

Investigation and Management of Disease in Wild Animals

Investigation and Management of Disease in Wild Animals

Gary A. Wobeser

*Western College of Veterinary Medicine
University of Saskatchewan
Saskatoon, Canada*

Springer Science+Business Media, LLC

Library of Congress Cataloging-in-Publication Data

Wobeser, Gary A.

Investigation and management of disease in wild animals / Gary A. Wobeser.

p. cm.

Includes bibliographical references (p.) and index.

1. Wildlife diseases. I. Title.

SF996.4.W63 1994

639.9'6--dc20

93-49048

CIP

10 9 8 7 6 5 4 3 2

ISBN 978-1-4757-5611-1 ISBN 978-1-4757-5609-8 (eBook)

DOI 10.1007/978-1-4757-5609-8

©1994 Springer Science+Business Media New York

Originally published by Plenum Press, New York in 1994

Softcover reprint of the hardcover 1st edition 1994

All rights reserved

No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording, or otherwise, without written permission from the Publisher

CONTENTS

Section I: Introduction

- 1. Disease and Epizootiology - Basic Principles3
- 2. Special Problems in Working with Free-living Animals13

Section II: Diseases Investigation

- 3. Identifying and Defining a Disease25
- 4. Collecting Population Data39
- 5. Defining Environmental Variables59
- 6. Formulating and Testing Hypotheses73
- 7. Samples, Sampling and Sample Collection87
- 8. Records and Record Keeping103
- 9. Investigation of Disease Outbreaks and Chronic or Inapparent Disease ...117

Section III: Disease Management

- 10. Disease Management - General Principles131
- 11. Management of the Causative Agent/factor or Its Vector139
- 12. Disease Management through Manipulation of the Host Population153
- 13. Disease Management through Treatment and Immunization169
- 14. Disease Management through Environmental Modification185
- 15. Disease Management through Influencing Human Activities195

16. Emergency and Integrated Management Programs209

17. Assessing the Effectiveness of a Disease Management Program221

Appendix: Scientific Names of Birds and Mammals235

Section IV

References.....239

Index261