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Notes on the Uniform Crake in Costa Rica.—Although the Uniform Crake (*Amaurolimnas concolor*) is found from Mexico to Bolivia and Brazil, and formerly occurred on Jamaica, virtually nothing is known of its habits. During fieldwork in 1971–1973 at Finca La Selva, in the wet lowlands of NE Costa Rica, I obtained information on the behavior and vocalization of this elusive bird, as well as the first unequivocal data on nesting of the species.

Although not reported for La Selva by Slud (Bull. Am. Mus. Nat. Hist. 121:49, 1960), the Uniform Crake is fairly common in forested swamps, heavy vine-tangled thickets along forested streams and in dense second growth adjoining forest, especially favoring the maze of hanging dead and decaying leaves in *Heliconia* thickets (cf. also Orians and Paulson, Condor 71:426, 1969; Kiff, Condor 77:101, 1975). In these dense, tangled habitats, the birds are not particularly shy and may approach a motionless observer closely, but seldom leave the densest available cover.

In life, *A. concolor* resembles a diminutive wood-rail (*Aramides* sp.) in build, posture and soft-part colors: red iris, greenish-yellow bill and orange to reddish legs. The bird usually has an erect stance and walks with head high and tail cocked, except while foraging. The tail may be pumped in agitation and is carried low as the bird scurries, mouse-like, across an opening. The birds forage deliberately, walking slowly and pecking into leaf litter, hanging dead leaves and detritus. Apparently they also dig in soft mud, as I have observed birds with obviously muddy beaks on several occasions. I have seen Uniform Crakes seize, beat and swallow spiders (Lycosidae), a very small frog (*Eleutherodactylus* sp.) and a small lizard (*Anolis* sp.), which was killed with a few swift pecks, then swallowed headfirst.

Like *Aramides* wood-rails, the Uniform Crake possesses loud, arresting whistled calls that often provide the only clue to its presence. To date I have noted the following vocalizations:

(a) A series of 6–9 clear, upslurred whistles, in which successive notes first become louder and higher pitched, then accelerate, drop in pitch and fade away—*tooeee*, *Tooeee*, *Toooeee*, *TOOOEEE*, *Tooee*, *tooee-tuee-tui*. A bird giving this call was often answered by another some distance away. I could often decoy single birds to within 1–2 m by imitating it; this call is probably a territorial advertisement or “song.” At very high intensities (as when answering my imitation at very close range), the loudest notes of the call often had a flutelike break in the middle: *toourlee*, etc.

(b) At close range in the last-mentioned situations a soft, low-pitched, pigeon-like *cuuuuuuu* is audible, possibly an aggressive note.

(c) Two birds, perhaps a mated pair, may call back and forth with one or several clear, not very loud, whistled *toooo* notes, either level in pitch or slightly downslurred.

(d) A sharp, nasal *kek* is given by a startled bird.

The loud “song” of *A. concolor* was heard at La Selva chiefly from late August to December, which is probably the breeding season. On 14 November 1973, I found a nest with eggs in an area where I had seen and heard much *A. concolor* activity in the preceding 2 months.

The nest consisted of a loose cup of leaves filling a hollow in the top of a vine-covered stump beside a seldom used trail in a small treefall clearing in swamp forest. The stump was about 5 m from a stream, and 1 m from the nearest dense thicket, into which the adult bird flushed from the nest promptly disappeared, allowing a brief glimpse of reddish-brown plumage and orange legs. The nest contained 4 slightly incubated, sub-elliptical, slightly glossy eggs (set no. 78177 of the Western Foundation of Vertebrate Zoology). The ground color of the eggs is pale buffy, marked mostly near the large end with bold superficial reddish-brown splotches and subsurface spots and blotches of grey and purplish-brown. Measurements (length and largest diameter) and dry shell weights of each egg are: 33.40×26.11 mm, 0.774 g; 44.41×25.90 mm, 0.740 g; 33.28×26.18 mm, 0.789 g; and 33.60×25.74 mm, 0.675 g.

The first description of a putative *A. concolor* egg (from Brazil) was by Nehr Korn (Katalog der Eiersammlung nebst Beschreibungen der Aussereuropäischen Eier von Adolf Nehr Korn, 11 Auflage, R. Friedländer und Sohn, Berlin, 1910): "reddish-grey with very sparse violet and rust-brown flecks, 33×26.5 mm" (translation mine). The measurements, but not the colors, fit the set described here. Schonwetter (Handbuch der Oologie, Lieferung 5, Akademie-verlag, Berlin, 1961) repeated Nehr Korn's description but could not locate the egg in question, which is probably lost. Bond (Birds of the West Indies, Waverly Press, Baltimore, Maryland, 1936) wrote of *A. concolor* that "the egg of the continental form is said to be ash-grey with a reddish tinge, speckled dusky (34×31.5 mm)." This description was not repeated in later editions of Bond's book, and its original source is unknown; since neither colors nor measurements agree with the present set, the identification was probably erroneous. Finally, Wetmore (Birds of the Republic of Panama, Pt. 1, Smithsonian Misc. Coll. Vol. 150, 1965) described eggs he believed to pertain to *A. concolor* collected on Isla San José, in the Las Perlas Archipelago off the Pacific coast of Panama on 1 September 1944. The description, measurements and date agree well with the present set, but as the eggs had been picked up by a worker who stated only that they "had been found in a low nest," the identification clearly required corroboration.

The eggs of *A. concolor* are quite similar to those of *Rallus* spp. and *Aramides* spp., but differ markedly in these respects from eggs of *Laterallus* spp. or *Porzana* spp. Behavior and vocalizations of *Amaurolimnas* also indicate close affinities with *Aramides*, as suggested by Olson (Wilson Bull. 85:381, 1973). Peters (Birds of the World, Vol. 2, Harvard Univ. Press, Cambridge, Massachusetts, 1934) had placed *Amaurolimnas* among a group of probably unrelated Old World genera. Ripley (Rails of the World, David Godine, Boston, Massachusetts, 1977) recognized an *Amaurolimnas-Aramides* relationship by lumping both into the Old World *Eulabeornis*. Relationships to Old World rails are beyond the scope of the present paper, but my observations definitely support the conclusion that *Aramides* is the closest relative of *Amaurolimnas*.

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