Forest Research

Feral Wild Boar and Deer in the Forest of Dean

Population surveys in the public Forest Estate 2022

Robin Gill

The Research Agency of the Forestry Commission

Introduction and Methods

The population of feral boar in the Forest of Dean has been monitored annually since 2013 to help inform the public as well as to support the management programme.

This report provides results up to and including the latest survey carried out during March 2022. Covid restrictions prevented completion of a survey in 2020.

The current survey adopted the same methods as previous surveys and covered almost exactly the same area (80.0 km^2) as the previous survey in 2021 (80.9 Km^2)[1]. The survey was based on observations made using thermal imaging and population estimates obtained using distance sampling[2]. This approach has proved effective in previous studies for estimating the abundance of wild ungulates in forested landscapes which offer limited visibility[3-6]. Observations were made at night between the 8th and 17th of March 2022.

Results

Wild Boar

In total, 76 sounders were detected during the survey with an average of 2.86 boar per sounder, a decrease from 2021 when 109 sounders were found with an average of 4.23 per sounder.

The estimated number of feral boar was 441 with a 95% confidence interval ranging from 290 to 671, indicating a significant decline from 2021 when the number estimated was 937 (see figure 1).

The number of recorded casualties (RTA's) has also decreased to 33, (down from 71 in 2021 and 81 in 2020). This figure includes both the number of recorded road casualties as well as animals found dead in the forest. The number of RTA's continues to show a close correlation with estimated population size (see figures 2 and 3).

Deer

The estimated total number of deer was 1347 (95% conf. interval 1120 -1620), a similar figure to the estimate obtained in 2021 (1362). The proportion of Fallow deer was 62%; 21% were muntjac and 17% were roe deer reflecting a continuing relative decrease in fallow deer at the expense of the other two species (see figure 4).

Figure 1. Trends in numbers of wild boar culled, killed on roads (RTA's) and population density 2008-202**2**. Figures are numbers per km^2.

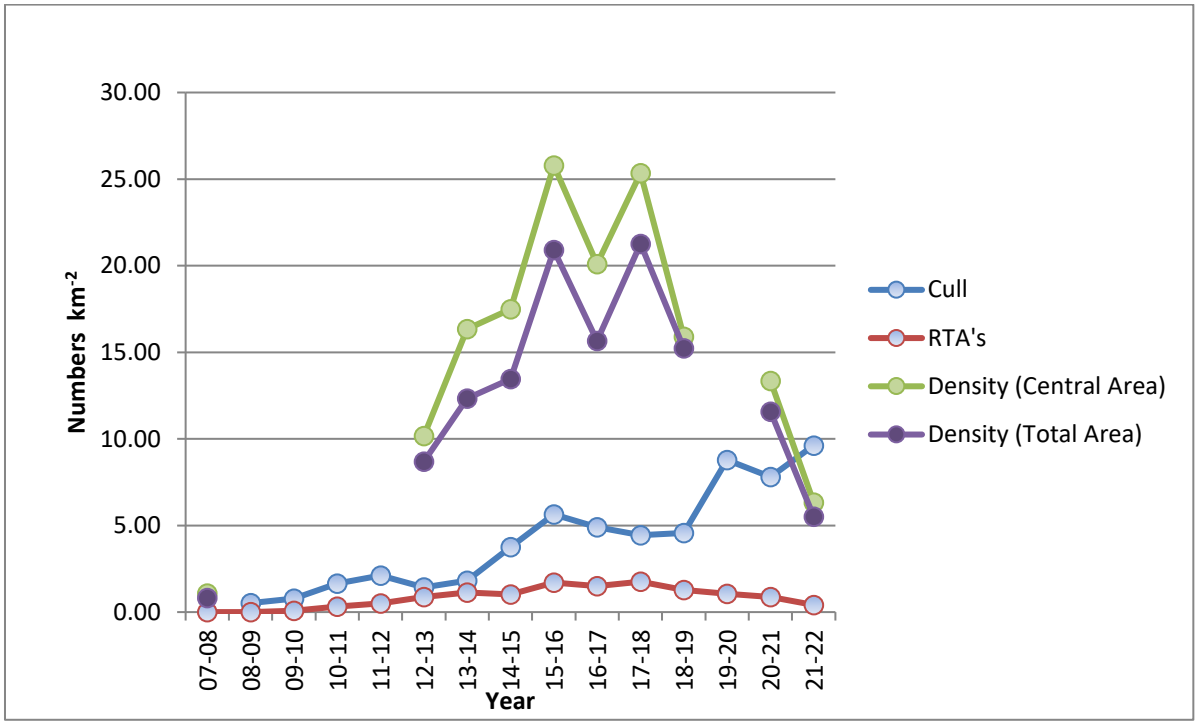


Figure 2. Trends in the number of feral boar culled and the number of recorded traffic casualties and found carcases (RTA's).

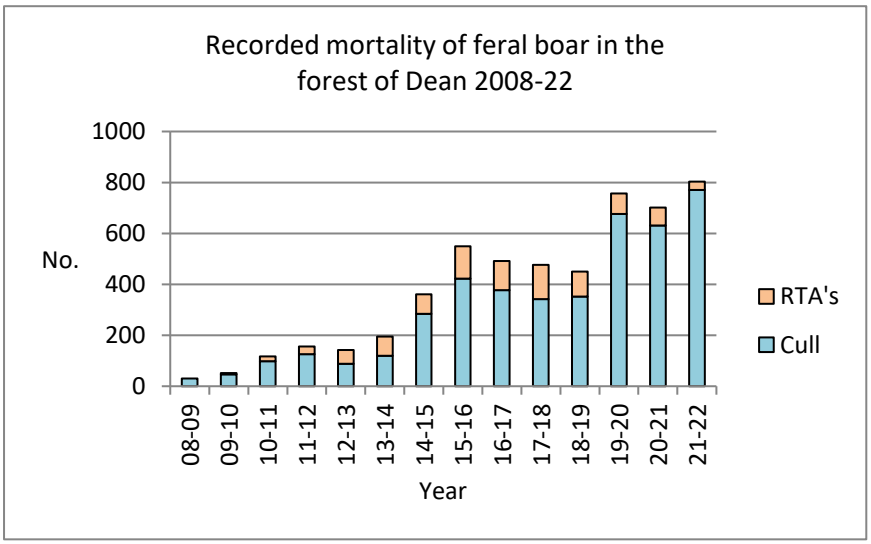


Figure 3. Numbers of feral boar RTAs recorded each year (vertical axis) in relation to estimated population density (Both variables expressed as numbers per km^2 of forest area; $r = 0.982$; $p < 0.01$).

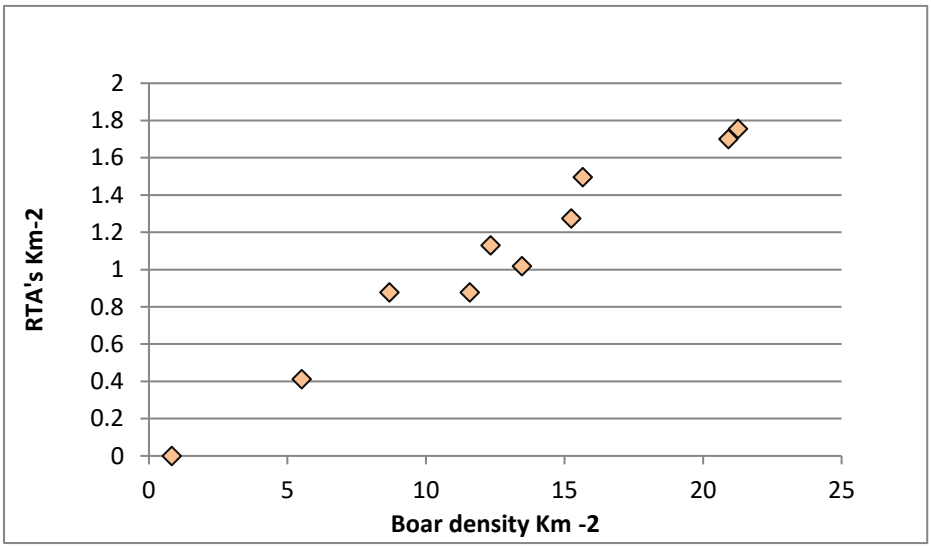
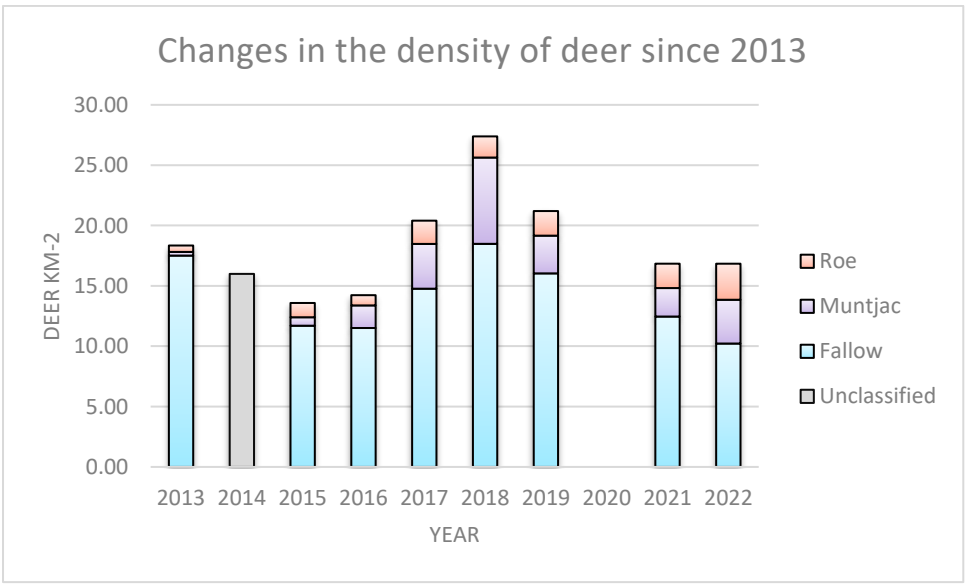


Figure 4. Changes in the density and composition of the deer population in the forest of Dean between 2013 and 2022.



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