Osceola National Forest

Collaborative Forest Landscape Restoration Program (CFLRP) Monitoring Quarterly Report (3/18/2016-3/31/2017)

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Tall Timbers Research Station continued its ecological monitoring for the Collaborative Forest Landscape Restoration (CFLR) project on Osceola National Forest to assess management effects on 3 declining "focal" species including Bachman's Sparrow (*Peucaea aestivalis*), Brownheaded Nuthatch (*Sitta pusilla*), Northern Bobwhite (*Colinus virginianus*). Avian and vegetation survey data entry for the 2016 field season was entered into excel and checked for inaccuracies. This report is a basic summary of analysis of data collected from April-June, 2016. A comprehensive analysis of management effects and recommendations will be provided after we receive all management activity shapefiles.

DATA REQUIREMENTS

As discussed via email, we need all management shapefiles with associated dates of activity from June 2015 through June 2017. This includes any management that occurred anywhere on the forest including: prescribed burns, roller-chopping, mowing, thinning, timber stand improvement, wildfires, etc. The exact date and location that the management occurred is also necessary. All avian and vegetation data from 2013-2016, field protocols, and shapefile locations of survey points were added to Dropbox for accessibility (contact sbrown@ttrs.org for Dropbox share invite).

AVIAN SUMMARY

During three visits to survey points on Osceola National Forest, Bachman's Sparrows were detected at 19 of the 78 points and Brown-headed Nuthatches were detected at 33 of the 78 points within a 200m radius. Northern Bobwhite counts continue to increase from 2015 to 2016 although they remain relatively low as they were detected at only 6 of the 78 points within a 200m radius. Focal species' naïve density estimates, which are uncorrected for detection probability are provided in Figure 1. Bachman's sparrow naïve density per 10 ha based upon unadjusted counts indicated a decrease in Bachman's sparrow density on OSNF from 2015 to 2016 (Figure 1). Northern Bobwhite naïve density per 10 ha indicated a nearly two-fold increase between 2015 and 2016. Brown-headed nuthatch naïve density per 10 ha indicated an increase between 2015 and 2016. Because naïve density estimates do not always depict accurate densities or trends, analysis of counts adjusting for detection will be provided in our future report.

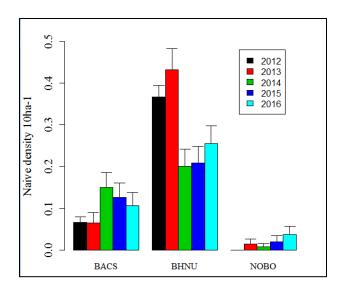


Figure 1. Bachman's sparrow, brown-headed nuthatch and Northern bobwhite naïve density per 10ha from 2012-2016 on Osceola National Forest, Olustee, FL. Error bars are +1 SE.

ECOLOGICAL CONDITION TIER SUMMARY

Our assessment is that the continued increase in management actions through the CFLRP have improved the ecological condition of the OSNF. Using the Ecological Condition Model tier index (1-5) our observational data indicated average tier index declined (i.e., improved ecological condition) from 2012 to 2016 (Figure 2). While tier is a simple ocular assessment of habitat, we are confident that more intensive analysis of vegetation data will further illustrate the improved ecological condition of the forest.

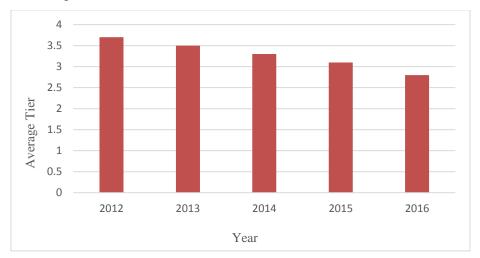


Figure 2. Average Ecological Condition Model tier index from 2012-2016 on Osceola National Forest, Olustee, FL.

FIELD SEASON PREPARATION

To prepare for the upcoming 2017 field season, all gear was checked for repairs and all broken/unusable gear was replaced. The iPad Canvas App for our vegetation data entry was edited and revised to fix glitches. Temporary housing for technicians was found and leases were signed. Job advertisements for the vegetation and avian technician positions (3) were posted on Texas A & M job board. Three candidates for the 2017 field season were hired after interviews and reference checks.