The S Files Success with Willynne: Gabriel: Biting when going into cage

Reported by: Willynne Tully, S.G. Friedman, PhD and L. McGuire

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The S Files are real case studies of behavior challenges faced by companion parrots that were successfully resolved using systematic, non-forceful behavior change strategies. In all cases, the interventionists were the parrots' actual caregivers, most of whom had a strong commitment to changing behavior with the most positive, least intrusive effective strategies but little or no prior experience applying the teaching technology of applied behavior analysis.

The S Files are not behavior-change recipes. Train-by-numbers approaches often fail because every bird is a *study of one* and every relationship and setting is unique. However, the steps used in these case studies can provide the scaffolding to better understand, predict, and change behavior. Appreciation and admiration is extended to the many caregivers, families, and precious parrots for their willingness to share their dedication and behavior programs here.

MEET:

Willynne Tully (Caregiver), Gabriel (3 year-old Elinora Cockatoo)

I. TARGET BEHAVIOR -- What is the one problem behavior you want to change? Describe it in unambiguous, *observable* terms.

Gabriel bites hard enough to draw blood.

II. ANTECEDENTS – What events or conditions immediately precede the behaviour that may set it off? Specifically, consider the following possibilities:

A. WHEN is the problem behavior most likely to occur?

When it is time for Willynne to go to work.

B. WHERE does the problem behavior occur?

In front of the cage in the living room.

C. WHO is present when the problem behavior occurs (people and pets)?

Willynne and Gabriel

D. Are there any other antecedents that precede the problem behaviour such as a demand or request, person entering or leaving the area?

Willynne opens the cage door and starts to put Gabriel in his cage.

E. When is the parrot most successful, that is, when doesn't the problem behaviour occur?

The problem behavior doesn't occur at other times during the day. At other times during the day, he goes in his cage without biting.

F. How might the behaviour relate to behaviour in the wild?

Perhaps this is related to defensive behavior in the wild used to protect a nest site or himself from being attacked.

III. CONSEQUENCES – What is the "payoff" for engaging in the behaviour?

A. Positive reinforcers gained:

- **Social:** Willynne's reaction; proximity to Willynne.
- **Tangible:** Continued access to items on play gym.
- Sensory: Skin in beak, the sensations associated with the bite itself.

Activity: Continued access to play gym; freedom of movement out of cage.

B. Negative reinforcers removed, escaped or avoided:

Being locked in cage avoided.

IV. SUMMARY – FUNCTIONAL ASSESSMENT OF THE PROBLEM BEHAVIOR:

Background: Time for Willynne to go to work.
Antecedent (A): Willynne asks Gabriel to step down into cage.
Behavior (B): Gabriel bites Willynne's hand.
Consequence (C): Willynne yells and lets Gabriel go.
Prediction of future behavior if nothing changes: Gabriel will continue biting.

V. REPLACEMENT BEHAVIOR - What alternate behavior(s) could meet the same function for the parrot if the environment was carefully rearranged? In other words, what do you want the parrot TO DO?

Voluntarily step onto perch in cage.

VI. PRELIMINARY STRATEGIES– How can you adjust the environment, including what you do, so that the behaviour doesn't occur in the first place? And, what behavior can you teach or re-teach so the parrot will successfully demonstrate the replacement behavior?

Antecedent Changes to Prevent the Behavior	Consequence Changes to Reinforce Alternate Behaviors	New Skills and Teaching Strategies
 Offer Gabriel a treat or toy prior to putting him inside the cage so that he had it in his beak and is unable to bite. Provide one on one time before work. Enrich cage environment such asAdd food on skewers to the cage. Add wood toys to chew and destroy, shredders, plastic balls, hanging toys, foot toys, coconuts, popcorn on the cob, baby keys, safe baby toys, 99 cent store toys, round rings, plastic napkins holders, whole garlic bulbs, anything he could hold, enjoy, and tear up. 	 Praise Access to other enrichment items listed in Antecedent Change Column. 	 Do not force him to step up when he refuses. Respect his ability to say no, especially when time is not a factor. At the same time reduce the likelihood that he will refuse by reinforcing high frequency of positive practice stepups. Work on training other behaviors so as to build up trust. Teach him to sing "happy song" and "good morning song" on cue. Teach him to turn in circle on perch. Teach him to give a kiss and wave goodbye.

VII. PRINCIPLES, PROCEDURES AND OUTCOMES

Willynne chose to change the antecedent environment making the cage a more inviting place to be with more activities to keep Gabriel occupied. This resulted in positive reinforcement for stepping into his cage to access a variety of toys, not available to him at any other time or location, which increased the value of the toys due to their relative rarity. This strategy is known as a **motivating operation** using rarity or excess to alter the value of a reinforcer. The toys included up to 25 items in a basket that was hooked onto the side of the cage, plus hanging toys, foot toys, and foraging toys. She made him a new toy almost everyday so that he there was always something different to find inside the cage, using novelty to add to the reinforcing value of the item. By rearranging the cage and giving Gabriel more to do, he became more willing to go into the cage without biting. Since he had more reinforcing activities to do inside the cage, he eventually started to step down without biting and with nothing in his mouth. This may be due in part to the matching law: Given a choice between two different schedules of reinforcement, animals tend to do the behavior that yields the most reinforcement. Given all these great antecedent arrangements, stepping in his cage offered Gabriel much more reinforcement than staying on his play gym.

Again relying on **motivating operations**, Billie drained the value of time with her by spending a few minutes of focused 1:1 time with Gabriel before asking him to return to his cage.

Billie also gave Gabriel a favorite toy just prior to asking him to step down so that he had something in his beak and couldn't bite. This is known as *differential reinforcement of an incompatible behavior*, a good way to decrease a problem behavior by increasing an incompatible, alternate behavior that can't occur at the same time.

By respecting Gabriel's refusal to step-up and not forcing him, she was able to gain his trust. She worked with step-ups and step-downs at times that didn't matter, so that he eventually stepped up most of the time when asked. This built **fluency** in the step-up behavior and increased Gabriel's overall level of access to positive reinforcement. Giving Gabriel choices to make didn't result in birdie bedlam as some might suggest but resulted in a cockatoo that chose to do as Willynne requested.

VIII. FOLLOW-UP

Now, four years later, Gabriel goes into the cage by himself in the morning. Willynne just leaves the cage door open, and he will fly over to it, go in, pick up the most recent toy addition to the cage and start to destroy it. There are even times now when Willynne needs to shut the door of the cage in order to keep him out long enough for some one-on-one time before she goes to work! Now that is a turn of events!