

ADDITIONAL HOSTS OF THE PARASITIC COWBIRDS¹

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In several earlier publications ("The Cowbirds," 1929; *Auk*, 1936, pp. 52-65; *Condor*, 1933, pp. 189-191; *Ibis*, 1934, pp. 340-347; *Wilson Bulletin*, 1934, pp. 25-36, 104-114) I have compiled all that was known to me of the species of birds acting as hosts of the various species of cowbirds. Since the last of these, I have gathered considerable additional information, based partly on unpublished specimens in private collections and partly on data gleaned from recent publications. For information generously sent me, I am under great obligation to Mr. G. D. Smooker of St. Joseph, Trinidad, Señor José Caetano Sobriñho of Arcos, Minas Geraes, Brazil, Dr. L. E. Hicks of Ohio, Dr. Paul Harrington of Toronto, and Mr. T. E. Randall of Alberta.

MOLOTHRUS BONARIENSIS (Gmelin). Shiny Cowbird

To the 137 species and subspecies of birds previously listed as victims of the various races of the Shiny Cowbird, we may now add 21 others, bringing the total up to 158. The additions are as follows:

- Certhiaxis cinnamomea cinnamomea* (Gmelin). YELLOW-THROATED SPINE-TAIL.
Phacellodomus striaticollis striaticollis (Lafresnaye and d'Orbigny). RUFOUS-HEADED THORN-BIRD.
Anumbius anumbi (Vieillot). LEÑATERO.
Elaenia flavogaster flavogaster (Thunberg). YELLOW-VENTED CRESTED FLYCATCHER.
Mimus saturninus frater Hellmayr. BRAZILIAN MOCKINGBIRD.
Mimus gilvus tobagensis Delmas. TOBAGO GRACEFUL MOCKINGBIRD.
Turdus chiguanco anthracinus Burmeister. SOOTY THRUSH.
Hylophilus aurantiifrons saturatus (Hellmayr). EASTERN OCHRE-FRONTED WOOD-BIRD.
Ateleodacnis bicolor bicolor (Vieillot). BICOLORED ATELEODACNIS.
Thraupis episcopus sclateri (Berlepsch). TRINIDAD TANAGER.
Tachyphonus rufus (Boddaert). GREATER WHITE-SHOULDERED TANAGER.
Ramphocelus carbo magnirostris Lafresnaye. LARGE-BILLED TANAGER.
Saltator similis d'Orbigny and Lafresnaye. ALLIED SALTATOR.
Oryzoborus crassirostris (Gmelin). THICK-BILLED SEED FINCH.
Myospiza humeralis humeralis (Bosc). GRASSHOPPER FINCH.
Poospiza assimilis Cabanis. GRAY-THROATED WARBLING FINCH.
Coccyzus nigricollis (Lafresnaye). BLACK-FACED CARDINAL.
Leistes militaris superciliaris (Bonaparte). ARGENTINE RED-BREASTED MARSH-BIRD.
Pseudoleistes guirahuro (Vieillot). YELLOW-BACKED MARSH-BIRD.
Icterus nigrogularis trinitatis (Hartert). TRINIDAD ORIOLE.
Holoquiscalus lugubris lugubris (Swainson). BOAT-TAILED GRACKLE.

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These hosts involve three races of the Shiny Cowbird, as follows:

1. **MOLOTHRUS BONARIENSIS BONARIENSIS** (Gmelin). Argentine Shiny Cowbird

Phacellodomus striaticollis striaticollis (Lafresnaye and d'Orbigny).

Anumbius anumbi (Vieillot).

Turdus chiguanco anthracinus Burmeister.

The known hosts of this race of the parasite now total 113 forms.

2. **MOLOTHRUS BONARIENSIS MELANOGYNA** Stzoleman. Dark Shiny Cowbird

Mimus saturninus frater Hellmayr.

Turdus rufiventris rufiventris Vieillot.

Saltator similis d'Orbigny and Lafresnaye.

Myospiza humeralis humeralis (Bosc).

Poospiza assimilis Cabanis.

Emberizoides herbicola (Vieillot).

Sicalis pelzelni (Sclater).

Gnorimopsar chopi (Vieillot).

Pseudoleistes guirahuro (Vieillot).

These nine bring the known victims of the Dark Shiny Cowbird up to eleven forms.

3. **MOLOTHRUS BONARIENSIS MINIMUS** Dalmas. Small Shiny Cowbird

Certhiaxis cinnamomea cinnamomea (Gmelin).

Elaenia flavogaster flavogaster (Thunberg).

Mimus gilvus tobagensis Dalmas.

Hylophilus aurantiifrons saturatus (Hellmayr).

Ateleodacnis bicolor bicolor (Vieillot).

Thraupis episcopus sclateri (Berlepsch).

Tachyphonus rufus (Boddaert).

Ramphocelus carbo magnirostris Lafresnaye.

Oryzoborus crassirostris (Gmelin).

Coccyzus nigrigenis (Lafresnaye).

Icterus nigrogularis trinitatis (Hartert).

Holquiscalus lugubris lugubris (Swainson).

The list of hosts of this cowbird is hereby raised to a total of twenty-four forms.

In the following annotated list, not only are all of the above listed forms taken up in greater detail, but also a few others, about which relatively important additional data have come to hand, are briefly treated.

Certhiaxis cinnamomea cinnamomea (Gmelin).—One record; a nest with four eggs of the Yellow-throated Spine-tail and one of the Small Shiny Cowbird, collected in the Caroni Marshes, Trinidad, July 18, 1930, by Mr. G. D. Smooker, to whom I am indebted for this and most of the other Trinidad cases mentioned in this paper.

Phacellodomus striaticollis striaticollis (d'Orbigny and Lafresnaye).—Pereyra (El Hornero, 5: 215-219, 1933) records a nest of the Rufous-headed Thorn-bird containing four of its own eggs and three of the Shiny

Cowbird, from Argentina, now in the National Museum in Buenos Aires. The nest has a tube-like vestibule leading to the nest chamber; the cowbirds' eggs were in the tube and not in the chamber where the thorn-birds' were.

Anumbius anumbi (Vieillot).—One published record has come to my notice. Castellanos (El Hornero, 5: 332, 1934) found young of the Shiny Cowbird in a nest or nests of this species in the Valle de Los Reartes, Cordoba, Argentina.

Pitangus sulphuratus bolivianus (Lafresnaye).—According to Castellanos (El Hornero, 5: 332, 1934) this large flycatcher is parasitized by the Shiny Cowbird in the Province of Cordoba (Valle de los Reartes), Argentina. Previous records were from Tucuman and Mendoza.

Elaenia flavogaster flavogaster (Thunberg).—Belcher and Smooker (Ibis, 527, 1937) have found the Yellow-vented Crested Flycatcher to be a molothrine victim in Trinidad.

Phaeoprogne tapera (Linnaeus).—In the Valle de los Reartes, Cordoba, Argentina, Castellanos (El Hornero, 5: 332, 1934) found the Tree Martin to be victimized by the Shiny Cowbird. This is the second such instance known to me, the first being Gibson's record from Ajo, southern Buenos Aires (cf. 'The Cowbirds,' 106-107, 1929).

Mimus saturninus frater Hellmayr.—Señor Sobrinho informs me that in Minas Geraes, Brazil, this mockingbird is victimized by the Dark Shiny Cowbird.

Mimus gilvus tobagensis Dalmas.—Listed as a victim of the Small Shiny Cowbird in Trinidad by Belcher and Smooker (Ibis, 527, 1937).

Mimus patagonicus (Lafresnaye and d'Orbigny).—To the two previous records may be added a third, a nest containing a nearly fledged Shiny Cowbird, found by Renard near the naval base at Puerto Belgrano, Argentina (El Hornero, 5: 219, 1933).

Turdus rufiventris rufiventris Vieillot.—The Rufous-bellied Thrush has been known as a molothrine host in Argentina and Uruguay. We learn from Sobrinho that it acts in this capacity in Brazil (Minas Geraes) as well for the Dark Shiny Cowbird.

Turdus chiguanco anthracinus Burmeister.—One record. Castellanos (El Hornero, 5: 332, 1934) found a parasitized nest in Valle de los Reartes, Cordoba, Argentina.

Turdus amaurochalinus (Cabanis).—Previously known as a molothrine victim in Tucuman Province, Argentina, it is now recorded in the same capacity farther to the south,—at Valle de los Reartes, Cordoba Province, by Castellanos (El Hornero, 5: 310, 1934).

Vireosylva chivi chivi (Vieillot).—The Chivi Vireo was previously known as a victim of the Shiny Cowbird on the basis of three records. To these may be added a fourth,—a nest with no eggs of the vireo and two of *M. b.*

bonariensis, recorded by Pereyra (El Hornero, 5: 218, 1933) from San Isidro, Argentina.

Hylophilus aurantiifrons saturatus (Hellmayr).—Two records, the data for both sent to me by G. B. Smooker who found the nests at Nelson's Estate, Trinidad, July 19 and 22, 1933. Each nest contained two eggs of the owner and two of the Small Shiny Cowbird.

Ateleodacnis bicolor bicolor (Vieillot).—Smooker writes me that he found a nest of this bird in the Caroni Swamp, Trinidad, July 18, 1932, containing two eggs of the Small Shiny Cowbird and none of the *Ateleodacnis*.

Thraupis episcopus sclateri (Berlepsch).—One record; a nest with two eggs of the Trinidad Tanager and one of the Small Shiny Cowbird, St. Joseph, Trinidad, May 18, 1933, G. D. Smooker.

Ramphocelus carbo magnirostris Lafresnaye.—One record, Trinidad, G. D. Smooker (Ibis, 536-537, 1937).

Piranga flava saira (Spix).—According to Sobrinho (*in litt.*) this tanager is victimized by the Shiny Cowbird in Minas Geraes, Brazil. Previously recorded from there by Skinner, possibly on the same original basis.

Tachyphonus rufus (Boddaert).—One record,—a nest with three eggs of this White-shouldered Tanager, containing three eggs of the owner and one of the Small Shiny Cowbird, Nelson's Estate, Trinidad, August 4, 1930, G. D. Smooker.

Saltator similis d'Orbigny and Lafresnaye.—Señor Sobrinho informs me that in Minas Geraes, Brazil, this saltator is victimized by the Shiny Cowbird.

Oryzoborus crassirostris (Gmelin).—Belcher and Smooker list this seed finch as a molothrine host in Trinidad (Ibis, 527, 1937).

Sicalis pelzelni (Sclater).—Previously known as a host of the Shiny Cowbird in Uruguay and Argentina, it may now be recorded as such in the province of Minas Geraes, Brazil, as well, from information received from Señor Sobrinho.

Sicalis flaveola holti Miller.—Holt's Saffron Finch is listed as a victim of the Shiny Cowbird in Minas Geraes, Brazil, by Sobrinho (*in litt.*). This is the second record known to me.

Myiospiza humeralis humeralis (Bosc).—The Grasshopper Finch is reported by Sobrinho as a host of the Shiny Cowbird in Minas Geraes, Brazil. Previously two other races of this finch (*tucumanensis* and *dorsalis*) were known to be parasitized.

Poospiza assimilis Cabanis.—The Gray-throated Warbling Finch is reported to be a host of *M. b. bonariensis* in Minas Geraes, Brazil, by Sobrinho (*in litt.*). Pereyra (El Hornero, 5: 218, 1933) reports finding two Shiny Cowbird's eggs in a nest of "*Poospiza lateralis* or *cabanisi*" in Isla del Arroya Correa, Argentina, January 15, 1933. This indefinite record may also refer to *Poospiza assimilis*.

Emberizoides herbicola (Vieillot).—Azara's Ground Finch is reported by Sobrinho (*in litt.*) as a host of *M. b. melanogyna* in Minas Geraes, Brazil.

Pitylus fuliginosus (Daudin).—Señor Sobrinho informs me that he has found the Gray Kernel-eater to be victimized by the Dark Shiny Cowbird in Minas Geraes, Brazil. This constitutes the second record for this bird, unless the only previous one,—also from Minas Geraes (Skinner, Ool. Record, p. 20, 1924; Friedmann, Auk, p. 57, 1931),—came originally from the same source.

Coccyzus nigrigenis (Lafresnaye).—The Black-headed Cardinal may be added to the list of victims of the Small Shiny Cowbird (*M. b. minima.*) on the basis of a nest with two eggs of the owner and one of the parasite, found in the Caroni Swamp, Trinidad, September 21, 1931, by G. D. Smooker.

Cnorimopsar chopi (Vieillot).—Previously known as a molothrine host only on the statement in Azara that his assistant, Noseda, found this grackle to be parasitized. A recent observation of the same import is sent me by Señor Sobrinho from Minas Geraes, Brazil.

Leistes militaris superciliaris (Bonaparte).—Two records,—Pereyra (El Hornero, 5: 219, 1933) records two parasitized nests, one with one egg of the Red-breasted Marsh-bird and nineteen of the Shiny Cowbird, and the other with two eggs of the former and twelve of the latter. No exact locality is given, but it is somewhere in Argentina.

Pseudoleistes guirahuro (Vieillot).—Recorded as a host of the Shiny Cowbird in Minas Geraes, Brazil, by Sobrinho.

Icterus pyrrhopterus pyrrhopterus (Vieillot).—To the single previous record from southern Minas Geraes, may be added the mere statement that Sobrinho also found the Chestnut-shouldered Oriole to be parasitized there by the Shiny Cowbird.

Icterus nigrogularis trinitatis Hartert.—Listed as a host of the Small Shiny Cowbird in Trinidad by Belcher and Smooker (Ibis, 527, 1937).

Holoquiscalus lugubris lugubris (Swainson).—In Trinidad, Belcher and Smooker have found eggs of the Small Shiny Cowbird in nests of this grackle.

MOLOTHRUS ATER (Boddaert). North American Cowbird

The following are additions to the list of known victims of the North American Cowbird (all races). They bring the total of host species and subspecies up to 246, an increase of eight.

Empidonax difficilis difficilis Baird. WESTERN FLYCATCHER.

Penhstes carolinensis carolinensis (Audubon). CAROLINA CHEICKADEE.

Sialia currucoides (Bechstein). MOUNTAIN BLUEBIRD.

Wilsonia pusilla pusilla (Wilson). WILSON'S WARBLER.

Agelaius phoeniceus nevadensis Grinnell. NEVADA RED-WING.

Loxia curvirostra pusilla Gloger. RED CROSSBILL.

Passerherbulus henslowi henslowi (Audubon). WESTERN HENSLOW'S SPARROW.
Melospiza melodia heermanni Baird. HEERMANN'S SONG SPARROW.

In addition to these, a few forms, previously listed as victims of one race of the cowbird, have since been found to be parasitized by another race as well. Therefore, if we list the victims according to the subspecies of the cowbird, we have the following additions (including the eight mentioned above).

MOLOTHRUS ATER ATER (Boddaert). Eastern Cowbird

Penthestes carolinensis carolinensis (Audubon).
Sturnella neglecta Audubon.
Loxia curvirostra pusilla Gloger.
Passerherbulus henslowi henslowi (Audubon).

The known hosts of the Eastern Cowbird now total 145 forms.

MOLOTHRUS ATER ARTEMISIAE Grinnell. Nevada Cowbird

Sialia currucoides (Bechstein).
Vireo solitarius solitarius (Wilson).
Dendroica coronata (Linnaeus).
Wilsonia pusilla pusilla (Wilson).
Agelaius phoeniceus nevadensis Grinnell.
Pipilo erythrophthalmus erythrophthalmus (Linnaeus).

The Nevada Cowbird's list of victims is hereby increased to 87 forms.

MOLOTHRUS ATER OBSCURUS (Gmelin). Dwarf Cowbird

Empidonax difficilis difficilis Baird.
Melospiza melodia heermanni Baird.

We now know 89 hosts for this southwestern form of the Cowbird.

Zenaidura macroura carolinensis (Linnaeus). EASTERN MOURNING DOVE.—To the very few data on the Mourning Dove as a molothrine victim may be added a parasitized nest in Franklin Co., Ohio, found by L. E. Hicks, to whom I am indebted for this information (see also Auk, 51: 386, 1934).

Tyrannus tyrannus (Linnaeus). KINGBIRD.—Coues (Bull. U. S. Geol. & Geogr. Surv., 4, no. 3: 601, 1878) collected a cowbird's egg from a nest of this species near Frenchman's River, Montana, July 9, 1874. This record, which I had previously overlooked, is the second record for the Nevada Cowbird.

Myiarchus crinitus boreus Bangs. NORTHERN CRESTED FLYCATCHER.—A third record has come to my notice. Blocker (Oologist, 54: 131-133, 1936) lists this bird as a victim of the Cowbird near Amboy, Illinois. The two cases previously known to me were in Massachusetts and Maryland.

Empidonax difficilis difficilis Baird. WESTERN FLYCATCHER.—Benson and Russell (*Condor*, 36: 219, 1934) captured a young Dwarf Cowbird attended by a Western Flycatcher at Berkeley, California. This is the first record of this flycatcher as a molothrine host.

Nuttallornis mesoleucus (Lichtenstein). OLIVE-SIDED FLYCATCHER.—T. E. Randall informs me that he found a nest with three eggs of the flycatcher and one of the Nevada Cowbird at Boyle, Alberta, on June 7, 1934. This is the second record known to me.

Hirundo erythrogaster Boddaert. BARN SWALLOW.—At Colony, Kansas, Wells (*Oologist*, 51: 13, 1934) found several parasitized nests of the Barn Swallow. Only two such instances were known to me previously.

Cyanocitta cristata cristata (Linnaeus). NORTHERN BLUE JAY.—Previously known as a molothrine victim on the basis of two indefinite records. Blocher (*Oologist*, 50: 58, 1933, and 54: 131-133, 1936) found the Blue Jay to be parasitized at Amboy, Illinois; a nest containing four eggs of the jay and one of the parasite were definitely reported by him. The second of his notes gives the impression of still another such instance in the same locality.

Penthestes atricapillus atricapillus (Linnaeus). BLACK-CAPPED CHICKADEE.—Blocher (*Oologist*, 53: 131-133, 1936) lists this bird as a host of the Cowbird at Amboy, Illinois. It is the second case of which I have learned.

Penthestes carolinensis carolinensis (Audubon). CAROLINA CHICKADEE.—One record, a nest containing five eggs of the chickadee and two of the Cowbird, collected at Piney Point, St. Mary's County, Maryland, April 25, 1934, by E. J. Court, who tells me that he caught the female Cowbird on the nest, about half an hour after daylight.

Baeolophus bicolor (Linnaeus). TUFTED TITMOUSE.—To the four cases recorded in earlier papers, I may add another,—a nest with seven eggs of the host and one of the parasite, found at Sherwood, Ohio, May 14, 1934, by Price (*Oologist*, 51: 107-108, 1934).

Troglodytes aëdon parkmani Audubon. WESTERN HOUSE WREN.—Previously known as a molothrine victim in a single case, we may now add a second record kindly sent me by T. E. Randall, who found a nest with five eggs of the wren and one of the Nevada Cowbird, at Boyle, Alberta, June 10, 1934.

Sialia currucoides (Bechstein). MOUNTAIN BLUEBIRD.—One record, kindly supplied me by T. E. Randall, of a nest found by him at Boyle, Alberta, May 29, 1934, containing four eggs of the bluebird and one of the Nevada Cowbird.

Poliophtila melanura californica Brewster. BLACK-TAILED GNATCATCHER.—A fourth record is given by Hanna (*Condor*, 36: 89, 1934), a nest found at Riverside, California, in May, 1933.

Sturnus vulgaris vulgaris Linnaeus. STARLING.—Previously known to be

victimised but once, in Maryland, we now have a second record,—Blocher (Oologist, 50: 157, 1933) reports a parasitized nest at Amboy, Illinois.

Vireo solitarius solitarius (Wilson). BLUE-HEADED VIREO.—This bird was known to be a victim of the Eastern Cowbird; we now know it in the same capacity for the Nevada Cowbird on the basis of a parasitized nest found by T. E. Randall at Boyle, Alberta, on May 28, 1934.

Vireo solitarius cassinii Xantus. CASSIN'S VIREO.—Michael (Condor, 37: 178, 1935) found a parasitized nest in Yosemite, California. This is the second record known to me.

Dendroica coronata (Linnaeus). MYRTLE WARBLER.—Previously I knew of but three cases of molothrine molestation in this warbler, and a search of the literature certainly gave the impression that the Cowbird only rarely affected the Myrtle Warbler. However, Dr. Paul Harrington writes me that out of thirty-eight nests of this species examined near Wasaga Beach, South Georgian Bay, Ontario, not less than twenty-five contained eggs of the Cowbird; twenty nests had one Cowbird egg; three had two each, and two had three each. One nest had a Cowbird's egg imbedded in its side.

T. E. Randall informs me that he found a nest with four eggs of the warbler and one of the Nevada Cowbird at Boyle, Alberta, May 27, 1934. This is the first record for the Nevada Cowbird.

Dendroica virens virens (Gmelin). BLACK-THROATED GREEN WARBLER.—To the few previous records may be added two more, both from near Wasaga Beach, South Georgian Bay, Ontario, found by Dr. Paul Harrington.

Dendroica pinus pinus (Wilson). NORTHERN PINE WARBLER.—To the four records previously known to me, may be added three more, all from Ontario (Wasaga Beach and Petawawa Military Camp on the Ottawa River), collected by Dr. Paul Harrington.

Oporornis philadelphia (Wilson). MOURNING WARBLER.—A fourth record has come to my attention. Dr. Paul Harrington writes me that he found a nest of this bird, with two eggs of the owner and one of the Cowbird, near Wasaga Beach, South Georgian Bay, Ontario, June 9, 1929.

Wilsonia pusilla pusilla (Wilson). WILSON'S WARBLER.—One record, kindly supplied me by T. E. Randall, who found a nest with three young warblers and one young Nevada Cowbird at Boyle, Alberta, June 12, 1934.

Sturnella neglecta Audubon. WESTERN MEADOWLARK.—Previously recorded as a victim of the Nevada Cowbird, the Western Meadowlark has been found to be a host of the Eastern Cowbird as well in eastern Nebraska (Nebr. Bird Rev., 2, no. 3: 69, 1934).

Agelaius phoeniceus californicus Nelson. BICOLORED RED-WING.—A second record has come to my attention,—Davis (Condor, 35: 152, 1933) found a parasitized nest in Butte Co., California. The cowbird in question is the race *artemisiae*.

Agelaius phoeniceus nevadensis Grinnell. NEVADA RED-WING.—One record, a nest with four eggs of the Red-wing and one of the Nevada Cowbird, June 1, 1936, Furnace Creek Ranch, Death Valley, reported by M. French Gilman (Condor, 39: 90, 1937).

Carpodacus purpureus purpureus (Gmelin). EASTERN PURPLE FINCH.—T. E. Randall writes me that he found a nest with three eggs of the finch and two of the Nevada Cowbird at Boyle, Alberta, on May 30, 1934. This is the third record for the Nevada Cowbird.

Carpodacus mexicanus frontalis (Say). HOUSE FINCH.—A second record of the Dwarf Cowbird victimizing this bird is given by Hanna (Condor, 35: 205, 1933) from the San Bernardino Valley, California.

Loxia curvirostra pusilla Gloger. RED CROSSBILL.—Saunders and Dale (Trans. Roy. Canad. Inst., 19, pt. 2: 240, 1933) record a nest with three eggs of the crossbill and one of the cowbird, now in the Saunders collection, taken on April 29, 1909, two miles east of London, Ontario. This is the first record of any crossbill as a molothrine victim.

Pipilo erythrophthalmus erythrophthalmus (Linnaeus). RED-EYED TOWHEE.—Coues (Bull. U. S. Geol. and Geogr. Surv., 4: 599, 1878) records a nest with two eggs of the towhee and three of the Nevada Cowbird. This is the only record known to me of this towhee being victimized by the Nevada Cowbird; it is very commonly parasitized farther east by the Eastern Cowbird.

Ammodramus savannarum australis Maynard. EASTERN GRASSHOPPER SPARROW.—Previously known from a single definite nest record and an indefinite statement. Price (Oologist, 51: 107-108, 1934) examined about one hundred nests in Paulding Co., Ohio, and found cowbirds' eggs in two of them.

Ammodramus savannarum bimaculatus Swainson. WESTERN GRASSHOPPER SPARROW.—A third record of this form as a host of the Nevada Cowbird has come to my attention,—a nest found by Neal Weber, at Towner, North Dakota, concerning which the discoverer wrote to Dr. W. M. Mann of the National Zoological Park, who in turn passed the information on to me.

Passerherbulus henslowi henslowi (Audubon). WESTERN HENSLOW'S SPARROW.—Dr. L. E. Hicks informs me that he found a parasitized nest of this sparrow in Franklin Co., Ohio. This is the first record for the Western Henslow's Sparrow (see also Auk, 51: 385-386, 1934).

Chondestes grammacus strigatus Swainson. WESTERN LARK SPARROW.—Davis (Condor, 35: 152, 1933) found a nest of this bird containing an egg of the Nevada Cowbird in Butte Co., California. This is the third record for this sparrow as a host of the Nevada Cowbird.

Zonotrichia leucophrys leucophrys (Forster). WHITE-CROWNED SPARROW.

—In the Royal Ontario Museum of Zoology, at Toronto, there is a nest of one egg of the White-crowned Sparrow and two eggs of the Nevada Cowbird, collected at Okotoks, Alberta, June 8, 1907, by E. Beaurre. This is the second case of which I know for the Nevada Cowbird.

Melospiza melodia heermanni Baird. HEERMANN'S SONG SPARROW.—One record; Arnold (*Condor*, 39: 35, 1937) found a parasitized nest with five eggs of the sparrow and one of the Dwarf Cowbird at Stockfarm Scout Camp, Coalinga Area, Fresno Co., California, on April 28, 1934.

TANGAVIUS AENEUS (Wagler). Red-eyed Cowbird

Two additional hosts have been reported for this cowbird, bringing the total number of its known victims up to thirty-four. These two are as follows:

Thryophilus modestus pullus Ridgway. CHIAPAS WREN.—Stone (*Proc. Acad. Nat. Sci. Philadelphia*, 84: 336, 1932) records a young Red-eyed Cowbird being fed by this wren at Cantarranas, Honduras, August 5. The cowbird in question is the race *involucratus* Lesson, whose hosts now total twenty-four forms.

Piranga erythrocephala candida Griscom. GRISCOM'S TANAGER.—J. T. Wright informs me that on July 21, 1933, at Rosario, Sinaloa, he found a nest of this tanager containing a young cowbird (subspecies *milleri*). The young tanagers had been crowded out and the parasite was the sole occupant.

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