2008 Survey Report

Wheless Preserve
Travis County

Lower Colorado River Authority

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Introduction

The Wheless Preserve is part of the Balcones Canyonlands Preserve system. It is protected habitat for the endangered Golden-cheeked Warbler (*Dendroica chrysoparia*, GCW, warbler) and other species of concern of western Travis County. The 2,316 acre tract is located on the east side of Lake Travis off Lime Creek Road, six miles south of RM 1431 and west of Volente. Travis County Audubon and The Nature Conservancy own preserves that partially border Wheless on its north and east sides respectively. To the west is Lake Travis and mostly undeveloped property. Housing, developed and semi-developed areas are located on the remaining borders.

The Wheless tract consists mainly of steep canyons and hillsides. Thick wooded areas cover about half of the preserve, with scrubbier vegetation on the less fertile and open hillsides. One hilltop has been cleared to encourage scrub re-growth for possible Black-capped Vireo (*Vireo atricapilla*, BCV) influx. A few springs form water holes in some of the canyons and a seasonal stream flows south on its eastern side, providing habitat for the rare Jollyville Plateau salamander (*Eurycea tonkawae*). A cleared right-of-way runs east-west for a water pipeline with a water tower. A few rough roads provide vehicle access.

Climax vegetation consists mostly of ashe juniper or cedar (*Juniperus ashei*), live oak (*Quercus fusiformis*), Texas oak (*Quercus texana*), limestone durand oak (*Quercus sinuate* var. *breviloba*), cedar elm (*Ulmus crassifolia*), and Texas ash (*Fraxinus texensis*). Other less numerous trees include escarpment cherry (*Prunus serotina* var. *eximia*), walnuts (*Uglans* sp.), coma (*Bumelia lanuginosa*), hackberry (*Celtis* sp.), and sycamore (*Platanus occidentalis*).

Mid-story plants are mountain laurel (*Sophora secundiflora*), silk-tassel (*Garrya ovata*), Texas persimmon (*Diospyros texana*), Texas redbud (*Cercis Canadensis* var. *texensis*), Carolina buckthorn (*Rhamnus caroliniana*), blackhaw (*Viburnum rufidulum*), Texas madrone (*Arbutus texana*), Mexican buckeye (*Ungnadia speciosa*), and holly (*Ilex vomitoria* and *I. deciduas*). A variety of plants (cacti, grasses and forbs) grow at ground level.

Methods

LCRA personnel previously set up two-100 acre plots for surveys and these were the plots surveyed in 2008, following BCCP enumeration protocol. One plot contains prime habitat and the other plot contains transitional habitat. Plots are surveyed for up to six hours each visit, 3-5 times between March 15 and May 25.

The plots at Wheless preserve were surveyed one time each for a total of 9.61 hours. Due to unexpected loss of staff, the surveys were stopped. Students from Texas A&M University started a study testing different survey methods, so staff decided to abandon the surveys this year and resume in 2009.

Surveys were conducted mostly by walking slowly through habitat while looking and listening for the target species. The routes walked and areas covered varied from survey to survey. When a target species was encountered the surveyor plotted the bird's location in the field on an aerial photograph and a waypoint was recorded on a hand-

held GPS unit. These waypoints could later be accurately plotted and analyzed using computer software.

Weather conditions were recorded at the start and end of every survey day (Table 2). All bird species observed or heard were noted.

Results

Wheless Preserve has been surveyed in the past to determine the warblers' population trends. Both study plot surveys and entire preserve surveys have been made. In 2002 Loomis Austin Inc. found 70 entire and 22 partial territories. This was an increase from the 60 territories found in 1993 and 1994 by LCRA, TxDOT and DLS. LCRA personnel also surveyed the Wheless Preserve in 2006. All of the preserve was searched and 93-105 males were observed. Between 1999 and 2004, surveys on the plots resulted in approximately 9-13 males combined.

Unfortunately, due to loss of staff, surveys were not completed and each plot was visited only one time. This two surveys collected data for eight males in the prime plot and one in the transitional plot.

Discussion

Due to the loss of staff this year, surveys were not completed therefore it is difficult to create a discussion based on findings. It would be beneficial to include a complete enumeration of the two plots in 2009.

Table 1- Survey Time

Date	Start Time	End Time	Daily Time
17 March	0750	1233	4.28 hrs.
24 March	0745	1305	5.33 hrs.

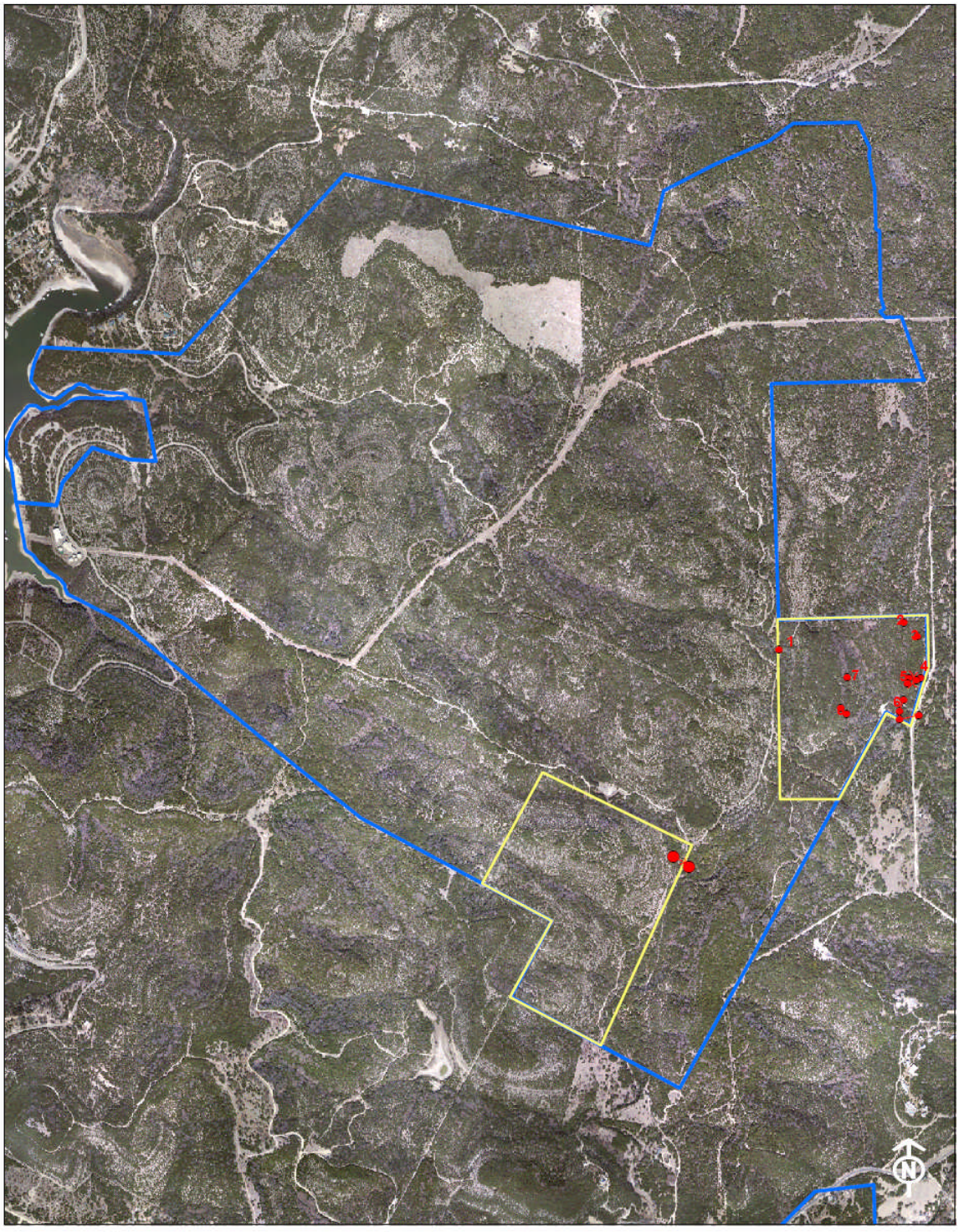
Observer: Ben Archer Total Survey Time 9.61 hours

Table 2- Weather Conditions

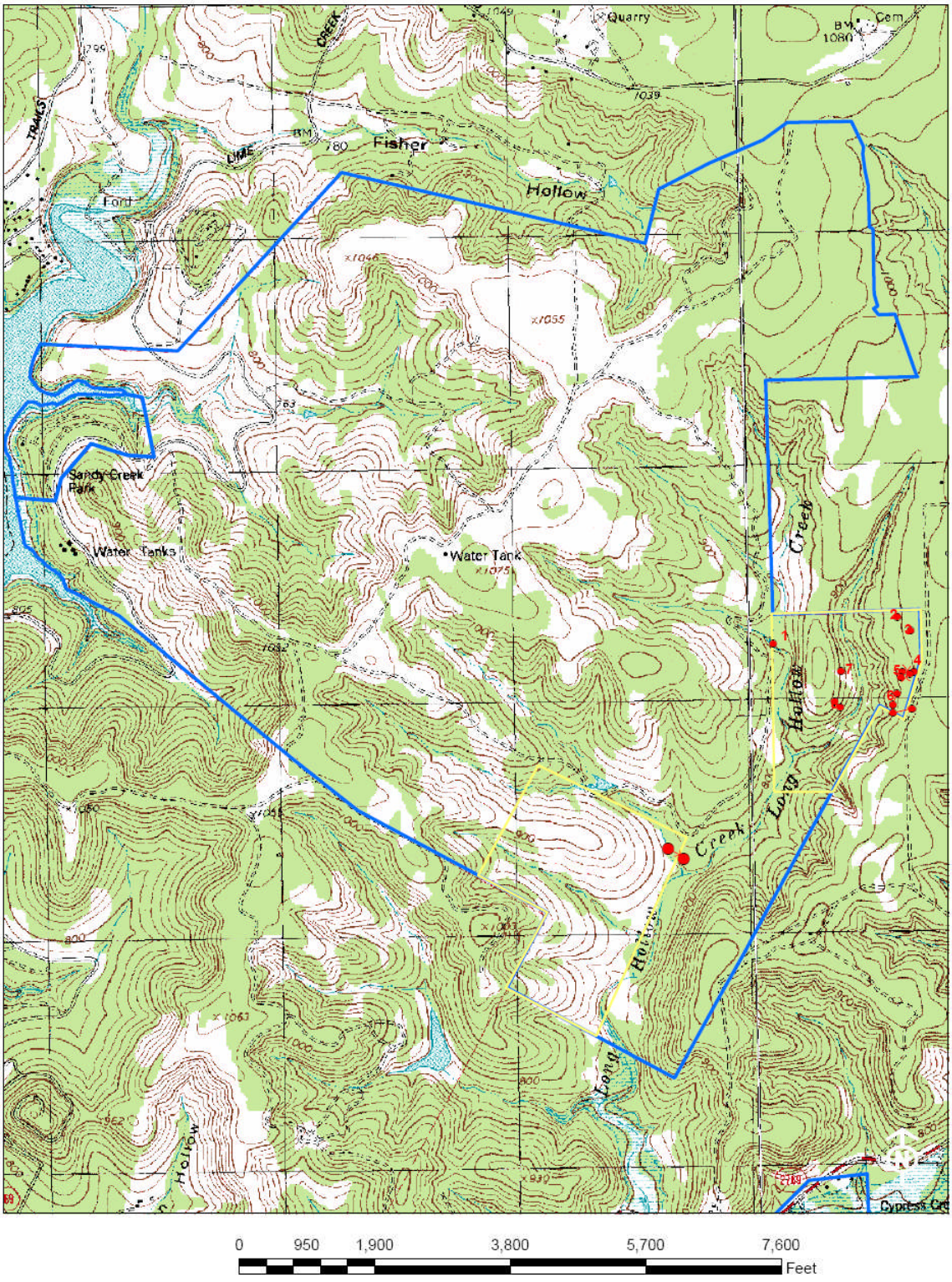
Date	Temp. F (start-end)	Wind (start-end)	% cloud cover (start-end)
17 March	67 – 79	0-15 var -- 5-15 S	100% -- 100%
24 March	48 – nn	0 -- 0-5 SE	0% -- <10%

nn = not noted

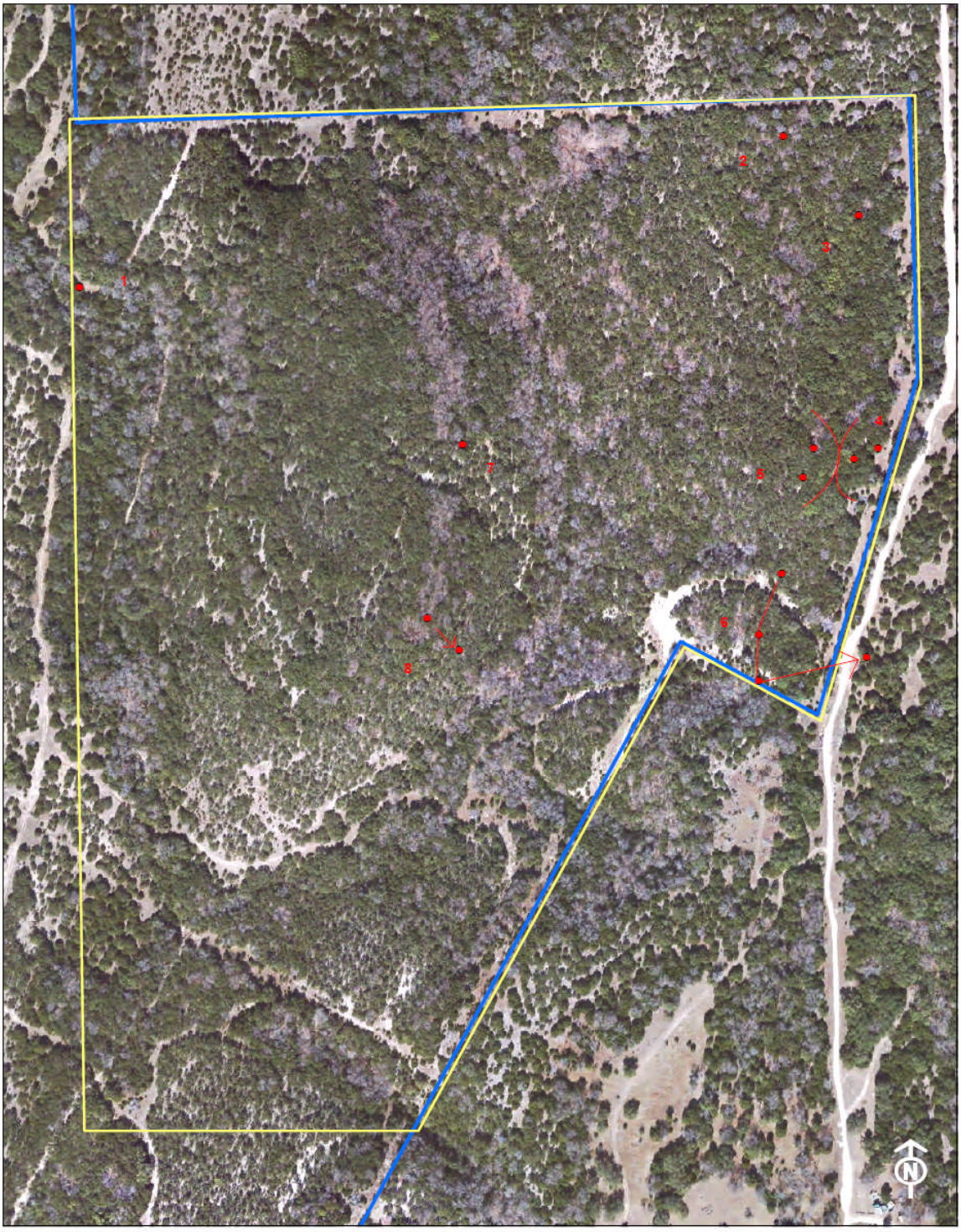
Wheless Preserve - 2008 Survey - 100-acre Plots



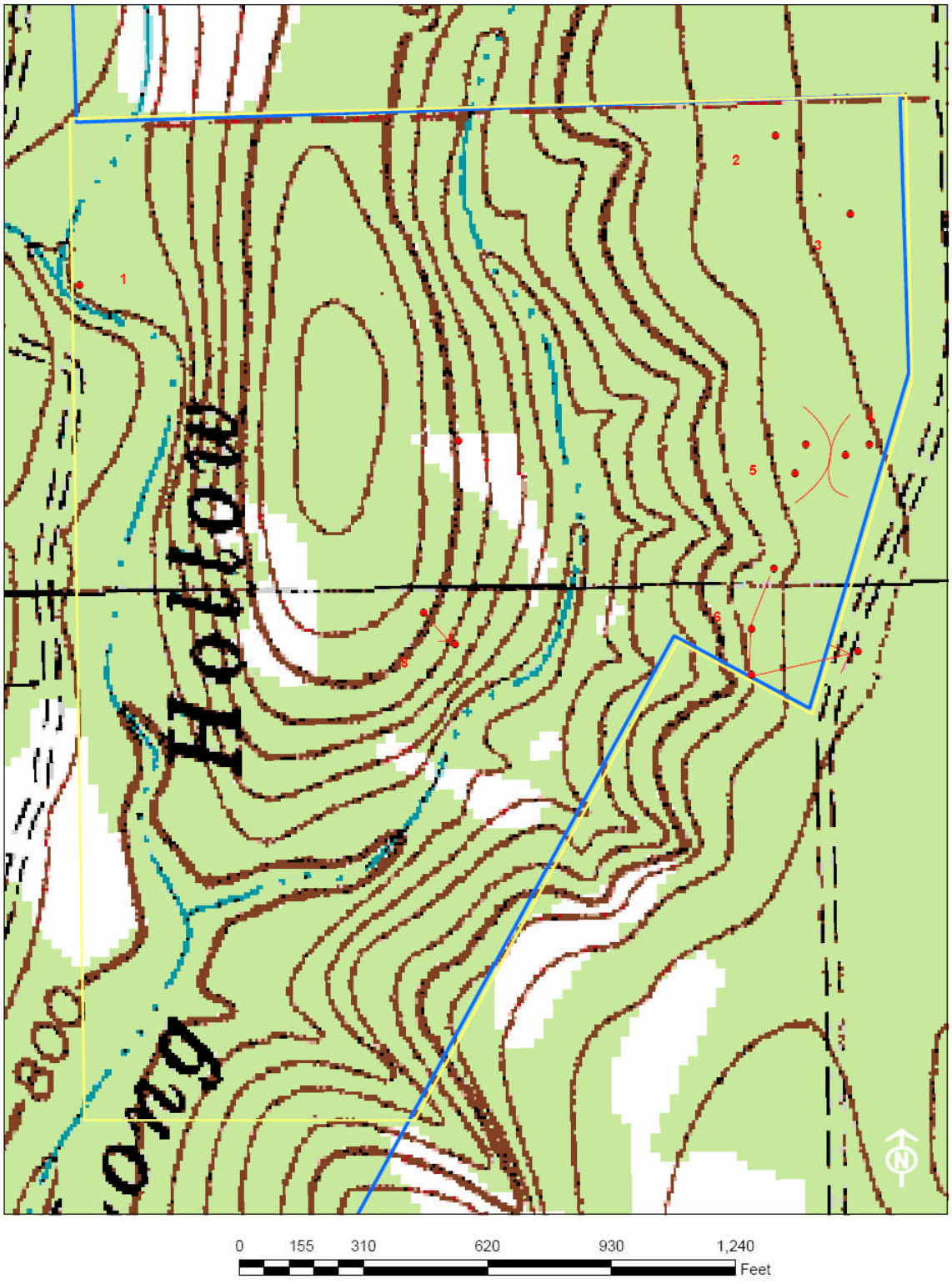
Wheless Preserve - 2008 Survey - 100-acre Plots



Wheless Preserve - 2008 Survey - Prime Plot



Wheless Preserve - 2008 Survey - Prime Plot



Wheless Preserve - 2008 Survey - Transitional Plot



Wheless Preserve - 2008 Survey - Transitional Plot

