
**HAUN CREEK – SOUTHWESTERN WILLOW FLYCATCHER AND
LEAST BELL’S VIREO FOCUSED PRESENCE/ABSENCE SURVEYS**

3 August 2010

Mr. R.C. Brody
Impact Sciences, Inc.
803 Camarillo Springs Road, Suite A
Camarillo, CA 93012

Subject: Results of Focused Presence/Absence Surveys for the Southwestern Willow Flycatcher and Least Bell's Vireo on the East Area 1 Specific Plan project, Haun Creek, Santa Paula, Ventura County

Dear Mr. Brody:

This letter report presents the results of focused surveys to determine the presence or absence of the least Bell's vireo (*Vireo bellii pusillus*) (LBV) and Southwestern willow flycatcher (*Empidonax traillii extimus*) (SWF) along the East Area 1 Specific Plan project area along Haun Creek, Santa Paula, Ventura County, California. Surveys were conducted according to guidelines (Sogge et al 1997, Sogge et al. 2010, USFWS, 2000, USFWS 2001) established by the U.S. Fish and Wildlife Service (USFWS) by biologist Mike San Miguel and Thomas Ryan, with the necessary federal Endangered Species Act (ESA) 10(a) survey permits (USFWS permit #TE-831910-3 and TE-097516-1). No least Bell's vireos or southwestern willow flycatchers were observed at the project site during the protocol surveys performed from April 16 to August 2, 2010.

PROJECT LOCATION AND SITE DESCRIPTION

The project site is located on the East Area 1 Specific Plan project site along Haun Creek in Santa Paula, Ventura County (Figure 1) where it levels out at the base of Santa Paula Ridge and Santa Paula Peak. Haun Creek is located along the eastern boundary of the Specific Plan area (Figures 1 and 2). It is located in the northwest corner of the Santa Paula USGS Quad at (34°21'50.30"N, 119° 2'19.13"W). The study area is on the eastern boundary of the developed area of Santa Paula.

The upland area west of the Creek is dominated by citrus orchards with a small area dedicated to the cultivation of cut flowers. Large, mature blue gum (*Eucalyptus globulus*) trees used as windbreaks are also present along the west bank of Haun Creek and with a few coast live oaks (*Quercus agrifolia*) and Mexican elderberry (*Sambucus mexicana*) (Figure 2). A large hot house used for the cultivation of palm trees is beyond the east side of the Creek. Avocado orchards are to the north of the project area and about a half mile to the south of the project site State Highway 126 crosses Haun Creek near its confluence with the Santa Clara River a few hundred-meters farther to the south. Intermittent flow from irrigation runoff from the orchards provides adequate water to sustain a young and rapidly maturing riparian corridor.

The riparian vegetation is dominated by arroyo willows (*Salix lasiolepis*) but mulefat (*Baccharis salicifolia*), narrow-leaved willow (*S. exigua*), and black willow (*S. gooddingii*) are also present and provide an increasing understory. Many young and mid-sized black cottonwood (*Populus trichocarpa*) and California sycamores (*Platanus racemosa*) are scattered throughout the streambed. Mr. San Miguel noted that since the 2007 surveys (San Miguel 2007) the riparian habitat had expanded and matured. The increasing understory and plentiful presence of water provides suitable conditions for several bird species including least Bell's vireo and southwest willow flycatcher.

BACKGROUND

The SWF and LBV were formerly more common and widespread, but are now rare and local summer residents of southern California's lowland riparian woodlands (Grinnell and Miller 1944, and Garrett and Dunn 1981). The substantial population declines of these two avian species over the latter half of the Twentieth Century is attributable to the loss and degradation of riparian habitats and, perhaps more importantly, brood parasitism by the brown-headed cowbird (*Molothrus ater*). As a result, the LBV was listed by the California Department of Fish and Game (CDFG) as Endangered on October 2, 1980, and by the USFWS as Endangered on May 2, 1986. All three subspecies of willow flycatcher breeding in

California (*E. t. brewsteri*, *E. t. adastus* and *E. t. extimus*, SWF) were listed by the CDFG as Endangered on January 3, 1991. The USFWS listed the SWF as Endangered on February 7, 1995 (USFWS 1995).

Least Bell's Vireo

The Bell's vireo is a neotropical migrant that breeds in north-central, south-central, and southwestern North America from northern Mexico to southern California, Nevada, and Utah, and east to Louisiana, and north to North Dakota, Wisconsin, and Indiana in the central U.S. (A.O.U. 1998). The winter range of this vireo, although not well known, is believed to be the west coast of Central America from southern Sonora south to northwest Nicaragua, including the cape region of Baja California (Kus et al. 2010). Of the four Bell's vireo subspecies, only two breed in California; the LBV and the Arizona Bell's vireo (*V. b. arizonae*), which occurs in the Colorado River Valley (Garrett and Dunn 1981 and Rosenberg et al. 1991). The LBV formerly was considered a common breeder in riparian habitats throughout the Central Valley and other low elevation riverine systems in California and Baja California (Franzreb 1989). Presently, the LBV has been eliminated from much of its historical range, including the Central Valley (Franzreb 1989 and Kus et al. 2010).

Breeding habitat of LBV is primarily willow-dominated riparian habitats that support a dense understory of willows (*Salix* spp.). Other shrubs, such as mulefat (*Baccharis salicifolia*) and California rose (*Rosa californica*), are often a component of the understory (Goldwasser 1981). The LBV is often found in areas that include trees such as willow, sycamore (*Platanus racemosa*), or cottonwood (*Populus* spp.), particularly where the canopy is within or immediately adjacent to an understory layer of vegetation (Salata 1983). Generally, the LBV nests in early successional stages of riparian habitats, with vireo nest sites frequently located in willows that are between four and ten years of age (RECON 1988 and Franzreb 1989). The most critical factor in habitat structure is the presence of a dense understory shrub layer from 0.6 to 3 meters above ground (Goldwasser 1981, Salata 1983 and Franzreb 1989).

Southwestern Willow Flycatcher

The willow flycatcher is a neotropical migrant that breeds in the west from northern Baja California to central British Columbia and generally east through the northern half of the United States to the Atlantic coast (A.O.U. 1998). There are four recognized subspecies of willow flycatcher, three of which breed in California (Unitt 1987 and USFWS 1993). The breeding range of SWF includes southern California, Arizona, New Mexico, western Texas, and extreme southern parts of Nevada and Utah (USFWS 1993). In California, the SWF breeds along the coast south of the San Fernando Valley and north in the interior to about Independence, Inyo County, including the Central Valley (Unitt 1987). Currently, the largest breeding colonies of SWF are located at the South Fork of the Kern River, Kern County, and on the Santa Margarita River in Camp Pendleton, San Diego County (USFWS 1993). The total California population of SWF is estimated to be about 70 pairs (USFWS 1993).

The SWF breeds in willow dominated riparian habitats that are similar to LBV nesting habitats. The SWF differs from LBV in that it shows a stronger dependency on willow thickets for all its requirements (Grinnell and Miller 1944). In addition, the SWF appears to have a preference for sites with surface water in the vicinity, such as along streams, the margins of a pond or lake, and at wet mountain meadows (Grinnell and Miller 1944, Flett and Sanders 1987, Harris et al. 1987, Sogge et al. 2010), and in Arizona the SWF invariably nests near surface water (Phillips et al. 1964). Recently, the SWF has adapted to introduced vegetation present in some riparian vegetation types, such as tamarisk (*Tamarix* sp.) and Russian olive (*Elaeagnus angustifolia*) (USFWS 1993).

The willow flycatcher is a common migrant in the interior of California and a rare to uncommon migrant along the coastal slope, with most birds during the spring season moving through southern California between May 15 and June 20 (Garrett and Dunn 1981 and Unitt 1987). The spring migration of SWF is earlier than that of the northern subspecies (Unitt 2004 and USFWS 1993). As a result, surveys for nesting SWF are complicated by the presence of more abundant subspecies migrating through the range of SWF during its breeding season.

SURVEY METHODOLOGY

Ten surveys for the SWF and LBV were conducted on April 16, 26, May 6, 16, 26, June 5, 15, 26, July 7, and August 2, 2010. USFWS protocol requires that at least eight surveys be conducted from April 10 to July 31 with a ten-day interval between each site visit (USFWS 2001). Surveys for SWF and LBV were performed simultaneously because of their similar habitat requirements. Least Bell's vireo and southwest willow flycatchers are known to breed along the Santa Clara River, not far from the project site.

The SWF survey protocol requires five surveys (Sogge et al. 1997, USFWS 2000). The first survey should be conducted between May 15 and May 31, with a subsequent survey conducted between June 1 and June 21 and three surveys, with a minimum of five days between each site visit, between June 22 and July 17. During the 2010 season, it was further amended so that two surveys were required between June 1 and 24 and two surveys were required between June 25 and July 17 (Sogge et al. 2010). For this survey, the former protocol was used because they were started before the subsequent protocol was approved. Consulting Biologist, Mike San Miguel (USFWS permit #TE-831910-3) retained by Impact Sciences Inc. conducted surveys using taped SWF vocalizations on May 16, 26, June 15, 25 and July 5, 2010. Mr. San Miguel passed away on July 15, 2010, before his scheduled survey on July 17, 2010 (Mike San Miguel, pers. comm. to R.C. Brody, April 16, 2010). After receiving approval from USFWS on July 23, 2010 (C. Dellith pers. comm.), Mr. Thomas Ryan (TE-097516-1) and Mr. R.C. Brody completed the final survey on August 2, 2010. This survey after the third survey window was the only deviation from the Sogge et al. (2000) protocol. All suitable habitats were thoroughly surveyed during each site visit. It should be noted that seven surveys for SWF were conducted with a second survey being performed during the May 15 – 31 period and the June 1-24 period.

The riparian habitat was systematically surveyed by walking slowly and methodically along the banks and along the stream bed of the creek. The area surveyed included all habitats, within a 100-meter buffer on the project site, and all riparian habitat 100-meters upstream and downstream from the Limonaire northern and southern property limits. Taped vocalizations of SWF were used to elicit a response from any potentially territorial SWF. If no SWFs were detected after the initial tape playing, the recording was usually replayed at least once, but often multiple times. All surveys were conducted under optimal weather conditions and during early morning hours when bird activity is at a peak. Numbers were recorded for all incidental bird species in Appendix A. Notable observations and any special status species and other birds such as brown-headed cowbird were recorded.

Table 1. Dates, Times, and Conditions at the Study Area during Surveys in 2010. (nd = no data available).

Date	Time	Observer	Wind (mph)	Cloud Cover (%)	Temp (°F)	Survey Type
4/16/2010	07:15-10:30	M. San Miguel	Calm	5	52-65	LBV
4/26/2010	07:30-10:45	M. San Miguel	Calm	0	54-66	LBV
5/6/2010	06:50-10:15	M. San Miguel	nd	nd	47-69	LBV
5/16/2010	07:00-10:00	M. San Miguel	0-1	100	52-61	LBV & SWF I-1
5/26/2010	07:30-10:05	M. San Miguel	Light, variable	50	57-65	LBV & SWF I-2
6/5/2010	07:00-10:15	M. San Miguel	Calm	100	59-	LBV & SWF II-1
6/15/2010	06:30-09:40	M. San Miguel	nd	100	56-64	LBV & SWF II-2
6/26/2010	07:00-09:45	M. San Miguel	2-4	0-30	57-	LBV & SWF III-1
7/7/2010	06:00-08:45	M. San Miguel	Calm	0	58-64	LBV & SWF III-2
8/2/2010	06:36-09:30	T. Ryan & R.C. Brody	Calm	0	56-71	LBV & SWF III-3

SURVEY RESULTS

No least Bell's vireos or southwestern willow flycatchers were observed during any of the surveys. A total of 77 bird species were recorded within the survey area during the ten site visits. At least 30 species were confirmed as breeders and an additional eight species as possibly nested. Because the surveys were conducted during migration, many of the species were transients. Among the breeding species was the yellow warbler, which is listed by the California Department of Fish and Game as a bird species of special concern. The list of bird species observed at the site is included in Appendix A. Interestingly, with the noted improvement in the quality of the riparian habitat from the 2007 surveys; several riparian-associated species were observed in 2010 including western wood pewee, Cassin's vireo, and blue grosbeak. Conversely, several disturbance-associated species were not observed in 2010 including American crow, house sparrow, and nutmeg manikin.

RECOMMENDATIONS

Given the quality of the habitat at the site and its proximity to known breeding populations of the least Bell's vireo and southwestern willow flycatcher along the Santa Clara River, additional surveys for these species should be conducted within one year prior to any habitat disturbance.

Any preliminary site investigations such as soils testing or other construction activity should minimize impact to the riparian areas. If construction takes place during the breeding season for birds, surveys for nesting birds should be performed and the appropriate buffer zones should be established. A qualified monitor should be present to advise and assist construction personnel to avoid impacts to the habitat and to any nesting birds.

Please feel free to contact me at (949) 923-8224 or tryanbio@gmail.com if you have questions or comments.

Sincerely,

A handwritten signature in blue ink that reads "Thomas Ryan". The signature is written in a cursive style with a long horizontal line extending to the left of the name.

Thomas Ryan, assisting the estate of Mike San Miguel
Consulting Biologists

I certify that, based on notes taken by Mr. Mike San Miguel, descriptions made in his 2007 report, and observations made during the final report, the information in this survey report, and attached exhibits, fully and accurately represent my work. The results of focused surveys for listed species are typically considered valid for one year by the USFWS and CDFG. If you have any questions or require additional information, please call me at (949) 923-8224.

Sincerely,

A handwritten signature in blue ink that reads "Thomas Ryan". The signature is written in a cursive style with a long horizontal line extending from the top of the "T".

Thomas Ryan
Biologist, Permit Number TE-097516-1
Ryan Ecological Consulting
526 West Colorado Blvd.
Monrovia, CA 91016
(949) 923-8224
tryanbio@gmail.com

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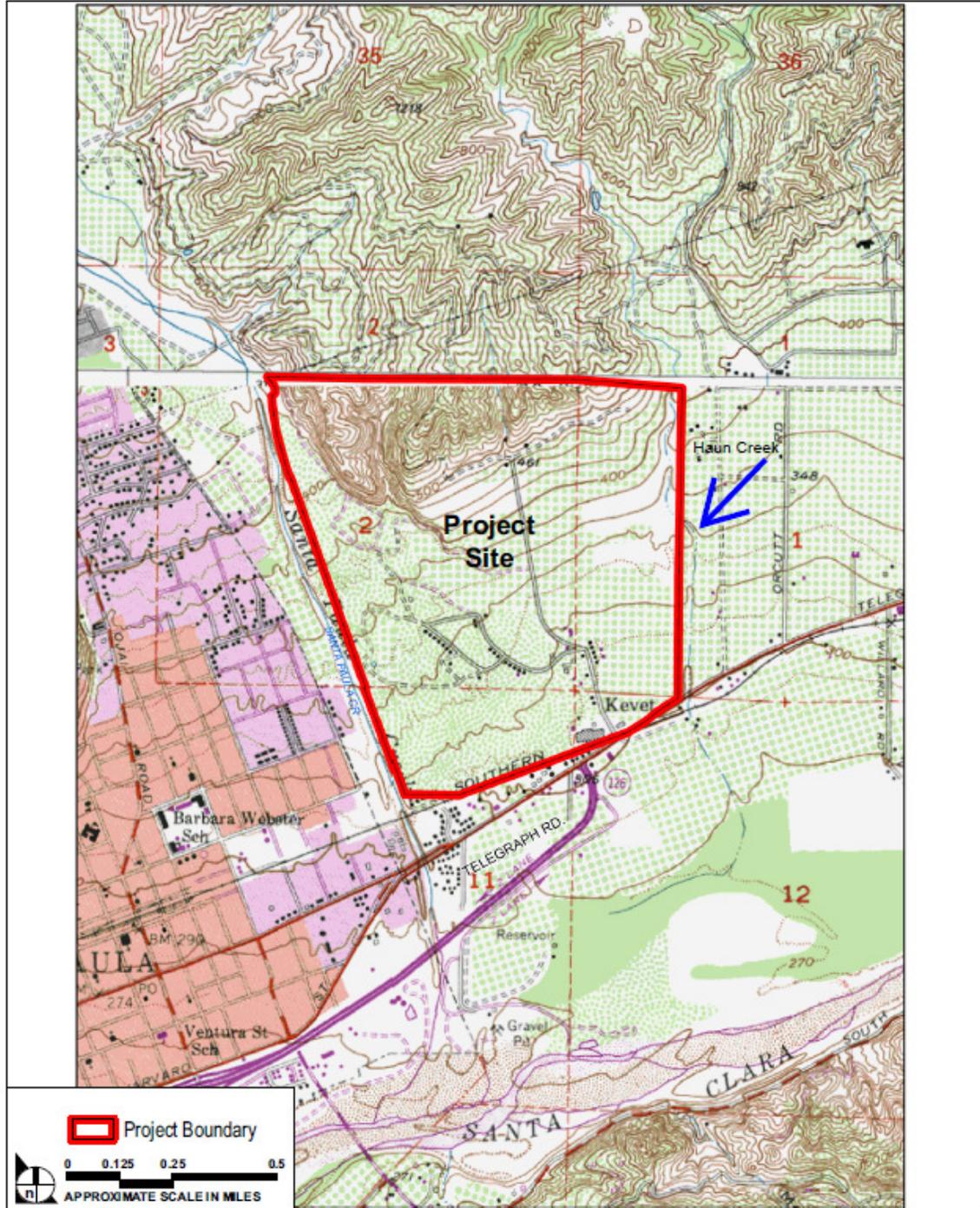
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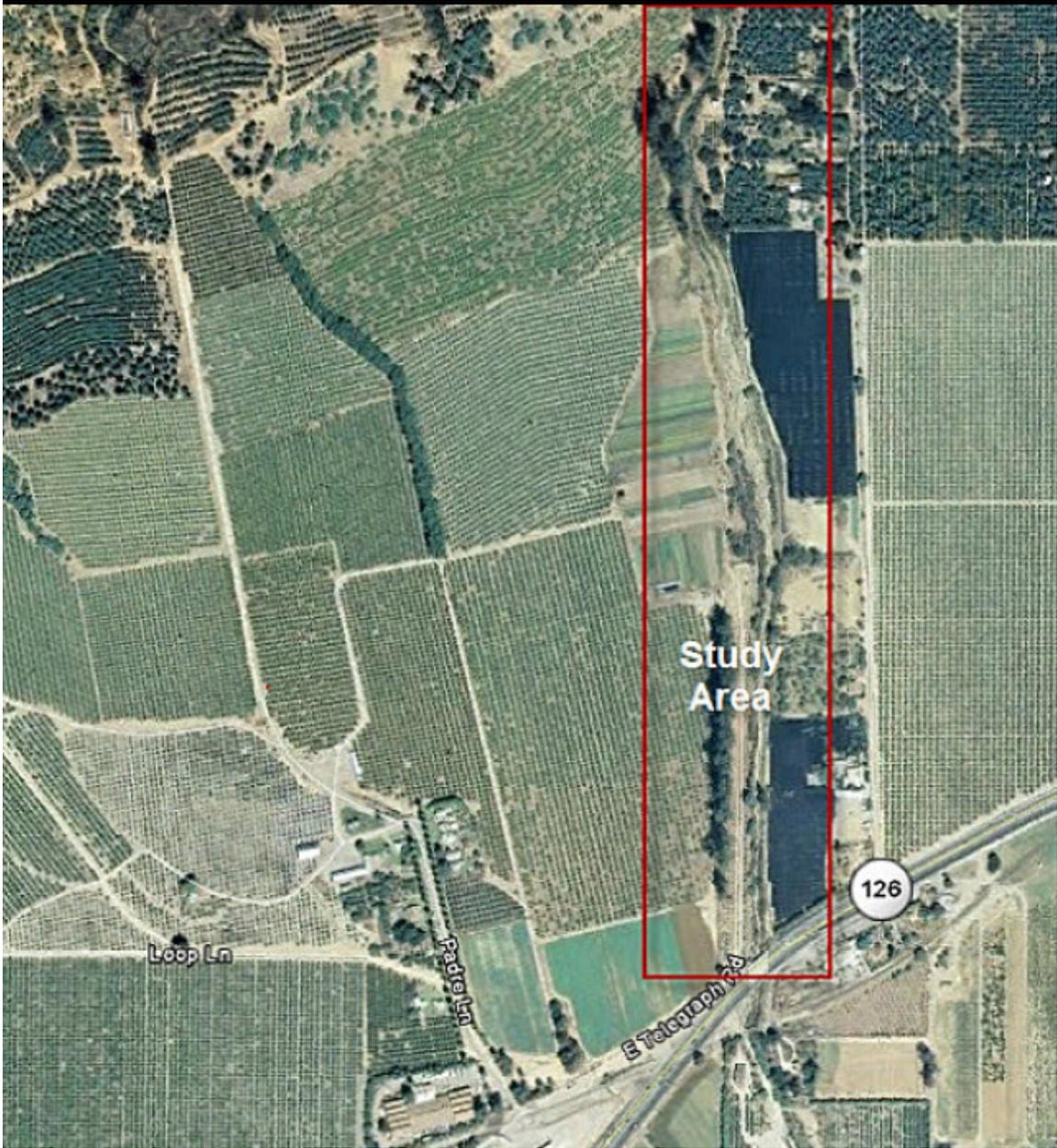
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Figure 1. Vicinity Map.



SOURCE: Impact Sciences, Inc. - January 2007

Figure 2. Aerial Photograph of the Project Site Showing the Project Boundaries.



Western Bluebird (P)	3	2			1					
Swainson's Thrush			1		2					
American Robin (B)	2	6	8	7	5	2	6	6		4
Wrentit (B)	2	1	2	3	3	3	7	1	4	1
Northern Mockingbird (B)	1	2	1		1	1		1	2	1
California Thrasher (P)	2	2	2	3	2	2	4	1	2	2
European Starling(B)	5	5		10	6	10	X	5		8
Cedar Waxwing		20	25							
Phainopepla (B)	1				1	4		1		
Orange-crowned Warbler	5				1	1		1		1
Nashville Warbler	1									
Yellow Warbler (B)*			6	5	4	1	1	2	2	1
Yellow-rumped Warbler	4	4								
Black-throated Gray Warbler	1									
Common Yellowthroat (B)	10	4	2	1	2	2	3		3	2
Wilson's Warbler	2	1	1							
Western Tanager			3							1
Spotted Towhee (B)	3	5	5	4	6	5	5	5	2	6
California Towhee (B)	12	6	12	12	13	12	15	12	10	12
Song Sparrow (B)			2		2				2	1
Lincoln's Sparrow	1									
White-crowned Sparrow	6									
Dark-eyed Junco (B)		2	2	2		1	1	2	1	
Black-headed Grosbeak (B)	1	2	1	1						4
Blue Grosbeak (P)						1	1			1
Lazuli Bunting		1								
Red-winged Blackbird						3	20	2		8
Brewer's Blackbird (B)		8	4	8	4	6	12	20	4	16
Brown-headed Cowbird (B)	3	1	2							2
Hooded Oriole (B)	6	6	8	8	5		4	6	3	8
Bullock's Oriole (B)	4	3	3	3	5		1	2	2	2
House Finch (B)	12	10	8	15	15		10	10	4	15
Lesser Goldfinch (B)	6	6	15	15	8	4	6	12	6	10
American Goldfinch (B)	10	10	12	6	3	6	8	4	6	10

x - Confirmed presence on site; numbers not recorded

(B) - Confirmed breeding on site

(P) - Probable or possible breeder on site

(?) - Species unknown

* - CDFG bird species of special concern