

I. INTRODUCTION

Birds from small to large have been kept as pets for centuries around the world. Canaries and other finches are valued for the beauty of their song and plumage. Parrots' intelligence and ability to talk in human speech has fascinated people throughout the ages.

Many birds in the parrot family are easily tamed and can be very affectionate and playful with their owners, while finches are a better choice for those who prefer to admire them in their cages. Finches and smaller parrots are great pets for customers who are not home much during the day, but medium to larger parrots need a lot of attention, making them not the best pet for everyone.

Learning Objectives

This chapter will give you a better understanding of birds and increase your confidence when selling these animals and related products.

After completing this module, you should be able to:

- Examine birds and identify possible health problems.
- Care for the birds in your store.

- Communicate basic needs to customers.
- Explain characteristics of different species and groups.
- Recommend equipment and add-on sales items for birds.

II. EXAMINING BIRDS

Introduction

The birds in your inventory should be healthy and in good physical condition when they arrive at your store. While an avian veterinarian can be consulted or called on to treat birds as needed, you are the principal resource to alert store management to any abnormal behavior or signs of trouble.

To avoid transferring disease, new arrivals should be kept separately from other birds in the store. Birds' unique respiratory system makes them very susceptible to airborne diseases and pollutants, and most will instinctively try to hide illness because a weak bird in the wild is a target for predators. Changes in behavior may be the only clue that something is wrong.

New arrivals should be carefully examined to see if there are any obvious problems. Birds should be monitored daily to ensure they are healthy and act normally. Use a daily checklist when necessary to prevent overlooking any problems. If you find something wrong,

notify your supervisor immediately so proper action can be taken.

Be sure to wash your hands thoroughly after handling each bird, feeding or cleaning cages. To prevent disease transmission, you also should change your apron or any other clothing that has been in contact with new arrivals before handling other birds in the store.

Legal Requirements

Certain states, counties and towns have specific regulations that govern bird sales. Local or state laws may require that pet stores have a certified specialist on staff or that all birds be examined by a licensed avian veterinarian before they can be sold. Check with your supervisor about requirements that impact your store.

Even if not required by law, some stores may have birds, particularly larger parrots, examined by a vet and issued a health certificate as a standard practice before putting them out for sale.

Initial Examination

New birds should be given an initial examination to identify any obvious problems or health issues.

Area to Examine: Eyes

What to Look for: Eyes should look clear and bright, with no discharge or swelling around the eye.

Possible Problems: Infection, injury or systemic disease.

Area to Examine: Nostrils

What to Look for: The cere (area above the upper bill) should be fairly smooth or have a consistent rough texture, with no pitting or odd growths. The nostrils should be clear, with no discharge or crustiness around the opening.

Possible Problems: Scaly mite infestation, infection or systemic disease.

Area to Examine: Beak/Mouth

What to Look for: The beak (or bill) should be fairly smooth, with no pits, holes or abnormal growths. The mouth should be closed completely, with no deposits, wetness or swellings around the mouth, and no panting. The bill grows constantly, so some layering may be noticeable. The bill should be of normal length for the species, not elongated.

Possible Problems: Injury, infestation, upper and lower bill not properly aligned, infection, respiratory ailment.

Area to Examine: Head

What to Look for: The head should appear normal with no swelling. Feathers should

look smooth and normal with no sores, scabs or bald spots (except right behind the crest in cockatiels and cockatoos).

Possible Problems: Infestation, infection, injury.

Area to Examine: Neck/Throat/Chest

What to Look for: Feathers should be smooth, with no bald spots or sores. Hand fed baby birds may have a swelling in the crop (front throat area), which is normal. Check for coughing or abnormal or labored breathing; “tail pumping” or exaggerated tail movement with each breath may indicate a respiratory problem.

Possible Problems: Infestation, infection, respiratory ailment

Area to Examine: Wings/Back/Abdomen

What to Look for: Wings should lay flat against the body when down and flap easily. Feathers should look smooth, with no bald spots, sores, swelling or bumps.

Possible Problems: Injury, infection, infestation

Area to Examine: Tail/Rear

What to Look for: Tail feathers should be smooth and not broken. Area around the vent (anal opening) should be clean, with no discharge, wetness or fecal matter on feathers around vent, and no swellings, sores or bald spots.

Possible Problems: Injury, digestive problems, infection, infestation

Area to Examine: Legs/Feet

What to Look for: Surface of legs and feet should be rough textured but fairly flat, with no bumps or growths. Scales should be present, with no odd growths or swelling. Four toes should be present and end in a slightly curved nail (parrots: two toes facing forward and two back; finches: three forward and one back). Bird should move smoothly without limping or favoring one leg when climbing or landing (sleeping on one leg is normal).

Possible Problems: Scaly mites, injury, infection

Area to Examine: Feathers

What to Look for: Body feathers should be smooth and in place, with no obvious bald spots, bent or curled feathers (young birds’ feathers may look a little rough). Coloration should be appropriate for species, with no bands or bars of abnormal color, particularly on longer wing or tail feathers. Check for excessive scratching.

Possible Problems: Infection, systematic disease, prior stress (bands/bars), infestation (lice/mites), injury

Ongoing Examination

After the initial examination, part of your job may be to observe and record each bird’s general health conditions on a daily basis until it is sold. This will help ensure the birds you sell are as healthy as they can

be. Notify your supervisor immediately if you notice a change in behavior or other symptoms of possible illness.

Weight—Hand raised birds should be weighed every three to four days using a scale that measures in grams. Healthy young birds will gain weight steadily, although once ready to fledge (leave the nest), they may stay at a steady weight or even lose a little to prepare for flight.

For fledglings and adults, weight also can be assessed by feeling the muscle on either side of the keel bone in the middle of the chest. In healthy birds, the muscle areas should come to the top or just slightly below the keel bone.

Birds with muscles that extend above the top edge of the keel bone may be overweight, a particular problem with Amazon parrot species. Muscles that stop well below the top of the keel bone may be a sign that the bird is underweight. Work with experienced bird personnel at your store and/or an avian veterinarian to get an idea of normal muscle distribution for species in your care.

Behavior—A bird’s behavior often is the best reflection of its general health; because birds try to hide illness, a change in behavior may be the first sign of a problem. When observed and noted daily, changes are easily spotted and further evaluations can be made.

Birds normally are most active and vocal in the morning and late afternoon. Healthy birds will be alert and curious about their surroundings. Although very young birds will take a number of naps during the day, they should be energetic when awake. Sick birds often will vocalize less, sleep more and appear lethargic or uninterested in what is happening around them.

Healthy birds will preen, or clean and straighten their feathers, on a regular basis. Birds have an oil gland at the base of their tail; during preening, they use their beak to pick up oil to clean and waterproof their plumage. Many species also will preen each other (called *allopreening*), particularly where they can’t reach themselves. Sick birds will preen rarely or not at all.

Eating—Food intake is essential to disease resistance and development. Poor eating or not eating at all can lead to rapid deterioration unless someone notices and takes action. Lack of appetite often is an early indicator of stress, infection or an internal parasite problem.

Fecal Matter—To stay light for flying, birds solidify their urine and release feces frequently, usually every 15 to 30 minutes. Fecal matter typically has a consistency similar to pudding or slightly dryer, with a white part (solidified urine) and a darker, usually greenish-colored, component.

Feces that deviate from normal may indicate problems. Changes in consistency, size, quantity and color are important to note and report to a supervisor or your store veterinarian. Note that changes in diet sometimes will impact feces' color or consistency.

Vomiting, Coughing, Nasal Discharge, Ocular (Eye) Discharge—All of these are danger signals and can indicate a serious health problem. Although birds sometimes regurgitate or vomit food in response to a mirror, another bird or a person, frequent regurgitation without outside stimulus may be a sign of infection or disease. If you notice any of these symptoms, let your supervisor know so immediate action can be taken to isolate the bird for further examination and treatment.

Common Parasite Identification

Parasites are quite rare in captive-bred birds unless they have been exposed to wild birds, unlikely unless they were bred outdoors in warmer regions.

Here are the more common parasites and steps you can take to prevent further infestation:

Scaly Mites

- **Overview:** Scaly mites are fairly common,

most often seen in budgerigars (parakeets) and canaries, and highly contagious.

- **What to Look For:** These mites generally attack the cere, beak, feet, legs and face area, resulting in crustiness or abnormal growths that appear scaly. The bill may look pitted (instead of smooth) or crooked.

- **What to Do:** Isolate birds with signs of scaly mite infestation and throw out any porous materials from the cage, including wood or rope toys and perches. Depending on the severity of infestation, treatment may be done with an over-the-counter medication or a veterinarian recommended remedy. Treatment should be continued for three to four weeks to eliminate mites throughout their entire life cycle.

Red Mites

- **Overview:** Red mites are nocturnal parasites that are most problematic for baby birds in the nest box. These mites suck blood at night, then retreat to dark places during the day, such as crevices inside or outside the cage. Red mites can cause anemia and troubled sleep, leaving birds irritable and weak, as well as transfer internal blood parasites and bacterial diseases.

- **What to Look For:** Red mites can be detected by placing a white sheet over the

cage at night, then looking for small red dots on the sheet in the early morning.

- **What to Do:** Treat the cage, contents and surrounding environment with an insecticide safe for use around birds or a bleach solution. Where possible, take apart plastic or metal perches or toys and treat individual components. Accessories made from porous materials, such as rope or wood, should be thrown out.

Feather Lice or Mites

- **Overview:** Feather lice or mites are seen rarely in captive-raised birds. Lice have white, elongated bodies and may be visible to the human eye; mites usually can be seen only under a microscope.

- **What to Look For:** Symptoms include excessive scratching and preening, as well as feathers that appear rough or damaged. Inspect feathers carefully for visible parasites.

- **What to Do:** Birds with these symptoms should be examined by an avian vet to confirm the cause of excessive scratching; abnormal or damaged feathers may be a sign of a serious disease rather than parasites, particularly in cockatoos and some parrot species. Mites or lice should be treated with an insecticide safe for use on birds.

III. FEEDING & NUTRITION

Introduction

What to feed caged birds has been a source of discussion and some controversy for bird owners, breeders and retailers. In the 1970s and early 1980's, seed-only diets were popular, causing health problems for wild caught birds due to missing nutrients. Manufacturers introduced pellet options to try to provide a more varied, nutritionally complete diet, but these also led to health problems when fed exclusively.

Today, experts agree that birds kept in captivity require a varied diet that approximates what they would eat in the wild. Birds that eat a variety of foods stay healthier and live longer, sometimes up to twice as long as those fed only seeds.

Depending on species, pellets mixed with some seeds or seeds mixed with some pellets should make up the majority of the diet, supplemented by vegetables, fruit, whole grain products and other healthy foods that are safe for birds.

Dairy products, fatty meats (such as beef and pork), salty and sugary foods, and those that contain caffeine or alcohol should never be fed to birds. Chocolate, avocado, and

fruit pits and seeds are poisonous to birds.

Finches

Most finches kept in captivity, including canaries, should eat a diet primarily composed of seeds. Seed mixes and pellets especially for finches are commercially available, including specific mixes for canaries. Seed mixes fed to finches should be high quality and very fresh, with no dust or preservatives.

Most finches also eat greens in the wild and they enjoy many types of vegetables in captivity. Dark greens, like mustard and turnip, and dark lettuces, such as romaine, are very good, but iceberg should be avoided due to lack of nutritional value.

Finches also will enjoy corn, peas, broccoli, beans, apples and sprouted seed. To sprout seed, spread seed mix lightly over wet, white paper towels and keep damp. Seed that doesn't begin to sprout in a few days is not fresh and should be thrown out.

All food for finches must be cut into small pieces. Hard vegetables should be cooked first to soften, then cooled before cutting and feeding. Crushing whole peas and corn kernels will make them easier for finches and other softbills to eat.

In the wild, some finch species eat insects

as a part or majority of their diet. These species require insects to stay healthy in captivity and, in some cases, to trigger their breeding season. Many finch and canary breeders also find that boiled or scrambled eggs are particularly good for these birds when breeding and also can be given as a treat.

Most dove and pigeon species kept in captivity are primarily seed eaters. Specialized dove and pigeon diets are available, but should be supplemented with grains and some greens and fruit.

Parrots

The parrot group is very diverse in terms of size and native geography, and consequently the type of food they eat. Some parrots do eat primarily seed in the wild, particularly those from Australia, including parakeets, cockatiels and some cockatoos. Birds from Central and South America, such as conures, Amazons and macaws, eat a variety of vegetables, grains and nuts. Species from Africa, such as the African grey, Senegal parrot, and lovebird group, eat vegetables, fruit, grains, seeds and greens.

In general, birds in the parrot group should be fed a mix of pellets and seeds, rather than having only one comprise the bulk of their diet. Pellets for specific groups are

designed to meet their nutritional needs, such as higher calcium levels for African greys and extra vitamin A for Eclectus, a species from the Australian rain forests.

Parrots that eat mainly seeds in the wild, such as budgerigars (parakeets) and cockatiels, should be fed high-quality seed mix, supplemented with pellets, greens, vegetables and a little fruit. They also will enjoy sprouted seeds and other, all-natural food.

Most other parrots kept in captivity should be fed primarily a species-appropriate pelleted food, supplemented with a little seed, nuts and vegetables, including dark greens, lettuces (other than iceberg), broccoli, corn and beans. Peanuts are not recommended due to their high fat content; peanut shells also may carry a fungus that infects birds.

Fruit should be kept at a minimum for most parrot species, but they can be fed apples, pears, grapes, berries and a very small amount of citrus. Parrots also will enjoy all-natural, whole grain pastas, breads and cooked rice as long as they are not salty, fatty or sugary.

Parrots generally can chew larger items, but smaller birds will find it easier to eat food that has been chopped into smaller pieces. Although most vegetables can be fed raw, lightly cooking these items makes them eas-

ier for smaller parrots to eat and digest their nutrients.

Food Supplements

Supplements—Commercially available pelleted diets typically include vitamins and minerals, as well as amino acids since birds cannot break down proteins easily. Birds generally do not need supplements, but those fed primarily a seed diet should have a supplement added to their food according to package directions to avoid overdosing. Adding supplements to water is not recommended as it will cause the water to spoil quickly, requiring more frequent changing.

Grit—In the wild, birds pick up gravel and grit when they eat off the ground; this material collects in the crop and helps grind food for better digestion. Caged birds often do not need added grit, since seeds and pellets grind against themselves. Soft billed birds that eat primarily a seed diet may be given a very small pinch of grit on their food once or twice a week. Grit should not be made available for self feeding, since some birds will eat too much, particularly when they feel ill, causing impaction.

Cuttlebones/Beak Conditioners—To keep birds' beaks in good condition and provide needed calcium and minerals, cuttlebones and/or beak conditioners should be available

at all times. These typically will include a device so they can be hung above a perch inside the cage, where birds can reach them easily.

Smaller and medium sized birds should be given both cuttlebones and beak conditioners. Large birds will chew up cuttlebone very quickly, so a larger beak conditioner may be a better choice, along with wood toys to keep the beak healthy. Cuttlebones and beak conditioners should be changed every six months or sooner if soiled or completely chewed.

Treats

Treats provide variety and should be an important part of any bird's diet. Commercially available options include seed sticks and millet spray, which can be hung from cage bars, and seed mixes with dried fruit and/or vegetables, which can be placed in a food dish.

Some treats are designed to be cooked by the bird owner and may include rice, beans and/or vegetables. Home kits that allow customers to sprout seeds in special containers also are available. A number of treats include flavors or spices, such as red pepper, which many parrots enjoy.

Toys that dispense dried treats, such as

dried fruit and/or vegetable mixes, also help to entertain and are great to use with medium and larger parrots.

Water

Fresh non-chlorinated water should be available at all times, served at room temperature in a clean water dish.

Water must be changed daily or more frequently if soiled with food (from dunking) or feces. Water must be changed more than once a day if supplements are added, especially if the cage is kept in a warm area.

Feeding

Food should be available to caged birds at all times and changed every morning, when birds usually eat the most. Foods that may spoil should be offered early and removed in the middle of the day.

Although bullying is rare when multiple birds are kept in the same cage, keep close watch to be sure that one is not preventing the others from eating. Birds must be carefully monitored to ensure they are eating the full range of foods offered. Some, particularly parrots, can be downright picky about what they will consume and may pick out only their favorites.

Converting a bird from an all-seed diet to one that contains pellets, vegetables or other foods can be challenging, particularly for adults. Birds in your store should be fed as many foods as possible to develop good habits while young and accustom them to a varied diet.

Patience and perseverance are critical to get birds to eat a variety of foods to stay healthier and live longer. Most birds will not eat unfamiliar foods, and may need to be repeatedly presented with a new food—sometimes for up to three weeks—before they are willing to try it.

The following can be effective ways to introduce new foods:

- Add pellets to the seed mix, increasing the proportion of pellets to seeds over time.
- Put vegetables on top of a seed mix so that birds can get a good look at the vegetables and must move them to reach the seed.
- Hang pieces of food, like broccoli or lettuce leaves, in the cage to pique their interest.
- Offer a variety of vegetables every day, such as a frozen mix with corn, peas, cubed carrots and green beans brought to room temperature.
- Make sure vegetables and fruit are cleaned well, chopped to a size birds can eat easily (particularly for smaller parrots and softbills

like finches), and very fresh with no rotten parts.

- Put a new food in a toy that dispenses treats.

Parrots, particularly the medium to larger sized ones, usually will be interested in what they see people eating. Consuming (people-safe) food in front of them with evident enjoyment may tempt them to try something new.

Selling Bird Food

Birds should be kept on the same diet for at least two to three weeks after going to a new home to minimize stress and digestive issues. If the owner wishes to switch the bird to a different seed and/or pelleted diet, this should be done slowly over a week or two.

Seed mixes and pellets from competing manufacturers usually look different and may be rejected initially. New vegetables, fruits and other foods can be introduced at any time, but preferably together with familiar foods. While birds will enjoy most foods given to them, owners may need to tempt them to try new things as described in the previous screen.

Encourage customers to provide a varied diet that includes treats. Caged birds that mainly eat a seed diet also must be fed a vitamin, mineral and amino acid supplement.

For suggestions on effectively communicating the features and benefits of bird food and other products you sell to your customers, consult the “Customer Service & Sales” chapter.

IV. HOUSING REQUIREMENTS

Introduction

New birds that come into the store should be placed in sanitized cages that are large enough for them to move around comfortably and spread their wings. Cages with new birds should be kept away from others in the store.

For finches, budgerigars and other small birds, keeping new arrivals of the same species together will help them settle in more easily, particularly if they were raised together. Hand fed baby birds, such as medium and larger parrots, can be kept together for a short time but should be separated once they are eating on their own, or they may start to bond to one another instead of to humans.

When possible, new arrivals should be kept initially in a room with a separate ventilation system to decrease the chance of transmitting airborne diseases.

Cage Specifications

Durable and Easy to Clean—The cage should have a large tray, usually made of plastic or metal, that slides out easily for cleaning. The bottom of most cages can be separated from the wire bars at the top to make cleaning easier. Some cages also include a grate at the bottom that can be slid out from the front or removed when the bottom is off.

Designed to Protect the Birds—Cage bars should be strong and of appropriate thickness; larger parrots have very strong bills and can break wire cages meant for finches and small parrots. Bars should be spaced so that birds cannot get their heads stuck between them. For medium to large parrot species that can be quite clever at opening cages, locks may need to be placed on the main door and even dish doors.

Cage Set Up

Whether at the store or at the customer’s home, cages should be set up completely before birds are placed inside and should include:

- At least three perches of different diameters
- One or more food dishes
- One large water dish
- A beak conditioner and (for smaller birds)

a cuttlebone

- A selection of toys
- Litter or paper

Perches should be placed to provide easy access to food and water, but not directly above food dishes to keep them as free of feces as possible. Different diameter perches are important to keep birds’ feet healthy. A swing also can be provided.

Depending on the birds’ size, you should provide approximately one food dish for every two to three birds kept in the cage. Food dishes should include a generous surface area, since softbills like finches generally will not dig down into food as much as parrot species. A cage guard or skirt will keep food inside the cage and the bird area cleaner.

Birds should have at least three toys made of different materials available at all times. Parrots are particularly intelligent and curious; toys will help keep them mentally stimulated.

The tray at the bottom should be filled with litter or paper safe for use with birds. Paper allows for easy observation of fecal matter but looks messier and needs to be changed more frequently.

Lightweight shavings are not recommended

for use with birds since they scatter when birds fly or flap their wings for exercise. Corn cob bedding may carry a fungus that can cause aspergillosis in birds and should be used only if placed at least three feet below a cage suspended from the ceiling.

V. CLEANING & SANITATION

Birds are messy creatures. Keeping their cages and the area around them clean is critical to keep them healthy and attract potential buyers.

Part of your job may include cleaning the cages and surrounding areas. Food, feathers and dander (especially in the case of parrots in the cockatoo family) inevitably will end up outside the cage.

While cage guards or skirts can help contain the mess, you may need to vacuum bird areas in your store three to four times a day to keep them looking neat and clean. Litter or paper should be changed frequently, and may need to be replaced every day depending on the cage size and number of birds.

Misting

Most birds clean and straighten their feathers regularly, but two or three light spritzes with plain, room-temperature water can

encourage them to preen more if needed. Although most birds don't like to be misted, those that are in the "mood" for a bath may use their water dish or spread their wings during misting to indicate they want to be wetted more thoroughly.

Birds should be misted lightly in the morning and left to dry off on their own. Never mist birds late in the day as they should be completely dry before going to sleep at night.

Cleaning the Cages & Bird Area

Birds are vulnerable to a number of diseases and infections. Cleaning cages and bird areas daily and sanitizing them before introducing new arrivals is important to keep the birds in your store healthy. Frequent vacuuming will help keep the floors, shelves or other store fixtures as clean as possible.

All cleaning equipment should be sanitized after each use by soaking it in a disinfecting or bleach solution to kill off bacteria and germs.

Equipment that you need to clean and/or sanitize the cages and bird areas in your store includes:

- Quality detergent or soap

- Disinfecting liquid and/or bleach
- Cleaning cloths
- Hot water
- Scrubbing pads
- Stiff bristle brushes
- Large sink with sprayer (and/or buckets)
- Aprons or smocks and gloves
- Paper and cotton towels
- Full sized or handheld vacuum cleaner
- Broom and mop for hard floors

Routine Maintenance Procedures

Cages, bird areas, and food and water dishes must be cleaned and/or sanitized daily. Use only soaps and detergents that are safe for use around birds and strictly follow label instructions. Follow your store's procedures, which likely will include the following steps:

1. Visually inspect the cages for potential problems and examine birds to verify they all look healthy. Before cleaning cages, vacuum or sweep around the bird area to keep it looking neater and prevent food, feathers and litter from being tracked around the store.
2. If the cages in the bird area are stacked above each other, begin cleaning at the top and work your way down to avoid contaminating already cleaned cages. An apron (or

smock) and rubber gloves are recommended.

3. Empty all trays or cage bottoms as needed of dirtied paper or other absorbent material (may be done every day or less often depending on cage size and number of birds). Scrub the trays and/or bottoms with soap and water. Rinse, dry, fill with new absorbent material and replace in the cage. If the cage includes a grate on the bottom, remove and scrub once a week or as needed, then rinse, dry and return.

4. Check carefully and if needed, use detergent to clean bars or other areas inside the cage. Wipe with plain water to remove all soap residue, then dry the cage before returning the birds.

5. Cages should be sanitized at least once a week and before using for new birds. After completing steps 1-4, thoroughly scrub all surfaces (side bars, ceiling bars, bottom, tray, etc.) and perches with a disinfecting solution safe for cleaning around birds and/or a 5% bleach solution (1_ cups of bleach mixed with two gallons of water). Follow instructions on the disinfecting solution regarding appropriate dilution and use.

Note that the disinfecting solution should not be mixed or used together with the bleach solution. If store procedures call for using both, use one, rinse well, then use the other.

6. Every week or as needed, wood perches should be scraped with a single-edged razor blade; rope or cement-type perches should be cleaned according to the manufacturer's instructions.

7. Water dishes should be cleaned every day or two and food dishes should be cleaned at least twice a week. Scrub dishes with soap and water, then rinse thoroughly.

Food dishes and water containers should be sanitized as needed or required by store policy. Allow metal, plastic and ceramic dishes to soak in a 5% bleach solution for 10 to 15 minutes, then scrub and rinse well until no bleach smell can be detected. New bird arrivals always should be given sanitized dishes.

Once food and water dishes are completely clean and free of any soap, bleach or other cleaning material, fill dry dishes with new food and containers with fresh water. Discard and replace any dishes that are chipped, rusty, cracked or pitted.

8. After the cages are cleaned and/or sanitized, clean or sanitize the bird area, play areas and other places where birds may go. This should include any surfaces that birds or their feces can come in contact with, especially floors, walls around cages, glass windows, shelves, partitions, etc. Always

remember: If it's dirty, clean it!

9. Check that air flows properly through bird areas. Air filters can clog quickly in this area; check regularly and clean or replace filters as needed or recommended.

10. Clean isolation and quarantine areas where unhealthy birds are kept last. Always use separate maintenance supplies to prevent transferring disease from isolation areas to display cages, including aprons (or smocks) and gloves. Always wash your hands thoroughly after handling each bird and before and after cleaning different areas of the store.

11. Sanitize brushes and other cleaning products by soaking in a bleach or other disinfectant solution. All cloth aprons and towels must be machine washed in hot water with quality detergent. Properly dispose of all trash immediately by placing it in garbage cans with full liners, then putting tied off bags in designated receptacles or areas, preferably outside the store.

VI. SOCIALIZATION, TAMING & GROOMING

Introduction

How well the birds that come into your store tolerate people usually depends on

how they were raised. Birds that are hand raised—or fed by people from birth or soon after—typically consider humans to be part of their flock and are quite tame.

Parrots, including cockatiels, lovebirds, conures, African parrots, Amazons, cockatoos and macaws are almost always hand raised. Smaller parrots, such as budgerigars, typically have been raised by their parents. Taming them requires patient and consistent work, preferably while they are young.

All parrots in your store, particularly hand raised birds, should be taken out of their cage at least once a day. Being held regularly by different employees and/or customers will help keep them tame and socialized to a number of people.

Most finches, including canaries and other softbills, are meant to be watched and/or listened to, not handled, and usually will not need to be tamed.

Birds generally will keep themselves clean and looking good with daily preening and do not need to be brushed or combed like a puppy or kitten. Birds that are allowed out of their cage need their wings trimmed every five to six months to prevent escape or injury. Finches need nails trimmed every two to three months; some parrots also require regular nail trims.

Step Up Command

All tame birds should be trained to step up onto your finger or hand with the “Step Up” command. Early training will avoid many behavioral problems, particularly with adolescent and/or sexual mature birds that may be less friendly during certain times.

To train smaller birds, use your index (pointer) finger; for larger birds, keep your fingers together with your hand held vertically (palm facing in).

- Open the bird's cage and push your finger or hand against the lower abdomen (stomach) area, near the feet.
- As you push, say, “Step up,” in a clear voice and keep pushing until the bird must step onto your finger (or hand) or be pushed off the perch. Rather than repeating “Step up,” say it once and push firmly and persistently.
- Once the bird has stepped up, praise it in a sweet, happy tone.
- Bring the bird away from the cage and talk to it in a nice voice for a few moments, then say the command, “Step Up,” as you push your other index finger (or hand) against the bird's stomach.

- When the bird steps onto the other hand, praise and talk to it.

- Once the bird has mastered the command, you should be able to make it go from one hand to the other and back again fairly quickly for up to five or six times with no other prompt than saying “Step up.” This is called laddering.

Ultimately, the bird should immediately raise its foot when given the command to step up. This command should be used regularly and consistently throughout the bird's life, both at your store and in its new home.

Taming Precautions

Birds that have not been hand raised can be taught to tolerate or enjoy being held with patience and care. Working with birds that have already had their wings trimmed will speed the taming process significantly.

When working to tame birds in the store, remember these important precautions:

- Work in a small, closed area to prevent escape and minimize distractions.
- Provide a safe environment by always handling birds gently and removing any objects on the floor that might hurt them.
- Protect yourself from potential bites by using a perch rather than your hand when

working with larger or aggressive birds.

- For birds that will not come out of the cage on their own or step onto a perch, gently wrap a towel around the bird to remove it. Never grab a bird with bare hands or gloves, as it may bite you or become fearful of hands.
- Remove any jewelry and other items that may tempt a bird to bite at a finger or elsewhere.

Taming Precautions

Birds may bite when startled or afraid, so moving slowly and handling them gently is important during training. Even smaller parrots can bite hard enough to draw blood.

If a bird bites you, it is important to react calmly, or you may unintentionally encourage the bird to bite more. Put the bird down and take care of the bite, and then use a perch to continue training. Avoid yelling, although saying “No,” in an angry tone will help the bird understand that biting is not acceptable. Never hit a bird or even tap its bill as punishment, as this can cause aggressive behavior and/or permanently affect the bird’s willingness to trust you.

Always tell your supervisor if you get bit. Most bites can be cared for with a thorough cleaning with soap and water, some antibac-

terial gel and a bandage. Very large or deep bites may need to be seen by a doctor.

Birds often use their beak for balance or investigation. When presented with a finger or hand, they may reach down to hold it in their beak before stepping onto it, but usually will not bite down.

Young birds rarely bite (although they may nibble) and usually can be trained using your finger or hand, particularly when working with a smaller bird like a budgerigar. When working with older birds, larger species or those that act aggressive, use a perch of the right size instead.

Taming

Taming birds accustoms them to being handled and requires patience and care; always move slowly to avoid startling the bird. A bird is considered tame once it will readily step up on your finger, hand or a perch and seems comfortable. Have the wings trimmed before starting the taming process.

To begin the process:

- Take the bird in its cage into a small, closed room and sit (or kneel) on the floor in a comfortable position.
- Open the cage door. The bird may come

out on its own; if not, wrap your hands in a towel, then gently and carefully move the bird from the cage to the floor.

- Using your finger, hand (held vertically with fingers together) or a perch, slide along the floor slowly and try to push on the bird’s abdomen to get it to step on it.
- At first, the bird likely will hop, run or helicopter over your hand or perch to get away. Keep trying and repeat as needed.
- As soon as the bird steps on your finger, hand or the perch, raise it off the floor by a foot or two. Typically the bird will jump off immediately; repeat until the bird begins to understand that it needs your help to get off the floor.
- Once the bird will stay on your hand or the perch, talk quietly to it in a sweet, caring voice. Making kissing or other sounds may help interest the bird, but avoid touching it in any way. If the bird seems fearful, stay still and continue talking to it.
- Once the bird relaxes enough to look around and act normal while on your hand or the perch, you can begin slowly training it on the Step Up command.

Once tamed, many birds enjoy being petted or scratched, particularly on the back of their neck where they can’t reach with their beaks.

Wing Trimming

Birds that are allowed out of their cages should have their wings trimmed to prevent them from escaping out a door or window, or crashing into mirrors or glass, causing injury or death.

Birds with trimmed wings are easier to tame, play with outside their cages, and recapture in case of escape. To prevent injury, birds with trimmed wings should still be able to flutter (or helicopter) to the floor instead of dropping like a stone. If they can still get lift, they need additional trimming.

Trimmed flight feathers will be replaced at the next molt, which happens approximately every six months for parrots. Make sure customers understand that they should bring the bird to the store or an avian veterinarian every six months for wing trimming. Occasionally feathers may grow in after the initial trim, requiring a second visit in the same month.

When done correctly, trimming wings does not hurt the bird. You should be trained how to hold birds and trim wings correctly by an avian vet or bird specialist.

Birds with longer wings, such as cockatiels, budgerigars, conures and macaws, will need more feathers trimmed than parrot species

with a more rounded wing shape, like lovebirds, cockatoos and Amazons. Baby birds are not as good at flying, so usually need fewer feathers trimmed.

Wing Trimming

To trim wings:

- Contain the bird in a small room, such as a bathroom in the back.
- Wrap the bird in a towel.
- Gently spread out one wing.
- Carefully identify and avoid any blood feathers (pin feathers with long sheaths filled with blood), which will bleed heavily if cut. If you accidentally cut a blood feather, pull the shaft out where it goes into the skin with a quick yank. While this will hurt the bird, putting powdered blood coagulant on the cut shaft usually is not enough to stop the bleeding. Blood feathers should not be clipped until they grow out.
- Trim only the first seven to 10 flight (primary) feathers (the long feathers at the end of each wing that give the bird lift). Cut to just below the covert feathers that cover the tops of the flight feathers.
- Do not cut too much or too many feathers at once. Start small and gradually cut more after assessing the bird's ability to get lift.
- Be sure to cut the last two to three feathers on the outside of the wing. While leaving them uncut may look better when the wing is closed, some birds can fly with just these

few flight feathers.

- Trim both wings, since some birds may be able to get enough lift from one wing to spiral out of control and injure themselves.

Nail Trimming

Birds that are in the store for a longer period may need their nails trimmed or ground down. How often a nail trim is needed will depend on the species and individual.

Finches and softbills generally require more frequent trimming than parrots. Nail growth varies even among birds of the same species, with one bird needing a trim every month or two, while another may require trimming much less frequently.

Because over-trimming can hurt the bird and make it fearful of grooming, never trim nails unless you have been trained to do it correctly. Clipping off too much will cut the quick (the blood vessel inside the nail), causing bleeding and pain.

The quick should be clearly visible in birds with white nails, but will not be detectable in black nails. When in doubt, trim longer nails partially, then again in three to four weeks after they have grown out and the quick has pulled back a bit.

If you accidentally cut the quick, use a blood coagulant powder to stop the bleeding

and apply light pressure on the skin just above the nail and the nail itself. Be sure the bleeding has stopped before putting the bird back in its cage.

For extremely long nails, use a small grinding stone on a dremel tool (a small drill-like device) to slowly grind back the nail; the tool will cauterize the nail as it's trimmed to prevent bleeding.

Nail Trimming

To trim birds' nails:

- Contain the bird in a small room, such as a bathroom in the back.
- Wrap the bird in a towel so that their head sticks out one end and they can breathe easily, but their feet are accessible.
- Hold the feet firmly but gently as you work to prevent sudden movement that may cause you to accidentally cut off too much nail or the tip of a toe.
- Use appropriately sized clippers and remove only part of the hooked end of the nail.

Perches designed to help keep nails trimmed should be used at all times at the store and at home. Avoid using sandpaper perch covers, which can roll and cause calluses and other foot problems.

VII. GENERAL BIRD CHARACTERISTICS

Introduction

Birds can make wonderful pets for many different people; the variety available means customers should be able to find a species that works for them with your help.

Finches and other softbills are a good choice for those looking for a bird to watch and/or listen to sing. Small parrots, like parakeets and cockatiels, are great beginner birds for kids and adults who want a pet they can take out and play with, but that can be left alone during the day.

Larger parrots are extremely intelligent creatures and can bond closely with their owner, but need a lot of attention. They cannot be left alone for long periods during the day, so are not a good choice for everyone.

You can expand your knowledge about birds and specific species by reading books, doing Internet searches, and talking to your store's bird specialists, breeders and avian veterinarian.

Selecting a Bird

Budgerigars and cockatiels make up over

70% of birds owned in the United States. Other birds commonly sold in pet stores include finches (including canaries), lovebirds, conures, African parrots, African grey parrots, Amazon parrots, cockatoos and macaws. Each species or group has certain characteristics and general personality traits that should be taken into consideration when purchasing a pet bird.

Customers looking for a bird they can admire and possibly breed likely will do best with one of the many species in the finch family. Many of the males in this group sing and nothing beats a male canary for a real songbird.

For customers who want a bird they can take out and play with, parrots make wonderful, intelligent, energetic and usually affectionate companions. A general rule is that the larger the parrot, the more attention it requires. Neglected parrots can develop behavioral problems, including yelling, biting or feather pulling, and may become mentally unstable.

For a first-time bird owner, a budgerigar (parakeet) is often the best choice, since they are inexpensive, energetic, fearless and love to play. Cockatiels are also a good beginner bird, since they usually are hand raised and already tame. Cockatiels are generally more affectionate than budgerigars and enjoy being

scratched and petted. Budgerigars and cockatiels are great starter birds for kids and a good choice for people who work outside the home.

Selecting a Bird

Medium sized parrots, such as Senegals, other African parrots, conures and lovebirds, are an appropriate choice only for customers who are home for at least part of the day, as well as mornings and evenings. Most do well with older children.

- Conures include birds of various sizes, ranging from the smaller Green-Cheeked Conure to some the size of a small Amazon, like the Mitred Conure. Conures are very friendly and love to play. In general they are very loud and a poor choice for someone looking for a quieter bird.
- Lovebirds make great pets; they are fearless and will go to many people. They are best kept individually, particularly if the customer wants a tame bird; unless paired when young, lovebirds may attack each other.
- The African parrot group includes species such as the Meyer's and Senegal. These medium-sized birds tend to be quieter than most other parrots. They are sweet and gentle, and prefer a quiet environment.

Selecting a Bird

The largest and most intelligent parrots need a lot of attention and cannot be left alone all day. African greys and parrots in the cockatoo, Amazon and macaw group should never be sold to anyone with a regular job outside the home.

- African greys are popular pets thanks to their talking abilities. They usually will go to many different people. They do best in a quiet environment and are sweet and gentle.
- Cockatoos generally are considered the most affectionate of all the parrots and love to cuddle and be scratched and petted. Some birds become very attached to one person, while others are friendlier and will go to everyone. Exposing young cockatoos to lots of people will improve their tolerance and friendliness.
- Amazons love to play and can be very fearless and great talkers. They tend to bond to only one person and may attack other people, particular those of the opposite sex who are close to their preferred person, which can be a problem for couples.
- Macaws are the largest parrots and usually are sweet and gentle. Unlike other species, they may bond with more than one person

and are more tolerant of environments that have some background noise. Mini-macaws are smaller than their larger counterparts, but have the same shape and similar personalities.

Vocalization

Birds can be very loud, particularly those in the parrot family. Birds typically are most vocal early in the morning at first light and late in the day. In the wild, birds vocalize to gather the flock at dawn, bring the flock together for roosting (sleeping), and determine the location of birds they can't see (called "contact calling").

Birds also will babble, sing, yell and whistle throughout the day, making them a poor choice for customers who want a quiet pet. Smaller parrots, like cockatiels and parakeets, along with finches and other softbills, have softer voices and are best for people living in an apartment or shared space. Large parrots like macaws, Amazons, and cockatoos have impressively loud calls that sometimes make it seem like they're trying to raise the dead. Yelling is one of the top complaints of bird owners. Customers who wish their birds were quieter should be encouraged to ignore them until they are quiet or babbling and talking quietly, then reward with praise and affection.

Yelling at birds to be quiet is ineffective, since most will assume you are part of the flock joining in, which will reinforce their behavior. Choose your words carefully, since many parrots are excellent mimics and may learn to say things you will regret. Birds may contact call to find out where you are when they can't see you; talking to them from other rooms can reassure them and minimize yelling.

Talking & Training

All parrots can talk, but certain species are better at it and chattier than others. It is important to communicate to potential owners that although some species are known for talking, each bird is an individual and a particular bird may never talk.

In general, larger birds are better at talking, with African grey parrots considered the best. These birds have very clear voices and usually will learn to say many different words and phrases. Yellow-Naped Amazon Parrots, along with many other Amazon species, also are strong talkers.

Birds in the psittacula family, such as the Ring-Necked Parakeet, can be excellent talkers and are much smaller than an Amazon or a grey. In most cases, smaller birds like cockatiels, budgerigars and lovebirds are not as good at learning to talk, although cockatiels can be excellent whistlers.

Training is an important component of whether birds learn to talk. Customers should be encouraged to start with one word (like "Hello") and repeat it throughout the day. Once the first word is learned, the bird usually will pick up more words fairly easily. Playing a CD or audiotape with words and phrases can be a useful tool when teaching birds to talk, but should not be played too often or for too long, or the bird may just tune it out.

Teaching a bird to whistle before they talk may keep them from talking. Age is also a factor: Larger parrots may not be able to learn to talk until they are five to six months of age or older, while smaller birds may begin learning a little younger.

Parrots, especially the larger (and usually more intelligent) species, have been proven to understand concepts like color, size and number, along with identifying objects and asking for certain food items. Their intelligence is comparable to a 2- to 3-year-old child.

Birds are great mimics and may make sounds like beeps from a microwave or a cell phone ring tone if they hear it often enough. They also may say "Hello" when the phone rings, mimicking what they hear when you answer the phone, even if they don't understand what the word means.

Biting

Biting is another cause of owner complaint, particularly with larger parrots and many species of conures. When young, parrots may "mouth" objects, including fingers, usually with a gentle pressure. Some species, most notably the African grey, will do this throughout their lives.

Birds may bite to test their owner, as territorial behavior, when startled or to gain attention. Many of these problems can be avoided with early training and consistent use of the Step Up command. Never allow birds to nibble on your finger; offer a substitute if necessary.

Older birds sometimes will bite someone who is reaching in their cage. Owners can help birds understand that neither territorial behavior nor biting will be tolerated by immediately prompting them to leave their cage using a perch instead of a finger, and always using the Step Up command.

If a bird bites you, it is important to react calmly, or you may unintentionally encourage the bird to bite more. Avoid yelling, although saying "No," in an angry tone will help the bird understand that biting is not acceptable.

Remember that parrots have the intelligence—and emotional maturity—of a 2-year old. Even negative attention is attention, so avoid rewarding birds that bite out of boredom by reacting. Never hit a bird or tap its bill, even lightly, or it may refuse to come to you again.

Biting also may be a problem when parrots reach sexual maturity, at eight to 12 months for smaller species and four to five years for larger ones. After hitting sexual maturity, parrots may experience hormone surges once or twice (or even more) each year, causing them to bite or display other unusual behavior.

Owners should learn to recognize the signs that a bird's hormones are up and leave it alone during these times. Indicators include feathers standing up at the front of the head, constricted (smaller) pupils and spread tail feathers.

Molting

Most birds molt every six months, shedding the long feathers on the wings and tail, along with body feathers. Molted feathers will be replaced by new feathers that look like long spikes, called pin feathers. When these feathers first grow in, the shaft is filled with blood and will bleed profusely if cut or broken. Pin feathers should be avoid-

ed during a wing trim.

Some birds, like budgerigars, lose some feathers on an ongoing basis, but still molt twice a year. Birds in the cockatoo family, including cockatiels, lose their downy feathers fairly frequently; these birds' dander may be a problem for people with allergies.

Even when molting, a bird should never lose so many feathers that bald spots appear. Birds that have bald spots on their head, wings, body and/or tail should be taken to an avian veterinarian since this may indicate a serious health problem.

Some parrots, particularly those in the cockatoo group and the African grey parrot, are known to pluck out feathers in response to health issues, environmental problems or stress. Feather plucking can be due to not enough light, but more often is a reaction to being left alone too much or changes in their environment. Feather pluckers should be taken to an avian vet to rule out health issues before considering behavioral problems.

Air Quality

Caged birds as a group are relatively healthy but their unique respiratory system does make them vulnerable to air pollutants and toxins in the environment. Warn customers to be particularly cautious about air

quality around their pet birds.

Unlike mammals (including humans), who keep residual air in their lungs after exhaling, birds' respiratory system allows their lungs to empty completely between breaths. As a result, they react much more quickly and strongly to air pollutants or toxins, which is why old-time miners brought canaries into the mines. If they hit a pocket of poisonous but odor-free gas, the birds would die long before the miners would be affected, alerting them to escape.

Birds are sensitive to cigarette and cigar smoke, pesticides, household cleaning supplies and other air pollutants. Customers should avoid spraying cleaners around birds, instead applying them to a towel or cloth and then wiping the area to be cleaned. Fumes from food burned on Teflon—a common coating for non-stick cookware—can be poisonous and should not be used in homes with birds. For safety, birds should be removed from a house before pesticides are sprayed inside or out and for at least 24 hours afterwards.

Mental Health

Parrots are highly intelligent creatures that require mental stimulation to stay healthy. Bored or stressed parrots can be dangerous, yelling constantly, lashing out at their own-

ers or harming themselves by feather plucking. Once they begin plucking feathers, parrots may continue the habit even after the root cause is eliminated.

Although these problems are most common with the larger parrots, which are particularly sensitive to changes in environment and boredom (particularly those in the cockatoo group and African greys), all birds need at least three different toys available at all times. A play stand or gym area also can help mentally engage pet birds.

Toys should be appropriate for the size and strength of the bird. Never give a toy meant for a small bird to a large one. Toys are available in a variety of materials, including metal, wood, rope, straw and plastic, and in various styles, shapes and colors, which is important since birds see colors well.

Birds will get bored with a particular toy over time, so they should be changed out every month or so. Damaged toys should be discarded, but others may be added back into the rotation after three or more months.

Toys also can help satisfy birds' need to chew to keep their beaks healthy, preventing undesirable behavior like screaming and chewing perches and dishes. Sturdy wood toys are a good fit for medium and larger birds, while smaller ones will do better with

rope or thinner wood options.

Home Environment & Care

Birds need a cage that is large enough to spread and flap their wings freely. The tray in the bottom of the cage should be cleaned out at least once a week. The whole cage should be washed well every three to four weeks, with perches washed or scraped (if wooden). Perches made of porous materials, such as wood or rope, should be thrown out and replaced every six months.

It is best to locate a cage in a room or area with activity during the day, but away from a door that may open suddenly and scare the bird. The cage should be placed to avoid drafts and vents, as well as out of reach of houseplants, electric cords and other items that may pose a danger if chewed.

Ideally the cage should be near a window that gets plenty of indirect sunlight. Otherwise, a full-spectrum light should be placed above the bird's cage and left on for up to 12 hours during the day. Feather plucking has been associated with inadequate light exposure in certain species; a full-spectrum light is recommended for African greys and cockatoos regardless of cage location.

Birds need at least 12 hours of sleep; those

that don't get enough continuous sleep at night are more likely to develop bad behaviors and health issues. In rooms where there is activity at night, such as a TV, covering their cage can help them sleep soundly and keep them from vocalizing and waking their owners at dawn. In some cases, a bird may need a special cage for sleeping that is placed in a separate, quiet room at night.

Most birds are comfortable with room temperatures appropriate for people, and many will tolerate lower temperatures in the winter without any problems.

VIII. EQUIPMENT CHECKLIST

- Pelleted food and/or seed mix
- Food and water dishes
- Supplements (if needed)
- Beak conditioner and cuttlebone
- Treats
- Miscellaneous toys
- Cage of appropriate size, strength and bar width
- Paper or litter for cage bottom
- Three or more perches of different diameters
- Swing
- Cage skirt or guard
- Full spectrum lighting (if needed)
- Mister bottle
- Travel carrier

- Bird care books and literature

IX. COMMON GROUPS & SPECIES

Budgerigar (Parakeet)

• Budgerigars are one of the smallest parrot species and by far the most popular pet bird in the United States. They are commonly referred to as parakeets in the pet industry, a misnomer since they are a different species.

• Budgerigars or "budgies" originated in Australia but have been bred in captivity for centuries; budgerigar means "good eating" in the native Aboriginal language.

• Centuries of breeding in captivity have produced birds in a variety of colors and feather patterns. Budgies come in green, yellow (lutino), blue, purple, grey and white (albino), as well as many color mixes.

• Budgerigars are great beginner birds for kids and adults, and a good choice for people who work outside the home. While personality will vary by individual, in general they are energetic, easily tamed and love to play.

• Male budgies usually are more vocal than females, even when young, and generally better talkers. While not considered the best talkers in the parrot family, careful training

may encourage them to become proficient, although their speech is not as clear sounding as other parrots.

• Baby birds are difficult to sex until they reach five to six months of age, when their pinkish to purplish cere will darken to purplish-blue to blue on males or to light tan to brown on females. Baby budgies that are not white or yellow have colored bars on their forehead that disappear at six months or so; very young birds will have a dark tip on their bills.

• Budgies typically live from six to 10 years.

Cockatiels

• Cockatiels are one of the smaller parrot species and the second most popular kept in captivity in the United States. They are part of the Cockatoo group and, like others in that group, have a crest of feathers at the front on the forehead that can be raised and lowered.

• Cockatiels or "tiels" originated in Australia but have been bred in captivity for many years, resulting in gray, cinnamon, white (albino) and yellow (lutino) color varieties, as well as various color mixes and feather patterns.

• Like other cockatoos, cockatiels lose their downy feathers fairly frequently; their dan-

der may be a problem for people with allergies.

• Cockatiels are great beginner birds for kids and adults, and a good choice for people who work outside the home. They are generally more affectionate than budgerigars and enjoy being scratched and petted. Most cockatiels sold in pet stores are hand raised and are already very tame.

• Cockatiels are not considered good talkers, but can be excellent whistlers, learning a number of different tunes. Customers who are interested in teaching these birds to talk should attempt that before teaching them to whistle. Males generally are much more vocal than the females, even when young, and more likely to be better talkers and whistlers.

• Baby cockatiels usually look fluffier than adults, with a shorter crest and larger looking eyes. Young tiels have barring on their tail feathers, although it may only be visible under strong light for white and yellow birds. At approximately six months, males will lose the barring after molting their feathers, but females will retain this coloration as adults.

• Cockatiels typically live from seven to 12 years.

Lovebird Group

- Lovebirds are one of the smaller, medium sized parrots. They have longer bills than most parrots and are the only group in which most species will cut wood, paper and shavings into strips, then tuck them into their rump feathers to bring back to the nest.
- Lovebirds originated in Africa and have been bred in captivity for many years. Peach-Faced Lovebirds in various colors are most commonly sold in pet stores, with Black-Cheeked, Masked and Fischer's Lovebirds seen more rarely.
- Lovebirds are fearless and will go to many people, but will bite to defend their cage or nest. Hand raised birds can make great pets, but need to be handled frequently to remain tame. Lovebirds require more attention than smaller birds and are a suitable pet only for customers who are home for at least part of the day, as well as mornings and evenings.
- Unless paired when young, lovebirds may attack each other; in general, they are best kept individually, particularly if the customer wants a tame bird.
- Lovebirds rarely talk well; their normal vocalizations are squeaky and loud. Males and females vocalize similarly.
- Distinguishing sex and age can be diffi-

cult. Depending on the species and coloration, young lovebirds may have darker coloring on their bill or larger looking eyes. Sexing lovebirds by appearance is virtually impossible, although experienced breeders can tell by feeling their pelvic bones. Young lovebirds may pair up with birds of the same sex and act like mating pairs; two females can even produce infertile eggs.

- Lovebirds generally live from eight to 14 years.

Conure Group

- Conures are a medium sized parrot, with individual species ranging in size from a cockatiel to a small Amazon.
- Conures originated in Central and South America, but are bred in captivity for the pet trade. Species commonly sold in pet stores include Sun, Janday, Green-Cheeked, Nanday, Mitred, Blue-Crowned, Dusky-Headed, Peach-Fronted and Red-Fronted Conures. Color mutations have been developed for more popular species, such as the Green-Cheeked Conure.
- Conures generally make great pets, since they are very outgoing and extremely playful, and can be good with older children. Those sold in pet stores are almost exclusively hand raised and very tame. Many can learn tricks, such as lying down on their

backs in an owner's hand.

- Most conures are very loud, making them a poor choice for people living in smaller places or who want a quieter bird. Like other medium sized parrots, they are an appropriate choice only for customers who are home for at least part of the day, as well as mornings and evenings.
- Conures can learn to talk with extensive training but are not considered strong talkers.
- Many conure species do not achieve their full color until after their first molt at approximately six months, but telling young birds from older ones is difficult. Sexing is virtually impossible by appearance, although some male birds are slightly smaller and stand more upright. Males and females generally act and vocalize similarly.
- Conures live an average of 12 to 20 years; larger birds generally live longer.

African Grey Parrots

- The African Grey Parrot is a very popular species of bird in the African Parrot group. They are large in size and, as their name implies, gray with a red tail.
- Greys are generally quiet and sensitive to changes around them; they require a stable,

peaceful environment and lots of attention. They cannot be left alone all day, making them a poor choice for anyone with a regular job outside the home. Hand raised birds are usually sweet and tame, and will be affectionate to more than one family member if handled by many people when young.

- African greys are considered the best talkers of all parrots kept in captivity, able to learn many different words and phrases. They also will learn different sounds, like the beep of a microwave, cell phone ring tones or the cry of a baby. Greys are extremely intelligent and can understand concepts like number and size.
- Young birds are virtually identical to adults but may have larger looking, darker eyes and tails with less red. Sexing is virtually impossible by visual examination; both males and females make great pets.
- Greys generally live 40 to 50 years.

African Parrot Group

- African parrots are medium to larger sized; in addition to the African Grey, Senegal and Meyer's Parrots are the species most commonly sold in pet stores.
- They generally are quiet and gentle birds that prefer a peaceful environment, and are well suited for those living in proximity

with other people. They require lots of attention and cannot be left alone all day, making them a poor pet for those with jobs outside the home.

- Unlike the African Grey, other parrots in this group are not proficient talkers although they can be taught.
- Young birds look almost identical to adults, but usually have paler or duller colors and dark brown eyes, which will turn yellow as adults. Males and females look and act very similar; both sexes make excellent pets.
- African parrots live 30 to 40 years on average.

Cockatoo Group

- Cockatoos are a large parrot. Species most commonly sold in pet stores include Umbrella, Sulphur-Crested, Goffin's and Moluccan cockatoos. Note that this group also includes cockatiels, which are smaller than other birds in this family.
- Cockatoos originated in Australia and north into the Philippines, but have been bred in captivity for many years.
- All cockatoos are distinguished by the crest of feathers on their forehead. Generally kept in the down position, cocka-

toos will raise their crest when they are excited, aggressive or interested in something.

- Cockatoos lose their downy feathers fairly frequently; their dander may be a problem for people with allergies.
- Hand raised birds typically are sweet and tame. Cockatoos are the most affectionate parrot species and usually love to cuddle and be scratched and petted. They may become very attached to one person and be aggressive to other family members, particularly those of the opposite sex. Exposing young cockatoos to lots of people will improve their tolerance and friendliness.
- These birds can be sensitive to changes around them and require a lot of attention to stay mentally healthy, making them a poor choice for people who work outside the home.
- Cockatoos generally are fair talkers. They do call out, especially in the morning and late afternoon, and have a loud, screeching yell that can cause ear ringing in humans standing nearby.
- Young birds are difficult to distinguish from adults in most species, but generally have duller colors and shorter crests. Younger birds have dark brown, almost black eyes; adult males retain the dark

brown color while females' eyes turn reddish brown or red.

- Cockatoos' average lifespan is 40 to 60 years.

Amazon Parrot Group

- Amazons are larger sized birds, sometimes referred to as "pirate" parrots. Species commonly sold in pet stores include Blue-Crowned, Yellow-Naped, Yellow-Crowned, Double Yellow-Headed, Mealy, Red-Lored, Lilac-Crowned and Orange-Winged Amazons.
- These parrots originate from Central and South America and are primarily green in color.
- Amazons are usually loud and playful; hand raised birds are sweet and tame. They make excellent pets for people who are home most of the day and want an outgoing and fearless pet. Amazons generally become attached to one person and may attack others in the family, particularly those of the opposite sex.
- Some species are strong talkers, particularly the Yellow-Naped Amazon, which is considered the second best talker after the African grey.
- Young Amazons generally have less color

than adults, with larger areas of brighter color emerging after their first molt at six to eight months. Males and females display similar coloration and personalities and both make excellent pets. Females generally are larger and may lay eggs when they hit sexual maturity at four to five years, while males usually stand straighter.

- Amazons may become aggressive during hormone surges after sexual maturity, and should be left undisturbed if they have raised feathers at the front of their head, spread tail feathers and/or pupils that rapidly dilate and constrict.
- Amazons live 50 to 60 years on average.

Macaw Group

- Macaws are the largest parrots kept as pets. Species commonly sold in pet stores include the Blue and Gold, Scarlet, and Green-Winged Macaws. The Hyacinth Macaw is the longest parrot in the world, approximately three feet from head to tail. Mini-macaws are medium sized birds with similar characteristics but rarer in the pet trade.
- Macaws originate from Central and South America.
- Macaws are generally sweet and gentle, and can be very playful. Hand raised birds

are very tame and, unlike Amazon parrots, macaws are less likely to bond to just one person, making them good pets for many people. Although they are not generally aggressive, they occasionally will lunge to intimidate someone. Like other large parrots, macaws need lots of attention and cannot be left alone all day, making them a bad choice for those who work outside the home.

- Young birds resemble adults, but may be duller in color. They generally have larger looking, darker eyes and shorter tails than adults. Sexing is virtually impossible by visual examination for almost all macaw species. Both sexes make excellent pets.

- Macaws live 60 to 80 years on average, but have been known to live to over 100 years in captivity.

Canary

- Canaries are the most popular species in the finch group and have been bred for centuries to enhance their beautiful singing and feathers.

- This finch originates from the Canary Islands, Madeira and the Azores. Most are yellow, but other colors, color mixes and feather patterns are available.

- Canaries are a good choice for customers

looking for a bird to admire, rather than interact or play with.

- Male canaries will fight with one another once they hit sexual maturity and must be kept apart.

- Males begin to sing at four to six months and will sing most days except when molting; females do not sing but may let out a single note occasionally. Male canaries sing to claim a territory and may stop when they feel there is no competition. Placing the cage near a window with plenty of light where the canary can see and hear birds outside will help keep him singing, as can playing a CD or audiotape with canary song (usually available at pet stores). In some cases, the owner may need to bring in another canary to stimulate singing.

- Young canaries look exactly like adults but mature quickly.

- Canaries have an average life span of six to 10 years.

Finch Group

- Finches are small birds generally kept for their beauty, song and/or to breed. In addition to canaries, Zebra Finches are the most popular species sold in pet stores and are available in many color varieties. Society Finches and Gouldian Finches (which have

particularly beautiful plumage in a rainbow of colors) also are common in the pet trade.

- Finches sold in the pet industry originated from many places throughout the world; most species have been bred in captivity for years. The zebra finch is originally from Australia.

- Finches are very active but not usually tame. They can be fun to breed to watch parents care for the young birds, which leave the nest in a little over a month. Males may fight when multiple pairs are kept in the same cage unless customers use larger units, referred to as flight cages.

- Males almost always have more color or a different color pattern than females, with adult coloration coming in at about six months of age. Only males sing, with songs varying by species but generally sweet and quiet.

- Finches normally live from five to 10 years, depending on species.

X. GLOSSARY

Allopreening: Preening of the feathers of one bird by another.

Anemia: Reduction of red blood cells that carry oxygen.

Aspergillosis: Fungal infection of the respiratory system.

Blood Feathers: Larger pin feathers with a strong blood supply that gets cut off naturally when the feather matures and opens up.

Cere: Skin area above a bird's upper bill, where the nostrils are located.

Covert Feathers: Feathers that lay over the top of other, larger feathers.

Crop: Pouch located in throat area, where food is ground up before being digested.

Ectoparasite: Parasite that lives on or within the skin surface.

Endoparasite: Parasite that lives within the internal organs or parts of the body.

Fledgling: A young bird that is weaned and out on its own.

Hand Raised: Description for a bird that was fed by humans as a baby chick.

Keel: Bird breast bone, located in the center of the chest.

Parasite: An organism that lives in or on another organism.

Pin Feather: New feather, where a sheath covers the soft feather parts.

Preening: Birds' personal grooming, which includes straightening their feathers and applying oil from a gland at the base of their tail to clean and waterproof their plumage.

Primary Feathers: Large, long flight feathers located at the end of the wings.

Quick: Blood vessel inside the nail.