

Neotropical swifts—the final frontier?

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Swifts pose one of the most fascinating but challenging identification problems in the Neotropics. In this article, the author, a leading proponent of field research to resolve such tricky issues, demonstrates how little we still know about these difficult-to-study birds, but describes how sound-recordings and digital photography can really help would-be observers get to grip with this tricky family.

Most birders visiting the Neotropics make an effort to see those species of swifts that 'should' be in the areas they visit, but how many of us really look for and at these supreme aerialists? Admittedly, it's not so easy when there are so many colourful birds to look at, but swifts offer some of the greatest challenges in bird identification—and new species may yet fly undescribed in the Neotropics. The widespread White-collared Swift *Streptoprocne zonaris* could comprise multiple species (based on morphology, voice, habitat and biogeography; pers. obs.), western and eastern populations of Andean Swift *Aeronautes andecolus* might best be treated as separate species, and one can only guess what else remains to be learned...

Among the most sought-after swifts are several species in the genus *Cypseloides*, including Spot-fronted *C. cherriei*, White-chinned *C. cryptus*, White-chested *C. lemosi* (described only in 1962) and the enigmatic White-fronted Swift *C. storeri* (described as recently as 1992). Even the relatively well-known Black Swift *C. niger* in North America appears variable (and not well understood) in terms of its age / sex variation⁵, whilst its moulting and wintering grounds are unknown—presumably somewhere in South America⁷.

This note is the sum of a few opportunistic observations in Mexico, Ecuador, Bolivia and Chile during recent years, and my hope is that it will prompt more birders to critically observe and document swifts on their travels. Simply getting good views of swifts is arguably the greatest challenge, and observing field marks on fast-flying birds can be almost impossible against the cloudy and often rainy skies that bring swifts low enough

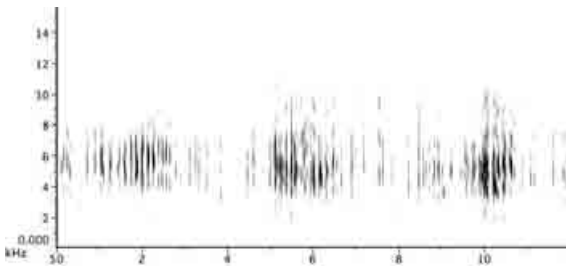


Figure 1. White-chinned Swift *Cypseloides cryptus* lacks any striking visual field marks but its relatively harsh, buzzy chatters, given in short bursts, are distinct from other known swifts (cf. this same vocalisation at www.xeno-canto.org/XC12874); Guacamayos ridge, Ecuador, 17 July 2002 (Steve N. G. Howell)

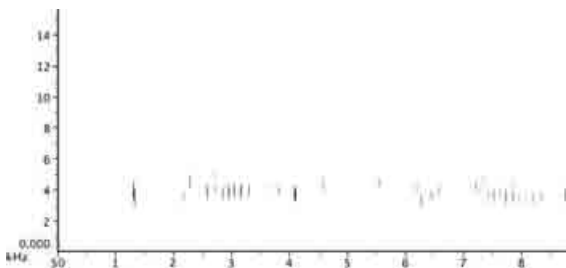


Figure 2. White-chested Swift *Cypseloides lemosi* is readily identified by sight, and its high, sharp, single chip notes (e.g., at 1.3 seconds and 4.1 seconds on this sonogram) and slightly rippling twitters (at 2.2–3.3 seconds and 7.2–8.4 seconds) suggest those of Black Swift *C. niger borealis* in North America, although perhaps average lower pitched (mainly 3.5–4.0 kHz on this White-chested vs. 4–5 kHz in Black Swifts in California; pers. obs.); Guacamayos ridge, Ecuador, 17 July 2002 (also cf. Lysinger *et al.*³) (Steve N. G. Howell)



Figures 3–5. Presumed female or immature presumed White-chested Swifts *Cypseloides lemosi* (cf. Eisenmann & Lehmann⁴). As well as having similar calls to Black Swift *C. niger borealis*, the heavily ‘fish-scaled’ underparts of female / immature White-chested are also similar to those of female / immature Black Swift. Note the fairly broad-based, sweptback wings, which suggest a Eurasian Hobby *Falco subbuteo*, and the squared to slightly notched tail tip. Also note how the white chest patch can appear as a partial collar, depending on the angle of view; Silanche Reserve, Ecuador, 15 February 2011 (Steve N. G. Howell)



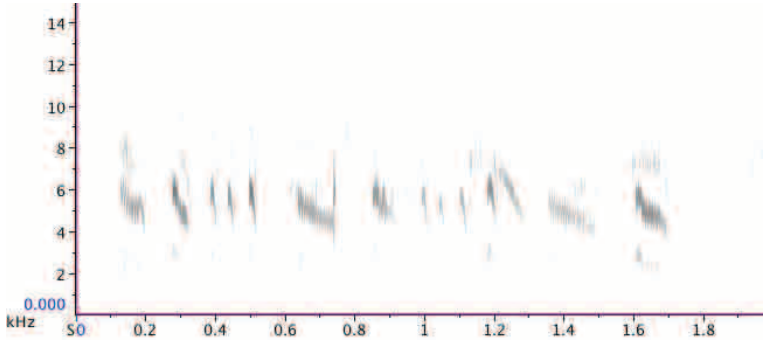
Figure 6 (left). Presumed female / immature Black Swift *Cypseloides niger borealis*, lacking the relatively long and distinctly forked tail typical of adult males; Monterey County, California, USA, 7 August 2010 (Steve N. G. Howell). Note the overall similarity in shape to White-chested Swift *C. lemosi* (Fig. 5). Black Swift presumably winters somewhere in South America, where it undergoes wing moult, perhaps mainly in November–March.

Figures 7–8 (centre and right). Adult White-chested Swifts *Cypseloides lemosi*, Silanche reserve, Ecuador, 15 February 2011 (Steve N. G. Howell). Observers familiar with Black Swift *C. niger borealis*, are likely to be struck by the similarity in shape and flight manner between White-chested and Black Swifts, although adult male White-chested may not have such long and forked tails as adult male Black. The apparent position of the white chest patch varies greatly with angle of view and at times can suggest the white collar of the much larger and longer winged White-collared Swift; note that the upper edge of the white is even but the lower edge is often irregular on White-chested, vs. a typically even lower edge but bulging upper edge to the collar on White-collared (Fig. 9).

for ‘mortals’ to see them. Digital images can help bring field marks to life, however, and with more birders looking and taking photographs (and making sound-recordings) our knowledge of field identification could improve—swiftly. Sonograms here were produced using RavenLite, with the same ‘spectrogram sharpness’ of 104 applied to all taxa.

In Ecuador, many swifts breed in the Andes and commute to the lowlands to feed, and this knowledge can help an observer to see different

species. Along the río Napo, e.g. at Yarina, Yuturi and Sacha lodges, all in Napo province, I have found that at least in July–August (from 1994 to 2003) several species (mainly White-collared and Chestnut-collared *Streptoprocne rutila*, but frequently also White-chested, and at least occasionally White-chinned⁶) typically appear overhead around 08h00–09h30, either feeding over clearings or heading elsewhere, with an apparent return movement towards the Andes in



Top two rows, clockwise from top left:

Figure 9. Adult White-collared Swift *Streptoprocne zonaris*, Silanche reserve, Ecuador, 15 February 2011 (Steve N. G. Howell). At this time (early-mid February), virtually all White-collared Swifts seen in north-west Ecuador showed mid-primary moult. The birds at Silanche looked 'huge' in contrast to White-collared Swifts seen over the Mindo area, and perhaps were altitudinal migrant *S. z. altissima* from the high Andes, which had 'leapfrogged' over the mid-elevation and appreciably smaller *S. z. subtropicalis*. As is so often the case, more data are needed, but digital images can help.

Figure 10. Adult presumed White-collared Swift *Streptoprocne zonaris*, Silanche reserve, Ecuador, 15 February 2011 (Steve N. G. Howell). Other birds at this stage of wing moult showed obvious tail forks (cf. Fig. 9), and the extent of the white collar on this bird is extreme.

Figure 11. Adult Chestnut-collared Swift *Streptoprocne rutila*, Silanche reserve, Ecuador, 15 February 2011 (Steve N. G. Howell). At this season (early-mid February), many adult Chestnut-collared Swifts (with obvious bright collars) in north-west Ecuador showed inner primary moult (cf. Fig. 14) and worn secondaries, like most White-collared Swifts *S. zonaris*, but unlike the fresh plumage of White-chested *Cypseloides lemosi* and Spot-fronted Swifts *C. cherriei*. Digital images offer an easy means to collect moult data on swifts, which might offer insights into differences between species and populations.

Figure 12. Unidentified swift, Silanche reserve, Ecuador, 15 February 2011 (Steve N. G. Howell). The relatively large head, short wings, and compact shape with a slightly rounded tail, in combination with a white vent band, appear incorrect for Chestnut-collared; might this be an immature or female White-chinned Swift *Cypseloides cryptus*?

Figure 13. Spot-fronted Swift *Cypseloides cherriei*, Tandayapa ridge, Ecuador, 29 July 2001 (Steve N. G. Howell). Alternation of buzzes and chips typically produces distinctive rhythmic series, often repeated two or more times in quick succession. A typical series (0.1–0.8 seconds on this sonogram) can be transliterated as *chirr chi-t-t-ti chirr*; at times the series' end with several sharp chips. These calls draw attention to birds high overhead and may recall the aggressive chatters of some *Selasphorus* hummingbirds. The calls I have heard from Spot-fronted sound ostensibly the same as those attributed to this species by Moore *et al.*⁴, although some have questioned that identification.

Bottom right:

Figure 14. Adult Chestnut-collared Swift *Streptoprocne rutila* seen with Spot-fronted Swifts *C. cherriei*, over Armenia, Pichincha province, Ecuador, 10 February 2011 (Steve N. G. Howell); note the obvious wing moult and notched tail.



Figures 15–17 (above, left to right). Spot-fronted Swift *Cypseloides cherriei*, Armenia, Pichincha province, Ecuador (Steve N. G. Howell). On the rainy mid afternoon of 10 February 2011, at least 8–10 Spot-fronted Swifts were feeding and chasing (giving their distinctive ‘chipping’ calls; Fig. 13) low over the road with 20+ Chestnut-collared Swifts *Streptoprocne rutila*. Note the stocky shape, squared tail and fresh plumage (birds seen in July 2001 were in mid-primary moult), as well as the obvious white face spots.

Figure 18 (left). Andean Swift *Aeronautes andecolus parvulus*, Azapa Valley, Chile, 7 November 2009 (Steve N. G. Howell); relative to nominate populations on the east slope of the Andes, western birds are smaller with relatively contrasting black-and-white plumage and a solid blackish belly band.

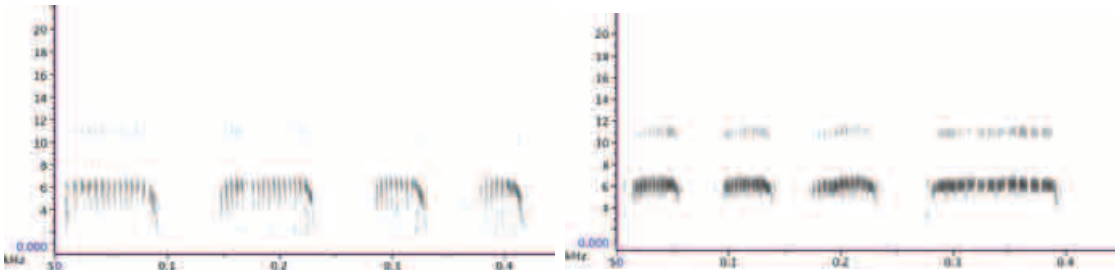


Figure 19 (left). Andean Swift *Aeronautes andecolus parvulus*, Lluta Valley, Chile, 30 August 1996 (Steve N. G. Howell). Relative to nominate *andecolus*, the calls of *parvulus* sound higher, faster and shriller. Note the striking difference in the number and structure of notes in the longer call phrases (e.g., 10–11 shorter notes / 0.05 seconds vs. 5–6 longer notes / 0.05 seconds in *andecolus*, cf. Fig. 20).

Figure 20 (right). Andean Swift *Aeronautes andecolus andecolus*, Cerro Tunari, Bolivia, 4 September 1996 (Steve N. G. Howell). Relative to the smaller west-slope taxon *parvulus*, the calls of nominate *andecolus* sound distinctly harsher and slower. Note the striking difference in the number and structure of notes in a call phrase, cf. Fig. 19.



Figure 21 (left). Adult Chestnut-collared Swift *Streptoprocne rutila*, Teotitlan del Valle, Oaxaca state, Mexico, 21 March 2010 (Steve N. G. Howell); unmistakable if seen well, but so often this species is high overhead when best located and identified by its distinctive, ‘electrical’, buzzy calls.

Figures 22–23 (centre and right). Unidentified swift, Teotitlan del Valle, Oaxaca state, Mexico, 21 March 2010 (Steve N. G. Howell); this bird was photographed among a flock of Chestnut-collared Swifts *Streptoprocne rutila*. While it might simply be a worn immature Chestnut-collared, the white forehead and relatively dark plumage (usually paler and browner on female / immature Chestnut-collared) suggests the possibility of the enigmatic White-fronted Swift *Cypseloides storeri*.

mid-late afternoon, usually from c.15h00. Good points to watch for swifts are the canopy towers at these lodges, or other areas with open skies such as lagoon edges and clearings.

The famous birding locale of Guacamayos ridge, also in Napo province, can be an excellent spot to see swifts as they apparently head to the lowlands. Morning passage over the pass by the radio antennas can be spectacular, with the main flights between 06h30 and 08h00, but seeing swifts well in the low cloud can be challenging and many are simply heard. Between 06h40 and 07h30, on 17 July 2002 I noted 50 White-chinned (Fig. 1), 100+ White-chested (Fig. 2), 50+ Chestnut-collared, 100+ White-collared and 50+ unidentified swifts; and on 16 July 2003, 6+ White-chested seen (others heard in the clouds), 200+ Chestnut-collared (in several flocks of 20–50 birds), 250 White-collared (in two large flocks) and 20+ unidentified swifts.

In western Ecuador, the tower at the Mindo Cloudforest Foundation's Silanche reserve, in Pichincha province, can make a productive watchpoint, especially on cloudy days. On the morning of 15 February 2011, I observed 10+ presumed White-chested Swifts flying around the tower for over an hour (Figs. 3–5, 7–8). This appears to be the first documented record of White-chested Swift from western Ecuador, although the type and other specimens of the species are from south-west Colombia¹. Also present were White-collared (Figs. 9–10), Chestnut-collared (Fig. 11), the 'expected' Gray-rumped Swifts *Chaetura cinereiventris occidentalis* and Lesser Swallow-tailed Swifts *Panyptila cayennensis*, and several unidentified swifts, perhaps White-chinned (Fig. 12). The Tandayapa Ridge, Pichincha province, can be good in early morning, especially at 07h30–09h00, when observers should listen for Spot-fronted Swift (Fig. 13), which associates readily with flocks of the typically more numerous Chestnut-collared Swift (Fig. 14). At times, mainly in rainy and cloudy conditions, Spot-fronted Swifts can be seen low over the road or even over towns, when their 'headlights' are fairly obvious (Figs. 15–17).

Despite being defined by the Andes, Chile is depauperate in swifts, although the striking Andean Swift can be found readily in the northern desert valleys of the Lluta and Azapa rivers (Fig. 18). Birds range down to feed over these valleys from presumed breeding sites in the cordillera, with flocks usually appearing in the lowlands by

08h00–09h00, where they often remain for most of the day. These are of the western taxon *parvulus*, which differs from east Andean populations (nominate *andecolus*) in their smaller size, different tail structure and plumage, and in their shriller, faster-paced vocalisations (Figs. 19–20). Such differences suggest these might best be treated as separate species, but critical studies are needed, including of the third described taxon, *peruvianus*.

Despite many years birding in Mexico, I have not found any consistently good areas for swifts, except in summer and autumn in the vicinity of waterfalls in the central volcanic belt, such as around Tacámbaro, Michoacán state, where White-fronted Swift may be found², and Temascaltepec, México state. Early morning is usually the best time to obtain prolonged and good views, before birds disperse widely for a day of foraging. Elsewhere in Mexico, swifts can be found almost anywhere by chance, depending on local weather conditions (Figs. 21–23).

ACKNOWLEDGEMENTS

I thank Jon Feenstra, Rich Hoyer, Tony Nunnery and Barbara Bolz for company in the field, WINGS for continued support of my 'peregrinations', and Nathan Pieplow for assistance in digitising recordings.

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