

The S Files

Yogi: Biting

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The S Files are real case studies of behavior challenges faced by companion parrots that were successfully resolved using systematic change strategies, without force or coercion. In all cases, the interventionists are the parrots' actual caregivers. Many of the caregivers have little or no prior experience applying the teaching technology of applied behavior analysis but all of them have a strong commitment to changing behavior with the most positive, least intrusive effective strategies.

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 with your own parrots or those with whom you work. Appreciation and admiration is extended to the many caregivers described in the S Files for their willingness to share their dedication and behavior programs here. This S file describes a recent intervention implemented by one of the authors' own birds.

**MEET:**

**Ray and Ellen:** Cockatoo Caregivers

**Yogi:** Approximately 13 year old, Moluccan Cockatoo hen

**RELEVANT BACKGROUND:**

Ray and Ellen adopted Yogi in September, 2008. Yogi, Ray and Ellen live with two cats, one Chihuahua and three other parrots (a male Moluccan, a bare-eyed cockatoo hen and a male cockatiel). A few months after Yogi moved in, she developed a sexual attraction (operationalized as crouching down, wings quivering, panting) when our male Moluccan, who showed no interest in her, was in her vicinity.

Yogi came with the habit of perching on shoulders; Ray and Ellen continued to allow this. After a few weeks with them, she began to make repetitive very loud vocalizations whenever left alone. In January, 2009, Yogi, perched on Ellen's shoulder, bit Ellen's ear hard enough to cause bleeding. Ellen did not allow Yogi on her shoulder after this, but Ray continued to do so. Yogi has never bitten Ray at any time. During the next eight months, Yogi bit Ellen's arm twice as Ellen put Yogi in her cage.

The shower rod in the bathroom was Yogi's perch of choice. After she chewed through the wood trim there, Ray began nailing up pieces of wood for her to chew. Ray would have to replace them every couple of weeks. Ray and Ellen jokingly referred to the shower as "Yogi's nest".

A year after Yogi joined the flock, she discovered that her wings had grown out enough to enable her to fly across the room. This is when the biting rapidly escalated; a couple of weeks later, Yogi flew to Ellen's shoulder and lightly nipped the right side of her neck. Yogi's wings were then trimmed to prevent a facial bite. After her wings were trimmed, Yogi would wait until Ellen was in close proximity to her perch and would then jump onto Ellen's shoulder. The final

incident occurred on November 2, 2009. Yogi jumped onto Ellen's back, bit Ellen's left ear, causing significant pain and damage.

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

Yogi bites Ellen: her beak grasps a large amount of flesh, clamping down repeatedly and twisting, refusing to let go, all of which causes deep bruising, bleeding and pain.

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

**GENERAL:** When Ellen is near Yogi.

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

1. Ellen turns her back to Yogi and walks away,
2. Ellen's attention is diverted and Yogi is nearby.
3. Ellen asks Yogi to step up from her shower perch.
4. Ellen tries to put Yogi in her cage.

**B. WHERE** does the problem behavior occur?

From wherever Yogi is perched, but most often from the shower perching area.

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

Ellen and the other two cockatoos are most often present. The dog, cats and Ray occasionally are present.

**D.** When is the parrot most successful, that is, when doesn't the problem behavior occur?

When Ray is home; when Yogi is occupied w/ chewing wood or eating, when Yogi is in her cage.

**F.** How might the behavior relate to behavior in the wild?

Yogi frequently exhibits reproductive behavior, which is operationalized as squatting low, wings slightly extended, total body quivering, vent winking and panting. Her biting may serve as a defensive maneuver to drive away competitors/intruders and/or to protect/guard the nest.

**III. CONSEQUENCES** - What is the purpose or "payoff" for engaging in the behavior?

**A.** Positive reinforcers gained:

**Social:** Ellen's drama when she tries to remove Yogi from her shoulder. Ray's attention to Yogi when he "rescues" Ellen

**Item or Activity:** Remaining in shower perching area, chasing Ellen from area, calling Ray

**Sensory Feedback:** Ellen's vocalizations, the feeling of beak on flesh

B. Negative reinforcers removed, escaped or avoided:

**Social:** Avoids stepping up, being near Ellen, returning to cage.

#### **IV. SUMMARY - FUNCTIONAL ASSESSMENT OF THE INITIAL PROBLEM BEHAVIORS:**

**A: Background:** Yogi is on a perch

**Antecedent (A):** Ellen turns her back

**Behavior (B):** Yogi jumps on Ellen's shoulder.

**Consequence (C):** Ellen yells and jumps.

**Prediction of future behavior if nothing changes:** Yogi will continue to jump onto Ellen's shoulder

**Then**

**Antecedent (A):** Ellen yells and jumps.

**Behavior (B):** Yogi bites Ellen.

**Consequence (C):** Ellen leaves the area.

**Prediction of future behavior if nothing changes:** Yogi will continue to jump onto Ellen and bite her.

**V. REPLACEMENT BEHAVIOR** - What alternate behavior(s) would meet the same function for the parrot? What behavior(s) do you ultimately want the parrot to do?

Ellen wanted to teach Yogi any type of learned skill that would focus Yogi on things other than biting. Teaching most behaviors begins with learning excellent target skills. Ellen also wanted to teach Yogi a reliable step-up and step-down, behaviors Yogi had never done well.

**PRELIMINARY STRATEGIES** - How can you adjust the environment, including what you do, so that the behavior doesn't occur in the first place? What behavior can you teach or re-teach so the parrot can successfully demonstrate the replacement behavior?

<b>Antecedent Changes to Pre-empt the Behavior</b>	<b>Consequence Changes to Reinforce Alternate Behaviors</b>	<b>New Skills and Teaching Strategies</b>
<p>Yogi is not allowed on the shower perch.</p> <p>Yogi is not allowed on anyone's shoulder.</p> <p>We do not pet/stroke Yogi anyplace on her body that sexually stimulates her.</p> <p>Yogi is not perched in close proximity to Merlin.</p> <p>Yogi remains in her cage unless Ray is home.</p> <p>Ellen does not turn her back to Yogi.</p> <p>Yogi is not out of her cage when the other birds are out.</p> <p>Ellen pays close attention to Yogi's body language at all times.</p>	<p>Reinforce acceptable behaviors, i.e. targeting.</p> <p>Reinforce step up and step down without these being the prelude to leaving or putting Yogi back in her cage</p> <p>Provide focused one-on-one attention twice daily for three-five minutes with training in place of petting</p>	<p>Teach expertise in targeting (variety of targets, locations)..</p> <p>Teach recall using step-up and targeting skills.</p> <p>Teach Yogi to remain on a perch until called.</p> <p>Gradual desensitization for Yogi to allow body handling without stimulation.</p> <p>Teach various simple tricks to develop a positive relationship between Ellen and Yogi.</p>

## VII. PRINCIPLES, PROCEDURES AND OUTCOMES

Due to the serious nature of Yogi's last bites, she and Ellen had lost all trust in each other. Ellen began to work with Yogi only in her cage; both felt safer with bars between them! Ellen did not get Yogi out of her cage, nor was she in the area when Ray had Yogi out of her cage. Yogi was familiar with the concept of targeting, so Ellen began working with this simple behavior. Shredded cheddar cheese is a high value reinforcer for Yogi, so this was used as a primary reinforcer. The clicker and verbal praise quickly became secondary reinforcers when they were associated with the primary reinforcer. A journal of training sessions was kept to record training plans, chart progress and adjust strategy as needed.

Time was the biggest hurdle, but Ellen was able to work with Yogi for five minutes twice a day. Ray cleaned her cage and took her out for some individual attention. Antecedent arrangements were made to pre-empt biting by not allowing Yogi on her shower perch and successfully keeping her off Ray's shoulder the majority of the time. By the end of the first week, Yogi was following the target all over her cage.

After one week of safe targeting, Ellen began targeting out of the cage. Ray got Yogi out, Ellen sat next to them, and began targeting Yogi. Ellen then targeted Yogi to her arm for a successful step-up. This occurred one week after the last bite!

By the end of the second week, Ellen was targeting Yogi in her cage with the door open. Ellen also began to remove Yogi from her cage while Ray was home. Ellen, always aware of giving Yogi the choice and avoiding the application of force, continued to work on step ups and downs with Yogi. And just sixteen days after the last vicious bite, Ellen removed Yogi from her cage when Ray was not home. For the next two weeks, Ellen continued the twice daily sessions of targeting with various objects, in various locations. Ellen began to also teach Yogi the basic steps for her to allow nail trimming. The other birds remained in their cages when Yogi was out for her training sessions. Six weeks after Yogi's last bite, all three cockatoos were let out of their cages together. Ellen would initially spend time with Yogi: targeting sessions started on a table-top perch, then Yogi was moved to her regular perching tree (not the shower), so that the other birds could have their training sessions.

## **VIII. FOLLOW-UP**

It is now ten weeks after the last bite. Two weeks ago, Ellen trimmed Yogi's nails with her voluntary participation. Yogi can do a few simple tricks (shake hands with either foot, stand on tippy-toes, turn-around, retrieve) and allows Ellen to perform a full body examination without melt-down. In addition, Yogi's loud, repetitive vocalizations have significantly decreased. Although nothing was done to directly address this behavior, positive reinforcement strategies directed at one undesirable behavior often resolve other issues. Trust was successfully restored between Ellen and Yogi with minimal time investment and careful attention paid to the most positively reinforcing, least intrusive strategies.

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