

# Molting

Friday, 17 November 2006

Molting is a primary factor in a bird's life. Nature has timed the molting cycle to occur under the most ideal conditions. Rarely does an event in the life of an animal occur where the environment becomes so involved with an internal process that intertwines nourishment, nutritional reserves, the endocrine (hormone) system, the circulatory system and the integumentary system.

Nature provides warmth, rain, humidity, lengthening photoperiods, and a luxurious food supply. The bird must provide a good healthy body, have its reserves prepared, and its hormone system tuned to undertake a molt. The countdown starts when spring arrives. Molting in many birds starts after the reproductive cycle.

## Recommendations For Birds In A Molt

**Heat** - In normal molt, no area of the bird's body ever loses all its feathers. However, the feathering is definitely thin, and this may cause the bird to chill. To avoid this, the room temperature should not be allowed to drop. **Rest** - Eight to twelve hours of total darkness per day will be required during the annual molt.

**Security** - Instincts direct birds to be quiet and stay hidden during an annual molt. The loss of feathers handicaps their flying skills which makes wild birds more susceptible to predators. The growth of hundreds of feathers also somewhat weakens them. Pet birds feel the same stresses as wild birds. Birds start feather picking and other vices during a molt more than at any other time. Providing birds with a quiet place, and covering part of the cage so that they have a place to hide reduces their anxieties.

**Quiet** - In nature, a molting bird resides in a peaceful, safe area. Molting pet birds should be kept in an area free of disturbances.

**Preening** - As the molting process begins, the bird becomes increasingly concerned with its plumage. When the quills begin to loosen, the bird removes them and is then ready to care for the new feathers. Each new feather is wrapped in a protective keratin casing. As the feather grows in length, its sheath must be removed before it can open. (The sheath is like a cover on an umbrella-the umbrella cannot be opened until the cover has been removed.) After the bird removes the protective coating the feather is still curled and the vein (flat part) is narrow. Preening flattens the feather and opens it to its full width.

With hundreds of new feathers regenerating, the bird must preen constantly. A white flaking material resulting from the bird's preening will collect on the cage paper and may alarm the owner, because it resembles heavy dandruff. Coupled with intense preening, it will cause some owners to think that the bird has dry, flaky, itchy skin. A natural but erroneous conclusion would be that oil is needed on the bird's skin and feathers. However, this powder is simply the residue of the keratin sheath, which the bird removes from around the feather, a normal and desirable process.

**Balanced Diet** - Molting is a test of the adequacy of the bird's nutritional state. Nutritional deficiencies are exposed probably more often during molting than at any other time of the bird's life.

Birds eating balanced diets should have no trouble satisfying their nutritional needs during a molt. However, to provide a margin of safety, birds are fed a diet with extra proteins, vitamins and minerals during this time-special need diets.

For birds not fed commercial balanced diets owners should add egg to their birds' food or other food with high quality protein. Preening magnifies during molting and might be observed as a bird with an intense "itch".

Feathers are mostly made from protein. But this is an oversimplification as the balance of amino acids in feather proteins are very different from the other organs of the body.

Feathers contain huge quantities of the sulphur containing amino acids. And these are the very building blocks of protein that are in short supply in all plant (seed, nut, vegetable, fruit) proteins. We further supplement these amino acids with a highly bio-available sulphur source that seems to enable the birds to make feathers even more efficiently.

When the bird wants to molt it obviously requires lots of the sulfur containing amino acids. We provide large quantities of these in Feather-Up and to a lesser extent in Fussy Feeder Essentials. These two products, when used in conjunction with Calcivet (CalciBoost), provide all the extra nutrients your birds require for excellent feather growth. Your chicks will get the same nutrients from a combination of Daily Essentials3, Calcivet (CalciBoost), and ProBoost SuperMax .

The Center for Animal Nutrition at the Hanover Veterinary School has demonstrated conclusively the molting tonics without sulfur containing amino acids simply don't work.

What are the benefits of using these supplements?

Firstly feather quality will be maximized. If nutrients are deficient then the bird will have to compromise in making the feather. The trace minerals and vitamins as well as other components of the bird's food are all important in this process.

Secondly a bird with an inadequate diet will not be able to molt quickly. As molting is a stressful experience for our birds the quicker we can get it completed the better. With appropriate natural supplements we can enable the birds to molt with much less effort. The molt is completed quickly and birds are not "stuck in the molt".