

Feather "Picking" Syndrome – What Really Causes it?



Simply put ---- > Feather-picking is "The end manifestation of undue stress placed upon a bird by one or several conditions". This is NOT a condition of simply the bird is lonely or bored as it is VERY stressful living in the wild searching for enough food, imbalanced diet, and being a prey-hunted species at all times, but one does not see healthy birds in the wild that are feather pickers. This should make most owners and veterinarians think a bit more as to the cause of this condition as it is quite complex. This condition is divided into FIVE main etiologic categories.

Definition

"Feather-picking" is ONLY a symptom, it is NOT a disease! When a bird feels discomfort or pain in an area it may pick that area. The picking can present as mild, moderate, or severe. Mild picking may manifest as chewing on a few feathers or wing tips (Exaggerated preening behavior), while moderate cases involve plucking and removing feathers. The worst form of this syndrome is termed "Mutilation Syndrome", where birds actually inflict wounds in their skin/muscle possibly causing life-threatening situations such as bleeding, nerve or muscle damage, or severe secondary infections. After examining and treating feather picking birds for over 37 years, Dr. Nemetz has found that:

98% of all feather pickers have physiological causes NOT a psychological cause for this syndrome

As diagnostics have improved through high detail digital radiology (2005), new blood testing (published by Dr. Nemetz 2010), Antiganglioside testing (2019), more understanding of the hormonal system in birds (Dr Nemetz 2011, 2012, 2015), and Borna Viral serology (2023) we are learning much more about the causes for feather picking and how to manage it. It is often very frustrating for loving owners as well as veterinarians, but with an organized thorough approach, most patients can be improved or cured, however it is also often very involved and costly to get a full resolution. Sadly, there is no quick fix this this syndrome.



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Primary etiological groups (refer to above flowchart):

- (1) Psittacine Beak and Feather Disease (PBFD)/Polyoma Virus (PVD) PBFD affects the immune system and in one presentation actually causes the necrosis (death) of the feather follicle and its eventual loss from the body. There is an accurate blood test to determine if a bird is a carrier whether the bird is symptomatic or non-symptomatic. Polyoma virus (PVD) has been shown to cause feather loss as well, but is more prevalent in juvenile birds with adults more likely acting as carriers. There is a blood test and a vaccine for Polyoma disease. Birds usually do not pick with these diseases.
- (2) **Metabolic Causes** These are causes that affect internal organ structures and can be sub-classified as (A) Infectious and (B) Non-infectious in their origins.
 - (A) Infectious Metabolic Any infectious agent (i.e. Chlamydia, bacterial, fungal, viral, parasitic) that can damage an internal organ and/or cause enough stress (pain) in a bird can lead to a feather picking syndrome, even though it may only show up as "ratty-looking" feathers. With the antiganglioside (2019) / Borna Serology (2023) test it is being shown as an increase cause of feather picking in older Macaws and African species.
 - (B) Non-infectious Metabolic These are substances that are in the environment that can do harm in our pet birds. Examples: Metal poisoning (Lead, Zinc, Copper, Iron, etc), Nicotine poisoning from second hand smoke, heart disease with decreased blood flow to various organs leading to pain, chronic nutritional imbalances with high fat seed/nut diets leading to liver/kidney/bone disease, and dairy products causing chronic inflammation of the small intestines are only some of the causes which may present as feather picking. Sometimes the bird will "attack" the site of pain or a referred site on the skin relating to the injured organ system in a predictable way. Many of these causes can be detected via radiographs, blood tests, cardiac ultrasound, or other specialty laboratory tests. Re COVID-19: Birds do NOT get COVID-19, but during the pandemic the incidence of ingested foreign bodies (FB) at the clinic has rose exponentially with many presenting with signs of feather picking or mutilation of the flesh! Please do not let your birds roam the home as there are so many things dangerous if ingested (Please download the Toxin handout).
- (3) Nutritional This is purposefully located in the center of the diagram as the fulcrum between physical causes and the psychological or hormonal (sexual) causes. Nutrition alone can affect ALL organs and exaggerate any other malady of the body. The skin and feathers make up the largest organ system in the body and, as such, will reflect a lack of proper nutrients, similar to hair and nails in humans. Imbalances in Vitamin A, amino acids, calcium, magnesium, trace minerals, Vitamin B and excess fats have all been shown to influence feather conditioning including changes in feather color and condition.
- (4) Hormonal Many birds (male and female) with high hormone levels can exhibit "sexual frustration" or "Obsessive Compulsive Disorders (OCD)" with the subsequent sign of feather picking/mutilation. This sometimes is accompanied by increased aggression in response to the "breeding season" for that species. Since 2006 with the research of Dr. Nemetz and his papers published from 2008-2015, hormonal causes of feather picking explain a much larger percentage of cases than previously thought.



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Chronic testicular activity (normal or neoplastic) with subsequent enlargement often leads to pain in the legs, back or tail area. In females, cystic ovaries, oviductal infections, egg yolk peritonitis, mummified eggs, and the presence of two oviducts or ovaries (previously thought that birds only had one of each) are just some of the causes that have been identified and treated with new medications or microsurgical procedures.

(5) **Psychological** – The mind is a powerful organ that takes in various environmental experiences through the senses and attempts to make logic out of it. Sometimes this logic mechanism short circuits and the only way the bird knows how to deal with life's anxieties is to take out his or her "problems" upon it's own body. Some of the worst self-mutilation cases seen at The BIRD Clinic have been diagnosed as an "acute psychotic episode" but the overall incidence of this is less than 2%. **Birds do not pick because they are lonely!** They pick psychologically because their life "structure" has been dramatically disrupted and they have not had the time to adapt to it. Birds are prey species and are at constant risk of predation in the wild, so feather picking places the bird at great risk of being attacked and dying so the "pain" must be so great that the bird has no other options.

Diagnostic Protocol for a Feather picking / mutilating bird

A good detailed medical history is crucial to all feather picking cases. The next goal is to perform tests to rule out the common/likely causes in a methodical manner based on the history and a physical examination. With an organized medical plan, an answer can often be achieved.

The first diagnostic most important is a two view well positioned whole body radiographs to rule out 'physical' pathology such as ingested foreign objects, tumors, respiratory disease, reproductive disease, etc. Based on the radiographic findings, blood testing, viral/chlamydia testing, heavy metal testing, and DNA sexing may be indicated as well as diet and nutritional modification. A diary of events leading to the symptoms composed by the owner can often be a VERY valuable tool in dealing with hormonal and psychological causes as well as pictures of the pet's cage, toys, and surroundings.

Unfortunately, since many birds presented to The BIRD Clinic have a very chronic history of picking, time is of the essence because:

"For every day a bird picks, it takes at least one day to repair the damage"

In conclusion, the situation of "feather picking", "exaggerated preening", and "mutilation syndrome" is <u>NOT</u> simple at all. Again, the key to remember is that feather picking is only a "symptom", not a "diagnosis". However, with today's technology, experience, and owner's patience, most birds can have dramatic improvements, but <u>FIRST</u> a proper diagnosis must be reached.