

rusty brown and almost devoid of spots^{3,12}. *G. costaricanum* takes more birds than other pygmy owls, as well as insects and lizards¹². On 24 April 2011, I observed a single *G. costaricanum* near San Gerardo Field Station, Bosque Eterno de los Niños, prov. Alajuela (10°35'80.57"N 84°79'34.02"W). It was vocalising 16 m up in a tree beside a road. Thereafter, I observed this species twice more in the same general area. On 16 July 2011, I observed one at the same location following playback, and on 11 January 2013 I observed one in Santa Elena Cloud Forest Preserve, prov. Alajuela (10°34'54.76"N 84°79'30.58"W). These sightings extend the species' range c.62 km north-west and are the first records in the Cordillera de Tilarán. They also explain why other species in this area react aggressively to playback of the pygmy owl's voice. Although the darker morph is considered 'normal'¹², there appears to be geographical variation as to which morph is commoner. In the Cordillera de Talamanca just 15% of my records of this species (40 total) were 'rufous morph', whereas in the Cordillera Central 60% (25 total) were 'rufous morph'. All observations in the Cordillera de Tilarán pertained to the so-called 'normal morph'. Differences in the relative abundance of colour morphs by geographic location have been reported in other owl species⁸.

I have observed this species hunting on four occasions, three times successfully, and I also observed the species with prey on another four occasions. Prey consisted of three Ruddy-capped Nightingale-Thrushes *Catharus frontzii*, a Rufous-collared Sparrow *Zonotrichia capensis* and three small rodents. Foraging technique was similar to published information¹². The owls would drop from a rather low perch (2–6 m) above ground in a near-vertical attack. When successful, the owl would remain on the ground for 1–2 minutes before flying to a nearby perch, always higher than the original one, presumably waiting for prey to die first.

New distributional, dietary and nesting data for an owl and two diurnal raptors in Costa Rica

Costa Rican Pygmy Owl *Glaucidium costaricanum*

Costa Rican Pygmy Owl is a regional endemic restricted to the Cordillera Central and Cordillera de Talamanca in Costa Rica, as well as the latter range in western Panama^{3,12}. The species has two distinct colour morphs: the 'normal morph', which is dark brown with white spots, and a 'rufous morph' that is mostly

Crested Caracara *Caracara cheriway*

This species is well known for being curious and is considered a dietary opportunist^{1,9,13}, leading it to exploit apparently unusual resources. They commonly feed on carrion^{10–12} often patrolling paved roads for dead animals, but will also kill live prey^{10,12,13} as well as feed on fruit⁵. Inter- and intra-specific kleptoparasitism is also commonly observed amongst Crested Caracaras^{4,10}. On 13 April 2001 I observed two *C. cheriway* (an adult and a juvenile) opening enlarged galls on the stems of short (40–60 cm) woody *Sida* sp. (Malvaceae) plants to feed on the larvae inside, 7 km north-west of Liberia, prov. Guanacaste (10°68'23.80"S 85°48'40.61"W). Observations were made at close range, from c.10 m. The adult caracara would select a stem with a gall, bend it over and hold it down using one foot, then rip the gall open with its bill and eat the single larva (c.2–3 cm long). During ten minutes of observation, the adult opened eight galls and the juvenile three, with the latter apparently not as adept in this behaviour as the adult.

Grey-lined Hawk *Buteo nitidus*

Until recently, Grey-lined Hawk and Grey Hawk *B. plagiatus* were considered conspecific under *B. nitidus*, but were split in 2012^{2,7}. Research using museum specimens revealed differences between the two populations and plumage discontinuity occurs coincident with the gap in their distributions in Costa Rica^{6,12}. Although the range of *B. plagiatus* is restricted to north-west Costa Rica, and *B. nitidus* occurs across the rest of the country, the true range of the latter in Costa Rica is still poorly understood, perhaps because most local birdwatchers' sole source of information is out-of-date field guides, meaning they are still unaware of the revised taxonomy. The southernmost record of *B. plagiatus* is 10 km north-west of Palmar Sur, Osa, prov. Puntarenas (09°03'23.67"N 83°59'84.44"W) and the northernmost record of *B. nitidus* is near Piedras

Blancas, Osa, prov. Puntarenas (08°78'23.13"N 83°23'86.56"W), leaving just 42 km between the two species. On 21 July 2013 I observed an adult *B. nitidus* carrying prey to a nest-like structure 12 m above ground in the upper third of a lone *Carapa guianensis* tree, with another individual perched nearby, possibly indicating the presence of young in the nest. I observed this probable nest near La Gamba, Osa, prov. Puntarenas (08°71'67.24"N 83°19'71.26"W). On 15 and 19 May 2014 I observed two birds carrying nest material near Dos Brazos del Río Tigre, Osa, prov. Puntarenas (08°53'37.59"N 83°38'41.82"W), which is also the first record on the Osa Peninsula.

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