



# BIRD SURVEYS ALONG A PORTION OF THE SANTA CLARA RIVER AND ITS TRIBUTARIES UPSTREAM FROM THE CASTAIC CREEK CONFLUENCE, NEAR VALENCIA, CALIFORNIA, 2002

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# Nature and Scope of Surveys

During the spring and early summer of 2002 surveys were conducted along a section of the Santa Clara River and its tributaries near Valencia, California (Figure 1). Surveys were focused on determining presence or absence of yellow-billed cuckoo, least Bell's vireo and southwestern willow flycatcher, and followed U.S. Fish and Wildlife Service Guidelines for the latter two species. Numbers of all species observed were noted, and, in addition to the three species noted above, special attention was placed on locating species considered rare and endangered or of Special Concern, and on determining numbers of brown-headed cowbirds.

Each survey was conducted on foot by observers well acquainted with visual, auditory and behavioral characteristics of southern California birds. Survey routes were designed to cover all areas of each section of the river, with emphasis placed on wetter habitats where least Bell's vireos and other sensitive riparian species are most likely to occur. All surveys occurred between 6:00 and 10:00 a.m. If focus species (yellow-billed cuckoo, least Bell's vireo, and southwestern willow flycatcher), were not visually observed, tapes of their calls were played in an attempt to elicit a response. Personnel for all surveys were Daniel A. Guthrie and Judith A. Sugden, both working under Federal Fish and Wildlife Service Permit number TE810394-1, issued under section 10(a)(1)(A) of the Endangered Species Act.

To facilitate surveys and observe the coverage guidelines for focus species, the area was divided into eight sections (Figure 1). Delineation of the eight areas and comments on each follow. Surveys of all sections of the river system were conducted five times during the nesting season and followed the Revised Protocol (Fish And Wildlife Service, July 2000) for southwestern willow flycatcher. Several sections of the river (Areas 4, 6-8) had no running water or wet riparian vegetation and were not considered suitable habitat for least Bell's vireo. However, areas 1-3,5 had flowing water and wet riparian vegetation. These sections were surveyed according to the protocol for least Bell's vireo as outlined by the Fish and Wildlife Service. This latter protocol requires 8 surveys between April 10 and July 31st, at least 10 days apart.

#### Habitat Condition and Bird Observations.

The riparian zone of the Santa Clara River, as described here, consists of two major habitat types, a wet riparian zone and a dry riparian woodland. The wet riparian zone consists of obligatory wet plants such as cattail and watercress found in continually moist soils along the active river channel and some willow, tamarisk and *Baccharis* shrubs also found in this zone. This zone is usually flooded during winter rains with the removal of much of the annual vegetation. Although this results in bare areas in April and early May, by June and July, most of this wet riparian vegetation has been reestablished. The dry riparian woodland consists of larger willow and cottonwood forests along the margins of the wet riparian zone and occurring on soils above the flood plain that are normally not damaged in winter floods. The 2001-2002 winter and spring seasons were the driest on record in southern California. As a result, there was no flooding. All annual vegetation away from the permanently flowing sections of the river failed to show any development, except near runoff drains from nearby suburban areas. Many perennial plants showed the effects of drought. Some smaller perennials died while older trees dropped branches.

Observations of all birds are shown in Tables 1-8. The numbers shown are of birds seen and heard, with heard individuals forming the majority of the observations. Numbers vary between censuses. Bird activity varies with season. Different species breed at different times of the year. In general, species are most easily observed when they are actively defending territories by song during the establishment of breeding pairs. Once pairs are established and nesting begins song often decreases and the numbers of birds observed, therefore, also decreases. After young leave the nest, numbers observed may increase. Thus, for most resident species, numbers of adult birds are most accurately censused in April and May, when territorial activity is at a maximum. A few species such as Anna's hummingbird that nest early in the season may be underestimated. Numbers of some nesting species, such as yellow warbler may be higher than normal in May due to migratory birds passing through the area. Numbers may also increase in late June and July when young birds leave the nest.

Due to drought conditions, more migratory birds than usual were observed in wet areas along the river. However, in dry sections not only were migrants absent but many resident species, especially insect feeders were less numerous than usual. The following sections contain specific comments on the habitat and bird observations in each area.

## Area 1 (Table 1). Santa Clara River; The Old Road Bridge to the mouth of Castaic Creek.

Length of section, 3.5 miles. The Santa Clara River flows continuously in this section and is augmented by the Valencia waste water outfall near the upstream end of this section and by some irrigation runoff from Magic Mountain and agricultural fields along the north side.

Along most of this section, wet riparian vegetation forms a narrow strip along the main channel of the Santa Clara River. There was no scouring of this vegetation during the winter, and

wet riparian vegetation was very well developed. A section of dense willows along The Old Road, protected from spring flooding by a dike and irrigated by runoff from agricultural fields was the site of nesting by two pairs of least Bell's vireos (Figure 3).

Construction at the Valencia Waste water outfall throughout the survey period, plus the drought conditions, limited observations of species normally found in dry riparian forests. A cowbird trap was in operation just north of the Valencia Waste water outfall during the latter half of the study period.

# Area 2 (Table 2). Santa Clara River; McBean Parkway downstream to The Old Road.

Length of section, 1.4 miles. The Santa Clara River flows continuously in this section and additional water is provided by irrigation runoff from industrial parks along the north side. There was no scouring of the channel be winter flooding, but dry conditions limited vegetation to a narrow band along the flowing stream. The wet willow forest near the mouth of San Francisquito Creek was carefully surveyed for focus species as migrating willow flycatcher have been seen here in previous years. None were found this year.

# Area 3 (Table 3). Santa Clara River; Bouquet Canyon Road downstream to McBean Parkway

Length of section, 1.2 miles. Water, supplied by the Saugus wastewater outfall at the Bouquet Canyon Bridge, is continuous in this section of the Santa Clara River. A small amount of additional water is provided from irrigation runoff coming from Bouquet Canyon and suburban development along the north side of the Santa Clara River. Drought conditions resulted in green vegetation being restricted to a narrow band along the flowing river. Cottonwood plantings along both sides of the river showed signs of drought with many smaller trees dying. A single willow flycatcher was observed along this section of the river on May 18th (Figure 2) but could not be found on subsequent visits. This sighting is thought to be of an individual migrating through the area rather than of a breeding individual.

# Area 4 (Table 4). Santa Clara River; Bouquet Canyon Road upstream to DWP transmission lines.

Length of section, 2.3 miles. The river channel in this section consists of a broad, flat, dry wash with narrow margins of dry riparian woodland. Within the channel are areas of coastal sage scrub habitat. This section of the Santa Clara River in past years has been wet only briefly during spring rains and due to water release from pumps one mile upstream from Bouquet Canyon Road. This section was completely dry during all surveys this year. This resulted in the almost complete absence of riparian species such as song sparrow and yellowthroat. A single yellow warbler was observed during migration and two rufous-crowned sparrows, resident on hillsides along the river, were observed once in the stream channel. Aside from migrants, most

of the other birds observed in this section are characteristic of coastal sage and dry riparian woodlands.

## Area 5 (Table 5). Castaic Creek; Route 126 to Interstate 5.

Length of section, 1.8 miles. Except for pockets of wet vegetation formed near irrigation runoff channels, and remnant puddles near the middle of this section, the creek was dry much of this spring. Despite this lack of permanent water flow, many wet riparian species (song sparrow, yellowthroat, nested successfully. Swallows nested under the three bridges that cross this section of the river. The extensive willow forest on this section where least Bell's vireo once nested has matured and was dry much of this year. No vireos have been seen here the last four years and the area no longer seems suitable habitat due to its age and lack of permanent water. A single willow flycatchers was observed in this section on May 19th. As this bird was not singing and could not be relocated on subsequent visits, it is considered to be a migrant passing through the area.

# Area 6 (Table 6). San Francisquito Creek; Santa Clara River upstream to Copper Hill Drive Crossing.

Length of section, 2.5 miles. Along most of this section the riparian zone consists of a broad sandy channel. In the upper part of this section the creek is bordered by land undergoing development. Coastal sage scrub plants occur within the channel as do sections of dry riparian woodland consisting mostly of cottonwoods. The lower ½ mile of San Francisquito Creek is wet due to runoff from adjacent development and is the only portion of this section where species preferring wet riparian habitat were observed. Although some water releases from upstream dams occurred during the winter months, no water was present during the survey period except along a short portion near the center of the section where a small amount of suburban runoff was present. Bridge construction across San Francisquito Creek affected one narrow section of the survey area.

# Area 7 (Table 7). South Fork of the Santa Clara River; McBean Parkway to Magic Mountain Parkway (Route 126).

Length of section, 1.0 miles. The channel along this section of the South Fork is narrow and very sandy. Along most of this section vegetation is restricted to a narrow band of dry woodland at each side of the channel and a few pockets of wet vegetation supported by runoff from adjacent development. Near the confluence with the main channel of the Santa Clara River a more extensive area of woodland exists on the north side of this section and a small cattail marsh is present.

# Area 8 (Table 8). South Fork of the Santa Clara River, Route 126 upstream to Newhall Creek.

Length of section, 1.4 miles. This section of the river consists of a wide sandy channel intersected by several concrete sills designed to restrict sand movement and flood damage. The river is entirely bordered by developed areas but contains small islands of dry riparian vegetation

and some wet riparian areas formed by runoff from culverts along the sides of the creek. No flooding has occurred on this section of the river in recent years and riparian vegetation around these culverts continues to develop into areas of cottonwood and willow woodland, resulting in the continued increase in riparian species along this section of the river.

#### Comments on Threatened and Endangered Species

#### Yellow-billed Cuckoo

The Yellow-billed Cuckoo is listed as a State Endangered Species. Despite playing taped calls of this species during June and July surveys, no individuals of this species were observed in 2002.

#### Southwestern Willow Flycatcher

This subspecies is listed under the Federal Endangered Species Act. Willow Flycatchers were once widespread in wet riparian woodland in southern California but now only a few individuals exist. Following the Revised Protocol (Fish And Wildlife Service, July 2000) five surveys were conducted specifically for Southwestern willow flycatcher. All surveys occurred between 6:00 and 10:00 am. and used taped calls to elicit a response if flycatchers were not first observed.

Five willow flycatchers were observed at locations shown on Figure 2. None of these birds were calling, and did respond to tapes. Despite attempts on subsequent visits to elicit responses none of these birds could be relocated.

Willow flycatchers are fairly common migrants through southern California and most of the migrants are believed to be of the common subpsecies of willow flycatcher, *E. t. brewsteri*, which breeds throughout southern Canada and the northern United States, rather than representatives of the southwestern subspecies. Southwestern willow flycatchers are positively identified primarily by nesting within the geographic area of their range or by measurements of in hand specimens. Lacking any evidence of nesting, none of the observations of willow flycatchers can be positively identified as belonging to the southwestern form of willow flycatcher. The report forms required for this species have been forwarded to the Ventura Office of the U.S. Fish and Wildlife Service.

#### Least Bell's Vireo

Surveys of the wet riparian areas (Areas 1-3,5) followed U.S. Fish and Wildlife Service Guidelines for least Bell's vireo. Eight surveys were conducted between April 10 and July 31 (see Tables 1-3,5 for dates). All surveys occurred between 6:00 and 10:00 am. and taped vireo

calls were played if no vireos were heard or seen. The only vireos observed were on the Santa Clara River at Castaic Junction in an extensive stand of willows. Vireos were heard in at least 5 locations (Figure 3) but were present at only two of the locations throughout the study period. Single observations at other sights on May 18<sup>th</sup> were at the height of migration and may have been of birds passing through the area.

## **Comments on Sensitive Species**

#### **Great Blue Heron**

Great blue herons are listed on the California Natural Diversity Data Base as a species that warrants monitoring. Individuals of this species were observed sparingly along the river after the breeding season. No nesting was observed and herons were absent during the nesting season.

## **Great Egret**

The great egret is listed on the California Natural Diversity Data Base as a species that warrants monitoring. A few individuals were observed along the river during migration and after the breeding season.

#### White-tailed Kite

This species, formerly the black-shouldered kite, is considered a Species of Special Concern by the State of California. Kites were infrequently observed along the river and there was no evidence of nesting this year.

## Sharp-shinned Hawk

This species is considered a Species of Special Concern by the State of California. Sharpshinned hawks regularly winter in southern California and the bird observed on May 7<sup>th</sup> is thought to be a late migrant through the area.

# Cooper's Hawk

Cooper's hawk is considered a Species of Special Concern by the State of California. Cooper's hawks were observed rarely along the main river in 2002 and may have nested near Castaic Junction.

#### California Horned Lark

This is a California Special Concern species. Although none were observed nesting on the study site, horned larks are ground nesters that prefer bare hillsides and abandoned fields. A few were observed feeding on bare fields and construction areas along Castaic Creek

#### Yellow Warbler

The yellow warbler is considered a Species of Special Concern by the State of California. Yellow warblers prefer wet riparian habitat but are also found in large cottonwoods in drier riparian areas. Singing yellow warblers were observed along the continuously wet sections of the survey area during nesting season, but were observed in other dry sections of the river only during migration.

#### Yellow-breasted Chat

The yellow-breasted chat is considered a Species of Special Concern by the State of California. A few chats nested along the wet sections of the Santa Clara River.

# Southern California Rufous-crowned Sparrow

This species is considered a California Special Concern species by the Department of Fish and Game and is also a Federal Special Concern species. Because of drought conditions a few rufous-crowned sparrows were visitors to the riparian zone from the surrounding coastal sage habitat where this species is a breeding resident.

#### Lawrence's Goldfinch

This species is a highest priority species on the Audubon Birds to Watch list for 1996 and is a Bird of Management Concern for the Fish and Wildlife Service. Although the preferred habitat of this species is coastal sage, small flocks of this species visited the riparian zone of the Santa Clara River during early spring and summer.

#### Comments of Brown-headed Cowbirds

Although not a Species of Concern, comments about this species are warranted due to its influence on several endangered species. Cowbirds were regularly observed along all sections of the Santa Clara River, usually flying along the riparian corridor searching for either mates or potential nests to parasitize. Cowbird females often responded to taped calls of least Bell's Vireo. Cowbird traps were operated throughout the study period just north of the Valencia Wastewater outfall (section 1).

#### **Summary**

No yellow-billed cuckoos were observed in 2002. Five willow flycatchers were observed but could not be relocated on subsequent surveys. This failure, and their behavior suggests that these were migrant birds passing through the area and, as such, members of the more common northern subspecies of willow flycatcher, *E. t. brewsteri*, rather than of the southwestern form. Two pairs of Least Bell's vireos were regularly observed and probably nested at Castaic Junction. Additional individuals of this species observed only on May 18<sup>th</sup> were probably migrants.

Three riparian Species of Concern, Cooper's hawk, yellow warbler and yellow-breasted chat nested in small numbers along wet sections of the river. Other Species of Concern include three migrant or wintering species; great blue heron, great egret and sharp-shinned hawk, and three visitors from nearly coastal sage scrub habitat; horned lark, rufous-crowned sparrow, and Lawrence's goldfinch. Cowbirds were numerous along the river and probably contributed to the small numbers of yellow warblers and least Bell's vireos observed.

Table 1. BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: Santa Clara River from Old Road downstream to the mouth of Castaic Creek.

**Dates of Surveys** 

epeciee	OTATUO	40 8		Dates of					
SPECIES	STATUS	18-Apr	7-May	18-May	3-Jun	14-Jun	24-Jun	4- <u>J</u> ul	14-Jul
Great BluetHeron	m,w	0	0	- 0	04	0	1 21 ji y	. 0	0
Great Egret	m	0	279-4	0	0	0	0:	0	- :0
Green Heron	r	0	6	3	6	0	2	7	6
American Bittern	m	0	7	0	0	0	0	0	0
Turkey Vulture	r	0	1	0	10	0	0	0	0
Mallard	Γ	6	0	4	0	0	0	0	0
Sharp-shinned Hawk	W.	. 0	1	0.	0	77 0	- 10	0.	0
Cooper's Hawk#30	TES Y	0	1	24	· : * : 0	- 0	CONTRACTOR OF THE PARTY OF THE	* 4.0	-3
Red-shouldered Hawk	r	2	5	1	0	4	3	3	3
Red-tailed Hawk	r	0	2	4	. 2	1	0	3	0
American Kestrel	r	0	0	1	3	0	0	2	0
California Quail	r	8	28	19	3	0	4	34	16
Killdeer	r	3	9	13	3	8	0	2	0
Spotted Sandpiper	s	0	2	0	2	2	0	1	0
Least Sandpiper	m	1	0	0	0	0	0	0	0
Rock Dove	r	2	0	7	0	8	0	3	0
Mourning Dove	Г	13	47	42	38	35	21	44	14
Great Horned Owl	r	0	1	0	0	0	0	0	0
Vaux's Swift	m	8	12	0	0	0	0	0	0
White-throated Swift	r	0	0	0	1	10	0	0	3
Selasphorus sp.	r	0	0	0	0	1	0	2	3
Black-chinned Hummingbird	s	0	0	2	2	4	1	1	2
Anna's Hummingbird	r	3	3	8	4	13	8	25	13
Costa's Hummingbird	s	0	0	1	1	0	0	1	3
Belted Kingfisher	m,w	1	1	0	0	0	0	0	0
Acorn Woodpecker	r	0	0	0	0	0	2	0	0
Nuttall's Woodpecker	r	1	9	9	11	13	11	10	16
Downy Woodpecker	r	0	5	7	6	10	4	7	9
Hairy Woodpecker	r	1	. 0	3	3	2	1	4	0
Northern Flicker	r	0	0	0	1	0	0	0	0
Western Wood-Pewee	m	0	0	1	3	0	0	0	0
Willow Flycatcher	75 m	0	* <b>*</b> 10	2	**:0	W. 0	0	0	0
Black Phoebe	r	3	0	0	4	12	4	4	2
Say's Phoebe	r	0	0	0	1	0	0	0	0
Ash-throated Flycatcher	s	6	13	11	10	13	13	11	8
Cassin's Kingbird	s	0	0	0	0	0	0	5	1
Western Kingbird	S	0	0	1	1	9	2	4	3
Bell's Vireo	- S	2	1.	. 6	0.	1.2	3.1	-1	2
Warbling Vireo	m	0	3	1	0	0	0	0	0
Western Scrub Jay	г	2	11	11	25	17	8	11	5
American Crow	r	2	2	2	1	1	Ō	6	2
Common Raven	r	4	19	7	13	25	19	14	29
COMMON RATOR	•	•		•	. •		. •	• • •	

Table 1 (cont.). BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: Santa Clara River from the Old Road downstream to the mouth of Castaic Creek.

Status: m, migrant; r, resident; s, summer only; w, winter

r

House Sparrow

Table 2. BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: Santa Clara River from McBean Highway to The Old Road.

Dates of Su	rvevs
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SPECIES	STATUS	18-Арг	7-May	18-May	3-Jun	14-Jun	24-Jun	4-Jul	14-Jul
Great Egret ( 1.0%)	: Friend	0	- T	0	. 0).	- :0	0.6	0	:0
Snowy Egret	m,w	0	1	0	0	0	0	0	0
Green Heron	r	0	0	2	1	2	2	3	4
Canada Goose	r	3	0	0	0	0	0	0	0
Mallard	r	1	1	5	. 0	0	0	2	0
Turkey Vulture	s	0	0	1	0	0	0	0	0
Red-shouldered Hawk	r	1	0	0	2	2	0	1	0
Red-tailed Hawk	r	0	0	1	1	1	0	0	0
California Quail	r	4	8	2	12	3	4	0	2
Killdeer	r	8	2	0	2	0	0	0	0
Mourning Dove	r	6	6	6	13	. 4	6	7	10
Vaux's Swift	m	3	0	0	0	0	0	0	0
White-throated Swift	r	0	0	10	0	0	0	0	0 ~
Selaphorus sp.	s	0	0	0	0	0	0	1	0
Anna's Hummingbird	r	2	1	1	0	1	0	2	0
Nuttall's Woodpecker	r	4	3	2	1	4	4	8	3
Downy Woodpecker	r	3	0	0	0	0	2	0	0
Hairy Woodpecker	r	1	1	0	0	0	0	0	0
Northern Flicker	r	0	0	1	0	0	0	1	0
Western Wood-pewee	m	0	4	3	0	0	0	0	0
Black Phoebe	r	0	3	0	3	3	2	0	0
Ash-throated Flycatcher	5	9	2	2	3	5	3	8	5
Western Kingbird	s	0	0	0	1	0	0	1	3
Plumbeous Vireo	m	0	1	0	0	0	0	0	0
Warbling Vireo	m	0	4	1	0	0	0	0	0
Western Scrub Jay	r	2	7	3	5	6	2	4	2
American Crow	r	0	0	2	3	4	2	6	0
Common Raven	r	4	2	0	4	0	2	8	0
N. Rough-winged Swallow	s	0	4	37	7	14	2	5	2
Cliff Swallow	s	5	50	45	40	24	30	50	15
Barn Swallow	s	0	0	1	0	2	8	4	3
Oak Titmouse	r	0	0	0	0	2	3	0	6
Bushtit	r	7	4	2	0	0	3	0	0
Bewick's Wren	r	8	10	7	3	5	0	3	11
House Wren	r	6	7	5	0	0	0	0	0
Western Bluebird	r	3	4	0	0	4	0	0	0
Swainson's Thrush	m	0	1	2	0	0	0	0	0
Wrentit	Г	0	0	1	0	0	0	0	0
Northern Mockingbird	г	0	0	1	1	0	0	0	0
California Thrasher	r	0	3	2	0	1	2	1	3
European Starling	r	4	4	4	3	14	8	10	0
Cedar Waxwing	w,m	10	23	0	0	0	0	0	0
Phainopepla	r	0	3	2	5	16	35	34	62

Table 2 (cont.). BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: Santa Clara River from McBean Highway to The Old Road.

	Dates of Surveys								
SPECIES	STATUS	18-Apr	7-May	18-May	3-Jun	14-Jun	24-Jun	4-Jul	14-Jul
	_								-
Orange-crowned Warbler	w,m	7	4	0	0	0	0	0	0
Yellow Warbler	• v. s.m	0	2	4	0	Û	0	14	. 0
Black-throated Gray Warbler	m	1	0	0	0	0	0	0	0
Townsend's Warbler	m	0	1	0	0	0	0	0	0
Yellow-rumped Warbler	w,m	.1	0	0	0	0	0	0	0
Common Yellowthroat	r	5	12	34	21	18	30	38	8
McGillivray's Warbler	m	1	1	0	0	0	0	0	0
Wilson's Warbler	m	0	6	10	0	0	0	0	0
Yellow-breasted Chare	* <b>15</b> /	0	2	0	1	19	-3	* 2	. 0
Western Tanager	S	0	4	0	0	0	0	0	0
Spotted Towhee	r	2	4	5	12	7	3	7	0
California Towhee	r	1	1	0	2	0	2	10	8
Song Sparrow	r	30	50	52	52	40	36	36	52
Black-headed Grosbeak	S	1	4	4	5	9	6	3	2
Blue Grosbeak	S	0	1	0	0	0	3	7	12
Red-winged Blackbird	s	5	45	50	10	13	0	15	0
Brown-headed Cowbird	S	8	13	4	· 3	. 3	10	9	6
Hooded Oriole	s	0	0	1	0	0	0	0	0
Bullock's Oriole	S	0	1	1	0	0	0	. 1	2
House Finch	Γ	4	2	3	6	11	12	26	50
Lesser Goldfinch	r	29	3	3	2	3	2	0	0
American Goldfinch	w,m,r	47	4	0	0	0	1	0	0

Table 3. BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: Santa Clara River from Boquet Canyon Bridge to McBean Parkway Bridge

3				Dates of	Surveys	;			
SPECIES	STATU S	18-Apr	7-May	18-May	3-Jun	14-Jun	24-Jun	4-Jul	14-Jul
Green Heron	Г	0	1	0	0	0	0	0	0
Cattle Egret	m	0	0	0	0	6	0	0	0
Mallard	Γ	7	3	2	2	2	0	0	0
Red-shouldered	r	2	0	0	1	0	0	0	0
Hawk					-				
Red-tailed Hawk	r	0	0	0	0	0	3	0	0
California Quail	r	30	8	2	1	22	11	18	18
Killdeer	r	12	2	2	2	0	2	0	0
Spotted Sandpiper	S	0	0	1	0	0	0	0	0
Least Sandpiper	m	12	0	0	0	0	0	0	0
Mourning Dove	r	15	17	7	8	6	В	12	8
Greater Roadrunner	r	0	0	1	0	0	0	0	0
Vaux's Swift	m	0	4	0	0	0	0	0	0
Black-chinned Hummingbird	S	0	1	0	0	0	0	2	0
Anna's Hummingbird	r	2	1	3	2	0	0	2	3
Costa's Hummingbird	S	0	0	0	0	0	0	0	1
Nuttall's Woodpecker	r	2	0	2	0	1	1	1	0
Northern Flicker	r	1	0	0	0	0	0	0	2
Western Wood-Pewee	m	0	0	1	0	0	0	0	0
Willow Flycatcher	∦9 m	0.	Jo.	31)		0	. 0	0.	- 0
Black Phoebe	r	1	2	4	0	' 1	2	1	5
Ash-throated Flycatcher	S	5	3	2	2	1	0	5	5
Warbling Vireo	m	0	0	2	0	0	0	0	0
Western Scrub Jay	r	2	1	5	3	3	3	4	2
American Crow	r	0	0	1	0	1	2	3	2
Common Raven	r	55	20	14	14	4	6	6	8
N. Rough-winged Swallow	S	0	18	7	6	4	4	12	3
Cliff Swallow	S	6	65	14	27	6	18	36	20
Barn Swallow	S	0	2	1	2	0	6	0	0
Oak Titmouse	r	0	0	0	0	0	0	1	2
Bushtit	r -	4	2	4	0	5	0	0	0
Bewick's Wren	r -	6	2	7	4	5	0	4	5
House Wren	Г -	1	_	0	0	0	0	0	0
Western Bluebird	r -	2	0 0	0	0	0	0	0	0
Northern Mockingbird	r	0	0	0 1	2	0 1	0 2	0 0	1 0
California Thrasher		,	4	3		2	4		0
European Starling	Г -	2	0	0	0	1	5	9	0
Phainopepla	111 70	0	0	0	1 0		0	0	0
Orange-crowned Warbler	w,m	4 4	41	10	- U	0	0	0	2 0
Yellow Warbler	s.m. t		0	0	0	0	STATE OF STREET, SHEET,	TOTAL CONTRACTOR STATE	DANA MENTAL PROPERTY OF THE PARTY OF THE PAR
Yellow-rumped Warbler Common	w,m · r	2 31	12	8	14	13	0 14	0 6	0 2
Yellowthroat	· I	31	14	O	14	13	14	U	2
McGillivray's Warbler	m	0	0	1	0	0	0	0	0
Wilson's Warbler	m	11	ő	20	0	0	ő	Ő	ő
11,100110 11010101	•••	• •	•			•	•	~	-

Table 3 (cont.). BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: Santa Clara River from Boquet Canyon Bridge to McBean Parkway Bridge

**Dates of Surveys SPECIES STATU** 18-Apr 7-May 18-May 3-Jun 14-Jun 24-Jun 4-Jul 14-Jul S Western Tanager m Spotted Towhee r California Towhee Lincoln's Sparrow w,m Savannah Sparrow w,m Song Sparrow r White-crowned Sparrow w,m Black-headed Grosbeak s Blue Grosbeak s Great-tailed Grackle r Red-winged Blackbird Brewer's Blackbird r Brown-headed Cowbird s Hooded Oriole S Bullock's Oriole s House Finch Lesser Goldfinch r American Goldfinch w,m,r

Table 4. BIRD SURVEYS OF THE SANTA CLARA RIVER BASIN, 2002: Santa Clara River from Boquet Canyon Bridge upstream for two miles.

				Dates of	Surveys		
SPECIES	STATUS	17-May		22-Jun	2-Jul	12-Jul	
Green Heron	Γ.	0	0	0	0	1	
Red-shouldered Hawk	r	1	3	0	1	0	
Red-tailed Hawk	r `	1	2	2	3	2	
American Kestrel	r	1	3	0	0	0	
California Quail	r	0	57	0	0	3	
Killdeer	r	5	6	1	0	0	
Rock Dove	r	0	2	0	0	0	
Mourning Dove	Γ	11	74	12	12	10	
Black-chinned Hummingbird	s	0	0	0	0	1	
Anna's Hummingbird	s	2	6	1	2	2	
Nuttail's Woodpecker	r	1	2	3	3	4	
Northern Flicker	r	0	0	0	0	3	
Western Wood-Pewee	m	1	0	0	0	0	
Black Phoebe	r	1	1	0	0	0	
Say's Phoebe	r	0	1	0	0	0	
Ash-throated Flycatcher	s	1	2	0	1	Ō	
Western Kingbird	S	1	Ō	Ō	2	3	
Western Scrub Jay	г	9	18	5	13	11	
American Crow	r	Ŏ	2	Õ	0	Ö	
Common Raven	r	1	22	8	4	6	
N. Rough-winged Swallow	s S	Ö	6	0	1	1	
Cliff Swallow	S	0	8	0	0	0	
Barn Swallow	s	Ö	1	0	0	0	
Oak Titmouse	r	Ö	5	0	1	0	
Bushtit	,	0	10	5	0	15	•
Bewick's Wren	r	9	12	3	3	4	
House Wren	r		0	0	0		
Western Bluebird	•	1		0		0	
	r -	2	0		0	0	
Wrentit	r -	3	8	4	1	1	
Northern Mockingbird	r	4	10	19	9	4	
California Thrasher	r	2	10	2	3	1	
European Starling	r	0	5	12	3	1	
Phainopepla	r	2	47	8	15	6	4
Yellow Warbler	9,2	1.	14.10	-0,-	L 04		
Wilson's Warbler	m	5	0	0	0	0	
Spotted Towhee	r	4	20	9	1	3	
California Towhee	Γ	4	11	10	4	12	
Rufous-crowned Spaniow.	. Τ. <sup>196</sup>	. 0	22	4 <sub>2</sub> 0;	. 0	0	Sec. 1
Song Sparrow	r	0	6	0	0	0	
Black-headed Grosbeak	s	1	0	1	0	0	
Red-winged Blackbird	s	0	0	2	0	0	
Brown-headed Cowbird	S	4	0	0	0	0	
Bullock's Oriole	S	5	10	5	2	1	
House Finch	Γ	18	78	21	21	43	
Lesser Goldfinch	r	2	4	0	0	3	

Table 4 (cont.). BIRD SURVEYS OF THE SANTA CLARA RIVER BASIN, 2002: Santa Clara River from Boquet Canyon Bridge upstream for two miles.

		Dates of Surveys								
SPECIES	STATUS	17-May	8-Jun	22-Jun	2-Jul	12-Jul				
House Sparrow	r	0	0	0	6	0				

Status: m, migrant; r, resident; s, summer only

Table 5. BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: Castaic Creek from I-5 to the Santa Clara River

<b>Dates</b>	of	Sur	ve	/S
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				Dates of	Surveys	;			
SPECIES	STATU SS_	25-Apr	9-May	19-May	4-Jun	14-Jun	25-Jun	5-Jul	16-Jul
Great BlueiHeron	m,w-	O	0	<i>3</i> ‰. 2	0	i, 0	ş 0	0	1.0
Green Heron	r	0	0	0	0	1	0	0	0
Red-shouldered Hawk	r	0	0	0	0	0	0	1	0
Red-tailed Hawk	r	1	2	1	5	2	2	2	0
American Kestrel	Γ	1	1	1	2	0	0	0	0
California Quail	r	31	26	44	10	87	9	55	92
Killdeer	r	2	2	4	4	5	3	1	1
Common Snipe	m	0	0	1	0	0	0	0	0
Rock Dove	r	4	0	41	8	6	0	3	0
Mourning Dove	r	38	30	27	35	21	- 17	24	74
Barn Owl	r	1	0	0	0	0	0	0	0
Vaux's Swift	m	3	0	0	0	0	0	0	0
White-throated Swift	r	0	1	0	0	0	0	0	0
Black-chinned Hummingbird	S	3	0	0	4	2		3	6
Anna's Hummingbird	r	7	1	12	13	10	17	10	7
Costa's Hummingbird	S	1	0	0	1	0	0	2	4
Nuttall's Woodpecker	r	6	10	3	14	5	5	4	1
Downy Woodpecker	r	2	2	1	10	2	2	0	2
Hairy Woodpecker	r	0	0	0	0	0	0	0	2
Northern Flicker	r	0	2	0	1	0	0	0	0
Western Wood-pewee	m	0	0	1	0	0	0	0	0
Willow Flycatcher # **	m 📴	0	0.		, TO	0	0	0	- 0
Pacific slope Flycatcher	S	0	0	0	0	2	0	0	0
Black Phoebe	r	0	0	1	0	0	2	2	0
Ash-throated Flycatcher	S	10	10	10	9	18	7	4	2
Cassin's Kingbird	S	0	0	0	0	0	0	6	0
Western Kingbird	S	6	2	15	27	13	23	10	0
Warbling Vireo	m	2	3	0	1	0	0	0	0
Western Scrub Jay	r	11	28	20	15	14	14	20	8
American Crow	r	2	17	4	16	0	0	3	0
Common Raven	r	7	5	15	6	5	23	57	34
Horned Lark *	1 J.	0.		112	4	Name of the State	· 0	•0	0
N. Rough-winged Swallow	S	80	40	62	18	40	2	21	8
Cliff Swallow	s	220	525	320	102	296	424	89	41
Barn Swallow	8	6	1	0	1	2	2	2	2
Oak Titmouse	r	2	10	2	10	5	10	3	7
Bushtit	r	11	11	21	8	26	39	20	23
Bewick's Wren	Γ	30	35	22	26	8	10	12	13
House Wren	r	8	9	2	13	2	0	0	0
Western Bluebird	r	4	2	2	2	1	4	0	2
Swainson's Thrush	S	0	1	0	0	0	0	0	0
Wrentit	r	0	0	2	2	3	2	7	6

Table 5 (cont.). BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: Castaic Creek from I-5 to the Santa Clara River

				Dates of	Surveys	;			
SPECIES	STATU S	25-Apr	9-May 	19-May	4-Jun	14-Jun	25-Jun	5-Jul	16-Jul
Northern Mockingbird	r	1	3	4	0	0	1	1	0
California Thrasher	r	2	2	. 0	5	10	4	2	2
European Starling	r	13	10	22	18	60	15	38	2
Phainopepla	r	0	0	2	4	0	1	0	1
Orange-crowned Warbler	w,m	3	2	0	0	0	0	0	0
Nashville Warbler	m	1	0	0	0	0	0	0	0
Yellow Warblers	. §	4	5	.,14	2	- 8	3.1	977-1	<b>3</b> > 0
Black-throated Gray Warbler	m	1	0	0	0	0	0	0	0
Townsend's Warbler	m	0	1	0	0	0	0	0	0
Common Yellowthroat	r	26	3	0	8	12	13	6	13
Wilson's Warbler	m	6	10	12	0	0	0	0	0
Yellow-breasted Chat.	S. S.	· 7.0.	-0	0	- 0	# 0	1.	0	0
Western Tanager	m	0	6	0	0	0	0	0	0
Spotted Towhee	r	25	34	14	32	9	3	2	5
California Towhee	r	31	25	27	47	23	16	20	21
Rufous-crowned Sparrow	1.0	(i) 0:	0.	240 O	O_	\$ \$12	1001	0	- 1.0
Lark Sparrow	ſ	0	0	0	4	2	1	0	5
Song Sparrow	r	26	21	22	37	43	38	22	8
White-crowned Sparrow	w,m	1	0	0	0	0	0	0	0
Black-headed Grosbeak	s	12	13	12	13	12	7	5	0
Blue Grosbeak	s	1	0	0	2	3	7	8	23
Lazuli Bunting	s	4	0	0	0	4	1	0	15
Red-winged Blackbird	s	57	24	50	14	59	5	35	2
Brewer's Blackbird	r	4	1	0	4	0	0	0	0
Brown-headed Cowbird	S	17	17	16	18	19	4	26	8
Hooded Oriole	s	0	2	3	0	11	9	1	1
Bullock's Oriole	S	6	3	7	8	12	14	3	0
House Finch	r	34	24	20	42	39	75	39	146
Lesser Goldfinch	r	7	9	0	23	15	20	18	5
American Goldfinch	w,m,r	0	0	0	1	0	0	0	2
House Sparrow	r	0	10	16	3	3	10	2	2

Table 6. BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: San Franciscquito Creek from Santa Clara River to Copper Hill Drive.

	Dates of Surveys										
SPECIES	STATUS	15-May		23-Jun	3√Júl	13-Jul					
_											
Red-shouldered Hawk	r	1	0	0	1	0					
Red-tailed Hawk	r	1	2	3	4	4					
California Quail	r	28	12	5	3	4					
Kilideer	r	2	6	5	1	0					
Mourning Dove	r	45	20	30	63	32					
Barn Owl	r	0	0	1	0	1					
Selasphorus sp.	m	0	0	0	0	2					
Black-chinned Hummingbird	S	0	0	2	1	3					
Anna's Hummingbird	r	4	3	6	4	16					
Costa's Hummingbird	S	0	0	1	0	0					
Nuttall's Woodpecker	r	6	3	7	2	1					
Northern Flicker	r	0	0	0	0	1					
Western Wood-Pewee	m	3	0	0	0	0					
Willow Flycatcher	i m	0	1	0	.0	0					
Black Phoebe	Г	6	3	2	0	1					
Ash-throated Flycatcher	S	4	1	6	9	6					
Western Kingbird	S	2	0	3	0	0					
Warbling Vireo	m	3	0	0	0	0					
Western Scrub Jay	r	15	16	3	8	10					
American Crow	r	2	2	0	5	18					
Common Raven	Γ	13	2	5	1	5					
N. Rough-winged Swallow	S	8	0	3	0	11					
Cliff Swallow	S	10	56	36	0	26					
Barn Swallow	S	0	0	0	0	4					
Oak Titmouse	r	3	2	0	2	0					
Bushtit	r	10	12	0	0	0					
Bewick's Wren	r	19	7	2	4	3					
Western Bluebird	r	3	4	1	0	0					
Swainson's Thrush	m	1	0	0	0	0					
Wrentit	r	0	0	0	1	0					
Northern Mockingbird	r -	5	0	7	0	4					
California Thrasher	r	1	4	1	0	1					
European Starling	r	2	2	0	5	0					
Phainopepla	r	6	25	43	13	18					
Common Yellowthroat	r	1	2	2	1	1					
Wilson's Warbler	m	18	0	0	0	0					
Yellow-breasted Chat	S	0	1	0	0	0					
Western Tanager	m	4	0	0	0	0					
Spotted Towhee	r	14	12	7	4	1					
California Towhee	r	20	22	16	14	14					
Lark Sparrow	r	0	2	0	0	0					
Song Sparrow	r	5	10	2	4	2					

Table 6 (cont.). BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: San Francisquito Creek from Santa Clara River to Copper Hill Drive.

	Dates of Surveys								
SPECIES	STATUS	15-May	_6-Jun	_23-Jun	3-Jul	13-Jul			
Black-headed Grosbeak	s	2	1	1	0	0			
Blue Grosbeak	s	0	3	1	2	3			
Red-winged Blackbird	r	28	21	14	2	4			
Brewer's Blackbird	r	3	0	0	0	0			
Brown-headed Cowbird	s	1	2	0	4	1			
Bullock's Oriole	s	7	6	5	1	2			
House Finch	r	42	48	118	67	137			
Lesser Goldfinch	r	9	7	6	9	2			
Lawrence's Goldfinch		nj <sup>⊕</sup> . E	7.50 1874	1864	Transfer of				

Table 7. BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: South Fork from Rte. 126 to the McBean Crossing.

Dates of Surveys
SPECIES STATUS 15-May 6-Jun 23-Jun 3-Jul 13-Jul

	01/11/00	- io-iiiay	<del>- 0 0 0 1 1</del>		3-0ui	13-541
Cooper's Hawk	- T	. 0	0	0.	0	1
Red-shouldered	r	1	Ō	0	1	0
Hawk				_	·	_
Red-tailed Hawk	r	1	2	0	2	1
American Kestrel	r	1	0	0	0	0
California Quail	r	6	2	2	0	0
Killdeer	r	0	0	1	1	0
Mourning Dove	r	12	23	34	16	33
Black-chinned Hummingbird	S	0	0	4	0	0
Anna's Hummingbird	r	1	4	4	1	9
Nuttali's Woodpecker	r	0	0	2	0	3
Black Phoebe	r	0	7	3	1	1
Ash-throated Flycatcher	s	3	0	2	3	1
Western Kingbird	s	0	0	2	2	0
Western Scrub Jay	r	3	5	5	3	1
American Crow	r	2	0	0	5	0
Common Raven	г	18	7	14	20	8
N. Rough-winged Swallow	s	4	4	14	3	2
Cliff Swallow	s	0	Ò	0	3	3
Oak Titmouse	r	0	2	4	Ō	Ö
Bushtit	r	0	0	4	Ŏ	16
Bewick's Wren	r	6	4	7	5	5
House Wren	r	2	0	1	Ō	0
Swainson's Thrush	m,s	5	Ö	Ò	Ö	Ō
Northern Mockingbird	r	2	2	1	1	3
California Thrasher	r	0	1	0	1	0
European Starling	r	3	4	6	7	1
Phainopepla	r	0	Ó	0	2	3
Yellow Walther 💥 🐪 🕟	s.m	1 1	. O	0	. 0	. 0
Common	r	0	0	4	0	0
Yellowthroat						
Wilson's Warbler	m	1	0	0	0	0
Spotted Towhee	r	7	4	0	2	0
California Towhee	r	11	4	9	7	0
Song Sparrow	r	5	0	0	0	0
Red-winged Blackbird	s	0	0	0	4	0
Brewer's Blackbird	r	0	0	1	3	0
Brown-headed Cowbird	s	0	0	0	3	0
Hooded Oriole	s	0	0	3	0	0
Bullock's Oriole	s	1	0	0	0	2
House Finch	r	34	21	42	50	15
Lesser Goldfinch	r	6	10	4	0	3
House Sparrow	r	6	1	1	Ō	Ō
•						

Table 8. BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: South Fork of the Santa Clara River from Route 126 upstream to Coyote Creek.

epoca opocas and opoc	Dates of Surveys						
SPECIES	STATU	15-May		23-Jun		13-Jul	
Red-tailed Hawk	<u>\$</u> _	0	1		1		
Red-shouldered Hawk	ŗ		0	0	0	0	
American Kestrel	7 -	1 0		0	0	10	
California Quail	r r	20	1 <b>12</b>	9	0	0	
Killdeer		4	0			0	
Rock Dove	r r	0	0	1 2	1 0	2 3	
Mourning Dove	r	24	50	28	30	30	
White-throated Swift	r	10	6	1	1	6	
Black-chinned Hummingbird	S	10	1	3	1	1	
Anna's Hummingbird	r	11	12	9	8	14	
Costa's Hummingbird	S	0	0	1	0	0	
Nuttall's Woodpecker	r	2	0	5	2	1	
Downy Woodpecker	r	0	0	0	1	Ó	
Western Wood-Pewee	S	1	0	0	0	0	
Pacific slope Flycatcher	m,s	Ó	1	0	0	0	
Black Phoebe	r	4	3	1	2	1	
Say's Phoebe	r	0	2	Ó	0	Ó	
Ash-throated Flycatcher	S	1	2	0	Ő	0	
Cassin's Kingbird	S	Ö	0	0	1	0	
Western Kingbird	S	0	0	6	1	0	
Warbling Vireo	m	2	0	0	Ö	0	
Western Scrub Jay	Γ	7	9	5	12	10	
American Crow	r	ó	2	1	1	0	
Common Raven	r	3	10	12	95	136	
N. Rough-winged Swallow	s S	8	38	10	2	6	
Cliff Swallow	s	Ö	2	6	4	8	
Oak Titmouse	r	3	1	1	0	2	
Bushtit	r	7	4	6	4	17	
Bewick's Wren	r	11	8	5	3	4	
American Robin	Г	0	0	0	1	0	
Swainson's Thrush	m	2	0	0	0	0	
Wrentit	r	2	3	1	2	1	
Northern Mockingbird	r	3	6	3	3	6	
California Thrasher	r	1	2	3	0	4	
European Starling	r	11	31	15	2	3	
Phainopepla	r	1	1	0	0	0	
Yellow Warbler &	s šim	34	0	7 0	1 T	0.4	
Common Yellowthroat	r	. 3	5	3	3	0	
Wilson's Warbler	m	16	0	0	0	0	
Western Tanager	m	2	0	0	0	1	
Spotted Towhee	r	9	4	. 1	2	2	
California Towhee	r	16	9	18	8	7	
Song Sparrow	r	10	11	2	3	2	

Table 8(cont.). BIRDS OF THE SANTA CLARA RIVER BASIN, 2002: South Fork of the Santa Clara River from Route 126 upstream to Coyote Creek.

		Dates of Surveys					
SPECIES	STATUS	15-May	6-Jun 2	3-Jun_	3-Jul	13-Jul	
Black-headed Grosbeak	s	2	2	1	0	0	
Brewer's Blackbird	r	0	0	1	0	0	
Brown-headed Cowbird	S	2	0	2	3	0	
Hooded Oriole	S	0	0	0	0	1	
Bullock's Oriole	s	2	2	5	0	4	
House Finch	r	46	36	35	25	43	
Lesser Goldfinch	r	16	14	30	7	10	
House Sparrow	r	0	1	3	8	5	

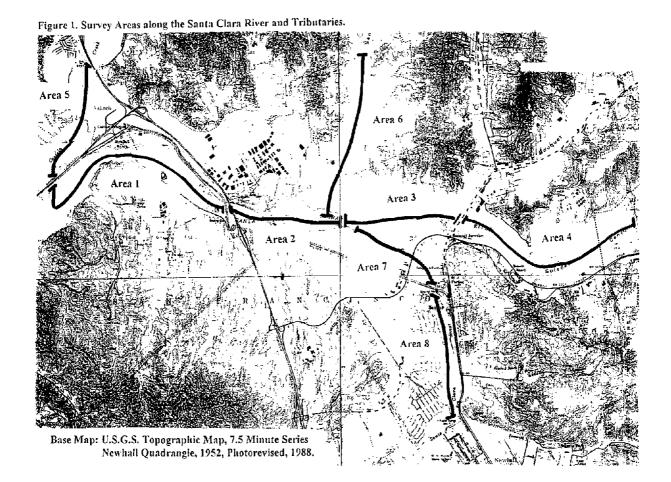
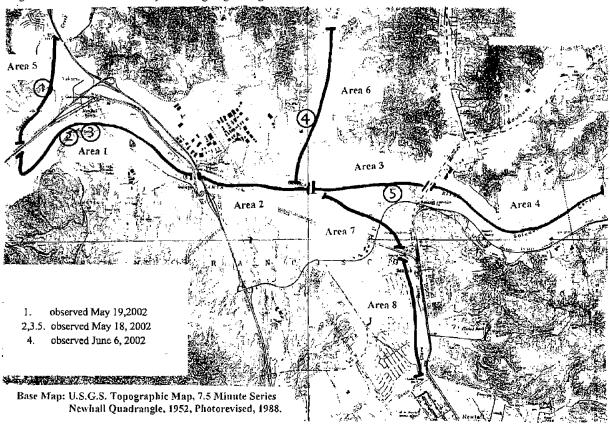


Figure 2. Southwestern Willow Flycatcher Sightings during 2002.



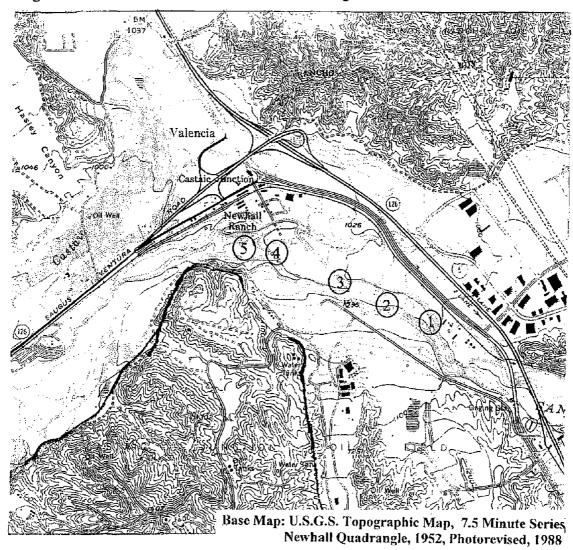


Figure 3. Observations of Least Bell's Vireo during 2002.

Dates of vireo observations.

1. - 4/18, 5/7, 5/18, 6/14, 7/14

2,4,5 - 5/18

3 - 4/18, 5/18, 6/14, 7/4