

THE DISPLAY OF THE YELLOW-BILLED COTINGA
CARPODECTES ANTONIAE

Among the very few birds of the tropical forest with practically pure white plumage are the three snowy cotingas. The Snowy Cotinga *Carpodectes nitidus* inhabits the Caribbean lowlands of Central America from Honduras to western Panamá. The Yellow-billed Cotinga *C. antoniae*, differing from the preceding chiefly in its lighter bill, is confined to the Pacific side of the continent in southern Costa Rica and adjacent parts of Panamá. The Black-tipped Cotinga *C. hopkei*, distinguished by the black spots on the ends of the primaries and four middle rectrices, occurs in western Colombia and Ecuador. The females and young of all these cotingas are brownish grey above, lighter below. Some systematists classify the three forms in a single species. The courtship and nesting of these birds of warm, wet forests have apparently never been described.

In 1940, while engaged in field work near Santa Rosa at the head of the Térraba Valley, about 2,500 ft. a.s.l., I saw a good deal of a male Yellow-billed Cotinga and frequently watched what was evidently his simple courtship display. This bird had several favourite stations: the dead top of a great living tree just within the edge of the forest on the ridge behind my cabin; a tall, slender, dead tree in the clearing close to this forest; and another dead tree at the edge of the forest far across the cleared valley of the Río Pacuar. In March and April, he was usually to be found during the early morning on one or another of these trees. I often watched him fly conspicuously from one to another; and I never noticed a white cotinga in two of these trees simultaneously.

In sharp contrast to such noisy cotingas as bellbirds *Procnias* and pihas *Lipaugus*, this Yellow-billed Cotinga was always silent. If he had any note, I failed to detect it during the four months when we were neighbours. As he perched on some slender bare branch projecting above the roof of the forest, his pure white form was conspicuous against the blue sky at so great a distance that the utterance of a sound to advertise his presence might have been a superfluous waste of energy. Usually he rested in his high treetops in silent inactivity, but from time to time he would suddenly fly in a deep catenary loop from one dead branch to another in the same treetop. Sometimes he would sidle a short distance along his perch. Then of a sudden he would fly several

hundred yards across the clearing to another of his stations, there to repeat his display; or else he would fly beyond sight over the undulating green roof of the forest. His flight was swift and direct. As May advanced, he displayed more seldom.

The arrival of a second male Yellow-billed Cotinga on 3 April provided further evidence that the first claimed as his display territory trees hundreds of yards apart. I watched one male, doubtless the resident bird, chase the other swiftly from the ridge behind the cabin, where two of the display trees were situated, to the forest on the steep slope across the valley of the Pacuar, where the third display tree stood. Here the pursuit continued back and forth above the treetops, so far away that an eight-inch bird with less gleaming plumage might have been invisible. Finally both cotingas vanished behind the ridge. The bigger Three-wattled Bellbird *Procnias tricarunculata* is more modest in his territorial claims.

I saw no female until 27 April, after which she was sighted repeatedly; but no evidence of nesting was noticed. This locality at the northern foot of the coastal range is the only spot where I have seen Yellow-billed Cotingas during my 30 years in El General, as the mountain-rimmed basin at the head of the Río Térraba is called. Mostly they live at lower altitudes.

El Quizarrá,
San Isidro del General,
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