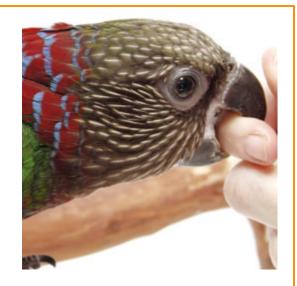


# Leslie Sinn, DVM,CPDT-KA Behavior Resident in Private Practice Training

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Behavior Solutions for Pets
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#### **Normal Avian Behavior**



## **Key Points**

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



http://www.birdwallpapers.com/two-parrots-wallpaper.html



#### 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



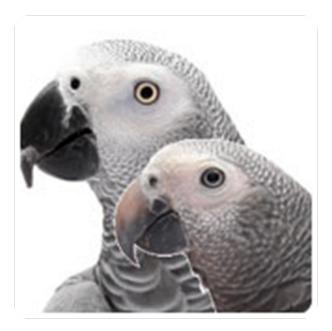






#### **Examples**

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



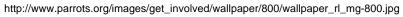


#### **Social Behavior**

**Flocks** 









#### **Flocks**

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







#### 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





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





http://www.parrots.org/images/get\_involved/wallpaper/800/wallpaper\_mit\_crw-800.jpg



#### **Time Allocation**

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

Bradley Bays page 53



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#### Hierarchy

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

Hardy 1965; Seibert & Crowell Davis 2001





http://www.birdtricks.com/blog/tag/body-language/



#### **Observed behaviors**

#### **Assertive**

- Turn threat
- Beak gape
- Peck threat
- Beak spar
- Peck
- Wing flapping
- Sidle approach
- Slow advance
- Rushing

#### **Submissive**

- Crouch
- Fluff feathers
- Wag heads
- Lift a foot
- Avoidance

\*COCKATIELS





http://www.dummies.com/how-to/content/reading-your-parrots-body-language.html





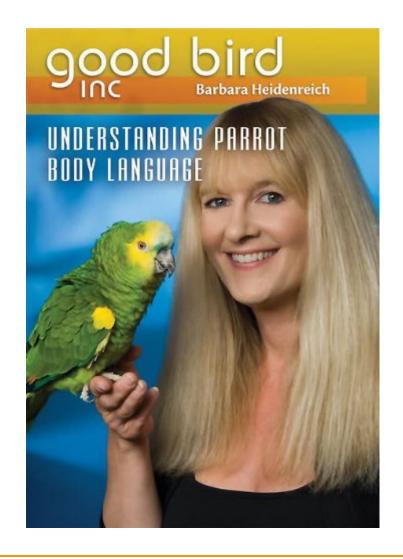
http://www.sheknows.com/pets-and-animals/articles/810137/common-eye-disorders-in-birds



http://drewbmac.wordpress.com/2011/04/05/blue-and-yellow-macaw/



# Understanding Parrot Body Language

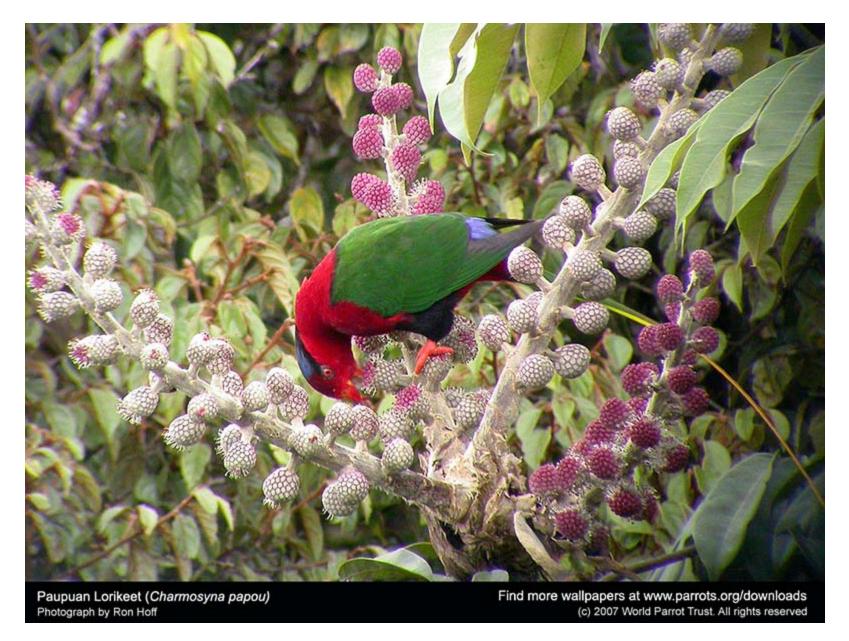




#### **Diet**

- 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)





http://www.parrots.org/images/get\_involved/wallpaper/800/wallpaper\_pl-800.jpg



#### 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





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





http://ibc.lynxeds.com/photo/rose-ringed-parakeet-psittacula-krameri/couple-rose-ringed-parakeet-close-nesting-cavity



#### 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





http://www.grey-parrot.com/gallery



#### **Vocal communication**

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





http://www.scienceupdate.com/2012/07/parrot/



## **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

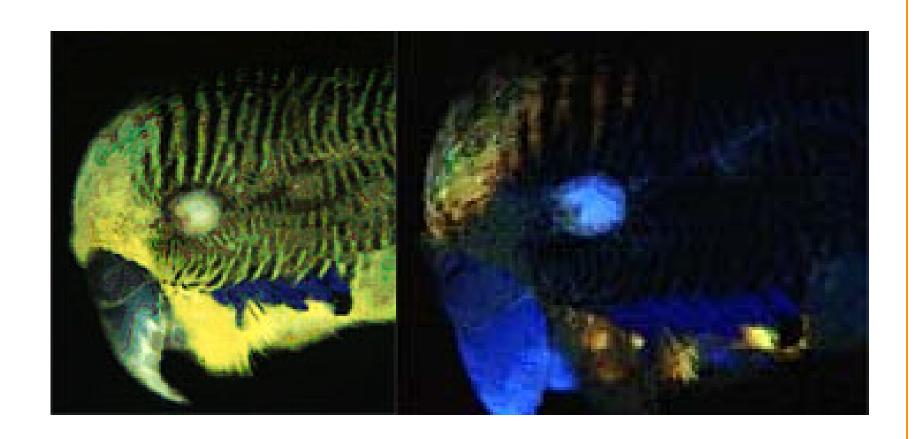
http://link.springer.com/article/10.1007%2Fs10071-012-0470-5



#### **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 in104 species
- In parakeets yellow reflects as blue fluorescence





http://web.qbi.uq.edu.au/ecovis/birds.htm



# Many behaviors still not understood



http://the-sieve.com/tag/worldparrot-trust/

**GEOPHAGY** 





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#### References

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- 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 affliative behaviors in a flock of captive adult cockatiels (Nymphicus hollandicus)" Seibert, Lynne; Applied Animal Behaviour Science, 71 (2001) 155-170

#### **Avian Care Webinar Series**

aspcapro.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

