

DISEASES IN INVASIVE SPECIES: INVESTIGATIONS IN FREE-RANGING
RACCOONS (*PROCYON LOTOR*) IN GERMANY

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The North American raccoon is an introduced species in Europe. Germany is the core area for this population with two main groups settled in the country: One in the center and the other in the northeastern region. Although both population groups are increasing and expanding to neighboring countries, investigations on diseases of these animals are lacking. Considering the role raccoons play regarding infectious disease ecology in North America, we aim to investigate the occurrence of diseases in raccoons in Germany. Carcasses of raccoons (n=156) from a National park in Northeastern Germany (n=108) and Berlin's metropolitan area (n=48) were collected and necropsied. Fur and intestines were examined for presence of parasites. Organ samples were collected for histopathology as well as analyses for selected viral and bacterial agents. Activation of the lymphoid tissue of the spleen and interstitial pneumonia were the most common histopathologic findings. In ten animals the trematode *Alaria alata* was identified and three cases of *Sarcoptes scabiei* infection were reported. Additionally, in December 2012, a canine distemper outbreak started amongst wild carnivores from Germany including Berlin. Tissue samples of 37 infected raccoons were collected for further diagnosis and strain characterization. The occurrence of these infectious diseases within the populations suggests that raccoons closely interact with other wildlife species and that the non-native raccoons can expand the host range for pathogenic organisms. Moreover, the comparison between urban and rural raccoon populations can help to understand the importance of this introduced species in Germany.

