A sight record of the White-fronted Swift *Cypseloides storeri* in Michoacán, Mexico

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Cypseloides storeri, un endemismo del sudoeste mexicano, es conocido sólo por el especímen tipo, colectado el 2 de septiembre de 1983 en Guerrero[7], tres especímenes de las cercanías de Tacámbaro (sin fechas)[7], y un especímen momificado de Jalisco en 1990 (que se presume fue muerto entre mayo y septiembre[9]). No se han encontrado nidos y sólo existen registros bien documentadas para julio y septiembre. El 12 de septiembre de 1995, los autores observaron un ave que se cree de esta especie con otros vencejos 6.5 km al sur de Tacámbaro, Michoacán, a 1,200 m. Se describe la observación y se compara con información sobre *C. storeri* disponible en la literatura y museos, así como con especies que potencialmente puedan crear confusión. El plumaje pardo negruzco, ápices blancuzcos en la cola, secundarias y algunas plumas de contorno, y la falta de una cara blancuzca distintiva en el ave de Tacámbaro, sugieren que era un juvenil, mientras su cabeza grande, silueta mas gruesa, cola corta y cuadrada, y vuelo rápido, oscilante y pesado, fueron los que se esperaban de los datos biométricos publicados para *C. cryptus*[6].

Introduction

Swifts, particularly of the New World genus *Cypseloides*, are among the least-known of all birds. White-fronted Swift was described recently as a full species, *Cypseloides storeri*, endemic to south-west Mexico[7]. Confusingly and without comment, this form was subsequently called White-faced Swift[8]. The basis for *storeri* being a species distinct from the morphologically very similar White-chinned Swift *C. cryptus* has been questioned[4]. Consequently, Howell & Webb[5] considered *storeri* a race of White-chinned Swift and noted "Critical studies may show *storeri* to be a good species, endemic to [south-west] Mexico, but based on present information we consider its recognition as a species premature."

Regardless of its taxonomic status, for more information to be gathered about *storeri*, observers need to be able to identify it. No documented field observations of *storeri* are known to us. Navarro *et al.*[7] reported that in October 1990, near Tacámbaro, Michoacán (whence come three of the five specimens of *storeri*), four swifts were seen which they "believe ... belong to the new species", and Navarro *et al.*[8] noted vaguely that *storeri* may have been flushed on occasions from a waterfall in Jalisco (no dates or supporting details provided). Thus, the in-flight identification of *storeri* has not been discussed in the literature. Field identification criteria for *C. cryptus*, which occurs from Belize to South America, are also inadequate in the available literature[2,5,10], because authors and illustrators have little or no critical field experience with the species away from nesting colonies[6].

Details of a swift believed to be *C. storeri*, observed near Tacámbaro, Michoacán, are reported here. The bird's structure, size, plumage, and flight manner relative to other swifts present is discussed. It is hoped this will prompt further critical observations in Mexico, and elsewhere, so that more may be learned about status and distribution of *Cypseloides* swifts.

Observation and description

On 12 September 1995, a flock of c.100 swifts was watched flying low over hills and fields bisected by a narrow, steep-sided canyon, 6.5 km south of Tacámbaro, Michoacán, at 1,200 m. The flock comprised 80–90 Chestnut-collared Swifts *C. rutilus*, four Black Swifts *C. niger*, a single Vaux's Swift *Chaetura vauxi* and a bird presumed to be *C. storeri*.

The last was watched from 07h05 to 08h05 under excellent viewing conditions as the flock remained in the same area; it frequently flew within 40–50 m of us against a largely cloudy sky and vegetated hillside. Often the bird flew in association with single or small groups of *C. rutilus* so that repeated comparisons of size, shape, and flight manner could be made. Views ranged from directly overhead to slightly below us over the lower slopes.

The bird's shape initially led SNGH to notice it among the *C. rutilus*: it appeared larger headed, fatter bodied (especially noticeable behind the wings), broader winged but with a narrower wing base, and, most obviously, had a relatively shorter and broader, square-tipped tail. Figure 1, based on field sketches made at the time, illustrates these differences in comparison with *C. rutilus*. Note the smaller head, slimmer body, narrower and more sickle-like but broader-based wings, and longer, narrower tail of *C. rutilus*. The tails of *C. rutilus* often appeared slightly notched when closed, and rounded when spread, and were often fanned widely when gliding or circling. In contrast, the tail of the presumed *C.*

storeri was broad and square ended, and was not spread or only very slightly spread in gliding. The wings of the presumed *C. storeri* showed a more distinct notch on the trailing edge near the tip than did the *C. rutilus*. The overall shape differences were consistent and distinct, and enabled all three observers to repeatedly find the presumed *C. storeri* among the surrounding *C. rutilus*.

The bird's colour was overall dark sooty brown, similar to an immature or juvenile *C. rutilus*, and not the darker, blackish brown of an adult *C. rutilus* or *C. niger*. We noted a narrow whitish tip to the tail and a narrow whitish trailing edge to the secondaries and possibly innermost primaries, most distinct when backlit, and, during close views against the hillside, there appeared to be narrow whitish tips to some upperwing coverts and undertail coverts. On several occasions the bird flew towards us against the hillside but we were unable to see a 'white front', although this is noticeable on *C. niger* in similar conditions. The forehead appeared slightly paler brown than the rest of the face, but this was also true of the brown-plumaged *C. rutilus* present.

The size (overall length and wingspan) of the presumed *C. storeri* appeared very similar to *C. rutilus*, not larger as we had expected. The flight was typically direct and heavy, without frequent or abrupt changes in direction, consisting of rapid, almost hurried-looking wingbeats broken by occasional brief glides and once a glide of c. 50 m; the wings were slightly bowed below the body plane, similar to *C. rutilus* or *Chaetura vauxi*, when gliding. In numerous direct comparisons we did not detect a noticeably different rate of wingbeats between *C. rutilus* and the presumed *C. storeri*, but the former glided more frequently and for longer distances, often changed direction more abruptly, and often circled, fanning their tails.

The four *C. niger* which joined the flock briefly were obviously larger and longer winged than the *C. rutilus* and the presumed *C. storeri*. They had relatively narrow, sickle-shaped wings, long tails, especially an adult male (sexed by its distinctly forked tail), and flew with unhurried wingbeats and prolonged glides typical of this species[5], quite unlike the presumed *C. storeri*. These birds' large size suggests they may have been transient *C. n. borealis* from North America rather than the smaller *C. n. costaricensis* which nests in Middle America. Webster[12] clarified that *C. niger* nesting in Mexico were referrable to *costaricensis* rather than *borealis*, *contra* Friedmann *et al*.[3] and A.O.U.[1]

The presumed *C. storeri* differed from *Chaetura* swifts (*Chaetura vauxi* and Chimney *C. pelagica*) in its shape and uniformly sooty brown plumage, lacking any paleness on the throat or rump.

Discussion

That the bird described above was distinct in appearance from all other species of Mexican swifts, with which we are very familiar, and that it was at a known location for *storeri*, lead us to believe that it was a *C. storeri*.

Its large head, thickset shape, short square-ended tail, and rapid, fluttery, heavy-bodied flight were what would be expected from the biometrics of *C. cryptus* overall size, the same as *C. rutilus*, surprised us. However, statements that *C. cryptus* is a medium-sized swift like *C. niger* (e.g. Marin & Stiles[6]) refer to mass (35 g for both vs. 20 g for *C. rutilus*), not linear dimensions. This mass for *C. niger* refers to *C. n. costaricensis*; *C. n. borealis* weigh ± 45 g (C. T. Collins pers. comm.). Wing chord measurements for seven of 12 *C. cryptus* and the smallest of four *storeri* specimens overlap at ± 13 cm with six of 18 *C. rutilus* (Figure 2 of Navarro *et al*.[8]). Measurements in Howell & Webb[5] for wingspan (33–35.5 cm for *C. cryptus* vs. 30.5–33 cm for *C. rutilus*) and total length (14–15 cm vs. 12.5–14 cm) also indicate overlap, although White-chinned Swifts average larger, e.g. mean wingspan of c.34 cm vs. 31 cm (Table 3 of Marin & Stiles[6]).

Given the Tacámbaro bird's sooty brown plumage, whitish tipping to the tail, secondaries and some contour feathers, and lack of a distinct whitish face we suspect it was a juvenile. These plumage characters accord with those of juvenile *C. cryptus* in Costa Rica[6,10] and also may account for the bird's relatively small size. The lack of wing moult, which would be expected in September on post-breeding adults in Costa Rica[6] also suggest the Tacámbaro bird may have been a juvenile. (In September 1995, obvious primary moult was apparent on 60–80% of 150+ presumed locally breeding *C. rutilus*, 1,000+ White-naped *Streptoprocne semicollaris*, and eight Great Swallow-tailed Swifts *Panyptila sanctihieronymi* seen by the authors in western Mexico.)

Thus, observers looking for *C. storeri* should not necessarily look for a bird which appears distinctly larger than *C. rutilus* (as does *C. niger*). In Costa Rica, *C. cryptus* forage singly or in small groups and occasionally join flocks of *C. rutilus*[6]. Flocks of *C. rutilus* should be scrutinised carefully in western Mexico. From our experience, it appears that, in life, *C. storeri* is unlikely to be confused in size, shape, or flight manner with *C. niger*; Marin & Stiles[6] noted parallel and distinct differences between *C. cryptus* and *C. niger* in Costa Rica.

Although Navarro *et al*.[8] suggested that *storeri* is a resident breeder in Mexico, it can be surmised

from Navarro *et al.*[7,8] only that *storeri* is known from the type-specimen, collected 2 September 1983 in Guerrero, three specimens from near Tacámbaro (no dates provided), and a mummified specimen from Jalisco in 1990 (presumed to have died between May and September[9]). No nest of *storeri* has been found. The three specimens from near Tacámbaro were collected on 10 July 1979 (A. R. Phillips *in litt.*). Data from the label of one of these specimens (ARP original no. 11,312) include the following: immature (?), immature ovary (?), no brood patch, length 151 mm [+; all rectrices pin feathers], extent 350± mm [+], shot 18h15, weight 1 hr 20 mins later 40.1 g; rather little fat (thin layer over body); moult on top and sides of head and neck, and wings and tail (A. R. Phillips *in litt.*). These data for age, gonads and lack of brood patch indicate that it was not nesting in July, but all rectrices being pin feathers suggests the bird was a recently fledged juvenile. This attests to the value of specimens collected by reliable ornithologists who take extensive information to offset the killing of a bird. While we suspect that *storeri* may be found nesting in western Mexico (a theory supported by the specimen data noted above), it may not be resident within its range. That we saw only one individual, probably a juvenile, suggests other birds may have left the area. Further, the type-specimen, collected at night in September clinging to a wet towel, may have been a disoriented migrant and/or juvenile, since resident swifts tend to have traditional roost sites (pers. obs.).

There are well-documented records of *storeri* in Mexico only for July and September. Observers seeking this enigmatic bird should look near waterfalls in interior south-west Mexico. May to September is probably the best season, and early morning and late afternoon (cf. collection time for the specimen discussed above) would be the best times of day.

Much remains to be learned of the seasonal distributions of New World swifts, such as the recent conclusion that *C. niger* probably winter in South America[5,11]. It is hoped that the identification criteria discussed here will help observers contribute meaningful data about the status and distribution of *C. storeri*.

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