

**Australasia -- Paradisaeidae: split *Manucodia alter* (Tagula Manucode) from *Manucodia ater* (Glossy-mantled Manucode)**

Drafted by Thane K. Pratt

AusRAG committee input from Andrew Black, Guy Dutson, Anna Kearns, Dick Schodde and Leo Joseph

---

This split was proposed in the following article:

Gregory, P., and W. Goulding. 2023. What is the manucode on Tagula (Southeast or Sudest) Island, Papua New Guinea? *Australian Field Ornithology* 40:257–259. <http://dx.doi.org/10.20938/afo40257259>

**Main Points:**

- (1) *Manucodia (ater) alter* is currently listed as one of two subspecies of the Glossy-mantled Manucode, *Manucodia ater*, of which the nominate ssp. inhabits all New Guinea Island, plus the Rajah Ampat and Aru Islands. The subsp. *alter* is an island endemic from the Louisiade Islands off eastern New Guinea. This form is poorly known, with the only reports of the bird in life appearing since about the year 2004. Few observers (including myself) have visited the island, most notably Will Goulding who conducted his PhD research there (but did not study the manucode).
- (2) This manucode is a geographical isolate, known only from Tagula (Sudest) Island, which it shares with three endemic bird species and several subspecies. Distance to mainland New Guinea and the nearest other manucode populations is about 300 km, over open ocean and a scattering of islands. The bird is uncommon.
- (3) Numerous morphological differences distinguishing *alter* from *ater* include: size larger (that of a small crow), bill larger (no overlap w/ *ater*), tail longer, and the underparts mostly violet vs. blue-green.

The tracheal loop, the signature feature of all male manucodes (Forbes 1882, Clench 1978, Frith 1994), is known in this taxon to extend beneath the skin down the full length of breast, vs. for *ater* emerging only a short way onto the “intra-clavicular air-cell, between the rami of the furcula” (Forbes 1882:347). Below is a field sketch of the tracheal loop a male *alter* drawn in the field by TKP.

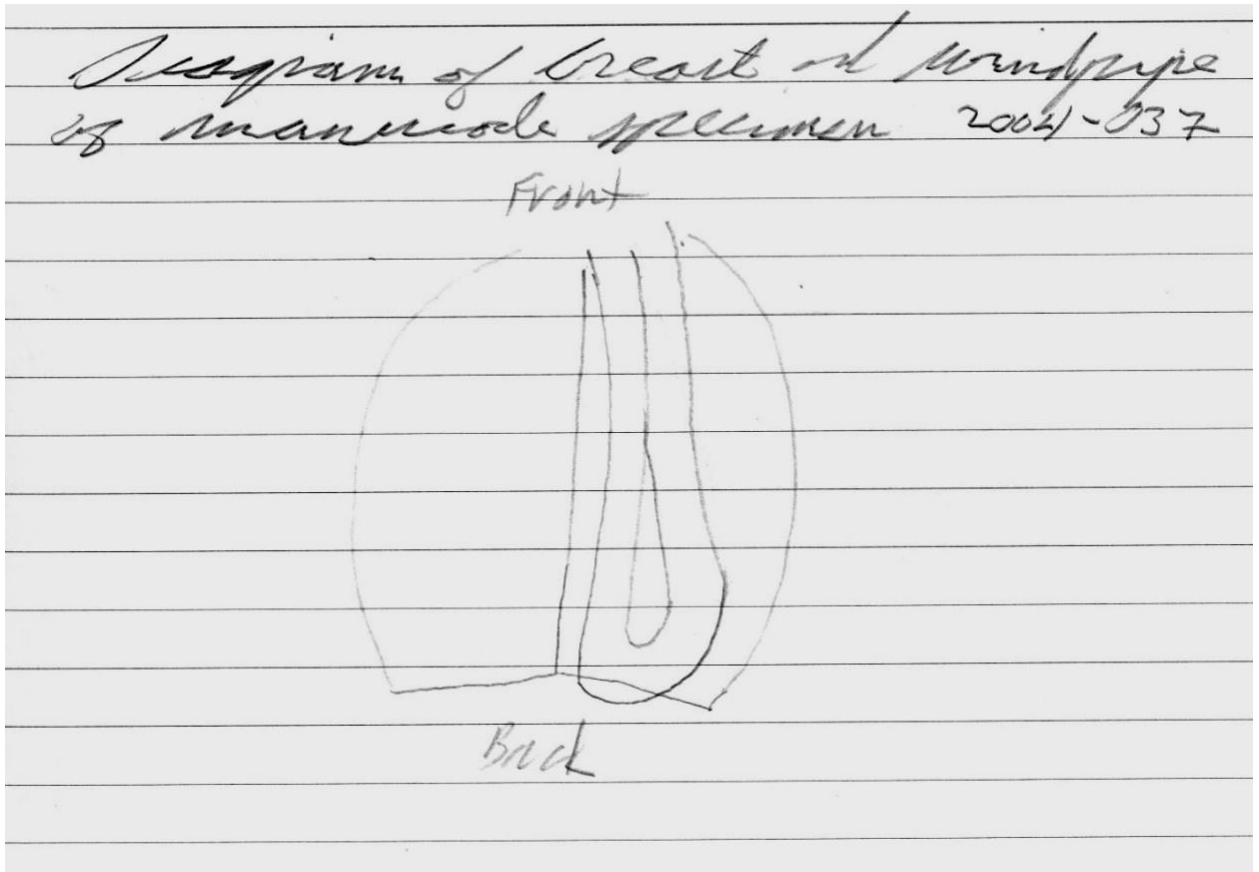


Figure 1. Reproduction of a field sketch of the tracheal loop of a *Manucodia alter* (T. K. Pratt, unpublished field notes). Note that the loop extends beneath the skin all the way down the pectoral muscle on the left side, then pokes slightly beyond the posterior edge of the sternum before returning anteriorly and diving into the body cavity to join with the lungs.

Firth (1994) argued that the elongated trachea possessed by manucodes had evolved to produce far-carrying, low-pitched songs and calls. If so, it's significant *alter* possesses the long tracheal loop and low-pitched song similar to all other manucode species except *ater*, which instead has a very short tracheal loop matched with much higher-pitched song.

I'd also like to draw attention to one more curious feature: the incredibly thick, fatty layer of muscle lining and attached to the skin of the male's neck; this layer is not as noticeable on *ater* specimens, in my limited experience (TKP).

- (4) Song of Tagula Manucode is very different from that of its sister, the Glossy-mantled Manucode. Although similarly structured to the song of the latter species (an even pitched, prolonged tonal note), the song of the Tagula Manucode is a deep, resonating hum. "Sounds like a fog-horn, cow lowing at a distance, or someone

rubbing their finger on a crystal glass – a deep echoing, hollow, tonal sound, far-carrying” (TKP field notes, 30 Oct 2004, Esirava Camp, Sudest Is.). The bird sings in the hours before dawn and during the day. Recordings and sonograms of *ater* can be found on the Xeno-canto and Macaulay Library websites, but none of the song of *alter* have been posted. I have recordings myself and hope to process these for a paper being drafted by Eliot Carter and myself.

By contrast, the song of *ater* is a high-pitched electric tone--other-worldly, thin, prolonged, and perfectly flat, fixed at a single pitch somewhere in the range of 2 to 4 kilohertz, that swells in volume, then dies away, so unique as to be easily recognized from one end of the bird’s two-thousand km range to the other. In preparing this proposal, I reviewed multiple recordings of the *ater* song on Xeno Canto and eBird and found that the steady pitch of these individual recordings can vary from medium (2 kHz), similar to a human whistle, to a higher pitch, as much as 4 kHz. What accounts for this variation is unknown. Does it relate to the bird’s sex, age, or behavioral context? Or geographical origin?

- (5) No genetic studies of *alter* have been published. However, a tissue sample I collected is available for study and is held at the Smithsonian Conservation Biology Institute’s Center for Conservation Genomics.
- (6) The Australasian RAG has reviewed the proposal with a quorum of 6 members supporting it and none opposing. The only additional comment was: “The main thing leading me to support this case is the biogeography of Tagula and the Louisiade Archipelago. Lots of endemism is being revealed through molecular work so I'd happily predict the same will apply here” (Leo Joseph).

### Recommendations:

Classify this taxon as a species, *Manucodia alter*, positioned in the AviList sequence to follow *M. ater* and adopt the English name Tagula Manucode, coined by Gregory and Goulding. (For the record, there are already a Tagula Honeyeater, Tagula Butcherbird, Tagula Shrikethrush, and Tagula White-eye, with other potential, repetitive Tagula Xs names waiting in the wings. Actually, “Tagula” is the name for the main town on Sudest Island, not the island itself, known to the locals by the old name Sudest, and originally called Taguna...but try find a modern map that doesn’t label the island “Tagula”! It would be nice to come up another name. Perhaps one that evokes the bird’s memorable song.)

Six AusRAG committee members reviewed this proposal and support this recommendation.

### References:

Clench, M. H. 1978. Tracheal elongation in birds-of-paradise. *Condor* 80:423-430.

Forbes, W. A. 1882. On the convoluted trachea of two species of manucode (*Manucodia ater* and *Phonygama gouldi*); with remarks on similar structures in other birds. *Proc. Zool. Soc. Lond.* (1882):347-353.

Frith, C. W. 1994. Adaptive significance of tracheal elongation in manucodes (Paradisaeidae). *Condor* 96:552-555.

Gregory, P., and W. Goulding. 2023. What is the manucode on Tagula (Southeast or Sudest) Island, Papua New Guinea? *Australian Field Ornithology* 40:257–259. <http://dx.doi.org/10.20938/afo40257259>



Figure 2. *Manucodia ater* photographed on Tagula/Sudest Island, 19 September 2023, by Charles Davies (eBird Checklist S150500436). The adjective *alter* in Latin means “other or another”. Could this be a pun on the Glossy-mantled Manucode’s epithet *ater*? ;-)