

Original article

# Seroprevalence of *Neospora caninum* in free living and farmed red deer (*Cervus elaphus*) in Poland

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## Abstract

Serum samples from 47 free living and 106 farmed red deer (*Cervus elaphus*) from the Mazurian Lake District in north-east Poland were investigated for the presence of antibodies to *Neospora caninum*. A modified *Neospora* iscom-ELISA was used for initial screening. All sera with optical density (OD) values exceeding 0.400 absorbance units were further investigated by Western blot analysis. Eighteen sera were positive in both tests. Six of these were from free living and 12 from farmed animals giving prevalence of 13 and 11%, respectively.

This is the first report of *N. caninum* infection in farmed and free-living red deer living in the same region where neosporosis was confirmed in cattle and the first evidence of exposure to the parasite in red deer in Poland.

**Key words:** red deer (*Cervus elaphus*), *Neospora caninum*, iscom-ELISA, Western blot, Poland