

# **Riparian Bird Surveys for South and East Tecolote Canyon**

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Prepared by: Kim Roeland

MSCP Biologist

Park and Recreation, Open Space Division

City of San Diego

## Introduction

Riparian bird surveys were conducted in the southern and eastern portions of Tecolote Canyon in order to determine presence or absence of sensitive riparian species, focusing primarily on detection of least Bell's vireo (*Vireo bellii pusillus*). The least Bell's vireo is federally threatened and is a covered species in the Multiple Species Conservation Program (MSCP). Tecolote Canyon is not considered a high priority for regional management of the species (USFWS 1998, SDMMMP 2013).

Riparian habitat occurs along Tecolote Creek and an unnamed tributary to Tecolote Creek predominately in the southern and eastern portions of the Canyon. The Tecolote Golf Course occurs between the southern and eastern sections of the Canyon and contains heavily degraded riparian habitat. As a result, the corridor is not contiguous between the two survey areas. An occurrence of least Bell's vireo was documented in 2004 by Helix Environmental just south of the Tecolote Golf Course. The California Natural Diversity Database (CNDDB) also has a record for the vireo at this location from 1991. Other sensitive riparian species reported by Helix Environmental in 2004 include yellow warbler (*Setophaga petechia*) and yellow-breasted chat (*Icteria virens*). City of San Diego Park and Recreation staff has previously completed two consecutive years of surveys in South Tecolote Canyon (City 2013, 2014).

The purpose of the riparian bird surveys was 1) to continue monitoring to determine the current status of least Bell's vireo where the bird had been documented previously, and 2) to expand the survey area to East Tecolote Canyon where additional potentially suitable habitat occurs. The results from the surveys will provide updated information on the status of sensitive riparian bird species within the southern and eastern portions of Tecolote Canyon to guide management as detailed in the Draft Natural Resources Management Plan for Tecolote Canyon Natural Park.

## Project Area

Tecolote Canyon is located between Interstates 5 and 805 and north of Interstate 8 in the City of San Diego (Figure 1). Tecolote Creek empties into Mission Bay near Fiesta Island. South of Tecolote Canyon the creek is lined with a concrete. The surveys were focused on the southern and eastern portions of the Canyon in the community of Linda Vista in two main areas: from the Tecolote Nature Center north to the south end of the Tecolote Golf Course, and from Genessee Ave west to the Tecolote Golf Course.

## Methods

Line transect surveys were conducted in South Tecolote Canyon on 10 April, 20 April, 11 May, and 26 May, and in East Tecolote Canyon on 15 April, 29 April, 18 May, and 11 June, 2015.

Survey methods followed the U.S. Fish and Wildlife Service protocol for least Bell's vireo survey; however, a modified schedule was implemented. No vocalization tapes were used.

The surveys were conducted between 7:45 a.m. and 11:30 a.m. and consisted of walking slowly along the side of the creek, stopping frequently, and recording all avian species seen or heard. Bird species were determined using both visual and aural identifying features (i.e. bird songs and calls). Binoculars were used to aid in observations.

On 8 July 2015 during a field assessment of a trail alignment in an area near Genessee from the Kearney Mesa Recreation Center, biologists participating in the survey were listening for sensitive riparian bird species, though no bird list was recorded during the trail-related fieldwork.

**Table 1. Survey Information**

<b>Date</b>	<b>Area</b>	<b>Time</b>	<b>Surveyors</b>	<b>Weather</b>
4/10/2015	South	0752-1020	Kim Roeland, Daniel Schwartz	0% cloud cover increasing to 30% cloud cover; 68°F decreasing to 66°F; winds 0-3 increasing to 3-5 mph
4/15/2015	East	0950-1040	Kim Roeland, Betsy Miller	0% cloud cover at 75°F with 0-3 mph winds remaining constant during survey
4/20/2015	South	0800-1000	Kim Roeland	75% cloud cover clearing to 5%; 70°F warming to 78°F, winds steady at 0-3 mph
4/29/2015	East	8040-1120	Kim Roeland, Daniel Schwartz	0% cloud cover remaining clear; 73°F warming to 86°F; winds remaining calm at 0-3 mph
5/11/2015	South	0815-1040	Kim Roeland	100% cloud cover clearing to 5%; 65°F warming to 73°F; winds increasing slightly from 0-3 to 3-5 mph
5/18/2015	East	0835-1047	Kim Roeland, Daniel Schwartz	95% cloud cover clearing slightly to 60%; temperature increasing slightly from 65°F to 68°F; winds holding steady at 0-3 mph
5/26/2015	South	0856-1054	Kim Roeland, Annabelle Bernabe	100% cloud cover remaining at 100%; 65°F decreasing to 63°F; light winds increasing from 0-3 to 3-5; light drizzle starting at end of survey
6/18/2015	East	0837-1010	Kim Roeland	100% cloud cover clearing to 0%; 65°F warming to 80°F; 0-3 mph winds remaining steady
7/8/2015	Outside park/East	0915-1130	Kim Roeland, Betsy Miller, Annabelle Bernabe	No weather data taken

## Results

Forty-three species of birds were detected during the 8 surveys (Table 2). No least Bell's vireos were seen or heard during any of the surveys. Three sensitive bird species were documented, as described below.

### Yellow-breasted chat (*Icteria virens*), California Department of Fish and Wildlife (CDFW) Species of Special Concern (SSC)

One male yellow breasted chat was seen and heard near the south end of the Golf Course on the east side of the creek on 11 May 2015 (Figure 2). This location has been documented to be occupied by yellow-breasted chat in both 2013 and 2014 (City 2013, 2014).

### Cooper's hawk (*Accipiter cooperii*), MSCP Covered

Cooper's hawks were detected on 10 April, 26 May, and 18 June 2015. On 10 April, an adult male was observed near the Tecolote Nature Center. On 26 May, an individual was heard in the vicinity of the eucalyptus trees located along the access roads north of USD (Figure 2). Cooper's hawks were also detected in this location in 2013 and 2014 though no nests were documented. On 18 June, an individual was seen and heard repeatedly near homes on the canyon rim near Boyd in East Tecolote Canyon (Figure 3). A nest in an unknown ornamental tree in a finger canyon heading toward Boyd Ave was observed late in the breeding season so it is not known if it was used by the Cooper's hawk in this area.

### California gnatcatcher (*Polioptila californica*), Federally Threatened (FT), MSCP Covered

A California gnatcatcher was detected calling from coastal sage scrub adjacent to riparian habitat in South Tecolote Canyon on 20 April 2015 (Figure 2).

## Discussion

Brown-headed cowbirds (*Molothrus ater*) were detected via aural identification on 20 April and 11 May near the golf course. On 18 May a male cowbird was seen advertising from the telephone cables directly above the golf course. Confirmation of cowbirds in Tecolote Canyon is of concern because they are nest parasites often targeting riparian songbirds such as vireos and warblers and have been shown to lead to a decline in sensitive songbird populations (Kus and Whitfield 2005).

Riparian habitat in the southern and eastern portions of Tecolote Canyon could support several territories of sensitive riparian bird species, and surveys early in the 2013 season showed several vireos, yellow warbler, and yellow-breasted chats occupying the habitat. These individuals were

not detected in surveys later in the season and it is assumed though not confirmed that they vacated the area (City 2013).

Recent mitigation by the City of San Diego Public Utilities Department has expanded suitable habitat in the southern portion of Tecolote Canyon. The Draft Natural Resources Management Plan prioritizes restoration efforts to expand suitable habitat and to connect areas between potential habitat to benefit the least Bell's vireo. Despite its urban setting and the disconnected riparian corridor, the habitat is in moderately good condition and it is not clear why least Bell's vireos aren't occupying the area.

The site will continue to be monitored in 2016 in order to determine if least Bell's vireos return to this canyon and successfully established breeding territories, and monitoring results will be used to inform management actions based on the Draft Natural Resources Management Plan for Tecolote Canyon Natural Park.

## References

City of San Diego. 2013. South Tecolote Canyon Riparian Bird Surveys.

City of San Diego. 2014. South Tecolote Canyon Riparian Bird Surveys.

Kus, B. and Whitfield, M. 2005. Parasitism, productivity, and population growth: response of least Bell's vireos (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) to cowbird (*Molothrus* spp.) control. Ornithological Monographs 15: 16-27.

San Diego Management and Monitoring Program (SDMMP). 2013. Management Strategic Plan for Conserved Lands in Western San Diego County.

U.S. Fish and Wildlife Service (USFWS). 1998. Draft Recovery Plan for the Least Bell's Vireo.

**Table 2. Bird Species Observed**

Family	Common Name	Scientific Name	Status
Accipitridae	Cooper's hawk	<i>Accipiter cooperii</i>	MSCP
	Red-shouldered hawk	<i>Buteo lineatus</i>	
	Red-tailed hawk	<i>Buteo jamaicensis</i>	
Aegithalidae	Bushtit	<i>Psaltirparus minimus</i>	
Apodidae	White-throated swift	<i>Aeronautes saxatalis</i>	
Anatidae	Mallard	<i>Anas platyrhynchos</i>	
Cardinalidae	Black-headed grosbeak	<i>Pheucticus melanocephalus</i>	
	Western tanager	<i>Piranga ludoviciana</i>	
Columbidae	Mourning dove	<i>Zenaida macroura</i>	
Corvidae	Western scrub-jay	<i>Aphelocoma californica</i>	
	American crow	<i>Corvus brachyrhynchos</i>	
	Common raven	<i>Corvis corax</i>	
Emberizidae	California towhee	<i>Melospiza crissalis</i>	
	Song sparrow	<i>Melospiza melodia</i>	
	Spotted towhee	<i>Pipilo maculatus</i>	
Fringillidae	House finch	<i>Haemorhous mexicanus</i>	
	Lesser goldfinch	<i>Spinus psaltria</i>	
Hirundinidae	Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>	
Icterids	Hooded oriole	<i>Icterus cucullatus</i>	
	Brown-headed cowbird	<i>Molothrus ater</i>	
Mimidae	Northern mockingbird	<i>Mimus polyglottos</i>	
Parulidae	Wilson's warbler	<i>Cardellina pusilla</i>	
	Common yellowthroat	<i>Geothlypis trichas</i>	
	Yellow-breasted chat	<i>Icteria virens</i>	
	Orange-crowned warbler	<i>Oreothlypis celata</i>	SSC
	Townsend's warbler	<i>Dendroica townsendii</i>	
	Black-throated gray warbler	<i>Dendroica nigrescens</i>	
Phasianidae	California quail	<i>Callipepla californica</i>	
Picidae	Nuttall's woodpecker	<i>Picoides nuttallii</i>	
	Acorn woodpecker	<i>Melanerpes formicivorus</i>	
Psittacidae	Parrots	Unknown	
Sylviidae	California gnatcatcher	<i>Polioptila californica</i>	FT, MSCP
	Blue-grey gnatcatcher	<i>Polioptila caerulea</i>	
Timaliidae	Wrentit	<i>Chamaea fasciata</i>	
Trochilidae	Anna's hummingbird	<i>Calypte anna</i>	
	Rufous/Allen's Hummingbird	<i>Selaphorus</i> sp.	
Troglodytidae	Bewick's wren	<i>Thryomanes bewickii</i>	
	House wren	<i>Troglodytes aedon</i>	
	Black phoebe	<i>Sayornis nigricans</i>	
Tyrannidae	Pacific-slope flycatcher	<i>Empidonax difficilis</i>	
	Cassin's kingbird	<i>Tyrannus vociferans</i>	
	Warbling vireo	<i>Vireo gilvus</i>	
Vireonidae	Hutton's vireo	<i>Vireo huttoni</i>	

FT = Federally Threatened, SSC = California Department of Fish and Wildlife Species of Special Concern, MSCP = Multiple Species Conservation Program

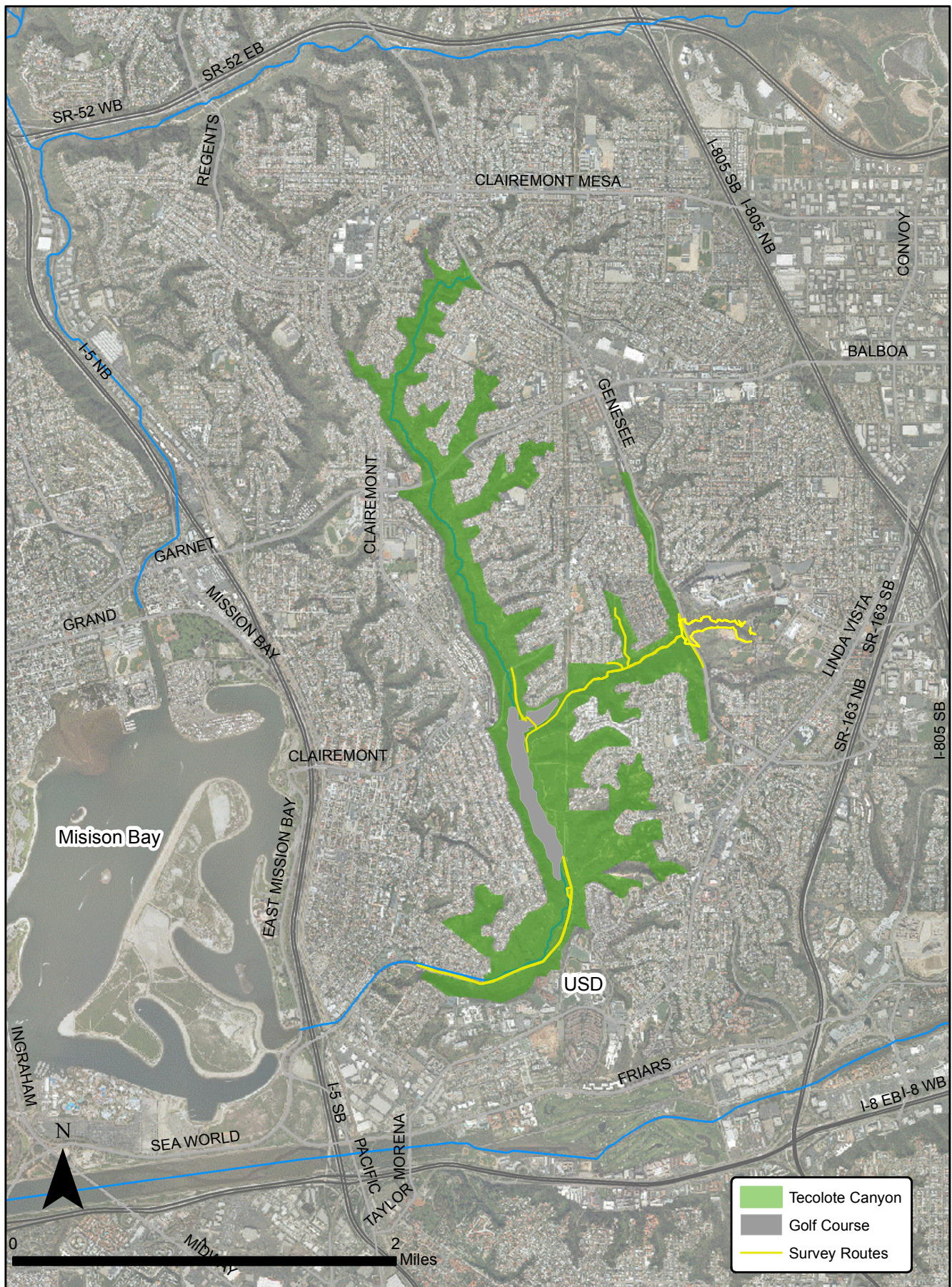


Figure 1. Tecolote Canyon Riparian Bird Surveys Project Area





Figure 2. Tecolote Canyon Riparian Bird Surveys  
Survey Results South





Figure 3. Tecolote Canyon Riparian Bird Surveys  
Survey Results East