

FEATHER DESTRUCTIVE BEHAVIOUR

Feather destructive behaviour (feather plucking, feather chewing, self-mutilation) in birds is a very common condition with many causes. It is a challenging syndrome to diagnose and treat in practice and requires a systematic and thorough investigation.

Feather destructive behaviour (FDB) may be caused by psychological problems such as stress, boredom or behavioural issues. However, many birds who display FDB have an underlying health problem. A myriad of diseases may be involved, such as malnutrition, liver or kidney disease, tumours, infections, pain, atherosclerosis (blocking of the arteries around the heart), toxin exposure or reproductive disease, to name just a few.

Very commonly feather plucking is caused by multiple factors, all of which need to be addressed to see an improvement.

Some birds with this problem do not actually remove the feathers completely. They nibble at or damage the feathers leaving them with a tattered and ragged looking appearance. The most severe cases damage the muscle tissue underneath the feathers causing severe self-trauma and bleeding. These cases should be presented to an avian vet as an emergency.

Many birds are presented at quite a chronic stage of feather plucking – often months or years after the initiation of the problem. This can be either because owners mistakenly believe the bird is moulting (in the initial stages) or after having tried various remedies such as mite treatments or pet store sprays in the mistaken belief that external parasites are the cause of the problem. It is important to note that normal moulting will never result in bald patches appearing on a bird.

It is vital to understand that there is no quick fix for this problem and often a slow and considered approach is necessary. For many of these birds who have been plucking for months a full resolution of the behaviour is not realistic, however there may be options to make your bird more comfortable.

There are many ways to begin a diagnostic work up but we would generally recommend the following approach:

- **A consultation and full clinical examination with one of our avian vets** – this will allow us to take a detailed history of the problem and allow us to discuss with you a logical diagnostic approach to further investigations.
- **A blood test for biochemistry and haematology** – this will give an overview of your bird's health. It will show if there are any obvious liver or kidney problems, calcium deficiency or signs of

infection which can either depress the white blood cell count eg Psittacine Beak and Feather Disease (Pbfd) or elevate the white blood cell count eg psittacosis (avian chlamydia). Separate tests for chlamydia (psittacosis) or Pbfd may be recommended at the same time and testing for heavy metals, such as lead or zinc, is also often advised.

- **X-rays** should also be taken under anaesthesia and can be useful to look for changes to organ size (eg liver enlargement), evidence of metal in the gastrointestinal system (which may indicate zinc or lead toxicosis) or arthritis (which can cause pain). They can also be used to look for evidence of proventricular dilation (PDD) or internal masses or areas of infection (granulomas).
- **Endoscopy** (inserting a small camera into the body) can also be very helpful in evaluating the internal organs, in particular to rule out respiratory disease which may affect the lungs and air sacs. Biopsies may also be taken via endoscopy for further testing.

In addition to these investigations, it is also very important to address husbandry factors which can be a direct cause of malnutrition, reproductive or hormonal issues or general poor health.

Diet:

Many birds showing feather-destructive behaviour are on seed-based diets which can be detrimental. Such diets often lead to selective feeding, where the bird only eats the high energy seeds, not the full ration offered. This leads to an increased fat intake which can trigger hormonal problems, while at the same time being deficient in vital minerals such as calcium and vitamins A and D. Even with some fruit and vegetable additions **seed is not a healthy balanced diet for a bird.**

Changing your birds onto a complete, pelleted diet supplemented with vegetables and fruits is an important step in improving their general health and immune system. See our separate handout on converting your bird to a pelleted diet. We recommend Harrison's pellets or Lafeber Nutriberries as the best base diets.

Environmental Enrichment:

It is vital that a full diagnostic investigation is undertaken before assuming a feather picking bird's problem is caused by stress or boredom, however it is important to remember a significant number of these bird's problems can be ameliorated, if not cured, if they are given a more interesting way to spend their time.

In the wild, birds spend a significant part of their day foraging for food. This behaviour must be replicated in some way in captivity to avoid boredom. You need to set your bird a challenge that is easy to begin with such as just putting a piece of paper over the top of the food bowl. Once they have mastered this you can make it a bit more difficult – wrap favourite food items partially in paper then move them to different places for more of a challenge. Place items inside cardboard kitchen roll inserts or egg boxes. Once your bird has mastered this, you can increase the degree of difficulty by buying toys that you can hide things in. It is important not to make things too difficult to begin with or your bird will become discouraged and give up. See our separate handout on enrichment for more ideas.

UV Light:

Unlike humans, birds' range of vision extends into the UV spectrum. Many of the feather colours and patterns that signify a bird as a male or a female to its flock members are only visible in full spectrum light

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(unlike the light we have in our homes which contains no UV). In addition to sex identification certain fruits and berries have different colours in the UV spectrum which help a bird tell if they are edible or ripe. Birds (especially Grey parrots) require UV light to convert vitamin D precursors in their skin allowing normal calcium absorption to take place.

Sunlight will contain no UV if it is shining through a window as the glass does not permit passage of the UV part of the spectrum. We recommend the provision of a bird UV light such as the Arcadia bird lamp system. Timers can be used to ensure the light goes on 1 hour after sunrise and turns off 1 hour before sunset - usually approximately 10-12 hours of light per day. Clamps can be used to attach these lights to the top of the cage and reflectors to better concentrate the beam in the bird's direction. Make sure your parrot cannot chew on the wires! The bulb must be changed every 6 months – although they will still emit light that we can see, the UV component wanes to negligible levels after 6-12 months.

It is very important to ensure your bird gets enough sleep, usually around 12 hours per night. You can either move your bird to a quiet, dark room or cover the bird's cage with a blanket to cut out light exposure. Just ensure there is no background noise to keep your bird awake! Excessive light can disrupt sleep patterns and cause hormonal changes connected with reproduction leading to frustration-based feather plucking.

Bathing or spraying:

Encourage your bird to preen normally by gently misting once or twice daily with warm water. Many birds also enjoy a bath in a shallow dish of water or may even enjoy access to the shower.

Environmental toxins:

Do not allow smoking around the bird or the use of incense, plug in air fresheners or other aerosols. The fumes from overheated Teflon pans can be fatal to birds.

Diagnostic tests, environmental management and potential treatments all take time, so it is important to be committed to the process. Even with the most dedicated management and appropriate investigations many of these cases can only be managed – not cured.