

## ECOLOGICAL, BEHAVIORAL, AND DISTRIBUTIONAL NOTES ON SOME CENTRAL PANAMÁ BIRDS

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While studying avian populations in the Canal Zone and the central part of the Republic of Panamá from 1 July 1968 to 31 July 1969, I observed the ecology and behavior of several little-known birds and established new distributional records. Wetmore (1965, 1968) summarizes the ranges of the non-passerine species, so this note will emphasize only new data. Additional information on recorded status is based on Eisenmann and Loftin (1968).

### STUDY AREAS

Most observations were made in a structurally mature, humid forest area (9°9'35"N, 79°44'36"W) approximately 8 km N of Gamboa in the middle Chagres River basin adjacent to Gatun Lake on the Caribbean slope of the Canal Zone. Many trees rise to heights of 40 m or more in this forest and the undergrowth is generally open. This forest study area is adjacent to the cabin of the Limbo Hunt Club on the Navy Pipeline Reservation (commonly called "The Pipeline Road"). Elevations along this road range from about 30 m to less than 170 m.

Many of the species here recorded from this reservation are primarily foothill species in central Panamá (*Euphonia minuta*, *Chlorothraupis carmioli*, *Decorychura longicauda*, *Sclerurus mexicanus*, *Thamnistes anabatinus*), while others (*Myrmeciza laemosticta*, *Leucopternis plumbea*, *Rhynchortyx cinctus*), hitherto unreported from the Canal Zone, are mainly species of more humid lowlands to the west and east (Wetmore 1965, 1968). The Pipeline Reservation contains a remarkably varied avifauna and seems to represent a transition area with both humid lowland and foothill elements, in addition to species regularly found in the lowland forests and clearings of central Panamá. Consequently, the area has interest from both zoogeographic and ecological viewpoints. The zoogeographic interest arises from the presence there of foothill and lowland species of eastern Panamá, as well as species typical of the somewhat more mesic areas on the Atlantic slope of central Panamá.

Ecologically, the overlap in these avifaunas is not surprising since the foothill areas and the wet Atlantic lowlands are similar in being relatively wet throughout the year. Neither area shows the effects of dry season as much as do areas on the Pacific slope of Panamá where the dry season is definite and more extreme.

Other localities mentioned are as follows:

Chiva Chiva Road (9°03'56"N, 79°34'13"W), an area on the drier Pacific slope of the Canal Zone, is composed of second growth woodland mixed with grassy clearings. This site was about 7.5 km from the origin of C21, about 3.5 km NW of the main entrance to Fort Clayton, Canal Zone.

Cerro Azul, Province of Panamá (9°13'N, 79°23'W), is the westernmost of the montane areas east of the Canal Zone, reached by highway east of Panama City. Under this name I include the elevated areas referred to as Cerro Azul, Cerro Jefe, and other peaks on the same ridge (maximum elevation about 1000 m). Mature, humid forest is still present in some areas although much of the area consists of cut-over forest and forest-edge.

Cerro Campana, Province of Panamá (8°41'N, 79°56'W) is a mountain rising about 1000 m at the eastern terminus of the chain running through southern Central America. Most of the vegetation cover near the top of Cerro Campana is cut-over forest and forest-edge, although some relatively undisturbed humid subtropical forest remains. A recent discussion of the zoogeographic significance of Cerro Campana was presented by E. Eisenmann in Olson et al. (1968).

### SPECIES LIST

Species marked with an asterisk (\*) are new records for the Canal Zone or the particular mountain mentioned, and species marked with a dagger (†) were described by Eisenmann and Loftin (1968) as "sufficiently unusual or doubtful [in the Canal Zone] as to justify very critical check (or collection of a specimen), either because no specimen from the area is known to us, or because the species is included on the basis of an old record and there have been no recent observations." Notes are presented on 25 species, of which five are new for the Canal Zone, one is new for Cerro Campana and one for Cerro Azul. Nine of the species discussed are listed as "unusual" and three others are listed as "rare" for the Canal Zone by Eisenmann and Loftin (1968). A (P) following the scientific name of the species indicates that, to substantiate the record, a color slide has been deposited with the American Museum of Natural History, where identifications were confirmed by E. Eisenmann. Although it was possible to collect specimens of many of the species discussed here, the nature of my studies made it undesirable to remove birds from study plots.

Chestnut-bellied Heron. *Agamia agami*. An individual in adult plumage of this "rare" species was on the small forest stream adjacent to the Pipeline Road study area on 9 January 1969. The bird flushed from a small riffle area and perched about 3 m up in a tree. The stream was 1–3 m wide and rarely did the depth exceed 20–30 cm. The nearest open water to this generally forested area is 4.5 km distant on Gatun Lake.

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Sunbittern. *Eurypyga helias*. A single individual was noted on 9 July 1968 in the same area as the *Agamia* when it gave a loud hissing sound reminiscent of that of a disturbed *Boa constrictor*. The bird was tame and was approached to within 7 m. It eventually scurried off through the forest without attempting to fly.

\*Plumbeous Hawk. *Leucopternis plumbea*. (P). Wetmore (1965) does not list this species from the Canal Zone and it is not included in the list prepared by Eisenmann and Loftin (1968) although it has been taken both to the west and east in humid forest (Wetmore 1965). I first observed a single individual on 11 August 1968 in my Pipeline study area. In the next few months I saw one or two individuals regularly. On several occasions I was attracted to the species by a long series of tremulous notes. When calling they generally were carrying recently-captured prey, and in one case a second bird was attracted by the calls. On this occasion the prey seemed to be a squirrel (*Sciurus granatensis*), and at another time an individual was carrying a large frog. On another occasion I saw one try to capture a squirrel.

One was captured (weight, 482.5 g), color banded, and observed with another individual for several months before an unbanded bird was shot by a group of Boy Scouts in early May 1969. None was seen afterward. I have recorded them hunting from 7 m up to the canopy at 50 m. An unbanded bird mounted the color banded bird in what seemed to be an attempted copulation, 16 March 1969. Edwin Willis (pers. comm.) saw one in forest by the Río Medio, near Gatun, 3 September 1963.

†Tiny Hawk. *Accipiter superciliosus*. A single bird was in the clearing of the Limbo Hunt Club for about 30 min on 24 October 1968. This individual, in rufous phase immature plumage (Wetmore 1965), changed perches several times before diving into a thicket. This resulted in the scattering of a dozen or more small birds, but no captures were observed. While I removed a thrush from a net the following day, a small rufous hawk flew about 2 m above my head and off through the forest. From the brief glimpse I suspected it was the Tiny Hawk again, perhaps attracted by the scolding of the mist-netted bird.

\*Tawny-faced Quail. *Rhynchortyx cinctus*. (P). A pair on 18 August 1968 was the first definite record for the Pipeline area and the Canal Zone. On most of the occasional later sightings an obviously mated pair sneaked away quietly through the forest undergrowth. They were generally on the ground in the thicket areas, which made them very difficult to observe for more than a few seconds. An adult male watched on 20 September 1968 gave a twittering vocalization similar to the "chirruping" of a covey of disturbed Bobwhite (*Colinus virginianus*). Since these birds hesitate to fly, I was able to chase it into a nearby mist net. It weighed 165.3 g.

\*Olive-backed Quail-Dove. *Geotrygon veraguensis*. (P). A single bird was on the ground in the forest near my Pipeline Road study area, 2 September 1968. Edwin O. Willis, who saw the bird before I did, identified it as this species, which has not been previously reported from the Canal Zone. I observed one occasionally afterward. Two attempts to chase individuals into mist nets were unsuccessful. As do most quail-doves, the birds feed on the ground, and, on two occasions when I was able to observe birds for extended periods, they were feeding on fruits. No vocalizations were heard. A brooding adult was found

on a nest with two feathered young at the Río Mendoza in the Pipeline Reservation 2 km N of my study area on 18 July 1969. The nest, about 1 m above the ground where a fallen palm frond crossed a liana, was similar in construction to the nest described by Olson et al. (1968) for *G. lawrencii*.

\*Purplish-backed Quail-Dove. *Geotrygon lawrencii*. Stuart Keith and I first observed this rare bird at Cerro Azul on 9 April 1969, where it was calling from the forest (for previously known distribution, see Olson et al. 1968). On a return to Cerro Azul on 14 April I heard a quail-dove calling and after a long stalk found one 6-7 m up in a tree. The elevation was between 750 and 800 m. On a return to Cerro Azul about a month later I heard the vocalization of this species again.

†Semi-collared Nighthawk. *Lurocalis semitorquatus*. This little-known, crepuscular species, which in flight looks like a medium-sized bat with broad wings and an extremely short tail, was seen occasionally at dusk (18:00-18:45) at the Pipeline Road. No calls were ever heard. Two were perched about 32-35 m up along a horizontal branch in typical lengthwise caprimulgid fashion for 45 min on the morning of 29 August 1969. They left about mid-morning.

\*Brown Violet-ear. *Colibri delphinae*. Henry Hespeler and I observed this rare, but unmistakable, hummingbird on Cerro Campana on 20 July 1969. Wetmore (1968:290) mentions records only from the mountains of western and extreme eastern Panamá. Two, or perhaps three, individuals were high in a tree in a small clearing adjacent to a road. They did not seem to be feeding, but rather engaged in darting flights at each other with intermittent pauses to perch high in the trees. This species was identified on the basis of the following characters observed in the field: large dark throat patch bordered by a light region; rusty vent area; buff-colored rump; generally large, buff to brownish in color, with a straight, short bill.

Cinnamon Woodpecker. *Celeus loricatus*. This woodpecker, listed by Eisenmann and Loftin (1968) as "rare in the Canal Zone," proved to be common in the Pipeline Reservation wherever there was forest. It is moderately difficult to observe because it stays in dense forest, but it regularly betrays its presence by a four-note call similar to the three or four note call of the Black-striped Woodcreeper (*Xiphorhynchus lachrymosus*). It is often in pairs and feeds regularly at intermediate levels in the forest, usually 10-20 m up.

\*Crimson-bellied Woodpecker. *Phloeocoastes haematogaster*. (P). This species was just outside my forest study plot in the Pipeline Reservation on 21 July 1968. It was seen irregularly on or near the study plot after that date. Generally no vocalizations were heard, but slow wheezy sounds were heard once as a pair fed. They were never above about 15 m in the forest and were usually on the lower trunks of living trees of 20-25 cm or larger diameter at breast height. Two other large crested woodpeckers were also present on the study area, the congener *P. melano-leucos* and *Dryocopus lineatus*. Contrary to Cody's (1968) suggestion that these two species may be inter-specifically territorial, I observed no evidence of conflict, but I found no nests. The latter two species were always higher in the forest and were more vocal than *P. haematogaster*. In addition, they often drummed loudly on trees, especially on the dead portion of trees. An adult female, *P. haematogaster*, shot by the Boy Scouts on 3 May 1969 weighed 223.8 g.

A pair of this species was seen by Eugene Eisen-

mann, Stuart Keith, and me on 9 April 1969 at Cerro Azul, a locality from which it has not been reported previously.

Ruddy Woodcreeper. *Dendrocincla homochroa*. (P). The only observation of this species, which is local or uncommon in the Canal Zone, was a bird captured in a mist net at the Pipeline Road Forest study area on 12 April 1969. This individual weighed 46.1 g. Slud (1964) indicates that this woodcreeper often accompanies swarms of army ants, and Edwin Willis (pers. comm.) has found it repeatedly over army ants in the Madden Forest Reserve, Canal Zone, and on Cerro Campana; he observed one on the Bohio Peninsula, near Frijoles, Canal Zone. Its ally, the Plain-brown Woodcreeper, *D. fuliginosa*, is common in the Canal Zone forest, often with army ant swarms.

Long-tailed Woodcreeper. *Deconychura longicauda*. (P). This species, recorded from central Panamá chiefly in humid foothill forest, was in the Pipeline Road area regularly, where several individuals were observed or recaptured after being color-banded. Eight weights of six individuals ranged from 19.4 to 26.4 g and averaged 24.0 g. Individuals were observed feeding within 3 m of the ground and up to heights in excess of 20 m.

Olivaceous Woodcreeper. *Sittasomus griseicapillus*. (P). This species, which seems to be uncommon in the Canal Zone, was netted in the drier Chiva Chiva Road area on 14 December 1968. The weight was 12.6 g. Edwin Willis (pers. comm.) once observed it in the Madden Forest Reserve of the Canal Zone, where it hitched up a tree trunk in moderately open woodland. Since I did not observe this species while it foraged I cannot compare its behavior in Panamá to two somewhat similar but more common Canal Zone species, the Wedge-billed Woodcreeper, *Glyphorhynchus spirurus* (average of six weights, 15.3 g; range, 14.2–16.3 g), and the Plain Xenops, *Xenops minutus*, a furnariid (average of eight weights, 11.4 g; range, 10.4–12.8 g). *Glyphorhynchus* gleans insects from the surface and crevices of the trunk and large branches of forest trees, using its tail for support, and *Xenops* gleans, rather like a titmouse (*Parus*), and pries into small rotten branches and twigs. Slud (1964) indicates that in Costa Rica *Sittasomus* is a species of more open areas or of drier habitats than those typical of *Glyphorhynchus*.

Tawny-throated Leafscraper. *Sclerurus mexicanus*. (P). An adult (25.5 g) mist-netted at the Pipeline Road area on 3 July 1969 was noticeably smaller than the common Scaly-throated Leafscraper, *S. guatemalensis* (21 weights of 9 individuals averaged 34.2 g; range, 29.6–40.9 g). Since *S. mexicanus* was never observed feeding, no behavioral comparisons of these two furnariids can be made.

†Russet Antshrike. *Thamnistes anabatinus*. (P). Eisenmann and Loftin (1968) indicate that this primarily foothill species is known in the Canal Zone from only one specimen. My first record was of a mist-netted bird (weight, 20.4 g) at the Pipeline Road area on 22 February 1969; I saw it several times afterward. Generally it traveled in mixed forest flocks with antwrens (*Myrmotherula axillaris*, *M. fulviventris*, and *Microrhopias quixensis*) as "passive nuclear species" (Moynihan 1962). The only vocalization heard was a harsh series of rasping notes. This species is difficult to observe since it forages at heights of 15–25 m in the tall forest. Eugene Eisenmann (pers. comm.) has observed this bird at Cerro Campana in the lower portions of taller trees at the edge of forest,

and I have observed it in the same circumstances at Cerro Azul.

†Pygmy Antwren. *Myrmotherula brachyura*. The Panama race, *ignota*, of this small antwren is little known and its taxonomic position is uncertain (see de Schauensee 1966:376). It was observed around the clearing at the Limbo Hunt Club on some eight to ten occasions. The first date was 29 August 1968. On 6 October I observed a single individual in the forest. It could easily be observed in the clearing area where only tall trees were present without thick undergrowth. It often accompanied mixed flocks of the larger antwrens as they moved through the semi-open area, but it was never observed with these flocks inside the forest. It forages at heights of 6–12 m.

\*Dull-mantled Antbird. *Myrmeciza laemosticta*. On 18 July 1969 a single individual was on the Río Mendoza about 1.6 km NW of the forest study plot on the Pipeline Road. A return on 21 July 1969 failed to produce any sightings, but a pair was observed on 26 July. The song is more like that of the Spot-crowned Antwren (*Dysithamnus puncticeps*) than like songs of its common Canal Zone congeners, *M. exsul* or *M. longipes*. The habitat was a relatively deep gorge with rocky outcrops on the steep slopes. *M. longipes* spends most of its time hopping on the ground (except for some periods of vocalizations), while *M. exsul* moves about regularly on the ground or on the low portions of shrubby growth (generally less than 1 m above the ground). *M. longipes* is a bird of shrubby, relatively dry, or highly seasonal, second-growth areas, while *M. exsul* and *M. laemosticta* are generally found in more humid forest areas. The foraging behaviors of *M. laemosticta* and *M. exsul* are very similar. Slud (1964) indicates that *M. laemosticta* is more characteristic of rugged terrain of the subtropical belt in Costa Rica. In Panamá it has been recorded only in very humid country some distance west and east of the Canal Zone.

†Wing-banded Antbird. *Myrmornis torquata*. (P). One individual of this species was observed on 21 August 1968 with several other species at a swarm of army ants (*Eciton burchelli*). I saw and mist-netted single birds and pairs regularly thereafter. Six weights of three individuals averaged 48.0 g (range, 45.4–49.6 g).

This species has been called antpitta, antthrush, and antbird by various workers in recent years. Because there is a concealed white spot on the back as in the Spotted Antbird (*Hylophylax naevioides*) and many other "ordinary" antbirds (lacking in the antpittas and true antthrushes), and because of the general behavior and ecology (see below), I suggest that this bird be grouped with the antbirds. Eisenmann (pers. comm.) agrees with this treatment as do Lowery and O'Neil (1969:9) on anatomical grounds. It feeds on arthropods discovered as fallen leaves are thrown with the bill. I never observed the species feeding above the ground, although they occasionally perched on fallen logs when disturbed. Movements were by hopping rather than by the walking movements of antthrushes (*Formicarius*). The legs are shorter than legs of typical antpittas (e.g., *Grallaria*, *Pittasoma*) and the general posturing was more like that of Bicolored Antbirds (*Gymnopithys leucaspis*) or Spotted Antbirds.

The only vocalization that I know for this species is a note similar to the churr note (Willis 1967) of the Bicolored Antbird.

They are tame and can be observed easily by a careful observer. When disturbed, they generally move only a short distance before beginning to feed again.

Perhaps 85–90 per cent of my observations involved a pair of birds, the two individuals feeding within 3–5 m of each other. After the first observation on 21 August 1968 all sightings (about 20) of this species were independent of army ants.

†Black-crowned Antpitta. *Pittasoma michleri*. (P). Very little is known about the distribution and ecology of this large formicariid, which I first observed near my study area on 12 April 1969 at a large swarm of army ants (*Eciton burchelli*). A single individual of unknown sex fed at the ant swarm for at least 2 hr. The species was seen irregularly after that date and was usually (see below) associated with army-ant swarms. Once, at sunrise on 24 June 1969, a bird enroute to a nearby swarm was disturbed by my presence. It gave a very loud series of squirrel-like scolding notes. On another occasion a softer series of notes was heard. On 12 July 1969 R. S. Ridgely and I captured, banded, and released an adult male (weight, 109.3 g). An adult female and a recently fledged immature were also present on that day. For the next week or two the three birds stayed on my study area, but were not associated with ant swarms. Perhaps the ants were inactive in a stary phase and there were no other ants to follow in the vicinity.

A single individual of this species was seen in the company of six Bicolored Antbirds at Cerro Campana on 20 July 1969.

†Broad-billed Manakin. *Sapayoa aenigma*. (P). This little-known species, generally placed in the Pipridae, was known only from one recent specimen taken in the Pipeline Reservation with other records from eastern Panamá, western Colombia, and Ecuador (Eisenmann 1955; Eisenmann and Loftin 1968). Due to the difficulty in identifying this drab species, several early observations were impossible to confirm. However, on 23 November 1968 a single adult female (lacking the yellow in the crown) was mist-netted. The same individual and an adult male were captured on 10 April 1969. Four weights of three individuals handled ranged from 20.2 to 21.3 g and averaged 20.6 g.

These birds usually associated with mixed antwren flocks. They fed on insects caught in darting flights through the forest at heights of 8–15 m. The only vocalization heard was a slow trill, like the clattering trill of the Blue-crowned Manakin, *Pipra coronata*, but higher in pitch. On the basis of their behavior and ecology I suggest that these birds may be more closely allied to the tyrannid flatbills (*Rhynchocyclus*) than to manakins.

White-ringed Flycatcher. *Conopias parva*. Wetmore (pers. comm.) has found the species from Chimán east to Darién in eastern Panamá and reports that there are few modern records from the Canal Zone. I first observed the species on 28 August 1968 at the Pipeline Road study area and observed it several times after that in the vicinity of my study area. The species was seen only in the canopy of the tallest trees, usually at the edge of tall forest. The only vocalization heard was a rattling trill as described by Slud (1964).

†Worm-eating Warbler. *Helmitheros vermivorus*. (P). Eisenmann and Loftin (1968) list this migrant as follows for the Canal Zone: "Only (?) sight reports from the Canal Zone." A single individual (weight, 12.9 g) of this species was captured near the end of Chiva Chiva Road on 15 December 1968. It was photographed, banded and released.

†White-vented Euphonia. *Euphonia minuta*. This species, primarily a foothill bird in central Panamá, was often around the Limbo Hunt Club buildings at

the Pipeline Road. It was never below heights of 8–12 m; the similar *E. fulvicrissa* was seen feeding on several occasions as low as 1 m, although it feeds commonly in the treetops.

†Carmioli's Tanager. *Chlorothraupis carmioli*. (P). This is another primarily foothill species that was fairly common along the forested sections of the Pipeline Road. This very nomadic species travels primarily in single species flocks. A flock was observed at irregular intervals on my study area. When present they remained for periods of up to six days and then disappeared for a month or two. Five individuals were color banded in the flock of about 12–15 and the return of the species after that generally involved the return of these marked individuals. Five weights on the five individuals averaged 33.5 g (range, 32.4–34.5 g). The species can be most easily recognized by its noisy vocalization similar to the scolding calls of the Clay-colored Robin (*Turdus grayi*), a species of more open habitats not found along the same forested portion of the Pipeline Road. *C. carmioli* is one of the most common species at Cerro Azul.

Tawny-crested Tanager. *Tachyphonus delatrii*. Flocks of this local species were encountered regularly in forested borders 5 or more km beyond the Limbo Hunt Club on the Pipeline Road. Generally, the flocks were of only this species. These birds are extremely active and noisy and, as was noted by Slud (1964), can be found on what seem to be well-established foraging rounds.

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## SOME FRINGILLID RECORDS FOR TEXAS

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Recent specimen acquisitions and numerous records<sup>1</sup> made available to the author prompt this note on some fringillid species. The specimens are deposited in a small collection of birds at the University of Dallas unless otherwise indicated.

Evening Grosbeak. *Hesperiphona vespertina*. The Audubon Field Notes (1969:494, 498) and Wolfe (1970) cite accounts of this species invading Texas during the winter of 1968-1969. The reports indicate that the birds invaded east Texas proper, and on reaching the southern part of this area they then moved westerly across to the Edwards Plateau.

In the northern part of the state the species barely reached the Dallas-Fort Worth area. There are only two reports: one is for Dallas, Dallas County, when a lone female visited the feeder of Mrs. Virginia Daggett 13-15 January 1969; the other is for Denton, Denton County, when two females and several males were observed by Mrs. J. R. Kilpatrick on 25 January 1969.

There is little doubt that the invading birds were from the east. Five specimens which I acquired at the home of Mr. and Mrs. Ross DeLay of Gladewater (approximately 125 mi. E of Dallas-Ft. Worth), Gregg County, on 4 February-3 March 1969 (three females and two males with ossified skulls) proved to belong to the nominate race *vespertina*. Also recovered at the same location on 27 January was a banded male over eight years old. It was at least a year old when banded by Miss F. Brierly on 18 April 1962 near Savey, Massachusetts.

The only previous records of Evening Grosbeaks for the area are three from Fort Worth, Tarrant County: a lone bird observed by Mr. Charles F. Crabtree et al. on 1 December 1962; a specimen taken in April 1963; and a single bird seen on 13 September 1964 by Mmes. Wade Smith and Robert Hardwicke. Dr. Kenneth C. Parkes of the Carnegie Museum identified the specimen as "an intermediate between *vespertina* and *brooksi*." This specimen is in the Fort Worth Science and History Museum.

Cassin's Finch. *Carpodacus cassinii*. On 8 April 1961, while leaving a cedar brake on the E. S. Dorman ranch 7 mi. E of Cayote, Bosque County, my son and I noticed an unusual looking finch perched high in an elm (*Ulmus* sp.) in the vicinity of a cattle feeding corral. We collected the bird which proved to be an adult female Cassin's Finch. Wolfe (1956: 79) indicates that the species is a migrant and a rare winter resident in the western part of the state. This bird was approximately 250 miles from where the species was recorded previously, and represents the only record for the north-central part of the state, as well as one of the few specimens for Texas. It apparently pushed its way into Texas during the species' invasion

into western Oklahoma (Sutton 1967:269) and west-central Kansas (Ely 1961).

House Finch. *Carpodacus mexicanus*. On 9 January 1960 my son and I collected a lone male as it fed on ragweed (*Ambrosia* sp.) on the University of Dallas property in Irving, along the Elm Fork of the Trinity River. The species normally ranges 100 miles to the west. The specimen was identified as belonging to the race *frontalis* and represents the first record for Dallas County.

Pine Grosbeak. *Pinicola enucleator*. Mrs. Phil Huey found a dead adult male Pine Grosbeak in Dallas, Dallas County on 24 November 1969. The bird was given to Mrs. Tie Davis who in turn gave the bird to me for confirmation. The bird, in excellent condition, was prepared as a study skin. Dr. Richard C. Banks of the Bureau of Sport Fisheries and Wildlife identified it as belonging to the race *montana*.

Observers in Amarillo reported Pine Grosbeaks in the panhandle January-March 1970.

Wolfe (1956:75) cites a specimen from Pampa, Gray County, in the Panhandle in December 1933; thus, the Pine Grosbeak from Dallas represents the second specimen record for Texas.

Pine Siskin. *Spinus pinus*. An immature Pine Siskin given to the daughter of C. F. Crabtree to care for during a vacation period was brought to me on 31 July 1969 for identification. The bird was extremely tame. It had been found with two dead nest males on the grounds of the Amarillo City Hall in Potter County by Kathy Crane after a severe hail storm on 17 June 1969. From its sparsely feathered body the surviving siskin was estimated to be only a few days old at the time. The bird died on 5 January 1970 and was prepared as a study skin.

Wolfe (1956:75) records the species as resident in southwest Texas. Sutton (1967:592) cites one nesting record in 1911 for the panhandle of Oklahoma near Kenton, Cimmaron County. Although local bird enthusiasts indicate that the species may have nested previously in the panhandle of Texas this is the first authentic nesting record for the area.

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