

Camera Traps In Animal Ecology

[DOWNLOAD HERE](#)

1;Preface;6 2;Acknowledgments;10 3;About the Editors;12 4;Contents;14 5;Chapter 1: Introduction;16 5.1;1.1 Evolution of Camera Trapping;16 5.2;1.2 Book Organization and Chapter Summaries;18 5.3;References;23 6;Chapter 2: A History of Camera Trapping;24 6.1;2.1 Introduction;24 6.2;2.2 Early Developments;25 6.3;2.3 The Modern Era;27 6.4;2.4 Forest Carnivores;30 6.5;2.5 Expanding Applications;31 6.6;References;37 7;Chapter 3: Evaluating Types and Features of Camera Traps in Ecological Studies: A Guide for Researchers;42 7.1;3.1 Introduction;42 7.2;3.2 Benefits and Problems with Camera Traps in the Field: A Review;43 7.3;3.3 Types of Camera Traps;44 7.3.1;3.3.1 Non-triggered Camera Systems;46 7.3.2;3.3.2 Triggered Camera Traps;46 7.4;3.4 Camera Trap Features and Trade-offs Among Them;47 7.4.1;3.4.1 System Components;48 7.4.2;3.4.2 Housing;48 7.4.3;3.4.3 Software and Programming;50 7.4.4;3.4.4 Power;51 7.4.5;3.4.5 Camera Types;52 7.4.6;3.4.6 Camera and Lighting Options;52 7.5;3.5 Discussion;54 7.5.1;3.5.1 Working with Camera Traps in the Field;54 7.5.2;3.5.2 Emerging Technology;54 7.6;References;56 8;Chapter 4: Science, Conservation, and Camera Traps;59 8.1;4.1 Introduction;59 8.2;4.2 Science;60 8.2.1;4.2.1 Approaches to Science;60 8.2.2;4.2.2 Science and Camera Traps;62 8.3;4.3 Management/Conservation;63 8.3.1;4.3.1 Structured Decision-Making: Introduction;63 8.3.2;4.3.2 Structured Decision-Making: Components;64 8.3.3;4.3.3 Sources of Uncertainty;65 8.3.4;4.3.4 Adaptive Resource Management;66 8.3.5;4.3.5 Management, Conservation, and Camera Trapping;67 8.4;4.4 Discussion;67 8.5;References;68 9;Chapter 5: Behavior and Activity Patterns;71 9.1;5.1 Introduction;71 9.2;5.2 Traditional Techniques of Studying Animal Behavior and Activity;71 9.3;5.3 Advantages and Implications for Using Camera Traps;72 9.4;5.4 Case Studies;73 9.4.1;5.4.1 Circadian Rhythms;73 9.4.2;5.4.2 Nest Predation;75 9.4.3;5.4.3 Foraging;75 9.4.4;5.4.4 Niche Partitioning and Social Systems;77 9.4.5;5.4.5 Habitat and Corridor Usage;77 9.4.6;5.4.6 Refugia and Reproduction;78 9.4.7;5.4.7 Statistical Analyses;78 9.5;5.5 Future Applications for Camera Traps in Behavior Studies;79 9.6;References;79 10;Chapter 6: Abundance, Density and Relative Abundance: A Conceptual Framework;84 10.1;6.1 Introduction;84 10.2;6.2 Estimation of Abundance;85 10.2.1;Closed Capture Recapture Models;88 10.2.2;Open Capture Recapture Models;92

10.2.3;Mixed Time Scale Model;94 10.3;Estimation of Density;95 10.4;Relative Abundance Indices;101
10.5;References;106 11;Chapter 7: Estimating Tiger Abundance from Camera Trap Data: Field Surveys
and Analytical Issues;110 11.1;7.1 Introduction;110 11.1.1;7.1.1 Camera Trap Studies of Tigers: Natural
History and Science;110 11.1.2;7.1.2 Tiger Ecology in Relation to Abundance Estimation Issues;111
11.2;7.2 Equipment and Field Practices;112 11.2.1;7.2.1 Camera Traps and Related Equipment;112
11.2.2;7.2.2 Choice of Trap Sites;114 11.2.3;7.2.3 Accurately Recording Data;114 11.3;7.3 Survey
Design Considerations;116 11.3.1;7.3.1 Season, Survey Duration and Population Closure;116
11.3.2;7.3.2 Spacing and Placement of Traps;117 11.3.3;7.3.3 Adequate Coverage of the Sampled
Area;119 11.4;7.4 Data Analysis: Issues and Examples;122 11.4.1;7.4.1 The Approach to Analysis of
Tiger Photo-Capture Data;122 11.4.2;7.4.2 Testing for Population Closure;123 11.4.3;7.4.3 Model
Selection and Estimation of Tiger Abundance;123 11.4.4;7.4.4 Estimating the Sampled Area Size and
Tiger Densities;125 11.5;7.5 Camera Trapping Tigers: Some General Comments;126
11.6;References;127 12;Chapter 8: Abundance/Density Case Study: Jaguars in the Americas;131
12.1;Introduction;131 12.2;Study Sites;132 12.3;Survey Design and Data Analysis;135 12.4;Results;140
12.5;Discussion;148 12.6;References;151 13;Chapter 9 Estimation of Demographic Parameters in a Tiger
Population from Long-term Camera Trap Data;157 13 EAN/ISBN : 9784431994954 Publisher(s):
Springer, Berlin Discussed keywords: Tierkologie Format: ePub/PDF Author(s): O'Connell, Allan F. -
Nichols, James D. - Karanth, K. Ullas

[DOWNLOAD HERE](#)

Similar manuals:

[Camera Traps In Animal Ecology](#)