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Ecological impacts of an invasive species in Wallonia, the raccoon (Procyon lotor)

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Raccoons are distributed throughout North America and recently introduced in Europe since 1927 in Germany. Feral populations have been increasingly observed in Europe since then. The first time a raccoon was found in Wallonia was in 1986. From 1986 to 2001, the raccoon was scarcely observed. Between 2001 and 2006, the number of records clearly increased. Nowadays, the raccoon is distributed all over south Wallonia, especially in Ardennes. Although potential impacts of the raccoon on native European biodiversity are poorly documented, its predation activity may affect aquatic molluscs (pearl mussel), amphibians and ground nesting birds (hazel grouse).

The aim of this study is to provide more information about raccoon's diet and about its parasites burden. Raccoon's samples were collected along the roads (road accidents) and forests or shot by hunters and rangers. Each animal was identified, weighed, measured and stored in a freezer. To determine the diet, stomachs were dissected. We analyzed the different items contained in those organs using a reference collection and various specific books. We also determined the relative occurrence frequency in each stomach. Faeces and gut contents were analyzed in order to estimate parasites prevalence, especially Baylisascaris procyonis, a nematode affecting human's health.

Partial results show raccoons mostly eat invertebrates (myriapods, insects and crustaceans), plant foods, such as berries, wheat, corn (on the crops or more often in silos) and vertebrates (eggshells, amphibians, fishes, reptiles and more rarely small mammals). Raccoons are suspected to have high environmental detrimental impacts, affecting European biodiversity by being competitors of native species and disturbing ecological niches, by their high adaptation capacity and their omnivorous behavior. This study, which is still in progress, will provide more information and details about raccoon's lifestyle and its parasites burden in Wallonia.