

Parasites from domestic pets affecting wildlife world wide

January 8 2018



A cat flea. Credit: Stephen Doggett

Fleas from domestic pets are infesting native wildlife and feral animals in all continents except Antarctica, a new study reveals.

The University of Queensland-led global study found domestic pet fleas feeding on [species](#) as diverse as Australian brushtail possums, coyotes, golden jackals and Iberian lynx.

UQ School of Veterinary Science researcher Dr. Nicholas Clark said the potential for urban-[wildlife](#) parasite exchange represented a considerable

threat, especially since fleas could transmit harmful bacteria including those causing bubonic plague and typhus.

The study showed that so-called cat fleas – the main flea species found on domestic dogs and cats— were infesting more than 130 wildlife species around the world, representing nearly 20 per cent of all [mammal species](#) sampled.

"Dog fleas are less widespread and to date they've been reported on 31 mammal species," he said.

"Both flea species are commonly reported infesting free-roaming (feral) cats and [dogs](#) or introduced mammals such as red foxes, black rats and brown rats."

The breakdown of barriers between wildlife and [invasive species](#) had increased the transfer of fleas between domestic [animals](#) and wildlife.

Dr. Clark said this was a threat to One Health – a concept from the Centres of Disease Control and Prevention that recognises that the health of people is linked to the health of animals and the environment, and requires a global effort to address.

University of Sydney researcher Associate Professor Jan Šlapeta said that despite the extensive risk for flea spill-over between domestic and wild animals, there was a lack of knowledge on cat and dog flea distributions among wildlife.

"This study is the first to uncover the magnitude and geographic spread of the wildlife occurrences of domestic dog and cat fleas," he said.

"We have provided tangible evidence that invasive species contribute to the spread of the most common parasites from domestic pets."

Dr. Clark said that reducing contact between wild species and domestic animals would be crucial to manage invasive flea infestations in wild animals.

More information: Nicholas J. Clark et al. Parasite spread at the domestic animal - wildlife interface: anthropogenic habitat use, phylogeny and body mass drive risk of cat and dog flea (*Ctenocephalides* spp.) infestation in wild mammals, *Parasites & Vectors* (2018). [DOI: 10.1186/s13071-017-2564-z](https://doi.org/10.1186/s13071-017-2564-z)

Provided by University of Queensland

Citation: Parasites from domestic pets affecting wildlife world wide (2018, January 8) retrieved 9 April 2024 from <https://phys.org/news/2018-01-parasites-domestic-pets-affecting-wildlife.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--