

## **Understanding Parrot Behavior, Naturally**

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### ***Abstract:***

Parrots may be the most misunderstood of all animals kept as pets today. Undesirable parrot behavior is the main cause of people giving up their valued pets and has led to the creation of parrot sanctuaries. Much of the problem behaviors we see with parrots today are directly connected to instincts, but are often misinterpreted with anthropomorphic approaches. Understanding the natural history and innate behaviors of parrots will help parrot owners deal with typical problem behaviors such as screaming, biting, and bonding as well as dispel the myth of height dominance.

**Key words:** parrot, parrot behavior, parrot sanctuaries, anthropomorphism, positive reinforcement, learned behavior, instinct, aggression, screaming, biting, height dominance, body language, pair bonding

### **Introduction**

Parrots are intelligent, entertaining and beautiful creatures. They may also be the most misunderstood and frustrating of all animals commonly kept as pets today. At the heart of the problem is the challenge associated with understanding their complex behavior. Books, videos, and lectures on parrot behavior are popping up everywhere, feeding eager, naive minds. Pet parrot behavior is fast becoming the boom sector of the pet industry for the new millennium.

Parrot behavior is largely responsible for another fast growing area in the companion parrot world: parrot sanctuaries. These are the places where people can donate, often for a fee, their treasured pet that they can no longer stand to live with. The lucky parrots find their way here as many other parrots end up being sold back to pet shops or in newspapers like used cars. Most often the undesirable behavior of the bird is at the root of his love-hate relationship.

This paper will offer some hopefully new perspectives on challenging pet bird behavior issues and the relationships we forge with these incredible creatures. These perspectives are different from many of the mainstream philosophies taught today. They are based on personal experiences studying wild parrot behavior, discussions with many experts who study wild parrot behavior for a living, and the training of free-flight parrots to perform natural behaviors for educational shows. These experiences have led to the development of the following behavior interpretation and modification strategies for some of the most common companion bird problems.

### **Screaming**

Some experts have expressed some pretty interesting views about why parrots scream and consequently some pretty interesting ideas for solutions to the problem. One “behaviorist” blamed a painting of Abraham Lincoln looking directly at the bird for its screaming problem. She said, “He was a good man but not a handsome man.” She also scolded the owner of the bird for wearing a back T-shirt with paintings of parrots on it, which scared the parrot into screaming because all the bird saw was dead parrots! These are fairly wild explanations for something that, when you look at natural parrot behavior, is very easily understood.

Screaming is one of the most natural things a parrot does in the wild and, likewise, one of the most natural things a parrot does in captivity. At sunup each morning the forests are alive with sounds of parrots claiming their territory and expressing their well being with various contact calls and other vocalizations. In the wild, parrots scream as a play behavior, to define territory, and to communicate many messages to other birds in their community. This form of screaming is innate, driven by instincts, and is one of the reasons that parrots make such challenging pets for many people. Unfortunately, it is difficult to eliminate instinctive behavior in any organism.

Screaming can easily become a learned behavior in a captive parrot. Behavior is a product of it's consequence, and if a parrot's screaming brings its owner rushing into the room and showing the bird attention, it is very possible the bird will soon learn to scream for attention.

So, how do you stop a parrot from screaming? That question is similar to how do you stop a dog from playing, or how do you stop a child from laughing? However, parrots are more independent than both dogs and children and are more difficult to control with negative interactions, which, unfortunately, are the most common approaches used to modify behavior with both dogs and children. Few people realize the power of positive reinforcement and usually resort to the less effective, but easier to use, negative approaches. Many people have tried covering the cage of a screaming parrot or squirting the bird with a squirt bottle when it screams. These methods generally produce only marginal results and rarely stop the screaming behavior.

If a parrot's screaming behavior is learned, or, if the bird vocalizes for a desired response such as getting attention or other positive reinforcers, it is possible that simply ignoring it may eliminate the screaming behavior. A behavior that goes unreinforced will eventually extinguish itself. However, screaming in the form of contact calls in the morning and evening is more hard-wired and is therefore more difficult to modify.

One skilled parrot trainer taught her Blue-fronted Amazon (*Amazona aestiva*) to modify its morning and evening contact calls by ignoring the bird's natural loud call and only responding to a soft whistle that the bird had previously learned from her. The owner went to the extent of freezing when the bird screamed so it could not even hear her moving in another room. When the bird finally made the soft whistle, the owner would whistle in response and the bird's contact whistle was reinforced. Over time, the bird finally replaced its natural loud contact call with the much more acceptable soft whistle.

## **Biting**

“Biting is just part of having a parrot as a pet.” Does that sound familiar? It should. It is the most common attitude associated with companion parrot ownership. However, this author feels the opposite is true. A parrot owner should strive to never get bit. That is a pretty bold statement for such a common problem. The fact is that biting is not a natural behavior for parrots. They don't bite each other in the wild, at least not hard enough to make another parrot bleed.

In the past 15 years or so, this author has interviewed many parrot field researchers (personal communications: Brice, February, 1994, Munn, July 1998, Gilardi, February, 1999, English, November, 2000, May, May 15, 2001) about biting and dominance. With a combined total of over 35 years of field research, only two of these researchers have ever seen or heard of a parrot biting another parrot hard enough to make it bleed. Both of these incidences were associated with nest holes. One incident involved two birds fighting over a nest cavity and the other involved a parrot attacking a young bird in the nest in an attempt to take over the nest.

Parrots very rarely bite each other in the wild. However, they often show aggression to protect resources like territory, mates, desirable perches, food items, etc. These interactions are generally limited to body language like the raising of the head feathers or a subtle look of the eye. Sometimes the aggression escalates to vocal displays such as growling or even more overt body language like thrusting the beak forward in a jousting fashion. In the wild, this body language is usually enough to deter an intruding bird and avoid negative physical contact with the resource holder.

So, why do parrots bite in captivity? First, if you put an animal in an unnatural environment you can expect some unnatural behavior. Second, all behavior is a product of instinct or experience. A bite from a parrot falls into one of these two categories. Some biting incidents are innate and some are learned. Many parrots have been forced to bite out of fear, or self-defense. Humans tend to be aggressive in the manner in which they approach and pick up their parrots. This bold, aggressive action may encourage a bird to bite out of fear. Most parrots do not have the option to fly away like their wild counterparts and are sometimes pushed to the point that biting is the only way they know to defend themselves or express their displeasure.

Before biting, most captive parrots display various body language and vocalizations to express their feelings, just like wild parrots. However, few people ever notice the slight glance of an eye or the almost imperceptible tightening of the feathers on the parrot's head that holds so much information about its thoughts and feelings. After all, human communication is generally very bold and obvious, and has evolved to put much more emphasis on verbal communication, than body language. Many, if not most, parrot owners are oblivious to their parrot's subtle attempts at communication. They fail to notice the slick feathers, or quick head movements, as the nervous bird instinctively looks for an escape path, a common avoidance behavior. Often, the first signs of nervousness most parrot owners notice are the obvious escape attempts or the growls and other vocal displays of discomfort and fear. By this time, they have already missed the myriad of signals that have preceded this most obvious show of discomfort and have pushed the bird to the brink of aggression.

Another important point to consider is most of the information available to parrot owners today does not encourage sensitivity. In fact, some of the most common teachings today encourage dominance and aggression when working with a parrot. It is common to hear and read things like "make sure he knows you're the boss," and "don't let him get away with that," etc. The popular trend is to dominate pet parrots rather than build partnerships. This aggressive approach only encourages more biting incidents as birds are forced to bite to express themselves to their confident but insensitive owners.

Parrots bite for the following main reasons:

**Play;** It is a hard wired, or instinctive behavior for parrots to investigate a person's finger or other body part with their strong beak. This is the way nature provides information to the young bird about its environment. It is the responsibility of the owner to tell the bird just how hard it is allowed to "investigate" fingers and other objects. A loud and sharp "NO" is similar in effect to the vocalization that an adult parrot would use in the wild to communicate to a youngster that it has exceeded its bounds.

**Territorial Aggression;** Parrots instinctively protect territories both in the wild and in captivity. In the wild a parrot bonds with one individual and will protect their nesting territory from intruders. Captive parrots also bond with one individual and defend a territory from intruders. They can easily learn that biting is the only, or at least the best, way to drive human intruders away from their territory.

**Fear Aggression;** As mentioned earlier, many parrots have bitten out of fear of a human forcing himself or herself on the nervous bird. This is also an instinctive reaction that is closely associated with survival. If the bird were in the wild it would simply fly away. However, most captive birds are denied the ability to escape and are left with biting as their last resort.

Learned Aggression; Some parrots learn to bite for a desired response. This learned aggression is displayed in many ways. One bird could learn that a light bite to the arm of its owner when he or she is eating a donut may result in a piece of the tasty treat being offered to stop the annoying nibbling. Another bird may learn that a bite to the finger will cause a person to leave it alone on top of the cage or on a person's shoulder, even if it is for just long enough for the person to go get a dowel or perch to pick the bird up with. Once a parrot bites a person for the first time, it may be on its way to learning that this is a valid way to communicate with humans. Any behavior that is reinforced is likely to be repeated.

To avoid being bitten, start by developing a positive relationship with the bird. Try to avoid forcing the bird to do anything it doesn't want to do. This is a very difficult concept for many parrot owners to understand, especially when the information available to parrot owners suggests dominating the bird. Plus, many humans have a fairly good reinforcement history associated with dominating other animals, such as dogs, and even other humans. It is a communication strategy that seems, at least to them, to work fairly well. Going against this natural tendency and working to establish a relationship with the bird that is built on positive interactions is the first step toward a partner relationship with a parrot. Next, the bird owner should develop sensitivities to the bird's communication. He or she should learn how to read its body language and listen to what it tells them. Then, they should care about what it says and allow the bird to be a partner in the relationship instead of an object. They should learn to ask the bird to do things and avoid telling it. After all, rarely does anything, except a predator, ever force a parrot in the wild to do something it doesn't want to do.

One more thing that will enhance a parrot owner's relationship with their parrot: taking responsibility for each time the bird bites them. Parrot owners should understand that biting is unnatural for a parrot, and it is something that they have either forced it to do or taught it to do. When they accept this responsibility they will begin to see that their scars are signs of insensitivity and not badges of courage. They will also begin to lay the foundation for a rewarding partnership with their companion bird.

### **Height Dominance**

To put it bluntly, Height Dominance does not exist in parrots. It is most likely just a projection of someone's personal beliefs that seemed to make sense when applied to parrots. Naïve bird owners searching for easy answers to complicated problems readily buy into the concept that a parrot will feel dominant over a person when held above eye level and that the bird will express this dominance through aggression. The accompanying myth about wild parrots forming hierarchies that are coordinated with the position a bird takes in a tree is equally inaccurate. Parrot behavior is far more complicated than this.

There is much talk these days about dominance and dominance hierarchies in captive parrots. To fully understand captive bird behavior people should begin with an understanding of wild bird behavior. Through personal observations, discussions with many parrot field researchers (personal communications: Brice, February, 1994, Munn, July 1998, Gilardi, February, 1999, English, November, 2000, May, May 15, 2001) and review of literature, this author has found no evidence of flock hierarchies in wild parrots. The field researchers all attest to aggression and disputes among parrots. However, the aggressors are not consistent from one incident to another. A bird that loses a confrontation with one bird may just as well win a confrontation with the same bird later. It could be said that the winners of these confrontations are dominant over the losers. However, the dominant position is limited to each specific incident and does not carry over to future encounters. There is no evidence of social hierarchies in flocks of wild parrots that resemble social hierarchies commonly found in many mammal species. If dominance hierarchies exist in wild parrots they are most likely limited to family groups.

Why then do so many people subscribe to the height dominance theory? For many people this is a very easy concept to accept. Hierarchies are common in human societies. When people were young it was the taller people who were dominant over them, and even as adults their relationships with others are often hierarchal. Plus, it is not uncommon to see some forms of hierarchies in captive pet parrots. Again, unnatural environments encourage

unnatural behavior. Confined groups of parrots in small environments will most likely work out dominance hierarchies. However, if these same birds were in the wild they would not be forced into these close relationships and they would surely avoid aggressive encounters with the other parrots.

It is easy for some parrot owners to misinterpret aggression as a parrot's desire to dominate. Aggression, for the purpose of establishing dominance, is common in many mammal species, however, it does not occur in parrots. Parrots have no natural inclination to form a dominance hierarchy with other parrots in the wild, or with humans in captivity. Parrots may be moved to show aggression for many different reasons when they are higher than human eye level. However, the desire to dominate should not be considered as one of those reasons.

Dominance, in all societies, is based on much more than a few inches of height. Dominance is about relationships and history. Explaining away something as complicated as dominance hierarchies with something as simple as a few inches is very misleading and does not provide a clear understanding of a bird's behavior. It is best to avoid anthropomorphic interpretations and let natural behavior be your guide when evaluating parrot behavior.

### **Bonding**

Most parrots form strong, lifelong bonds in the wild. They spend almost every minute of their life together, unless the female is sitting on eggs. They groom each other, choose a nest together, protect the territory together, and raise and nurture their young together. Bonded pairs of parrots in the wild have little need for other parrots in their immediate territory. They may socialize with other parrots and share communal roost trees, but, most of their day and night is spent side by side, often shoulder to shoulder with their mate. Their bond is innate and is one of the greatest influences on their behavioral repertoire.

Companion parrots are fully armed with all the same instincts that their wild counterparts possess. The urge to bond is just as strong with a captive-bred bird as it is in a wild bird. It is very natural for a pet parrot to choose an individual in a household to bond with. A bonded parrot will defend a territory, which could be anything from a cage, to a room in a house, to the entire house itself. A bonded parrot may also establish a personal aggression with one individual in a house who frequently invades the territory. This personal negative history can manifest itself in the form of routine biting incidents, or even full on attacks. Bonding and defending territory are personal to individual birds and therefore vary greatly in their frequency and intensity.

Even though bonding is a natural behavior for a parrot, a bird that is well socialized with many different people early in life may be less likely to form strong bonds with an individual in latter life. It is best if all family members spend equal time with a companion parrot to discourage the bird from focusing on any one individual.

### **Conclusion**

Parrots are beautiful, intelligent creatures that have entertained and frustrated humans for hundreds of years. They are not the mental or emotional equivalent of a child, as many people have expressed. They are parrots, unique in their own right and deserving of their own identity and treatment. Their natural behavior is foreign to most people, but is key to developing the relationship most people want with their companion parrot. Learning about a parrot's natural behavior and developing sensitivities toward reading the bird's body language will take a little extra effort. However, once a parrot owner begins to understand what their bird is expressing through its body language, and stops trying to dominate, or force, the bird to do things, the payback will be enormous, for both owner and bird alike. Listen to what they tell you and care about what they say. They deserve nothing less.

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