

Black-capped Vireo Survey
Big Bend National Park, Brewster County, Texas
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Jeffrey R. Troy

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Introduction

Between 18 and 22 June 2006 I surveyed sites in Big Bend National Park (BBNP), Brewster County, Texas for Black-capped Vireos (*Vireo atricapilla*; BCVI). The census was conducted as Study # BIBE-00221 for the National Park Service in accordance with Resource Activity Permit # BIBE-2006-SCI-0030. This survey was the twentieth annual BCVI census since 1986 (Maresh 2004).

Objective

To purpose was to assist BBNP with their annual BCVI census.

Survey Methods

Survey sites were chosen from descriptions of areas used by BCVI in previous years (Maresh 2004). Areas of appropriate habitat were surveyed by listening and watching for BCVI. In most instances, BCVI were heard before seen. Visual contact was attempted for most individuals. Universal Transverse Mercator (UTM) coordinates were recorded for vireos. UTM coordinates are referenced to North American Datum 1983.

Results

I spent 25.75 field hours surveying Black-capped Vireo habitat over 5 days. Between 23 and 25 adult BCVI were detected with 17-18 males and 6-7 females. In addition, 2 hatch-year birds were observed with one BCVI pair.

Lost Mine Trail (trailhead) to Basin Campground – I surveyed habitat on both sides of Basin Road from the Lost Mine Trail trailhead to the Basin Campground from 7:00 – 11:00 on 18 June (4 observer hours). Between 2 and 3 BCVI pairs were observed.

As in 2004 (Maresh 2004), a male and female were heard and seen in the drainage below the “25 MPH” sign on Basin Road (13R 0666100, 3239748). The female was seen following the singing male.

A possible second pair was seen from Basin Road between the location of the previously observed pair and the vehicle pull-off (13R 0665874, 3239672). These birds, however, could have been the same as the previous pair. Another adult female BCVI was seen in close proximity to this pair. This bird then flew across Basin Road and upslope from the vehicle pull-off.

Another adult male BCVI was observed between the vehicle pull-off and the turn-off for the Basin Campground (13R 0665706, 3239640). This bird eventually flew across Basin Road and upslope to an area in the vicinity of where the previous lone female had flown. It is possible these two were a pair with a nest upslope.

Window Trail – I surveyed habitat from the Basin Lodge Store to the Window pour-off from 7:45 – 12:00 on 19 June (4.25 observer hours). Two adult male BCVI were observed.

One male BCVI was heard near the trail (13R 0664439, 3239678), however this bird was not seen.

A second male was heard and seen near the trail (13R 0664064, 3239897). This bird was not seen with a female.

Laguna Meadows Trail – I surveyed habitat from the Basin Lodge Store along this trail until BCVI habitat was no longer observed near the trail from 17:00 – 18:30 on 19 June (1.5 observer hours). One adult male BCVI was observed.

I observed one male BCVI. This bird was both heard and seen, however was not seen with a female (13R 0664665, 3238792).

Blue Creek Canyon – I surveyed habitat between the trailhead near Homer Wilson Ranch and the Pinyon/Oak habitat in the Chisos from 7:45 – 12:00 on 20 June (4.25 observer hours). One adult male BCVI was detected.

I heard only one male BCVI. This bird was not seen. He was observed singing approximately 150 meters upslope to the southeast of this point (13R 0661618, 3233863).

Panther Canyon – I surveyed habitat in both forks of this canyon from 16:15 – 18:30 on 20 June (2.25 observer hours). One BCVI pair and 2 hatch-year birds were observed.

I observed one BCVI pair with 2 hatch-year birds (13R 0672073, 3244417) in the right fork of the canyon. I observed no BCVI in the left fork of the canyon.

Juniper Canyon – I surveyed habitat between the Juniper Canyon trailhead and the Pinyon/Oak habitat in the Chisos from 9:00 – 13:00 on 21 June (4 observer hours). Eight adult BCVI were observed (6 males and 2 females).

One BCVI pair was observed in the drainage near the trail (13R 0668742, 3236707). The female was following the male.

A male was heard singing approximately 50 meters south of this point (13R 0668412, 3237002). This bird was not seen.

A second BCVI pair was observed in the drainage (13R 0668147, 3237141). The male was following the female around the territory. This may indicate the beginning of nesting behavior. A second male was heard singing approximately 100 meters south of this same point. This bird was not seen.

A third male was observed singing (13R 0667823, 3237233), however was not seen at this location. He was seen countersinging with and chasing another new male near this point (13R 0667595, 3237241).

Green Gulch – I surveyed habitat along Basin Road between the end of desert vegetation to the vicinity of the “Tree Zone” roadside exhibit from 13:00 – 14:00 and 16:00 – 18:00

on 18 June, and again from 6:30 – 9:00 on 22 June (5.5 observer hours). Five adult BCVI were detected.

I observed one male BCVI near the “Tree Zone” roadside exhibit (13R 0666926, 3240461). This male was both heard and seen, however not observed with a female.

A BCVI pair was observed near this point (13R 0666996, 3240653). The female was observed following the male around the territory.

A male was heard and seen (13R 0667345, 3241167), however not seen with a female.

Another male was heard and seen near this point (13R 0667505, 3241656). This bird was not seen with a female.

Pine Canyon – Not surveyed in 2006.

Laguna Meadow – Not surveyed in 2006.

Discussion

Most sites that were known to have Black-capped Vireo breeding territories in recent years were surveyed (Maresh 2004, Williams 2005). However, limited time did not allow for repeated visits to most sites (with the exception of Green Gulch). Unvisited isolated patches of BCVI habitat in drainages around and within the Chisos Mountains may harbor additional birds. Therefore, additional BCVI within the park may have been undetected. Despite this possibility, I believe a fairly accurate BCVI survey was obtained for visited areas.

A total of 25 to 27 individuals were detected (17-18 males, 6-7 females, and 2 hatch-year birds). Numbers of adult BCVI detected in 2006 (23-25) shows a marked increase from the number detected in 2005 (9) and is identical to that of 2004. Numbers detected in 2005 may be reflective of earlier survey dates compared to previous censuses (Williams 2005). Numbers of adult males and females differ from numbers detected in 2004 (Maresh 2004).

Black-capped Vireos were detected in all areas known to have held territories in recent years. Each site is individually discussed below.

- The area along Basin Road from the Lost Mine Trail trailhead to the Basin Campground revealed 4-6 adult BCVI (2-3 pairs) in 2006. (4 adult BCVI detected in 2004; 2 in 2003; 3 in 2002; 3 in 2001; 6 in 2000). This site was not surveyed in 2005. This suggests consistent habitation of this site by vireos compared with recent years.
- I detected 2 adult male BCVI on the Window Trail in 2006. (0 adult BCVI detected in 2005; 4 in 2004; 3 in 2003; 3 in 2002; 0 in 2001; 2 in 2002).
- I observed one adult male BCVI on the Laguna Meadows Trail between the Basin Lodge Store and the Pinyon/Oak habitat. This area was not surveyed in 2004 or

2005. It appears that reasonably good BCVI habitat occurs on this trail. It is possible that this area of habitat hosts 1 or 2 territories most years.

- I only observed one adult male in Blue Creek Canyon. (0 adults in 2005; 2-3 in 2004; 4 in 2003; 3 in 2002; 0 in 2001; 0 in 2000).
- Panther Canyon was visited for the first time in 2004 (2 adult BCVI) and not visited in 2005. The 2006 survey revealed a BCVI pair with 2 hatch-year birds in the right canyon. It is my recommendation that Panther Canyon become a regular part of the annual BCVI census.
- Juniper Canyon revealed the most BCVI detections in 2006 (6 males, 2 females). (3 adults in 2005; 3 in 2004; 5 in 2003; 4 in 2002; 5 in 2001; 6 in 2000). Suitable habitat in Juniper Canyon was not reached until mid-morning, however many vireos were still observed. This may indicate a slight increase in habitat utilization in this site compared with that of recent years.
- Four male and 1 female BCVI were observed in Green Gulch in 2006. (5 adults in 2005; 8-9 in 2004; 5 in 2003; 1 in 2002; 1 in 2001; 0 in 2000). This suggests consistent habitation of BCVI in this site compared with the previous 3 years.

Acknowledgements

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