Training vs. Maintaining Good Behavior

Training a new behavior may take some time, but the investment is worth it. Plan on a few sessions to get a new behavior trained. Difficult behavior will take more time. If you really need a behavior trained quickly, have frequent short training sessions. This may mean up to three sessions a day depending on your parrot’s interest in the reinforcer. Most parrots will participate in training sessions for five to twenty minutes on average.

To maintain behavior be sure to reinforce your bird every time you request behavior. You will no longer need to have daily training sessions to teach your parrot how to do the behavior. Instead you will reinforce your bird whenever he presents the behavior in your day to day interactions.

Once a behavior is solid, try offering a different reinforcer for each presentation of the behavior. This will help keep your bird motivated to present behavior. He never knows if he is going to get a head scratch, a toy or his favorite treat. If for any reason your parrot stops pressing the behavior, you can go back to your approximations and retrain it. Usually the behavior will get back on track very quickly.

You Can Do It!

Well behaved parrots do exist. Parrot can learn to step up, step down, go back into the cage, step up on strangers and come to you when called. Spend a few training sessions getting these five important behaviors solid. You will find interacting with your parrot even more rewarding when he is cooperative and eager to respond to your requests. Most importantly you will enjoy a wonderful relationship with your parrot based on trust.

Reinforcements

Reinforcers are needed to ensure a behavior is maintained. The most common reinforcers for this are: food, toys, attention, and a variety of items that are of personal interest to your bird. It is also important to use positive reinforcement to train step up is critical for recall.

The first approximation for training recall is cuing the bird to step up. In the next approximation the hand is presented slightly farther away from the bird so that he must stretch his legs to get to the hand. In the following step the hand is presented at a distance that will require the bird to reach up onto the hand and pull his body to the hand. In some cases the bird may flap in conjunction with the step. This can be heavily reinforced to communicate flapping is desired. The next presentation of the hand should be far enough away that the bird will need to hop to the hand to gain reinforcers. Over time the distance can be increased. You can fine tune this training by presenting your cue for your bird to fly to your hand when the bird looks very likely to fly to you. This will pair a quick response to the cue with the actual reward. This will help create a solid recall.

If your bird is not flighted, recall is still a behavior worth training. Instead of asking your bird to fly to your hand, you will be asking him to walk towards your hand. Practice the behavior on a flat surface initially. Then adding climbing to your hand as another type of recall. If your bird ever ends up in a tree you will find this behavior extremely helpful.

Desirable Characteristics of an Ideal Avian Probiotic

• Ability to improve immunity
• Ability to improve longevity
• Ability to improve growth rate and productivity
• Ability to prevent and/or treat certain diseases
• Ability to prevent gastrointestinal infections
• Ability to reduce the number and severity of infections
• Ability to enhance digestive health
• Ability to enhance nutrient absorption
• Ability to enhance water solubility and bioavailability of nutrients
• Ability to enhance nutrient delivery to the target organs
• Ability to enhance nutrient delivery to the target tissues
• Ability to enhance nutrient delivery to the target cells
• Ability to enhance nutrient delivery to the target molecules
• Ability to enhance nutrient delivery to the target species
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isolated from birds did not adhere to cells, only \textit{Lactobacillus} species did. Giving Lactobacilli from mammals to chickens had no effect, but giving adherent Lactobacilli from chickens resulted in better growth rates and resistance to gram negative bacterial infections. Since the discovery of adherence in avian lactic acid bacteria, researchers continued to find that mammalian Lactobacilli have no effect in birds and avian strains of Lactobacilli with a high level of adherence provide the most health benefits. In pitta- cines, cockatiel chicks were given a \textit{Lactobacillus} species found adhered to crop cells from healthy adult cockatiels. The group not given the adherent Lactobacilli developed a population of non-adherent Lactobacilli by two weeks of age (presumed to be from the environment). The groups given the adherent Lactoba- cilli had significantly faster growth rates, 100 times fewer gram negative bacteria, and higher total numbers of lactobacilli. So non-adherent Lactobacilli didn’t provide the benefits seen with an adherent Lactobacilli. Research has shown that birds need adherent bacteria so that when the crop empties there is still bacteria available to inocu- late new food entering the crop and to provide a constant supply of bacteria for the entire intestinal tract. Adherent bacteria help prevent pathogenic bacterial infections by competing for bind- ing sites. The pathogenic bacteria need to attach to the intestines before they invade or just to keep from being swept away by the movement of the intestinal contents. If all the binding sites are already occupied, they can’t do as much damage. Research has also shown that when a \textit{Lactobacillus} attaches itself to an intesti- nal lining cell, it triggers changes in the cells themselves that improves immunity, improves digestion and absorption of nutri- ents, and helps keep pathogenic bacteria from attaching.

\textbf{SPECIES SPECIFIC.} What does species specific mean? The probiotic bacteria must be isolated from the same species of ani- mal you’ll be using it in. Our commonly kept pet birds belong to many different species of \textit{Lactobacillus}. Different \textit{Lactobacilli} vary in the types and amounts of metabolites they produce. One study tested inhibition of \textit{E. coli} and \textit{Salmonella enteriditis}, by metabolites from 296 differ- ent strains of Lactobacilli isolated from the intestinal tracts of chickens. They found 77 strains produced inhibitory metabo- lites against one or both of the pathogens and 35 of those 77 showed strong inhibition against both bacteria.

\textbf{ABILITY TO IMPROVE IMMUNITY:} Much more research into probiotic effects on immunity has been done in humans and mammals than in birds, but some work has been done in poultry. Probiotics have been found to improve immune function and influence changes in the intestines that improve disease resistance. In chickens given Lactobacilli then given coccidia (an intestinal parasite), numbers of the parasite in the droppings were reduced by as much as 75%, while given coccidia (an intestinal parasite), numbers of the parasite in the droppings were reduced by as much as 75%, while

\textbf{ABILITY TO COLONIZE AND REPRODUCE:} Suc- cessful probiotic organisms colonize and reproduce in the bird. You should be able to find live probiotic organisms in the bird after you stop giving the probiotic. That means it has estab- lished within the bird’s intestinal tract.

\textbf{ABILITY TO SURVIVE THROUGHOUT THE GI TRACT:} In order to populate the entire intestinal tract, a pro- biotic organism must be able to survive the acid environment of the proventriculus and gizzard and survive in the presence of bile in the intestinal contents. Crop lining cells constantly die and become replaced with new cells. The dead cells travel down the gizzard and proventriculus and become replaced with new cells. The dead cells travel down the gizzard and proventriculus and survive in the presence of gram negative bacteria, and increased total numbers of lacto- bacilli. Lastly, a Lactobacilli-based probiotic was given to three species of macaws (Spix, Lear’s, and Hyacinth) but what spe- cies of bird the Lactobacilli came from was not reported. The birds showed a shift from mostly gram positive cocci flora back to mostly gram positive rod flora based on gram stains of the droppings. From this very limited amount of pittacline research it appears that there might be a few take-home messages: (a) the beneficial effects of a probiotic depends on the presence of live organisms; some cross-species benefits do occur; and (b) that competition for binding sites was only one way the organisms inhibit pathogenic organisms. At first they thought the Lactobacilli inhibited other organisms by producing lac- tic acid which made the intestinal contents more acidic. Later they found that an acid environment or lactic acid alone could not explain the inhibition that was seen.

Other inhibitory materials, or metabolites, were discov- ered. Different Lactobacilli vary in the types and amounts of metabolites they produce. One study tested inhibition of \textit{E. coli} and \textit{Salmonella enteriditis}, by metabolites from 296 differ- ent strains of Lactobacilli isolated from the intestinal tracts of chickens. They found 77 strains produced inhibitory metabo- lites against one or both of the pathogens and 35 of those 77 showed strong inhibition against both bacteria.

\textbf{Multiple- vs. Single-Species Probiotics} Some probiotics contain several different species of bacteria and some contain just one, usually a \textit{Lactobacillus} species. Some researchers believe that the best overall benefit can be obtained when different types of bacteria each play their own role in protective the bird. Other researchers have developed methods to test Lactobacilli for positive traits and believe that if you use a very good strain of \textit{Lactobacillus} you get the best results. There are many studies that support each of the two opinions. Currently

\textbf{SAFE:} All probiotics in use today can be found on a list of generally regarded as safe (GRAS) bacteria. Probiotic bacteria must be shown to be harmless to birds.

\textbf{SURVIVE PROCESSING AND STORAGE:} To be marketable, a probiotic organism must grow well in artificial media and then survive freeze drying, storage, and reconstitu- tion. Because the beneficial effects of a probiotic requires that the birds take in enough live organisms, the organisms must be able to survive whatever they are exposed to until they are ingested. Probiotics need to be viability tested for shelf life, storage conditions, and administration conditions.

\textbf{Probiotic Benefits Documented in Birds} \textbf{DISEASE PREVENTION:} Many studies in poultry have shown probiotics can prevent disease and reduce the numbers of pathogenic organisms they shed into the environment. Most of these studies involved pre-treatment with probiotics either before the birds were exposed to the pathogen or before the same type of pathogen was given. In a com- parison of probiotic pre-treatment and treatment (given probi- otic after giving the pathogen) pre-treated birds showed much better survival and performance, although treatment provided some protection as well. In psittacines, a species specific \textit{Lac- tobacillus} given to cockatiels showed a significant reduction in potentially harmful gram negative bacteria. Several of the protectively treated psittacines did not show any differences in health after giving the probiotic. That means it has estab- lished within the bird’s intestinal tract. The overall effect is to make more nutrients available to the bird from its intestinal tract. The following research has been done in psittacines: Quaker parakeets were given a mammalian \textit{Lactobacillus} probiotic for 3 days. No difference was found between the flora of the birds getting the probiotic and the birds getting no probiotic, but no live bacteria were found in the product used. A chicken- derived probiotic was given to various species of pittacline chicks throughout their feeding period. No changes in growth rate, bacterial flora, or resistance to disease was found. Again, no live Lactobacilli were ever cultured from the probiotic given. In cockatiel chicks, a chicken-derived \textit{Lactobacillus} nutritional supplement was given from 14–42 days of age. This time live Lac- tobacilli were found in the product. The chicks showed signifi- cantly increased growth rates but no reduction in numbers of gram negative bacteria or yeast. Cockatiel chicks given an adher- ent cockatiel-derived \textit{Lactobacillus} from hatch to six weeks of age showed significantly increased growth rates, reduced levels of gram negative bacteria, and increased total numbers of lactobacilli. The \textit{Lactobacilli} isolated from birds did not adhere to cells, as has been seen with an adherent Lactobacilli. Researchers believe that birds need adherent bacteria so that when the crop empties there is still bacteria available to inocul- ate new food entering the crop and to provide a constant supply of bacteria for the entire intestinal tract. Adherent bacteria help prevent pathogenic bacterial infections by competing for bind- ing sites. The pathogenic bacteria need to attach to the intestines before they invade or just to keep from being swept away by the movement of the intestinal contents. If all the binding sites are already occupied, they can’t do as much damage. Research has also shown that when a \textit{Lactobacillus} attaches itself to an intesti- nal lining cell, it triggers changes in the cells themselves that improves immunity, improves digestion and absorption of nutri- ents, and helps keep pathogenic bacteria from attaching.

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2013 State Quarter Challenge!

1,055,476,000 North Carolina quarters were minted in 2001...

How many coins can you find to help aviculture?

OFFICIAL CONTEST RULES:

Mail coins to the AFA Home Office. Coins being mailed must arrive on or before July 31, 2013 to be counted and verified.

Coins may also be presented at the AFA Convention in Raleigh, NC no later than August 9, 2013. Be sure to include full name and address with your entries.

Winner will receive one (1) year’s free individual membership to AFA along with a Garmin GPS system.

Winner will be announced August 10, 2013. Need not be present to win. In the event of a tie, winner’s name will be drawn.

Mail Coin Entries To:
American Federation of Aviculture, Inc.
Attn: 2013 Quarter Challenge
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1 Yr Indiv. AFA membership & Garmin GPS
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Recommendations for Probiotic Use

Appropriate probiotic administration can both prevent gastrointestinal diseases and help a bird fight off existing infections. Prevention is much more effective and probiotics should not be used instead of specific treatments for an intestinal disease. You should continue to get a sick bird diagnosed and treated, using the probiotic as additional help. In the poultry industry, probiotics are recommended for treating newly hatched chicks who have no contact with older birds. This allows them to establish a healthy intestinal flora and help them develop their intestinal immune defenses. In psittacines, parent birds feeding chicks in the nest provide normal flora as they feed their chicks. The parents might need to be given a probiotic if they are older birds, have been treated with antibiotics, or have been through a stressful period. Handfed chicks do not receive normal flora from their parents, so giving a probiotic would serve the same purpose as it does in poultry chicks separated from adults.

Because numbers of gram negative bacteria increased with age and numbers of Lactobacilli decreased with age in psittacines, periodic treatment with a probiotic to replenish their normal bacterial flora would be advisable, especially in pet birds with limited exposure to other members of their species.

As mentioned earlier, antibiotic treatment is known to kill normal flora in addition to the target pathogenic bacteria. Probiotic use may be indicated after antibiotic treatment to re-establish normal flora. It’s probably not advisable to give a probiotic during antibiotic treatment because the antibiotic will likely just kill the bacteria you’re giving the bird. Wait until the antibiotic treatment is finished before starting the probiotic.

Birds experience stress when something significant changes in their environment or if they are subjected to uncomfortable or fearful conditions. Things like moving, getting a new puppy or cat in the household, being set up with a new mate, having an owner be less available are all examples of potentially stressful situations for a bird. Studies have shown that physiologic stress reduces numbers of normal bacteria and increases numbers of abnormal or pathogenic organisms in the intestinal tract. Stress also triggers changes that decrease intestinal immunity and overall immunity and damages the intestinal lining. Because probiotics help stimulate immunity and help intestinal cells heal, they should be used in times of stress to help prevent disease.

Summary

There is ample evidence that the use of appropriate probiotic organisms can provide significant benefits to birds. More research is needed to determine if bacterial strains can be found that adhere or colonize in multiple pet bird species. Because the commonly kept pet birds belong to hundreds of different species, it won’t be possible to develop species specific probiotics for them all. Research has shown that even among Lactobacilli there’s a wide range of abilities to adhere, produce inhibitory metabolites, and survive passage through the intestinal tract.

Potential probiotic bacteria need to be screened and selected for positive traits. Probiotic manufacturers need to determine the minimum doses of live organisms needed and be able to guarantee delivery of that minimum dose under recommended storage and handling conditions.

Breeding Fig-parrots in Weltvogelpark Walsrode

With a maximum size of 20 cm, fig-parrots (Tribe Cyclopsittacini) are among the smaller species within the Order Psittaciformes. Weltvogelpark Walsrode houses four of the five known species of these small parrots (Genus Cyclopsitta and Psittaculaeae). During the 2012 breeding season the Orange-breasted Fig-parrot (Cyclopsitta gouldianae) as well as the Double-eyed Fig-parrot (Cyclopsitta dasyphthalama) successfully parent-reared their young. German-wide, both species can only be seen in Weltvogelpark Walsrode.

All the seven recognized subspecies of the Orange-breasted Fig-parrot inhabit rain, monsoon and swamp forest in lowlands and hilly regions up to 1100 m on New Guinea and surrounding islands. In the wild the main breeding season is between December and June. These fig-parrots nest in a hole that they excavate themselves in an arboreal termite hill. In contrast, the Double-eyed Fig-parrot nest in existing cavities in a hollow of a high tree or in a rotten tree trunk or limb. This species has eight recognized subspecies which are found on New Guinea and on the Northeast coast of Australia. Double-eyed Fig-parrots inhabit lowland and montane forest, mangroves and more open woodland up to 2000 m. The main breeding season occurs between March and June in New Guinea, while in Australia the birds mainly breed between August and November.

A special feature, alluded to in their name, is the diet of these small parrots—in the wild they mainly feed on fruits of various fig trees, preferring the seeds rather than the flesh of the figs. Additionally, a variety of other fruits and berries, nectar and also insects and their larvae are taken.

In captivity experiences have shown that fig-parrots are very sensitive to disturbance, especially during the breeding season. Changes in their direct surroundings as well as at the nest box can unsettle them. It is very important to deal with the birds very carefully in order to breed them successfully.

To encourage our breeding pairs of Orange-breasted Fig-parrots to start breeding, we construct nest boxes with a size of 30 cm x 20 cm x 20 cm (length x width x height) that are placed in the enclosures behind the scenes. These nest boxes are made of waterproof particle board. An entrance hole with a diameter of 4 to 6 cm is provided on both sides of the boxes. The boxes are entirely filled with natural cork tiles. The cork is scratched a bit at the entrance hole to provide the birds with a starting point to begin excavating their nest cavity in the cork tiles. Digging the cavity together stimulates the pair’s breeding instinct. Once the nest cavity is ready, the parents start incubating their eggs.