

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

Peter E. Lowther, *Field Museum*

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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 1968¹, 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 1987²



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-Spinetail, *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 phryganophilus*

Plain-crowned Spinetail, *Synallaxis gujanensis*

Slaty Spinetail, *Synallaxis brachyura*

Spix's Spinetail, *Synallaxis spixii*

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
Brasilium annias MDCCCVII -
MDCCCXX / collegit et descriptis
..., 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* Pelzeln 1870

Zur
Ornithologie Brasiliens; Resultate von Johann Natterers 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.

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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-breasted [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 *superciliosa* 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 trübrötlichen 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 Ähnlichkeit in ihrem Aeußerem 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 schsdzi*, 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.

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THE EFFECTS OF NEST PARASITISM BY TAPERA NAEVIA ON TWO SPECIES OF WREN, THRYOTHORUS RUFAALBUS 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 RUFAALBUS 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 nidos 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 aumentó. 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.