M-M-Maybe you just ain't seen Nutting yet? Steve N. G. Howell

Few, if any, families of Neotropical birds seem likely to hold more unrecognised or 'new' species than the Tyrannidae, or tyrant flycatchers. Within this diverse assemblage, vocalisations often hold the key to distinguishing similar species and have proven time and again the key to identifying the existence of cryptic species. Although the genus *Myiarchus* has been fairly well studied it still contains unresolved taxonomic issues, even in areas as 'well known' as Mexico and Central America. Here the author highlights a previously unrecognised potential split in Nutting's Flycatcher.

mong the huge New World family of tyrant flycatchers, the genus Myiarchus contains numerous similar-looking species which are frequently most easily distinguished by voice. Species limits for most Myiarchus appear to be fairly well established, not least through the extensive work of Wesley E. (Bud) Lanyon^{3,4}, who ably demonstrated the importance of vocalisations for species recognition in this genus⁵. Six well-defined species of Myiarchus are generally recognised as occurring in Mexico and northern Central America¹, including the widespread Nutting's Flycatcher M. nuttingi, which is represented by three subspecies. M. n. inquietus occurs from northern Mexico south to Chiapas, with M. n. flavidior along the Pacific coastal slope from south-east Oaxaca state, Mexico, south to Costa Rica, and M. n. nuttingi of the interior valleys from Chiapas south to north-west Costa Rica⁴.

Recent field observations in south-west Chiapas, Mexico, indicate that two populations of vocally distinct 'Nutting's' Flycatchers occur in close proximity and in appreciably different habitats (Figs. 1–2). These appear to correspond to the described taxa *inquietus / nuttingi* and *flavidior*. In the following, references to xenocanto (www.xeno-canto.org) catalogue numbers in the text are prefaced by XC.

The typical vocalisations of *inquietus* are those described by Howell & Webb¹: the common call is an emphatic whistled *wheek!* (Fig. 3; cf. XC3982) and sometimes a doubled *kwee-wheek!* The dawn song is a somewhat rambling, varied series of notes incorporating versions of the *wheek!* call (as heard

on Keller²). Agitated birds give a querulous, rolled bicker that can be transcribed *kwiddik* or *quiddik-quiddik* (Fig. 4; cf. XC3982, XC31476). The habitat of *inquietus* is typically fairly dense deciduous thorn forest and oak-thorn scrub, often in hilly terrain, from near sea level to approximately 1,800 m elevation; *inquietus* rarely ventures into adjacent open areas. Birds in the interior of central Chiapas sound similar (pers. obs.) and have been considered as nominate *nuttingi* or as intergrades between *nuttingi* and *inquietus*⁴.

On 14 March 2000, while driving with Dan Lane along a dirt road near Puerto Arista, Chiapas, I heard an unfamiliar but loud 'flycatcher' call and immediately pulled over. The vocalising bird was a Myiarchus flycatcher, perched in the open on a fencepost in a sparse hedgerow. It looked more like a 'Nutting's' than anything else and after watching and tape-recording it (XC28755) we pigeonholed it into that species, despite the 'atypical' vocalisations and habitat. On 20 March 2000, we found several inquietus in Oaxaca state which did not respond to the recordings from Puerto Arista. On 24 March 2000 we relocated the 'atypical' Nutting's and confirmed our impressions, followed by seeing and hearing 'typical' Nutting's in the foothills above Arriaga, Chiapas (25 March 2000), and at El Sumidero Canyon, Chiapas (26 March 2000).

On 5 March 2007, Chris Wood and I again found 'atypical' Nutting's in the same location near Puerto Arista (15°86'85"N 93°67'74"W), confirming that they did not respond to calls of *inquietus* but did to their own calls. On 16 March 2010, Rich Hoyer and I found three different 'atypical' Nutting's on the coastal plain near Puerto Arista (16°00'32"N 93°75'63"W), some 20 km (as the flycatcher flies) from the 2000 and 2007 observations. Again, they responded to calls of the birds from March 2000 but ignored those of *inquietus*. Conversely, on 17 March 2010, presumed *inquietus* in the foothills inland of Arriaga (16°32'24"N 93°87'16"W; within sight of the coastal plain) exhibited no response to the coastal plain birds but responded to *inquietus* calls.

The taxon of Nutting's Flycatcher in the coastal plain around Puerto Arista is flavidior, which, as well as differing in voice from *inquietus*, inhabits open hedgerows in pastureland-a habitat quite distinct from the closed thorn forest inhabited by inquietus (Figs. 1-2). Moreover, on all visits the *flavidior* gave no vocalisations that resembled those of *inquietus*. Instead, they gave a slurred, slightly emphatic *wh'beehr* call (Fig. 5; cf. XC28755), vaguely reminiscent of a common call of Cassin's Kingbird Tyrannus vociferans. Also given was a single syllable wheee (Fig. 5) lacking the emphatic quality of *inquietus*, and vaguely recalling an attenuated Dusky-capped Flycatcher *M. tuberculifer* call, a similarity noted by Lanyon⁴ (cf. recordings from El Salvador in Lanyon's Fig. 5; cf. XC 287489). The agitated call of *flavidior* was a distinctive, rapid-paced, slightly descending series of dee notes that vaguely recalled Northern Beardless Tyrannulet Camptostoma imberbe (Fig. 6; and also lower two rows of examples in Fig. 11 of Lanyon⁴) and nothing like the *kwiddik* call of *inquietus*. These striking vocal (and habitat) differences raise the question of whether *flavidior* and *inquietus* are even sister taxa, let alone conspecific!

In appearance, the presumed *flavidior* (Figs. 7–8) generally resembled *inquietus* (Figs. 9–10) but typically had slightly duller wingbars (dirty buff versus dull whitish), a brighter yellow belly, and slightly greyer face (especially the lores, at times producing an expression recalling Yucatán Flycatcher *M. yucatanensis*).

An obvious question is: why didn't Lanyon's study⁴ identify these two types? On re-reading that seminal work, it is clear that Lanyon was focused on establishing that Nutting's Flycatcher was not conspecific with Ash-throated Flycatcher *M. cinerascens*, which was far from universally accepted at the time. Lanyon⁴ found that Nutting's had many vocalisations not shared with Ashthroated, but he was not seeking differences *within* Nutting's. For example, it appears that Fig. 9 of Lanyon⁴ lumps the *wheek! (inquietus)* and *wheee (flavidior)* calls as examples of calls not given by Ash-throated.

A further complicating factor is the potential sympatry, or at least parapatry, of nuttingi and *flavidior* in various areas on the Pacific slope from Chiapas south to Costa Rica. Thus, it is possible that both types of 'Nutting's' (and thus two types of vocalisations) may occur in the same areas. Suggestions of intergradation between inquietus and flavidior in the Isthmus of Tehuantepec, presumably based on morphological features⁴, should be reinvestigated. Given the striking differences in voice, it may be that no intergradation actually occurs, cf. many old reports of widespread hybridisation between Ashthroated and Nutting's Flycatchers, which Lanyon⁴ demonstrated were unfounded. The classic flavidior vocalisations (wh'beehr, wheee and deedee-dee...) are shown in Lanyon's⁴ sonograms, but only from localities on the Pacific slope of Middle America. There is no evidence that inquietus makes such calls. From preliminary observations in the interior of Chiapas, presumed nuttingi sounds similar to *inquietus*, but further study from here and elsewhere in the range of nominate nuttingi could help to confirm this.

The observations detailed here suggest that two species of 'Nutting's Flycatcher' exist ostensibly alongside each other in western Chiapas (and perhaps elsewhere in northern Middle America). Critical observations and recordings in Central America could help to resolve this puzzle, and clarify whether or not this note is simply much ado about Nutting! If two species are recognised, Nutting's Flycatcher could be retained for the widespread inquietus / nuttingi group, and Ridgway's Flycatcher employed for *flavidior*, in recognition of Robert Ridgway's perspicacity in discerning that Nutting's Flycatcher was a species distinct from Ash-throated-an insight that required 80 years before it became universally accepted.

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Figure 1. Typical hilly thorn forest habitat of *inquietus* 'Nutting's' Flycatcher, km 35.5 above Arriaga, Chiapas, 17 March 2010 (Steve N. G. Howell)



Figure 2. Typical 'field and hedgerow' habitat of *flavidior* 'Nutting's' Flycatcher, near Puerto Arista, Chiapas, 16 March 2010 (Steve N. G. Howell)

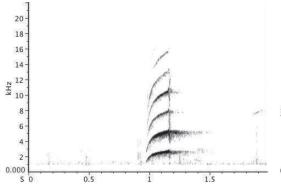


Figure 3. Classic *wheek!* call of *inquietus*, recorded at Barranca El Choncho, Jalisco, Mexico, 4 March 201, cf. Fig. 5; this call is not known from *flavidior* (Steve N. G. Howell)

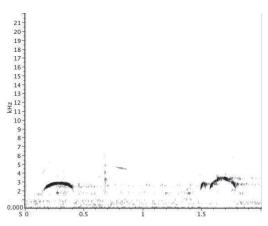


Figure 5. The wheee (at 0.3 seconds) and wh-beehr (at 1.5–1.8 seconds) calls of presumed *flavidior*, recorded near Puerto Arista, Chiapas, 16 March 2010, cf. Fig. 3; these calls are not known from *inquietus* (Steve N. G. Howell)

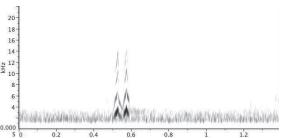


Figure 4. Classic agitated *kwiddik* call of *inquietus*, recorded above Arriaga, Chiapas, Mexico, 17 March 2010, cf. Fig. 6; this call is not known from *flavidior* (Steve N. G. Howell)

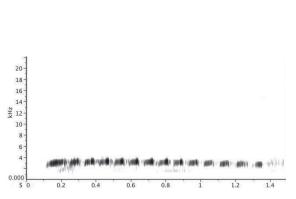


Figure 6. Agitated *dee-dee-dee...* call of presumed *flavidior*, recorded near Puerto Arista, Chiapas, 16 March 2010, cf. Fig. 4; this call is not known from *inquietus* (Steve N. G. Howell)



Figures 7–8. Presumed *Myiarchus nuttingi flavidior*, near Puerto Arista, Chiapas state, Mexico, 5 March 2007; tail pattern and blended rufous on secondaries much like *inquietus*, but wingbars slightly duller and lores slightly paler and greyer, both features more reminiscent of Yucatán Flycatcher *M. yucatanensis* (Steve N. G. Howell)



Figure 9. *Myiarchus nuttingi inquietus*, near Tehuantepec, Oaxaca state, Mexico, 18 March 2010; a 'typical' Nutting's Flycatcher in most of Mexico, note the whitish wingbars, blended rufous on secondaries and brownish face (Steve N. G. Howell)

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Figure 10. Myiarchus nuttingi inquietus, Cerro de San Juan, Nayarit state, Mexico, 19 January 2009; another 'typical' Nutting's Flycatcher, cf. Fig. 9 (Steve N. G. Howell)

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