

TRENDS IN WILD UNGULATE POPULATIONS

FFH 10

Wild ungulates (red deer, roe deer, wild boar) are a fundamental component of our forest and rural environments: influence on the dynamics of forest vegetation (e.g. dispersion of seeds), tourism, etc. But in Wallonia as in neighbouring countries, a continuous increase of their populations has been observed for several decades, with important repercussions on the environment (impact on biodiversity, obstacles to natural regeneration, damage, etc.)¹.

A recent reversal of the trend?

Since 1980, the population growth of ungulates has been continuous: according to population estimates carried out in the spring before births (based on the number of animals killed in hunting or found dead during the previous year's hunting season), red deer and roe deer populations doubled between 1980 and 2005 and between 1980 and 2010 respectively, and wild boar populations more than tripled between 1980 and 2012. However, the trend may be reversing: a decrease in populations has been observed since these peaks, from 3%/year between 2005 and 2016 for roe deer, from 6%/year between 2010 and 2016 for red deer and from 6%/year between 2012 and 2016 for wild boar. This apparent downward trend is encouraging for achieving a balance between forest and ungulates. However, these values should be taken with caution due to the uncertainties associated with counting methods². In addition, the data from 2013 to 2016 are only partial. Another indicator, the nocturnal abundance index, calculated for red deer since 2010, makes it possible to establish demographic trends. It does not provide an absolute density but a kilometer abundance index³. It remained stable between 2013 and 2016 in slightly more than 62.5% of (sectors of) Hunting Councils (HC), it decreased in 20% of them and it increased in 17.5% of them⁴.

Cumulative effect of natural and anthropogenic factors

The increase in populations in recent decades can be explained by a combination of factors that reduce the effect of natural selection: an absence of natural predators, mild

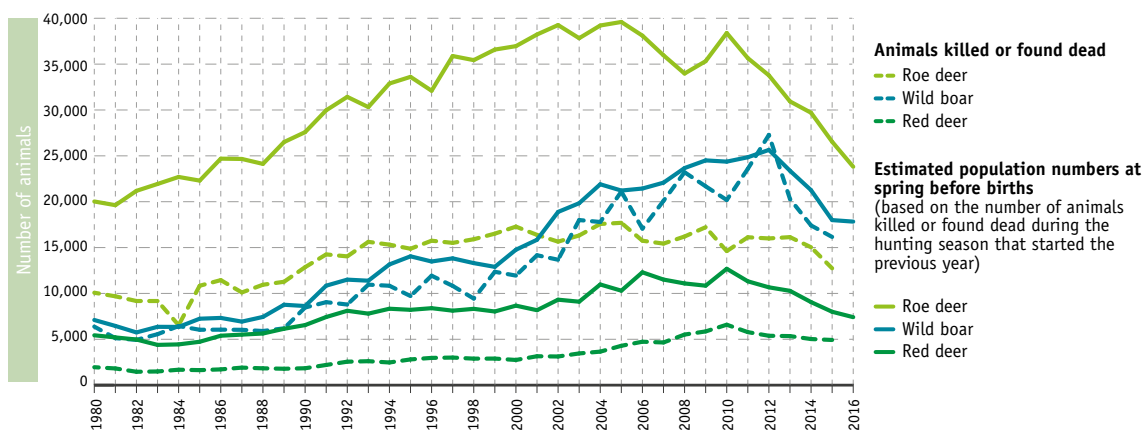
winter periods or high availability of natural resources (fruits, buds, young shoots, etc.) or artificial resources (feeding¹, various crops, etc.). In addition, the high prices of hunting rentals often disadvantage local hunters in favour of external hunters who are less present on the ground, and prompt some hunting managers to keep animal densities high, by sparing breeding females, to satisfy and retain their shareholders.

Measures implemented to return to a balance

Since 1989, shooting plans for red deer have been issued annually by the Nature and Forests Department to the HCs. Between 2011 and 2016, the number of antlerless red deer hunted remained below the total of the imposed minimums⁴. Roe deer and wild boar have not been the subject of shooting plans, but hunting periods for these species have been gradually lengthened from 2004⁵. Other measures were programmed in 2012 under the Strategy to reduce populations of big game (*Stratégie de réduction des populations de grand gibier*) (some have since been cancelled)¹. Finally, in 2016, a network of enclosure-exlosures⁶ was installed in public forests (850 systems) and private forests (around 100) to carry out vegetation surveys. In the long term, this will make it possible to better assess the balance between forest and ungulates.

[¹] → FFH 11 | [²] The estimate of the density is the least biased for red deer. | [³] Number of red deer observed per kilometre travelled on the basis of a set of permanent itineraries | [⁴] SPW - DG03 - DEMNA & DNF, 2017 | [⁵] For wild boar, tracking and hunting from a hide has been open all year round since 2006. | [⁶] <http://biodiversite.wallonie.be>

Fig. FFH 10-1 Estimate of wild ungulate populations in Wallonia*



* From 2013 to 2016, missing or partial data for some cantonnments