# NO HOLDS BARRED



## Anti-fostering — Pro-fostering

### Howard D. Pancoast vs. Terry Dunham

Fostering — the raising of one species under another — is a controversial but widely practiced techinque. Does it destroy the quality of birds for future generations? Or does it make quality stock available in greater numbers for the future? Is it boon or bane? In the following two articles, two friends — and adversaries — debate the issue, with no holds barred.

Dave Pancoast and his wife Nancy operate Blue Ridge Aviaries, in Lowesville, Va., where they breed an impressive array of birds. Terry Dunham is the Watchbird's finches editor, and raises finches at Bird Bay Breeders in St. Petersburg, Fl.

There's the bell. Gentlemen: enter the ring.

Ed.

## **ANTI-FOSTERING**

by Howard D. Pancoast

I write as a layman, not as a trained zoologist or agriculturist. I try, as best I can, to relate all knowledge to the whole, so that when I think of captive bird breeding, I think of the emerging nations and their frantic drive to industrialize and to exploit to the fullest their natural resources. When I think of aviculture, I think of overpopulation, pollution, war, and of our desperate need for an ethical commitment to a more meaningful purpose than the raw pursuit of another dollar.

It follows from such habits of thought that I am strongly opposed to the indiscriminate use of any breeding practice which would tend to dilute, or otherwise diminish, the long-range vigor and viability of any captive-bred animal.

Note that I used the word "indiscriminate". Obviously, when the total population of any species is inadequate in either a natural or captive context, or is not yet amenable to captive breeding, then priority must be given to increasing that population by any means possible. If the imprinting of the resulting offspring is then safeguarded by early introduction of the young to naturally imprinted adult

members of its own species, then the use of such artificial breeding practices was beneficial.

But it is my impression that such is rarely the case among those who maintain rows of cages of frustrated Society finches opposite corresponding rows of cages of choosier and more colorful finches.

Quite the contrary: the Society finch devotee will almost invariably brag first and loudest about his production volume. This is usually followed by an oblique reference to the resulting income. Thereafter a discussion of mutation and hybrids is par for course.

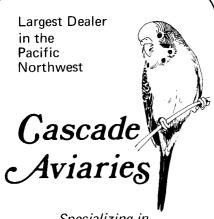
A leading practitioner and spokesman of this school recently offered me the following information as an example of his thesis. A friend of his had foster-raised 55 offspring in one year from a single pair of Purple Grenadiers. Far from being an advantage, it is my opinion that this feat of production could prove to have been a delayed-fuse disaster.

It must be conceded that the Purple Grenadier is (or was, until then) a rather rare finch in U.S. aviculture. I will hazard the wild guess that that one pair increased our domestic population by at least 20% — one out of five, all brothers and sisters. One could speculate from now 'til dooms-

day about the potential for gene pool pollution since virtually nothing is known about the inherent stamina of the parents or of their breeding and rearing potential if left to their own devices. It would be comforting to know at least something about such super-studs before they become the grandparents, aunt and uncle of every indigenous Purple Grenadier in the United States a few generations hence.

Another, and very real, source of potential gene-pool pollution comes from the simple fact that there is virtually no natural selection process at work here. As long as the offspring have feathers, can fly, see lightning, eat seed and survive in a temperature controlled room, they are salable. Birds which are subtly, probably invisibly, flawed since conception—birds which would not, in an even half-way natural environment, have made it through the first year, or even week, of their lives -are pampered, reared, and shipped out, hopefully to disseminate their genetic inadequacies into an ever-increasing proportion of the species' captive population.

But all that is probably quite academic compared to the vastly more immediate problem of imprinting. The simple logistics of fertilizing and delivering enough eggs to result in the successful foster-rear-



Specializing in Budgies and Exotic Cage Birds

WHOLESALE ONLY

206-839-5877

4848 S. 288th St. Auburn, WA 98002

Satisfaction Guaranteed



Visit to private aviaries
Sanctuary visits
Sydney Opera House
Coober Pedy (Underground City
and Opal Mines)
Alice Springs and Ayers Rock
Great Barrier Reef
Sheep Station Barbeque

Tour includes full escort, hotel accommodations, 29 meals, transfers, sight-seeing and air transportation as per itinerary.

### \$2,679 from Los Angeles

(A deposit of \$200 per person is required to book space on tour.)
For more information contact:

YORBA LINDA TRAVEL 4886 Main Street Yorba Linda, CA 92686 (714) 993-1121

Prices are based on tariff, currancy values,, and fuel prices in effect March 1, 1979, and participation of a minimum of 30 persons. prices subject to change.

ing of 55 offspring would reasonably seem to preclude the likelihood that parents devoted whatever spare time they had to the task of imprinting this herd. A far safer guess is that the young Grenadiers were removed from their foster-society parents at the earliest possible date and subsequently sold or traded at the first opportunity.

Meanwhile, I assume that this same pair of birds is still hard at work, pumping out more eggs to increase its share of the U.S. Grenadier gene-pool. No doubt there will be some small fraction of this huge generation which will overcome these handicaps of flawed imprinting and/or flawed genetics, and will successfully raise viable young. But my logic tells me that it will be a minute fraction.

It would seem far more predictable that one or more of the following will occur:

- 1. The new owner will get fed up waiting for his new finches to get it all together, and will turn to the tried-and-true Society finch.
- 2. The new owner will inadvertently pair siblings, with God-knows what results for the future.
- 3. The new owner will go ape trying to figure out (1) why his bird's eggs are always clear, or (2) why the young always die in the nest, or (3) why the parents invariably toss them out, or (4) why they never breed at all, and may decide to cross one of the pair with an over-sexed Violet Eared Waxbill on the companion theories of the Societyists of hybrid vigor and re-cross breeding

No matter how you cut it, the logical extension of these proceses would have to result, at some not too distant date, in a captive race of Purple zombies resembling their vigorous wild ancestors in color only.

I have belabored the example of the fecund Grenadiers for convenience sake alone. The same straight line logic may be applied to any other species, from thousands of Gouldians to a handful of Peter Twinspots.

Fortunately, however, straight-line logic seldom occurs in reality. Too many variables intervene to throw it off course. In this case, one of those variables is us, and many others like us—the believers in natural breeding and rearing. We, like the Society-ists, brag first and loudest about production volume, but with a difference. We brag not of dozens, but handfuls. We think in terms of nests, and of end results in terms of one through five. The subject of consequent income is usually avoided, or at best expressed with a groan. And for ourselves, at least, a mutation is regrettable, and a hybrid is shameful.

Our policy, here at Blue Ridge Avi-

aries, is to provide our breeding birds with as spacious, natural, and challenging an environment as we can devise and afford, given the inherent unnaturalness of an environment which is enclosed and free of predators. All breeding structures have dirt floors, and all are heavily planted with small trees, shrubs, vines, weeds and seeding grasses from foxtail to millet. All such structures afford maximum exposure to sun and weather, consistent with the tolerances and health of the species involved. Bear in mind that our aviaries are located on a windy hilltop on the southern fringes of the middle Atlantic region. Our temperature extremes are essentially the same as those in coastal Connecticut.

Our breeding Saffron finches, Green Singing finches and Brazilian Crested Cardinals are kept in large outdoor flights with attached, open-fronted, shed-type shelters the year around, despite winter temperatures that occasionally dip below zero. Even the young from the previous summer stay out all winter.

Our more delicate finches — Violet Ears, Parrot finches, Gouldians, Owls, Blue Caps, Melbas, Twinspots, to name a few, and a pair of yellow-winged Honeycreepers, are maintained in 50' x 20' shedtype building which is virtually convertible to an indoor-outdoor enclosure on a moment's notice. Fresh air and bugs whiz in and out as freely as if there were no roof at all. Within this building two or more pairs each of several species compete for mates, nest sites, and resident live food. No meal worms are offered. This building is kept above the freezing point in winter — more for the sake of the exotic plants than the birds — by means of a single wood stove.

Once, late last Fall and due to my own oversight, an icy blast in the teens penetrated that building. A fig tree and several smaller plants were killed. The water and nectar froze. But not a single bird was lost. No medication was required, just a little extra sun-bathing. Under such conditions our finches court, build their own nests, incubate their eggs and rear their young. Only the strong grow up. The flawed and the weak don't make it, and we do not raise a finger to alter that process.

We have had the pleasure of watching a young hen Violet Eared Waxbill help her mother feed the young from the next nest.

We have had the surprise of seeing young Shafttails, just after developing adult colors, and much earlier than we thought possible, build a nest — disdaining available nest boxes — and rear four feisty youngsters.

We have had the amazement of finding three healthy young Peter Twinspots perching in a bush in an 8' x 16' outdoor

### MICHKEN WILDLIFE CORPORATION

01314 CHARLEVOIX STREET, MONTREAL, QUEBEC, CANADA H3K 2Z9

PHONE (514) 935-9174 or 937-2577 CABLE ADDRESS "ZOOBIRD" MONTREAL

- \*We have five modern government approved and veterinarian supervised quarantine hospitals to serve your complete wildlife needs.
- \*Animal mortality and transport insurance, freight charges, and customs brokerage can be arranged upon request for all shipments.
- \*We are suppliers to over 400 zoos, aquariums, bird parks and private collections throughout the world.
- \*We specialize in captive raised specimens and have for ten years.

Please let us serve you.



### BIRDS IMPORT APPLICATION TO:

Dr. George Pierson
Animal and Plant Health
Inspection Service
U.S. Department of Agriculture
Federal Center Building
Hyattsville, Maryland 20782
U.S.A.

### BIRDS ?

Your collection needs birds?
You do not have a quarantine station?
You cannot get a good selection?
You cannot get top-quality specimen?
MICHKEN can solve your problems:

This lovely selection of birds is now available and can enter the U.S.A. after 90 days residence in Canada.

- 6.7 Golden Fronted Fruitsucker
- 9.9 Java Sparrow
- 2.2 Bare Throated Bellbird
- 3.4 Rufous Tree Pies
- 1.0 Marabou Stork
- 1.1 Asiatic White Pelican
- 1.1 Black Stork \*1975
- 2.3 Stanley Crane \*1978
- 5.5 Caribbean Flamingoes \*1977
- 3.3 Abdim's Stork
- 6.7 East African Crown Crane
- 2.3 Black Necked Stork
- 1.0 Saddle Billed Stork \*1977
- 1.1 Painted Stork
- 1.1 Vonderdeckens Hornbills \*1978
- 1.1 Artic Raven \*1978
- 3.2 Snowy Owl \*1978
- 2.2 European Little Owl \*1977
- 2.2 Tawny Owl \*1977
- 1.1 Australian Brush Turkey
- 3.3 Ocelated Turkey \*1978
- 2.2 Malayargus Pheasant \*1978
- 1.1 Steamer Duck \*1977
- 3.3 Red Brested Geese \*1977
- 3.3 Ruddy Headed Geese \*1977
- 2.2 Emperor Geese \*1977
- 3.3 Paradise Shelduck \*1977
- 1.1 Hyacinthine Macaw

Mammals worth noting which are presently available are :

- 1.1 Bactrian Camel \*1978
- 1.1 Alpaca- Black \*1975
- 2.2 Capybara \*1978
- 1.1 European Lynx \*1976
- 2.4 Dall Sheep \*1977-1978
- 3.4 Brushtailed Phalanger \*1978
- All permits in order
- (\*) indicates captive bred animals

Contact us for your complete wildlife requirements.

Breeders of Cockatiels, Lovebirds, and Zebra Finches



#### • WE SHIP BIRDS •

Send stamped, self-addressed envelope for prices.

Hours: 9 a.m. to 5 p.m. Closed Mon.

(714) 443-8315

12995 Old Barona Road Lakeside, California 92040 (near San Diego)

# Bracken Bird Farm



WE BUY, SELL, TRADE
WHOLESALE
RETAIL

100 PLUS AVIARIES AT THIS LOCATION

714/792-5735

10797 New Jersey Street Redlands, CA. 92373 flight, which their parents shared with three pairs of Gouldians, a pair of Blue Caps and a pair of Splendid Parakeets, one week after a television crew had been trapsing around inside the flight.

And we have had the sorrow of finding dead babies on the ground, eggs that fell through ill-constructed nests, mates that refused to help feed young, and young that chose fatally-exposed perching sites.

But the strength and the future of any species, be it captive or wild, is not in those that fail but in those that make it, and do so knowing who and what they are. Therein lies the crux of the argument.

The Society breeder swamps the total captive gene pool with masses of unculled and generally unimprinted young. But he does so profitably. The natural breeder produces mere handfuls of culled and hardy young thoroughly imprinted. But he probably loses money. It is a goal, secondary to the ideal, to learn how to do so profitably. The ideal — which is primary — is less amenable to logic or proof. Ideals are more often simply sensed and believed.

I have enjoyed observing and working with wild creatures since I was a child. I have had a fifty-three year love affair with all that is natural about our planet. I want my captive wild creatures to be just like, in all ways, their free counterparts in some fascinating land half-way around the world. If they are green in the wild, I don't want mine to be blue, yellow or white. And I want them to know how to compete for mates, how to build nests, and feed their young, and how to scrounge for seeds and bugs.

Probably because I have always felt rather guilty about encapturing a wild creature. I want to believe that those birds bred under our care are as tough and resourceful and fertile as their wild brethren: that should some war or condition of rampant development in an emerging nation lead to the extinction of the Peter Twinspot, or any other species, those of that species bred with us will have at least a reasonable hope of reintroduction into their native habitat; and, — the ultimate dream — that if enough people would place this goal above (but not exclusive of) the pursuit of profit, we could someday provide a self-sustaining and guilt-free aviculture in America without resort to the depopulation of wild stock with all that that entails.

Birds are not cars, cans of spagetti, or shares of common stock to be marketed with a hard-nosed, one-eyed, view to profit. They belong to something bigger than we. If we can profit from them, it should be only with an overriding commitment to their long-range preservation.

### **PRO-FOSTERING**

by Terry Dunham

The single most compelling fact about fostering is that it WORKS. The practice of using very domesticated species (society finches, zebra finches) to raise young of less manageable species, either routinely or as an emergency measure, has demonstrated its effectiveness. Any reader who has had any finch species lay fertile eggs but fail to raise the hatchlings has a serious reason to consider fostering. With the availability of continuing stock of imported birds becoming ever more uncertain, breeders of EVERY bird type should weigh the disadvantages - real or imagined — outlined in the accompanying article, against the very real considerations outlined here.

Among the species successfully raised by society finches here at Bird Bay Breeders and by our friends: Lady Gouldians, Owls, Shafttails, Stars, Cherry Finches, Chestnut-breasted Mannakins, Red-head and Blue-faced Parrot Finches, and other Australian grassfinches. Less well known are our successes with various African finches, including Cordon Blues, Fire finches, Violet-eared Waxbills, Purple Grenadiers, Melbas, various species of Nun, Peter Twinspots, and others.

Luis F. Baptista outlined fostering techniques in the August/Septmeber 1978 issue of the Watchbird. An article in the last issue of the Watchbird elaborated on a nesting food diet used to raise 55 Purple Grenadiers from a single pair by utilizing fostering under societies after the adults failed in several nesting efforts when left to their own devices. Although my friend and adversary Dave Pancoast tells me he has selected that species to illustrate his fears about fostering, it is ironic that he and his wife Nancy saw fit to order several pair of the fostered Grenadiers from us, as well as our fostered Owls and Lady Goulds.

Before anything else is said, it must be understood that in my opinion, Dave's arguments have merit, as do my own: it is my contention, simply, that at a time when many species are disappearing from American aviculture, or are threatened, we MUST consider alternatives that could preserve their numbers. At the same time, we must carefully observe DOCUMENTED harmful affects of fostering and react to eliminate or minimize them. We do this, for example, by removing young from their foster parents by their 42nd day, when Dr. Klauss Immelmann believes fostering either has not taken place or is reversible (see June and August 1975 Watchbirds). As Dr. Immelmann recommends, we then place the young in a holding cage with others of their own species.

One of the most articulate critics of fostering has often complained to me about the production of inferior quality birds, birds he feels would die under natural conditions. To me, this is the weakest argumente, and I touch on it here only because my adversary in this debate-in-print might refer to it. I simply fail to see the justification for this fear: all society parents do is FEED hatchlings, just as natural parents do. Some live, some die. Those that die do so — perhaps — because they are inferior, flawed in some way. Those which live would also live in a nest with natural parents WHICH FED. The advantage of fostering is not that it raises all young which hatch: the advantages instead are that young are raised which might die if their parents refused to feed them, and that more young are produced because the parents (called serial layers) produce multiple clutches of eggs in the time it would take them to raise a single clutch by themselves. There is NO proof that when exotic birds refuse to feed young they are doing so because of the perception of defects in those young. There is more reason to believe the parents fail to feed because of the contrast between the unnatural conditions in most captive set-ups and the wild environment they are accustomed to.

Now, on to the facts. First: fostered birds are NOT useless as breeders. Ralph Herman, Exotic Birds, in Ft. Lauderdale, Fla., for example, has a pair of our fostered Lady Goulds that at last count had raised 19 young in the natural fashion. We frequently get reports of such success, though it is usually more moderate. Yet Ralph's birds are our FOURTH generation fostered stock. I'd be surprized if there were not also other generations of fostering in the birds' lineage before we got them. Every breeder knows a dealer who calmly asserts "all our imported birds are aviary raised in Europe" or some other area: How many breeders believe that is ALWAYS true? Can the Europeans be blind to the same economic possibilities that motivate breeders elsewhere?

The first question a breeder considering fostering should ask himself or herself: ARE FOSTERED BIRDS BETTER THAN NO BIRDS AT ALL?

The answer is obvious. Given a choice, I would take aviary (natural parent) raised

stock rather than fostered stock for my own collection, because there MAY be an advantage but there is no imaginable disadvantage. Taken by itself, this might indicate fostering is undesirable. But consider the other factors: With some difficult species (wild-caught African imports, for example) a talented breeder might raise none or only a handful of young from a given pair or pairs. By fostering, he may raise dozens. Which alternative puts him in a better position to later establish a successful breeding population? Obviously, one's odds of success improve with the size of the initial colony. Anyone who has ever had a small number of a given species but lost them all before successfully reproducing them would have to agree: fostered birds ARE better than none at all.

The second question: ARE FOSTERED BIRDS BETTER THAN WILD-CAUGHT STOCK?

Wild-trapped birds are accustomed to unlimited freedom of movement. They live among untold varieties of plant and insect foods. Suddenly they are trapped, put through the rigors of quarantine, and thrust into diverse captive envronments.

Continued on next page





Fostered birds, on the other hand, will generally have been cage raised. The diet they are offered as adults will approximate the diet they have known all their lives. When released into larger breeding quarters they will experience an increase in freedom, NOT the restriction experienced by birds which originally flew free. Likewise, the intelligent breeder will enhance the diet for breeding stock: these factors help arouse the breeding urge.

Opponents of fostering will generalize about birds they have known (or heard of) which were fostered and which would not raise their own young. I object to this unscientific methodology, but for fairness let me offer an equally inconclusive observation. Acclimation to captive environments DOES seem to be a problem for aviculturists to overcome. I know of any number of cases where wild-trapped birds showed no significant nesting activity for their first year or two in captivity. My answer to question two: I would prefer intelligently fostered stock to wild-caught stock, except for a few cases with rare species where all domestically bred stock may be inbred and the infusion of new blood from wild stock offers a wise alter-

Dave Pancoast has often challenged our fostering efforts on the basis of potential inbreeding. We keep careful records to avoid that result. If a breeder using purely natural techniques raises four Violet-eared Waxbills in a season, what will he do with those young? Pair them up? Sell two of them as a pair? If he is intelligent, he will try to obtain unrelated stock for the pairings, be they his or his customers'. Fostering — and the concurrent increase in production — simply makes more birds available, giving breeders more choices for obtaining unrelated young, not fewer choices. I see no difference in the two situations insofar as inbreeding is

The question of wild-caught stock does not apply to Australian species, of course, since export of those birds has been banned since the early sixties. Nevertheless, consider the case of one Australian species: the Painted Finch, Emblema picta. Painted finches were generaly available in the U.S. before the ban on Australian exports. Breeders failed to reproduce the species. I understand there may be one or two males remaining in California. Some breeders undoubtedly fostered their Painted finches, but for various reasons the species is lost to American aviculture, as is the Crimson (Australian Fire) finch, to the best of my knowledge. How I wish the breeders who had the final few pairs in this country had put those eggs under society finches!

The same is true of mutations: say, for discussion, that a Lutino gould appears in your collection. The third question: WHAT WOULD YOU DO? Attempt only to raise young under the natural parents? Or foster enthusiastically to produce as many genetically-linked offspring as possible, to assure the maintenance of the mutation for future years? I think in answering questions like this one breeders are casting their votes — FOR fostering.

These are not idle questions. The Crimson and Painted finches testify to their significance. I know of a California breeder who has had an apparent Lutino Star Finch for four years: it has failed to raise young with the hens in the flight with it, though it has produced eggs which have hatched. A carefully planned fostering program, pairing the male to two or three hens a year, might have firmly established the mutation, if that is what it is, by now. We are now working with White-breasted and Blue-breasted Lady Gouldian finches, and until their numbers are secure I would not dream of watching young die in nests, or even successful nestings which produced only a few pairs of young for the subsequent year.

While some breeders oppose mutations as unnatural, others pursue the establishment of new color varieties with great zeal. The list below is probably incomplete, but it tries to list finch mutations which presently exist.

- Shafftails: fawn, pied and white exist in England. A fawn specimen appeared in a Georgia breeder's collection.
- Zebra finches: In addition to the commonly recognized color varieties, English breeders have blackbreasted and yellow-billed strains. A variety that may constitute a new mutation has occurred in Florida and, apparently, elsewhere, and has been discussed earlier in the Watchbird. Crested zebras exist in the U.S.
- Star finches: In Australia a yellow-headed variety is common. The red on the head is replaced by a golden orange similar to the head color of "yellow-head" Lady Gouldians. A California breeder obtained from import a uniformly yellow star finch four years ago. It has since moulted in several feathers of normal color. It has not bred.
- 4. Diamond Sparrows: A "silver" variety which may be a dilute appeared in a Texan's aviaries. The young have so far showed unusually high mortality in the nest.
- 5. Lady Gouldians: white and Bluebreasted varieties are now in small

  Continued on next page 27

### **PRO-FOSTERING**

Continued from page 22

numbers in the U.S., and there are reports of a blue-backed variety. Dilute-backed Gouldians in Australia. Europe and S. Africa have the head color diminished and the green of the back replaced by a pale yellow. There are reports of red-breasted Gouldians in S. Africa. Lutino Gouldians were bred in Australia and at one time it is reported several dozen existed, but it can not be confirmed that the mutation still exists. Disease destroyed the breeding stock of the two most successful breeders of that mutation.

- 6. Society finches: the crested variety is now fairly common in the U.S.
- 7. Strawberry finches with a few white flight feathers have appeared in a Florida aviary, but have not been established as a true-breeding variety.

It is interesting to note that almost all of the mutations have occurred in Australian finches, which are the most domesticated of the finch species. Is that simply the result of greater captive breeding and management when the mutations appear?

It should be pointed out that mutations are as natural as the species themselves. Eons ago, differences in the first birds mutations, if you will - resulted in the wonderful diversity of species we enjoy today. A more recent example: It is likely the first Gouldian finches were blackheaded and the red-headed variety is the result of a mutation that became established in the wild. The yellow head, present in numbers one-thousandth of that of red and black-heads, is a more recent mutation. To say one color variety is "more real" than another is a form of philosophical bemusement I'm unable to label more accurately.

Critics may focus on the use of fostering with fairly commonly available species: Cordon Blues, Star finches, and normal Goulds, for example. I would answer with another question: Are fine birds to be available only to expert breeders, and to those with unlimited funds? There are more than a dozen breeders now working with our Purple Grenadiers who simply would not own that species if it were not for fostering. Some of them may succeed with natural breeding. At least, there are more opportunities now for success. Breeders now working with our star finches might have found stock elsewhere.

continued on next page

# ALUMINIM



Available Now S from Europe

OPEN . COLORED

Used to Identify Families or Splits

1		sid <b>e</b> c Mea	s.	Numbered	Price
Α	2.5	mm	Finches	1 - 20	4c ea.
В	3	mm	Canaries	1 - 20	5c ea.
C	4	mm	Parakeets	1 - 20	6c ea.
		e in: P ack, Si		Lime, Gree	n, Blue
D E	6	m m m m	Cockatiel Game Bir	s 1 – 10 ds 1 – 10	8c ea. 10c ea.
F	10	mm	Pheasant (small)	1 – 10	10c ea.
G	12	mm	Pheasant	1 - 10	11c ea.
	ilable en, F		(large) ilver, Blue,	Gold	

minimum order

\$4.00 +.75c postage & handling Calif. add 6% tax.



(714) 826-5248

Bird Band International

10441 Barbara Ann. Cypress, CA 90630

### **Analysis per 3.5 grams** (approximately one teaspoon)

. . 600 IU Α Carotene . . 0.365 mg. Cantha-. . 1.8 mgs. xanthin  $D_{\scriptscriptstyle 3}$  . . . . 60 IU . . 32 mgs. Arginine Histidine . . 13 mgs. Isoleucine . . 24 mgs. Leucine . . 33 mgs. Phenylalanine . 30 mgs. Tyrosinę . . 33 mgs. Methionine . 12 mgs. Cystine . . . 8 mgs. Threonine . . 33 mgs. Tryptophane . 9 mgs. Valine . . 40 mgs. Lysine . . . 44 mgs. 30 mgs. Alanine Aspartic Acid . 50 mgs. Glutamic Acid . 140 mgs. Glycine . . . 36 mgs.



. . . . 10 IU K . . . 0.001 mg. . 6 mgs. Bioflavanoid Complex . . 0.85 mg. Hesperedine Complex . . 0.735 mg. Rutin . . . 0.365 mg.  $B_1$ . . . 0.5 mgs.  $B_2$  . . . 0.5 mgs. . . 0.5 mgs. B<sub>12</sub> . . . 0.001 mg. Choline . . 7.8 mgs. Inositol . 7.8 mgs.

# THE SECRET

The secret of Avia's "Magic Powers" has been well guarded up to

Niacinamide 3.7 mgs. P.A.B.A. . 2 mgs. Biotin . . 0.003 mg. Calcium . . 170 mgs. Phosphorus . 170 mgs. Magnesium . 7.3 mgs. Potassium Chloride . . 39 mgs. Sodium Chloride . . 25 mgs. Manganese . 0.069 mg. Cobalt . . Trace Silicon . . Trace Iron . . . 0.7 mas. Copper . . 0.037 mg. . . 0.008 mg. lodine Zinc . . 0.245 mg. Proline . . . 39 mgs. Serine . . . 50 mgs. Pantothenic Acid . . . 2.5 mgs. Folic Acid . 0.122 mg.

now. Whispered in top aviaries around the world, concealed from the public, men with that special edge know that when it comes to developing the most brilliant intense coloration covering the full breadth of the spectrum, that when it comes to developing luxuriant plumage, full weight and all those enviable qualities of vitality and durability Avia has no peer.

### Available from leading bird supply shops or from:

NUTRA-VET RESEARCH CORPORATION, 201 Smith Street,

Poughkeepsie, NY 12601, 914-473-1900

 $2 \text{ ozs } \$2.99 - 5 \text{ ozs } \$6.49 - 9\frac{1}{2} \text{ ozs } \$9.79$ 20 ozs \$17.49 - 5 lbs \$57.60

> PLEASE ADD \$1.00 FOR SHIPPING AND HANDLING ON ORDERS UNDER \$9.79.

### **ATTENTION! ALL '79 BIRD EXHIBITIONS**

The American Federation of Aviculture is offering complimentary patronage show awards to all clubs holding shows in 1979. These awards are in the form of certificates suitable for framing plus one year subscriptions to "Watchbird" magazine. A.F.A. awards are to be offered at the discretion of your local show committee.

Clubs which are '79 affiliated members of A.F.A. are entitled to three award certificates and three "Watchbird" subscriptions. Non-affiliated clubs can receive one certificate and one subscription. We can only honor one show per club.

The following information is needed in applying for A F A show awards:



November 3, 1979 Greater Pittsburgh Cage Bird Society

presents its

5th Annual All Bird Show and

A.B.S. District No. 3 Regional

Show Location: Ramada Inn, Rt. 8, & McNeal Rd. PA. Turnpike Exit No. 4 Allison Park, PA. Judges

Ed Rogacki-Type Canaries Adelaide Walow-Amer, Singers Scott Ritchie-Color-bred Canaries Dick Ryan-Foreign Birds & American Budgies Tony Mancini-English Budgies

For more information, contact: Karen Kroshefsky **Show Secretary** 406 Camel Drive Aliquippa, PA 15001

but perhaps not at the price (\$60/pr) which fostering has made possible for us. I would argue that the increased productivity of our Goulds due to fostering has made it possible for us to breed selectively enough to produce stock the size of which we're very proud.

A related observation on star finches: because ours were so prolific, I wanted to set up a colony to raise their own young. I bought stock from two different California breeders whose stars had been raised naturally for many generations, and were quite reliable parents. None of those birds has ever successfully raised young in our aviaries. Had the stars been fostered stock placed in the hands of a critic of fostering, their failure would have been erroneously attributed to their background.

I also mentioned what purists consider the chief bugaboo: economic considerations. Is here something intrinsically wrong with the breeder who fosters in order to raise more birds to make more money? First, they make more birds avialable to more breeders. The waiting lists for birds from breeders all over the country attest to the need for more birds. Surely then, increasing production in a responsible manner is a contribution to American aviculture.

There is another factor, too. If I had not fostered my stars, I would probably still be breeding silverbills and zebras, unless boredom drove me out of the fancy entirely. Instead, the increased income from increased productivity has financed moves into new species, new varieties. Any reader who might someday obtain Peter Twinspots, Blue-breasted Lady Goulds, or any of the other birds we raise, owes a debt to fostering. Because of other financial responsibilities, we simply would not now be breeding those many types of birds had we not fostered.

To be sure, we MUST have breeders who rely solely on natural breeding, and who invest great effort in making those experiments succeed. Some will concentrate in this way because they have the financial capacity to do so. They deserve our praise and respect. But we can consider their efforts in a positive way ONLY if they do two things: 1) succeed, and 2) make their offspring available to others. In the absence of these two things, or at least of the first (with publication of methodology for other hobbyists) there is NO contribution to American aviculture, and that, by the very standards of the AFA, is what we should be talking about here.

Fostering also reduces the demands on wild-caught stock, thus causing less depletion of wild populations — another goal of the AFA.

Before concluding, let me ask some questions for readers to ponder:

- 1. One danger of fostering is that the fostered offspring might prefer mates of the foster parent species to their own species. How many of you attempt to raise owl finches, Goulds, or Twinspots in flights WITH society finches?
- 2. Some species of birds, the Whydahs, for example, are basicaly parasitic and are NEVER raised by their natural parents. If imprinting is an inescapable conclusion of fostering, how do these offspring of "naturally-fostered" species manage to continue reproducing their own kind?
- 3. Eggs are now taken from the nearextinct Whooping Crane and placed under sand cranes. The Whoopers will then lay again and it is hoped the technique will increase their numbers. Do you endorse this practice? It is fostering.
- 4. For wild-caught Peregrine Falcons to breed in cages, Cornell-trained ornithologist Heinz Meng believes they must be taken captive before leaving their natal nests. He says he knows of no peregrine taken later in life that has been successfully bred. Is it not possible that captiveraised offspring — even if fostered — are superior to wild-caught stock for captive breeding programs?
- 5. No details need be given to remind readers of the incredibly extensive changes taking place in the planet's environment, changes which threaten many species in the wild. Nor must details be given to remind readers of our government's ever-more-restrictive policies on bird importations. Do you believe the future of American aviculture lies in domestic breeding programs?

I'll rest my argument on the answer to this final question. If you believe, as I do, that we must now rely on the stock we NOW have, and upon our own skills at breeding, you may share my conclusions:

- 1. The future of American aviculture is in our hands - and in our cages and aviaries.
- 2. We must never stop watching for harmful side-effects of ANY captive procedures, be they techniques for feeding, housing, or raising young.
- 3. Fostering like serious efforts to promote natural breeding — must be pursued diligently, wisely, and must be considered a positive contribution to our future.

Tom Gade, founder and director of the peregrine—breeding project at Cornell University, offers this final thought:

'Compromise," he says, "is the necessary rule of our time, for man and his environment .