When it comes to Crimson Seedcrackers, we do not recommend these to the collector of finches. We agree with Mike Fidler when he says too many so-called aviculturists are merely consumers of birds, collecting the flashy and rare with no commitment to breed them. Cursed or blessed (depending upon your point of view) with both of these properties, the Crimson Seedcracker seems doomed in worldwide aviculture, short of divine intervention.

There are currently three recognized species of seedcrackers although this is still open to debate. As far as we can determine, the Black-bellied Seedcracker *Pyrenestes ostrinus* is already absent from American aviculture. However, the Riverbanks Zoo, under the guidance of Bob Siebels, did an excellent job of breeding these birds and had a viable self-sustaining population going. Unfortunately, this population no longer exists due to no fault of their own.

The second species, the Lesser Seedcracker *Pyrenestes minor* has not been imported into this country.

The third, the Crimson Seedcracker *Pyrenestes sanguineus* is currently free from import restrictions and is being imported by those who are knowledgeable enough to keep it alive. This is a stunning species. You may consider the Peters' Twitspots *Hypargos niveoguttatus* to be red or even the Red-headed Parrot Finches *Erythrura psittacea* to be red, but these pale in comparison to the intensity of the Crimson Seedcracker's red coloration. Offset by the chocolate colored breast and its chunky size, it is truly a breathtaking species. In fact, when viewed under Vita-lites, the intensity of the red almost hurts your eyes.

The Crimson Seedcracker has developed an almost mystical following, and keepers and so-called breeders of this bird have developed inflated egos. When we strip away the veneer of self-generated hype, we can find no qualified private breeders of the species, either now or in the past, in this country or abroad.

This is an extreme claim but we challenge anyone to offer us proof to the contrary. Breeding seems invariably to be a matter of accident as opposed to diligent hard work to produce generation after generation.

We do, however, tip our hats to the hard work and perseverance of Ben Cooper, a dedicated breeder who is putting forth a great effort to produce a viable, self-sustaining colony. Although he is working with only one generation from wild-caught, we feel his unwavering efforts will produce results in the long run.

So what is the big deal about breeding this bird? Birds offered for sale anywhere in the world are wild-caught specimens. If a so-called breeder tells you he is selling domestics, he is very skeptical and insist upon proof. Remember, people will tell you whatever they think you want to hear in order to sell you their birds.

Seedcrackers are by nature very shy and timid and must be supplied with ample hiding places. In a quarantine situation these birds fare best as a colony. However, for general husbandry they should be set up one pair per flight. They must be tampered with as little as possible. For example, once a year we find it necessary to catch them to trim their nails. This is extremely stressful for them and the entire procedure should be done as quickly and efficiently as possible.

Seedcrackers can inflict painful bites with their massive beaks when they find themselves in such a compromised position and will close their eyes as if awaiting death. Also, try to avoid moving your Seedcrackers from one flight to another. Most finches will take such a move in stride but Seedcrackers do not react well and may even succumb to the stress it causes.

In captivity they have a reputation for being very finicky eaters. We suggest a mixture of finch and canary seed...
be placed in a dish on the cage floor as well as in the seed cup hung near a high perch in a secluded location where the birds feel secure. This should be repeated with millet sprays. We found some pairs which avidly devoured Romaine lettuce and others which virtually ignored it.

These are birds of tropical swamps and marshes and water should be supplied in large shallow dishes for bathing and drinking. You'll be surprised at how readily they bathe when they feel they are not being observed. Warmth, quiet, and secure conditions are a must. High temperatures (80 - 85°F) and high humidity (70 - 80%) are also necessary for these birds of equatorial climates.

There is a condition with which many imported Seedcrackers are afflicted that we call "Seedcracker Syndrome." There seems to be no organic or pathogenic cause. We believe the cause is stress. Symptoms include repeated sneezing and coughing and eye inflammation. The only known treatment is a stable and stress-free environment. This respiratory condition is chronic and will rear its ugly head again whenever the bird feels stressed. Lacking good husbandry, they will eat less, go light and die. This is how most of them in captivity seem to perish.

After your colony has been quarantined long enough to prove they are carrying no contagious diseases, they should be set up as pairs in individual breeding flights. The smallest cage we recommend is 4 ft. long by 2 ft. wide by 3 ft. high. Each of our Seedcracker flights has a 4 ft. shop fixture fitted with two 4 ft. Vita-lite tubes resting directly atop the cage. These flights should be amply decorated with thick foliage affording a good selection of hiding places. Silk foliage seems to work as well as real for this purpose.

Seedcrackers will accept large wicker baskets for nest building which have been placed in strategic locations. We suggest placing pairs close enough to view each other for, unlike species such as Violet-ears *Uraeginthus granatina*, there appears to be a colony bond among pairs. However, do not make the mistake of keeping several pairs in one giant flight, for individual territoriality will invariably result in dead birds.

We also strongly recommend obtaining a recirculating fountain placed where the entire colony can see and hear it. Our birds showed a great change in their attitude after the fountain was installed. Almost immediately they started clinging to their cage screen, facing the fountain and staring at it. This proved to be an effective pacifier and a powerful stimulus for breeding. It is also a good idea to mist your birds at least twice a day. Remember to use warm water only as cold water will shock the birds leading to possible illness.

The potential breeder of Seedcrackers must be blessed with the virtue of patience. It is not unusual for these birds to take two years to settle into their new environment. If you want faster results work with Australian finches instead. It may also take this long for your birds to vocal-
ize, and this is where we feel we have made one of our most exciting discoveries.

One afternoon, with growing certainty of our discovery, we called Dr. Luis Baptista to relate our theory. We knew what we were about to tell him did not make sense—did not even fit within the definition and characteristics of an estrildid finch. We explained that we were sure these Seedcrackers were talking to each other—not in the traditional sense of estrildid finch vocalizations which can be catalogued for specific meanings, but in a much more complicated way. They were literally talking in rudimentary sentences.

Waiting for the doubting response we felt would come, we were much relieved to hear Baptista state that in the beak-size genetic studies done by Tom Smith on the Black-bellied Seedcrackers, he (Baptista) received numerous fascinating vocal recordings and felt this was a bird worthy of more study.

Encouraged by this response, we went on to explain that we were beginning to understand what they were saying.

Included in a longer "sentence" there are definitive vocalizations for when they are pleased by misting, the introduction of livefood, etc., and we were able to invoke these phrase variations by simulating the right conditions.

Baptista said this was very exciting and was previously unknown in estrildid finches but that, indeed, some of the larger birds do "speak" in simple sentence structures.

We have discovered that these birds essentially “talk” in sentences containing three distinct bits of information. For example: (1) I like the misting, (2) I am feeling very content with my environment, (3) I know that my mealworms are coming soon.

We are presently trying to catalogue these vocalizations and submit them to Dr. Baptista for sonogram studies. The question arises: is this dialect only relevant for a population in a given area, or can Crimson Seedcrackers from one area understand what Crimson Seedcrackers from another area are saying?

Better yet, can Crimson Seedcrackers communicate these ideas to other species of their genus? This does not mean that they are without vocalizations such as other estrildids have. For example, we have catalogued a single note cough-like sound repeated several times that means "something in my environment bothers me." (More often than not, this is the keeper himself.)

Hens will produce a bell-like tone when isolated from the others of their species which we interpret as meaning "I am mourning and lonesome and wish to see others of my kind."

Cocks will produce a beautiful song similar to that of the Purple Grenadier Uraeginthus unbimogaster and Violet-ear but much louder. This seems to state, "I am going to breed. My hen has accepted me and all is well with the world."

Interestingly, the actual display vocalization with symbol (generally a long piece of straw held in the beak by one end) seems to be free from too much variation as opposed to closely related birds such as the Western Blue-bills Spermophaga haematina which ramble on for many minutes with guttural grunts and whistling chirps. The Seedcracker’s display song runs only about two or three seconds and then is repeated.

Cocks that do not have mates but can observe bonded pairs, when introduced to a hen after a period of six months or more, produce a call similar to the display call but expressing much more excitement. The obvious interpretation: "Oh boy, I've got a hen now. I hope she likes me."

We once observed a cock beak to beak with his hen, body parallel to the ground. His tail was twitching as he stared intently at the hen. One of the birds, presumably the male, was producing an electric buzz quite similar to that produced by the cock Strawberry Finch as he tries to entice his hen into the nest. The meaning of the Seedcracker’s buzz is open to debate. According to Baptista, this behavior was hitherto unknown. Unfortunately, we did not not have a camcorder at hand and are unable to play the behavior back for detailed study.

We have worked with many estrildid finches and this is by far the most intelligent. In fact, the intelligence, comprehension and environmental awareness of the Crimson Seedcracker is almost eerie in its nature. We believe we have only just begun to understand the meaning of their vocalizations and there is much more to be learned from this remarkable estrildid finch.

When you hear your birds vocalizing and, particularly, if you see them displaying, it is a good idea to encourage breeding.

We designed the Crimson Seedcrackers' cages with a cultivated ornamental miscanthus known as porcupine grass. Later, Baptista told us that seedcrackers are very fond of long thin grasses for nesting material. Although our grasses were dried, they apparently served as that stimulus, for these were the first materials to be used as a nest lining.

Knowing the birds' reluctance to accept any changes during breeding, when the grasses were harvested by the birds, we did not replenish them, fearing nest abandonment. We were relieved to note that seedcrackers, like other estrildids, are opportunists. When the grasses were gone, the cock simply used the coarse hay we supplied as bedding. We observed only the cock actively involved in the nest building. Our pairs did not use any fine hay or feathers for nest lining.

We have found that pairs randomly set up will generally accept each other. We had aggression with only one hen who murdered her mate and refused all future cocks after that. We believe this type of aggression is not typical for this species.

Be very careful, for what you interpret as aggression may really be displaced aggression, namely, a bird exhibiting hostility towards its mate but actually being angry at something else which cannot be reached. In one of our videos a hen Seedcracker is shown leaving the nest and being attacked by her mate. This could be interpreted as aggression on the part of the cock. But in reality, the cock is angry with the videographer who got too close to the nest. The coughing vocalizations which are clearly audible in the video confirm it.
Crimson Seedcrackers seem reluctant to accept any livefood or even eggfood. Our birds went years before accepting it. During molting times we relieved our apprehension by providing 40 watt heat bulbs in metal reflectors placed atop the cage about five inches above an access perch in a very visible area generally at the front of the cage. Birds were often spotted basking here often tilting their heads to one side to get the maximum effect.

Imagine our relief when we saw a cock Crimson Seedcracker taking a mini-mealworm from the dish on the floor of his cage. Although he had been offered these for years, he invariably ignored them. His obviously curious hen tried them too and she was hooked. Pairs in other cages were watching, sampled and were likewise hooked. All other forms of livefood had been consistently ignored.

A surprising trait of our colony of seedcrackers is that they vanish into their secret hiding places at twilight, not to be seen or heard until morning. This appears not to be a sign of stress or illness, but a part of their natural behavior.

One wonderful aspect of these birds is their complete acceptance of their keeper. The birds would observe the videographer with restrained curiosity and it was not necessary to resort to remote video equipment as was necessary with some other species. The Blue-breasted Parrot Finch *Erythrura tricolor*, for instance, even after several generations of domestication, remains very leery of one's presence and would flee.

Our clutches have consistently numbered three eggs. In our experience, Crimson Seedcrackers make wonderful parents. Unlike many species which are notorious for abandoning, these birds will do their best to raise their young if their environment remains consistent. It is an absolute given that there be no nest inspection, cage cleaning or any other behavior that would disturb them.

Crimson Seedcracker chicks are dark-skinned and remarkably similar to the chicks of Peters’ Twinspots. This is not surprising as the two species are closely related.

We personally believe that it should not be necessary to foster Crimson Seedcrackers.

There are no known mutations anywhere in the world.

The Crimson Seedcracker has been greatly abused by aviculture worldwide. Breeding results are consistently dismal and we believe that this is one species of estrildid finch that should not be kept except by qualified and dedicated aviculturalists. For too long it has been regarded as a trophy bird ultimately to end up on someone’s compost heap.

We challenge those who have the equipment, the insight and, most of all, the dedication, to engage in serious behavioral research on this species. We encourage those so prepared to contact us through Watchbird Editor-in-Chief Dale Thompson.

There is much for the amateur, though dedicated, researcher to explore. We certainly hope some of you will take up the challenge.