

Yellow-crowned Woodpecker (*Dendrocopus mahrattensis*) Another bird species gone from Thailand?

Conservationists are generally reluctant to declare any animal species extinct. How can the absence of information be taken as a positive indicator of extinction? How can one be sure that a taxon has been lost? Even today, nearly 80 years after the last Tasmanian Wolf (also known as the Tasmanian Tiger, or Thylacine) *Thylacinus cynocephalus* died in Hobart Zoo, in 1936, there are still some who prefer to believe, in a forlorn hope, and against all available evidence, that a population may be hanging on undiscovered somewhere.

The “Rule of Thumb” adopted by ornithologists and other conservationists working on vertebrates has usually been to assume that a species is extinct if 50 years elapses without a record. According to Collar (1994), this results from an over-simplification of a criterion used for assumption of extinction by the CITES Secretariat, concerned principally with trade in wild species. It has led to what has been called, again by Collar (1994) “The Romeo Error”, in which a species, having been considered extinct, “returns from the dead” when refound. In one of the most notorious (or possibly happiest) Romeo Errors, the rediscovery of the Cebu Flowerpecker *Dicaeum quadricolor* (Timmins 1992) came about because conservation authorities in Philippines had not previously searched for the bird, having slavishly accepted the assertions of desk-scholars that its forest habitat had been 100% destroyed.

Such cases have led to the latest versions of IUCN Red List being considerably more cautious,

introducing an element of flexibility, in stating that, “A taxon is Extinct when there is no reasonable doubt that the last individual has died. . . .when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon’s life cycles and life form.”

While IUCN and BirdLife are principally concerned with global status, national conservation authorities —BCST and its government partners, the Department of National Parks, Wildlife and Plants Conservation (DNP), and the Office of Natural Resources, Environmental Policy and Planning (ONEP) —have a duty to assess species conservation status nationally. The above definition of extinction may equally be applied to determining whether any given species is still present within Thailand’s national boundaries.

The 50 years Rule of Thumb nevertheless remains a useful guideline, since a half-century —approximately the length of an individual field biologist’s active career—is a timespan to which the human mind can relate. Approximately 50 years up to the present is also just about long enough to link the previous era of museum specimen collection with the present one, in which itinerant ornithologists armed with binoculars, cameras and sound recording gear can make use of relatively inexpensive and easily accessible remote sensing

imagery to locate forest and other habitat patches. Once an animal's core habitat and geographic range have been identified, often from the labels on museum skins, surveys may be pinpointed to reveal once and for all whether a taxon still exists in the wild.

This is exactly how Gurney's Pitta was re-discovered in 1986—precisely 50 years after the last (published) specimens were collected (Collar, Round & Wells 1986, Round & Treesucon 1986). In the case of extra-scarce or shy and hard to detect mammals and birds, other modern technology (e.g., camera-traps, recently used in searches for the nocturnal Jerdon's Courser *Rhinoptilus bitorquatus* in India, Jeganathan *et al.*, 2002) may be combined with traditional methods such as searching for tracks and signs, to reveal whether any individuals of a species remain.

I have chosen here to focus on a species which, in both the national and regional context, is of particular interest and extreme conservation concern—Yellow-crowned Woodpecker *Dendrocopos mahrattensis*. It's a species that is relatively common in dry scrub country in the Indian subcontinent, Sri Lanka, and seemingly in western Burma (races *palescens* and *mahrattensis*) but which is unaccountably scarce further east, in Indochina, where the race is apparently the doubtfully distinct *aurocristatus*. The pair of Yellow-crowned Woodpeckers that I found in Dong Khanthung, Southern Lao PDR (Round 1998) was the first undoubted Lao record (Duckworth *et al.* 1999), and I was as excited about these birds as I had been by my first ever sighting of Giant Ibis only a few days before. The birds were feeding in *Dipterocarpus obtusifolius* trees, and my memory of that forest is that it was as good quality dry dipterocarp as I had ever seen, and characterized also by the presence of the tree *D. intricatus*.

The similar-sized Freckle-breasted Woodpecker *D. analis* (formerly treated as conspecific with

Fulvous-breasted Woodpecker, *D. macei*) was also present in close proximity. But while Freckle-breasted Woodpecker, when in forest, is likewise restricted to the best quality plains dry dipterocarp (as at Sap Sadao in Nakhon Ratchasima, Thailand) it has also adapted to parkland and suburbs, with plantation trees such as *Samanea*. It still occurs widely, even commonly across open floodplains and agricultural land, where hedgerow trees remain, and may even be found in the suburbs of Thailand's two largest cities, Bangkok and Chiang Mai. Unfortunately, though, there is no evidence that Yellow-crowned Woodpecker ever followed Freckle-breasted into such disturbed habitats.

I have also seen Yellow-crowned Woodpecker in good quality deciduous woodland at Tmatboey in the northern Cambodian plains. Indeed, it is well known from ten sites in N and NE Cambodia, including the important Siem Pang forest complex (Goes 2013). But Simon Mahood (*in litt.* 2015) nevertheless commented that Yellow-crowned was “The scarcest, most localised [woodpecker] of the deciduous/semi-evergreen lowland forest of Cambodia. This makes it all the more likely to be the first to go from Cambodia, followed (I would guess) by Rufous-bellied and Streak-throated.”

This is not a very optimistic appraisal, but unfortunately, it is almost certainly a realistic one. The two additional woodpeckers mentioned by Simon Mahood, Rufous-bellied Woodpecker and Streak-throated Woodpecker, are already teetering on the brink in Thailand, with only one or two site records of either in the last decade- and-a-half. So what of Yellow-crowned Woodpecker?

Tantalisingly Yellow-crowned Woodpecker was listed for Thailand by Deignan (1963) for Kamphaengphet Province—the only site from which it was ever recorded, but with no published details. Might Yellow-crowned Woodpecker still occur somewhere in Thailand? Where is the best lowland dry dipterocarp to be found? Mae Ping

National Park in Northern Thailand; Sap Sadao, mentioned above (a mere fragment of no more than 2-3 sq km); or along the Huai Mae Rewa, in Mae Wong Wildlife Sanctuary, perhaps? Is there anywhere else?

This last site, the Mae Rewa valley, received extensive surveys from the Wildlife Research Division of the Department of National Parks, Wildlife and Plants Conservation in the last couple of years without revealing any of the three scarcest deciduous woodland woodpecker species, and suggesting that this upland forest is qualitatively different to the habitat they favour. One further site, the magnificent 2500 sq. km expanse of Huai Kha Khaeng Wildlife Sanctuary, is in so many respects a microcosm of what we fondly believe the lowlands of continental Thailand must have once been like, where even megafauna like Banteng, Tigers and Green Peafowl still roam. But while total avian diversity in Huai Kha Khaeng is high, owing to the juxtaposition of deciduous and semi-evergreen riparian habitats, there has never been the faintest hint that Yellow-crowned Woodpecker was ever present. This in spite of the great amount of field research carried out there by so many different observers and institutions since 1980. While there are large tracts of mixed deciduous forest and bamboo in Huai Kha Khaeng, there is relatively little dry dipterocarp, and what little that remains is depauperate, with a rather low avian diversity, mostly even lacking characteristic species like Burmese Nuthatch and Common Woodshrike. Most of the area is, again, rugged and hilly. The best and purest stands of lowland dry dipterocarp, once found in the Huai Thap Salao drainage around the eastern sanctuary margins, were tragically logged by the Thai Plywood Industry in the years 1985–1988, leading up to the nationwide cessation of logging. They were never properly surveyed. In those far-off days, to my eternal regret, we always hurried into the interior of the sanctuary, riding in the back of

Khao Nang Rum research station's 4WD. The only time I ever remember stopping there was when, together with Ben King in early 1984, we saw a Greater Adjutant perched in treetops.

Returning to the Thai specimens of Yellow-crowned Woodpecker, no fewer than six (four males and two females) were collected by Herbert Deignan at a single site in Kamphaengphet, during 12–13 April 1953, and were deposited in the Smithsonian Institution's National Museum of Natural History.

The actual collection locality, Ban Khlong Khlung (now a district town) is situated on Phaholyothin Road (the main north-south highway) c. 40 km south-east of the provincial capital, Kamphaengphet, and about 3.5 km south-south-west of the Ping River, at 16 deg 11 min N and 99 deg 43 min E. It is quite clear from the 179 bird specimens of 71 species collected there by Deignan over a period of 19 days that the habitat sixty years ago was good quality lowland deciduous forest, with such typical dry dipterocarp denizens as Common Woodshrike, Indochinese Cuckooshrike and Burmese Nuthatch among them. No fewer than 46 woodpecker specimens of ten species were collected, including three Great Slaty Woodpeckers, two White-bellied Woodpeckers and four each of Black-headed Woodpecker and Lesser Yellow-nape. It is notable that of the small, pied "ladder-backed" woodpeckers, Deignan obtained 14 Grey-capped and four Freckle-breasted Woodpeckers along with the six Yellow-crowned. But while the dates of collection of both the Grey-capped and the Freckle-breasted Woodpeckers span almost the entire collection period the Yellow-crowned were all taken in the first couple of days. Deignan would certainly have been aware that this species was an addition to the Thai avifauna. He was no mere museum collector and taxonomist, but, as evident from his writings on northern Thai birds, a highly astute field observer, much interested in the

ecology of birds in the wild. It is perhaps plausible that, recognizing the scarcity of Yellow-crowned Woodpecker, he avoided collecting any more. But since most of Deignan's "birdwatching" was done down the barrel of his gun, it would have probably been difficult to identify the smaller woodpeckers to species with certainty before shooting them. It is equally likely, therefore, that the absence of further specimens of Yellow-crowned Woodpecker indicates that no more were encountered and that it was genuinely rare or patchy in distribution.

Deignan's sojourn to Ban Khlong Khlung would have been one of the last collecting trips in lowland floodplain before this habitat was irrevocably altered for the worse by human settlement and the spread of agriculture. The Migratory Animals Pathological Survey (MAPS) which took place 10–15 years later did no significant collecting in plains dry dipterocarp. Already by then it doubtful there was much left. But at the time of Deignan's trip, the Phaholythin highway was probably little better than a dirt track. Almost certainly, like his predecessors, he reached Kamphaengphet by boat up the Ping River from Nakhon Sawan. There is probably nobody still alive with direct knowledge of how enormously the landscape has been transformed since those days. But Lowe (1933), for example, in referring to the Ping River, wrote that the Asian Woollyneck ". . . was quite plentiful" . . . Flocks of 10–20 birds, mixed with Black-necked Storks were seen daily on suitable sand-banks." The River Tern was "very common", and the Black-breasted Tern somewhat less so. It was an utterly different country to the Thailand that we know today.

Khlong Khlung at the present time holds nothing other than paddies, orchards, residential areas, highways and large industrial facilities (Fig. 3). There are certainly no patches of native vegetation remaining anywhere that might hold any of the woodpeckers that used to be there, with

the possible exception of the inexplicably tolerant Freckle-breasted. If this is true of Kamphaengphet province, it is equally true elsewhere. There are no expanses of deciduous or semi-evergreen forest remaining anywhere on floodplains throughout the length and breadth of Thailand. Zero! The habitat has entirely gone. While some slight question remains as to whether tattered remnants of dry dipterocarp around the margins of protected areas, and in the foothills, might possess ecological attributes typical of those floodplain forests, and may yet hold the species, based on over 30 years of searching, I am highly doubtful that this could be so.

There is little alternative but to conclude, however reluctantly, that with 62 years having elapsed since a handful of specimens were collected, and with no sight records subsequently reported anywhere, Yellow-crowned Woodpecker has followed Giant Ibis, White-shouldered Ibis, and a few other birds of the lowlands into extinction in Thailand. It disappeared because its core habitat—high diversity deciduous forest of the floodplain— was wiped from the landscape by loggers, farmers and settlers long before the beginnings of Thailand's park and sanctuary network came into being.

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Fig. 1. Yellow-crowned Woodpecker *Dendrocopos mahratensis aurocristatus*, (male), Tmatboey, Cambodia, 8 March 2015 (Ashish John)



Fig. 2. Yellow-crowned Woodpecker *Dendrocopos mahratensis aurocristatus*, (female), Tmatboey, Cambodia, 8 March 2015 (Ashish John)

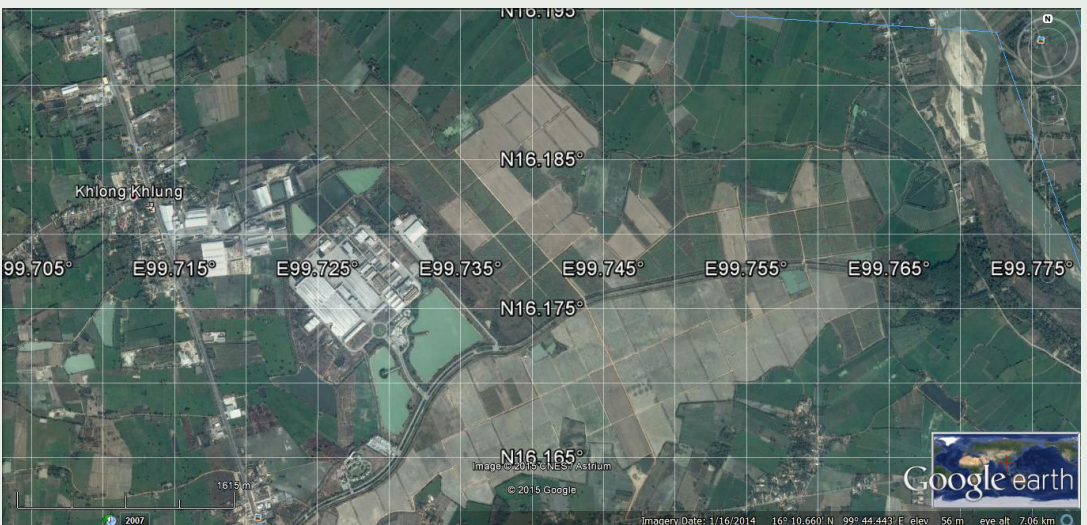


Fig. 3. Satellite image of Ban Khlong Khlung, downloaded from Google Earth, 10 May 2015. The Ping River can be seen on the extreme eastern margin, as can Phaholyothin Road (Highway 1) at the western edge.

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