

Roadside Hawk *Rupornis magnirostris* predated a Bogota Rail *Rallus semiplumbeus*, an endemic and Endangered species of Colombia

Bogota Rail *Rallus semiplumbeus* is endemic to Colombia and has a very restricted range of c.730 km² on the Cundinamarca–Boyacá plateau in the East Andes¹. It occurs at 2,500–4,000 m in wetlands with dense, tall reeds and floating vegetation at their edges^{1,6}. Due to intensive drainage, pollution and fragmentation of wetland habitats in this region prior to the 1940s, the species has lost c.90% of its original habitat and it is listed as Endangered¹. Although some data concerning its natural history are available^{1,6}, the bird's ecology remains poorly understood, including its relationships with syntopic rails, waders, other waterfowl, and also with potential predators.

R. semiplumbeus is locally common in some wetlands around Bogotá¹. Probably one of the most important populations is at 'Humedal La Conejera' Natural Reserve⁶. The frequency of sightings makes this reserve a highly suitable place to undertake ecological and natural history studies on this rail. Here we present the first confirmed record of predation on *R. semiplumbeus* and also discuss the information available for the predator, Roadside Hawk *Rupornis magnirostris*, based on an observation at this reserve, which is situated at 2,596 m (04°45'42.1"N 74°6'20.4"W).

Our observation was made on 22 February 2011 at 11h06, when a *R. semiplumbeus* started making frequent alarm-calls from within a patch of California bulrushes *Schoenoplectus californicus*. At 11h08 several other species also started alarm-calling including Common Gallinule *Gallinula galeata*, Spot-flanked Gallinule *G. melanops*, American Coot *Fulica americana*, Great Thrush *Turdus fusater*, Yellow-hooded Blackbird *Chrysomus icterocephalus* and Rufous-collared Sparrow *Zonotrichia capensis*. Others like

Blue-winged Teal *Anas discors* and Ruddy Duck *Oxyura jamaicensis* sought refuge in dense vegetation. At 11h12 we noticed an adult *R. magnirostris* perched on a fence post plucking a dead adult *R. semiplumbeus*; the fence was in an open area dominated by flooded pastures, herbaceous plants and emergent vegetation, near tall bulrushes where the other *R. semiplumbeus* was still calling. When we attempted to photograph the raptor it flew to a plantation, probably searching for a taller tree on which to consume its prey. At 11h21 the other birds resumed their activities, and at 11h37 the *R. semiplumbeus* ceased vocalising, 31 minutes after the predation event.

This is the first record of predation on *R. semiplumbeus*. Potential predators could include mammals such as Long-tailed Weasel *Mustela frenata*, White-eared Opossum *Didelphis albiventris* and Black Rat *Rattus rattus*. Our observation reveals that common raptors also pose a threat to *R. semiplumbeus*. We can infer that birds such as Great Egret *Ardea alba* and Black-crowned Night Heron *Nycticorax nycticorax* may also pose a similar threat as already documented for three railbirds in North America^{2,4,8}. Gulls (*Larus* spp.) and even large passerines (e.g. *Lanius* spp.) can also predate *Rallus*, *Laterallus* and *Porzana* rails⁴.

The diet of *R. magnirostris* includes insects (especially Orthoptera), frogs and rodents, with fishes, bats and small birds less frequently taken^{5,7,9}. Although this raptor mainly takes small prey^{7,9}, our record shows that this c.45-cm long bird can predate birds more than half its size (*R. semiplumbeus* is 25 cm long). Such behaviour could indicate searching for a higher caloric reward, as was suggested for Tiny Hawk *Accipiter superciliosus*, a hummingbird-specialised raptor that was observed attacking a Golden-green Woodpecker *Piculus chrysochloros*³.

Although *R. semiplumbeus* commonly forages in the open in

undisturbed wetlands, it tends to be more secretive in urban wetlands like 'La Conejera' (where dogs, people and houses are nearby). Taking into account the habits and location of the raptor, the rail was probably predated while in an open area. Due to fragmentation of the original cover, rails and other aquatic birds may be forced to cross open areas in urban wetlands, increasing the probability of their being predated. If a low area of dense cover increases predation rates⁴, a taller cover and connectivity of bulrush patches could offset the risk. Because habitat degradation has severely reduced the original cover at all wetlands on the Cundinamarca–Boyacá plateau^{1,6}, we recommend increasing the connectivity of bulrush patches through habitat restoration as a small-scale conservation measure for *R. semiplumbeus*.

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