African Waxbills

by Grant Rishman Victoria, B.C., Canada

Without a doubt, one of the most popular families of African birds is the colorful waxbill. They vary in size from the tiny Golden-breasted Waxbill (Amandave subflava) at 3-1/2 inches up to the incredible beautiful Bluebills (Spermophaga) and Seedcrackers (Pirenestes) at about six inches. The Quail Finches (Ortygospiza) live almost exclusively on the ground while the Negro Finches (Nigrita) spend most of their lives in the forest canopy. Antpeckers (Parmoptila) require a minimum temperature of 70°F while the Crimson-wings (Cryptospiza) remain quite unconcerned when temperatures drop to near freezing point once they have been correctly acclimated. While all this information is interesting, it does not really help if you are trying to keep and breed these birds. Perhaps I should start by giving some general background information and then continue with a few breeding observations from some of the more common species.

Many waxbills have short, conical, red beaks. The color resembles sealing wax and this is most likely how they got their common name. They are often referred to as "finches" which is actually incorrect and can cause some confusion to newcomers to aviculture. True finches are generally larger than waxbills, up to 10 inches, and build a cup shaped nest (all waxbills build a domed nest). Probably the best known true finches in North American are both native birds: the House Finch (linnet) from the Western States and the closely related Purple Finch from the East. Waxbills occur naturally almost exclusively in Africa, (except for the Asian Strawberry Finches and the Australian Sydney Waxbill). Some of the more common species have been introduced into other parts of the world, i.e., southern Europe and central America.

A selection of mixed millets with the addition of small canary seed forms the basic diet. However, few species of waxbill will remain in good health if this is the only food offered. "Tonic" seeds, such as maw and niger, can be added. Soaked seed and millet sprays are a useful standby when the preferred seeding grasses are out of season. Various fruits, corn and greenfood are often appreciated. Whether they are breeding or not, livefood is essential to keep waxbills fit. Mealworms and their larvae are often the only livefood offered. However, it is very easy to start a fruitfly or whiteworm culture in a small box or old aquarium. When housed in an outside aviary, the waxbills will display their agility by catching all manner of livefood from moths and houseflies to earwigs and crickets. If the birds will accept a fine grade insectivorous food or eggfood, their health will certainly be benefitted. The diet should be rounded out with a good vitamin and mineral mix and crushed, baked eggshells.

There are no "hard and fast" rules regarding how "hardy" some species can be. As already stated, some require temperatures above 70°F while others are not bothered by temperatures near freezing. Over the course of time the aviculturist will gain that "feel" for their birds. The bird's body language will tell everything. A bird that is very active and in good, sleek condition is obviously quite fine, while a sick bird will sit on the perch with its feathers fluffed out and its eyes closed. I have had birds as small as Goldbreasts and Orange Cheeks that have overwintered without heat (but I live on Canada's "California" coast where the temperature rarely drops to below freezing). As a general rule, a minimum temperature of 50°F should be adequate, but keep an eye open for the body language.

It is very difficult to generalize when it comes to breeding. Some species breed during the rainy season while others prefer the dry season. However, in captivity I have found that the main breeding stimulus appears to be sufficient livefood. Most waxbills have a reputation for being "difficult" to breed but, once again, there are always exceptions. The following two examples show that a little luck always helps.

I had just obtained a pair of Schlegel's Green Twinspots (Mandingoa nitidula schlegeli) direct from quarantine. It was too early to put them outside and at the time I had no spare cages in the birdroom, so I placed a wire front on a cardboard box and put the birds in this temporary enclosure. Within a week the male was displaying, so I placed a four inch square cardboard nest box in the top corner. The birds layed four eggs and raised their young in a cardboard box! Three times!

The second example involves a pair of Red-cheeked Cordon Bleus (Uraeginthus bengalis) that I "rescued" from a local pet store. I housed these birds in a breeding cage 48" x 15" x 18" high. After two weeks, the hen was looking quite delicate. The next morning there was an egg laid in the middle of the cage. (I've been keeping birds for over 30 years and I still cannot tell if a bird is sick or if she is going to lay an egg!) I removed the egg and the next day there was a small circle of grass with an egg in the middle. I reached in to remove the egg and the hen attacked my hand! I built a nest in a wicker basket and hung it in the corner of the cage with the egg in it. They laid four more eggs and hatched all five with four of them fledging.

Some species have been bred in captivity so often that there are now pied mutations appearing occasionally. I have seen pied Goldenbreasted and Blue-capped Waxbills and I have heard of pied mutations with Strawberry and Fire Finches.

We have already discussed the diversity of this family and have looked at their general care. The following paragraphs contain descriptions and other pertinent information of some of the more common species.

GOLDEN-BREASTED WAXBILL

(Amandava subflava)

Three and one half inches long; beak red; upper surfaces dark olive green; breast orange; abdomen yellow with flecks of orange; flanks yellow finely barred with grey; eyebrow stripe red; legs and feet flesh colored. The hen is paler, lacking the orange breast and the eyebrow stripe. These hardy birds are ideal for beginners, more than one pair may be housed together but best breeding results are obtained with one pair housed in each aviary with other species. The three to six small white eggs are incubated by both parents and hatch after 12 days. The young should be fed ant eggs, fruit flies, tiny mealworms, eggfood, etc. and fledge after a further 20 days. The aviary wire should be $1/2 \ge 1/2$ inch as the Goldenbreast have been known to escape through $1/2 \ge 1$ inch if the wire is slightly bent.



Male Strawberry Finch, left. Male Blue-capped Cordon Bleu Finch.

ORANGE-CHEEKED WAXBILL

(Estrilda nelpoda) Four inches long; beak red; head, throat and underparts grey; upper surface brown; large cheek patches orange; rump crimson; tail black; legs and feet horn. The sexes alike, although the hen is slightly duller.

This is my favorite of the common waxbills. They are relatively cheap and are ideal for beginners and experienced fanciers alike. They may be kept in flocks but should be housed in single pairs if serious breeding is attempted. They will nest in a small wicker "finch" nest hung in a quiet corner. If they build their own nest it is usually built on, or very close to the ground and there is often a small "cock nest" added on top of the main nest. The four almost round while eggs hatch after 11 days and the young fledge 21 days later. Privacy is essential. If the birds are disturbed they will almost certainly desert the nest; they are disinterested parents at the best of times. Small livefood is essential at this time.

STRAWBERRY FINCH (Amandava amandava)

Four inches long. This is the only species of waxbill to have an eclipse plumage. Cock bird (nuptial plumage); beak red; back and wings dark brown; remainder bright red; sides and breast spotted with white; legs and feet brown. The cock bird (eclipse plumage) resembles the hen: upper parts brown; lower parts buff brown; eye stripe black. These birds may be offered for sale under the names of Red Avadavat or Tiger Finch. Although they are not aggressive, the male sometimes takes exception to the presence of other red birds and may defend an area surrounding the nest site. He has a pleasant little song which often can be heard. Like other birds that originate in reedy areas, their toenails have a tendency to become overgrown in captivity and will need to be clipped regularly. They breed quite freely, either constructing their own nest or using a basket. The nests are usually within three feet of the ground. They do not appear to like wooden boxes. The four to six eggs are incubated by both parents and hatch after 12 days. The young are fed almost exclusively on insects at this time. Some adults will feed insectivorous food or eggfood as a substitute for insects. The young fledge after 20 days and are independent about two weeks later. An occasional nest inspection is usually permitted.

SENEGAL FIRE FINCH

(Lagonosticta senegala)

Four inches long; beak red; head, rump and undersides red; back and wings light brown; tail brownish black; eye ring whitish yellow; legs and feet flesh. Hen: eye stripe and rump red; remainder greyish brown. Both sexes have fine white dots on the side of the breast. These birds are not good travellers, requiring the utmost care and attention until they are established. At this time they are still reasonably delicate requiring a temperature no lower than 50°F. In their natural habitat they are found around human habitation making them tame and confiding in captivity. One of the most even tempered of all birds, the Fire Finch spends a great deal of time searching the aviary floor for insects and seeding grasses. It is probably the easiest member of the waxbill family to breed and will nest in either a wicker basket or wooden box.

AURORA FINCH

(Pytilia phoenicoptera) Five inches long; beak black; upperparts grey; wings darker grey washed with crimson from the shoulder to the primary flight feathers;



From the Past:

rump and tail crimson; underparts grey barred with white; legs and feet red brown. Hen: browner than male with more wavy lines on the breast and belly. These birds are ground feeders and spend many hours on the aviary floor searching for insects and seeding grasses. If alarmed, it crouches on the ground with its tail raised vertically to hide the crimson wings. It is not known as a good songbird but the male will often find a sunny location and his soft, melodious little song can be heard for most of the day. They are very peaceful and more than one pair may be kept together even when breeding. Insects are essential if chicks are to be raised successfully. This bird is ideal for those fanciers who cannot resist to "peek" into the nest. They are hardly ever provoked or frightened into deserting by nest inspection. This is another of the species that I have bred successfully in a cage.

RED-CHEEKED CORDON BLEU (Uraeginthus bengalis)

Four and three fourth inches long. Beak silvery pink; forehead, neck, back and wings brown; face and underparts sky blue; cheek patch red; lower breast and abdomen grey brown; legs and feet horn colored. The hen lacks the red cheek patch of the cock bird and is much duller. One of the most popular of all foreign seedeaters. The Cordon Bleu is so charming and pretty that it is always the first to catch the eye of newcomers and is responsible for kindling the first interest in many bird fanciers. They are very inquisitive and are usually the first birds to investigate any new additions to their aviary. Strange food is also sampled quite willingly. These birds frequently breed in captivity and will use a wooden box or wicker basket. Up to five eggs are incubated by both parents and hatch after 14 days. If sufficient livefood is offered, the chicks should develop well and will fledge after 19 days. I have always been able to sex the chicks as soon as they leave the nest. The young males have blue flanks while the females are brown. Several pairs may be kept together even when breeding. Whether you have one or several species of these beautiful birds, you will find them worthy of your attention. Some of them are a challenge to breed, but the results more than make up for the extra effort involved.

Aviculture Institute's Finch Breeding Facility

by Dale R. Thompson Canyon Country, California

In 1981, a large finch breeding facility was begun by Aviculture Institute of Southern California. It was privately owned. The finch species reproduced at this facility included the Lady Gouldian Finch (three head colors and the white-breasted), Owl Finch (Bichenos), Red-headed Parrot Finch, Tricolored Parrot Finch (blue face), Masked Finch, Chestnutbreasted Mannikin, Shaftailed Finch (normal and fawn mutation), New Guinea Blood Finch and the Pectorella Finch. The main emphasis was on the Gouldian and Owl Finches. They were housed in a large commercial building with controlled temperatures and humidity. Large skylights were placed in the roof. A temperature of around 80°F was maintained with several large heaters above the breeding units and weaning flights. The humidity was kept around 65% relative humidity. Swamp coolers were used, but due to the high content of bacteria that was built up in the filters (even with regular changes), the humidity was accomplished by using a steam generator that blew steam through the heating ducts.

In almost all cases, the fostering method of breeding was used. The Society Finch (Bengalese) was used as the foster parent. Parent reared exotic finches (non-Society) were used for future breeding stock. But it was found that there was equal success from breeding with fostered birds as with parent reared birds. The key was found that baby exotic finches could be fostered under Society Finches during the rearing process but weaned with babies of their own species. For example, when baby Goulds were removed from their foster Society Finch parents in the breeding cages, they were only placed with Goulds (both young and old) in large weaning flights. This meant that they were weaned with other Goulds and there were no Society Finches around to socialize

with. This way they could not identify with their surrogate parents. These Goulds stayed together until they were either set up for breeding the following year or sold.

Almost all of the finches were bred in small cages and all eggs were removed from the exotic type finches when they were laid. They were then placed under Society Finches for incubation. Often nonincubated eggs were held at room temperature for one to five days before placing under a Society pair. This enabled the eggs to hatch at approximately the same time; so there would not be a clutch of decreasing sizes of babies where the smallest could be abandoned or not fed. The Societies were also kept in small cages. The only species of exotic finches that used larger cages or flights to reproduce were the New Guinea Blood Finch and the Redheaded Parrot Finch. The Red-headed Parrot Finches gained too much weight when cage bred in a small environment. The New Guinea Blood Finches, as with the Australian variety, should be bred in single pairs due to the fighting among the cockbirds. Aviculture Institute received the U.S. first breeding AVY award in 1981 for reproducing the New Guinea Blood Finch.

The cages for cage-breeding were made from a single mold and this material was a plastic poly vinyl chloride (the same as PVC pipe material). All parts of the cage were made in one piece except the front. The color used in the plastic was offwhite. The fronts were made of wire (1-1/2 inch) and this wire was bent at the bottom to form a wire cage bottom within the plastic cage. This arrangement did not allow the finches to sit or eat from the refuse on the cage bottom. The wire was heat-treated and covered with a teflon coating which aided tremendously in the cleaning process.

Watering, weed, food (commer-