

Sarcoptic mange infection in red foxes (*Vulpes vulpes*) in Belgium.

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Eight cases of sarcoptic mange in foxes were reported during summer 2014 (n=3) and winter 2015 (n= 5) in Belgium. All animals came from the same restricted forest zones near urbanized areas and some of them were discovered in private gardens (Forest District of Thuin, Hainaut, Belgium). Three of them were found dead, the others were shot for sanitary reasons. At necropsy, all of them presented large areas of alopecia and extensive skin lesions such as hyperkeratosis and suppurative lacerations. Animals presented poor body condition and some of them were severely emaciated (absence of visceral fat). Mange has profound influences on population since, if untreated, death follows in four to six months. In the present cases, cutaneous scrapings and histopathological examinations were systematically performed. Numerous parasites were observed in skin scrapings and marked dermo-epidermatitis with several parasites was observed in histopathological sections. These results suggest an outbreak of sarcoptic mange in red foxes in a limited area of the country. This is a first record for the country. Furthermore, investigations on lungs and digestive tracts performed on 3 of these foxes revealed they were also infected by parasites transmissible to pets and/or humans: *Angiostrongylus vasorum* was observed in the respiratory tract of one fox whereas *Toxocara canis*, *Uncinaria stenocephala*, *Taenia* spp. and *Echinococcus multilocularis* worms were detected in the digestive tract.

In conclusion, urban foxes represent a source of parasites of public health and veterinary importance and foxes surveillance should be strengthened in these areas.