

Nature Notes

Insights into the Reproductive Ecology of the Critically Endangered Trinidad Piping-Guan, *Pipile pipile* Revealed Through Camera Trapping

The Trinidad Piping-Guan (or Pawi), *Pipile pipile*, (family Cracidae) is a species endemic to the island of Trinidad (Hayes *et al.* 2009). It plays an important role in large seed dispersal, and is important economically for ecotourism (Naranjit 2012). The species is classified as critically endangered by the International Union for the Conservation of Nature's Red List (Birdlife International 2018), with estimates of the population being between 77 and 231 individuals (Hayes *et al.* 2009). Though the species is protected under the Conservation of Wildlife Act in Trinidad and Tobago (Chapter 67:01), and is also designated as an Environmentally Sensitive Species, habitat destruction and illegal hunting may continue to adversely affect the species, as well as efforts to conserve the remaining population and aid in the species' recovery (Nelson *et al.* 2011).

A major constraint has been a general lack of knowledge on the species itself (Nelson *et al.* 2011, Alexander 2002). Studies have concentrated on feeding and behavioural ecology (Alexander 2002; Hayes *et al.* 2009; Naranjit 2012), with limited information on their reproduction. Naranjit (2012) confirmed a protracted breeding season and that nesting appears to be low to the ground, with 2-3 cream-coloured eggs being produced. Three 2-3 day old chicks were also observed following an adult along the ground in February of 2007 (Naranjit, 2012).

Here, I add to the observation of parents accompanying chicks on the ground. During the National Wildlife Survey component of the National Restoration, Carbon Sequestration, Wildlife, and Livelihoods Project initiated by the Environmental Management Authority, an adult Pawi with chick were pictured by one of the Reconyx HC600 cameras deployed in the proposed Matura National Park (Fig. 1). The picture was taken on 24 March 2017 at 5:13pm. In the first picture the adult bird was seen walking on the ground up a hill with the chick about half a metre behind. Before the birds go out of frame the chick is very close to the adult, taking shelter under the tail feathers. These individuals were in primary forest at an elevation of about 325m above sea level, between the Grande Riviere and Zagaya Rivers. It would appear that this habitat is suitable for their reproduction, and that, like other cracid species, there is significant parental care and investment of young chicks (Delacour and Amadon 2004). The photo capture reveals that adults and young spend some time on the ground, perhaps engaging in foraging. That nests have been observed close to the ground may facilitate fledging young's access to the ground, where they at least spend some of their time before returning to trees. This may



Fig. 1. Adult Pawi and chick pictured in the Matura National Park, 24 March 2017.

also leave them more vulnerable to predation, and these insights provide valuable information which can be used to further the conservation and recovery of this critically endangered species.

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