LARGE, RECENT COLONIES OF NESTING TRICOLORED BLACKBIRDS IN NORTHERN BAJA CALIFORNIA, MEXICO

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Abstract: We report two large, recent breeding colonies of Tricolored Blackbirds (*Agelaius tricolor*) in northern Baja California, Mexico, the largest ever reported there. The first colony found contained about 350 nests with large, fledging young on 5 May 1995 in El Rosario, Baja California Norte. No tricolors were found at the site in 1996, but it again contained about 350 nests on 24 April 1997. A second large colony with about 300-350 nests was also found on 25 April 1997, near San Telmo, Baja California Norte. The last-known major breeding colony in Baja California was reported in the El RosarioValley more than 100 years ago, although a small number of recent (since the 1980s) sightings of non-breeding birds have been reported, and a small colony of about 40 nests at XXX was reported in 1991 by Howell and Webb (1992) as a "surprise." Since the Tricolored Blackbird was historically a common resident, we suggest that this species may be increasing again in Baja California.

Key words: Tricolored Blackbird, Agelaius tricolor, Baja California, breeding records, distribution.

The Tricolored Blackbird (*Agelaius tricolor*) was "formerly described as a [common] breeder in marshes of [northwestern Baja California Norte]. . . but [is] now apparently local" (Howell and Webb 1995:736). Wilbur (1987:160) reported the Tricolored Blackbird as a "local resident in northwestern Baja California south to El Rosario", but he listed only two recent sightings of non-breeders (1979-80 and 1981 near Ensenada and Colonet, respectively). Howell and Webb (1992) reported "...there are few recent records of Tricolored Blackbirds from Baja California, particularly in summer..." Ruiz-Campos and Rodríguez-Meraz (1993) conducted extensive avian surveys in the lower El Rosario Valley in November and December of 1990 and June and September of 1991; the only blackbird reported was the Red-winged Blackbird (*A. phoeniceus*). The Tricolored Blackbird was last known as a breeder at El Rosario in 1885 (Grinnell 1928). Howell and Webb (1992) reported a small breeding colony which was the first known in many years for Baja California,

located near Ejido Héroes de la Independencia, some 145 km NNE of El Rosario, on 19 June 1991.

Since 1971, DWA has, in passing, annually searched along the highway traversing the El Rosario Valley for Tricolored Blackbirds, especially nesting colonies (March through June), without any sightings. But on 5 May 1995, DWA, TMC, and SKH arrived in El Rosario not more than five minutes after DWA had told the others that he had not seen "tricolors" in this valley in some 24 years. As we drove through town, DWA noticed two-direction flight lines of Tricolored Blackbirds passing from the valley marshes to the edge of the desert to the north. We then tracked the birds back to their nesting colony (Fig. 1).

In order not to disturb the colony, we remained on a small cutbank overlooking the marsh dominated by cattail (*Typha* sp.) and willow (*Salix* sp.). The nests were deeply imbedded in cattail and many adults perched on the willows nearby. The river bed in this area consisted of gravel bars sparsely covered with willow and Salt Cedar (*Tamarix* sp.), with mixed, dense patches of cattail and willow. The main channel of the El Rosario River contained running water and was about 300 m from the colony, but the blackbirds were feeding away from the channel and into the desert. Some kind of medium-sized (2-3 cm) insects could be seen in the bills of the birds returning to the colony, but we could not identify them. According to local residents (as told to WJH and RVB), these blackbirds are considered a common barnyard pest, feeding also off waste grain fed to domestic fowl. We could hear hundreds of large young begging and calling from the colony area and surmised that we were witnessing the final stages of 1995 nesting. Our estimates of the total number of nests (250-300) were based on the extent of the colony (about 10-20 by 70 m); but since it was in the latter stages, it was likely larger earlier in the season (350+ nests). When we returned to the area on 10 May, there were no longer flight lines coming from the colony area and we surmised that the young had mostly fledged.

DWA was unable to find nesting tricolors at this location in 1996, but WJH and RVB conducted followup surveys in April 1997 as part of a review of the total range of the species (Beedy and Hamilton 1997). They reconfirmed the size and location of the El Rosario colony on 24 April where adults were found provisioning nestlings. And with further exploration the next day, they located yet another breeding colony near San Telmo, some 105 km to the NNE. The San Telmo colony had about 600 adults surrounding the edges and feeding nestlings; and the colony was estimated to contain about 300-350 nests.

The El Rosario colony was located along a seasonal creek parallel to the El Rosario River at about $30^{\circ} 3.75'$ N, $115^{\circ} 43.08'$ W in a *Typha/Salix*-dominated marsh (Fig. 1). The San Telmo colony was located in dense *Typha* along the San Telmo River at about $30^{\circ} 57.16'$ N, $116^{\circ} 9.44'$ W. About 49% of all Tricolored Blackbird colonies surveyed by DeHaven et al. (1975*a*) (*n* = 156) used only cattail as nesting substrate.

Further, on 22 April 1997 DWA and S. Luttich observed several singing and displaying Tricolored Blackbird males on open, low pines (*Pinus jeffreyyi*) along the marshy edges of Laguna Hanson, about 220 km N of El Rosario. This behavior is usually indicative of nesting activity (Orians and Christman 1968); however, severe overgrazing of extensive bullrush (*Scirpus* sp.) stands around the lake probably precluded nesting at Laguna Hanson in 1997--as it probably has in the past as long as such heavy grazing has occurred there. Overgrazing and degredation of emergent vegetation on this

National Park is known at least back to 1985, when DWA spent 9 days there from 17-25 August. No tricolors were observed then, but Red-winged Blackbirds were seen daily around the lake.

The nearest known large colonies of Tricolored Blackbirds were described by DeHaven et al. (1975*a*) and Beedy and Hamilton (1997) in San Diego County, California, about 320 km NNW of El Rosario. Large colonies in excess of 25,000 to 100,000 birds have been reported farther north in California (Beedy and Hamilton 1997). Therefore, two colonies of 300-350 nests may superficially seem rather insignificant. But given the dynamic nature of the habitat in northern Baja California and its isolation in coastal sage scrub or desert transition areas (see Mooney, 1977:471-489), we would predict these peripheral populations to be smaller and subject to more extreme seasonal fluctuations, perhaps not breeding in unusually dry years, and breeding heavily in wet years. Hence, smaller colonies like the ones in the El Rosario and San Telmo valleys demonstrate the value to avian biodiversity of small, isolated riparian habitats in coastal sage scrub and other xeric habitats of Baja California.

The Tricolored Blackbird seems to again becoming a major breeding species for northern Baja California and increasing in number. Its relationship to agricultural changes in these valleys is unclear, however. Rodriguez-Estrella et al. (1997) have reported that the European Starling (Sturnus vulgaris), along with the White-tailed Kite (Elanus leucurus), Brown-headed Cowbird (Molothrus ater), and Western Meadowlark (Sturnella neglecta) have expanded even into southern Baja California, likely in association with man-induced agricultural changes on the Baja California landscape. The first impression on one hand is that Tricolored Blackbirds have also benefitted from agricultural land development. But on the other hand, agricultural operations in riparian valleys like this (which are being developed for irrigation and tomato farming) can also negatively affect small, habitat patches and isolated, breeding wildlife populations there. In fact, recent agricultural operations in the El Rosario Valley, no more than 10 km from the site of the Tricolored Blackbird colony described here, have resulted in the recent extinction of a local kangaroo rat species (*Dipodomvs gravipes*) due to habitat destruction (Mellink et al., 19XX). Due to the highly nomadic and migratory nature of the Tricolored Blackbird (DeHaven et al. 1975b), its protection in Mexico is also an international issue and should be supported by the Migratory Bird Treaty Act and developing California conservation plan for the Tricolored Blackbird (Cook 1996). Studies on the ecology and post-breeding movements of Tricolored Blackbirds from Baja California are needed, as are more extensive surveys, to clarify which conservation practices can be most effectively promoted.

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