record was published in Field Notes 51:770.

Northern Saw-whet Owl (*Aegolius acadicus*) (17). A specimen collected in El Paso, *El Paso*, on 10 February 1983 was located during 1997 (*UTEP 886). One was in El Paso, *El Paso*, on 17 December 1996 (J&PR; 1997-100, TPRF 1501).

Green Violet-ear (*Colibri thalassinus*) (21). One at Fredricksburg, *Gillespie*, from May to September 1995 (exact dates unknown) (FH&GP; 1996-141). One was near Lake Bastrop, *Bastrop*, from 12–23 May 1996 (J&BR, BF, OC, RFe; 1996-72, TPRF 1511).

Green-breasted Mango (*Anthracothorax prevostii*) (5). Up to two were at San Benito, *Cameron*, from 17–20 August 1996 (TFu, GGw, BMc, JGo; 1996-107, TPRF 1544).

Broad-billed Hummingbird (*Cynanthus latirostris*) (24/23). A male at Cottonwood Campground, BBNP, *Brewster*, on 13 November 1991 (SWe; 1995-48). A female at Laguna Meadows, BBNP, *Brewster*, on 23 August 1996 (J&WR; 1996-109). A male at San Antonio, *Bexar*, from 6 October 1996 to 12 January 1997 (SC, CB, WS; 1996-144, TPRF 1476). A male at Inez, *Victoria*, from 16 November to 7 December 1996 (EG, RV, GeG, PH, SW; 1996-160).

White-eared Hummingbird (*Hylocharis leucotis*) (8). A male at Guadalupe Mountains NP, *Culberson*, on 31 May 1996 (GGr; 1996-84).

Violet-crowned Hummingbird (*Amazilia violiceps*) (3). One at Big Bend NP, *Brewster*, from 30–31 March 1996 (MDa, AL, FW, BH; 1996-54, TPRF 1479). One at Lake Amistad, *Val Verde*, on 31 October 1996 (JWi; 1996-145, TPRF 1551).

Costa's Hummingbird (*Calypte costae*) (5). Up to seven individuals at El Paso,

El Paso, from 28 October to 12 December 1995 (BZ, BF, ML; 1995-151, TPRF 1409). An amazing record which included two adult males, four immature males and a female. All previous state records were of single birds.

Allen's Hummingbird (*Selasphorus sasin*) (7). An immature male was at Canton, *Van Zandt*, from 20 October 1994 to 1 January 1995 when it was found dead (RK, WP; 1996-70, TPRF 1492, *WMP 3678). Up to two immature males (captured and measured) were at Victoria, *Victoria*, from 13 November 1995 through "mid" March 1996 (BO, PH, BF; 1995-136).

Elegant Trogon (*Trogon elegans*) (5). One male in the Chisos Basin, BBNP, *Brewster*, from 28 November 1995 to 8 January 1996 (LN, EC; 1996-52). One in Boot Canyon, BBNP, *Brewster*, on 16 June 1996 (D&LHed; 1996-63).

Lewis's Woodpecker (*Melanerpes lewis*) (29/27). A specimen collected in the Chisos Mountains, *Brewster*, on 1 May 1935 (*CMNH 117315) was located during 1997. One on Lombardy Street in El Paso, *El Paso*, from 7 November 1995 to 10 February 1996 (BZ, BrN, BF, PH, DBra, GL, MAu, T&PF; 1995-139, TPRF 1428). One on Frontera Street in El Paso, *El Paso*, from 22 November 1995 to 15 February 1996 (GL; 1995-164, TPRF 1407). The bird on Frontera Street in El Paso, *El Paso*, returned 29 October 1996 to 19 April 1997 (JPa, BZ, GL; 1996-152, TPRF 1483). The bird on Lombardy Street in El Paso, *El Paso*, returned 5 November 1996 to 27 April 1997 (BF, PH, RW, GL, DBra, MC, ML; 1996-151, TPRF 1441). One at Imperial Reservoir, *Pecos*, on 12 December 1996 (BJP; 1996-174).

Greater Pewee (*Contopus pertinax*) (5). One at El Paso, *El Paso*, from 5–14 December 1995 (BZ, BrN, DE; 1995-161, TPRF 1404).

Dusky-capped Flycatcher (*Myiarchus tuberculifer*) (10). Two specimens collected in El Paso, *El Paso*, on 11 May 1891 were located during 1997 (*CMNH 119210 & 119211). One at Pine Canyon, BBNP, *Brewster*, from 23 April–8 May 1996 (BG, FW, BRi, MPar, BPa, MF1; 1996-75, TPRF 1497). One at the Lawrence Wood Picnic Area, Davis Mtns., *Jeff Davis*, on 8 July 1996 (DHed; 1996-102).

Sulphur-bellied Flycatcher (*Myiadanastes luteiventris*) (5). One at Port Aransas, *Nueces*, from 27–29 August 1993. (J&SH; 1994-20).

Tropical Kingbird (*Tyrannus melancholicus*) (11). Up to seven at Villanueva, *Cameron*, from 11 November 1995 + (BMc; 1996-29, TPRF 1469). Two at Santa Ana NWR, *Hidalgo*, from 10–17 February 1996 (BMc; 1996-30). Up to two at Cottonwood Campground, BBNP, *Brewster*, from 24 June–3 August 1996 (BL, Mar, MFl, BZ, VE; 1996-92, TPRF 1498, TBSL 203-18).

Rose-throated Becard (*Pachyramphus aglaiae*) (21/18). A specimen collected at Brownsville, *Cameron*, on 30 October 1891 was located during 1997 (*ANSP 40539). An egg set was collected in *Hidalgo* on 10 May 1957 was also located during 1997 (*SMNH 15347). One at Santa Ana NWR, *Hidalgo*, from 18 February–14 March 1996 (T&PF, LM, BMc, CBe; 1996-21, TPRF 1394).

Yellow-green Vireo (*Vireo flavoviridis*) (14/13). A specimen collected at Brownsville, *Cameron*, on 7 June 1892 was located during 1997 (*ANSP 42478). Another specimen collected at Matagorda Island, *Matagorda*, on 9 May 1938 was located during 1997 (*UMMZ 195270). One was at High Island, *Galveston*, from 15–23 April 1996 (DW, T&JH, GM, FB, JD; 1996-69, TPRF 1491).

Clark's Nutcracker (*Nucifraga columbiana*) (12). One at Quitaque, *Floyd*, from

13–14 December 1996 (TFe; 1996-179, TPRF 1547). One at Lubbock, *Lubbock*, on 18 January 1997 (GJ; 1997-40, TPRF 1455). One at Sherwood, *Irion*, from 31 January–1 February 1997 (DMc, TM, DTa; 1997-39, TPRF 1456). This the first winter with multiple records for this species since the early 1970's.

Orange-billed Nightingale-Thrush (*Catharus aurantiirostris*) (1). One at Laguna Atascosa NWR, *Cameron*, on 8 April 1996 (RPa, DBre, JMa, GSc, SL; 1996-59, TPRF 1493). A photograph of this first record for United States was published in Field Notes 50:304.

Clay-colored Robin (*Turdus grayi*) (47). One at Salineno, *Starr*, from early November to 31 December 1995 (JGo; 1996-2). One at Santa Ana NWR, *Hidalgo*, from mid February to 8 April 1996 (LM, BMc, T&PF, BZ, TB; 1996-27, TPRF 1467).

Varied Thrush (*Ixoreus naevius*) (16). One at Balmorhea SP, *Reeves*, from 9–22 February 1996 (CS, GM, TCl, JF; 1996-22, TPRF 1395).

Aztec Thrush (*Ridgwayia pinicola*) (4). One at Corpus Christi, *Nueces*, from 16–20 May 1996 (M&SO, AC, BF, T&PF, DBra, JGe, CEed, RF, SB, J&BR; 1996-71, TPRF 1496).

Red-faced Warbler (*Cardellina rubrifrons*) (15). A specimen collected in *El Paso* on 17 August 1890 (*MVZ 37897) was located during 1996. One at Boot Spring, BBNP, *Brewster*, on 13–14 August 1995 (S&KS, DPu; 1995-106). One at El Paso, *El Paso*, on 12 May 1996 (JPa; 1996-77). One in Pine Canyon, BBNP, *Brewster*, on 12 August 1996 (JGe, CEed; 1996-106).

Golden-crowned Warbler (*Basileuterus culicivorus*) (10). One at Bentsen-Rio Grande SP, *Hidalgo*, on 21 December 1995 (CF; 1996-134).

Flame-colored Tanager (*Piranga bidentata*) (2). A male at Pine Canyon, BBNP, *Brewster*, from 14–19 April 1996 (CO, DO, AL, DC, BeN, BG, MDa, HW, WB; 1996-64, TPRF 1488). Another male was at Chisos Basin, BBNP, *Brewster*, from 20–22 April 1996 (AL, BG, PK, MDa; 1996-65, TPRF 1489).

Baird's Sparrow (*Ammodramus bairdii*) (23). A specimen collected in *Brewster* on 22 November 1975 was located during 1997 (*SHSU 959). One in *Jeff Davis* on 28 November 1995 (PH, BF; 1995-156). One near Panther Junction, BBNP, *Brewster*, from 1–2 May 1996 (BMu, PMa, DSc, CMa, CEk, JD; 1996-66, TPRF 1490). One at Cattail Falls, BBNP, *Brewster*, on 11 May 1996 (BG; 1996-133). One in *Jeff Davis* on 15 November 1996 (R&NA; 1996-157).

Golden-crowned Sparrow (*Zonotrichia atricapilla*) (20/18). Two specimens collected in *Orange*, one on 15 March 1887 (*UMMZ 48964) and one on 4 April 1887 (*UMMZ 48963), were located in 1997. One at Hueco Tanks SP, *El Paso*, from 13 November 1995 to 13 April 1996 (BZ, BF, MAu; 1995-149, TPRF 1408).

Yellow-eyed Junco (*Junco phaeonotus*) (5). One at Guadalupe Mountains NP, *Culberson*, on 5 November 1995 (DTh; 1995-144).

Blue Bunting (*Cyanocompsa parcellina*) (16). A female at Santa Ana NWR, *Hidalgo*, on 11 November 1995 (WM; 1995-155). A pair at Bentsen-Rio Grande SP, *Hidalgo*, from 17 December 1995 to 27 March 1996 (LM, BMc, GLe, SMI, BBe, JGo; 1996-26).

Lawrence's Goldfinch (*Carduelis lawrencei*) (9). One male at Fort Bliss, *El Paso*, on 11 February 1996 (BoJ; 1996-53, TPRF 1474). One male at the Lawrence Wood Picnic Area, *Jeff Davis*, on 12 October 1996 (AD; 1995-125). Up to 12 at Hueco Tanks SP, *El Paso*, from 12 October 1996 to 9 March 1997 (JPa,

ML, JWS, MC, CEa, DBra, BF, PH, GL, MAu, BZ, RR; 1996-126, TPRF 1557). Up to two at Fort Bliss, *El Paso*, from 12 October–1 November 1996 (JPa; MAu; 1996-127). Five at Marathon, *Brewster*, on 21 October 1996 (LB; 1996-154). One at Tornillo, *El Paso*, on 3 November 1996 (MAu; 1996-148). A male in *Jeff Davis* on 18 November 1996 (RW; 1996-177). Up to six at Macho Tank, *Hudspeth*, on 29 December 1996 and 17 February 1997 (BZ, JPa; 1997-7).

UNACCEPTED

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 unaccepted because the material submitted 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 resubmitted to the committee if additional substantive material is presented.

Red-throated Loon (*Gavia stellata*). One (1995-40) at Lake O'The Pines, *Marion*, on 2 January 1995.

Pacific Loon (*Gavis pacifica*). One (1993-100) at Lake Texoma, *Grayson*, on 27 March–3 April 1993.

Audubon's Shearwater (*Puffinus lherminieri*). One (1996-55) found dead on North Padre Island, *Nueces*, on 13 September 1992. The bird was turned into the National Park Service headquarters, but was apparently not saved.

Band-rumped Storm-Petrel (*Oceanodroma castro*). One (1995-104) off Port Isabel, *Cameron*, on 1 July 1995.

White-tailed Tropicbird (*Phaethon lepturus*). Two (1996-1) over Bentsen-Rio Grande SP, *Hidalgo*, 25 December 1995.

Trumpeter Swan (*Cygnus buccinator*). Two (1996-68) were in *Garza* between 8 January and 4 March 1996. The swans originated from eggs brought from Alaska to Minnesota as part of the re-introduction program currently underway. The TBRC does not consider individuals from this effort to qualify as state records at this time.

Eurasian Wigeon (*Anas penelope*). One (1996-35) at Loy Lake, *Grayson*, from 18 February to 22 March 1996. The bird was determined to be a Eurasian x American Wigeon hybrid.

American Black Duck (*Anas rubripes*). One (1994-167) was captured during a waterfowl survey in *Parmer* on 26 January 1986. Even with hand held photographs of the bird the specific identity could not be determined. The possibility

that the bird might be an American Black Duck x Mallard hybrid was also a consideration.

Garganey (*Anas querquedula*). One (1996-146) at Laguna Atascosa NWR, *Cameron*, on 5 November 1996.

Northern Goshawk (*Accipiter gentilis*). One (1996-139) at Welder Wildlife Refuge, *San Patricio*, on 16 December 1995.

Swainson's Hawk (*Buteo swainsoni*). One (1996-137) at Corpus Christi, *Nueces*, on 16 December 1995. Two (1996-138) at Laguna Atascosa NWR, *Cameron*, on 17 December 1995. Swainson's Hawk is not a review species, but details of from December-January reports are reviewed. There are very few well documented midwinter records of this species from Texas.

Spotted Redshank (*Tringa erythropus*). One (1996-13) at Ballou Island, *Aranas*, on 30 December 1995.

Purple Sandpiper (*Calidris maritima*). One (1996-176) at Bentsen-Rio Grande SP, *Hidalgo*, on 27 February 1979.

Ruff (*Philomachus pugnax*). One (1996-55) at Greenbelt Lake, *Donley*, on 9 April 1996.

Black-headed Gull (*Larus ridibundus*). One (1996-149) at Imperial Reservoir, *Pecos*, on 11 November 1996.

California Gull (*Larus californicus*). One (1996-105) at Corpus Christi, *Nueces*, 21 October 1945 and 17 March 1946. Up to four birds (1994-136) at Cooper Lake, *Delta*, from 26 May 1994 through early January 1995. One (1996-24) at Port Aransas, *Nueces*, 24 November 1995.

Lesser Black-backed Gull (*Larus fuscus*). One (1994-175) at Lubbock, *Lubbock*, from 13–28 November 1994. One (1996-135) at *Tarrant* from 16-23 December 1995. One (1996-136) at Sea Rim SP, *Jefferson*, on 31 December 1995. One (1996-183) at Goose Island SP, *Aranas*, on 2 November 1996.

Great Black-backed Gull (*Larus marinus*). One (1995-21) at Aransas NWR, *Aranas*, from 19–24 February 1995.

Ruddy Ground-Dove (*Columbina talpacoti*). One (1996-140) at Santa Ana NWR, *Hidalgo*, on 16 December 1995.

Green Violet-ear (*Colibri thalassinus*). One (1996-63) at Packery Channel Park, *Nueces*, on 13 April 1996.

Allen's Hummingbird (*Selasphorus sasin*). One (1995-47) at San Marcos, *Hays*, from 13 January–18 March 1995. The bird appeared to begin to practice a display flight similar to that of an Allen's Hummingbird in early spring. The committee felt that the possible display flight was not enough evidence to accept the record.

Amazon Kingfisher (*Chloroceryle amazona*). Up to two (1996-142) at Rangerville, *Cameron*, from 21 October–23 November 1996. The written details were very suggestive, however the photos of the bird were at best inconclusive and the committee felt that the submitted materials were not strong enough to document a first U.S. record.

Greater Pewee (*Contopus pertinax*). One (1996-108) at Grandfalls, *Ward*, on 27 August 1996.

Tropical Kingbird (*Tyrannus melancholicus*). One (1995-29) at Sabel Palm Sanctuary, *Cameron*, on 20 January 1995.

Fork-tailed Flycatcher (*Tyrannus savana*). One (1996-181) at South Padre Island, *Cameron*, on 24 April 1996.

Connecticut Warbler (*Oporornis agilis*). One (1994-80) at Jefferson, *Marion*, on 26 April 1994. One (1995-138) at San Ygnacio, Zapata, on 9 November 1995.

Gray-crowned Yellowthroat (*Geothlypis poliocephala*). One (1995-137) at Zapata, *Zapata*, on 9 November 1995. One (1996-25) at Bentsen-Rio Grande SP, *Hidalgo*, on 29 December 1995.

Baird's Sparrow (*Ammodramus bairdii*). One (1996-36) at *Dallas* on 13 March 1996.

Blue Bunting (*Cyanocompsa parellina*). Two (1996-78) at Chisos Basin, BBNP, *Brewster*, on 9 May 1996. Two (1996-121) at Sam Nail Ranch, BBNP, *Brewster*, on 25 August 1996. One (1996-122) at BBNP, *Brewster* on 29 September 1996. Currently there are no accepted records of Blue Bunting from the Trans-Pecos.

White-winged Crossbill (*Loxia leucoptera*). One (1996-190) at Kilgore, *Rusk*, on 24 November 1996.

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NOTES AND NEWS

Where's Volume 30 Number 2?—Due to an error in communication number 2 (1998) of the *TOS Bulletin* was not printed. I apologize for any confusion this has created. JCE.

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SHORT COMMUNICATIONS

FIRST COUNTY RECORDS OF RED CROSSBILL IN THE PINEYWOODS REGION OF EASTERN TEXAS

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The Red Crossbill (*Loxia curvirostra*) is reported from Western Texas as a scarce and sporadic breeder in the Guadalupe Mountains (Oberholser 1974), and a probable rare or irregular nester in the Davis Mountains (Peterson et al. 1991). It is also a rare and irregular winter visitor in many parts of the state (T.O.S. 1995). Red Crossbills invaded much of Texas during the 1972–1973 winter. This invasion missed the Pineywoods region east of the Trinity River, with the exception of a single sight record in Polk Co. (Oberholser 1974). Several northern, seed-eating bird species, including the Red Crossbill, are well known for their irregular, irruptive movements. These movements are believed to coincide with times of food shortages in the species' normal range (Bock and Lepthien 1976).

On 21 November 1996, I located seven Red Crossbills in the Angelina National Forest, San Augustine Co. This represents the first reported sight record of Red Crossbill for this county, and is the first sighting of what turned out to be an invasion of Red Crossbills throughout the Pineywoods region. Since that date, numerous observers have reported Red Crossbills from a total of ten eastern Texas counties, all representing first county records (Table 1). As of 16 July 1998, I have accumulated a total of 48 Red Crossbill reports, from 23 locations in the Pineywoods region east of the Trinity River, and a single Montgomery Co. record west of the Trinity River. These reports involve single birds or flocks of up to 13 individuals. On 3 May 1997, two juvenal-plumaged Red Crossbills were seen foraging with an adult pair in San Augustine Co., representing probable breeding in that area (Lasley et al. 1997). Red Crossbill sightings were fairly regular through 15 May 1997, but only five reports for the region were accumulated for the summer of 1997. As of 16 July 1998, only three Red Crossbill reports have been received since the beginning of that year. One sighting each for the months of February, March and April. The April sighting included a flock of nine Red Crossbills in Nacogdoches County.

Red Crossbills were observed in areas dominated by mature pines (*Pinus* spp.). Much of the Pineywoods region is dominated by mixed stands of loblolly pine (*P. taeda*) and shortleaf pine (*P. echinata*). There is a wide overlap in the site tolerance of both species, however, loblolly pine is more typical along streams and near river bottoms, whereas shortleaf pine prefers drier, sandy soils (Harlow and Harrar 1950). Longleaf pine (*P. palustris*) dominates southern portions of the Angelina and Sabine National Forests, with only remnant stands remaining in other areas of the southern Pineywoods region. There has been no strong evidence

¹ Maintained in cooperation with the College of Forestry, Stephen F. Austin State University.

Table 1. First County Records for Red Crossbill in the Pineywoods Region.

County	Date	Lat/Long	No. observed
San Augustine	21 Nov 1996	31°22'N, 94°15'W	7
Sabine	3 Dec 1996	31°11'N, 93°43'W	5
Jasper	4 Dec 1996	31°04'N, 94°14'W	several ^a
Angelina	7 Dec 1996	31°04'N, 94°16'W	1
Nacogdoches	10 Dec 1996	31°30'N, 94°45'W	1
Newton	5 Feb 1997	31°08'N, 93°47'W	1 ^a
Harrison	9 Feb 1997	32°40'N, 94°09'W	6
Anderson	8 Mar 1997	31°38'N, 95°19'W	2 ^b
Montgomery	13 Apr 1997	30°13'N, 95°29'W	1
Hardin	21 Apr 1997	unknown	2 ^b

^a Birds heard only; visual report for these counties on a later date.

^b Bird^s heard only; no known visual report for these counties.

thus far to indicate a preference by Red Crossbills for a particular pine species, though birds have been observed foraging from cones of both loblolly pine (pers. obs.) and shortleaf pine (C. Shackelford and C. Collins, pers. comm.).

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A SURVEY OF WINTERING RUFOUS HUMMINGBIRDS IN TEXAS

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The Rufous Hummingbird (*Selasphorus rufus*) breeds in northwestern North America west of the Rocky Mountains (from southeastern Alaska to northern California and east to central Idaho) (AOU 1983). Some individuals migrate through Texas to wintering grounds in western Mexico (Johnsgard 1983; Howell and Webb 1995). The occurrence of wintering Rufous Hummingbirds in Texas has been considered uncommon in coastal areas to rare throughout the remainder of the state (Oberholser 1974, Texas Bird Records Committee 1995). Preliminary results from a Texas Parks and Wildlife Department (TPWD) monitoring program, Texas Hummingbird Roundup, suggest that substantial numbers of Rufous Hummingbirds are wintering in Texas.

TPWD initiated a five-year hummingbird monitoring program in 1994. During the first three years of this project (1994–1996), 1001 volunteer participants recorded hummingbird observations on a standardized survey form and returned when completed. Survey participants were requested to observe hummingbirds at their residence for a minimum of two hours per week and record for each individual: species, sex, and behavior. TPWD established a telephone hotline to assist participants with species identification when needed. One hundred forty-six survey respondents (14.6%) reported Rufous Hummingbirds at least once between the months of November and February from 1994–1996.

Wintering Rufous Hummingbirds were observed in a total of 44 Texas counties distributed in all ten ecological areas of the state described by Gould (1975). The highest percentage of winter Rufous Hummingbird reports (48.6%) were from counties that border the Gulf of Mexico while only 24.7% of the respondents reside in these counties. Furthermore, three of the five counties with the largest percentage of winter Rufous Hummingbird reports are on the Texas coast (Table 1). Moderate winter temperatures in coastal areas compared to other regions of the state may account for the disproportionate number of sightings in counties adjacent to the Gulf of Mexico.

While the number of survey participants has varied each year, statewide reports of Rufous Hummingbirds during winter in Texas have increased 121.2% since

Table 1. Texas counties with the greatest percentage of total wintering Rufous Hummingbirds (RUHU) reported to TPWD, 1994–1996.

County	Percent of RUHU reports	Percent of respondents
Harris	22.6	12.3
Nueces	5.5	2.1
Bexar	4.8	3.9
Travis	4.8	7.6
Victoria	4.1	1.1
Total	41.8	27.0

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1994 (33, 40, and 73 RUHU reports from 1994–1996, respectively). Similar increases in winter Rufous Hummingbird sight records have been documented in other Gulf Coast states from Louisiana to Florida (Hill et al. 1998). This trend may be the result of climatic changes, normal population fluctuations, artificial nectar availability, or other factors. Increased awareness and improved identification skills of observers have undoubtedly contributed to the increase in winter Rufous Hummingbird reports in Texas. Additionally, observers may have misidentified individuals as Rufous Hummingbirds in some instances during this survey. However, TPWD literature and telephone assistance for survey participants probably reduced the frequency of identification errors and occurrence of the most similar species, Allen's Hummingbird (*Selasphorus sasin*), is currently considered extremely rare in Texas (Texas Ornithological Society 1995). North American Breeding Bird Survey data indicates a long-term decline in the population trend of this species (Peterjohn and Sauer 1994), making conservation efforts essential on its wintering grounds in Texas and Mexico.

Rufous Hummingbirds migrate over greater distances than other North American hummingbirds and vagrant individuals often stray far from typical fall migration routes (Conway and Drennan 1979). Artificial nectar availability may be critical for late migrants and wintering individuals. Maintaining feeders during winter months provides food to these individuals that would likely perish in the absence of this source. Some monitoring program participants expressed reluctance towards feeding hummingbirds during winter due to their belief that this activity discourages individuals from migrating to their traditional wintering grounds. However, it is unlikely that the presence of artificial nectar alters heritable migratory behavior over the average short life span of a Rufous Hummingbird (Brittingham 1990).

For the significant number of individuals which migrate in a west-to-east route from their breeding grounds in northwestern North America to their wintering grounds in Texas and northern Mexico, supplemental feeding may help sustain individuals after the first hard freeze of the winter. Additional studies are needed to establish the effects of providing artificial nectar to wintering Rufous Hummingbirds in Texas.

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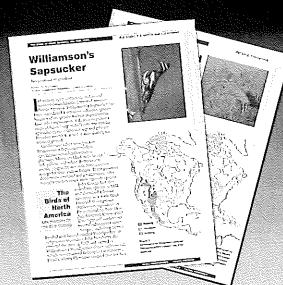
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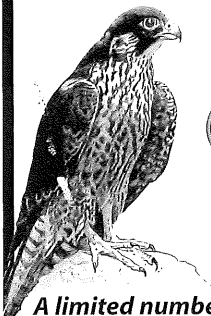
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