RANGE EXPANSION OF THE BRONZED COWBIRD WITH THE FIRST MISSOURI RECORD

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AND

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At the beginning of this century the Bronzed Cowbird (Molothrus aeneus) was found from southern Texas through Mexico and Central America to Western Panama (Ridgway 1902). Since then, the species has increased and expanded its range in the United States. The purpose of this note is to summarize this expansion and to discuss its possible consequences on bird populations in the United States.

RANGE IN THE UNITED STATES

Arizona. The Bronzed Cowbird was first observed in Arizona in 1909 (Phillips et al. 1984) and breeding populations of the species apparently became established throughout much of southern Arizona during the next 45 years. In 1957, the A.O.U. Check-list indicated that the winter range extended "north, rarely to southern Arizona (Tucson)" (p. 542). Bronzed Cowbirds were not reported west of Wickenburg (Maricopa Co.) until 1951 when Monson (1954) found them along the Colorado River near Parker (Yuma Co.). By the mid-1960's, they were regular but uncommon winter residents of southern Arizona (Johnson and Roer 1968). The species now commonly breeds throughout southern and central Arizona (M. Robbins, pers. observ.), but is still an uncommon summer resident along the Colorado River (J. Dunn, pers. comm.). Wanderers have also recently appeared in Prescott (Yavapai Co.), Car- rizo (Navajo Co.), and Clifton (Greenlee Co.) (Witze- mann et al. 1976).

New Mexico. Phillips et al. (1964) indicated that Bronzed Cowbirds first appeared in New Mexico, in Guadalupe Canyon (Hidalgo Co.), during July 1947. The species was breeding there on 21 June 1968 (Niles 1970). It was primarily confined to the extreme southwestern corner of the state until the early 1960's, when it was detected in the Gila River Valley near Bedrock (Grant Co.) on 6 June 1962. By 1968, it had reached the area of the Rio Grande (Grant Co.) and was subsequently found breeding just north of there (Hubbard 1971). The species was observed in the San Francisco Valley near Pleasanton (Catron Co.) on 10 June 1975 (Witzemann et al. 1975); in central New Mexico at the Bosque Na- tional Wildlife Refuge (Socorro Co.) on 6 June 1973 (Parker 1973); and again in the Socorro area during May 1977 (Witzemann et al. 1977). At present, its range continues to expand slowly northward in the state.

California. The first report of the Bronzed Cowbird in California was of a male at Whipple Point above Parker Dam (San Bernardino Co.) on 29 May 1951 (Monson 1951). Monson (1958) obtained the first speci- mens near Bard (Imperial Co.) on 12 May 1955. Cardiff (1961) collected a second specimen, a female, about 110 km farther west, at Westmoreland (Imperial Co.) on 22 April 1956. Cowbirds were reported at Brock Ranch (Imperial Co.) on 10 May 1968 and at Mecca in the desert north of the Salton Sea (Riverside Co.) on 13 July 1968. A pair lived near Jacumba (extreme southwestern San Diego Co.) between 1973 and 1976, but their breeding status is uncertain; however, a ju- venile was seen there on 13 July 1974 (J. Dunn, pers. comm.). Strays were seen as far west as Whittier (Los Angeles Co.) on 12 June 1963 and 9 April 1964 (J. Dunn, pers. comm.); and as far north as Kelso (San Bernardino Co.) on 25 May 1977 (McCaskie 1977). McCaskie et al. (1966) provided the first evidence that Bronzed Cowbirds were breeding in California when they saw a pair copulate near Laguna Dam (Im- perial Co.) on 2 June 1962. Currently, the species is an uncommon summer resident along the Colorado River, primarily in park-like settings (J. Dunn, pers. comm.).

Florida. The first record was of three birds in Sarasota (Sarasota Co.) on 15–21 April 1962 (Paulson and Stevenson 1962). Matteson (1970) subsequently collected a male on 8 November 1971 (Stevenson 1976). Matteson et al. (1975) in central Florida and along the coast were seen or obtained in southeastern Florida (Ala- chua Co.) on 18 November 1971 (Robertson 1972) and at Boynton Beach (Palm Co.) on 7 and 11 November 1976 (Edscorn 1977). An "invasion" of cowbirds followed in south Florida during the winter of 1977–78, where as many as ten may have been present (Steven- son 1978); three wintered near St. Petersburg (Pinellas Co.) during 1978–79 (Stevenson 1979). To date there is no evidence of breeding in the state.

Mississippi. Bronzed Cowbirds were first noted in Mississippi on 6 January 1979 at Fascaugoula River Flats (Jackson Co.). In March, more than ten were seen in huge flocks of blackbirds (Hamilton 1979).}

Missouri. Berlin Heck first reported the presence of a Bronzed Cowbird in Missouri on 5 January 1979 at a bird feeder in the Squaw Creek National Wildlife Refuge (Holt Co.). We and others (Tim Barksdale, Leo
Galloway, and Floyd Lawhon) saw the bird later. It was subsequently collected by Heck and found to be a female of the nominate race M. a. aeneus (D. A. Easterla 3094; ova 1 mm; some fat; light head molt; weight 59 g). This was either a stray individual or represents a range extension of about 830 km north of the nearest locality where it was reported earlier (Fort Worth, Texas).

DISCUSSION
As with a number of other species currently expanding their ranges [e.g., Cattle Egret (Bubulcus ibis), White-tailed Kite (Elanus leucurus), Burrowing Owl (Athene cunicularia), Great-tailed Grackle (Quiscalus mexicanus), and Brown-headed Cowbird (Molothrus ater)], the Bronzed Cowbird appears to be taking advantage of human alteration of the environment. All of the above species have increased dramatically in the United States as a result of increased agricultural activity (Davis 1960, Ligon 1963, Mayfield 1965, Eisenmann 1971, Pratt et al. 1972). For example, the Bronzed Cowbird increased significantly in Texas after large tracts of forest along the Rio Grande Valley were cleared for agriculture. This seems to have paved the way for its expansion into central Texas and along the Gulf Coast.

The irrigation of arid land has undoubtedly aided expansion of the species in the southwest by providing an abundant, year-round source of food. This species commonly forages in residential areas, golf courses, and parks in central and southern Arizona (M. Robbins, pers. observ.). It has also taken advantage of the increased presence of cattle by feeding on insects flushed by them. Thus far, it has had more limited success in the drier areas of Arizona and California.

Like the Brown-headed Cowbird, the Bronzed Cowbird is a brood parasite (Bent 1958). The adverse effects of the Brown-headed Cowbird on other birds. They may have competition between the two congeners, there is still a significant overlap in the species that they parasitize (Friedmann et al. 1977).

Little information exists concerning the effect of Bronzed Cowbirds on other birds. They may have contributed to the decline of several species of wrens, vireos, and warblers in Texas (Oberholser 1974), but no quantitative evidence of this has been published. Careful documentation of their range extensions and possible effects on other species will be useful in studying both the mechanics of range expansion and the coevolution of parasitic birds and their hosts.

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LITERATURE CITED


TEXAS ORNITHOLOGICAL SOCIETY. 1974. Checklist of
FIRST RECORD OF A BLACK-LEGGED KITTIWAKE IN IDAHO

JOHN W. CONNELLY AND ROBERT J. GATES

The Black-legged Kittiwake (Rissa tridactyla) is a common oceanic gull that winters off the Pacific coast from British Columbia south to northwestern Baja, California (A.O.U. Check-list 1957). While there have been several inland reports of Black-legged Kittiwakes in various western states (Haywood et al. 1976, Weber and Larrison 1977, and others), to our knowledge this species has never before been reported in Idaho. The purpose of this note is to document the first record of this species in Idaho and to review past records of the kittiwake in adjacent states.

The carcass of a juvenile male Black-legged Kittiwake was found by the authors on 13 February 1980, approximately 5 km southeast of Howe, Butte Co., Idaho. The nearest large body of water is American Falls Reservoir, located on the Snake River, 85 km to the southeast. This bird appeared to have been dead less than 24 h. A large wound on the dorsal portion of the body, just behind the neck, indicated that the bird may have been killed by a raptor. The carcass weighed 277.5 g and contained no deposits of body fat.

Most of the inland sightings of Black-legged Kittiwakes in the northwestern United States have been made in the last eight years (Table 1). It is unclear whether this recent increase in sightings is the result of greater effort by field biologists, or if it results from a pioneering tendency of the kittiwake due to an increase in the number of reservoirs along major northwestern rivers. Juvenile gulls of many species wander great distances in the late summer and fall (Pettingill 1970, Parsons and Duncan 1978). Since at least one of the records was for an adult and most of the sightings occurred during the winter and early spring, this does not immediately offer a satisfactory explanation for the majority of inland kittiwake records. Further, the sightings of kittiwakes do not follow the same pattern as those of the Ancient Murrelet (Synthliboramphus antiquus; Munger 1965); Munger indicated that murrelets wander inland primarily during October and November, and their movements are associated directly or indirectly with adverse weather over the Pacific coast. However, we found that at least one and usually a series of low pressure systems had moved inland across the Pacific Northwest within a two- to three-week period just before each inland kittiwake sighting (U.S. Dep. of Commerce) except for the 1898 sighting, for which we have no data. We suggest that inland movements by the Black-legged Kittiwake are often the result of winter storms moving inland from the Pacific coast.

<table>
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<tr>
<th>Area</th>
<th>Time of sighting</th>
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<th>Authority</th>
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<td>January 1972</td>
<td>adultb</td>
<td>Verner 1974</td>
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<tr>
<td>Asotin County</td>
<td>February 1976</td>
<td>unknownb</td>
<td>Weber and Larrison 1977</td>
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<tr>
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<td></td>
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<tr>
<td>Butte County</td>
<td>February 1980</td>
<td>immaturec</td>
<td>this report</td>
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<tr>
<td>Western Montana</td>
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<td></td>
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<tr>
<td>Ninepipe N.W.R. *</td>
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<td>P. D. Skaar (pers. comm.)</td>
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<tr>
<td>Wyoming</td>
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<td>Near Douglas, Wyoming</td>
<td>November 1898</td>
<td>unknownc</td>
<td>McCreary 1937</td>
</tr>
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* National Wildlife Refuge.
b Sighting.
c Specimen found dead or collected.

TABLE 1. Inland records of Black-legged Kittiwakes in the northwestern United States.