

Yellow-breasted Hunting Cissa

Family: *Corvidae* Sub-family: *Corvinae* Tribe: *Corvina*

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"*Cissa* are perhaps the most beautiful of the whole family." (Delacour, 1936).

Of all the birds in the Corvid family, Cissas are probably the most sought after in aviculture.

There are three species of Cissas with 12 sub-species. The Green Magpie *Cissa chinensis*, also known as the Long-tailed Hunting Cissa in aviculture, comes from the Malay Peninsula up into Annam (Vietnam) and as far north as China. Four sub-species are on the mainland with one sub-species *C.c. minor* coming from the island of Sumatra up to Burma. We have the mainland sub-species *C. c. klossi*, and the island sub-species *C. c. minor*, which is smaller than the mainland birds.

The Short-tailed Hunting Cissa *Cissa thalassina* comes from two islands, Java and Borneo. We have a female of the Javan sub-species *C. t. thalassina*. The Short-tailed has quite a musical song much like that of a songbird. The other species we keep don't seem to.

Three sub-species of the Yellow-breasted Magpie *Cissa hypoleuca* come from Annam (Vietnam), Laos, and Thailand. There are two isolated sub-species in China. The Yellow-breasted have a longer crest and display it far more often than the other species. The species we keep are the nominate *Cissa b. hypoleuca*.

Cissas are a little larger than the American Blue Jay (13 to 14 inches). They are a beautiful light green color with chestnut red colored wings, a black mask and red/orange beak. The green color seems to fade to a light blue color in captivity if the birds are exposed to too much sunlight and perhaps not given enough carotenoids in the diet. The males seem to turn more bluish than the females. The young we have raised all had bluish or turquoise feathers. Interestingly, Lynn Hall, expert breeder of fruit doves, informed me of seeing recently caught birds that were entirely blue at bird markets in Singapore. They do seem to

spend most of their time in the aviary shelter or in the shade of the plants in the aviary.

The word "hunting" does describe the method the pair uses to capture their prey. When the prey (usually a feeder mouse) is spotted in the grass, the pair of cissas will stalk it together, like a brace of dogs, on either side of the aviary until it is cornered. At that point the male will usually make the kill.

Breeding the Yellow-breasted Hunting Cissa

We received the pair on breeder loan from Gene Fetter. They were together at his aviaries but had never bred. Fetter believed that it was because he wasn't able to provide them with what they needed in aviary size and particular care. We kept them indoors for about Three months then moved them into a sheltered cage that was outside to get them acclimated to the climate. We live at 1200 feet elevation and it can get to below freezing at night (15 degrees in 1999).

They were fed "soft food" daily along with four pieces of canned dog food and two pieces of beef heart. The soft food consisted of Science Diet (Canine Maintenance - small bites); Kaytee Mynah pellets; green Purina Nutra-blend Pigeon pellets; and Mazuri Small Bird Breeder pellets softened with water.

This was mixed with defrosted frozen mixed vegetables every other day. Dry food was kept in their cage constantly. The dry mix consisted of Science Diet (Canine Maintenance - small bites); Kaytee Mynah pellets; green Purina Nutra-blend Pigeon pellets and Calf Manna. The female laid an egg on the floor of the cage.

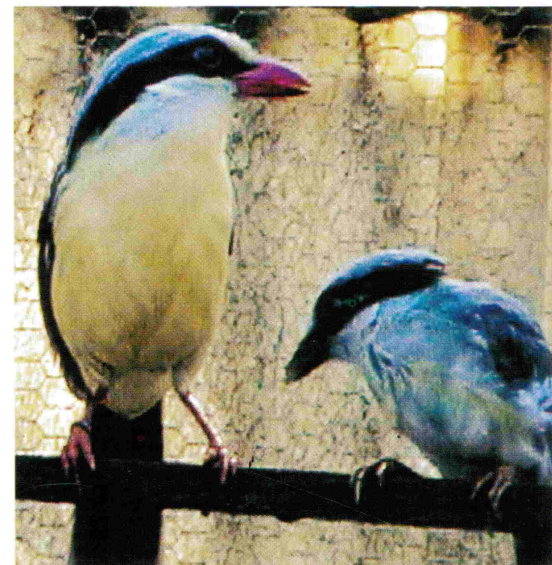
The birds were finally moved to an outside aviary three feet wide and 16 feet long planted with *podocarpus*. A basket nest was placed high in the sheltered area above the door. The

basket nest was a decorative plant pot covered with rushes' inside. More rushes were placed in the aviary, which the female gathered to complete the nest. In our experience, the hen seems to build a nest that is sturdy and neat as compared to other jays and magpies.

The female began to make her nest immediately after being placed in the aviary. The same food mixture was fed. We also fed weanling to half grown mice 3-4 times a day.

After a few days she started to lay. The first clutch of three eggs was infertile. They were removed at 15 days. To our surprise, she immediately laid again. Our other pairs have never laid so soon after an unsuccessful nest. Mealworms were also added to their diet. They seemed to eat both the mealworms and mice with relish. At the onset of the first egg of the second clutch, mice were added on a daily basis. The mice were live and placed in a porcelain mixing bowl partially sunk in the ground. The sides of the bowl are smooth so the mice couldn't jump or climb out.

In four days time she laid four eggs. The male kept vigil guard. She set tight unless someone went into the aviary to drop mice in the feeding bowl. The male sounded an alarm or became aggressive and she left the nest temporarily always going to the ground. (The Long-tailed Cissa always went to a high perch). About two days prior to the eggs hatching, the male became even bolder and more aggressive hit-



Male Yellow-bellied Cissa and a young starting to show yellow on its breast.



A pair of Yellow-breasted Cissas. The male is on the left. The females of this species retain more green while the males seem to become more blue in captivity.

ting me on the head as I fed mice in the mornings.

In about 18 days the first egg hatched showing a completely naked, sightless, and helpless chick. The next day, two chicks hatched, one in the morning and one in the late afternoon. The fourth chick hatched the next day. Mealworms seemed to be their exclusive diet for the first 3-4 days after hatching. After 5-6 days, the numbers of mice given the parents were increased to 3-4 per feeding and served 2-3 times per day. It appeared that all parts of the mice were either fed or eaten by the parents. Remnants of the mice could not be found.

The babies had pinfeathers at approximately 11 days. Their eyes opened at 12 days. At approximately 12-14 days old, the parents were given 15-20 mice per day and served four times per day. The parents stopped eating soft food, dog food, and beef heart for a while. It was quite hazardous serving the pair. The female would leave the nest calling and complaining and the male would scold and dive at the person entering the aviary. The offering of food meant nothing to him. He even drew blood from my ear.

The babies grew quickly and the amount of food we offered increased also. At approximately 17 days one of the babies started to perch on the edge of the nest. The rest perched about two or three days later. One baby left the nest at this time also.

At about 25 days the chicks were standing on the perches away from the nest. They would be found on the ground and were able to hop and scramble up the perches to the highest perching "branch" and nest. During this entire time they were always fed soft food, canned dog food, and beef heart. At about 24 days old the soft food mix, canned dog food and beef heart started to disappear. I never actually saw the chicks eat the food but the amount was increased and it always seemed as though less was left. They also started to eat the dry mix as more of that disappeared also.

The number of mice served was decreased and the amount of canned dog food, beef heart and soft food was increased. At 29 days the chicks were increasing their activity and would fly to the "outside" perches and hop along the branches and perches. They started to call and scold like the parents and fully display their crest feathers. At 31 days their landings were much more accurate. Soft food consumption increased along with canned dog food and beef heart. What I didn't mention before was that occasionally powdered calcium was sprinkled on their soft food and beef heart.

They are still not the same color as the parents but they haven't gone through their first adult molt yet. They appear to be a blue-gray color instead of the lime and light olive green of the parents. Their beaks are also grayish in

color and their feet are a fleshy pink color instead of the adult orange color.

Corvids (crows, magpies, jays) comprise a family of more than 100 species. They are distributed world wide except in the Polar Region.

My fascination with corvids began when at the age of 12 I helped my brother hand raise over 20 native magpies and some crows.

I have found this family of birds to be extremely intelligent. "Of all birds, corvids have the largest cerebral hemispheres relative to their body size. Under operant conditioning methods, crows have been found to be superior in intelligence to all other avian species tested." (Plasse quoting Angell). Through the years, I too have found that the corvid family is far more intelligent than any of the other birds that I have worked with.

Ilana's fascination with corvids began in 1964 when she hand raised an Eastern Blue Jay. It proved to be an intelligent, mischievous clown. It kept itself busy and amused by causing chaos and teasing all the other birds in the house. It was very bold and always stole objects from pockets and various places in the house to hide them somewhere else. This is a natural behavior but none the less frustrating and comical.

References

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 Delacour, Jean: Aviculture, volume 1, Stephen Austin and Sons, Ltd., Hertford, 1936.
 Madge, Steve and Burn, Hilary; Crows and Jays, Houghtan Mifflan Company, 1994.
 Plasse, Chelly, *AFA Convention Proceedings*, 1992 "Corvids."
 Woolham, Frank; *The Handbook of Aviculture*, Blandford Press.

End Notes

1. Rush — Juncos: "rushes somewhat resemble grasses; leaflike stems are round" *Sunset Western Garden Book*.

They grow in bogs or wet areas and due to the cylindrical blades seem to make a very neat nest.

2. The mice seemed to keep the male busy throughout the day. He would kill the mice and store them in a larder-like manner for later consumption or feeding.

Historically, one of the problems with raising these kinds of birds in captivity has been that the males would eat the eggs or young. We have used this mice-feeding method with the Cissas and Red-billed Magpies and we believe it works to keep the male busy. We have never had a problem with predation of the nest by the males. 