Companion Parrots: Answering Frequently Asked Questions

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Many of the characteristics that make parrots well-suited for life in the wild – loud calls, strong beaks, strong bonds with their partners – are also the same reasons companion parrots can be some of the most challenging animals to have in a household environment. For these reasons and many more, we at Natural Encounters, Inc. (NEI), believe that a parrot can be one of the toughest pets to share your home with, and strongly suggest extensive research and consideration before acquiring one.

If, after doing your research, you decide to add a feathered friend to your family, we encourage you to research reputable breeders or consider adoption from rescue organizations. The illegal pet trade has decimated wild populations of parrots globally. By adopting or rescuing a parrot from a parrot rescue facility, or purchasing one through a reputable breeder, you can show your support for wild parrot conservation.

With NEI's extensive work in the zoological field and decades of experience helping both zookeepers and companion parrot owners with birds of all shapes and sizes, we commonly receive a number of questions about parrots and their behavior, including:

- How do I stop my bird from biting?
- My bird has started screaming very loudly. My neighbors are complaining! What do I do?
- Is it true that if I let my bird get above eye level, he will feel dominant over me?
- Why doesn't my parrot like to be petted?
- Why does my parrot love me but attack my husband/wife/children?
- Why is my parrot picking its feathers?
- How do I teach my parrot to talk on cue?
- How do I teach my parrot to fly?

In this paper, we will share our knowledge regarding the artful application of the science of behavior change to provide information to consider regarding these commonly asked questions and challenges associated with companion parrot ownership.

How do I stop my bird from biting?

While many people consider getting bitten by their bird to be an accepted part of having a parrot in their home, biting is actually a fairly uncommon behavior for parrots in the wild. NEI President and CEO, Steve Martin, has interviewed many parrot field researchers about behaviors observed in wild parrot populations, and with a combined total of over 35 years of field research, only two researchers have ever seen or heard of a parrot biting another parrot hard enough to draw blood. 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 as it attempted to take over that nest.

While biting is rarely seen in the wild, parrots will often show aggression to protect resources like territory, mates, desirable perches, and food items. These interactions are generally limited to demonstrations of body language like the flattening 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 our homes? Often, it may be because we humans are much less versed at picking up on the subtle displays of discomfort that they've evolved to recognize in one another, and because many companion parrots do not have the space or flight capability that would allow them to get away from things they don't like. With their escape routes limited and their body language cues not responded to, many companion parrots quickly learn that the best – and maybe only – way to get out of an undesirable situation is by biting. If this biting produces an outcome that the bird wants, such as being set back in its cage, being left alone, or having a person they don't like move away, then biting will be more likely to occur in these situations again in the future.

In order to strive to never get bitten by their companion parrot, we feel the most important thing the humans in their life can do is to learn to recognize the small signs of discomfort that their birds may demonstrate, and learn to respond in a way that doesn't force the bird to resort to biting in order to get away from whatever it finds to be aversive in that moment. These signs can be very small, such as when the bird's pupils rapidly expand and contract in size (known as "pinning"), or when the feathers on the bird's head and neck slick down tightly against their body, or they can be much more overt, such as pacing quickly back and forth on the perch in its cage as if looking for a way to get away. A sensitive caregiver will recognize these signs of discomfort, and immediately change their own behavior in the moment as a result.

At NEI, we strive for relationships with our animals that are based on the trust that's built through a history of shared positive experiences. Unfortunately, a lot of the information available to parrot caregivers is focused on concepts like "making sure your bird knows that you're the boss" or "don't let them get away with that" when they show undesirable behavior. We encourage companion parrot owners to take responsibility for their bird's behavior – the good and the bad – because that empowers them to create strategies for improving things in the future.

These strategies that involve attention to small detail can pay large, positive dividends for both the owner and bird. For example, when we wish to step up our birds, instead of going into the bird's personal space, pushing our hand into the bird's belly, and scooping them up off a perch, we ask them to participate by offering on of our hands out flat for them to step onto, and use the other as a target hand as a prompt to encourage upright posture, with the combo of the two acting as a cue that is asking the bird "would you like to step up?" This cue is given at a distance, and we wait for the bird to affirmatively respond to our offer by moving or leaning towards us and lifting up its own foot off of the perch. Only after they reply "yes" with their body language and invite us into their personal space do we move closer so that they can then step up onto the flat hand. With both of the parrot's feet firmly on our flat hand, we will then offer a food reinforcer from the other hand. This process is shaped through positive reinforcement training, and initially involves the bird learning to simply put a toe on the hand, then one foot, and so on, repeatedly until they are comfortable enough to choose to come closer to us and put two feet on our hand. We would then approximate for more time spent on the hand, initially allowing the bird to step on and off the hand repeatedly until they are comfortable enough to increase the time they choose to stay on the hand.

For birds whose relationship with people doesn't yet safely allow for this kind of close interaction, we suggest first building up trust while the bird is in its enclosure. This can be accomplished by training basic behaviors like following a target stick, or turning from facing one side of the perch to the other. For birds that are too nervous of people for this sort of up-close interaction, you may want to consider dropping a peanut in their bowl as you walk by their enclosure. No matter what behavior the bird may be doing at the time you deliver the peanut, dropping a treat in their bowl and continuing to pass by can help to build trust and turn behavior that looks like "Oh no! Here comes a person!" to "Oh boy! Here comes a person!" Once the bird is comfortable enough to take food directly from your hand, you can then use favored treats like this to reinforce other desirable behaviors you want to see more of in the future.

A final consideration about biting is that it can also be the result of a bird learning that it is a way to get something that it wants, not just to get away from things that it doesn't like. A bird might 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 perch in which to pick the bird up. 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 to get what it wants. We will never know what our animals are thinking, we observe what they do through their body language and any behavior that is maintaining or increasing in frequency is, by definition, being reinforced in some way, so the best strategy is to look for ways to set up the environment and your own behavior is such a way that biting never needs to occur in the first place.

My bird has started screaming very loudly. My neighbors are complaining! What do I do?

Screaming is an innate, natural behavior for parrots in the wild. At sunup each morning the forests are alive with the sounds of parrots claiming their territory and expressing their well-being with various contact calls and other loud vocalizations. Wild parrots scream as a play behavior, to define territory, and to communicate many messages to other birds in their community.

Screaming is the number one challenge we hear about from people who have parrots in their homes. This screaming could be the result of a bird that is content and displaying one of the things that parrots are built to do, but it may also be something that their owners may have inadvertently trained their bird to do. All learned behavior is a function of its consequences, so many birds learn that screaming may result in someone coming into the room to give them attention; even if the owner's intention is to tell the bird to be quiet, it's very possible that this attention (whether positive or negative from the owner's perspective) is enough to reinforce this screaming behavior.

However, this doesn't mean that a companion parrot owner is powerless to make a difference where screaming is concerned. Most advice offered to owners is focused on strategies meant to punish the screaming behavior, such as spraying the bird in the face with a squirt bottle or covering their cage with a blanket. These methods generally produce marginal, temporary results, but are common because they are quick and easy, and are the "accepted methods" that have been used for many years. Fortunately, there are less intrusive, more positive effective methods to start to reduce the volume and frequency to more acceptable levels.

One of the most effective ways to reduce the frequency of an unwanted behavior is to teach the subject to do something else that produces the same consequences, but that it can't do at the same time as the unwanted behavior. This strategy is known as the differential reinforcement of an incompatible behavior, or a "DRI" strategy. One skilled parrot trainer taught her Blue-fronted Amazon parrot (*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 eventually replaced its natural loud contact call with the much more acceptable soft whistle. The beauty of this strategy is that it recognizes that the behavior of screaming has a real and important function for the parrot and it seeks to give the parrot an alternative behavior to do to accomplish that function. Since the bird is unable to both scream and whistle quietly at the same time, the bird chooses to do the behavior that produces the desired outcome.

While this "height dominance" discussion involving parrots has been discussed in popular pet parrot resources for years, the fact is that there is no evidence to support that height dominance is present in parrots in the wild. The accompanying myth about wild parrots forming hierarchies that are correlated with the position a bird takes in a tree is equally inaccurate, as the positions that wild birds take in trees at different times of day and in different locations varies wildly.

Through personal observations, discussions with many parrot field researchers, and a review of literature on the subject, we have found no evidence of flock hierarchies in wild parrots. The field researchers all attest to aggression and disputes among wild 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, and it's possible that confined groups of parrots in small environments might establish hierarchies amongst each other. For a bird that prefers to be above the eye level of its caregivers, such as on top of a book shelf or the top of their enclosure, it is likely because this position gives the bird the best view of its surroundings, a large degree of personal space, and quick access to escape options if something were to make it nervous. To call these birds "height dominant" is nothing more than putting a label on a set of observed behaviors that we might see a bird display over time.

Why doesn't my parrot like to be petted?

In the wild, parrots preen both themselves and sometimes each other as a way to straighten and clean feathers. Research also suggests that allopreening (preening other members of the same species) in wild parrots may also have important social ties similar to that of primates. This preening action, however, is very different from the kind of petting that is common when interacting with domestic animals like dogs and cats. Some companion parrots do seem to enjoy receiving scratches around the head and neck, which is similar to the kind of preening parrots might do with each other. Two-way communication is key to owners noticing subtle changes in the bird's body language that may let them know where and when their bird might want to interact in this way. A way to test this is to offer your bird a "wiggling finger" near their neck; if the bird lowers its head and choses to approach, this might be an invitation to offer a scratch around that area.

One issue to be mindful of, though, is that this type of interaction can lead to a strengthening of the bond between the participants. This may seem like a good thing – and for many parrot owners it is – but this can also lead to aggression if the bird doesn't receive these scratches when they are solicited, and there have been cases of birds developing behavioral and hormonal challenges associated with scratching or stimulating the feathers on the lower back, rump, or near the cloaca, since interaction in those areas is often correlated with breeding behaviors. Most commonly, scratching behaviors from one of their caregivers will lead to an increased tendency for the bird to show aggression towards the other humans that share the household. Which leads to our next question...

Why does my parrot love me but attack my husband/wife/children?

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.

This urge to bond with one individual, to the exception of others, is just as strong with a captive-bred bird as it is in a wild bird, so it's very natural for a pet parrot to choose an individual in a household to bond with. A bonded parrot will often defend a territory, keeping others away from the territory they share with their "mate," and while that territory may be defined as their cage, a room in the house, or even the whole house itself, it sometimes also includes the "human mate" themselves, which can spell bad news for anyone else in the house that might want to interact with the bird, or the human that they have chosen as their "favorite!" The bird may demonstrate aggressive behaviors like lunging or biting towards all individuals in the house who frequently invade this territory, or sometimes just towards one unfortunate individual in the home. And to further complicate things, young birds that may have bonded to one individual may "shift" that bond onto another person in the household as they near sexual maturity, perhaps as an expression of the developmental changes that would tell a bird in the wild when it was time to leave the nest and their bond with their parents in order to seek a mate of their own.

While it's hard to say why a parrot might "choose" one individual over others, there are steps that can be taken to help build a more trusting relationship between the bird and those that might be having trouble with them. One of the most effective methods is to increase the number of positive interactions that the bird has with those people, such as having treats dropped in their bowl while walking by, and avoiding being involved in things the bird might not want, such as unsolicited attention, petting, or handling. If these unwanted behaviors seem correlated with certain activities (for example, lunging at certain people when they clean the cage), it might be best to have the rest of the family avoid interactions in these scenarios. This might mean a little more work for the person whom the bird is bonded to, but that's the price they pay for being the "favorite!"

This process can be helped along by having the person that is currently the "favorite" take a temporary step back from their time with the bird, which will increase the likeliness that the bird will look to others for treats, attention, scratches on the head through the cage bars, etc. All of these things, when presented by the "bonded" person, only strengthen this bond further, so having that person hit the "pause" button on these activities is an important part of setting the stage for others in the house to improve their own relationships with the bird. With the window then open for the other members of the family to offer things that the bird might like – positive reinforcement-based training sessions from outside the cage, toys and enrichment items, favorite treats – there is a good chance that these aggressive behaviors will go down as the parrot starts to look forward to spending time with those people in their life they had previously tried to chase away. Keeping the bird well-socialized with the whole family moving forward then becomes part of everyone's job in the household to ensure the best relationship between the bird and all the humans with whom they spend their life.

Why is my parrot picking its feathers?

Feather plucking or feather picking can be common in companion parrots and can occur for a number of reasons. A number of health conditions can be associated with these self-harming behaviors, such as malnutrition, allergies, tumors, internal injuries, and hormonal imbalances to name only a few. If you start to see patches of exposed downy feathers or skin on your bird, or large amounts of molted or shredded feathers on the bottom of its cage, it is a good idea to contact an avian vet as a first point of intervention to rule out the above issues or other possible medical concerns.

If the picking/plucking is a learned behavior, giving your parrot the opportunity to interact with varied enrichment that changes regularly can help keep them mentally engaged and active throughout the

day. The use of enrichment items that can be shredded, like cardboard and paper, are things that we have seen many of our parrots enjoy chewing on and tearing up regularly. Untreated, parrot-safe wood is also great for them to chew and destroy, and has the added benefit of keeping the bird's beak worn down in the same way a wild parrot's beak would be worn down by chewing on leaves, branches, and the hard shells of foods like seeds and nuts. Positive reinforcement training sessions, like voluntary step-ups, nail trims, or even teaching your parrot how to interact with their enrichment, can all help increase their overall welfare and potentially help reduce feather destructive behaviors.

How do I teach my parrot to talk on cue?

Parrots "talk" or, more accurately, mimic the human speech they hear around them when they are healthy, happy, and at ease in their environment. They may talk to entertain themselves, or because of the attention that's associated with talking around others in their environment.

Parrots mimic sounds they hear often and sounds they like, and while all parrots have the ability to mimic speech, not all birds have the desire. You cannot make a parrot mimic any sound it does not want to mimic. It is for this reason that we always discourage people from getting parrots as pets if their main goal is to have a bird "parroting" what they say in their home, because there's just no guarantee that the bird you bring into your home is going to be "a talker."

That being said, positive reinforcement can be used to attempt to make favored vocalizations, words, or phrases more likely to occur in the future, and even to eventually put them on a cue. If you want a bird to learn to say a particular word or phrase, it needs to hear that word or phrase in its environment on a regular basis. If the bird begins to copy a certain sound that you want to hear more of, you can reinforce that vocalization by giving the bird attention, praise, or one of its favorite treats every time you hear them make it. The next step after that is to then try introducing whatever word, phrase, or gesture you want as the cue before you say the phrase you want the bird to repeat.

For example, if you want your bird to say "I'm a pretty bird" when you say "What are you?" you would start by first simply saying "I'm a pretty bird" over and over and over again in the bird's presence, and praising or giving the bird a treat if it starts to say the phrase itself. After the bird is consistently saying "I'm a pretty bird" after you say it, you can then start saying both the cue and the phrase together – "What are you?...(pause)...I'm a pretty bird." The idea is that the bird will make the connection between the two parts of the phrase, anticipate that it will be able to earn a treat, and start to say "I'm a pretty bird" before you say the phrase yourself. You can then fade out saying "I'm a pretty bird," and then simply say the cue – "What are you?" If the bird has made the connection, it should start saying "I'm a pretty bird" when you say "What are you?" and you can give the bird a nice big treat.

While consistently reinforcing desirable vocalizations should increase the frequency of these vocalizations, it's also important to remember that a bird may mimic sounds that it hears in the absence of reinforcement from you. Even though they were never given treats for it, many a bird has learned to copy the sound of a vacuum cleaner, a crying baby, a ringing phone, or a barking dog because it has heard those things consistently and likes to copy it themselves. Of course, this leads to another important piece of advice where the topic of talking parrots is concerned: a parrot can learn to copy almost any sound in its environment, so always remember to watch your language when your bird is around!

How do I teach my parrot to fly?

This is an increasingly common question that we hear from companion parrot owners, and is a very complex question that has many dangers associated with it. Our free-flighted bird shows exhibiting natural behaviors are impressive and may inspire others to fly their birds outside, but it is important for

people to understand that behind those flights is a large team of trainers with decades of experience in training birds, a strong understanding of the science of behavior change and how to develop antecedent and consequence strategies to set the birds up for success, and birds who have had the opportunity to develop strong flight skills from a very young age via both large aviary enclosures and regular training sessions.

While some people make free-flying birds look easy, it is one of the most difficult and risky training projects to undertake, as the consequence of a bad training decision can be that you never see that bird again. Given the large number of environmental factors that are simply outside of human control – weather conditions, presence of other predatory animals, power lines and other manmade hazards, and the bird's history with and physical ability to fly before they were in your household being just a few of them – outdoor free-flight is something we strongly encourage companion parrot owners to avoid.

For owners looking to give their birds the opportunity to fly, there are a few ways to do so in a way that poses far fewer challenges and safety issues than outdoor free-flight. Some owners have built large wired or screened aviaries adjacent to their homes where their birds are able to spend time outdoors, but in a controlled space where they can be supervised. Others have taught their birds to do short flights around the inside of their homes, teaching them to land on specific perches or platforms that the owner has set up so the bird can get a different view of what's going on in the house. In both these scenarios, it's important to note that there are still a number of safety concerns that need to be considered. In an outdoor aviary, the integrity of the structure needs to be evaluated to ensure both that the bird stays inside, but also so that unwanted visitors that could harm the bird – such as snakes and raccoons – are not able to get in. For birds that fly indoors, glass doors and windows may need to be covered in order to prevent the bird striking the glass (an event that has led to the injury and even death of companion birds). Dangers like hot stoves, ceiling fans, and doors that might open and lead out of the house all need to be considered for the risks they pose, and those risks need to be taken very seriously for the threat they pose to the safety and welfare of the bird.

For those for whom the above accommodations are not feasible or possible, we encourage companion parrot owners to consider the many other ways they can give their birds the ability to use the senses and adaptations they have been built to express. Teaching a bird to climb a rope allows it to use its beak and feet much in the same way as their wild counterparts. Puzzle toys and forage boxes allow birds to spend long periods of time working out ways to acquire food, just as a bird would do in the wild. As long as safety is always taken into consideration, the only limit is the owner's imagination as they consider new opportunities for fun and enriching activities for this important feathered member of their family.

For further information on these questions and others, please check out our other papers on parrot training and behavior on our website, http://www.naturalencounters.com, where you can also read more about the webinars and online courses on behavior and training via our educational initiative, the Natural Encounters, Inc Training and Education Center (NEI TEC). For those interested in learning more about the science of behavior change and the many ways it can improve the lives of all the animals (and humans) in your life, we also recommend the website of our colleague and NEI TEC faculty member, Dr. Susan Friedman, at http://www.behaviorworks.org.