

A nest of the Spot-fronted Swift *Cypseloides cherriei* in eastern Ecuador

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Among the most poorly known species in South America is the Spot-fronted Swift *Cypseloides cherriei*. Originally described from Costa Rica 110 years ago (Ridgway 1893), it was considered to be confined to a single locality there for over 50 years (Peters 1940) until specimens were reported from Colombia and Venezuela (Zimmer 1945, Beebe 1949). Whilst its range is now known to extend to both slopes of the Andes in northern Ecuador (del Hoyo *et al.* 1999, Ridgley & Greenfield 2001), its distribution is disjunct and poorly understood. Little has been reported concerning the behaviour of Spot-fronted Swift in Ecuador (but see Moore *et al.* 1999, Ridgley & Greenfield 2001, Howell 2002), and the only reports of breeding activity are from Rancho Grande in Venezuela (Collins 1980) and central Costa Rica (Marín & Stiles 1992). Here I present observations of Spot-fronted Swift in north-east Ecuador.

Observations were made at Cabañas San Isidro preserve, in Napo province, c.3 km west of Cosanga and adjacent to the Yanayacu Biological Station & Center for Creative Studies (00°35'S, 77°53'W). The preserve encompasses primary and disturbed forest at 2,000–2,500 m in elevation and experiences a wetter season from roughly February to July. Whilst bird watchers and ornithologists have appreciated the uniqueness of this area for nearly 20 years, little has been published about the site and ornithological studies have only recently drawn more attention to its avifauna (Greeney 2002, Dobbs *et al.* 2003, Price 2003, Greeney *et al.* 2004).

On 27 May 2002 at 1300 h an adult Spot-fronted Swift was found sitting in a seemingly completed but empty nest in the relatively level area of primary forest west of the Cosanga River at 2,050 m. The nest was within a small cave created by a pile of large boulders through which a small stream was running. Overall, the cave was c.3 m high at the highest point and accessible from three entrances, each c.1.5 m high and 1.5–2.5 m wide. The nest had been constructed on top of an old Chestnut-collared Swift *Cypseloides rutilus* nest that had successfully fledged two young the previous October (Greeney unpubl. data). It was 1.5 m above the stream, 35 cm from the top of the cave at this point, and located on an outward-curving rock face. It was slightly smaller than the remnants of the Chestnut-collared Swift nest, which created a platform to support the new nest. The nest was a shallow cup formed entirely of fresh green mosses, lichens, liverworts and pieces of ferns. Unfortunately the nest was found destroyed two weeks later and no further observations were possible.

The cave where this nest was found has been used for breeding over the past four years by Chestnut-collared Swifts (Greeney unpubl. data). This species breeds in August–January in the area, roughly corresponding to the drier months. This, and other similar nesting sites of the Chestnut-collared Swift are used as roosting sites throughout the year. The exact nest site of the Spot-fronted Swift was re-used in September–December 2002 and 2003 by a pair of Chestnut-collared Swifts. It is unknown whether Chestnut-collared Swifts were using this cave as a roost in May 2002, but no other active nests were found.

Collins (1980) noted the proximity of Spot-fronted Swift nests to those of Chestnut-collared Swift nests in Venezuela. Breeding activity for both species was recorded in the wet season in that area (Beebe & Crane 1947, Collins 1980). Chestnut-collared Swifts breed during the dry season in this area of north-east Ecuador (Greeney unpubl. data), whereas all previous studies have indicated the species to breed in the wet season (Snow 1962, Collins 1968, Marín & Stiles 1992). The nest of Spot-fronted Swift observed here was during the wet season. Work on swiftlets (Collocalia) in Indonesia suggested that species sharing roost sites used foraging times as a resource-partitioning mechanism (Medway 1962, Harrison 1974). Whilst both of the *Cypseloides* swifts discussed here are often seen foraging together in Ecuador (Howell 2002, M. Lysinger pers. comm.), and Collins (1980) suggested a similar resource-partitioning hypothesis for observations in Venezuela (Beebe 1949, Schäfer & Phelps 1954), the information presented here suggests a different ecological relationship between these congeners in our area. My observations warrant further investigation of possible niche partitioning for these species in north-east Ecuador and point to the need for basic natural history and observational studies on these and many other Neotropical birds.

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References:

- Beebe, W. 1949. The swifts of Rancho Grande, north-central Venezuela with special reference to migration. *Zoologica* 34: 53–62.
- Beebe, W. & Crane, J. 1947. Ecology of Rancho Grande, a subtropical cloud forest in northern Venezuela. *Zoologica* 32: 43–66.
- Collins, C. T. 1968. The comparative biology of two species of swifts in Trinidad, West Indies. *Bull. Florida State Mus.* 11: 257–320.
- Collins, C. T. 1980. The biology of the Spot-fronted Swift in Venezuela. *Amer. Birds* 34: 852–855.
- Dobbs, R. C., Greeney, H. F. & Martin, P. R. 2003. The nest, nesting behavior, and foraging ecology of the Rusty-winged Barbtail (*Premnornis guttuligera*). *Wilson Bull.* 115: 367–373.

- Greeney, H. F. 2002. First description of the nest for the Bicolored Antvireo (*Dysithamnus occidentalis*), with notes on its behavior in eastern Ecuador. *Orn. Neotrop.* 13: 297–299.
- Greeney, H. F., Hannelly, E. C. & Lysinger, M. 2004. First description of the nest and vocalisations of the Peruvian Antpitta *Grallaricula peruviana* with a northward range extension. *Cotinga* 21: 14–17.
- Harrison, T. 1974. The food of *Collocalia* swiftlets (Aves, Apodidae) at Niah Great Cave in Borneo. *J. Bombay Nat. His. Soc.* 71: 376–393.
- Howell, S. N. G. 2002. Additional information on the birds of Ecuador. *Cotinga* 18: 62–65.
- del Hoyo, J., Elliott, A. & Sargatal, J. (eds.) 1999. *Handbook of the birds of the world*, vol. 5. Lynx Edicions, Barcelona.
- Marín A., M. & Stiles, F. G. 1992. On the biology of five species of swifts (Apodidae, Cypseloidinae) in Costa Rica. *Proc. West. Found. Vert. Zool.* 4: 286–357.
- Medway, Lord. 1962. The swiftlets (*Collocalia*) of Niah Cave, Sarawak. *Ibis* 104: 228–245.
- Moore, J. V., Coopmans, P., Ridgely, R. S. & Lysinger, M. (1999) *The birds of northwest Ecuador*, 1. J. V. Moore Nature Recordings, San Jose, CA.
- Peters, J. L. 1940. *Check-list of birds of the world*, vol. 4. Harvard Univ. Press, Cambridge, MA.
- Price, E. R. 2003. First description of the nest, eggs, hatchlings, and incubation behavior of the White-bellied Antpitta (*Grallaria hypoleuca*). *Orn. Neotrop.* 14: 535–539.
- Ridgway, R. 1893. Descriptions of two supposed new species of swifts. *Proc. U.S. Natl. Mus.* 16: 43–44.
- Ridgely, R. S. & Greenfield, P. J. 2001. *The birds of Ecuador*. Cornell Univ. Press, Ithaca, NY.
- Schäfer, E. & Phelps, W. H. 1954. Las aves del parque nacional “Henri Pittier” (Rancho Grande) y sus funciones ecologicas. *Bol. Soc. Ven. Cienc. Nat.* 83: 1–167.
- Snow, D. W. 1962. Notes on the biology of Trinidad swifts. *Zoologica* 47: 129–139.
- Zimmer, J. T. 1945. A new swift from Central and South America. *Auk* 62: 586–592.

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