that. His loud protests at Jim's handling in the evening (when it's time to come into the house) turned into his walking up to the aviary door in eager anticipation of the "house fun."

Then one day I realized that I had to re-assess my old opinion of him being easier than Bert to have in the house (as he never did anything except just sit there).

He started out in the morning by throwing his stainless steel water bowl off the refrigerator (where he likes to sleep) watching it carefully as it splashed and loudly crashed on the ceramic tile floor. Then he hopped onto the stove and, one by one, took each of the 4 metal grates off the burners watching them crash onto the floor (chipping the tile floor). Next he worked on the paper towel roll, shredding the paper so meticulously I had to admire his attention to detail. After gathering three cloth kitchen towels, he strutted King-Kong style (that's where he got his name) across the living room floor to his perch, a real tree stump Jim fixed up for him.

Kong began to rip bark into neat little shreds and carried it back – one beak full at a time – to a corner under the kitchen cabinets behind the dishrack. We had watched him climb over the dishrack into that corner a few times during past evenings wondering what he was up to.

As I watched him arrange dishtowels, paper shreds and bark it finally dawned on me. Could it be that he was making a nest? Of all things, this is the last thing I would have expected from this old raven. But then again, the one thing I *have* learned from my time spent with these incredible beings is that I can most definitely expect the unexpected.

The purpose of this article is to offer insight into the species' behavior and increase reader's awareness and appreciation of these birds. As you have probably discovered by now, ravens are frequently aggressive, unpredictable, and destructive and therefore do not make good pets. Keeping or breeding ravens is illegal.

Kong has since died of a large liver tumor, probably caused by the years of neglect and inadequate diet.

Bert, on the other hand, after DNA testing, turned out to be Berta, and is now doing wildlife education programs with "Zoo To You" (www.zootoyou.com) in Paso Robles, California.

Cleaning Safely

by Carolyn Swicegood, Hollywood, FL



Swicegood's natural air fresheners.

A s the year 2000 approaches, there is hardly a corner of the world unpolluted by manmade chemicals. We as consumers created the demand for these earthdestroying substances and we now must do whatever we can to stop the destruction of our planet. A good place to start is at home.

Thanks to cleaning products and the many other chemicals that we use, our homes and indoor aviaries can be compared to miniature chemical factories. Indoor air pollution endangers not only human health but the health and longevity of parrots who are more sensitive and susceptible to damage by chemicals than we. Chemical levels can be up to 70 times higher inside our homes than outside. Over one hundred chemicals commonly found in our homes have been linked to allergies, birth defects, cancer, psychological abnormalities, skin problems, headaches, depression, joint pain, chronic fatigue, chest pains, dizziness, loss of sleep, respiratory disorders, and more. The better insulated our homes and aviaries are, the more toxic the indoor air can be.

Chemical sprays never should be used near parrots. Heating and air con-

ditioning systems can distribute the chemical toxins to every room in the home. Non-spray chemical solutions also can pollute indoor air. Even in outdoor aviaries, hazardous chemicals can be inhaled, ingested, and absorbed through the skin of birds' feet as they use perches with residual toxic chemicals improperly rinsed after cleaning. By becoming educated consumers and changing our methods of cleaning, we can improve the health and life expectancy of our birds and ourselves. By using non-toxic cleaning products, we protect the health of our families and birds while we promote a healthier environment. Here are some safe, alternative methods of cleaning our homes and aviaries.

All Purpose Cleaners

• Grapefruit Seed Extract (GSE) is a relatively new disinfectant that kills staph, strep, candida, salmonella, and e-coli microorganisms. It also is effective against Giardia. Citricidal is the powdered double-strength version of GSE and is available only through mail order. GSE is a liquid and is available in most health food stores. Nutribiotic, Agrisept, and ProSeed are some of the brand names of GSE. It is non-toxic and can be used to disinfect surfaces in the kitchen, bath, aviary, and nursery. This versatile product has become the disinfectant of choice of many aviculturists. A few drops of GSE added to any cleaning solution will give it germicidal properties as well.

• Add 20 drops of NutriBiotic GSE to a 32-ounce spray bottle filled with water. Use on all surfaces around the house and to clean fruits and vegetables before feeding to parrots.

• Baking soda with water is a good all-purpose cleaner (1/4 cup baking soda to 1 quart water).

• Sprinkle baking soda on surfaces to be cleaned or make a paste with baking soda and a small amount of liquid soap. Scrub with a damp nylon scrubbing pad, soft cloth, sponge, or very fine steel wool.

• White distilled vinegar diluted in water removes baking soda residue. Dry with a soft cotton cloth. Recycled cotton clothing serves as a good cleaning and drying cloth.

• Vegetable-based liquid soap, such as castile soap diluted in water makes a good all-purpose cleaner.

• Soap jelly can be made by adding 1 cup of soap flakes to 1 quart boiling water. Stir until dissolved. Pour into jar and let cool. Mix with water as needed.

Kitchen

• Multi-chemical sprays and solutions are not necessary to clean appliances and surfaces in the kitchen.

• Mix a small amount of liquid soap with water in a spray bottle. Mist surfaces and clean with a sponge or cloth. Wipe dry.

• Sprinkle baking soda, or make a paste of baking soda and water; scrub with a wet sponge. If the baking soda leaves a residue, rinse with cold water and vinegar. Dry with a soft cloth.

• For stains on counters, squeeze fresh lemon juice on the stain and allow to stand for 45 minutes. Sprinkle on baking soda, and rub with a sponge or soft cloth.

• Burned or baked-on food in cookware – Two tablespoons liquid dishwashing detergent and three teaspoons baking soda. Add ingredients to enough water to cover the burned-



Swicegood's natural cleaning products.

on food; boil for 15-20 minutes and wash normally. Or sprinkle cookware liberally with baking soda and add just enough water to moisten. Let stand for three hours and lift the burned food out of the pan.

• Stained cookware – Use steel wool and a solution of lemon juice and baking soda. Cover the discoloration for thirty minutes; then scrub and rinse clean.

• Cutting board cleaner and disinfectant – Apply 10 to 20 drops of NutriBiotic to cutting board and work into entire board with a wet sponge or dish cloth. Leave on for 30 minutes before rinsing well.

• Ovens – For lightly soiled ovens, make a thick paste of water and baking soda. Scrub well with a nylon scrubbing pad. If the oven is greasy, add a small amount of liquid soap. To remove spots, use very fine steel wool. A wet cleaning pumice bar can be used to remove the toughest spots, being careful not to scratch the surface. Commercial oven cleaners are available that are non-toxic and do not contain lye. Avoid products with the word "Danger" on the label.

• To clean underneath the refrigerator, tie a sock around the end of a yardstick. When one side is dirty, turn the sock inside out and repeat.

Bathrooms

• To clean the sink, shower, tub, and tile grout, soak with diluted liquid soap, sprinkle on baking soda, scrub with a nylon scrubbing pad, and rinse.

• Use a stiff toothbrush or scrub brush for tiles. If any residue occurs, rinse with vinegar and cold water.

• To remove soap scum from glass shower doors, soak surfaces with diluted liquid soap and scrub with a nylon scrubbing pad. For serious soap scum, use very fine steel wool. Rinse with cold water and, if necessary, add vinegar to rinse. Buff dry.

• To disinfect bathroom surfaces, spray with a solution of one quart of water and 20 drops of GSE (grapefruit seed extract) from health food stores.

• Mildew remover: Spray mildew with hydrogen peroxide.

• Prevention: Keep surfaces dry. Bacteria, viruses, mildew, and mold cannot live without dampness. Wipe down surfaces with white vinegar after cleaning. It prevents the growth of mold and mildew.

• Lime deposit remover: Spray a solution of 1 cup apple cider vinegar, 2 tablespoons salt, and 1 cup water on lime deposits and let stand overnight. Rinse with cold water.

Floor

• For vinyl floors, fill a bucket with a gallon of warm water and add 1/2 cup of white vinegar.

• To cut grease on vinyl floors, dilute a small amount of liquid soap with water.

• To remove black heel marks

on floors, rub with a pencil or typewriter eraser.

• To prevent water spots, dry with a cloth after mopping.

Carpets

Products like "Carpet Fresh" have been linked to bird deaths. There is no safe way to use it as every time you vacuum clean the carpet, leftover particles will become airborne.

• For spills, immediately blot with a clean cloth or paper towel.

• For most spots, mix liquid soap with water in a spray bottle. Spray lightly and blot with a cloth or towel.

• For grease, cover with baking soda. Allow the grease to be absorbed by the baking soda before vacuuming.

• For odors, sprinkle carpet with plain baking soda. Let sit for 15 minutes, and then vacuum.

• Carpet shampoos may contain toxic ingredients such as ammonia and perchlorethylene, a known carcinogen. Plant-based cleaning products, such as citrus cleaners are preferable. Use a steam cleaning machine with 10 to 15 drops of Grapefruit Seed Extract per gallon of water. Many hospitals now use GSE for carpet cleaning.

Wood Furniture

• *Consumer Reports* found that it is better and far less expensive to use a soft cloth or sponge moistened with water and a little all-purpose cleaner, or even a plain damp cloth to clean finished furniture.

• To remove water stains on wood furniture, dab white toothpaste onto stain. Allow the paste to dry and then gently buff off with a soft cloth.

• To dust, wipe along the grain with a soft cloth.

• To clean most spills and fingerprints, rub with a soft cloth, lightly moistened with water. Buff immediately with a soft dry cloth.

• To polish furniture, mix 1/4 cup linseed oil, 1/4 cup vinegar and 1/2 cup lemon juice. Rub into wood with a soft cloth.

• Another furniture polish is made by mixing 2 parts olive oil with 1 part lemon juice. Apply mixture to furniture with a soft cloth and wipe it dry.

• Nicks and scratches can be

covered by mixing granular instant coffee with a little water and applying with a clean, cotton cloth.

• A solution of lemon juice and warm water to clean glass-top tables will make them sparkle. Dry them with a linen towel and then go over them with a crumpled newspaper to remove all lint and make the glass shine.

• Use your hair dryer on the cool setting to dust pleated lamp shades and other hard to reach areas.

Leather Furniture

• Clean weekly by wiping with a soft wet cloth.

• The color pigment on leather furniture is either applied to the surface like paint or the hide is treated with aniline dye. Spills soak up quickly and become stains. Remove all spills immediately and clean the spill area with mild soap and water. *Consumer Reports* wrote that all commercial leather cleaners remove some of the color from leather.

Windows

• Recipe for window and glass cleaner: 1 gallon water, 1 cup white vinegar. Apply with cloth or spray bottle and clean with a linen cloth.

• For extra sparkle, polish clean windows with a crumpled piece of newspaper when nearly dry.

• Or crumple up black and white newspaper and dip in white vinegar. Wipe the glass until almost dry; then shine with dry newspaper. The drawback to this method is that newspaper print may rub off on the wood surrounding the glass. Best used for inner portions of large expanses of glass.

• Lemon juice removes greasy fingerprints on windows.

• When polishing windows use up and down strokes on one side of the window, and side to side strokes on the other, to tell which side has streaks.

Cage Cleaning

• There are three perfect ingredients for cage cleaning – soap, water, and "elbow grease." Very little elbow grease is needed if cages are wiped down daily and cleaned well once a week. This method is best to preserve the finish on cages.

• Grapefruit Seed Extract is a good anti-bacterial cleaner for cages. It can be added to a spray bottle and used for pre-soaking the cage, and on a sponge to wipe down the cage. It is completely non-toxic and more effective against strep, staph, salmonella, candida, and e-coli than Clorox.

• OxyFresh also can be used and is especially good at cleaning grates and hardened dirt. It is nontoxic and is effective against polyoma.

• To catch droppings, use newspaper rather than bedding which can hold moisture and rust out cage bottoms.

Laundry

• Laundry Discs are hypo-allergenic, anti-bacterial ceramic "washing stones" that clean clothes through an ion exchange. Laundry Discs are ideal for people with multiple chemical sensitivities, for baby clothes, for natural cotton fabrics, and for the environmentally concerned. The discs last for approximately 400 wash loads and eliminate the need for detergents which contain phosphates that harm the environment. Various brands cost from \$30 - \$45 U.S.

• If you use detergent in the washer, eliminate soap residue by adding one cup of white vinegar to the final rinse.

• For homemade laundry starch, dissolve 1 tablespoon cornstarch in 1 pint cold water. Place in a spray bottle. Shake before using.

Silver Polish

• To magnetize tarnish away, line an aluminum pan with a piece of aluminum foil. Mix 1 teaspoon baking soda, 1 teaspoon salt, and 1 quart hot water. Add silver and boil for three minutes. Remove silver, wash with detergent, rinse and dry. Do not use on silver jewelry.

• To clean only one or two pieces of silverware, rub gently with white toothpaste on a soft cloth. Rinse with water and dry with a soft cloth.

Stainless Steel

• Mix baking soda with water and clean. You also can also add a small amount of liquid soap. Rinse with vinegar and water. Buff with a dry cloth.

Marble Cleaner

Mix 1 tablespoon baking soda and 1 quart water. Wash with a sponge and wipe dry.

Chrome Cleaner

Mix 1/4 cup baking soda with enough water to make a paste. Rub on, rinse with water, dry.

Brass and Copper Cleaner

• Mix 2 tablespoons salt, 1 tablespoon lemon juice and 1 tablespoon vinegar. Rub with sponge and allow to dry. Rinse with hot water and dry with a soft cloth.

An alternative method is to apply a paste of lemon juice and cream of tartar and leave on for 5 minutes. Wash in warm water and dry with a soft cloth.

Solid brass is gold-colored on both sides, brass-plated is gold on front and black on the back. These methods are for solid brass only.

Drain Cleaner

When drains are clogged by hair and debris, make a solution of equal parts of baking soda, vinegar and salt. Place in the drain and let it foam for 15-20 minutes. Then rinse with boiling water.

Air Fresheners

There have been numerous reports of serious toxicity and even death of parrots exposed to "essential



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oils" so their use should be avoided around birds. Most scented candles should not be used in the air space of parrots. Unscented beeswax candles that contain no chemical additives are safe.

The use of air fresheners is dangerous to parrots. Rather than freshen the air, they contaminate it with a synthetic fragrance, coat nasal passages with an undetectable oil film, or diminish your sense of smell with a nerve deadening agent. Some contain paradichlorobenzene, an organochlorine that can cause liver and nerve damage. The only way to really freshen the air is to open windows and circulate fresh air with a fan or air conditioner. Here are some safe ways to make the air in our homes more fragrant.

Set out a dish of cut lemons or baking soda to absorb odors.

Simmer on the stovetop or in a slow cooker: water, slices of ginger, and spices such as cinnamon, cloves, allspice, vanilla, and almond extracts. This also increases humidity in dry heated homes during winter. Never use Teflon or other non-stick cookware or kettles for simmering.

Stick whole cloves into an orange, grapefruit or lemon and place near heater or air conditioner cold air return vent.

Decorative containers of cloves and cinnamon sticks can be set in areas where fragrance will be appreciated..

Fill a saucer with vanilla extract and place near the air intake register of air conditioning or heating system.

• Fill a spray bottle with a pint of water and a tablespoon of vanilla extract. Use as a room air freshener spray to eliminate cooking and pet odors.

To keep pet areas fragrant, keep an open box of baking soda, a bowl of charcoal, or cotton balls dipped in vanilla extract nearby and out of the reach of children and pets.

Many plants are said to freshen indoor air. The best known of these is the "air plant" or Spider plant.

> Coming next issue: "Safe and Natural Pest Control." 🔀