

When the bush dried up in March–April, the reeds were harvested and used for making stools, easy chairs and screens and mats of varying sizes. The reeds were held in place with strips of unprocessed jute. The finished mats were called “sirkee” and in the plural, “sirkian”. At times these sirkees were even lined with home-spun cotton sheets on one side to make them more durable and effective. In rural homesteads, sirkees were used as curtains on doors, as floor covering and even as space partition screens. They were also used on the floorboard and sides of bullock-carts to prevent the harvested grain from spilling during transportation to the grain markets.

The dictionary text in Pittie (2004) for “Sirkee” (p. 22) also mentions, “*Centropus sirkee* J. E. Gray, 1831 (No locality=Cawnpore)”. And that throws up an interesting hypothesis. Major-General Thomas Hardwicke, F.R.S., F.L.S., retired from the Bengal Presidency Army in 1823 and returned “home”. His was the first comprehensive collection of Indian fauna and flora, which he gifted to The Natural History Museum (British Museum), which displayed it in 1825. He had also prepared in manuscript a book, *Illustrations of Indian Zoology*, which was edited by J. E. Gray (the curator) and published by the museum in two volumes in 1830–1835. To Hardwicke’s title was added a sub-title “Chiefly from the Collection of Maj-General Thomas Hardwicke”.

The General had also gifted all his field notes and his huge collection of paintings, drawings and sketches of natural history objects to the Museum. J. E. Gray, as curator, must have had full access to field notes which probably were the base-line data used by Gray for the description of the Sirkee in 1831?

In all probability, General Harwicke’s entry on the Sirkee must have been from Cawnpore (now Kanpur) for two reasons. Firstly, Kanpur-Allahabad region even now has abundant Sarkanda growth. And secondly, for a while the General was indeed stationed at the Fatehgarh cantonment (still in existence), which today is about an hour’s drive from Kanpur, en route Allahabad.

Incidentally, the General had also made his field notes available to Latham around 1809. Yet no one has either

credited him for the first book on India’s natural history nor as pioneer of Indian natural history, per se. Others even claimed some of his first descriptions of species despite evidence to the contrary in the minutes of the Linnaean Society. My advocacy of this historical injustice is unfortunately seen as one general trying to promote another!

This account will be incomplete without recalling a most unusual encounter I had with one Sirkeer Malkoha. On the second day of the war with Pakistan in December 1971, four Sabre jets of the P.A.F. targeted the only bridge over the Chenab River at Akhnoor (on the Jammu–Poonch road) at about 15:30 hrs. I was mid-way on the bridge, when rockets and bombs straddled it. A few very close misses! We sped away the fastest we could and on exiting the bridge, drove the jeep into the first available depression off the road beam.

The idea was to abandon the jeep and get as far away from it as possible. For having missed the prime target, the P.A.F. pilots would next take an easy, sitting duck such as a jeep, strafing it with machine guns. So the driver and I, leaping from the jeep, ran towards a clump of Sarkanda bushes some 50 m away. Once inside, I came to an abrupt halt (the driver almost knocking me over) because a Sirkeer Malkoha was understandably, terribly agitated when I dislodged him from his mid day roost, and in such unseemly haste!

Though mortally scared of the Sabres still circling overhead, I burst out laughing as I saw that Malkoha taxi away and take off in the bid, “everyone for himself”. My driver was puzzled at my mirth, when in fact we both were in blue funk!

## References

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## Book reviews

Ragupathy Kannan

***Birdsong: A natural history*** by Don Stap, Scribner (publ.), 261 pages, \$16.00 Hard cover.

No sound of nature has captured man’s ear and soul as much as birdsong. Whether it is the twittering of a chipping sparrow or the ethereal fluty whistles of a hermit thrush, birdsongs have made humans pause and reflect with awe over the millennia. Poets over the ages have waxed eloquent on these avian virtuosos, but only recently have these sounds been examined from the objective perspective of scientists.

For the past fifty-odd years, birdsongs have been a favorite field of study for many competent field biologists. However, the cornucopia of information revealed from their enquiries is largely locked away in scientific journals or in erudite ornithological tomes and thus is veiled from the public eye.

Don Stap’s *Birdsong* brings this finally within the purview of the amateur naturalist and backyard birdwatcher. Even those who are not scientifically inclined would benefit from this book’s ability to present the science of birdsong in more easily readable prose.

What makes birds sing? What is unique about their anatomy that enables them to sing? Has birdsong evolved to attract mates or to delineate territories? Is the song learned after hatching or is it innately programmed in the genes? Do birds of the same kind establish a social hierarchy based on their singing prowess and repertoires? Why don’t all birds sing? How did songbirds evolve? These are some of the many fascinating questions that are addressed in this book.

Stap centers the account on the life story of America's leading bioacoustic expert, Don Kroodsma, as he journeys the globe with his voice recorder to unravel the mysteries of birdsong. Stap's book is as informative and entertaining as his *Parrot without a name*, an account of the search for the last few new bird species on earth.

When Kroodsma started his career in the late 1960s, the prevailing wisdoms about birdsong were established largely by controlled laboratory studies. The leading expert then was Peter Marler, whose pioneering lab work rearing chicks exposed to recorded birdsongs at different stages after hatching, led to the conclusion that song was learned during a brief critical period after hatching. After this critical time-window, Marler and his colleagues said, learning stopped.

Nevertheless, Kroodsma, the quintessential field biologist, had misgivings about lab research. He challenged the established dogma and did some ground-breaking field investigations that shook traditional notions. He took the gutsy decision of basing his entire doctoral work on banding and recapturing baby Bewick's Wrens after they dispersed from their nests, to find out where they learned their songs. His project proved that although these wrens learned their father's songs initially, they replaced those dialects with new ones they learned in the neighbourhoods to which they dispersed. Different Bewick's Wrens, therefore, sang different dialects of the same song depending on the prevailing dialect in their new neighbourhoods. Clearly, this flexibility helps them match their songs with those of the males in their new environs. Learning does not cease but rather continues even beyond the critical period. This landmark study highlighted for the first time the importance of field studies in interpreting birdsongs. It heralded a great career in which Kroodsma made significant strides in our understanding of avian vocalizations. Many of his studies were done by himself, but there were some interesting collaborations: His paper on the astonishing repertoire of the Brown Thrasher (2,000 songs!) was co-authored with his mother-in-law.

Stap's most informative chapter is the one that provides a synopsis of what is known about birdsongs. The reader is flooded, but not overwhelmed, by a deluge of fascinating factoids. The syrinx (voice box) of some song birds is divided laterally, with each half controlled independently, making birds essentially duet with themselves as they sing; songs are the driving force in territory making (muted red winged blackbirds lose their territories to rival males); hormones govern the development of song (castrated males don't sing, and testosterone given to females make some sing like males); female Black-headed Grosbeaks imitate a rival male's song when the male partner has been absent from nest for long, ostensibly to lure him back to defend the nest from the perceived rival male; call notes are important to alert mixed feeding flocks of potential predators, but some birds use them to deceive and distract another bird from a prey item; the song template is acquired at birth but the song itself is learned, as was demonstrated by increased heart beat of sparrow babies exposed to their own song; birds with high frequency songs, like the Blackburnian Warbler, perch higher up the canopy because these songs don't travel well and thus the higher perch enables them to disperse the songs through fewer obstacles. Facts like these flow rich and smooth throughout

the book. The book is riveting, especially to any reader with a flair for natural history.

The chapter also educates the reader on the importance of song repertoires (number of songs a bird can sing). Males with larger repertoires are not only associated with better health (in the form of less parasites, etc.), but also more mates, earlier nesting and, incredibly, better offspring survival.

The aforementioned studies have involved a lot of lab work, and Kroodsma, naturally, is skeptical about some of these findings. Do controlled lab studies reflect what is actually happening out there? In his words, "To experiment first is human, to describe first, divine." This controversy illustrates how ripe the field of birdsong is despite the decades of inquiry.

The book's educational value to birdwatchers is immense. Many of us (even seasoned birdwatchers) use songs and calls to identify birds, but then we move on, paying scant attention to subtle variations in notes. Any bird watcher who has wondered about the different songs of the Chestnut-sided Warbler will learn that it uses them in different social contexts; and the earliest risers who have pondered over the pre-dawn songs of Chipping Sparrows would know that these songs might be used to establish male dominance.

Stap ends the book with a big section devoted to how Kroodsma discovered that sub oscines (non-songbirds) also learn songs. This finding, stemming from months of painstaking work with Bellbirds in Central America, goes contrary to long-held belief that only oscines (songbirds) learn their songs, whereas the sub oscines use only their innate voices. Unfortunately, this study is yet to be published and thus has little scientific credibility. Stap makes this mistake of giving undue importance to unpublished observations earlier in the book too: Evidence that western and eastern populations of the Marsh Wren may be different species, albeit tantalizing, have not passed scientific muster.

The only other hindrance in this book is the lack of a bibliographic section. The book piques curiosity but does not satiate it. Readers wanting more information on a particular study are left on their own to ferret it. In addition, none of the chapters or parts of the book is titled and one does not get a feeling of direction. Barring these minor blemishes, the book is a boon to amateur naturalists and serious pursuers of natural history. *Birdsong* has surely given more meaning to one of nature's most ancient sounds.

Welcome to the 2<sup>nd</sup> South Indian Bird Watchers Fair. A 3-day event from 23-25 February 2007 at Gandhigram University, near Dindigul, Madurai district, Tamil Nadu. Ask for our brochure with your address and / or email ID. Joe Homan, Lakeside Guest House, Athoor, Dindigul 624701. Phone: 0451-3298132. Email: joehoman2003@yahoo.co.in.