Leslie Sinn, DVM, CPDT-KA
Behavior Resident in Private Practice Training

Behavior
Behavior Solutions for Pets
&
Professor
Veterinary Technology
Northern Virginia Community College
Normal Avian Behavior
Key Points

• Species vs. breeds
• Tame vs. domesticated
• Prey animals kept in captivity
• Selection primarily for appearance not behavior (color morphs)

Introduction

- Prey animals
- Highly social flock behavior
- Complex interactions
- Foragers

How this affects care

• Retain natural instincts and behaviors
• Little scientific study of behavior and health
• Captive exotic species very subject to stress
• Natural behaviors not suited to captivity

Examples

• Easily stressed by normal, daily activities
• Hide illness and medical conditions
• Unwanted natural behaviors including biting, screaming, calling, chewing, aggression, etc.
• Maladaptive behaviors

Social Behavior

Flocks
Flocks

- Complex groups
- Decrease predation
- Improve reproductive success
- Help with foraging (cooperation)
- Protect territory

http://antpitta.com/images/photos/parrots/gallery_parrots1.htm
How flocks work

• Travel to different sites to search for food
• Improved efficiency
• Greater safety for flock members
• Size of flock varies with species and food source
• Cyclic pattern feeding vs. roosting
Red-fronted Parakeet (*Cyanoramphus novaezelandiae*)

Photograph by Ron Hoff

Find more wallpapers at www.parrots.org/downloads

(c) 2007 World Parrot Trust. All rights reserved

http://www.parrots.org/images/get_involved/wallpaper/800/wallpaper_rfp-800.jpg
Cyclical Activity

- Active with sunrise
- Vocalize, groom, forage
- May separate into smaller feeding flocks
- Decreased activity with heat
- As light decreases may gather into larger roosting flocks
- Evening flock gathers for social interaction and predator avoidance
Time Allocation

- Grooming 20-60%
- Foraging 40-60%
- Vocalizing 2-5%
- Social interactions 10-40%
Hierarchy

- Overt aggression increases risk of injury and increases likelihood of injury
- Hierarchy established
- Supports predictable interactions
- Access to resources such as food, nesting sites, roosting spots, and mates
- Important in flocks but not investigated between species

Hardy 1965; Seibert & Crowell Davis 2001
Observed behaviors

Assertive
• Turn threat
• Beak gape
• Peck threat
• Beak spar
• Peck
• Wing flapping
• Siddle approach
• Slow advance
• Rushing

Submissive
• Crouch
• Fluff feathers
• Wag heads
• Lift a foot
• Avoidance

*COCKATIELS
Understanding Parrot Body Language
Diet

- Opportunistic foragers
- Fruits, nuts, seeds
- High-energy requirements
- Insects? Carrion?
- Specialized diets (Lories and Lorikeets)
- Seasonal variation including agricultural crops
- Scarlet macaws-43 different plant species
- Recent study: 17 species consumed 102 different plant species (Gilardi 2012)
Reproduction

- Ritualized courtship behaviors
- Display
- Vocalization including songs
- Most common mating strategy monogamy or pair formation
- Species specific strategies include territorial, colonial or cooperative systems
Pair Bonding

• Attachment between female and male for the purpose of reproduction
• Preferential affiliative behaviors such as preening, allofeeding and touching
• Often exclude others from interactions
• Can be aggressive in defense of mate
• Monogamy but may be serial
Blue-fronted Amazon (Amazona aestiva)
Photograph by Bowles/Erickson | www.amazonia.us

Find more wallpapers at www.parrots.org/downloads
(c) 2007 World Parrot Trust. All rights reserved

http://www.parrots.org/images/get_involved/wallpaper/800/wallpaper_bf_mg-800.jpg
Nesting

- Most use tree cavities
- Most have individual nests
- Defend the nest area
- Monk parrots - communal nest
Parental care

• Altricial
• Cooperative parenting
• Social interaction needed for vocal learning and social development
• Different parental strategies—communal nursery area (Meyer’s Parrots)
• Juvenile foraging flocks
• Play including object play
Vocal communication

- Calls and songs
- Mimicry-vocal plasticity
- Learn while in the nest
- Contact calls-loud and carry long distances
- Dialects-Amazon parrots
Macaulay Library

http://macaulaylibrary.org/
Birds and people have similar genes for learning and producing vocalizations

http://www.scienceupdate.com/2012/07/parrot/
http://atheistuniverse.net/group/avm/forum/topics/alex-the-parrot-s-last-mathematical-prowess

Non-vocal Communication

- Signals and displays
- Plumage and color
- Tetrachromic vision—can see into the ultraviolet range
- UV cones in retina (5 different kinds)
- Can see fluorescence—documented in 104 species
- In parakeets yellow reflects as blue fluorescence
Many behaviors still not understood

http://the-sieve.com/tag/world-parrot-trust/

GEOPHAGY
Leslie Sinn, DVM
lsinndvm@gmail.com
540-454-9081

Behavior
P.O. Box 116
Hamilton, VA 20159

Join me on Facebook:
Behavior-Leslie Sinn, DVM
References

- *Behavior of Exotic Pets* edited by Valarie Tynes
- *Exotic Pet Behavior* written and edited by Teresa Bradley Bays, Teresa Lightfoot and Jorg Mayer
- *Manual of Parrot Behavior* edited by Andrew Luescher
- *The Alex Studies: Cognitive and Communicative Abilities of African Grey Parrots* by Irene Pepperberg
- “Further Evidence of addition and numerical competency by a Grey Parrot” Pepperberg, Irene; Animal Cognition, July 2012, Volume 15, Issue 4, 711-717
- “Gender effects on aggression, dominance rank, and affiliative behaviors in a flock of captive adult cockatiels (Nymphicus hollandicus)” Seibert, Lynne; Applied Animal Behaviour Science, 71 (2001) 155-170
Avian Care Webinar Series

aspcapро.org/webinars

Recorded:

• Overview of Avian Care for Shelters
• Bird Housing, Enrichment, and Care

Upcoming:

Managing Behavior Issues in Pet Birds
Tuesday, March 5, 3-4pm ET