

while on the wing except when in the presence of waxwings; however, they remove berries in a more conventional manner after the waxwings have departed. Only a detailed study of the feeding behavior and diet of robins before and after the passage of waxwings would indicate if this contact results in persisting modification of the behavior of the robins.

If responsiveness to social stimulation is, in fact,

## OCCURRENCE AND NESTING OF BLACK TERNS IN SOUTHWESTERN BRITISH COLUMBIA

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In early June 1963 Kurt-Eric Eiche and Bill Schmalz noticed a pair of Black Terns (*Chlidonias niger*) flying over a marshy area at the south end of Pitt Lake, about 22 mi. W of Stanley Park, Vancouver, British Columbia. In late June the same observers located an adult Black Tern sitting on a small nest among cattails there. Later the nest was checked and found to contain two eggs.

The same year, on 13 July, Werner and Hilde Hesse and Dr. Paul MacKenzie, using a 30× telescope, watched two adult Black Terns feeding young on a nest (presumably the same one) approximately 90 ft from the dyke. The nest, a low platform of marsh vegetation, was floating in about 2 ft of water among emergent marsh vegetation.

On 28 May 1964 Robert E. Luscher recorded two pairs of Black Terns in the same area at Pitt Lake and on 20 June two nests were located. One nest contained two eggs, the other, three. On 4 July one nest had two small young, the other still contained the complete clutch of three eggs. Color photographs of both nests were taken by Luscher on his visit, as well as by Eiche on 19 July 1964.

No nests were located in 1965 but Luscher observed two pairs of Black Terns in the Pitt Lake area on 5 June 1965.

There were no 1966 sightings for the Pitt Lake area but Black Terns (never more than three) were regularly reported at the Ladner sewage pond (about 15 mi. S of Stanley Park) by Gwen DeCamp, Jack Husted, and Roy Phillips from late May to late July in 1966.

There were six reports of Black Terns in the Vancouver area in 1967. Madelon Schouten recorded

a regular feature of the biology of the robin, other observers should be able to cite additional cases in which the behavior of robins has been modified by contact with other species of birds.

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a Black Tern at Iona Island just north of the Vancouver International Airport on 3 June and 3 September. Ian Yule also reported a Black Tern at Iona Island on 3 June and Phillips observed a bird there on 5 June. On 11 June DeCamp recorded Black Terns at Pitt Lake, and on 23 June I watched a Black Tern flying over Robertson's Slough in the George C. Reifel Waterfowl Refuge, just to the south of the airport.

William J. Anderson provides the only record for 1968, a Black Tern photographed in flight over the sewage ponds on Iona Island on 27 May.

In 1969 Phillips saw a Black Tern on Iona Island on 9 June and I watched a bird flying over the sewage ponds on 25 June.

Prior to the summer of 1963 there were no breeding records for the Black Tern in southwestern British Columbia. Munro and Cowan (British Columbia Prov. Mus. Spec. Publ. No. 2:121, 1947) furnish the only summer record for southwestern British Columbia: a specimen in the Provincial Museum in Victoria collected on 3 June 1929 at Chilliwack, about 50 mi. W of Vancouver. Godfrey (Nat. Mus. Can. Bull. 203:194, 1966) shows the breeding range of the Black Tern in western Canada as interior-central and southern British Columbia, east of the Coast Range.

From records over the past seven years the Black Tern presently should be considered a breeding species, but rare in summer, in the Vancouver area. Further nestings at Pitt Lake (1965-1969) may have been prevented by fluctuating water levels. The Black Tern may, in the future, be found nesting at Iona Island.

The earliest arrival date (27 May) for Black Tern in southwestern British Columbia was recorded by Anderson in 1968 at Iona Island. The latest date, also at Iona Island, was recorded as 3 September 1967 by Schouten.

I wish to thank the observers, members of the Vancouver Natural History Society, for communicating their observations to me.

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## A RECORD OF CLUTCH SIZE AND BREEDING IN NEW MEXICO FOR THE BRONZED COWBIRD

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Although there is published information on the reproductive capacities, including clutch size, of the Brown-headed Cowbird, *Molothrus ater* (e. g., Payne 1965) and of the three South American cowbirds, *M. bonariensis*, *M. rufocollaris*, and *M. badius* (Davis 1942), there seems to be nothing in the literature

concerning the clutch size of the Bronzed Cowbird, *Tangavius aeneus*. On 21 June 1968 I collected a laying adult female Bronzed Cowbird (preserved at the Museum of Southwestern Biology, University of New Mexico) at tree-shaded High Lonesome Wells in desert grassland (Sec. 22 of T33S, R17W) in Hidalgo County, New Mexico. The oviduct of this bird contained an unshelled egg, and macroscopic examination of the bird's ovary disclosed three collapsed post-ovulatory follicles and an enlarged follicle of approximately 9 mm diameter. The next largest unovulated follicle, at 4 mm diameter, probably would not have contributed to the present clutch (see Payne 1965). It thus seems likely that the clutch being produced when the cowbird was collected would have

contained four eggs. This latter figure is well within the range of values (from one to seven eggs) given by the above authors for clutch size from the four species of *Molothrus*.

The present record also documents for the first time unquestioned breeding in New Mexico by *T. aeneus*, and this locality becomes the eastern extremity of known range north of the Sierra Madre Occidental (see Miller et al. 1957:277) for the sexually dimorphic populations comprising *T. a. milleri* of northwestern Mexico, Arizona, and southwestern New Mexico. The A.O.U. Check-list (1957:542) includes Guadalupe Canyon, New Mexico, within the breeding range of *milleri*; as far as I know, however, this estimation, while no doubt correct, relies only on this cowbird's regular occurrence in that canyon during the summer. Additionally, Ligon (1961:267) cites a pair of Bronzed Cowbirds collected "in breeding condition" in June 1957 "on the east side of the Animas Mountains, 30 mi. S of Animas" (and thus presumably about 10 mi. N or NW of my 1968 locality). These two birds (also preserved at the University of New Mexico) bear only minimal data on their labels, however, and I am unable to assign a precise meaning to Ligon's "breeding condition."

The laying female was accompanied by either another female or a young male *T. aeneus* when collected. Among other species observed in the im-

mediate area of collection were Bullock's Orioles, *Icterus bullockii*, Mockingbirds, *Mimus polyglottos*, and a Blue Grosbeak, *Guiraca caerulea*, all of which have been recorded (Friedmann 1963:233) as hosts for Bonzed Cowbirds.

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