

## RAMPHASTOS SWAINSONII.

### Swainson's Toucan.

#### SPECIFIC CHARACTER.

*Ramph. mandibulae superioris basi infernè inferiorisque basi totâ rufis; hujus apice lineâque obliquâ a rictu ad frontem extensâ nigris; superioris culmine parteque anticâ flavis: ater, vertice nuchâque rufo parum tinctis; gutture lutescenti-flavo, abdomen versus lineâ albâ alterâque coccineâ cincto; tectricibus caudæ superioribus albis, inferioribus coccineis.*

*Rostrum pro tempestate bicolor tantum; mandibulâ inferiore superioreque obliquè et infernè basin versus nigris; hac ad apicem supernèque flavâ.*

The base of the lower part of the upper mandible, as well as the entire base of the under, is of a rich salmon colour, bounded by a narrow line of black on the former, the point of the lower being entirely black; the remainder of the upper mandible, from the forehead to the point, of a rich orange yellow; throat lemon yellow bounded on the breast by a narrow band of white, which is succeeded by a broader one of scarlet; the head, the back of the neck, the whole of the upper and under surface, deep black; under tail-coverts scarlet, upper ones white; legs and feet lead colour.

In a different season the salmon colour towards the base of the mandibles is entirely wanting, its place being occupied by a dull black, only less intense than that of the oblique line which borders it.

Total length, 18 inches; tail,  $6\frac{1}{4}$ ; wings, 9; tarsi,  $1\frac{3}{8}$ ; length of the bill,  $5\frac{1}{4}$  to 6.

*Tocard?* Le Vaill., Ois. de Parad., vol. 2. pl. 9.

*Ramphastos ambiguus?* Swains., Zool. Illus., pl. 168.

*Ramphastos Swainsonii.* Gould, Proceedings of the Zool. Soc., part 1. p. 69.

THE changes which the colours of the bill undergo in this race of birds during the living state are at length beginning to be understood; and the present species is well adapted to illustrate the extent of variation which occurs, probably at different seasons. Were it not for a knowledge of these changes, the birds in the Plate before us might be regarded as two species; but their identity is fully proved by a series of specimens in my possession, which exhibit a gradual transition from one colour to the other.

From the *Ramphastos ambiguus* of Mr. Swainson, a species which I have referred to with doubt as synonymous with the present, the distinction rests on the less extension forwards of the black of the upper mandible. In the figure published by that gentleman, the black of the lower margin of the bill reaches to the tip, and gives off near its anterior part small subtransverse bars of the same colour. In the present species, on the contrary, the black stops short of the tip fully one third of the length of the bill; and the bars are absent. Mr. Swainson's figure also represents an oblique dash of green on the side of the bill; but this is probably of no importance, and depends on incipient change after death in the brilliant yellow of that part: in one of my specimens there are on one side irregular blotches of green which are entirely wanting on the other. In all other respects the closest resemblance obtains between the two birds.

I am not aware that any specimen of Mr. Swainson's bird is in existence. His authority for it was a drawing (stated to have been taken from the bird just dead,) by an unknown artist, for whose general accuracy, however, he was enabled to vouch. It is barely possible that a slip of the pencil may have produced the difference of colouring which has just been pointed out; but this would be an assumption on which I am not disposed to rely. I therefore regard the present bird as distinct. In dedicating it to Mr. Swainson, I trust that he will receive it as a testimony of the high estimation I entertain for his scientific attainments in the studies of nature and his researches in this particular group.

The *Tocard* of Le Vaillant represents a state of plumage I have never seen. It agrees with the present bird in every respect except in the colour of the throat and chest, which is represented as white. It is most probable that this is owing to the fading of the delicate lemon yellow of that part in an individual of the present species, perhaps from exposure to air or to a strong light.

The *R. Swainsonii* was received by me from Mr. Christie of Popayan, in Columbia: I have also received a specimen from South Mexico. Its habitat appears extended along the Andes and the diverging chains intervening between those places.