## State of the Apes

## Disease, Health and Ape Conservation

In memory of Steve Ross, who was a part of every volume in the *State of the Apes* series and whose death is a profound loss to the captive ape community. He will be dearly missed.

As the Anthropocene unfolds, the impact of humanity on all ecosystems on the planet is becoming more visible and better understood. Deforestation, encroachment into natural habitat and other human activities are driving an increase in the frequency of interactions between people and wildlife, including viruses, parasites and bacteria. One consequence is a heightened risk of disease transmission, with serious implications for biodiversity protection and human health. Indeed, infectious disease is often listed among the principal threats to ape conservation, along with habitat loss and hunting, which can also expose apes to health risks. In captive settings such as sanctuaries and zoos, apes face similar health risks from increased human contact, as well as geriatric and psychological disorders. Spillover of wildlife pathogens into sanctuaries can also occur.

This volume of *State of the Apes* brings together original research and analysis with topical case studies and emerging best practice to further the ape conservation agenda around disease and health. It provides an overview of relevant disease and health issues and explores factors such as the ethics of intervening in and managing ape health; the impact of research and tourism on apes; the One Health approach; and disaster management and the protection of apes. It shows how the welfare of apes is interrelated with that of the people who share their habitats, while also demonstrating the benefits of integrating ape conservation in health, socioeconomic activities (such as in the extractive industries, industrial agriculture and infrastructure development), and regulatory policy and practice at all levels, from the local to the international.

This volume is available as an open access eBook via Cambridge Core and at www.stateoftheapes.com.

### **State of the Apes**

Series editors

Alison White Arcus Foundation

Steve Unwin University of Birmingham then

Wildlife Health Australia

Annette Lanjouw Arcus Foundation Katy Scholfield Arcus Foundation

Helga Rainer Arcus Foundation at time of writing

The world's primates are among the most endangered of all tropical species. All great ape species – gorilla, chimpanzee, bonobo and orangutan – are classified as either Endangered or Critically Endangered. Furthermore, nearly all gibbon species are threatened with extinction. Whilst linkages between ape conservation and economic development, ethics and wider environmental processes have been acknowledged, more needs to be done to integrate biodiversity conservation within broader economic, social and environmental communities if those connections are to be fully realized and addressed.

Intended for a broad range of policy-makers, industry experts and decision-makers, academics, researchers and NGOs, the *State of the Apes* series looks at the threats to these animals and their habitats within the broader context of economic and community development. Each publication presents a different theme, providing an overview of how these factors interrelate and affect the current and future status of apes, with robust statistics, welfare indicators, official and various other reports providing an objective and rigorous analysis of relevant issues.

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Disease, Health and Ape Conservation







Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org
Information on this title:
www.cambridge.org/9781316513071
DOI: 10.1017/9781009071727

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When citing this work, please include a reference to the DOI 10.1017/9781009071727.

First published 2023

Printed in the United Kingdom by TJ Books Limited, Padstow Cornwall

A catalogue record for this publication is available from the British Library

ISBN 978-1-316-51307-1 Hardback ISBN 978-1-009-06998-4 Paperback

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Alison White

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Rick Jones, StudioExile

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Jillian Luff, MAPgrafix

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