

HOST LIST OF AVIAN BROOD PARASITES - 3 - CUCULIFORMES; Neomorphidae

Peter E. Lowther, *Field Museum*

version 12 Oc 2023 (illustrations added 08 Jun 2012)

Tapera

Tapera Thunberg 1819, Handlingar Kungl Vetenskaps och vitterheetssamhället i Göteborg, 3, p. 1.

American Striped Cuckoo, *Tapera naevia* (Linnaeus) 1766 Systema Naturae, ed. 12, p. 170.

Distribution. – Neotropics.

General life history information found in Friedmann 1933, Belcher and Smooker 1936, Sick 1953, Haverschmidt 1955, 1961, Wetmore 1968, Morton and Farabaugh 1979, Salvador 1982, Payne 2005, Pulgarín-R. et al. 2007, Mark and Gamaez-Rugama 2015, Ballarini et al. 2022 (see also additional references in host list below).



Host list. – From Friedmann 1933; see also Davis 1940, Loetscher 1952, Sick 1953, 1993, Haverschmidt 1955, 1961, 1968, Wetmore 1968 ¹, Salvador 1982, Kiff

and Williams 1978, de la Peña 1987, 1993, Payne 2005, Erritzøe et al. 2012, Salvador 2013. Brief mention of this cuckoo in studies of actual or potential hosts given by: Skutch 1969, Thomas 1983, Freed 1987 ²

TYRANNIDAE

White-headed Marsh-Tyrant, *Arundinicola leucocephala*

Slate-headed Tody-Tyrant, *Poecilotriccus sylvia*

tody-flycatcher, *Todirostrum* spp. * (Sick 1953, 1993 lists species as “apparently also” hosts)

flycatcher, *Myiozetetes* spp. * (Sick 1953, 1993 lists species as “apparently also” hosts)

FURNARIIDAE

Buff-fronted Foliage-Gleaner, *Philydor rufum*

Tufted Tit-Spintail, *Leptasthenura platensis*

Little Thornbird, *Phacellodomus sibilatrix*

Russet-fronted Thornbird, *Phacellodomus rufifrons*

Freckle-breasted Thornbird, *Phacellodomus striaticollis*

Greater Thornbird, *Phacellodomus ruber*

Red-eyed Thornbird, *Phacellodomus erythrophthalmus*

Short-billed Castanero, *Asthenes [pyrrholeuca] baeri*

Yellow-chinned Spinetail, *Certhiaxis cinnamomeus*

Chotoy Spinetail, *Schoeniophylax phryganophila*

Plain-crowned Spinetail, *Synallaxis gujanensis*

Slaty Spinetail, *Synallaxis brachyura*

Spix's Spinetail, *Synallaxis spixi*

Pale-breasted Spinetail, *Synallaxis albescens*

Sooty-fronted Spinetail, *Synallaxis frontalis*

Azara's Spinetail, *Synallaxis azarae* ³ (includes *superciliosa*)

Rufous-breasted Spinetail, *Synallaxis erythrothorax*

Stripe-breasted Spinetail, *Synallaxis cinnamomea*

TROGLODYTIDAE

Rufous-and-white Wren, *Thryothorus rufalbus*

Plain Wren, *Thryothorus modestus*

PASSERELLIDAE

Black-striped Sparrow, *Arremonops conirostris*

Dromococcyx

Dromococcyx Wied-Neuwied 1832, Beitrage zur Naturgeschichte von Brasil. 4 (1), p. 351.

Pheasant Cuckoo, *Dromococcyx phasianellus* (Spix) 1824 Avium Species Novae, quas in itinere per Brasiliam annis MDCCCXVII - MDCCCXX / collegit et descripsit ..., 1, p. 53, pl. 42.



Distribution. – Neotropics. General life history information found in Sick 1953, Sieving 1990, Payne 2005. First published record of this species being parasitic in 1914 (Friedmann 1965).



Host list. – Based on Sick 1993, Wilson 1992, Payne 2005, see also Schönwetter 1964⁴, Friedmann 1965.

TYRANNIDAE

Yellow-olive Flycatcher, *Tolmomyias sulphurescens* flycatcher, *Myiozetetes* spp. *

Eye-ringed Flatbill, *Rhynchocyclus brevirostris*

Pied Water-Tyrant, *Fluvicola pica*

THAMNOPHILIDAE

Barred Antshrike, *Thamnophilus doliatus*

Pavonine Cuckoo, *Dromococcyx pavoninus* Pelzel 1870 Zur Ornithologie Brasiliens; Resultate von Johann Nattersers Reisen in den Jahren 1817 bis 1835, 3, p. 270.

South America east of Andes.

General life history information found in Sick 1953⁵, Payne 2005, Sánchez-Martínez et al. 2017. First reported as parasitic in 1949 (Friedmann 1965)

Host list – Based on Makatsch 1971, Sick 1993, Sánchez-Martínez et al. 2017, see also Friedmann 1965, Payne 2005



TYRANNIDAE

Sepia-capped Flycatcher, *Leptopogon amaurocephalus*

Slaty-capped Flycatcher, *Leptopogon superciliaris*

Ochre-bellied Flycatcher, *Mionectes oleagineus*

Drab-breasted Pygmy-Tyrant, *Hemitriccus [diops] diops*

Ochre-faced Tody-Flycatcher, *Poecilotriccus [plumbeiceps] plumbeiceps*⁶

Eared Pygmy-Tyrant, *Myiornis [auricularis] auricularis*⁷

THAMNOPHILIDAE

Plain Antvireo, *Dysithamnus mentalis*



Acknowledgments. Illustrations and map distributions taken from accounts at Neotropical Birds Online (see Lowther 2009a, 2009b, 2009c). Photo credits:
Tapera naevia: Hacienda Vieja, Alajuela, Costa Rica; 15 Sep 2008 © Luis Vargas Durán
Dromococcyx phasianellus: Mata da Michelin, Ituberá, Bahia, Brazil; 5 Nov 2008 © Ciro Albano
Dromococcyx pavoninus: Vale da Benção - Chapada dos Guimarães, Mato Grosso, Brazil; 1 Sep 2008 © Bradley Davis
Maps provided by Robert S. Ridgely.

References:

- Ballarini, Y., D. R. De Souza and M. Â. Marini. 2022. Brood parasitism by the Striped Cuckoo (*Tapera naevia*) on the Rufous-fronted Thornbird (*Phacellodomus rufifrons*) in Brazil's Cerrado. *Wilson Journal of Ornithology* 134: 205-214.
- Belcher, C., and G. D. Smooker. 1936. Birds of the colony of Trinidad and Tobago, part 3. *Ibis*, series 13, vol 6: 1-35.
- Davis, D. E. 1940. A suggestion concerning territorialism in *Tapera naevia*. *Wilson Bulletin* 52: 208.
- de la Peña, R. M. 1987. Nidos y huevos de aves argentinas. Santa Fe, Argentina.
- de la Peña, R. M. 1993. Parasitismo del Crespín, *Tapera naevia chochi* (Vieillot, 1817) en la provincia de Santa Fe, República Argentina. *Nótulas Faunísticas* 37: 1-4.
- Erritzøe, J., C. F. Mann, F. Brammer and R. A. Fuller. 2012. Cuckoos of the world. Christopher Helm, London, UK.
- Freed, L. A. 1987. Rufous-and-white Wrens kill House Wrens nestlings during a food shortage. *Condor* 89: 195-197.
- Friedmann, H. 1933. A contribution to the life history of the Crespín or Four-winged Cuckoo, *Tapera naevia*. *Ibis* (series 13) 3: 532-538.
- Friedmann, H. 1965. The history of our knowledge of avian brood parasitism. *Centaurus* 10: 282-304.
- Haverschmidt, F. 1955. Beobachtungen an *Tapera naevia* und ihren Wirtsvögeln in Surinam. *Journal für Ornithologie* 96: 337-343.
- Haverschmidt, F. 1961. Der Kuckuck *Tapera naevia* and seine Wirte in Surinam. *Journal für Ornithologie* 102: 353-359.
- Haverschmidt, F. 1968. Birds of Surinam. Oliver & Boyd, Edinburgh, UK.
- Kiff, L. F., and A. W. Williams. 1978. Host records for the Striped Cuckoo from Costa Rica. *Wilson Bulletin* 90: 138-139.
- Loetscher, F. W., Jr. 1952. Striped Cuckoo fed by Rufous-and-white Wren in Panamá. *Condor* 54: 169.
- Lowther, P. E. 2009a. Striped Cuckoo (*Tapera naevia*), Neotropical Birds Online (T. S. Schulenberg, ed.). Cornell Laboratory of Ornithology, Ithaca, NY; retrieved from: http://neotropical.birds.cornell.edu/portal/species/overview?p_p_spp=24014
currently available as
Lowther, P. E. 2020. Striped Cuckoo (*Tapera naevia*), version 1.0. In Birds of the World (T. S. Schulenberg, ed.). Cornell Lab of Ornithology, Ithaca, NY, <https://doi.org/10.2173/bow.strcuc1.01>
- Lowther, P. E. 2009b. Pheasant Cuckoo (*Dromococcyx phasianellus*), Neotropical Birds Online (T. S. Schulenberg, ed.), Cornell Laboratory of Ornithology, Ithaca, NY; retrieved from http://neotropical.birds.cornell.edu/portal/species/overview?p_p_spp=24182
currently available as
Lowther, P. E. 2020. Pheasant Cuckoo (*Dromococcyx phasianellus*), version 1.0. In Birds of the World (T. S. Schulenberg, Editor). Cornell Lab of Ornithology, Ithaca, NY, <https://doi.org/10.2173/bow.phecuc1.01>
- Lowther, P. E. 2009c. Pavonine Cuckoo (*Dromococcyx pavoninus*), Neotropical Birds Online (T. S. Schulenberg, ed.), Cornell Laboratory of Ornithology, Ithaca, NY; retrieved from http://neotropical.birds.cornell.edu/portal/species/overview?p_p_spp=24350
currently available as

- Lowther, P. E. 2020. Pavonine Cuckoo (*Dromococcyx pavoninus*), version 1.0. In Birds of the World (T. S. Schulenberg, Editor). Cornell Lab of Ornithology, Ithaca, NY, <https://doi.org/10.2173/bow.pavcuc1.01>
- Makatsch, W. 1971. Einige Bemerkungen über die parasitären Kuckucke. Zoologische Abhandlungen, Staatlichen Museum für Tierkunde in Dresden 30: 247-283.
- Mark, M. M., and N. A. Gamez-Rugama. 2015. Social interactions between adult and juvenile Striped Cuckoos (*Tapera naevia*). Wilson Journal of Ornithology 127: 127-131.
- Morton, E. S., and S. M. Farabaugh. 1979. Infanticide and other adaptations of the nestling Striped Cuckoo *Tapera naeva*. Ibis 121: 212-213.
- Payne, R. B. 2005. The cuckoos. Oxford Univ. Press, New York, NY.
- Pulgarín-R., P. C., J. Cardona-Duque and S. A. Llano-C. 2007. *Synallaxis azarae*: hospedero del cuco parásito *Tapera naevia* en el sur del Valle de Aburrá. Boletín SAO 17: 56-58.
- Salvador, S. A. 1982. Estudio de parasitismo del crespín *Tapera naevia chochi* (Vieillot) (Aves: Cuculidae). Historia Natural 2: 65-70.
- Salvador, S. A. 2013. El espinero chico (*Phacellodomus sibilatrix*) un nuevo hospedante del crespín (*Tapera naevia*). Revista Nuestras Aves 58: 58-59.
- Sánchez-Martínez, M. A., S. David, G. A. Londoño and S. K. Robinson. 2017. Brood parasitism by the enigmatic and rare Pavonine Cuckoo in Amazonian Peru. Auk 134: 330-339.
- Schönwetter, M. 1964. Handbuch der Oologie. Band I (Nonpasseres). Lieferungen 9. Akademie-Verlag, Berlin.
- Sick, H. 1953. Zur Kenntnis der brasilianischen Lerchenkuckucke *Tapera* und *Dromococcyx*. Bonner Zoologische Beiträge 4: 305-326.
- Sick, H. 1993. Birds in Brazil. A natural history. Princeton Univ. Press, Princeton, NJ.
- Sieving, K. E. 1990. Pheasant Cuckoo foraging behavior, with notes on habits and possible social organization in Panama. Journal of Field Ornithology 61: 41-46.
- Skutch, A. F. 1969. A study of the Rufous-fronted Thornbird and associated birds. Wilson Bulletin 81: 5-43, 123-139.
- Snethlage, E. 1913. Über die Verbreitung der Vogelarten in Unteramazonien. Journal für Ornithologie 61: 469-539.
- Snethlage, E. 1935. Beiträge zur Brutbiologie brasilianischer Vögel. Journal für Ornithologie 83: 1-24.
- Thomas, B. T. 1983. The Rufous-fronted Thornbird [*Phacellodomus rufifrons*]: nest construction, material choice, and nest defense behavior. Wilson Bulletin 95: 106-117.
- Wetmore, A. 1968. The birds of the Republic of Panama. Part 2 – Columbidae (pigeons) to Picadae (woodpeckers). Smithsonian Miscellaneous Collection 150, part 2.
- Wilson, R. G. 1992. Parasitism of Yellow-olive Flycatcher by the Pheasant Cuckoo. Euphonia 1: 34-36.

Notes:

1. **Wetmore 1968** references paper given 24 Aug 1967 at 85th Stated Meeting of the American Ornithologists' Union at Toronto, ON; proceedings published in **The Auk** (Auk 85: 109, 1968):
Hugh C. Land, Department of Biological Sciences, Northwestern State College, Natchitoches, Louisiana. Nest parasitism of the Striped Cuckoo, *Tapera naevia*, on the Rufous-breasted Spinetail, *Synallaxis erythrothorax*.

Abstract from meeting's Abstract Book presented below:
Nest parasitism of the Striped Cuckoo on the Rufous-brested [sic] Spinetail. HUGH C. LAND, Department of biological Sciences, Northwestern State College, Natchitoches, Louisiana.
It is well known that the Old World Cuckoos, subfamily Cuculinae, are nest parasites, none of them building their own nest or raising their own young. Lesser known is the fact that a few Neotropical cuckoos of the subfamily Neomorphinae are also parasitic. One of these, the Striped Cuckoo (*Tapera naevia*) often chooses as a host a member of the Furnariidae, the Rufous-breasted Spinetail (*Synallaxis erythrothorax*). The evidence for this is discussed and a motion picture sequence shows the brushland habitat of the Rufous-breasted Spinetail, the construction of its bulky nest, and the entrance of a Striped Cuckoo into the nest, although no egg was actually laid. The background sound includes the song of the Rufous-breasted Spinetail; photographs and sound recordings were made in the Caribbean Lowlands in northern Guatemala.
2. **Freed 1987: 196**: "Striped Cuckoos (*Tapera naevia*) perched at the entrance of nest boxes [used by House Wrens, *Troglodytes aedon*] during other months and years but did not destroy eggs or nestlings in nests at which they were observed. There was no evidence of brood parasitism during the study."
3. Includes the *supercilliosa* subspecies group which is sometimes considered separate species – "Buff-browed Spinetail"
4. **Schönwetter 1964: 576**:
"Nun werden wir uns aber ganz ähnlich ein Ei vorzustellen haben, welches Dr. EMILLIE SNETHLAGE (J. f. Orn. 1913 [sic ? = J. f. Orn. 1935]) ins Nest von *Myiozetetes* fand, ähnlich dessen Eiern, aber doch abweichend, so daß sie es

für eines von *Tapera* hielt. Diese Art besitzt jedoch unzweifelhaft nur einfarbigweiße oder blaßbläuliche Eier, scheidet also aus. Ein der ersten Beschreibung vollkommen entsprechendes und der zweiten nicht widersprechendes, nur etwas größeres Ei meiner Sammlung kam zusammen mit einem von *Thamnophilus doliatus intermedius* aus San Pedro (Honduras), 20. 4. 1891, von diesem gänzlich abweichend, obwohl nicht als andere Art bezeichnet. Ich halte es für *Dromococcyx*, da kein weiterer Kuckuck in Frage kommt und für einen solchen nicht nur Gestalt, Korn und Schalengewicht sprechen, sondern auch der Gesamteindruck, der an den der trübrotlichen Eitypen von *Cuculus canorus bakeri* erinnert."

Snethlage 1913 makes no mention of the breeding biology of either *Tapera* nor *Myiozetetes*; it may be that Schönwetter 1964 intended reference to Snethlage 1935:

Snethlage (1935: 14):

"Ich habe Grund, anzunehmen, daß der Sacy, obgleich er den *Synallaxis*-Nestern den Vorzug gibt, auch andern Vögeln seine Eier unterschiebt. Ich sah ihn höchst verdächtig um ein Nest des *Myiozetetes cayanensis* beschäftigt, das leider außerhalb meiner Reichweite befestigt war. Ein anderes Mal sah ich ein Nest derselben Art, das zwei Eier enthielt, die von denen des Erbauers abwichen, trotzdem eine gewisse Aehnlichkeit in ihrem Aeußeren vorhanden war. Da aber keine andern Eier daneben lagen, handelte es sich diesmal vielleicht um das Gelege eines andern halbparasitischen Vogels. Ich traf auch einmal einen Sacy, der sich tagelang in der Nähe des Nestes eines *Todirostrum sylvia* schlüpfte, eines kleinen Verwandten unseres *Ferreirinho*, aufhielt und dort sang. Der *Todirostrum* macht ein verhältnismäßig großes Taschennest. Bei meinem ersten Besuch war das Nest noch im Bau, bei meinem zweiten fand ich ein weißes, fein rot punktiertes Ei wie das des *Todirostrum* schudzi, aber von der Größe desjenigen des Sacy darin. Beim dritten Besuch war das Nest noch wohl erhalten, aber Ei, *Ferreirinho* und Sacy waren verschwunden."

5. **Sick 1953: 324:** "Herr Schönwetter vermutet *D. phasianellus* in einem Gelege von *Thamnophilus doliatus* aus Honduras und *D. pavoninus* in 3 Formicariiden-Gelegen aus Ecuador (Schönwetter in litt.)."
6. Formerly placed in *Todirostrum*
7. *Myiornis* sometimes merged into *Hemitriccus*

* Tody-Tyrants include the genus *Todirostrum* (formerly sensu strictu 15 species; presently 7 species) and *Poecilotriccus* (12 species) and ##; *Myiozetetes* includes following 4 species: *M. cayanensis*, *M. similis*, *M. granadensis*, *M. luteiventris*

Mark, M. M. 2006. The effects of nest parasitism by *Tapera naevia* on two species of wren, *Thryothorus rufalbus* and *Thryothorus modestus*, in a modified landscape in Nicaragua [abstract], IV North American Ornithological Congress, 3-7 Oct 2006, Veracruz, Mexico.

Mark, M. M., SUNY Stony Brook, Stony Brook, United States, mark.melissa@gmail.com

THE EFFECTS OF NEST PARASITISM BY *TAPERA NAEVIA* ON TWO SPECIES OF WREN, *THRYOTHORUS RUFALBUS* AND *THRYOTHORUS MODESTUS*, IN A MODIFIED LANDSCAPE IN NICARAGUA.

We examined the impacts of nest parasitism by the Striped Cuckoo, *Tapera naevia* on nest success in two of its documented host species, *Thryothorus modestus* and *Thryothorus rufalbus*. These two species differ in their distribution in forest vs. human-altered habitats and so provide an instructive comparison of habitat use patterns and rates of nest parasitism in a modified landscape. Recent studies have shown that the relationship between forest fragmentation and nest success in temperate birds may be scale dependent. In this study nest parasitism across habitat types was compared at three scales: nest site, territory site, and local landscape. Nest parasitism on *T. rufalbus* was significantly greater than that on *T. modestus* across all scales. Nest parasitism had the greatest negative impact on *T. rufalbus* on nest site located in coffee and in territory sites neighboring coffee or agricultural fields. The rate of nest parasitism on *T. rufalbus* decreased as distance of the territory from agricultural fields increased. At the local landscape level, the proportion of agricultural fields was positively correlated with higher rates of nest parasitism. A more complicated relationship emerged between the proportion and distribution of shade coffee and rates of nest parasitism. No nest parasitism occurred in *T. modestus*

LOS EFECTOS DEL PARASITISMO DEL NIDO DE *TAPERA NAEVIA* EN DOS ESPECIES DE TROGLODITIDA, *THRYOTHORUS RUFALBUS* Y *THRYOTHORUS MODESTUS*, EN UN PAISAJE MODIFICADO

Examinamos los impactos del parasitismo del nido del Striped Cuckoo, *Tapera naevia* en el éxito del nido en dos especies de pájaros que han reportado como hospederos, *Thryothorus modestus* y *Thryothorus rufalbus*. Ambas especies son diferentes en sus usos de hábitat modificado por las actividades humanas, y una comparación de las pautas de uso de hábitat y el nivel de parasitismo entre las dos especies será instructiva. Recientemente, algunos estudios han *mostrado* que la relación entre fragmentación y éxito del nido depende en la escala del estudio. En este estudio comparamos parasitismo del nido de los hábitats en tres escalas: la escala del nido, la escala del territorio, y la escala del paisaje. Parasitismo del nido ha tenido el impacto negativo lo mas profundo en los nido de *T. rufalbus* localizado en café de sombra y en territorios a la orilla de café o agrícola. El nivel de parasitismo del nido en *T. rufalbus* ha bajado cuando la distancia del territorio de agrícola se aumento. Al nivel del paisaje, la proporción de agrícola tenía una correlación con un nivel de parasitismo más alto. No hubo parasitismo en ni un hábitat por *T. modestus*. Una relación mas complicado existe entre la proporción y distribución de café de sombra y el nivel de parasitismo del nido.