

Tricolored Blackbird Status Report for 1999

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We coordinated a survey on 24 April 1999 to estimate once again (see Beedy 1998) the distribution and abundance of Tricolored Blackbirds (*Agelaius tricolor*) during the breeding season. Survey forms were mailed to all participants on former surveys (1994, 1997), and instructions and forms were widely distributed to active birdwatchers via birding listservers. Our survey methods — to revisit all known breeding locations of the species and to search in their vicinity for new settlements — should have given coverage equaling that of past surveys. With the exception of a few southern California sites, all colony sites active in 1994 and 1997 were visited during the 1999 census. In addition, our knowledge of where Tricolored Blackbirds traditionally nest continues to expand annually, increasing the likelihood of detecting previously unobserved colonies.

The California Department of Fish & Game (CDFG) and the United States Fish & Wildlife Service (USFWS) sponsored this one-day effort, which involved the collaboration of 50 volunteers. We located fewer than 95,000 breeding individuals, compared with 230,000 in 1997 and 330,000 in 1994 using similar methods (Table 1). The results implicate a precipitous decline in overall abundance of this species in southern California and, especially, the Central Valley during the 1990s. Twelve of 19 Central Valley counties (63%) exhibited reduced breeding bird counts and 8 (42%) had no 1999 breeding observations (Table 2). Each county was surveyed in all three census years. The basis for this decline appears to be (1) loss of habitat to urban expansion, (2) intensification of agricultural operations and (3) conversion of rangeland and pasture to vineyards and orchards.

There has been in the recent past (1991-1998) and continues to be (1999) widespread loss of breeding effort due to certain agricultural practices, especially mowing of cut feed for livestock. In addition, predation by Black-crowned Night-Herons (*Nycticorax nycticorax*) and raccoons (*Procyon lotor*) in cattail (*Typha* spp.) marshes and by Common Ravens (*Corvus corax*), raccoons and coyotes (*Canis latrans*) in other habitats has heavily affected reproductive success. On public refuges, emergent marsh vegetation, the classical nesting habitat of this species, has become a reproductive sink in most places (i. e., it is a habitat producing overall population losses rather than gains) due to predation by Black-crowned Night-Herons.

Table 1. Results of breeding season surveys for Tricolored Blackbirds, 1994, 1997 and 1999.

	1994	1997	1999
Number of counties surveyed	37	34	32
Survey participants reporting	68	55	50
Active breeding colonies observed ^a on 24 April	80(26 ^c)	71(25 ^c)	57(22 ^c)
Inactive former colony sites observed ^a on 24 April	94(18 ^c)	43(15 ^c)	115(19 ^c)
Active breeding colonies observed, ^a all dates	99(28 ^c)	79(28 ^c)	93(26 ^c)
Breeding birds reported ^b	330,000	230,000	95,000

a = Number of active colonies, inactive historical colony sites, and counties in which surveys were conducted and/or colonies were observed are from data compiled by Hamilton which have yet to be verified by the DFG or USFWS.

b = Breeding birds reported by all observers throughout the breeding distribution of the species as of late April. Rounded to nearest 5,000.

c = Number of counties containing sites.

Tricolored Blackbirds are sharply declining and the observed causes of this decline continue to eliminate the reproductive effort of active colonies and associated foraging habitat. Extrapolation from measures of reproductive success in 1999 and in previous years suggests that annual recruitment is insufficient to sustain this species. Further declines are expected in the Central Valley given current land use practices, trends in land use conversions, and continued loss of breeding efforts at colonies.

Ways to prevent further decline have also been identified (Beedy and Hamilton 1997). In 1999, CDFG and USFWS protected a colony that would have been destroyed by routine agricultural activities. Two breeding efforts at this colony, representing approximately one third of the entire observed population in 1999, produced more than 32,000 fledglings. Recovery will depend upon the cooperation of private landowners, and there is currently no perceived incentive for them to do so. Conservation of this species is not at present a high priority for some conservation groups, perhaps because of their emphasis upon species already listed as threatened or endangered.

We expect further revision of the 1999 reports of colonies and will continue to incorporate them as we have done with additions in previous years. A detailed 1999 Status Report, including all accounts by volunteers, will be available by April 1, 2000. Because intentional colony destruction to avoid

Table 2. Breeding Tricolored Blackbird observations in censused Central Valley counties, California, on April survey weekends only.

County	Number of Tricolored Blackbirds observed		
	1994	1997	1999
Alameda	20	1200	4,000
Butte	0	0	5,000
Calaveras	0	8,250	0
Colusa	25	100	1,000
Contra Costa	400	0	0
El Dorado	0	200	0
Fresno	21,150	2,500	39,790
Glenn	2,000	0	0
Kern	70,600	16,950	3,350
Kings	0	8,250	0
Merced	60,100	12,500	1,500
Placer	1,000	430	2,000
Sacramento	93,225	25,730	12,860
San Joaquin	13,750	11,750	0
Stanislaus	2,500	150	3,000
Sutter	35	0	200
Tehama	0	35	0
Tulare	50,000	53,500	14,000
Yolo	400	200	0
Totals	317,199	143,742	88,699

compliance with the Migratory Bird Treaty Act has been documented, precise locations of colonies will not be available in the 1999 status report.

We need an agreed upon plan for conservation of this species. In the 1999 Status Report we outline specific steps that should to be made, including recommendations to:

- 1) establish a scientific review committee to refine and prioritize management and research objectives;
- 2) identify the Tricolored Blackbird as a riparian and wetland species so it may benefit from current Partners in Flight conservation programs;
- 3) implement research objectives identified in Beedy and Hamilton (1997);
- 4) incorporate Tricolored Blackbird conservation measures into Habitat Conservation Planning;
- 5) monitor annual abundance and reproductive success, and protect existing colonies and frequently used colony sites;

- 6) manage for the species on state and federal wildlife areas and refuges;
- 7) plan for water allocations to make suitable habitat temporally available;
- 8) incorporate active management measures into the CEQA process, especially at dairies and along highway rights-of-way;
- 9) manage for Tricolored Blackbirds breeding in nettles and other exotic plant substrates until predation pressure in traditional substrates (tules, cattails, etc.) can be controlled;
- 10) secure funding to support Tricolored Blackbird breeding colonies should these colonies become jeopardized by agricultural practices on private land;
- 11) develop an easement program to encourage the beneficial aspects of Tricolored Blackbird use of dairies and rice production sites;
- 12) include the Tricolored Blackbird as an "At-risk Native Species" in the CALFED Ecological Restoration Plan (ERP) and in other aspects of the CALFED planning process.

These measures are consistent with the recommendations posed by Beedy and Hamilton (1997) and serve to focus the broad goals and objectives of that document. Beedy and Hamilton (1997) also recommend a three-tiered monitoring program designed to monitor regional and global population trends by conducting both range-wide and state-wide censuses using standardized methods and a combination of volunteer and paid observers.

If you are interested in receiving a copy of the complete report please contact Bill Hamilton (e-mail: wjhamilton@ucdavis.edu). The report includes accounts of colonies seen after April 24, 1999. **We would like your reports of colonies observed earlier and later in the 1999 season if they are not listed in this report.** We will conduct another intensive survey on April 21-23, 2000. Please count on being in the field in April to develop an accurate current understanding of the status of Tricolored Blackbirds. Accounts are most useful if they involve regular observation of colonies prior to this survey and ongoing and prompt reports to us. We will advise all former participants of ways to report observations.

As one of just a few essentially endemic California bird species, the Tricolored Blackbird is an important part of the natural heritage of California and the Central Valley. Unique adaptations including itinerant breeding and its ability to rapidly exploit freshwater marsh and agricultural breeding habitats which are spatially and temporally unpredictable make this species an excellent

candidate for active management programs. The Central Valley will play a key role in the recovery of Tricolored Blackbird populations as we work towards developing cooperative agreements with landowners and ensuring management and conservation of this species on public lands.

LITERATURE CITED

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