The Laughing Thrushes

(Garrulax species)

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Red-winged Laughing Thrushes (Garrulax formosus) at the Fort Worth Zoological Park.



As of 30 June 1995, 67 White-crested Laughing Thrushes (Garrulax leucolophus) were distributed among 27 U.S. public collections. This bird was photographed at the Los Angeles Zoo.

The 48 species in the genus Garrulax constitute one of the major groups of Asian passerines, and a number of species have held important places in aviculture. Garrulax canorus, the Melodious Jay Thrush or Hwamei has been a muchexploited cage bird in China for hundreds of years. The White-crested Laughing Thrush (G. leucolophus) and the Greater Necklaced Laughing Thrush (G. pectoralis) were mainstays of both the Indian and Thai bird trades that flourished in the 1950s and '60s, the major sources of Asian passerines entering the U.S. in those decades.

Prior to the 1980s about half-adozen species in this genus were common commercial imports to this country (Bates & Busenbark, 1963). Other species showed up from time to time, especially out of Hong Kong. In the mid 1980s, a much richer variety of *Garrulax* species became available, when the People's Republic of China began large-scale commercial exports of birds. Traditionally, Laughing Thrushes (or Jay Thrushes, as they are just as commonly called) of one kind or another have been traditional zoo softbills for a long time.

From the accompanying table it will be seen that of the 15 species of Garrulax hatched in U.S. zoos in the period 1959 - 1995, only four commenced breeding before 1987. It is also interesting to note that the one species consistently bred during the 1970s, the White-crested Laughing Thrush, was hatched far less frequently in the late 1980s and '90s, as some of the novel species began to be propagated in numbers. Perhaps this is to be expected. At any rate, by the 1990s it was clear that some sort of program would be needed if any species was to be truly established in this country's zoos as a self-sustaining population. In 1994 the various Species Interest Committees of the Passerine Taxon Pretty Bird...
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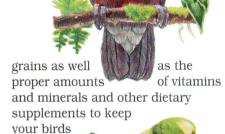
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Advisory Group (operating under the aegis of the American Zoo and Aquarium Association) were formed. The SIC for Laughing Thrushes was inaugurated with three people. The Species Interest Committee Organizer (SICO) is Jimmy Pichner, long-time Curator of Birds at the Minnesota Zoological Gardens, who also recently assumed responsibility for the Rothschild's Mynah studbook. The other participants were Christopher Brown, Curator of Birds at the Fort Worth Zoological Park, and Anita Cramm, Curator of Birds at Lincoln Park.

Out of the 18 species of *Garrulax* held by U.S. zoos as of 31 December, 1994, four were designated as target species species in the First Draft of the Passerine TAG Regional Collection Plan, which resulted from a two day meeting of SICOs at Seattle, in September of 1995. If the draft is approved as is, these will be the Laughing Thrush species that zoos will be encouraged to establish as self-sustaining populations.

White-crested Laughing Thrush

It was almost inevitable that one of these four is the White-crested Laughing Thrush. Quite aside from the fact that this species is striking-looking, hardy, an admirable songbird (performing duets), and typically stays out where people may enjoy it, it would be most annoying to not finally have something to show for all the specimens hatched in this country's zoos over more than 25 years, a total of 419 from 1968 through 1995.

Out of this total, however, at least 258 died before reaching adulthood. The problem of neonatal mortality remains a major problem. A contributing factor is the tendency for "the birds to re-cycle on to the nest quickly, and not to finish off the chicks after fledging" (Roth, 1993). The Minnesota Zoological Gardens has dealt with this by pulling chicks and handrearing them (Ibid, 1993). I have not heard whether hand-raising at this age leads to imprinting. While imprinted Jay Thrushes make charming pets, they are certainly not the best of breeders and are definitely an escape risk in walk-through aviaries.



A White-browed Laughing Thrush (Garrulax sannio) at the San Diego Zoo where eight were fully reared from 1988 through 1993.



The enigmatic Yellow-bellied Laughing Thrush (Garrulax galbanus), the subject of part II of this article. This specimen is in a breeding program at the Fort Worth Zoological Park.

The White-crested Laughing Thrush breedings in U.S. zoos have definitely declined in recent years. Of the 29 collections that bred this bird in the U.S. from 1968 through 1995, 13 did so in the 1970s, 18 the '80s but only seven did in the '90s. A major reason has been the importation of other *Garrulax* species in recent years. Not only are these novelties colorful and otherwise attractive, most of them have proved to be markedly less aggressive than the White-crested Laughing Thrush.

The White-crested Laughing Thrush has a long-standing reputation for aggressiveness, especially when breeding. This has not prevented it being kept in all sorts of mixed aviaries, but caution is advised.

Unrelated White-crested Laughing Thrushes are notorious for aggression against members of their own species as well. The most detailed published account of the breeding of this species I am aware of concerns the repeated successes at the now-defunct Busch Bird Park in Houston (Young, 1978). This article is illustrative of the problems typical in working with this species. While the breeding records of the International Zoo Yearbook cover the years 1974 through 1976, breeding actually took place the previous two years as well. Not one of the of the 45 chicks hatched at the Bird Park over those five years were reared in an entirely normal fashion.

In July, 1971, six "newly purchased" specimens were liberated in the Bird Park's 3,000 m² walk-through aviary. By June, 1972, only three birds were left, so six more newly purchased birds were introduced. Every one was killed by the original three in three days. It was then discovered that there was a nest with four chicks in a tree two meters off the ground (Young, 1978). All three adults fed the chicks. The chicks however succumbed to another prevalent source of neonatal mortality for this species. They left the nest before they could fly and were either drowned or eaten by one or another of the fifty-odd species of birds which shared the exhibit. The fifth and last chick hatched in 1972 suffered a similar fate, the only hatching from a clutch of three laid in October. Therefore, all

five of the chicks (from two clutches) hatched in 1973 were pulled at the age of 10 days and hand-reared easily on a diet of mealworms and Zu/Preem Canned Feline Diet (Young, 1978).

By March of 1974, only two adults were still living in the aviary, and it was not clear if these were a pair. The five hand-reared offspring were reintroduced to the exhibit, and had to be removed at once, as the remaining two attacked them murderously. These two were a pair after all, and hatched three chicks that same April. This time, the chicks, though again removed at 10 days, were placed in a "nursery" cage in the aviary. After 12 days of being fed by their parents, they were released without incident.

In 1975, 11 chicks were successfully handreared, and six were likewise raised in 1976. Again, the chicks were pulled at 10 days of age. The three young birds released in 1974 assisted with feeding and protecting their siblings, as well as in nest construction. However, all incubation was done by the breeding pair. The young birds never attempted to breed in the presence of their parents. A similar situation existed at the Minnesota Zoological Gardens, where a group of six, which had "been raised together since they were juveniles" were maintained in a walk-through aviary, but only one pair bred (Roth, 1993).

The Minnesota Zoological Gardens has far and away been the most successful U.S. collection breeding Whitecrested Laughing Thrushes, with 42 surviving out of the 88 hatched over an 11 year period. A brief summary of Minnesota's work is provided by Roth (1993).

Breeding occurred throughout the year. Nests were generally built from scratch (bamboo leaves were a preferred material). They were usually "five to six feet from the ground." Adults fed only insects to their chicks. As previously noted, there was a tendency for chicks to be neglected once they fledge so that they need to be handfed.

No White-crested Laughing Thrushes have been hatched at the Minnesota Zoological Gardens since 1993. As of 31 December, 1995, ISIS (The International Species Information

System) listed 67 specimens distributed among 27 U.S. collections. At least 50% were captive-bred. Only 12 hatched in U.S. zoos in 1995: Four at the Henry Doorly Zoo in Omaha, and eight at St. Louis. The largest holdings at the end of 1995 were at St. Louis with seven birds, followed by Minnesota with six. Though none of these birds are identified to subspecies, I think it likely they are all the Indo-Chinese *Garrulax leucolophus diardi* (also found in China's Yunan Province). A great many were exported out of Thailand in the 1960s and '70s.

The San Diego Zoo and Bronx Zoo breedings are attributed to this subspecies. In the 1950s and '60s, the larger and grayer Himalayan *G. l. leucolophus* was exported to the U.S. from India, and the very dark Sumatran *G. l. bicolor* has recently arrived in Europe, where it has already bred. I am not aware of either of these breeding in American zoos.

The Passerine Taxon Advisory Group's recommendations for Whitecrested Laughing Thrushes are as follows: "A popular species for display. Populations in the wild appear to be doing well, and maintenance of the North American captive population has been inconsistent. The North American captive population has been bolstered by imports from the wild when numbers get low and captive breeding falters. This species has the highest number of individuals in captivity... A good species to develop caphusbandry techniques Garrulax... Studbook recommended."

In contrast to the wide-spread and long-kept White-crested Laughing Thrush, the other three TAG-designated *Garrulax* species have small ranges and more-or-less recent captive histories.

Red-tailed Laughing Thrush

Until specimens began appearing in Europe and the U.S. in 1987, the Redtailed Laughing Thrush (*Garrulax milnei*) had only twice been exported from Asia. Jean Delacour (1939) brought one back from Indo-China in 1929. That bird was still alive at Cléres when Delacour received further specimens in 1939—collected by none other than Charles Cordier, the great Swiss Collector (who died in 1994 at

the age of 97), captured in Vietnam Nam near the Yunan border (Delacour, 1939).

When it became commercially available from China in 1987 and succeeding years, this beautifully-colored and hardy bird at once attracted attention. And when it became apparent that, as Delacour (1939) had noted long ago, this species resembles "a large Pekin Robin" in its habits (rather than the irascible White-crested Laughing Thrush), a number of zoos acquired it. As of 31 December, 1995, the International Species Information System listed 51 specimens distributed among 11 U.S. public collections, making it the second most common Garrulax species in U.S. zoos in 1995.

Four bred it in 1995: Houston, the Minnesota Zoological Garden, St. Louis, and the San Diego Zoo. Out of the 12 hatched, only two died at less than a month of age. The total from 1987, when U.S. zoo breedings commenced, through 1995, is 111, with 62 surviving, among seven collections.

The Passerine Taxon Advisory Group's recommendations for the Redtailed Laughing Thrush are as follows: "Good exhibit species. Wild population is near-threatened. Present captive numbers are large enough to sustain a captive population if reproduction improves. We need to decide on which level to work with the species/subspecies. Population is large enough to warrant a studbook... Acquire additional founders, develop written husbandry protocols and recruit studbook keeper."

I do not believe the above-mentioned subspecies question is really a problem. I think all the birds imported to the U.S. were collected in China's Yunan Province, so that they are all *G. milnei sharpei*.

Red-winged Laughing Thrushes

While the first U.S. importations of Red-tailed Laughing Thrushes were commercial, and available to both zoos and private aviculturists, the first Redwinged Laughing Thrushes (*G. formosus*) to arrive in this country were part of an exchange between the San Diego Zoo and the Chengdu Zoo in the People's Republic of China. Seven birds arrived from Chendu in 1981.

joined by 10 more in 1983 (Lieberman, 1984). These birds were distributed among four exhibits. Groups of two and six were respectively set up in planted community aviaries, while four and five birds were liberated in the large walk-through aviaries known as the "Upper and Lower Rainforests." The dimensions of these enclosures are provided by Alan Lieberman (1984) in an Avicultural Magazine account of this species at San Diego, which remains one of the definitive accounts of *Garrulax* aviculture.

None of the seven 1981 birds bred until 1983. That year "a flurry of Redwinged Laughing Thrush nesting activity began in all four aviaries, involving what is thought to be, at most, six pairs of birds" (Lieberman, 1984), (The 1983) importation of 10 specimens arrived in January, so some of these birds went to nest in a hurry). A total of 11 nests were built between 3 March and 21 July, typical Garrulax cups composed of "dried grasses, bark fibers, pine needles, and bamboo leaves." Eight of these nests were built in Golden Bamboo (Phylostachys aurea). Lieberman (1984) describes nests built in these plants as "materials... woven around and between the the ½ in. to 1 in... stems of the bamboo, incorporating the bulk of the bamboo clump into the matrix of the nest itself. Wherever available, bamboo leaves were used as the finishing material to form the interior lining of the nest chamber."

Out of these 11 nests, eight produced eggs (clutch size ranging from one to three, five of the clutches consisting of two eggs). Two clutches abandoned after more than 21 days were discovered to be infertile. Another three disappeared. a sixth clutch consisted of a single dead-inshell (Lieberman, 1984).

After incubation periods of to 17 days, three Red-winged chicks hatched at San Diego in 1983. One of these died of injuries inflicted by another pair about to breed. At the end of that year's breeding season, Al Lieberman (1984) expressed hope that sustained propagation would be achieved: "In view of the restrictions imposed on the exportation of nearly all of Mainland China's avifauna, it is hoped by the staff of the San Diego Zoo that this

recently established group... will serve as the nucleus of a breeding flock. Successful breeding in the forthcoming seasons will provide future generations of this handsome Laughing Thrush to other aviculturists and zoos that are interested in keeping such a charming songster."

Early breeding results made it appear that this wish might be fulfilled. None were hatched in 1984. However, from 1985 through 1989, 33 were hatched, and only seven failed to survive.

San Diego Zoo did send specimens to the Bronx Zoo and, of course, the San Diego Wild Animal Park. Ultimately, though, this stock did not become established. After 1989, no Red-winged Laughing Thrushes were fully reared to adulthood in U.S. Zoos. This has remained the case at least to 1 January, 1996. The Miami Metrozoo did raise three in 1989, but was the only U.S. zoo beside the San Diego Zoo to do so. Houston, and the Reid Park Zoo, in Tucson, were, through 1995, the only U.S. zoos to breed Redwings in the '90s, but failed to rear any.

According to ISIS Bird Abstract as of 31 December, 1995 (ISIS, 1996) 26 Red-winged Laughing Thrushes were distributed among seven U.S. zoos. I have been informed, however that the nine birds listed at the San Diego Zoo do not, in fact, exist. Considering that there have been no fully successful breedings in U.S. zoos since 1989, it would appear that the prospects of establishing an American population of this species are grim.

However, there are reasons for optimism. This species began appearing in commercial shipments from China in the late 1980s, and unlike some other Chinese birds that have since become unavailable, continues to be offered by importers. At the 1996 Annual Conference of the American Federation of Aviculture, Dick Schroeder mentioned a California bird dealer who, as of August 1996, held around 200 newly imported specimens.

In the last several years quite a number have been acquired by American private aviculturists, and there are several who are definitely interested in sustained propagation of this bird and making available captivebred specimens to zoos. Ted Fox, Bird Supervisor at the Burnet Park Zoo in Syracuse, New York, also maintains an extensive collection of his own. Concerned by the appearance of a formerly unobtainable species at bird marts, he acquired nine pairs. As of September, he had so far hatched 21 in 1996.

The Red-winged Laughing Thrush, a species targeted for serious programs by zoos and yet also widely held in private collections, may well establish a precedent in cooperation between American zoos and private aviculturists. Based on the September,1995 working meeting recommendations of the Passerine TAG, this bird has been provisionally designated as one to be maintained in a self-sustaining population. Specific TAG pronouncements on this species include a recommendation that further stock be obtained. A species manager should also be appointed. The Red-winged Laughing Thrush was chosen for such treatment on the basis of its listing by Birdlife

International (formerly the International Council for Bird Preservation) as a "near-threatened species" (Collar & Andrew, 1988). I imagine this has something to do with a historic scarcity of this bird in study skin collections.

Its range includes the Chinese provinces of Szechwan and Yunnan as well as Tonkin and northern Vietnam - all areas where little museum collecting was done, and which the tiresome complications of politics made inaccessible for years. There is certainly a potential threat to this bird's habitat. However, Roland Wirth, of Birdlife International, and the Zoological Society for the Conservation of Species and Populations (based in Munich), pointed out to me that as long as any habitat for Giant Pandas remains, Redwinged Laughing Thrushes will continue to exist in Szechwan at least.

It goes without saying that the People's Republic of China, not to mention the world-wide conservation community, will see to this. (While the original San Diego birds were collected in Szechwan, the later commercial shipments came, I believe, out of Yunnan).

References

- BATES, H. & R. BUSENBARK (1963) Finches and soft-billed birds. T.F.H. Publications, Inc.
- COLLAR, N.J. & P. ANDREW (1988) Birds to watch The ICBP World Check-list of threatened birds. Smithsonian Institution Press.
- DELACOUR, J.T. (1939) Mr. C. Cordier's collection. *Avicultural Magazine Ser.V*, Vol. IV, 267-271.
- INTERNATIONAL SPECIES INFORMATION SYSTEM (1995-96) ISIS Bird Abstract as of 31 December (1994-95).
- LIEBERMAN, A. (1984). Breeding the Redwinged Laughing Thrush (Garrulax formosus) at the San Diego Zoo. Avicultural Magazine XC, 87-90.
- ROTH, V. (1993) White-crested Laughing Thrush (Garrulax leucolophus) A.F.A. Watchbird XX (no.6) 36-37.
- YOUNG, R.A. (1978) Co-operative breeding the the White-crested Laughing Thrush (Garrulax leucolophus), with notes on its hand-rearing at Busch Bird Park, Houston. *International Zoo Yearbook* XVIII, 106-109.
- ZOOLOGICAL SOCIETY OF LONDON (1960-96) Species of birds bred in zoos and other institutions 1959-Q3. Ibid. I-XXXIV.



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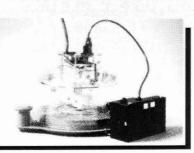


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