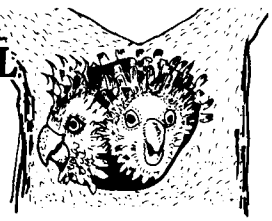
THE NATURAL CHOICE



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Challenges With Tiffany and Tsar

This baby's name is Lucinda. She is a gorgeous female *Eclectus roratus roratus* who sleeps in her basket under the sleeping bag with me when nights are cold. There is no heating in the cabin here; I guess raising handfed psittacines without benefit of a brooder has its advantages after all.

Lucinda is seven weeks old today, and she represents the latest in a long line of challenges breeding Grand Eclectus. It is always harder raising these chicks singly. They seem to sleep and even to grow better with a sibling to lean on in the tub. They stay warmer, support each other's pudgy weight, even incite each other to feed with begging noise and response.

But, once again the parents, Tsar and Tiffany, succeeded in hatching and raising only one bird from a clutch of eggs—the third time since I have kept them.

Tsar and Tiffany came to me two years ago from a breeder friend who had experienced two years of their infertile egg-laying after years of prolific production. It turned out to be a classic case of "breeder burnout"—the hen immersed in a dysfunctional cycle of egg laying and nest box setting, while the male feeds her faithfully, but never quite gets into breeding sync. No searching for a nesting tree, no scavenging for nest food, no greenery to shred all equals no courtship, no copulation, no fertile eggs.

When they arrived here, Tsar and Tiffany seemed agape at the Hawaiian woods surrounding their 8 ft. cage. They were quiet and observant of the many wild birds nearby. They had been denied a nest box for several months in preparation for the move. I gave them a week to become familiar with the cage, then attached a 12 x 12 x 48 in. box to the outside of the cage's sheltered end. They found it and slept inside the first night.

Tiffany and Tsar are one of the finest bonded pairs of Eclectus in the United States. There is just one flaw — Tiffany plucks the feathers out of her upper neck, 360 degrees around just at the top of her preening reach. I first thought she used the feathers to line her nest cavity, but as she does not grow them back when denied a box, it has obviously become a habit.

During the pair's first nesting cycle, begun two months after arriving in Hawaii, I received another shock: the hen somehow transfers her feather picking to her chicks. She feeds the young very well, but when tufts of black down begin to grow on the babies, Tiffany works herself up to a point then bites off the offending feathers.

The former owners would always pull the chicks at 13-14 days, before a significant feathering could tempt the mother.

My goal with each and every breeding pair I keep is to encourage the birds to parent raise at least one clutch. (This will strengthen the future of aviculture in America). I therefore confronted the plucking behavior as a challenge and began taking steps to discover the missing link in Tiffany's natural instincts—it being quite *un*natural to mutilate one's self and one's babies.

The 16th day after hatching, I was awakened at 1:00 A.M. by loud squeals coming from the nest box. Checking the next morning, I found the older chick with a plucked area four inches square on his back and rump. There was red soreness but no blood. Many of the quills were bitten off, with others being pulled. The baby was pulled to be handfed. the younger sibling, less feathered, was barely picked. I rubbed a large, sticky mass of *Aloe vera* sap all over this baby and put her back, hoping Tiffany would be deterred by the bitter taste. For the next four days I repeated the *Aloe* application all over the chick's soft down and no further feather plucking occurred. Then on day 21 I found this baby also plucked on the back and rump. It was pulled and placed in the tub with its sister (now showing red).

Tiffany was in and out of the nest box the next week. She did not seem at all disturbed that her babies were taken away. On the contrary, she was promptly getting ready to lay again. Enter problem number two with this pair.

Without the stimulation of preparing a nest site and the attendant courtship by the male, Tiffany would merely disappear in the box for days on end and cycle a new clutch of eggs. Laid 24 days after the last chick was pulled, this clutch proved to be one fertile egg and one infertile.

It became apparent that with a nest site always available and ready, this hen became so caught up in laying and setting that the male was no longer an active partner in the baby-making process. He spent most of his time feeding her or just sitting alone on a perch. The only reason that the one egg was fertile is that three days into her laying cycle Tiffany did a curious thing. She came out of the box, made a distinctive honking sound, then squatted on the perch. Copulation ensued. Had she not called thusly, most likely *both* eggs would have been clear, as they were during the earlier two years of infertility. This nest was not successful.

I added an extension to their cage bringing the flight to a length of 16 ft., all of the new section open to the ele-

ments. Tsar is a wild caught bird who flies easily back and forth this entire distance. Tiffany always crawled along the cage wire to get from one end to the other or up and down for food. I decided that to get her into shape and flying , I would begin a game of chasing her once a day from the new perch to the log perch next to her nest box 14 ft. away. A bright orange towel was used to startle her off the perch to follow Tsar who always flew at the slightest provocation. Tiffany's first flight (in years, perhaps?) was a clumsy, overweight descent that made it barely half way. Most likely, this captive raised hen had not been allowed proper fledging after handfeeding since she has no hopping ability for short flights of one or two feet.

Within a month, our game of "Tiffany, here...I...come," using the towel had resulted in her first 14 foot flight with a stable landing. It was so exciting; I felt I was adding potential years to this bird's lifespan by forcing her to exercise.

Diet for the pair was modified to include 50% raw fruits, vegetables, herbs and greens. Daily mixtures varied as did the cooked grains and dry and sprouted seeds. Interestingly, the pair was previously given lots of raw corn on the cob while nesting—a "favorite food." The moment they arrived here, they would not touch corn on the cob ordinarily. Only if I cut back on the other foods would they reluctantly nibble a cob. With a daily addition of powdered vitamins, spirulina and calcium, I knew the pair's diet was of optimum quality.

Tiffany loves to bathe, and a sprinkler was installed at the open end of the cage to allow them to be sprayed about 20 minutes at least three or four times a week. Fresh branches are introduced periodically, but these birds are light chewers outside of the nest box. Still, they love to hide amongst the leaves. Yet there is no change in the hen's feather plucking.

I now believe that the cause is either emotional or is an acquired habit whose pattern needs to be broken to effect a cure.

The challenge of the chick plucking is being approached from a different angle. The *Aloe vera* gel only succeeded in extending the time for the young in the nest box to roughly three weeks, and it is hardly a natural solution. The next step was to decrease the inner dimension of the nest box to 8 x 10 in., then further to 8 x 8 in. The goal was to duplicate as nearly as possible the cavity of a narrow tree trunk in the wild, while at the same time making it more difficult for Tiffany to step back from the chicks and pluck their backs. We inserted two 2 x 8 in. pieces of fir wood into the bottom section of the box. But, even then, the mother and two young did not fill up the space. (Attempts to tighten the nest box to a 6 x 8 in. interior resulted in toenail dents in one clutch of eggs and were not continued.)

In addition, I began introducing rotted log material, green branches, papaya stems, etc. into the box to 1.) induce Tiffany to create her own natural shavings as nest liner, and 2.) as diversion for chewing when the babies begin feathering. Feathers from her last molt were added so she would have plenty to line the egg depression.

This hen chews and chews; when prepping the box, when setting and when the chicks arrive. As the young grow their first down, new sticks are added every day or two. She demolishes them. During the ensuing year, in the smaller nest box and with fresh chewing material added when the chicks reach 10 days of age, the time I could leave the chicks with Tiffany increased to 26 days. Our goal of four weeks was not yet reached, but all feather picking at this point was restricted to the underside of the chicks' rumps. And we quickly remove the chicks when even a tiny patch of feathers is mutilated.

This has been a slow learning process for the birds and for us. And there are so many variables; but the night time squeals of pain have ceased. The next contemplated steps are: a full rotting-core nest log, a new-design slanting nest box, moving the pair to a 25 x 25 ft. planted aviary and, switching feathered chicks. The one thing we are *not* considering is giving up on the problem.

To further involve the male in the courtship/nesting cycle, we have established a routine of closing off the nest box for 60 days before a breeding season, then forcing the hen to chew her way through a ¼ in. piece of plywood with a "knot hole" cut out. (I can always tell the moment Tiffany breaks through and enters the box. Tsar's high-pitched warning scream is repeated over and over to announce it. The first time I heard that scream, I ran to see what the "danger" was.)

After one clutch, with babies pulled and with two days to allow for the hen to realize they are gone, the box is closed for 7-10 days, then opened with a cardboard covering she must chew through in one day. This itinerary adds up to an annual season of 10 months and fits in well with the belief that the natural number of clutches for these birds is two or three a year, or 4-6 chicks per hen. I hear a lot of talk about prolific pairs of Eclectus these days, but to allow breeding pairs to produce more than this is a financial decision which offers no benefits to the birds or to aviculture.

Ideally, the final chick of the year is parent reared, leading smoothly into the 60 day box closure to end the season. I have not yet realized this goal with Tiffany and Tsar but definite progress has been made. Both parents are now flying well, and they have produced seven healthy chicks, including Lucinda.

And who ever said aviculture was supposed to be easy?