

## **Feather Loss**

### **Normal molting**

Birds usually go through 2 molts a year, usually in the spring and summer but this can vary by species. During these periods you will probably notice more feathers at the bottom of their cage. Sometimes during molts I am convinced that my sulfur-crested cockatoo has started to feather pick because there are so many feathers in the cage (eg maybe 10 feathers in a night), but then it passes and all is well. The rest of the year, feathers are lost here and there but not in large numbers. It is NOT normal to see bare patches of skin; if this occurs then an exam is needed. Please note that parrots DO have featherless tracts on their bodies; however, these are usually covered by surrounding feathers when the plumage is healthy. It is also not normal to see rough looking plumage; this can indicate feather damaging behavior and/or illness.

### **Feather LOSS without normal regrowth vs. feather destructive behavior**

The causes of feather loss can be due to feathers falling out and then not regrowing normally or due to feathers being taken out or damaged by the bird. These two problems are caused by two slightly different sets of underlying diseases.

#### **Causes of lack of feather regrowth or abnormal feather regrowth:**

- Viral infection (polyoma, psittacine beak and feather disease virus)
- Fungal or bacterial infection
- Nutritional deficiency (especially for birds on an all seed diet)
- Endocrine disease (hypothyroidism)
- Stress or debilitation
- Liver disease
- Polyfolliculitis (a poorly understood disease that affects budgies and lovebirds)
- Feather cysts
- Knemidokoptes (the scaly face mite); usually affects the face and legs rather than the body; usually just budgies and canaries
- VERY old age

#### **Causes of feather damaging behaviors or feather plucking:**

- Bacterial or fungal infection of the skin or feather follicles
- Pain from any source—birds may feather pick or mutilate over painful areas
- Systemic disease such as liver disease, intestinal disease, reproductive tract disease, respiratory tract disease, heart disease etc
- Parasitic infection; parasites on the skin and feathers are not very common in our indoor parrots, though they can occur. Parasites in the intestinal tract can also cause feather picking.
- Toxin exposure—either via ingestion (eg lead or zinc) or via exposure to the skin (eg nicotine/cigarette smoke)
- Topical irritants (eg medicine, lotion, perfume, make-up on the owner, anything applied to the bird)
- Skin cancer
- Picking by a cagemate (usually on the head)
- Inappropriate wing trims
- Allergies

--Dry air

--Behavioral causes: stress/anxiety, hormones (can lead to frustration, territoriality etc), boredom, fear

**Medical causes of feather picking should always be ruled out before we assume the disease is behavioral.** However, this can be costly and not all owners are able to afford to do the complete work-up. Even with the most thorough work-up, it is likely that the cause is sometimes medical and we fail to identify the disease process. There are some species in which behavioral causes are more likely than medical ones (such as cockatoos and African grey parrots) but a medical work-up is still recommended, otherwise we could be missing an underlying disease.

### **Testing**

The following are many of the tests that should be considered in working-up a bird with feather loss/abnormalities. The actual work-up will depend on what you and your veterinarian decide is the best approach for your bird AND your budget. Also, if abnormalities are identified on these tests, further work-up might be needed.

--Thorough history to try to identify any possible causes

--Physical exam

--Visual exam for mites/lice, possible skin scraping

--CBC/biochemical profile/bile acids (blood work)

--Fecal parasite screen

--Fecal Gram stain or culture for intestinal bacteria/yeast

--Whole body radiographs (Xrays) to look for underlying disease (usually done with anesthesia)

--Psittacine beak and feather disease virus and polyoma virus testing

--Lead and zinc concentrations

--Skin biopsy with cultures and histopathology

--Thyroid testing (difficult to do)

### **Management**

#### **1) Maximize husbandry**

- a. 10-12 hours of sleep a night (dark, quiet place)
- b. Excellent diet
- c. Lots of toys and foraging activities
- d. Bathing: Good soaking at least weekly, misting daily
- e. Consider full spectrum light
- f. Trick training rather than sexualized interactions with bird
- g. Keep bird on a routine/schedule to reduce anxiety
- h. Remove any possible topical irritants
- i. Remove anything new in the environment that may be causing stress
- j. Prevent contact with other pets etc that may be scaring the bird
- k. Consider a HEPA filter in the bird's room to improve air quality
- l. Keep in mind that birds with feather loss need to eat more to stay warm and will be more prone to getting cold

- m. Also keep in mind that if you are really stressed-out and unhappy, this will affect your bird
- 2) **Treat any underlying diseases**
  - a. Consider trial on Benadryl (diphenhydramine) in case of environmental allergies
  - b. Consider hypoallergenic diet (eg Roudybush's rice diet) in case of food allergy
  - c. Treat any other underlying diseases identified
- 3) Do NOT give your bird attention when it is feather damaging; this will only train your bird to do it more. Instead, turn your back or leave the room when the behavior starts.
- 4) **Place restraint collar or a sock sweater IF appropriate (for feather picking, not for problems with feather growth)**
  - a. These should **ALWAYS** be used under the guidance of a veterinarian
  - b. These do NOT treat the underlying cause of the disease, just prevent feather damaging behaviors from happening.
  - c. Usually birds will not eat well initially with the collar so the owner needs to offer food by hand several times a day and have a digital gram scale to monitor weight DAILY.
  - d. These are usually left on until feathers grow back completely and then removed.
  - e. In rare cases where birds are **MUTILATING** themselves we will leave them on indefinitely; sock sweaters work well in birds that mutilate their trunks but not for birds that go after their legs or wings.

Feather loss can be a very stressful thing for the owner and the bird, especially when the feather loss is caused by the bird. Many bird owners are distraught when feather destructive behaviors first begin. We often are unable to determine the cause of the feather destructive behavior. Feather damaging behavior often becomes a habit once it has started, even if the inciting cause is gone. Some birds (especially cockatoos and African grey parrots) can live apparently happy lives as feather chewers; my umbrella cockatoo has been happily chewing her feathers for 18 years. Other birds will seem itchy and unhappy and we have to try very hard to find ways to help these birds.

Closing thoughts:

\*\*\*Try to give your bird the most healthy and enriched life possible to avoid problems with feather loss or feather destructive behavior.

\*\*\*Please bring your bird to your veterinarian right away if feather loss or feather abnormalities are noted.

\*\*\*If your bird does develop feather problems, try not to blame yourself!