The S Files



Kathy: Reba: Chasing Kiki

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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:

Kathy Wells (Caregiver), Reba (17 month-old Solomon Island eclectus) Kiki (16 month-old cockatiel)

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

Reba chases Kiki. She lowers her head, flies at Kiki, pounces and bites him. Kiki has learned it is safer to fly off when Reba approaches but Reba follows in hot pursuit. Sometimes Reba stays where Kiki was and snoops around Kiki's food

dishes and toys. Other times she just goes back to her own play area after displacing Kiki.

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?

It occurs when Reba is already free and Kiki has just been let out of his cage.

B. WHERE does the problem behavior occur?

It occurs in the living room where their cages and play stations are kept.

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

It occurs no matter who is there - Kathy and/or any other family members (husband, 3 kids and a dog).

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

Sometimes Kathy is giving attention to Kiki but other times Kiki is busy eating his food or perching and playing on a play gym minding his own business. One time, Reba actually flew off Kathy to chase Kiki.

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

When Reba has Kathy's full attention she doesn't usually chase Kiki, or when one of them is caged.

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

Chasing off other birds may increase the pursuer's resources (food, nests, mates, etc.) and increase that bird's chances of survival.

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

A. Positive reinforcers gained:

Social: To stop Reba, Kathy talks to her, approaches her, and picks her up to move her back to her play gym or cage. Kiki squawks.

Tangible: Kiki flies off; Reba gets Kiki's perching spot, food and toys.

Activity: Reba flies and lands.

B. Negative reinforcers removed, escaped or avoided:

Kiki, when he flies off.

IV. SUMMARY – FUNCTIONAL ASSESSMENT OF THE PROBLEM BEHAVIOR:

Background: Reba is out of her cage.

Antecedent (A): Kiki is let out of his cage

Behavior (B): Reba lowers her head and chases Kiki **Consequence** (C): Social, tangible and activity (see III. above)

Prediction of future behavior if nothing changes: Reba will continue to

chase Kiki.

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?

Rather than chase Kiki, Kathy identified the following alternate behaviors: 1) Reba stays on her play areas longer eating her own food and playing with her own toys; 2) Reba stops preparing to fly when Kathy says "stay" and returns to perching, eating or playing; 3) Reba calmly engages in activities or quiet perching close to Kiki.

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
 Let Reba out of her cage by herself for a few hours to burn off energy before letting Kiki out of his cage. Give Reba her daily shower right before letting Kiki out of his cage – its harder to fly with wet feathers. Put Kiki on the one perch (boing) that Reba never lands on. Move the cages as far apart as 	Reinforce both birds, but especially Reba, with attention and treats whenever she engages in eating, playing with toys, preening and any other "non-chasing" behaviors.	 Shape calm coperching by reinforcing successive approximations toward one another. Teach Reba to stay on cue and increase the duration.

- possible to increase the effort Reba must expend to fly there. Provide the exact same food in both birds' treat dishes so less is
- both birds' treat disnes so less is gained by flying to Kiki's dishes.
 Move Kiki's play stand so that Reba can check it out from her
- play gym.
 Change toys often to give the birds more engaging activities on their own stations.
- Increase social time with Kathy throughout the day by including Reba in household chores and activities.

VII. PRINCIPLES, PROCEDURES AND OUTCOMES

By engaging in the process of *systematic* observation, assessment, planning and intervention, Kathy treated her parrots with utmost respect and met all of her behavior goals. She avoided spraying ineffective, random fixes all over the place that could have made Reba's behavior even harder to change in the long run. What made this case study particularly interesting were the many strong reinforcers available to Reba for engaging in the problem behavior that were outside of the control of the caregiver, namely automatic reinforcers associated with flying, landing and displacing Kiki. As a result, we put a lot of emphasis on brainstorming and implementing the widest range of antecedent changes we could think of, including setting events, establishing operations (EO) and cues.

Setting events are the context, conditions or situational influences that affect behavior. Kathy changed the location of cages, play stations and perches, and ensured that they were similarly and amply provisioned. This set the occasion for Reba to stay on her own gym more as she quickly learned more effort was required to fly to Kiki's dishes and little was gained. An EO, also called a motivation operation, temporarily alters the relative value (effectiveness) of a reinforcer by the process of satiation (or deficiency). Kathy reduced the value of both rigorous activity and Kathy's attention by letting Reba have her fill of both of those reinforcers before letting Kiki out of her cage; thus, Reba was less motivated to chase Kiki – she did it less. Kathy also removed one of the cues for chasing by reinforcing Kiki for staying on the one perch Reba didn't fly to. These three changes immediately reduced Reba's chasing behavior to near-zero occurrences.

Kathy further reduced Reba's chasing by providing a higher rate of social, tangible and sensory reinforcers for staying on her own play gym, eating, playing and other appropriate behaviors than previously earned for chasing Kiki. This principle, called the **matching law**, states that given a choice between two

different schedules of reinforcement, animals tend to demonstrate the behavior that produces the higher frequency of reinforcement. Kathy also taught Reba the cue "stay" by reinforcing her for abandoning her pre-flight behaviors of lowering her head and stretching forward when the cue was given. Careful observation of Reba's body language was the key to effectively timing the cue and delivering the reinforcement for responding to it. As a result, Reba learned what *to do* to gain reinforcement rather than solely what not to do (which is the insufficient outcome of most punishment strategies).

VIII. FOLLOW-UP

After six months, Kathy is extremely pleased to report that Reba continues to not chase Kiki and both birds have learned to perch together with Kathy, without any agonistic behavior. The cages and play stands have been returned to their original positions and these new behaviors have generalized to other locations. Well done Kathy, Reba and Kiki!