

Don't panic: The animal's guide to hitchhiking

October 20 2011

New research suggests that hitch-hiking, once believed to be the exclusive domain of beat poets and wanderers, is in fact an activity that daring members of the animal kingdom engage in. And it may lead to a serious ecological problem.

Dr David Chapple, Dr Bob Wong and Sarah Simmonds from Monash University's School of Biological Sciences, have published two complementary studies on <u>invasive species</u>, which are taking the opportunity to jump on board freight and cargo transports to explore, and settle, new lands.

The researchers found that particular <u>personality traits</u> may equip animals to become successful, if unintentional, invaders.

Dr Chapple said the process of moving to new territory was difficult and only naturally bold species were able to do this successfully.

"Not only do animals need to be in the right place at the right time in order to be inadvertently transported by humans, but they also need to be able to survive the often harsh and lengthy journey inside consignments of freight.

"When they arrive at the new destination, the stowaways have to contend with being strangers in a strange land and successfully adapt to new environments. In the face of these challenges, the new colonists must also thrive and reproduce before spreading out across the landscape," Dr



Chapple said.

Dr Wong said it was the ability to overcome these significant hurdles that makes successful invaders a formidable threat to <u>native wildlife</u>.

"The incidence and impact of unintentional invasion is increasing with globalisation - as we encroach further and further into the natural environment, animals have had more opportunities to jump on board our various transports. Given this increase, and the potential impact on biodiversity, it's important that we understand this phenomenon better.

"Personality and behavioural traits are an important and, to date, unexplored component of the success of these species' invasions," Dr Wong said.

Ms Simmonds said the researchers examined whether personality differences between two species of garden skinks in eastern Australia could explain why one of the species has managed to spread overseas and the other has not.

"Our research found that the successful skink invader was bolder and tended to be more exploratory, thereby increasing its chances of entering cargo ships.

"Once on board, the lizards' tendency to hide probably helps them evade biosecurity checks and reach their destination undetected," Ms Simmonds said.

The researchers emphasised that factors besides behavioural and personality traits, including diet and the suitability of the new habitat, affect the success of biological invasion; however, these factors did not tell the whole story.



The research has been published in *Trends in Ecology and Evolution* and in *Ecology and Evolution*.

Provided by Monash University

Citation: Don't panic: The animal's guide to hitchhiking (2011, October 20) retrieved 18 April 2024 from https://phys.org/news/2011-10-dont-panic-animal-hitchhiking.html

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.