

## Contents

**List of Contributors** *xiii*

**Acknowledgments** *xv*

### **Part I Introduction to Animal Behavior and Handling**

#### **Concepts** *1*

#### **1 Introduction** *3*

*Meghan E. Herron*

Why We Study Behavior *3*

How We Study Behavior *4*

What Comes Next *5*

#### **2 The Process of Domestication** *7*

*Carlos A. Driscoll*

Introduction *7*

Animal Domestication *8*

Dogs *14*

Cats *15*

Farm Animals *17*

Horses *19*

Entrained Beasts *22*

Domestication in Fast-Forward: The Farm-Fox Experiment *22*

References *24*

#### **3 Social Behavior** *31*

*R. Julia Kilgour, Traci Shreyer, and Candace Croney*

Introduction *31*

Evolutionary and Environmental Constraints on Social Behavior *32*

The Costs and Benefits of Group Living *32*

Types of Social Groupings *36*

Conflict in Social Groups *39*

Social Structures and Dominance Hierarchies *44*

Affiliative Behaviors *47*

Parent-Offspring Relationships *50*

Conclusion *54*

References *55*

**4 Sensory and Perception 65***Shana Gilbert-Gregory*

Introduction 65

Vision 66

Audition 73

Olfaction 77

Gustation (Taste) 81

Conclusion 82

References 82

**5 Animal Learning 91***Lisa Radosta*

Introduction 91

Factors Affecting Learning 91

Types of Learning 96

Choosing the Right Training Method 101

Techniques for Changing Behavior 103

Reinforcement Schedules 104

Conclusion 107

References 107

**6 The Development of Behavior and the Shaping of the Human–Animal Bond: Dogs 111***Marie Hopfensperger and Jacquelyn Jacobs*

Introduction 111

Developmental Stages in Dogs 111

Veterinary Care 119

Behavior Support for Clients 121

Managing Typical Puppy Behaviors 123

Conclusion 128

References 128

**7 The Development of Behavior and the Shaping of the Human–Animal Bond: Cats 135***Kersti Seksel*

Introduction 135

Developmental Periods 136

Setting Up for Success 143

Veterinary Experiences 150

Conclusion 151

References 151

**8 The Development of Behavior and the Shaping of the Human–Animal Bond: Horses 153***Katherine A. Houpt and Sharon Madere*

Introduction 153

The Neonatal Period 153

Mare–Foal Communication 156

Early Training 157

Play 158

Sick Foals 159

Foal Rejection	160
The Orphan Foal	160
Weaning	160
Predicting Adult Behavior	162
Additional Problem Prevention Tips	162
References	162

## **9 Bovine Communication, Handling, and Restraint 165**

*Kathryn L. Proudfoot*

Introduction	165
How Cattle Perceive Their World	165
How Cattle Communicate Their Emotions	167
Impact of Human Handlers on Cattle Affective States	170
Cattle Handling and Restraint	172
Cattle Handling in the Real World	175
Conclusion	176
References	176

## **10 Equine Communication, Handling, and Restraint 181**

*Jeannine Berger and Kathryn Holcomb*

Introduction	181
Body Language and Emotional States	181
Tools, Handling Skills, and Procedures	186
Medications to Aide in Handling	200
References	203

## **11 Canine and Feline Communication, Restraint, and Handling 205**

*Meghan E. Herron, Allison Shull, Traci Shreyer, and Susan Barrett*

Introduction	206
Step 1: Assess the Environment	207
Step 2: Assess the Patient's Comfort Level and Indicators of Intent	214
Step 3: Assess Yourself	215
Step 4: Make a Handling Plan	220
Conclusion	238
References	238

## **Part II Clinical Concepts in Animal Behavior 241**

### **12 Addressing Canine and Feline Behavior Problems in Clinical Practice: The Art of Behavior Triage 243**

*Traci Shreyer, Susan Barrett, and Allison Shull*

Introduction	244
The Importance of Communication	245
The Five Steps of Behavior Triage	246
Setting Up the Behavior-focused Visit	262
Other Important Certifying Organizations	265
References	265

### **13 Feline Elimination Disorders 269**

*Amy L. Pike*

Introduction 269

Normal Elimination Behavior 269

History Taking for Elimination Disorders 272

Ruling Out Medical Disorders 275

Behavior Diagnoses for Undesirable Elimination 276

Approach to Treatment 278

Conclusion 284

References 284

### **14 Feline Aggression 289**

*Carlo Siracusa*

Introduction 289

Neurophysiology of Aggression 289

Aggression As a Normal Social Behavior of Cats 290

When Cat Aggression Becomes a Behavior Problem 292

Physical Disease and Aggression 293

Classification of Cat Aggression 294

General Guidelines for the Treatment of Aggression 296

Using Psychoactive Medication to Treat Affective Aggression 299

Cat Aggression Directed to People 300

Aggression Between Cats 303

References 306

### **15 Canine Aggression 311**

*Gabrielle Carter*

Introduction 311

The Body Language of Aggression 313

Factors that Influence Aggression 315

Making an Aggression Diagnosis 320

General Principles of Treating Aggression Cases in Dogs 326

Prognosis 331

Considerations for Rehoming/Relinquishing/Euthanasia 333

Conclusion 334

References 334

### **16 Separation-Related Disorders in Dogs 337**

*Niwako Ogata*

Introduction 337

Definitions and Variations on Separation-Related Disorders 338

Risk Factors 340

Common Signs 340

Making a Definitive Diagnosis 343

Approach to Treatment 345

Concluding Remarks 348

References 349

**17 Equine Aggression 351***Jeannine Berger and Kathy Holcomb*

Introduction 351

Categories of Aggression 353

Diagnosis and Treatment Summary 361

What to Avoid When Addressing Aggression 363

Medication 363

References 364

Further Reading 365

**18 Repetitive Behaviors in Companion Animals 367***Melissa Bain*

Introduction 367

Definitions and Motivating Factors 367

Specific Repetitive Behaviors 370

Physiological Differentials 373

Gathering a History 375

Treatment 376

Conclusion 380

References 380

**19 Repetitive and Other Abnormal Behaviors in Wild Animals Under Human Care 385***Mark Flint and Randall E. Junge*

Introduction 385

Behavior and Other Domains as a Welfare Indicator 386

Common Abnormal Repetitive Behaviors 388

Applying What We have Learned in Zoos and Wildlife Sanctuaries 391

Prevention, Management, and Treatment 395

Conclusion 399

References 399

**20 Repetitive and Other Abnormal Behaviors in Livestock and Horses 403***Emily Miller-Cushon and Carissa Wickens*

Introduction 403

Behavioral Indicators of Sickness 403

Behavioral Indicators of Pain 404

Cognitive Approaches to Understanding Emotional States 407

Importance of Meeting Behavioral Needs 407

Common Abnormal Behaviors in Horses, Pigs, Cattle, and Poultry 408

Medical Considerations 410

Prevention, Management, and Treatment Concepts 412

References 416

**21 Approach to Psychopharmacology in Companion Animals 419***M. Leanne Lilly*

Introduction 419

Daily Medications 420

Specific Medications 422

Selecting a Daily Medication	425
Event Medications	426
Polytherapy	430
Administering Medications	431
Weaning	432
References	434

## **22 Chemical Restraint and Sedation in Small Animals 443**

*M. Leanne Lilly*

Introduction	443
Medications and Routes	444
Protocols, Combinations, and Decision-Making	450
Safely Getting Injections into Your Patients	451
Achieving and Maintaining Sedation	451
Record Keeping and Communication	455
References	457

## **23 Behavior Considerations for Aging Dogs and Cats 461**

*Margaret O'Brian*

Introduction	461
Sensory Changes	461
Brain Changes	463
Cognitive Dysfunction Syndrome	464
References	469

## **Appendix A: Books to Keep in Practice – Clinical Textbook Recommendations 471**

## **Appendix B: Teaching Your Cat to Like the Carrier 473**

*Lisa Radosta*

## **Glossary 475**

## **Index 483**