Results of the 2006 Golden-Cheeked Warbler Survey on the Schramm Ranch Preserves, City of Lakeway, Travis County, Texas

Submitted to

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INTRODUCTION

On 16 July 1998, the U.S. Fish and Wildlife Service (USFWS) issued a Section 10(a)(1)(B) permit authorizing the incidental take of the endangered golden-cheeked warbler (*Dendroica chrysoparia*) during construction and occupation of specified portions of the approximately 498-acre Vista Royale property in western Travis County, Texas (USFWS Permit No. PRT-812695). Use of the name "Vista Royale" has since been discontinued. Development has been constructed, or is occurring, on approximately 300 acres now referred to as the "Alta Vista" property. The remaining approximately 198 acres are contained in natural preserves owned by the City of Lakeway and are referred to as the "Schramm Ranch" preserves. For sake of convenience, the entire approximately 498-acre property is referred to as "Schramm Ranch" in this report.

Schramm Ranch is located east of Ranch Road 620 approximately two miles north of State Highway 71. The City of Lakeway lies immediately northwest of the property and the City of Austin is located approximately 14 miles to the east-southeast (Figure 1).

The Schramm Ranch preserves were required to be set aside and maintained in perpetuity as a preserve for the golden-cheeked warbler under the terms and conditions of the Vista Royale Section 10(a)(1)(B) permit. The permit also required that presence/absence monitoring surveys for the warbler be conducted in preserve areas every third year until the proposed development reached "build-out," which is defined as 95 percent project completion.

SWCA Environmental Consultants (SWCA) conducted the first golden-cheeked warbler monitoring survey on Schramm Ranch in the spring of 2000. In 2000, a total of 48 hours and 30 minutes was spent conducting surveys on 29 March, 6, 12, and 25 April, and 2 May. It was estimated that all or portions of 10 golden-cheeked warbler territories were present on the Schramm Ranch preserves in 2000. No development had occurred on the property as of the time of this survey.

The second golden-cheeked warbler monitoring survey on Schramm Ranch was conducted in 2003 by SWCA. In 2003, a total of 48 hours and 5 minutes was spent conducting surveys on 27 March, 1 and 16 April, and 9 and 14 May 2003. It was estimated that all or portions of 10 to 11 golden-cheeked warbler territories were present on Schramm Ranch in 2003. Some development had occurred on Schramm Ranch between 2000 and 2003, with a paved road having been constructed down a ridge on the west end of the property and other road alignments having been cleared on ridges in the south-central portion of the property.

This report provides the results of the third monitoring survey conducted on the Schramm Ranch preserves. This survey was conducted in the spring of 2006, as required by the terms and conditions of the Section 10(a)(1)(B) permit.

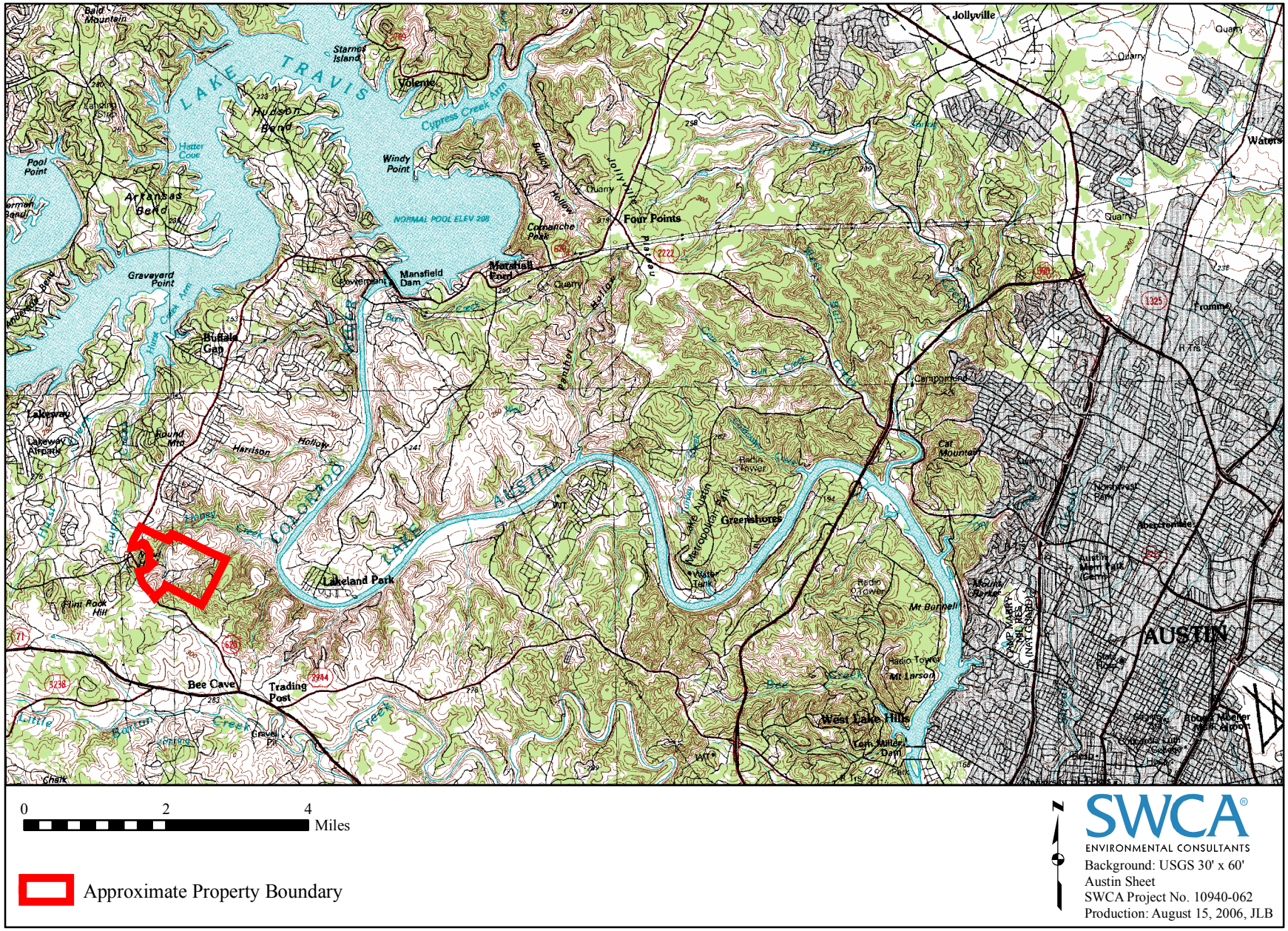


Figure 1. Project Location of the Schramm Ranch Property.

PROPERTY DESCRIPTION

Schramm Ranch lies on the eastern edge of the Edwards Plateau and has topography typical of the region with relatively flat-topped ridges separated by steep-walled canyons. Two well-developed tributaries of Honey Creek originate on the property, both draining to the northeast. A segment of a third smaller tributary of Honey Creek is present in the northwest corner of the property. The tributaries are separated by steep-sided ridges that decrease in elevation to the northeast, generally through a series of topographic steps. The two largest tributaries are separated by ridge that becomes particularly broad at lower elevations.

Virtually all of the approximately 198-acre warbler preserve area is comprised of steep-sided canyons. Vegetation within the canyons consists primarily of Ashe juniper (*Juniperus ashei*)/mixed-deciduous woodland. Plateau live oak (*Quercus fusiformis*) trees are generally common throughout. Texas red oak (*Quercus buckleyi*), escarpment black cherry (*Prunus serotina* var. *eximia*), shin oak (*Quercus sinuata* var. *breviloba*), and Carolina buckthorn (*Frangula caroliniana*) trees occur in low to moderate densities on canyon slopes, being most common along the courses of ravines that incise the canyon slopes. Cedar elm (*Ulmus crassifolia*), Arizona walnut (*Juglans major*), sugarberry (*Celtis laevigata*), sycamore (*Platanus occidentalis*), and black willow (*Salix nigra*) trees also occur in the woodlands, although primarily in low to very low densities and along the channels of the tributaries. Canopy closure within the woodlands is generally high, usually greater than 75 percent. Shrub development within the woodlands is generally poor because of the mostly wooded canopy. Shrub species present include yaupon (*Ilex vomitoria*), Texas persimmon (*Diospyros texana*), Lindheimer's silktassel (*Garrya lindheimeri*), wafer-ash (*Ptelea trifoliata*), redbud (*Cercis canadensis*), and agarita (*Berberis trifoliolata*).

Since 2003, residential development had been constructed, or was being constructed, on the broad ridge separating the two largest tributaries of Honey Creek. This development included a line of houses along a road extending down a long ridge to the northwest corner of the property. Residential development had also been constructed along the road on the ridge in the western portion of the property that was paved prior to the 2003 survey.

METHODS

SWCA biologists familiar with golden-cheeked warbler habitat and vocalizations conducted presence/absence surveys for the warbler in the Schramm Ranch preserve areas on 21 March, 3, 11, and 25 April, and 11 May 2006. A total of 43 hours and 48 minutes was spent conducting surveys over these five days.

Surveys were conducted primarily by walking through woodland areas and listening for golden-cheeked warbler vocalizations. No tape-recorded calls of warblers or screech owls were used to elicit responses. Birds located during surveys were usually followed for periods of time in an attempt to better determine the extent of their territories. Locations of all birds seen or heard on the property were recorded in the field on topographic aerial photographs at a scale of 1" = 300'. Lines were drawn connecting observations representing the same individual.

SURVEY RESULTS

It was estimated that all or portions of six golden-cheeked territories were present on Schramm Ranch in 2006. Locations of warbler observations made on the property are depicted on Figure 2. This figure uses 2004 aerial photography as its base, with the photograph depicting the general extent of development on the property by showing locations of road alignments. However, more vegetation had been cleared from, and many more houses were present in, development areas on the property in the spring of 2006 than indicated in the 2004 photograph.

As shown on Figure 2, two warbler territories were believed present in the canyon west of the large central development area and four territories were believed present in the large canyon on the east side of the property. One female warbler was observed on the property in 2006. No fledgling warblers were observed, although limited time was spent on the property during the time of year when it would have been possible to find them.

The number of warbler territories estimated present on Schramm Ranch in 2006 was four to five fewer than the number believed present on the property in 2000 and 2003. As discussed below, the decrease in number of warblers on the property is likely due, in part, to increased presence of development on the property, but also likely the result of other factors.

In 2003, four territories were believed to be present in the canyon west of the central development area, compared to two in 2006. The two birds present in this canyon in 2006 were in generally the same locations as the middle two of the four birds present in 2003. In 2003, a warbler was present in the head of this canyon where vegetation is not particularly suitable for golden-cheeked warblers. Development has not infringed on the head of this canyon and absence of a bird from this location in 2006 is considered more likely the result of natural fluctuations in local warbler numbers than being related to development of the property. The lowest of the four birds present in this canyon in 2003 occupied a territory that was believed to straddle the northern property boundary. Woodland in this portion of the canyon appears highly suitable for golden-cheeked warblers and is located at greater distance from development on the property than are the woodlands in the canyon where the two warblers were found in 2006. It is not known why no warbler was detected in this area in 2006, although the reason appears unlikely to be related to development of the property.

Six to seven golden-cheeked warblers were believed to be present in 2003 in the large canyon on the east side of the property. This includes one bird that was present in a western fork of the canyon now separated from the main canyon by a long developed ridge that nearly reaches the northwestern corner of the property. We did not find a warbler in the western fork of the canyon in 2006. Development has greatly reduced the amount of woodland present on the eastern slope of this fork and it appears that absence of a bird from this area in 2006 could likely be the result of the authorized clearing of woodland from this portion of the property.

One or two of the other birds present on the east side of the property in 2000 and 2003 were located in the head of the main eastern canyon. The head of the canyon actually lies off of the Schramm Ranch property and was mistakenly surveyed in 2000 and 2003. This area was not surveyed in 2006 and it is not known whether these birds were present in the area this year.

Discounting these birds, the number of warblers believed present in the main stem of the eastern canyon on Schramm Ranch in 2003 was four, which is identical to the number of birds estimated present in 2006.

FUTURE WORK

The Alta Vista development had not reached build-out as of the spring of 2006. Therefore, monitoring surveys on the property will continue pursuant to the terms and conditions of the Section 10(a)(1)(B) permit. The next monitoring survey is scheduled for the spring of 2009.

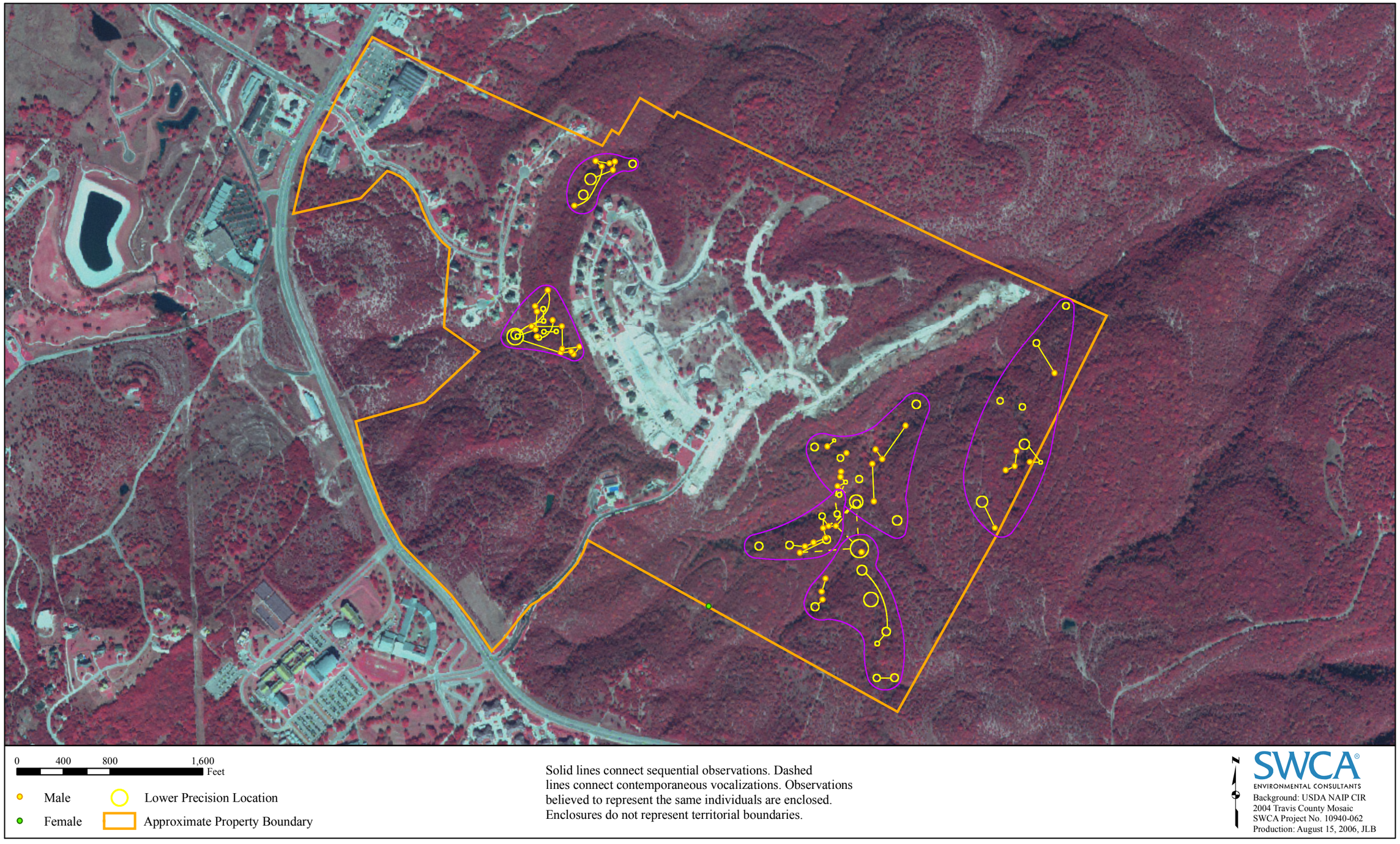


Figure 2. Golden-cheeked Warbler Survey Results for the Schramm Ranch Preserves.