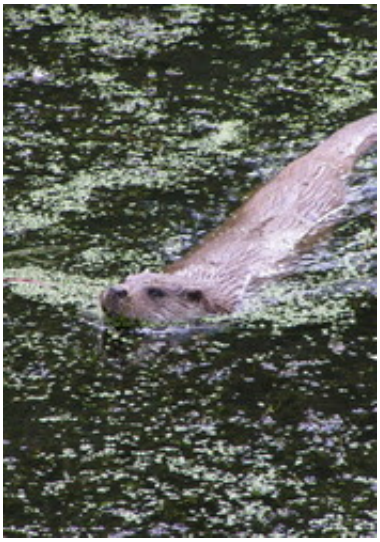
Study reveals disease-causing parasites in dead otters

June 18 2013



Research undertaken by the Cardiff University Otter Project has revealed a number of disease-causing parasites in the bodies of dead otters. The findings were revealed at the BBC Summer of Wildlife event held at the National Museum of Wales.

Spread by cat faeces and present in 39.5% of otters examined was Toxoplasma gondii - the most insidious of the parasites. Findings showed that the infection was prevalent across many areas of the UK, with significantly more cases arising in the East. How this affects otters is yet to be determined – further investigation in this area is planned -

but in humans the parasite can lead to miscarriage and retinal abnormalities.

Parasitic flatworms were found in 18.3% of otters – these could be divided into two species: Pseudamphistomum truncatum and Metorchis albidus. The former flatworm is native to Eastern Europe and infects a range of wild carnivores; both are associated with pathological damage to the otter gall bladder. Dissections of affected otters revealed gall bladders to be inflamed or thickened. Both parasites can infect any fish eating mammal – including humans.

A species of tick called Ixodes hexagonus was found in nearly a quarter of otters (24.3%). Up to 122 ticks per otter were identified. More ticks were found on younger otters than adults. Scientists reason that this is likely due to younger otters tending to spend more time in the holt (an otter den). As otters are common carriers of this tick, this may have implications for vector-borne diseases, which can infect humans and their companion animals.

Speaking of these findings, Dr Elizabeth Chadwick said:

"The project's research on the parasites that infect otters has revealed previously unknown aspects of their distribution and ecology. Continued work is necessary to help us to better understand their transmission pathways and the impacts that they have on otters, other wildlife and human health. "

Members of the public were also be encouraged to learn about how otters communicate by the smell of their spraint. By analysing otter scent, researchers have uncovered the complex nature of scent communication in otters, and demonstrated that scent differs between individuals, with reproductive cycle, with country of origin, and with genotype.

Cardiff University's Project Splatter was also be unveiled at the event, where people were encouraged to become a 'Splatter Spotter'. The project aims to reduce wildlife road casualties in the UK using data supplied by the public. Project Splatter collects UK wildlife road casualty data via Twitter and Facebook with a view to identify roadkill hotspots. By collating data across the country, researchers can identify roadkill 'hotspots' for future mitigation projects and help preserve our wildlife.

Provided by Cardiff University