

the rivers Madeira, Negro and Branco; it also inhabits the low countries of Guiana, Surinam and Cayenne. It differs from every known species in the rich colouring of its bill, the brilliancy of which appears to be much greater at some seasons than at others, considerable difference in this respect having been observed in the few living examples that have reached this country, and constantly occurring in the bills of the specimens sent home for our museums. In the latter, a great difference is found to exist, the fine scarlet being more or less clouded with dull black, which may be partly attributed to the effects of the decomposition of the cellular tissues within, and partly to causes which existed while the bird was living. One of my specimens appears to have been more than usually brilliant, and differs from all others that I have seen, in having no trace of the transverse black band at the base of the red; while we frequently find the red crossed by numerous irregular and indistinct bars of dull black. It is probable that the greater or lesser brilliancy of the red colouring is dependent upon the health and vigour of the bird, and that it is more intense at the breeding-season than at any other period.

As is the case with *R. Cuvieri*, a slight difference is observable in the size of specimens from different localities; their bills also slightly vary in form, some being more swollen than others, and having the blue space at the base of the under mandible of a greater breadth: these variations are, however, too trivial to be considered as specific. Newly moulted birds have a delicate straw-coloured tinge pervading the white breast, but it soon disappears under the united influence of light and heat.

In its general habits and manners it resembles the rest of its congeners, leaping lightly from branch to branch among the topmost foliage of the lofty trees of its native forests.

Mr. Waterton states that the native name in Demerara is *Bouradi*, signifying 'nose'; that it frequents the mangrove trees on the sea-coast, and is never seen in the interior till you reach Machouchia, where it is found in the neighbourhood of the river Tacatou. It feeds entirely on the fruits of the forest, and never kills the young of other birds or touches carrion. The sound the *Bouradi* makes is like the clear yelping of a puppy dog, and you fancy he says *pia-po-o-co*; and thus the South American Spaniards call him *Piapoco*. It lays its eggs in the hollows of trees.

Although Mr. Waterton states that the bird lives entirely upon fruits in its native wilds, it exhibits the utmost partiality for animal food in a state of captivity, as shown in the account given by W. J. Broderip, Esq., of a living specimen of the present species examined by him in 1825, at a dealer's in St. Martin's Lane.

"After looking at the bird," says Mr. Broderip, "which was apparently in the highest state of health, I asked the proprietor to bring up a little bird, that I might see how the Toucan would be affected by its appearance. The proprietor soon returned bringing with him a goldfinch, a last year's bird. The instant he introduced his hand with the goldfinch into the cage of the Toucan, the latter, which was on a perch, snatched it with his bill. The poor little bird had only time to utter a short weak cry; for, within a second, it was dead, killed by compression on the sternum and abdomen, and that so powerful that the bowels were protruded after a very few squeezes of the Toucan's bill. As soon as the goldfinch was dead, the Toucan hopped with it still in his bill to another perch, and placing it with his bill between his right foot and the perch began to strip off the feathers with his bill; when he had plucked away most of them, he broke the bones of the wings and legs (still holding the little bird in the same position) with his bill, taking the limbs therein, and giving at the same time a strong lateral wrench. He continued this work with great dexterity till he had almost reduced the bird to a shapeless mass; and, ever and anon, he would take his prey from the perch in his bill, and hop from perch to perch, making at the same time a peculiar hollow clattering noise, at which times I observed that his bill and wings were affected with a vibratory or shivering motion, though the latter were not expanded. He would then return the bird to the perch with his bill and set his foot on it. He first ate the viscera and continued pulling off and swallowing piece after piece, till the head, neck, and part of the back and sternum with their soft parts were alone left; these, after a little more wrenching, while they were held on the perch and masticated as it were while they were held in the bill, he at last swallowed, not even leaving the beak or legs of his prey. It was clear to me that he felt great enjoyment; for whenever he seized his prey from the perch he appeared to exult, now masticating the morsel with his toothed bill and applying his tongue to it, now attempting to gorge it, and now making the peculiar clattering noise accompanied by the shivering motion above-mentioned. The whole operation lasted about a quarter of an hour. He then cleaned his bill by rubbing it against the perches and bars of his cage. It may be as well to mention another fact, which appears to me not unworthy of notice. I have more than once seen him return the food from his crop some time after he had taken it, and after masticating the morsel awhile in his bill, again swallow it; the whole operation, particularly the return of the food to the bread, boiled vegetables, eggs and flesh; to which a little bird is added every second or third day. He shows a decided preference for animal food, picking out all morsels of that description, and not resorting to the vegetable diet until all the former is exhausted."

The Plate represents the bird of the natural size.