

other Amazon species entrusted to them.

With a little care they are not a difficult parrot to feed in captivity. My own birds are maintained on a diet of 50% fruits and vegetables, including carrots, beets, celery and crisp greens. The balance is met with a mixture of germinated wheat and mixed pulses.

The *xanthops* has many endearing ways. For instance, a twig will keep this bird entertained for ages, while a rotting log of wood will occupy the birds until the wood is reduced to a heap of pellets. One would expect to find all of these little traits in the offspring's make-up, learned directly from the parent bird by association. There is, however, one skill particular to the *xanthops*, and that is the habit of dunking food in the water bowl. Food and water bowls soon become encrusted with food particles, while the water itself is turned into soup. Fresh water must be given several times throughout the day.

Because of the difficulties experienced in pairing the original stock and their offspring, it has been necessary each year to remove the chicks from the nest box at the pinfeather stage. All are rung (with leg bands) and kept as one group). This practice makes it possible to pair up unrelated birds as soon as they are self-feeding.

Any youngsters taken from the group to be sexed and held apart under observation for a day or two, will encounter fierce aggression on being returned. Occasionally it has proved most difficult to re-introduce a chick into the group. Having taken the youngsters from the parent birds at such an early age (just as they are coming into their pin feathers), we find that once they begin feeding from the dish, they too will dunk their food in water.

Since these chicks removed directly from their parents' nest have no contact with any adult bird during the handfeeding process and after being weaned, it must be surmised that the trait of dunking food can only be an inherited trait. When a parent teaches a behavior (which these chicks did not have access to), it is learned behavior.

I have spoken to trackers in the jungles where these Amazons occur about the aggressive behavior patterns in *xanthops*, and learned that they found this behavior in wild Yellow-faced Amazons to be quite common. This was true even with very young chicks taken from the wild. ➤

Breeding Orange-cheeked Waxbills

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The Orange-cheeked Waxbill, until very recently, has been one of the most commonly imported waxbills. Because of this, relatively few aviculturists have taken up breeding these birds because replacements had been readily and cheaply available.

Unfortunately, the Orange-cheeked Waxbill has developed the reputation for being a poor breeder over the years. Yet if properly managed, they are free and prolific breeders. Crucial for success is privacy for the breeding pair. This means that each breeding pair must have either a small aviary or flight cage entirely to themselves. Without a shadow of a doubt, overcrowding has been one of the most important factors in the limited breeding success of this waxbill.

I initially acquired four domestically raised Orange-cheekeds. They were placed with eight wild caught birds in a flight 6 ft. long by 2 ft. wide, along with Cordon Bleus and Black-cheekeds. They all got along perfectly together. This was in May. By early autumn all of the Orange cheekeds had come into breeding condition and their behavior changed very suddenly and abruptly. The males began displaying and fighting over the hens. Eventually three pairs formed and the excess birds, including the much larger Black-cheekeds, were repeatedly and savagely attacked. The Orange-cheekeds now began nest building in earnest. Soon two pairs had eggs but the bickering continued. One pair was actually evicted from their nest by another half way through incubation. The new pair proceeded to build another nest on top of the one that they had taken over. They soon had eggs but were driven away by the original pair who re-

claimed their old nest site. In this extremely stressful environment, none of the nestings survived and I eventually removed all of the pairs into individual breeding cages.

In the breeding cages two of the pairs immediately went into a molt, but the third pair consisting of a domestically raised hen and a wild caught male produced a clutch of five eggs in a large finch wicker basket nest. No effort was made to incubate them. When a second clutch appeared a few weeks later, eggs were removed and placed under Societies (Bengalese). Two of them hatched in about 13 days but survived only a day. They do not appear to have been fed, although they appeared very similar to young Societies, being light skinned with white gapes. The adult Orange-cheekeds again had eggs within a few weeks. These were incubated almost to the point of hatching before being abandoned. All had been fertile. Soon there was a new clutch but the usual pattern followed. These were incubated about a week. In February the pair went into a very heavy molt and all breeding activity ceased.

In May the male began singing and displaying. The old nest was relined and rebuilt with whatever the birds could find; I did not think that they were really that serious and had not supplied much in the way of nesting material. But while just making a routine check, I was shocked to find three eggs in the nest. I did not have much hope for this clutch and assumed that it would soon share the fate of the previous ones. To make matters worse, the hen proved an extremely light sitter, flying wildly off the nest whenever I entered the room. She

often remained off the eggs for long periods of time. The male was preoccupied with the construction of a nest on top of the large wicker basket which contained the eggs. He took great delight in adding various types of things to it: millet sprays, wood chips, pieces of greenfood, and even shredded newspaper. Here he roosted and when his hastily and flimsily build domain fell apart, he would immediately rebuilt it.

On the morning of the 13th day, both Orange-cheekeds were seen foraging on the bottom of the cage. I supplied egg food, white worms, and small newly molted mealworms. Over the next couple of days, the consumption of the mealworms increased dramatically until they were actually eating over 100 a day. White worms were also eaten in large amounts but gentles, waxworms, and wingless fruit flies were ignored. During this time I never heard any begging sounds coming from the nest. And only five days after the suspected hatching date, the hen ceased to brood at night, joining her mate in his untidy domain atop the regular nest.

About three days later I poked my finger into the nest and was greeted by quite loud peeping. A few days later I discovered a chick huddled in a corner of the cage. It was already half feathered, with a black beak, looking much like a young Zebra Finch. It was immediately returned to the nest. When they were not much more than two weeks old, two chicks left the nest, already able to fly fairly well but so small I feared that they would go through the wire of the cage. They returned to the nest frequently at first, but after about a week never went into it again. After being so silent in the nest, they now began begging very loudly whenever they wanted to be fed. They continued to grow very rapidly and were nearly completely self supporting within 10 days. The parents fed them much less live food after they left the nest. They were chased by the male when the hen commenced to incubate a new clutch.

Only two weeks after being removed from their parents, the young Orange-cheekeds had practically completed their juvenile molt. One of them proved to be a male, and at six weeks of age is already singing and displaying like an adult.

Orange-cheeked Waxbills are very easy to feed and will thrive on any quality finch mixture as long as they have a source of animal protein in the diet. Live-

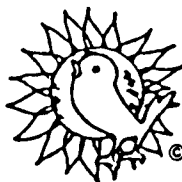
food is essential for the rearing of young. All of my Orange-cheekeds are especially fond of seeding grasses and also use them for nesting material.

Orange-cheekeds are lively, active, inquisitive birds with very charming personalities. Their future in aviculture is far from secure. Few are bred annually anywhere. If aviculturists don't make the effort very soon, this species will almost

certainly die out by the beginning of the next century or even before then. And that will be a tragedy.

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