

CHAPTER

4

PERSPECTIVE ON PARROT BEHAVIOR

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Veterinarians who treat companion birds must be knowledgeable about not only avian medicine and husbandry, but also behavior. Every year many birds are euthanized, sent to zoos or breeding facilities, released, abused or ignored because a client is not able to tolerate or change a bird's abnormal behavior.^{1,7} Fortunately, most companion birds are loving, valued family members that are well adjusted to a captive environment. In order to understand the difference between a well adapted bird and one with behavioral problems, dozens of variables must be analyzed, including species, age, past history, health, diet, environment and the client's lifestyle.

Parrots appear to have a complex communication system. Vocalizations were found to be distinct among pairs of Puerto Rican Amazon Parrots and in parrots within Peru's Manu Biosphere Reserve. Differing vocalizations were used to signal danger, food or to greet another bird.^{15,31}

To understand the behavior of companion birds, it is necessary to remember that many captive-bred birds are only one generation removed from the wild and thus retain many of the characteristics of their free-ranging conspecifics. This, coupled with their relatively high level of intelligence, can make them challenging pets.

Some species of free-ranging parrots have been noted to spend all waking hours flying, eating, preening and vocalizing with their mates. For such intensely social birds, life in an enclosure with no companionship must be the ultimate "psychological torture."¹⁵ It has been suggested that large birds, especially macaws, should never be kept as a single bird unless the client can meet their extensive needs for social interaction.

Behavior in the Wild

From Hatching to Weaning

Even before hatching, communication appears to occur between parent and embryo. Some parents segregate infertile eggs, sometimes discarding them from the nest. Incubation studies have shown that hatching may be synchronized and that pipping sounds may actually encourage the hatching of other chicks.

The newly hatched chick is primarily concerned with staying warm and eating. The parent bird will use its beak to stimulate a feeding response by gently stroking the soft caudolateral part of the chick's beak. Some chicks (eg, Lady Gouldian Finches) have brightly colored spots in the roof of the mouth that are thought to strengthen the parents' feeding instincts. The neonate gapes (opens the mouth fully), and the parent positions its beak so that not a morsel of food is lost during transfer. In harmony with the neonate, a pumping rhythm is established as the parent regurgitates food into the chick's oral cavity. Clutch mates often pump on each other.

It has been shown that parents tend to feed the strongest beggar first. If food is in short supply, this pumping activity tends to weaken smaller chicks, ensuring the survival of stronger clutchmates. It has been estimated that as many as 80% of a clutch of neonates from free-ranging parents may not survive past the first few days or weeks of life. In nesting macaws, it was found that out of 20 nests, 7 failed completely, and only 15 to 25 young were raised from 100 pairs of nesting birds.¹⁵

As the neonate matures, the sound of the parent at the nest opening will stimulate begging sounds, first hissing and later crying. When the eyes open, the visual areas of the brain begin to map who the bird is and what it accepts as normal. This process is closely associated with the pin feather development. If the bird is in a nest and experiences only its natural parents, it "imprints" as that type of bird. It is usually quite robust and carefree about life up to that point, but once it has imprinted, strange objects may cause it to freeze in alarm.

As the chick approaches weaning, strange sights cause cries of fear and often panic behavior (eg, fluttering, thrashing, flipping backwards). Macaw neo-

nates are particularly prone to flip onto their backs when disturbed. The parents start to ignore the chicks begging to be fed, and an urge to exercise the wings starts to override the desire to be fed. Wing exercise results in a loss of weight and toning of muscles in preparation for sustained flight. The trim lines of the adult replace the bulgy abdomen of the infant, and the neonate starts to fly.

Once the bird leaves the nest (fledges), it becomes versed in the flock experience. Weaning is nearly complete as the parents feed larger, more natural sizes of food, often presenting them to the mouth rather than placing them in the pharyngeal area. In some cases, food for the neonate is placed on the nest or perch to stimulate food gathering behavior. The chick will model its eating habits after those of the parents.

In one field observation of a trio of Black Cockatoos, the parents would fly from branch to branch tearing open pine cones one after the other, ignoring the constant cries of the fully sized and adeptly flying youngster. After 30 minutes of begging and crying, the neonate finally ingested the edible parts of several pine cones unassisted. In some species, this stage of weaning is complete within weeks, while with others, it may take up to a year.

Flock Socialization

As juvenile parrots mature in a flock, they become socialized. If the leader moves, the flock moves. Free-ranging macaws have been observed congregating in large numbers in the trees around a clay lick and waiting for the first bold pair to move onto the ground. The birds then squabble to secure an ideal position on the ground, while an alert bird stays in the tree tops as a lookout. At the slightest hint of danger, the sentry "gives an exceedingly loud alarm squawk, where upon all the parrots take off".¹⁵ Young parrots also learn to submit to the leader. If they try to share the leader's food or perch they are bitten and chased away.

The White-fronted Amazon Parrot was studied over a period of two years to map the normal social behavior patterns termed playing.^{13,29} Those behaviors deemed strictly "play" included play solicitation (moving into the other bird with head and body lowered), play biting or play fighting (slowly and gently biting the tarsi and toes of each other, and foot clawing — opening and closing the raised foot directed at the opposing bird.

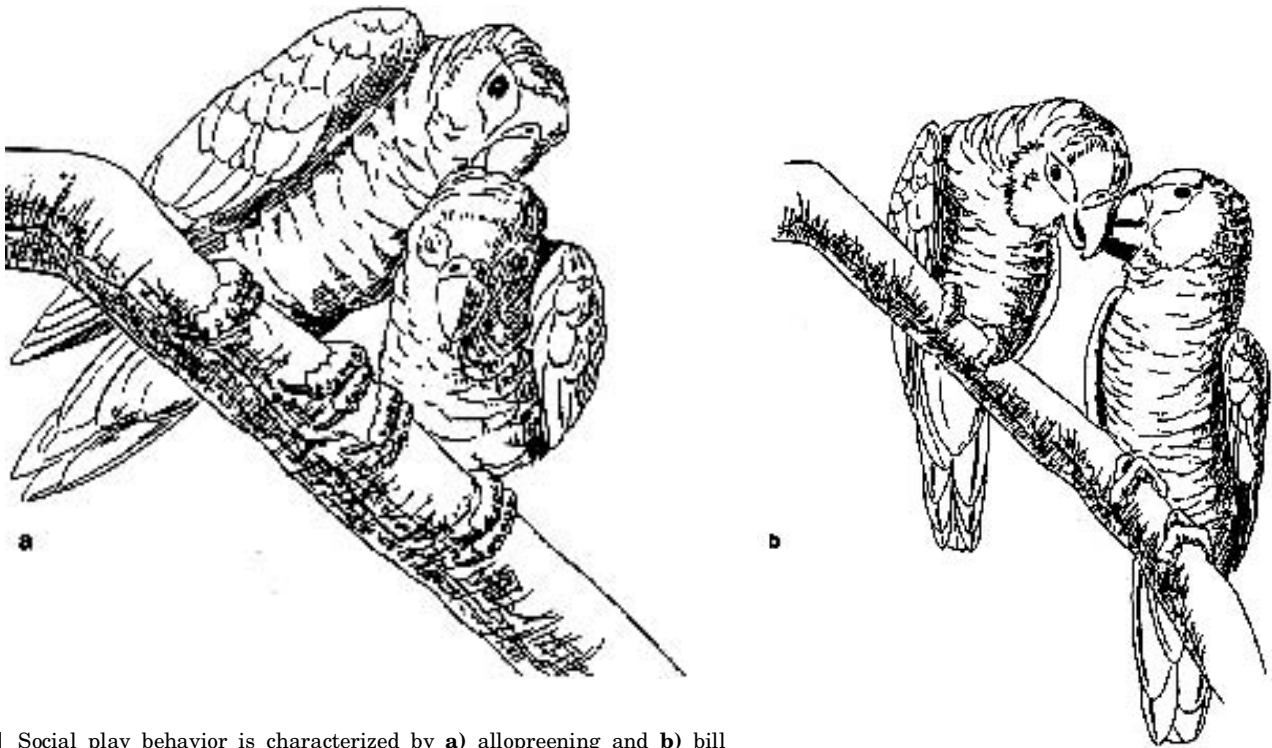


FIG 4.1 Social play behavior is characterized by **a**) allopreening and **b**) bill nibbling (modified from Skeate^{28,29}).

Other play behaviors were associated with pair bonding and included allopreening (grooming one another's feathers), bill nibbling or gently locking bills while flicking tongues together, and pseudo-copulation (Figure 4.1). Other play behaviors were considered agonistic and included foot lifting, attack sliding and neck stretching. True aggressive behavior consisted of rapid jabs of the beak, usually directed at the head.

Courtship and Breeding

Courtship activities initially involve allopreening (see Color 8). In Amazon parrots, lovebirds and the genus *Melopsittacus* the preening is confined to the head and neck region, while in *Aratinga*, *Brotogeris*, *Ara* and *Cacatua* the area preened includes the head, wings and tail.^{13,15} Solicitation is performed by lowering the head towards the mate and assuming a ruffled appearance (Figure 4.2). As a pair bond is formed, the two birds begin traveling together and sleeping side by side. Males feeding females helps to develop this bond, but is not considered a sexually motivated activity because it occurs year round in some Amazon parrots, conures, lovebirds and Grey-cheeked Parakeets.

An older juvenile male (eg, Amazon parrots) may court submissive males until he is old enough to court an adult female in breeding condition. After several years of practice, the juvenile develops the courage to challenge a dominant male. As breeding season approaches, the dominant males establish their own territory on the perching sites and chase other birds away. The males begin eating less and the females, more. The female is often fed by the male.

Posturing for copulation begins with the female fanning her tail, leaning forward and making various vocal sounds. Mounting attempts by the male occasionally end in rolling and what appears to be fighting until finally the female allows the male to complete copulation for several days in a row. Amazon parrot and macaw males stand to the side of the soliciting female, placing one foot on her back (Figure 4.2). In cockatiels, lovebirds, conures, lorries and *Brotogeris*, the male stands with both feet on the female's back.

The pair chooses a nest site and becomes increasingly protective of the territory. Some birds (eg, Amazon parrots, macaws, Sun Conures and occasionally cockatiels) will fly at and attack intruders. In the case of most Amazon parrots, no other female is

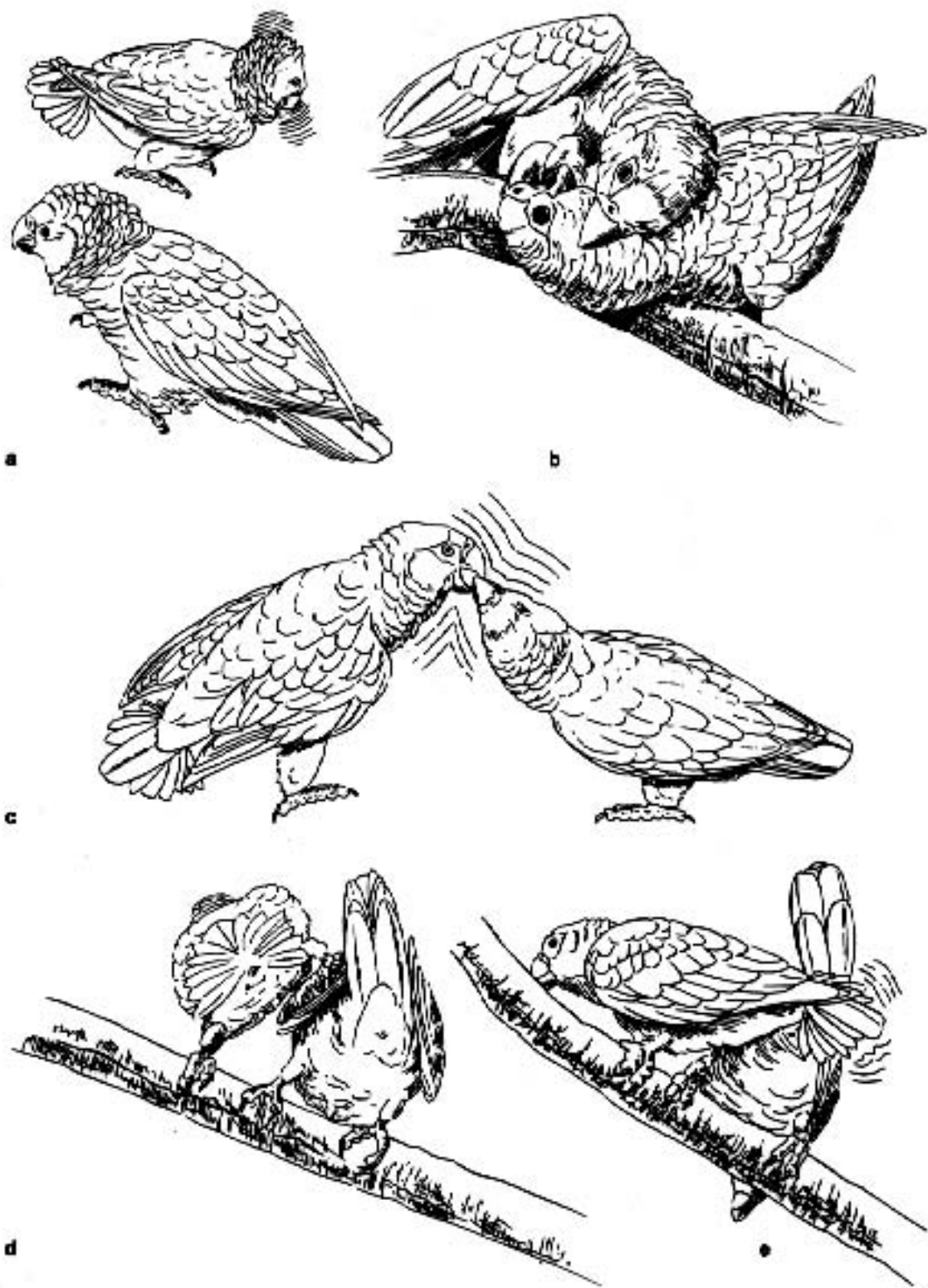


FIG 4.2 a) Sexual solicitation is characterized by lowering the head toward the mate and assuming a ruffled appearance. b,c) Allopreening and the male feeding the female are indications of a successful pair bond. d,e) During copulation, Amazon parrot and macaw males stand to the side of a soliciting female and place one foot on her back (modified from Skeate^{28,29}).

allowed in the area, while in some species of cockatoos (eg, Moluccans), conures and macaws other females may approach the nest area.³¹ Other species such as Monk Parakeets and Queen of Bavaria Conures are communal nesters, with several pairs assisting in nest building. In the case of macaws, conures and cockatiels, both genders incubate the eggs, whereas male Amazon parrots seldom go in the nest.

Many aviculturists believe that the sounds of one pair of birds courting and mating act as a stimulus to cascade breeding activity among a group of aviary birds. Some cockatoos seem inhibited by the visual presence of other birds, while limited visual interaction and opportunities for simulated combat are considered stimulating to others (Amazon parrots).

Some birds become obsessed with driving competitive birds out of their territory and breeding does not occur. This competitive behavior has also been noted in free-ranging birds when the number of birds in a flock exceeds the carrying capacity for an area. The Puerto Rican Amazon Parrot has lost so much habitat that the breeding birds must heavily compete for nest sites. This competition has been shown to prevent a pair from breeding. In addition, life-threatening physical injuries may occur from any territorial defense interactions.³²

In the case of large macaws, the flock creates a buffer zone with the non-breeding birds on the fringes of the territory to warn against intruders. Several pairs of birds are involved in what appears to scientific observers as preparation of the nesting area, and only one out of several pairs breeds at any one time. Estimates of only one-third of a macaw flock breeding during any one season have been made. Thus, the number of birds in a macaw flock may be important to breeding success, and removing adult birds from an established breeding group may be extremely disruptive to other pairs within the flock (aviary).¹⁵

During incubation, some birds exhibit an aggressive walk, which is interpreted as an intraspecific threat display. Amazon parrots, pionus, conures, lorries and Hawk-headed Parrots have been observed performing this parade-like walk.

It is commonly believed that some birds such as Amazon parrots mate for life, but this theory does not always prove correct. Free-ranging male Amazon parrots have been noted to challenge a nesting male, drive it away and then breed with the female.³²

In a group of breeding cockatiels, one male was found to incubate eggs, while a second male would guard the nest and help feed the young. Both males would take turns breeding the female with one male preening the hen while the other male was involved in copulatory activity.



Companion Bird Behavior

Birds have been shown to be capable of discrimination, tool use, numerical competency and problem solving involving simple labeling and intermodal associations. They have further been shown to be able to transfer learned information and thus are considered to have abstract thought. An excellent insight into avian intelligence and learning ability is presented by an African Grey Parrot that has been shown to comprehend certain number-related concepts at a fairly advanced level.^{18,19}

One companion bird was observed to cache food in the folds of its enclosure cover. A Blue and Gold Macaw learned to smack a stick of wood on the table, imitating the owner in an effort to discourage the house cat from coming near its enclosure.¹² A Boat-tailed Grackle, after repeated unsuccessful attempts to kill a frog with its beak, was video-taped using a stick to impale and kill the frog. Free-ranging birds have been filmed using sticks to remove bugs from dead trees.

■ Hand-raising

Birds raised by human foster parents will imprint as people, not birds. As they mature, their natural instincts to choose a mate may cause objectionable behaviors (eg, feather picking, screaming) (Figure 4.3). An imprinted bird will spend all of its time attempting to drive unwanted individuals, other pets or objects out of its territory, while trying to find one chosen person with whom to mate.

Molding a companion bird's behavior should begin when it is a neonate. It should be raised in an area where there is lots of activity and opportunity for new experiences. It should be handled and fed by different people using a variety of feeding methods. Chicks that are exposed to different situations are more stable as adults. Chicks raised "en masse" in boxes



FIG 4.3 A diagnosis of psychological feather picking should be reserved for cases in which no other medical cause for the abnormality can be identified. Psychological feather picking is particularly common in African Grey Parrots but can occur in any species.

without a variety of socializing experiences will be less tolerant and more fearful of new situations as adults. These birds rarely enjoy handling or close contact with people.

Weaning is an important part of early training, and it is crucial that human foster parents understand that begging and whining are a natural part of the weaning process. Some birds, especially Umbrella Cockatoos and lorries often go through a prolonged crying time as they approach weaning. Overindulgent clients can inadvertently teach the chicks that screaming, begging and throwing food will get the results they are seeking (eg, food or attention).

The weaning area should be free of perches, toys and other distractions so that the new food will be the entertainment. A flat plate covered with the formulated diet and several kinds of soft vegetables and fruit can be placed on the bottom of the enclosure. When the bird begins to reject hand-feeding, the

midday feeding should be eliminated. As it begins eating more on its own, the other feedings can be gradually decreased in volume, with the evening feeding being the last to be eliminated.

When a healthy baby is refusing food but begging constantly, it is often overly client-dependent (eg, “spoiled”). In these cases, it may be necessary to have an experienced aviculturist complete the weaning process, because the chick will not beg so intensely from a stranger. Varying the type of feeding utensil (eg, spoon, syringe), adding small chunks of whole food to the formula, or gradually moving the utensil from the bird to the feeding dish may help. It is a common practice by some aviculturists to offer foods from the hand or mouth; however, it should be noted that as a bird becomes older it is capable of seriously injuring the lips or face of the feeder.

Preventing Behavioral Abnormalities

Successful weaning is only the beginning of molding the behavior of a companion bird. In order for the bird to recognize that it is a bird, not a human, it must understand its boundaries. Clear, consistent communication through words and actions will make the bird feel secure and realize that it is the follower, not the leader.

Herd and flock animals are guided by natural desires to lead or to follow. If a bird is allowed to lead, it will determine who can and cannot enter its territory. It may choose the person it perceives as the leader in the household, especially if that person is a good communicator of boundaries. It will also demand that certain foods or items be present in its territory. As it matures sexually, the demands increase and it becomes more and more frustrated, if allowed to lead.



Training

Model-Rival Training

Free-ranging parrots use other members of the flock as models for behavior. This natural learning process can be used by clients in a model-rival training program to teach birds what is and is not acceptable behavior.¹² This program involves the use of one per-

son as the trainer, while a second person acts as the bird's rival, and models both good and bad behavior.

For example, the goal of a training session for the African Grey Parrot, Alex, was to review and improve his pronunciation of the label "five." To accomplish this goal, two trainers, **A** and **B**, were used in a model-rival training program. The dialogue included:

- **A** (acting as trainer): "Bruce, what's this?"
- **B** (acting as model/rival): "Five wood."
- **A**: "That's right, five wood. Here you are.. five wood." **A** hands five wooden popsicle sticks to **B**, who begins to break one of the popsicle sticks apart in a manner similar to that of Alex.
- Alex: "I wood."
- **B** (now acting as trainer, quickly replaces broken stick and presents them to Alex): "Better."
- Alex: "No!"
- (**B** turns from Alex to establish visual contact with **A**.)
- **A**: "What's this?" (presents sticks)
- Alex (now acting as model/rival): "I wood."
- **B**: "Better." (Turns, then resumes eye contact): "How many?"
- **A**: "FIVE wood." (Takes wooden sticks.) "Five wood." (Now acts as trainer, directs gaze to Alex and presents sticks to him.) "How many wood?"
- Alex: "Fife wood."
- **A**: "OK, Alex, close enough. Fivvvvve wood. Here's five wood." (**A** places one stick in the bird's beak and the others within his reach.)¹⁹

Goals and Reinforcers

A list of goals for desirable behavioral attributes for a companion bird might include: be loving and gentle, be quiet, be clean, be willing to consume a balanced diet, come when called, stay where placed, allow wings and feet to be handled, get on a perch, be controllable and be house trained. Once the behavioral goals for a bird have been established, they can be taught by using positive reinforcers.

A primary positive reinforcer is any item or action that will stimulate a behavior to recur. Trainers have traditionally used highly desirable food items, praise or affection as primary reinforcers, but it has been suggested that the use of object rewards increases the speed of learning.¹⁹ The bird is allowed to play with a variety of items until it chooses a favorite. That object is then used as a reward for that day's lessons. Using the same reward every day causes boredom and slows learning. In talking lessons, it is best to use the item being taught as the reward. For example, to teach the word "strawberry," a strawberry should be the reward.

The intensity and amount of interaction with the reinforcer, or the most desirable item of the day

should be varied. The first positive response should elicit a large positive reinforcement, and each succeeding response would be a little less dramatic and much less time-consuming.

After choosing a highly desired item as a primary reinforcer, it is a good idea to also choose a secondary reinforcer. These are items or events that, through repetition, have become associated with the primary reinforcer. The advantage is that they can be interchanged with each other. For example, a sound such as a kiss, a bell, a whistle, or a clicker, can be given as a secondary reinforcer. Each time the primary reinforcer is offered, the bird develops a Pavlovian response to the secondary reinforcer. This is important because it is not always easy or appropriate to offer the primary reinforcer. The bird may be doing a series of actions and rather than stop to offer a primary reinforcer, the sound can be offered and the bird knows the desired action has occurred and is likely to repeat the performance.

Negative Reinforcement

A negative reinforcer is something that a bird is willing to work to avoid and can be used to diminish or extinguish unwanted behavior. Negative reinforcement should be used only as a last resort after the bird has successfully completed as much of the positive training program as it is able; it is the trainer's responsibility to make certain the tasks given the bird were not too difficult. Frequently, clients try negative reinforcement first, and the bird learns that negative actions get attention. Intelligent birds consider the negative reinforcers as a form of entertainment. Especially violent negative reinforcement may destroy the bird's will to learn and cause it to reach a permanent learning plateau. Birds that are frightened may behave, but they would not be expected to seek interactions with the client or enjoy learning.

As with positive reinforcement, negative reinforcement must be given at the exact time the negative event occurs. Immediately placing the bird in a small "timeout" enclosure on the ground is an effective negative reinforcement. Neither the traveling enclosure nor the regular enclosure should be used as a negative reinforcing area. A sturdy cardboard box works well. Other possible negative reinforcers include spraying the bird with water, leaving the room and scolding.

Verbal negative reinforcers should be presented fairly, using commanding, not violent, tones. Identifying certain shapes or colors the bird dislikes may be useful. Merely showing a disliked item from a nonthreatening distance at the moment a negative action is beginning may be a deterrent. Perhaps the use of a remote or voice-activated shocking perch would be effective for feather picking and screaming.

■ Initiating Training

When training a chick, a commitment of at least 15 minutes, three times a week, for three to six months is a minimum. Training sessions should be uninterrupted, and begin and end at the same time each day. They should be held in an unfamiliar place, away from the bird's play or living area. Training of juvenile birds should begin with simple, one-word commands given over and over to elicit a chosen response. The command must be the same each time, and the bird's response must be the same each time in order for the bird to receive reinforcement. Commands should be issued in a command tone that is sharp, louder than a normal talking voice and delivered with authority.

During the early part of training, the minimal effort on the bird's part must be rewarded, and every time the desired action is repeated it is reinforced. Timing of reinforcement is critically important. The reinforcing event must occur at the exact second that the positive action has been completed. This makes it easy for the bird to understand what is being reinforced and increases the possibility of a repeat performance.

After the desired behavior is established it is recommended to attempt two performances to get reinforcement, then three, four and so on until ten behaviors in a row are performed for one reinforcement. At that point, the reinforcement should be changed from a predictable schedule (ten behaviors = one reinforcer) to a random schedule. Thus, a reinforcer may require 10 behaviors one time and two the next. It takes a while to establish random scheduling, but once established it will produce the strongest performance.

■ Teaching Commands

In order to be good companions, birds should respond to a minimum of six or seven commands such as "come," "up," "stay," "wing," "foot," "hood" and "go potty."

Training should begin while the neonate is still being hand-fed and the pin feathers are just beginning to

open. In order to teach the bird to come, a desired item should be presented to it while giving the command, "come." Beginning with a feeding utensil first thing in the morning often works well, especially if no food has been left in the enclosure overnight. The "stay" command should be taught second, while placing a hand in front of the bird in a stop-sign fashion.

With the bird already on a perch, the "stay" command should be given. While the trainer's hand remains in a stop-sign fashion, a second perch is presented to the bird. The "up" command is given and the bird is encouraged to step up onto the perch.

The "wing" command is accomplished by gently taking each wing from the folded to the open position. Repetition and reinforcement may be needed for ten to twelve weeks. By the time of the emergence of the first pin feathers, the bird should be able to lift its wing on command. Once fledging age is reached, the primary feather tips may be easily clipped one portion at a time by using the commands "stay" and "wing."

Likewise, "stay" and "foot" commands are taught for nail trimming. Over a period of weeks, the bird learns to present its foot and allow the nails to be filed.

For ease of mouth examination, "stay," and "tongue" commands are used. The bird can be taught to allow its tongue to be held for up to ten seconds.

By covering the head with a hood, most birds can be easily handled for nail and wing clips and even minor surgery. This has been shown to be an effective way of calming pious parrots, cockatiels, conures, cockatoos, some Amazon parrots and macaws. A doll bonnet can be modified by stitching a length of cloth to the brim and inserting a draw string in the bottom edge, making a sort of bee keeper's bonnet. Towels and plastic trash liners have also been used successfully. The hood should be slowly introduced during play time, making sure it does not frighten the bird. Gradually, over several play sessions, the hood can be placed on the bird's head. Hooding time can be extended to accommodate long periods of time such as those that occur with travel. Hooding prior to anticipated times of stress (eg, visits to the veterinarian) is a good way to prevent fear reactions.

■ House Training

Many birds have a natural inclination to keep the nest clean. They will defecate over the edge or in an area away from the nest. Companion birds usually defecate when they are aroused first thing in the

morning. Other common times are when first picked up and every few minutes thereafter on a fairly predictable schedule. With some patience, ingenuity and reinforcement, most birds can be house trained. Each time the bird is picked up, it should be held over the “toilet” area and the “go potty” command should be given. Signs of impending defecation such as legs apart, squatting and leaning back are cues for moving the bird to the “toilet” and issuing the command. Some larger psittacine birds can be trained in a week, but smaller species make less obvious preparation for defecation and are somewhat more difficult. Nervous birds can be expected to go more often and should be presented with the opportunity to do so.

Diet Changes

The first step in changing a bird’s behavior is a thorough physical examination to detect any sub-clinical disorders. It is difficult to change behavior in a bird that is ill. Included should be a blood panel for liver function and CBC, Gram’s stain, possibly radiographs and cultures. If the bird is on a seed diet, the injection of vitamins, minerals and oral lactulose should precede diet change by three weeks.

For many large birds, offering a highly palatable diet alone for 24 hours is sufficient. If they refuse to eat, mixing the new diet in the old seed diet or adding a treat such as popcorn, fruit juice, cheese or other sweet or fatty items may help. Table food may also be mixed with the new diet for several days, and then gradually decreased. Frequently, the biggest obstacle in correcting an improper diet is the client. Most birds will switch to the new diet within five days if they are placed in a different environment separate from the client.

Many birds are so accustomed to seeds and the familiar surroundings in their enclosure, that adding anything new is stressful. A bird may sit on the opposite side of its enclosure for weeks after a piece of carrot or a new toy has been added. For these birds, a diet change is often more successful if food is not the only change made. The bird is placed in a box, aquarium, bath tub or travel enclosure with no bowls, toys or perches. The food is sprinkled on the floor of its new enclosure, and after several hours of walking on the food, the fear is gone. The natural picking curiosity returns and the food is eaten. Placing food over a mirror on the floor may also help. Use of a bird already on the diet as a model is often rewarding.¹⁰

A number of formulated diets are available today based on nutritional requirements of various companion bird species. Some are more readily accepted than others. As a general rule the extruded diets are more palatable than pelleted diets. Several studies have shown that birds tend to choose a diet most like the diet available in nature.^{4,17,22,25} Subtle shades of black, brown, yellow and green (naturally occurring colors of food) have been shown to be most acceptable. The use of dyed grains has been found to decrease the acceptance of food in several studies.^{11,17}

Birds are able to taste, which is supported by the presence of taste receptors. Preference testing experiments that showed responses to sweet, bitter, acid and salt solutions.^{3,6,9,30} Sugar or fat can be added to a diet to facilitate its acceptance; however, the continued use of 10% sugar and 15% fat by weight in a formulated diet has been shown to be detrimental. Birds have been shown to avoid foods treated with pesticides if given a choice.^{2,11,23,24}

Behavioral Modification

Although it is ideal to train birds when they are young, adult birds with behavioral problems can also be trained. The quickest route to an obedient bird is to let the bird know it must depend on you for leadership.

A hand-held perch and portable stand perches of several heights (all shorter than the handler’s shoulders) are required for the training sessions. Plastic jugs or buckets can be cut to scabbard the arm, keeping the bird off the arm and shoulder and also preventing biting, while a hand cover may be cut from a sheet of dark plastic or a garbage can liner. A hood should also be available.

The bird’s favorite color may be discovered by using children’s beads or other toys that are similar in size and shape but of different colors. The color the bird chooses to play with is considered a favorite and should be used on perches, clothes and reinforcers. The training routine and the commands used must remain consistent. The same stands, perches and reinforcers should be used at each session, and the trainer should even wear the same uniform (eg, a favorite hat or shirt in the bird’s favorite color) (Figure 4.4).



FIG 4.4 To be the most effective, training sessions should occur at the same time each day and there should be consistency with respect to the routine. In this case, an adult Blue and Gold Macaw is being taught to step onto a perch and to allow itself to be stroked. The bird appears to prefer blue colors and the perch and clothing of the trainer reflect this preference. A perch is presented and the command is given to “step up.” A blue plastic bag is used to facilitate contact with the bird as the initial step to acclimate the bird to being stroked.

Only one person should be the trainer for at least the first three to four weeks, but a tape recorder, video camera or coach may help monitor communication between the trainer and the bird. Methods for training problem birds are similar to those for neonates. Simple, one-word commands in a relatively strong, authoritative voice should be given only once and only when in training. The trainer must be ready to demonstrate appropriate behaviors and must have positive reinforcers chosen and ready to be delivered. To be effective, behavior correction sessions must occur four times each week for a minimum of 15 minutes for each session. Practice sessions should take place in the training area only and should be uninterrupted.

■ Specific Behavioral Problems

Companion birds are frequently presented to the avian practitioner with behavioral problems. Birds exhibit a variety of negative behaviors including biting, screaming, feather picking, favoring one person and an unwillingness to go in or come out of an enclosure. Training steps that can be used to correct many of these problems are listed in Table 4.1. Many of these problems can be prevented by encouraging the client to carefully select a companion bird based on specific attributes (see Chapter 1).

Biting

A good way to overcome negative behavior is to avoid it. A biting bird should receive no affection (eg, pet-

TABLE 4.1 Steps to Behavior Modification

- Stage 1** During the first week of training, the bird should learn to stay on command. To do this, it needs to identify the word, “stay” with some negative visual signal (eg, holding the hand up with the flat palm facing the bird, or holding a large black object in front of the bird). If the bird tries to move or bite, the visual signal is offered with the word “stay”. If the bird responds (a response in this case is lack of movement), it should be verbally praised. When the “stay” command is mastered and the bird has successfully responded ten times in a row, the training can move to Stage 2.
- Stage 2** The bird is ready to be picked up with a perch on command. First issue the “stay” directive, even as the hand-held perch is being presented (without the “up” command). Hesitate to see if the bird steps up on its own. If so, present the negative visual signal but do not repeat “stay.” Then give the “up” command. If the bird does not step up, gently slide the perch closer into the bird’s abdomen to force it to step up on the perch. Reinforce (verbally praise) the bird for stepping up. Repeat the process, going from the hand-held perch to a stand perch using the same commands, “stay” (with the stop sign) and “up” for moving to the perch (at the discretion of the trainer, not the bird). The bird can then be trained to “stay” on the perch stand, for increasing periods of time.
- Stage 3** Using a feather or a stick, the wing is slightly opened away from the bird’s body, while the command, “wing” is given. The bird is praised, and the steps are repeated. The same series of exercises can be performed to enable the bird to lift a foot on the “foot” command. Eventually, the bird will respond comfortably so the wings and nails can be trimmed without restraint.
- Stage 4** When “stay,” “up,” “wing” and “foot” are performed successfully, the bird is ready to receive a hood. A large soft article of an acceptable color (towel, piece of opaque plastic, etc) is gently draped over the bird’s body while the command “hood” is given. The article is left on for only a few seconds at first, gradually increasing the time of each phase as the material is maneuvered up over the head. The size is gradually decreased so a small “hood” is actually placed over the head, obscuring the bird’s vision. The hood is then removed at intervals. Stages 1 through 3 should be repeated with the hood over the bird’s head. Over time, the trainer should be able to touch and walk around with the hooded bird on the hand-held perch, and even trim the wings or nails and transfer the bird to a new person without incident. Additional challenges should be added from time to time to keep the bird interested and the bird/trainer relationship strong.

ting, holding) for one to two months. If the bird is biting out of fear the trainer must first gain its confidence. If it is biting because it is “spoiled” or needs to show dominance, it must first be trained to respect the client. If the bird runs up the perch and bites the trainer’s hand, a section of PVC pipe placed over a portion of the perch so it will spin if stepped on, can be used as an effective barrier.

Screaming

Screaming is a serious behavioral problem, especially in cockatoos and macaws. The time of day and circumstances associated with screaming should be charted for several weeks in order to arrange training or play sessions for the time just before the



FIG 4.5 Some cases of psychological feather picking can progress to the point of self-mutilation.

screaming behavior usually begins. If that is impossible, the bird may be hooded or taken to a dark time-out location prior to screaming periods. The remainder of the training is routine, with special emphasis placed on the trainer leaving the room for increasing periods of time during the stay command. If the bird screams during training, the trainer should leave the room, and if it continues, the bird should be hooded or placed in a time-out location until it stops. Yelling back at a bird is never useful, as it will quickly learn that screaming is a good way to get attention. The trainer should always wear ear protection when working with a screaming bird.

Feather Picking

Feather picking may be caused by pathologic and psychologic conditions, and the first step in solving the problem is a thorough physical examination. Once medical causes of feather picking have been ruled-out, psychologic causes should be explored. The two most common primary causes of feather picking in the author's experience are frustrated mating instincts and lack of proper training (Figure 4.5).

Sexual frustration is common in birds, especially in cockatoos and many domestically bred birds. Programmed in the wild to be constantly with a mate, a bird becomes distraught when its "person mate" is gone much of the day. It may also become jealous of other family members or maladjusted following a change in environment (eg, change of enclosure location, a new dog or child). Even the client's emotional state can affect the bird's behavior.

Training is the first step in solving psychological feather picking, with correction of any dietary deficiencies being a critical part of the therapy. Birds that feather pick often consume pin feathers as if they are attracted to the taste of blood. A craving for the minerals, protein and fat of mature feathers may even be the cause for this pica. Birds given a balanced diet tend to feather pick less and spend less time chewing plants and perches. Many birds pick when first left alone, so early training in anticipation of the problem may be an effective preventive. Once feather picking is established, training may decrease the severity of the feather picking but will rarely stop the habit (see Chapter 24).

Favoring One Person

A bird that fiercely favors one person should be given the basic training, and when the training is finished, several other people should become involved in giving the commands and continuing the training interactions. Sexual stimulation such as stroking, playing with favorite toys and hiding in dark places should be avoided (Figure 4.6). When other people are present, the bird should be kept away from areas it wants to defend, such as shoulders and its enclosure. Sexually induced regurgitation, masturbatory behavior and pulling ears and jewelry can be corrected using preventive measures, basic training and finally, negative reinforcement.

Going In and Out of Enclosure

A bird that refuses to leave its enclosure should be fed just outside the enclosure door. The food should be left out for 15 minutes and then removed. Once the



FIG 4.6 Masturbatory activity is common in imprinted adult birds that accept a client, enclosure furniture or toys as a mate.

bird is accepting food in a bowl placed on the outside of the enclosure, it should be made to eat a portion of each day's meals from a spoon. With a perch stand placed near the enclosure door, the bird should be taught the "come" command while the trainer holds the food for several minutes. If this is repeated several times a day, the bird will gradually learn to perch outside the enclosure and can then be moved to other eating areas away from the enclosure.

A bird that refuses to go back into its enclosure may be trained in the same manner by placing food in the enclosure for 15 minutes. If the bird enters within that time period, it is allowed to eat for a few minutes before the food is removed and the door is closed.

A bird that has psychogenic polydipsia may respond to a similar behavioral modification program. Consumption of water is restricted to two ten-minute periods a day. These birds should be examined for possible disease.

Support Groups

Veterinarians, bird trainers, behaviorists and bird clubs have begun to offer group support for prevention and correction of bird behavior problems. Some resources for behavior modification are: Chris Davis, PO Box 1067, Sierra Madre CA 91025; 818-355-2267; Eddie Callahan, 5770 Lake Worth Road, Lake Worth FL 33463; 407-964-2121; Parrot Responsive, PO Box 66 Dept. RHH, Riverside IL 60546; 708-442-8081; Parrot People, PO Box 1650, Bellaire TX 77402-1650; 713-447-6622.

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