

association; each is governed by his individual preference, and each attends to his own affairs. It is worthy of remark, that males compose by far the greater portion of the individuals observed at this elevation, while very few females are seen there; whereas in the lowlands this sex outnumbers the other. In March a considerable number are found to be clad in the livery of the adult male, but without the long tail-feathers, while others possess them in various stages of development. These are, I have no doubt, males of the preceding season. It is also quite common to find one of these lengthened feathers much shorter than the other; and in their aerial encounters with each other a tail-feather is sometimes displaced. The whirring sound made by the rapid vibration of the wings of the male is more shrill than that produced by those of the female, and indicates the proximity of the bird before the eye has detected it. The male utters an almost incessant chirp, both while resting upon a twig and while feeding from the flowers. They do not invariably probe the flowers upon the wing, but may frequently be seen thus engaged when alighted and sitting with closed wings; and they often partially sustain themselves while feeding by clinging with the feet to a leaf with the wings expanded and vibrating". . . . When perched, "they usually sit in a nearly upright posture with the head thrown somewhat backwards, the beak pointing at a small angle above the horizon, the feet almost hidden by the body being brought into contact with the perch, the tail thrown somewhat forward under the belly, and the long feathers crossing each other near their middle."

Mr. Gosse states, that they do not confine themselves to any particular season for nidification, but that he found the nests most numerous in June; while Mr. Hill considers the breeding season to be at its height in January. The situation of the nest too appears to be very various, Mr. Gosse having found one attached to the hanging fibre of the root of a tree which had entwined itself round the projecting points of an overhanging limestone rock in a deep and thickly wooded dell; another stuck on a twig of a sea-side grape-tree (*Coccoloba*), at about fifteen feet from the ground, the tree itself being so near to the water that some of the branches hung over it; another on a hanging twig of a black mangrove-tree, the twig passing perpendicularly through the side and out at the bottom; and another on a twig of a wild coffee-tree (*Tetramerium odoratissimum*). The nest is principally "composed of silk cotton very closely pressed, mixed with the still more glossy cotton of an *Asclepias*, particularly around the edge; the seed remaining attached to some of the filaments. On the outside the whole structure is quite covered with spiders'-web, crossed and recrossed in every direction, and made to adhere by some viscous substance, evidently applied after the web was placed, probably saliva. Little bits of pale green lichen, and fragments of thin laminated bark, are stuck here and there on the outside by means of the webs having been passed over them." The whole forms "a very compact cup,  $1\frac{3}{4}$  inch deep without, and 1 inch deep within; the sides about  $\frac{1}{4}$  inch thick, the inner margin a little overarched, so as to narrow the opening; the total diameter at the top  $1\frac{1}{2}$  inch." The eggs are of a long oval form, and of a pure white, save that when fresh the contents produce a reddish tinge, from the thinness of the shell; they are seven-twelfths of an inch long by four-twelfths of an inch broad. The above, adds Mr. Gosse, is the usual "form, dimensions, and materials of the nest. Variations, however, often occur from local causes: thus in one from a rocky situation only moss is used, and the base is prolonged to a point; one now before me is wholly composed of pure silk cotton bound profusely with the finest web, undistinguishable except on the closest examination; not a fragment of lichen mars the beautiful uniformity of its appearance; others are studded all over with lichens and have a peculiar rustic prettiness." That the chief food of the Humming-bird consists of insects, we have abundant evidence from examination of the stomachs of many species; they are usually sought for in the deep flower-cups, but that they are also obtained by hawking in the air, we learn from Mr. Gosse, who states that he has distinctly seen "the minute flies in the air, which it pursued and caught, and heard repeatedly the snapping of the beak."

It will be seen that I have drawn very largely from the rich store of observations recorded by Mr. Gosse, and much more might be extracted with advantage, particularly a long and most interesting account of the various attempts made by that gentleman at domesticating this very lovely species, for which, however, I must beg to refer the reader to his "Birds of Jamaica."

The male has the crown of the head and the nape deep velvety black; upper surface green; wings purplish black; tail deep black, glossed with green at the base; throat, breast and belly lustrous emerald green; vent and under tail-coverts bluish black; irides black; bill coral-red, the tip black; feet brown.

Total length, 10 inches; bill, 1; wing,  $2\frac{3}{4}$ ; tail,  $7\frac{1}{4}$ ; tarsus,  $\frac{1}{4}$ .

The female has all the upper surface green with a bronzy lustre, deepening into brown on the forehead; wings as in the male; two centre tail-feathers bronzy green, the remainder deep blue glossed with bronzy green on the basal portion of the external web, except the two outer feathers on each side which are deep blue largely tipped with white; under surface white, the tips of the feathers on the sides of the neck and flanks glossy green; irides dark brown; bill reddish brown, black at the edges and tip; feet brownish black.

Total length,  $4\frac{1}{2}$  inches; bill, 1; wing,  $2\frac{1}{4}$ ; tail,  $1\frac{3}{4}$ ; tarsus,  $\frac{1}{4}$ .

The Plate represents two adult males, a young male, a female, and a nest, all of the natural size.