Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

Vol. 38, No. 1

MARCH 2010

PAGES 1-42

Florida Field Naturalist 38(1):1-7, 2010.

FIRST BREEDING RECORD OF THE BRONZED COWBIRD (Molothrus aeneus) IN FLORIDA

BILL PRANTY¹ AND ARTHUR NELSON² ¹8515 Village Mill Row, Bayonet Point, Florida 34667-2662

E-mail: billpranty@hotmail.com

²225 SW 5th Street, Dania, Florida 33004-3939

Abstract.—We document the first record of Bronzed Cowbird (*Molothrus aeneus*) breeding in Florida, based on photographs of a fledgling cowbird following and being fed by a Spot-breasted Oriole (*Icterus pectoralis*) at Dania, Broward County, in July 2009. We discuss other summer sightings of Bronzed Cowbirds in Florida, including two previous reports of fledglings fed by other icterids.

Bronzed Cowbirds (*Molothrus aeneus*) have benefitted greatly from human settlement of North America. Prior to 1940, their breeding range in the United States was confined to Texas, but it now encompasses parts of Arizona, California, Louisiana, Mississippi, and New Mexico (Ellison and Lowther 2009) and Florida (this note). Bronzed Cowbirds were first observed in Florida in 1962 (Truchot 1962) and are now permanent residents in southeastern Florida. The two previous observations that suggested breeding in Florida were not accompanied by verifiable evidence. Here we provide photographic documentation of a fledgling Bronzed Cowbird in Florida during July 2009, and discuss previous reports that suggested breeding in the state.

RESULTS

Discovery.—On 25 July 2009, Nelson noted that the resident pair of Spot-breasted Orioles (*Icterus pectoralis*) in his neighborhood at Dania, Broward County, was accompanied by one cowbird fledgling (Fig. 1) and no oriole fledglings. Over the next six days, Nelson observed the cowbird fledgling for a total of six hours. During this period, the oriole



Figure 1. Fledgling Bronzed Cowbird accompanying an adult Spot-breasted Oriole at Dania, Broward County, Florida. No other fledgling was observed with this oriole pair. Photograph by Arthur Nelson, 26 July 2009.

pair fed the cowbird a total of 21 times; food provided was small green caterpillars and bits of mango (Mangifera indica) fruit. At no time during 25-31 July was any other bird observed feeding the cowbird fledgling, which strongly suggests that the oriole pair were the hosts of the cowbird. Bronzed Cowbird nestlings fledge at 10-12 days of age, and are fed for approximately two weeks post-fledging (Ellison and Lowther 2009). The cowbird was unsteady in flight and clumsy when perched on 25 July, but its proficiency at flight and perching had improved noticeably by 29 July, when Nelson photographed one of the orioles feeding it (Fig. 2). Except for rectrices that appeared to be still growing, the fledgling appeared full-grown. Its plumage was dark sooty-black, lacking gloss, and with a hint of pale mottling throughout. The basal half of the bill was pale, and the distal half blackish. The irides were brown and the legs and feet were gray. The bill was stout, rather long, and not as conical as that of a Brown-headed Cowbird (Molothrus ater). Plumage coloration and the stout, rather elongated bill ruled out the fledgling being a Brown-headed Cowbird or a Shiny Cowbird (*M. bonariensis*).

Previous Florida reports that suggested breeding.—We limit potential breeding reports to those Bronzed Cowbirds observed during June or July; observations during May could refer to lingering winter resi-



Figure 2. Adult Spot-breasted Oriole feeding a fledgling Bronzed Cowbird at Dania, Broward County, Florida. This photograph documents the first record of Bronzed Cowbird breeding in Florida, and the first record in the United States east of the Mississippi. Photograph by Arthur Nelson, 29 July 2009.

dents, and observations during August could refer to post-breeding or post-natal dispersers. There are 19 observations of Bronzed Cowbirds in Florida during June or July, with 10 of these representing single adults (Table 1). The first report was from Key West, Monroe County, on 21 July 1982 (Paul 1982). Nineteen years elapsed before the next summer report, in July 2001 (Pranty 2002). Bronzed Cowbirds have been reported annually in Florida during summer since 2003, at times in numbers (Table 1). One cowbird fledgling fed by a Spot-breasted Oriole at Sweetwater, Miami-Dade County, on 11 July 2004 (Pranty 2005), and another fledgling fed by a Red-winged Blackbird (Agelaius phoeniceus) at Topeekeegee Yugnee Park, Broward County, on 23 June 2008 (Pranty 2009) were not photographed. A juvenile Bronzed Cowbird that summered with an adult male and female at Princeton, Miami-Dade County, during 2004 (Pranty 2005), and two juveniles with an adult male and female at Pinecrest, Miami-Dade County, on 17 July 2006 (Pranty 2007) were almost certainly reared locally but were independent when discovered. Among at least 12 Bronzed Cowbirds at Homestead, Miami-Dade County, on 12 July 2008 were two males performing courtship hover-flights over separate females, and several independent juveniles (Pranty 2009). Reports of as many as six Bronzed Cowbirds at Redlands, Miami-Dade County, for most of summer 2005

Date	County	Location	Number	Reference
21 Jul 1982	Monroe	Key West	1	Paul 1982
$11 \mathrm{Jul} 2001$	Miami-Dade	Princeton	1	Pranty 2002
20-25 Jun 2003	Wakulla	St. Marks NWR	1	Pranty 2004
$25 \mathrm{Jul} 2003$	Miami-Dade	Castellow Hammock Park	1	Pranty 2004
4 Jun 2004	Miami-Dade	A.D. "Doug" Barnes Park	1	Pranty 2005
27 Jun-3 Jul 2004	Miami-Dade	Kendall	1	Pranty 2005
$11 \mathrm{Jul} 2004$	Miami-Dade	Sweetwater	1; fledgling fed by Spot-breasted Oriole	Pranty 2005
All summer 2004	Miami-Dade	Princeton	3; male, female, and juvenile	Pranty 2005
1 Jun- 12 Jul 2005	Miami-Dade	Redlands	as many as 6	Pranty 2006
$3 \mathrm{ Jun} 2005$	Miami-Dade	Florida International Univ.	1	Pranty 2006
All Jul 2006	Miami-Dade	Homestead	14	Pranty 2007
$17 \mathrm{Jul} 2006$	Miami-Dade	Pinecrest	4; male, female, and 2 juveniles	Pranty 2007
22 Jul 2006	Miami-Dade	Miami Shores	1	Pranty 2007
24 Jun 2007	Miami-Dade	Kendall	2; male and female	Pranty 2008
$23 \mathrm{Jun} 2008$	Broward	Topeekeegee Yugnee Park	1; fledgling fed by Red-winged Blackbird	Pranty 2009
$5 \mathrm{Jul} 2008$	Miami-Dade	Cutler Ridge	1	Pranty 2009
$6 \mathrm{Jul} 2008$	Miami-Dade	Acosta Farms	1	Pranty 2009
All summer 2008	Miami-Dade	Homestead	12 or more 12 Jul; included two courting males	Pranty 2009
$25-31 \mathrm{Jul} 2009$	Broward	Dania	and several juveniles 1; fledgling fed by Spot-breasted Oriole	Pranty 2010, this paper

(Pranty 2006), and 14 at Homestead during July 2006 (Pranty 2007) provided no information on age or sex.

DISCUSSION

There are four subspecies of the Bronzed Cowbird: *M. a. aeneus* from New Mexico and the Gulf of Mexico to Colombia; *M. a. loyei* from California and New Mexico to northwestern Mexico; *M. a. assimilis* in southwestern Mexico; and *M. a. armenti* in north-central Colombia (Ellison and Lowther 2009). *M. a. aeneus* is rapidly expanding its range northward and eastward in the United States (Ellison and Lowther 2009) and is the subspecies that has occurred in Florida (Stevenson 1976, Ellison and Lowther 2009).

Bronzed Cowbirds were first reported in Florida at Sarasota, Sarasota County, in April 1962 (Truchot 1962). Stevenson and Anderson (1994) listed reports in 18 counties, as far south as Key West in Monroe County, and there have been subsequent reports in six additional counties (Charlotte, Collier, Franklin, Leon, Orange, and Wakulla). Aside from an anomalous report in 1982 (Paul 1982, Table 1), it was not until 2001 that Bronzed Cowbirds were observed in Florida during summer months. Observations of Bronzed Cowbirds in Florida during summer have been annual since 2003 (Table 1), implying that the species is now resident in Broward and Miami-Dade counties.

The one recorded and two reported Bronzed Cowbird fledglings in Florida were all fed by other icterids: two by Spot-breasted Orioles and one by Red-winged Blackbird. Both of these species are known hosts of Bronzed Cowbirds, although Spot-breasted Oriole apparently had not been known to raise a cowbird to fledging (Ellison and Lowther 2009). Among the most frequent hosts of Bronzed Cowbirds are Northern Mockingbird (*Mimus polyglottos*) and Northern Cardinal (*Cardinalis cardinalis*), two species that are widespread and abundant throughout Florida. There currently is an 1100-km overland gap between the breeding populations of Bronzed Cowbirds in southwestern Mississippi and southeastern Florida. But the seasonal movements of Bronzed Cowbirds through most of Florida, coupled with the presence of numerous host species, suggest that Bronzed Cowbirds may eventually breed in most or all regions of the state.

An interesting situation now exists whereby Spot-breasted Orioles have been brood-parasitized by Bronzed Cowbirds in both their native range in Middle America and their exotic range in southeastern Florida. *Icterus* orioles are frequent hosts of Bronzed, Brown-headed, and Shiny cowbirds (P. Lowther unpubl. data), and Bronzed Cowbirds are known brood-parasites of Spot-breasted Orioles (Ellison and Lowther 2009, this paper). Given the limited range of the Spot-breasted Orioles

in Palm Beach, Broward, and Miami-Dade counties, Florida, broodparasitism by Bronzed Cowbirds and perhaps other cowbirds may be a threat to the persistence of this isolated population.

Prior to 2004, there were five reports of Bronzed Cowbirds in the state during August, all along the Panhandle Gulf coast: one at Shalimar, Okaloosa County, on 16 August 1992 (Pranty 1993); two independent juveniles at Alligator Point, Franklin County, on 4 August 1994, and another on 16 August 1994 (Pranty 1995), another cowbird there 15-20 August 1996 (Pranty 1997); and one "immature male" at Bald Point, Franklin County, on 21 August 2000 (Pranty 2001). None of these cowbirds occurred in areas with observations earlier in the same year, which suggests that they may have dispersed from breeding or natal areas west of Florida. Bronzed Cowbirds breed along the Gulf coast to southwestern Mississippi (Ellison and Lowther 2009), roughly 260 and 480 km west of Okaloosa and Franklin counties, respectively. Although there is no information on dispersal of Bronzed Cowbirds from breeding or natal sites (Ellison and Lowther 2009), observations in the coastal panhandle of Florida suggest that some cowbirds do disperse after breeding or fledging. A similar pattern of late-spring and early-fall observations prefacing their eventual breeding in Florida was shown by Brown-headed Cowbirds from the 1920s to the mid-1950s (Stevenson and Anderson 1994).

Brown-headed Cowbirds were first noted breeding in Florida in 1956 and now breed throughout the state (Stevenson and Anderson 1994). Shiny Cowbirds colonized Florida from the West Indies in 1985 (Smith and Sprunt 1987) and are now resident in extreme southern Florida, with only one definite breeding record (Pranty 2000, A. W. Kratter pers. comm.). With Bronzed Cowbirds now breeding in the state, landbirds in Florida, which evolved without brood-parasitism by cowbirds, now must contend with three species of breeding cowbirds. It will be interesting to observe how native and exotic landbirds adapt to brood-parasitism in Florida, and how three species of cowbirds interact with each other and with their hosts.

ACKNOWLEDGMENTS

We thank Bruce H. Anderson and Jon S. Greenlaw for commenting on Nelson's photographs; Larry Manfredi for assisting Pranty during a visit in July 2008; and Andrew W. Kratter for information about the recent breeding record of Shiny Cowbirds in Florida. Peter E. Lowther improved a draft of the manuscript.

LITERATURE CITED

ELLISON, K., AND P. E. LOWTHER. 2009. Bronzed Cowbird (*Molothrus aeneus*), The Birds of North America Online (A. Poole, ed.) http://bna.birds.cornell.edu/bna/species/144>. Accessed 8 August 2009.

- PAUL, R. T. 1982. Florida region [Summer 1982 seasonal report]. American Birds 36:967-970.
- PRANTY, B. 1993. Field Observations fall report: August-November 1992. Florida Field Naturalist 21:42-51.
- PRANTY, B. 1995. Field Observations fall report: August-November 1994. Florida Field Naturalist 23:44-56.
- PRANTY, B. 1997. Field Observations fall report: August-November 1996. Florida Field Naturalist 25:74-84.
- PRANTY, B. 2000. Shiny Cowbird: possible anywhere. Birding 32:514-526.
- PRANTY, B. 2001. Field Observations fall report: August-November 2000. Florida Field Naturalist 29:60-74.
- PRANTY, B. 2002. Field Observations summer report: June-July 2001. Florida Field Naturalist 30:11-19.
- Pranty, B. 2004. Field Observations summer report: June-July 2003. Florida Field Naturalist 32:34-41.
- PRANTY, B. 2005. Field Observations summer report: June-July 2004. Florida Field Naturalist 33:20-27.
- PRANTY, B. 2006. Field Observations summer report: June-July 2005. Florida Field Naturalist 34:28-35.
- PRANTY, B. 2007. Field Observations summer report: June-July 2006. Florida Field Naturalist 35:30-37.
- PRANTY, B. 2008. Field Observations summer report: June-July 2007. Florida Field Naturalist 36:12-20.
- PRANTY, B. 2009. Field Observations summer report: June-July 2008. Florida Field Naturalist 37:22-30.
- PRANTY, B. 2010. Field Observations summer report: June-July 2009. Florida Field Naturalist 38:32-40.
- SMITH, P. W., AND A. SPRUNT IV. 1987. The Shiny Cowbird reaches the United States. American Birds 41:370-371.
- STEVENSON, H. M. 1976. Vertebrates of Florida. University Presses of Florida, Gainesville.
- STEVENSON, H. M., AND B. H. ANDERSON. 1994. The Birdlife of Florida. University of Florida Press. Gainesville.
- TRUCHOT, E. 1962. Bronzed or Red-eyed Cowbird (*Tangavius aeneus*). Florida Naturalist 35:135.