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## The configuration of the tail of the Sri Lanka Spurfowl *Galloperdix bicalcarata* (Galliformes: Phasianidae)

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Dissanayake, R., 2022. The configuration of the tail of the Sri Lanka Spurfowl *Galloperdix bicalcarata* (Galliformes: Phasianidae). *Indian BIRDS Monograph* 5: 52–56. Rajith Dissanayake, Department of Science, Birkbeck College, University of London, Malet Street, London WC1E 7HX, U.K. E-mail: [rajith@mac.com](mailto:rajith@mac.com). Manuscript received on 08 October 2021.

Birds that are rarely observed or extinct may be painted or drawn in a manner that contradicts their life appearance or deportment. For example, modern scientific restorations of the Dodo *Raphus cucullatus* did not accord with the probable historical appearance of the bird (Dissanayake 2004). Such birds that are difficult to observe in the wild will not generate adequate data worthy of scientific publications, leading to their neglect or extirpation.

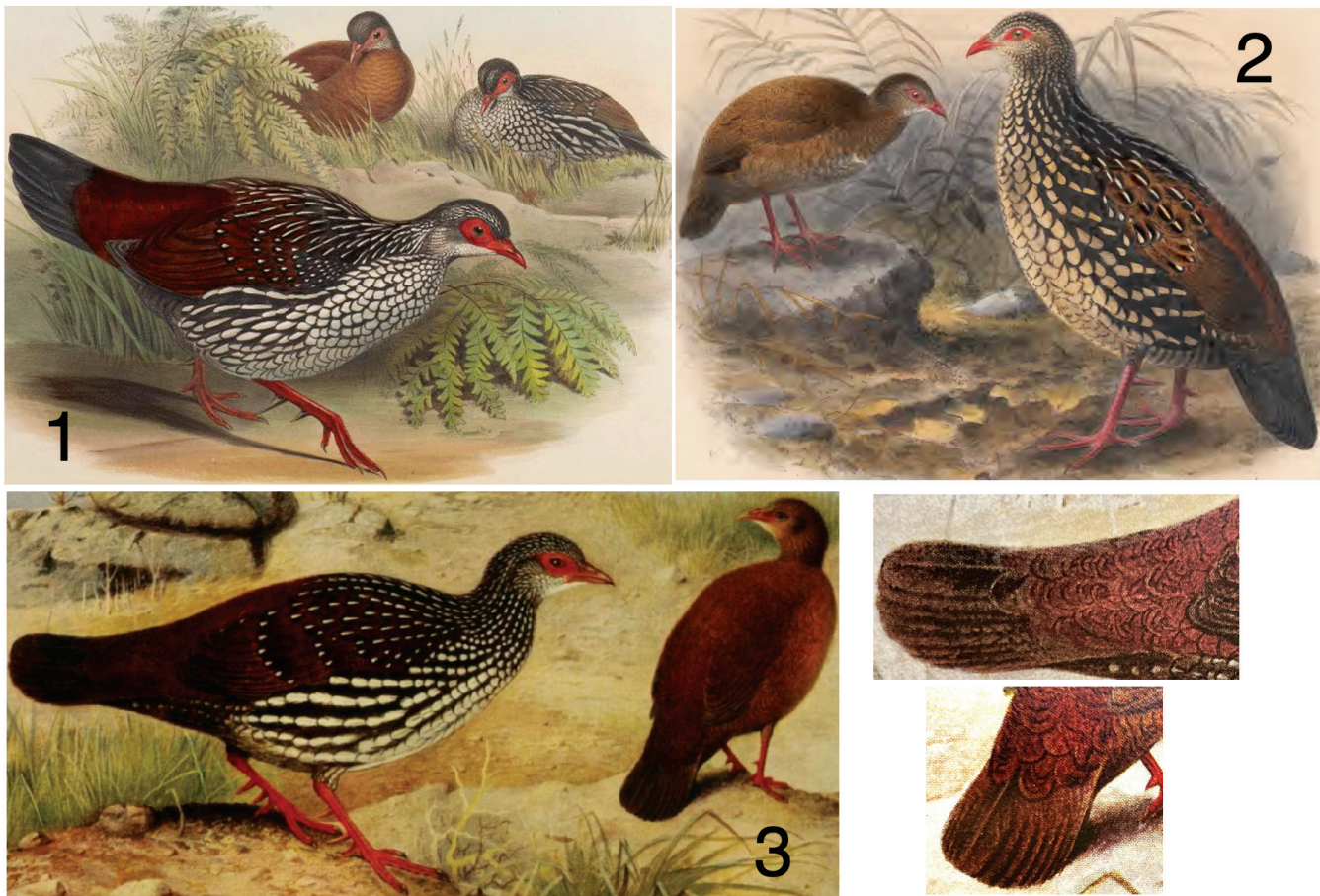
Historical South Asian ornithological art tends to depict the tail of the Sri Lankan Spurfowl *Galloperdix bicalcarata* as neatly folded. However, live observations reveal that the tail is largely fanned out rather than folded. Here, I present photographic evidence for the fanned-out tail of this species. I highlight limitations in depictions of the birds based on inert specimens, compared to life observations, and the variance between artists who have not studied live birds compared to those who have.

The Sri Lanka Spurfowl is an elusive Sri Lanka endemic confined to an endemic bird area, and biodiversity hotspot (del Hoyo et al. 1994; Stattersfield et al. 1998). The difficulty in observing this species is almost legendary. Only now, as its habitat is shrinking, is it gaining more photographic traction. Adequate film or photographic footage is still limited or restricted.

From the field, Legge (1880: 742) described: “one of the shiest [sic] birds in the island ...”. Lushington (1950: 89) stated, “The Spur–Fowl shares the honours with the Ceylon Crow–Pheasant [*Centropus chlororhynchus*] as the Island’s shyest bird. It is rarely seen, ... Besides being shy ... very difficult bird to flush ...”. “Strictly a forest bird, ... shy and wary ...” stated Henry (1971: 259). Fleming (1977: 2) described a female, “When she spotted us observing her, she lunged suddenly and violently into the nearest cover ... We knew spurfowl would be hard to see but had not realized how violently they react to being seen.” De Silva Wijeyeratne’s (2019) “... often heard but hardly ever seen ...” frames a prevailing consensus. It is a bird that actively avoids being seen, even in captivity (Suthard & Allen 1964).

Recent observations of this spurfowl offer insightful discrepancies between artistic depictions as opposed to life observations. Such observations may not be very important but are mentioned regularly (Gallagher 2005). With regards to Indian palm squirrels (*Funambulus* sp.), Blyth (1847: 874) described a coloured plate of taxon under discussion from Leach (1814): “Leach’s figure of *penicillatus* is execrable, and separation characters most unsatisfactory”, a harsh but proper critique for taxonomic diagnosis. However, practically every other description in Henry & Wait (1927–1935) offers somewhat petty criticisms of comparative plates in the earlier monumental work by Legge (1880): [Dusky Flycatcher] “In Legge’s figure ... the colouring of the forehead is not sufficiently bright and the general shape is not correct.” New and undocumented plumage features often crop up (De Mel et al. 2014). The discrepancies indicated here do not concern colouration but configuration. This work arises from a familiarity with illustrations of the spurfowl from historical references and contemporary field guides including del Hoyo et al. (1994), and a relatively unknown Suthard & Allen (1964). Pre-1921 plates of the bird are indicated in [14], including the first detailed studies (Gould 1850–1883: plate 67 (1854); Legge 1880: plate 33; Baker 1920). Although missed from Henry & Wait (1927–1935), Henry (1955) produced a plate complemented by another in Suthard & Allen (1964). Several field guides yield modern depictions excluding photographic guides (Kotagama & Fernando 1994: plate 8; Harrison 2011: plate 14; Rasmussen & Anderton 2012: plate 41; Warakagoda et al. 2012: plate 2). Furthermore, the plate of the male Sri Lanka Spurfowl in del Hoyo et al. (1994: plate 51) has the same profile as a more generic species in a companion volume (Winkler et al. 2015: 53). Alternative editions of many of these works duplicate the same plates, e.g., the Warakagoda et al. (2012) spurfowl is reproduced in Grimmett et al. (2014).

I obtained several minutes of film and photographs of the spurfowl. Precise locations are not given here to safeguard the



14. Images of Sri Lanka Spurrowl from plates: 1. Gould (1850–1883, J. G. Keulemans), 2. Legge (1880, J. G. Keulemans), 3. Baker (1920, H. Gronvold) – enhanced tail images for Baker on right.

bird and its home, but it was on private land situated in named forest sites and settlements. I first glimpsed the spurrowl visually in July 2011 in montane buffer forest connected to Sinharaja reserve at 950 m elevation close to Kadamuduna near Rakwana (in Dissanayake & Oshida 2012) and captured ten seconds of colour film of a pair just before they ran away, indicating and corroborating the above cited difficulties in observing them.

In 2012 I visited Kalugala proposed forest reserve, ~300 m (Botejue & Wattavidanage 2012; Mendis 2021), close to Badureliya, and aurally noted how common the species was. During a subsequent visit in 2015, I captured over ten minutes of film footage of the bird foraging from 17–19 July 2015, including a whole family party. The species normally operates as a pair (Henry 1955) but with the addition of a juvenile, there was a family with good visual representation for the bird. The observations in 2015 provided the best footage of the bird over three days in the morning, afternoon, and at dusk. My final visual encounter was at Kalugala on 08 September 2016 for around five minutes that provided one of the best images of the male from the front, captured from 4K film footage [16]. I used a relatively light Panasonic FZ300 camera, sometimes with a zoom extension.

A compilation of my images from photos and stills from video footage from 2015 and 2016 [15] indicate the bird from life and its riverine, rainforest habitat. A brief sample of my footage has been uploaded to YouTube: <https://youtu.be/BVW3ntILeac>

(images I have released (e.g., [15], bottom right) have already been plagiarised on the Internet by amateur enthusiasts). [16] represents consecutive imagery from two ~ 3 m film sequences filmed within half an hour from 1419 h, 19 July 2015, lasting a total of over six minutes, converted to monochrome for greater clarity of the tail.

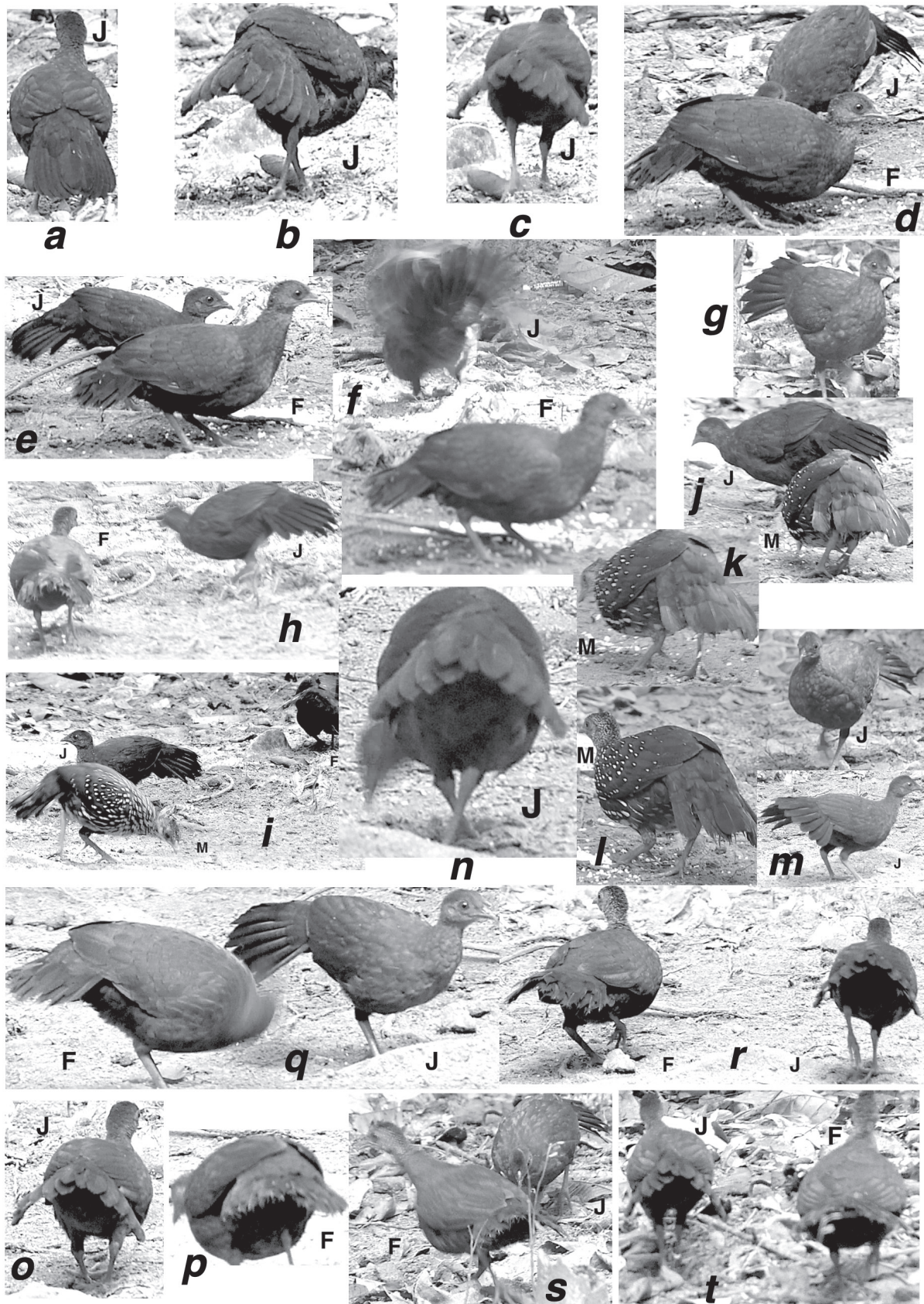
Other online depictions of the spurrowl including YouTube videos (viewed in 2021) do not contain more data than documented from videos detailed here.

Some illustrations are available in the public domain [14] ([www.biodiversitylibrary.org](http://www.biodiversitylibrary.org), 2021). The plates in Kotagama & Fernando (1994), and Rasmussen & Anderton (2012) indicate a tail that is similar to Gronvold's spurrowl in [14, 16], albeit, with squarer edged tail profiles. The plate in Warakagoda et al. (2012), and associated publications, indicates a tail very similar to Keulemans's spurrowl in [14], image 2 with feathers that taper together distally into an oval point. The plate in del Hoyo et al. (1994) indicates the profile of a tail that indicates feathers folded together, somewhat tighter than any in [14]. The plate in Harrison (2011) indicates a tail in profile that is more open than in HBW and similar to Gronvold's but with a squarer edge – the posture is alert and lifelike.

The primary conclusion from live observations [15–16] is that the spurrowl tail feathers (M, F & J) tend to be spread out rather than folded and neat as generally depicted in plates. The running juvenile in [15] and on the walking male (2016) both have their tail



15. Stills largely from filmed footage of the Sri Lanka Spurfowl at Kalugala proposed forest reserve, 2015 and bottom right 2016. Juvenile running in bottom left.



16. a–t: 40 consecutive stills variously scaled from two films representing 6 m of footage (19 Jul 2015, Kalugala proposed forest reserve) with modified monochrome slightly enhanced images for inspection. Capital M, F & J indicate male, female and juvenile. Emphasised: 3f (outspread tail of juvenile while chasing off an Emerald dove) & j (12 outer tail feathers clearly visible).

expanded. The tail was maximally expanded by the juvenile while chasing off an Emerald Dove *Chalcophaps indica* in a fluttering leap [16f]. This supports Legge's note that the bird prefers to run rather than fly. Fraying ends of the adult tail indicate that the tail frequently touches the ground while the bird crouches. Often, the tail is bent towards the feet as the bird readies to rush off at signs of danger. The open and bent tail does not invalidate the plates. The tail may be fully folded at times. Between 16a and 16b the tail expands slightly, suggesting a more folded configuration in 16a. However, unlike better documented relatives (*sensu lato*), the tail typically appears somewhat fanned out. Virtually all the professional artists [14] behind the plates, among others for the recent field guides, would have been working from skins or guidance, and are unlikely to have observed the bird in life, except Henry (1955), who does present a more lifelike tail.

Spurfowl were taken captive in the 19<sup>th</sup> century (Legge 1880). Suthard & Allen (1964: 39) describe captive Sri Lanka Spurfowl from a 1958 breeding program. "Both parents rushed at me with their tails spread ..." to potentially defend a chick. Furthermore, "When flushed from the nest or excited, both male and female spread their tails like a fan. That of the female is spread and folded down much like the landing flap on an airplane wing. (Suthard & Allen 1964: 40)." There are no photographs or other significant details except aspects of captive breeding and chick raising. These observations complement and enhance these field observations.

No aspersions are cast on any illustrations as opposed to photos, given the relative scarcity and value of painted plates and the greater talent needed in their execution. The Victorian artists in 14 were quite assiduous, judging by their attention to numbers of tail feather counts (12–13 outer rectrices). Most citations here are from books because there is very little research on the Sri Lanka Spurfowl due to its shyness as opposed to the relatively more conspicuous Sri Lanka Junglefowl. Female junglefowl were often confused with spurfowl during inquiries at Kalugala.

Kalugala reserve is being broken up by roads and encroachment (Mendis 2021) and the population of the spurfowl observed is palpably in decline. It is hoped that these observations and the historical record will enhance further research and the preservation of this attractive, voluble bird and its threatened habitat.

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