## **Ruffed Grouse Drumming Survey Summary 2017**

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Ruffed grouse were monitored by counting drumming males at 739 listening stations distributed across 51 routes on the Pisgah and Nantahala National Forests. These National Forests are distributed throughout the mountain region and represent a great deal of potential grouse habitat and hunting opportunity (Fig. 1). NCWRC field staff spent approximately 887 hours and drove 9,005 miles clearing roads and conducting the surveys in 2017. Each of the 51 routes consisted of 3 to 27 listening stations. Observers counted drumming males within a 4-minute listening period at each station between March 29<sup>th</sup> and April 15<sup>th</sup>, 2017. Additional information collected but not summarized in this report includes number of drums, grouse sighted, turkeys sighted, and turkey gobbles.

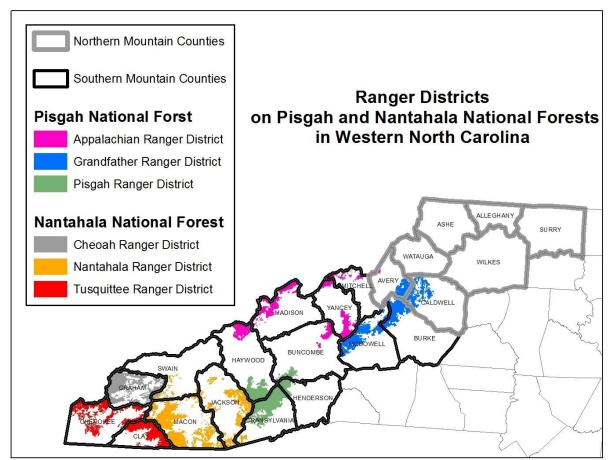


Figure 1. Ranger Districts on Pisgah and Nantahala National Forests in Western North Carolina.

Grouse drummed at 85 of the 739 stations (11.5%). A total of 92 drumming males was detected. On average, each grouse drummed 1.3 times within the 4-minute listening period. As seen in Figure 2, the Cheoah ranger district had both the highest abundance (0.22 grouse per station) and station occupancy rate (21%). As in most years of the survey, relatively few grouse were encountered on the Grandfather ranger district. This is not surprising given that district's relatively low elevation and lack of suitable habitat.

After accounting for variations between ranger districts, significant drumming count fluctuations are sometimes seen between years (Fig 3). On average, 0.13 grouse were heard at each station during this year's survey. This is comparable to numbers of grouse heard in many previous years of the survey, though the overall trend is slightly declining and shows considerable annual variation. Trends for individual ranger districts are presented in Figures 4 - 9.

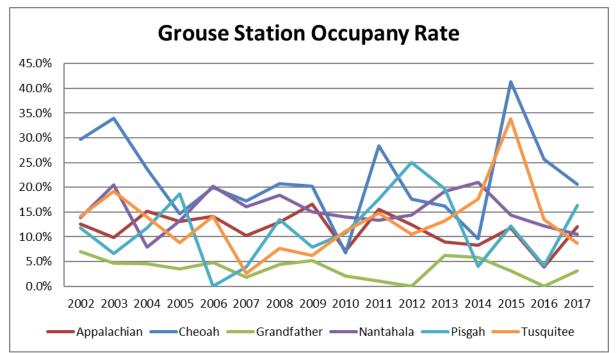


Figure 2. Average Number of Grouse Heard Drumming Per Station By USFS Ranger District, North Carolina Grouse Drumming Survey, 2002-2017.

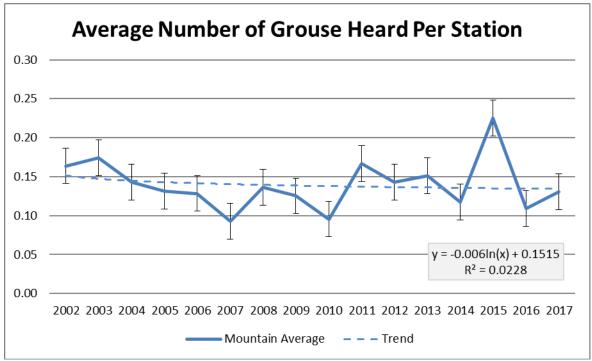


Figure 3. Average Number of Grouse Heard Drumming Per Station, North Carolina Grouse Drumming Survey, 2002-2017.

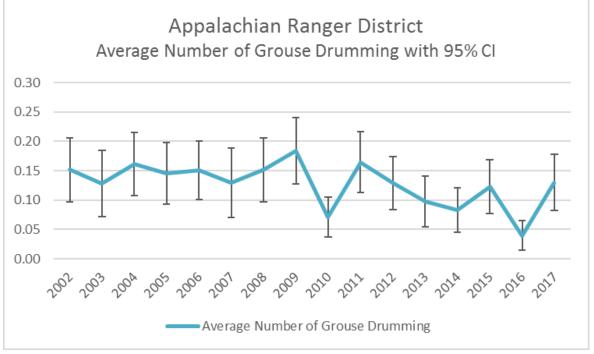


Figure 4. Average Number of Grouse Heard Drumming Per Station on Appalachian Ranger District of Pisgah National Forest, North Carolina Grouse Drumming Survey, 2002-2017.

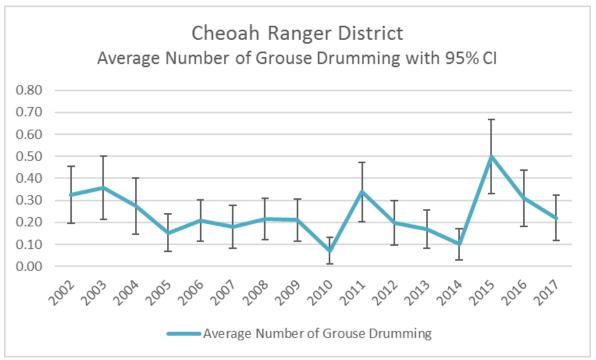


Figure 5. Average Number of Grouse Heard Drumming Per Station on Cheoah Ranger District of Nantahala National Forest, North Carolina Grouse Drumming Survey, 2002-2017.

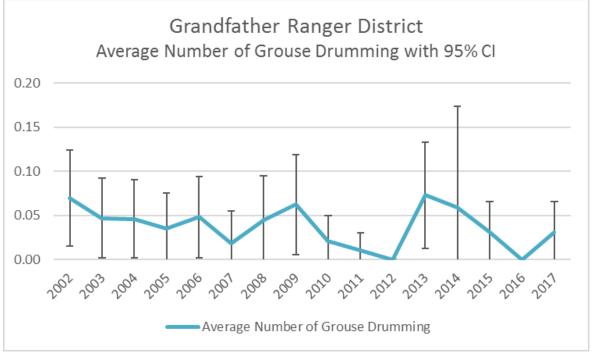


Figure 6. Average Number of Grouse Heard Drumming Per Station on Grandfather Ranger District of Pisgah National Forest, North Carolina Grouse Drumming Survey, 2002-2017.

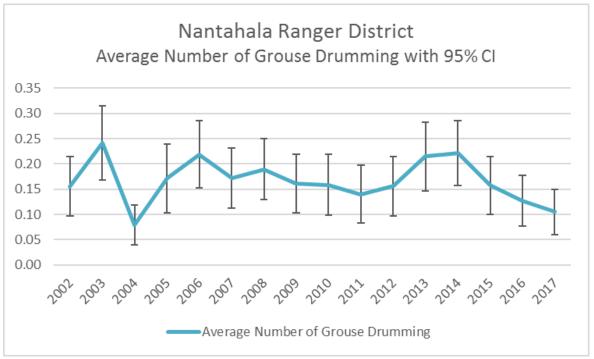


Figure 7. Average Number of Grouse Heard Drumming Per Station on Nantahala Ranger District of Nantahala National Forest, North Carolina Grouse Drumming Survey, 2002-2017.

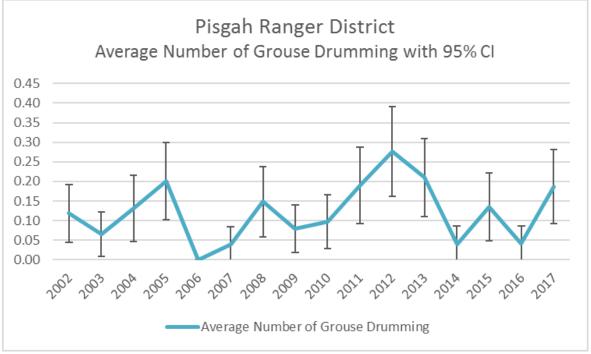


Figure 8. Average Number of Grouse Heard Drumming Per Station on Pisgah Ranger District of Pisgah National Forest, North Carolina Grouse Drumming Survey, 2002-2017.

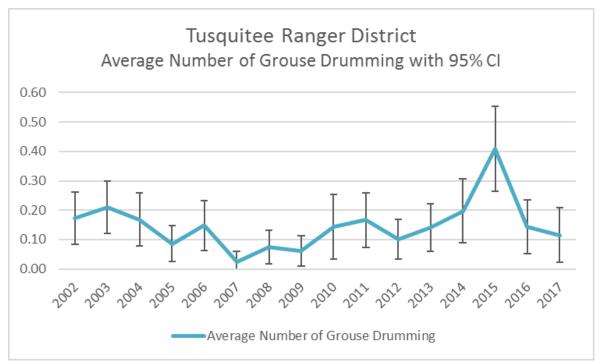


Figure 9. Average Number of Grouse Heard Drumming Per Station on Tusquitee Ranger District of Nantahala National Forest, North Carolina Grouse Drumming Survey, 2002-2017.