## CARIBBEAN RECORDS OF LONG-TAILED JAEGER STERCORARIUS LONGICAUDUS FROM COSTA RICA

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In Costa Rica the Long-tailed Jaeger Stercorarius longicaudus is only known from a single specimen collected in the Papagayo Gulf on the Pacific coast in 1974 (Stiles & Skutch 1989). Its migration routes are poorly known (Furness 1996), and it is possible that migration occurs more commonly via the Pacific than the Atlantic ocean, because the greatest winter concentrations are on the Pacific side of Antartica and the south of Argentina, close to Magallanes Narrow (Harrison 1983, Howell & Webb 1995, Furness 1996). In the Caribbean Sea this jaeger is a rare visitor, recorded by a few observations—two in Cuba (Garrido & Kirkconnell 2000), two in Venezuela (Hilty & Meyer de Schauensee 2003), and one in Puerto Rico (Raffaele 1989). Here, we report the presence of the Long-tailed Jaeger on the Caribbean coast of Costa Rica based on a partial skeleton and one specimen.

Both records are from Tortuguero, Limón (10°33'N, 83°30'W) located on the north Caribbean coast of Costa Rica. The first record was an immature male (240 g) found on the beach, exhausted, on 7 March 1997. The bird died five days after it was encountered, and was deposited in the Zoological Museum of Universidad de Costa Rica (UCR3919). This bird was a juvenile male with lightmorph plumage. The shafts of primaries were whitish, the leg and foot were black, and the interdigital web was black with a yellow window between the bases of toes two and three. The standard tail length was 141 mm and wing cord was 127 mm.

The second record is from a skull and tarsus, with a foot attached, that were found on the beach on 26 March 2009. The body parts occurred together, partially buried in the sand. The skull was composed of only the upper part of the bill and was completely clean (without soft tissue or feathers). The feet were completely covered by skin, which was light grey in colour with a whitish

patch in the middle of the interdigital membrane. The remains are currently held at the Zoological Museum of Universidad de Costa Rica. We identified the species by comparing the skull measurements from jaeger specimens in the Museo de Zoología, Universidad de Costa Rica (UCR) and the Museo Nacional de Costa Rica (NMCR). The nail of our skull covered approximately 58% of the upper bill, and the measures are more similar to the Long-tailed than the Parasitic *S. parasiticus* or Pomarine *S. pomarinus* jaegers (Table 1). The small tarsus size of the Tortuguero specimen (Table 1) also supports the identification.

Possibly Costa Rican individuals are vagrant birds, which get lost and die during migration to the summer grounds. Some reports suggest prolonged migratory movements without feeding (Dean *et al.* 1976). Due to the scarcity of records of Long-tailed Jaegers for the Caribbean area, studies are needed to understand the migratory routes and of this species during the south to north migration (Wiley & Lee 1998), which are poorly known (Furness 1996). More observations during migration periods (March to May; Harrison 1983 Furness 1996) may demonstrate that some individuals use the Caribbean Sea regularly in returning to the summer grounds.

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TABLE 1

Measures (mean ± SD mm) of bill and tarsus from all jaeger specimens collected in Costa Rica, and the jaeger skull and foot collected in Tortuguero

Species	Tarsus	Culmen	Bill nail	Catalogue number
S. pomarinus (n = 3)	$53.4 \pm 3.8$	$38.4 \pm 0.1$	$19.8 \pm 0.1$	NMCR27026, UCR3321,UCR2716
S. longicaudus	40.5	26.9	13.5	UCR1243
S. longicaudus <sup>a</sup>	43.5	28.6	14.4	UCR3919
Skull and foot <sup>a</sup>	40.2	29.6	17.2	none
S. parasiticus (n = 1)	51.4	34.9	18.4	NMCR24455

<sup>&</sup>lt;sup>a</sup> New records of Long-tailed Jaegers in Costa Rica reported here.

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