Joaquín Vicente et al, 2007

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Risk factors associated with the prevalence of tuberculosis-like lesions in fenced wild boar

Abstract -
In recent decades the management of large game mammals has become increasingly intensive in south central Spain (SCS), resulting in complex epidemiological scenarios for disease maintenance, and has probably impeded schemes to eradicate tuberculosis (TB) in domestic livestock. We conducted an analysis of risk factors which investigated associations between the pattern of tuberculosis-like lesions (TBL) in wild boar (
Sus scrofa
) and red deer (
Cervus elaphus
) across 19 hunting estates from SCS and an extensive set of variables related to game management, land use and habitat structure. The aggregation of wild boar at artificial watering sites was significantly associated with an increasing risk of detecting TBL in both species, which probably relates to enhanced opportunities for transmission. Aggregation of wild boar at feeding sites was also associated with increased risks of TBL in red deer. Hardwood
Quercus
spp. forest availability was marginally associated with an increased risk of TB in both species, whereas scrubland cover was associated with a reduced individual risk of TBL in the wild boar. It is concluded that management practices that encourage the aggregation of hosts, and some characteristics of Mediterranean habitats could increase the frequency and probability of both direct and indirect transmission of TB. These findings are of concern for both veterinary and public health authorities, and reveal tuberculosis itself as a potential limiting factor for the development and sustainability of such intensive game management systems in Spanish Mediterranean habitats.

Key words:

Mycobacterium tuberculosis
complex / red deer / risk factors / tuberculosis / wild boar

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