

## **Tourists risk animal bites by misreading wild monkey facial expressions as 'kisses'**

## May 31 2017

Wildlife tourists frequently fail to identify aggressive and distressed emotional states in wild monkeys - mistaking animals' warnings of aggression for 'smiles' and 'kisses' - and this can lead to welfare problems for primates and risk of injury for people, according to new research published today.

A new study by a team of behavioural ecologists and psychologists examined whether educational tools intended to help tourists recognise different <u>facial expressions</u> in monkeys - such as 2D images and information signs like those found in zoos or animal parks - were effective in reducing harm to humans and distress to primates in destinations where wild macaques freely interact with humans.

The researchers found that tourists made significant mistakes in interpreting macaques' emotions - such as believing a monkey was 'smiling' or 'blowing them kisses' when they were in fact displaying aggression - despite exposure to pictures designed to demonstrate what the <u>animals</u>' facial expressions mean.

This level of misunderstanding could lead to increased risk of injury to humans and have a negative impact on the welfare on the animals, particularly in places where wild macaques interact with people, the study concluded.

The research, led by researchers from the University of Lincoln, UK, suggests videos or supervised visits led by expert guides would be better



placed to educate tourists about how best to read emotions in animals in zoos and wildlife parks, along with advice on maintaining safe distance from the animals.

Dr Laëtitia Maréchal, from the School of Psychology at the University of Lincoln said: "There is a growing interest in wildlife tourism, and in particular primate tourism. People travel to encounter wild animals, many of them attempting to closely interact with monkeys, even though this is often prohibited.

"However, serious concerns have been raised related to the safety of the tourists interacting with wild animals. Indeed, recent reports estimate that monkey bites are the second cause of injury by animals after dogs in South East Asia, and bites are one of the main vectors of disease transmission between humans and animals.

"Our findings indicate that people who are inexperienced in macaque behaviour have difficulties in recognising monkey's emotions, which can lead to dangerous situations where they think the monkeys are happy but instead they are threatening them.

"Education, guided visits, and keeping a safe distance with animals could be implemented as measures to reduce such issues, improving both animal welfare and <u>tourist</u> experience. Video might be a particularly effective tool to help people recognise animal emotion based on their facial expressions, behaviour or vocalisations, reducing any misunderstanding."

Researchers quizzed three groups of participants - those with little to no experience of Barbary macaques, those with exposure to 2D images of different monkey faces, and those who had worked with primates for at least two months - on what emotions were being portrayed in a series of images showing aggressive, distressed, friendly and neutral faces.



Macaques present aggressive or threatening stances through raised eyebrows, staring, and opening the mouth to show the teeth, or having the lips protrude to form a round mouth. When the mouth is widely open and the animal is yawning, or the corners of the lips are fully retracted revealing the upper and lower teeth, it signals that they are distressed or submissive.

Macaques will have their mouths half open and the lips slightly protruding with a chewing movement and clicking or smacking of the tongue and lips to indicate they are friendly; and neutral faces feature a closed mouth and relaxed face.

They found that all participants, regardless of their levels of experience, made some mistakes confusing aggressive faces with non-threating faces such as neutral or friendly faces. Experts made just under seven per cent of mistakes, participants who were exposed to 2D images of monkey faces made just over 20 per cent of mistakes, and participants who had never or rarely encountered live <u>monkeys</u> made nearly 40 per cent of mistakes.

Dr Maréchal added: "When on site in Morocco, I often heard tourists in saying that the monkey seemed to blow them a kiss when they actually displayed a threatening face.

"The tourists often responded by imitating the monkey's facial expression, which generally ended by either aggression by the monkey towards the tourists or the monkey leaving the interaction.

"If we can educate people, and prevent monkey bites, we can not only reduce the risk of disease infection, we can improve on the tourism experience. These findings are highly relevant to the general public and any professional in wildlife tourism, where <u>wild animals</u> can interact with the general public."



The study is published in the journal *PeerJ* today (1st June 2017).

More information: *PeerJ* (2017). <u>DOI: 10.7717/peerj.3413</u>

## Provided by University of Lincoln

Citation: Tourists risk animal bites by misreading wild monkey facial expressions as 'kisses' (2017, May 31) retrieved 16 July 2024 from <u>https://phys.org/news/2017-05-tourists-animal-misreading-wild-monkey.html</u>

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.