



U.S. Fish & Wildlife Service

# Black-capped Vireo

*Post-delisting Monitoring News, Vol. 3*

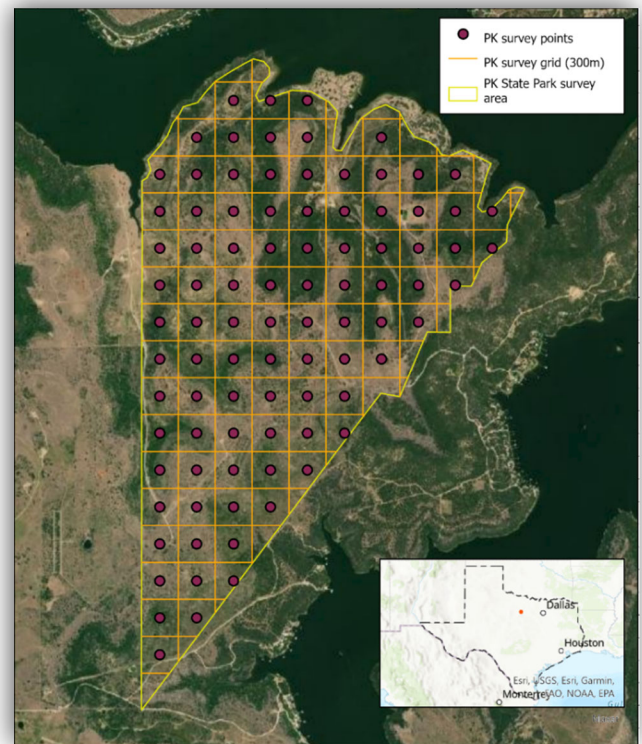
## 2021 News

The third year of black-capped vireo (BCVI) post-delisting monitoring (PDM) saw major accomplishments. Numerous surveys were conducted by Service staff and our partners. Two suspected large populations were surveyed and confirmed to be Tier 1 populations! Tier 1 populations are those censused or estimated through surveys to consist of 30 territories or more. Both Government Canyon State Natural Area and Possum Kingdom State Park in Texas were added to the Tier 1 category this year.

### Possum Kingdom State Park

The Arlington Field Office teamed up with Texas Parks and Wildlife Department (TPWD) to survey Possum Kingdom State Park during the spring. The survey was planned last year, when we discovered large amounts of suitable habitat and heard several singing males as part a trial project using automated recording units. Based on that project, it was determined that a more complete survey was necessary at that location. Five biologists and two interns from the Arlington Field Office visited the park over two weeks in April and May. Ninety-one point locations separated by 250 meters were established across the park. While rainy weather hampered much of the survey period, the team was able to visit 74 of the points and detected 33 individual vireos. Using a subset of those detections to obtain bird density, we estimate the population of breeding male BCVI at Possum Kingdom to be between 43 – 81 individuals! Prior to this survey, the vireo population at Possum Kingdom was relatively unknown, presumed to be quite small, and treated as a Tier 2 population in the PDM plan. We now know that it is much larger and has reached the Tier 1 category. This is likely the combined result of wildfires that burned 90% of the park in 2011, and prescribed fire management that together

produced a substantial shrub component on the landscape, which is necessary for a healthy vireo population.



Map of survey points at Possum Kingdom State Park.

### Government Canyon State Natural Area

Last year, a new population of vireos was discovered by state biologists at Government Canyon State Natural Area. This year, a more extensive survey was conducted on the approximately 460 acres of habitat at the Natural Area. The 2021 surveys confirmed at least 72 males! This adds another Tier 1 locality in the state that was previously unknown. The TPWD is working with Trinity University to develop plans for habitat management at the Natural Area that would maintain suitable conditions for the population for a longer period.

## Big Bend National Park

In May 2021, the Arlington and Austin Field Offices worked with the U.S. Forest Service and National Park Service to continue long term monitoring of black-capped vireo surveys in the Chisos Mountains at Big Bend National Park. The 2021 survey effort supplements over two decades of monitoring information collected within Big Bend National Park and is intended to provide comparable trend data and population information for the PDM plan. Seventy-five point counts were conducted across 10 transects, totaling 6.25 hours of survey time across four days. Seventeen male black-capped vireos were detected during point counts and six opportunistic detections (observed while moving between point count stations) of male black-capped vireos were recorded. Follow-up surveys are tentatively planned for May 2022 to accommodate the PDM plan schedule.



*USFWS biologist surveying for vireos at Big Bend National Park.*

## Citizen Science

The Service collaborated with TPWD to conduct a trial citizen science project for Tier 2 properties in the PDM plan. Our target was Lost Maples State Natural Area and Inks Lake State Park, which we encouraged birders to visit and post vireo detections to the eBird website.

We developed a flyer entitled “Calling All Birders” and posted it to our social media accounts and at the parks. See the results of the project in the follow-up flyer at the end of this newsletter.

## Section 6 Grant

The American Bird Conservancy teamed up with Texas State University and TPWD to implement post-delisting monitoring under the 2019 Section 6 grant. The surveys were postponed in 2020 due to the pandemic, but this year surveys were completed at both Devil’s Sinkhole State Natural Area and Kickapoo Caverns State Park. While the data are still being evaluated, preliminary information indicates that Devil’s Sinkhole still maintains its Tier 1 status (> 30 territories) and Kickapoo Caverns has over 100 territories. Nest monitoring was also conducted at Kickapoo Caverns which shows promising results.



*Black-capped vireo nestlings at Kickapoo Caverns State Park. Photo: Brendan Mulhall*

## Vireo Cam at Fort Hood

The Arlington Field Office and Fort Hood Military Installation in Texas partnered for a trial vireo cam project. The purpose was to provide outreach to our partners on the important work we are doing and to test a low cost method for monitoring black-capped vireo nests. Several weeks of coordination between the Fort Hood Natural Resources Branch and the Arlington



Field Office, led by our Student Conservation Association Intern, produced a plan to document vireo development at the Army base. Using trail cameras and other filming equipment, amazing moments of vireo activity were caught on camera. Hundreds of hours were edited to create a documentary on black-capped vireos. Additionally, the project was highlighted in a local news article. Watch the video:



Read the article in the Fort Hood Sentinel Newspaper: "Biologists Observe Rare Birds with Nest Cams."

## Major Population News

Large abundance numbers were reported again by TPWD for Kerr Wildlife Management Area (WMA) and Mason Mountain WMA this year. Kerr WMA held steady with 423 territories and Mason Mountain increased to 384 territories; 100 more than last year! Point count surveys were conducted at Balcones Canyonlands National Wildlife Refuge – 116 vireos were detected at 251 points. Additionally, staff at the refuge have been actively managing shrublands at the Shin Oak Observation Deck to enhance habitat for nesting BCVI. While BCVI abundance has been generally increasing across the refuge, point counts and incidental observations of vireos have yielded low levels of occupancy at the Shin Oak Observation Deck area. The refuge employs a combination of mechanical and prescribed fire to maintain vegetation structure appropriate for BCVI nesting, in accordance with a recently revised habitat management plan. Wichita Mountains Wildlife Refuge conducted nest monitoring this year and reports extremely low brown-headed

cowbird parasitism rates (2 of 26 nests monitored); although nest failure was higher than previously recorded. Fort Hood Military Installation was able to complete point count surveys this year and estimate the population at over 8,500 males!



*Testing the trail camera at Fort Hood, Texas.*

## More Surveys

With the help of Audubon Texas, The Nature Conservancy surveyed BCVI abundance at several preserves, including Barton Creek Habitat Preserve, Dolan Falls Preserve, Independence Creek Preserve, and Love Creek Preserve. Data are still be analyzed, but BCVI abundance appears to be stable. The Texas Department of Transportation (TxDOT) continued its surveys along two Breeding Bird Survey routes in the southern Edwards Plateau area. The two routes are each 25 miles long with 50 stops (for counts), and intersect portions of Edwards, Kerr, Real, and Kimble Counties. During the 2021 survey, 41 individuals were detected along the routes. The USFWS and TxDOT are working on a strategy to apply an abundance estimate to what appears to be a very large vireo poulation in the area. Thanks to all of our conservation partners for their continued effort in implementing the PDM plan; looking forward to next season!

# Calling all Birders!

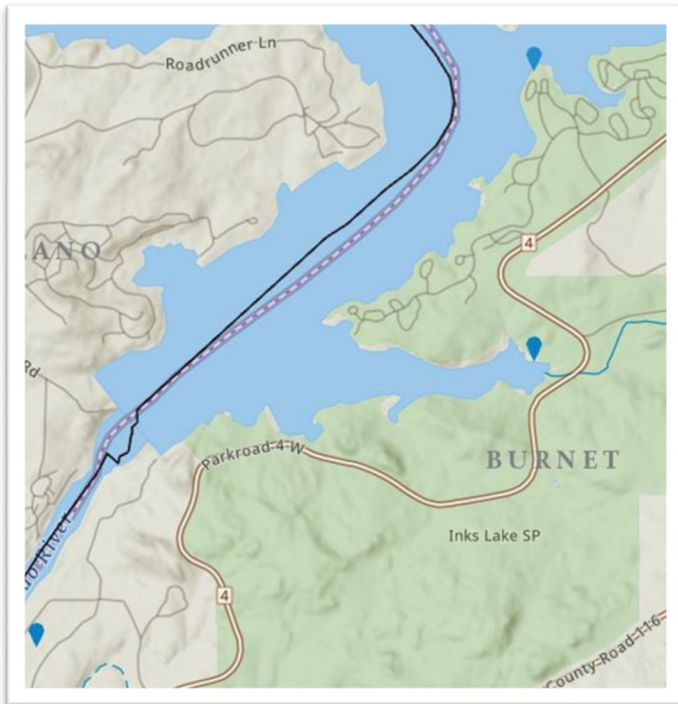
**Citizen scientists monitored black-capped vireos in Texas, and the results are in!**

Texas Parks and Wildlife Department and U.S. Fish and Wildlife Service asked citizen scientists to help monitor black-capped vireos during the 2021 breeding season. Birders conducted post-delisting monitoring and added over 143 observations on the eBird app.

Surveys were conducted from April 10th to July 1st, 2021 at Tier 2 localities.

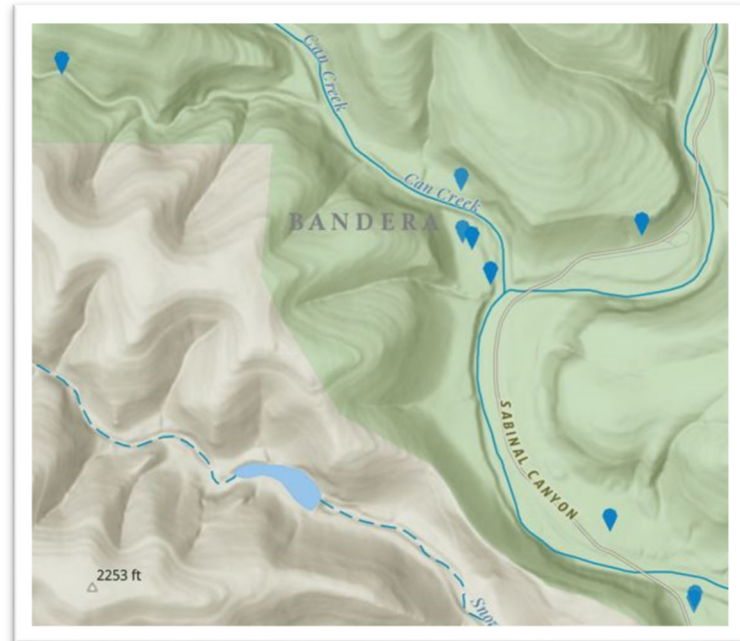
## Inks Lake State Park

- 3 black-capped vireos



## Lost Maples State Natural Area

- 5 to 6 black-capped vireos



Thank you to everyone who participated in the post-delisting monitoring of black-capped vireos. With the help of the citizen science community, the success of this beautiful bird can be monitored for years to come.



Photo: Gil Eckrich

