

A
MONOGRAPH

of the
Trogonidae

OR

Family of Trogons.

by

J. GOULD,

F. L. S.

Part I.

(To be completed in three Parts)

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TROGON MEXICANUS; (Swains.)
Mexican Trogon.
Adult Male.

TROGON MEXICANUS.

Mexican Trogon.

(Adult male.)

SPECIFIC CHARACTER.

Trog. suprà et ad pectus viridi; gutture auribus, alisque nigris, his cinereo punctatis; torque pectorali albâ; ventre crissoque coccineis; rectricibus duabus intermediis viridibus nigro apiculatis, duabus proximis utrinque nigris, reliquis ad basin nigris ad apicem albis.

Rostrum flavum: tarsi brunnei.

Beak bright yellow; throat and ear-coverts black, gradually blending with the green which covers the chest and the whole of the upper surface; two middle tail-feathers green with black tips; the two next on each side wholly black; the three outer on each side black with white tips; wings black, the whole of which, with the exception of the primaries, is finely dotted with grey; a crescent of white encircles the chest; breast, belly, and under tail-coverts fine scarlet; feet brown.

Total length, 11 to 12 inches; *wing*, $5\frac{3}{4}$; *tail*, $7\frac{3}{4}$.

It is only by the careful examination of a great number of specimens of different ages that the ornithologist is enabled to understand the changes of plumage which birds of this tribe undergo while passing from youth to maturity, and which render them in specific distinction so extremely perplexing. The preceding remark applies more particularly to the Trogons of the New World, which exhibit in their barred tails a feature that will at all times readily distinguish them from those of the Old; but though we find that the barred tail is characteristic of most of the species at a certain period of their existence, yet in some it is only the sign of immaturity, while in others it is a striking feature in the adult.

The bird here represented was evidently considered by Mr. Swainson as a different species from *Tr. Mexicanus*, as on looking over the collection of birds in the possession of John Taylor, Esq., I observed a specimen in the plumage of the present Plate, with a label attached to it bearing the name of *Trogon Morgani* in Mr. Swainson's handwriting; under which name I should have figured it, had I not discovered in another collection recently received by Mr. Taylor from Real del Monte, specimens directly intermediate between the Barred-tail Trogon as figured by Mr. Swainson in his Zoological Illustrations and the bird here represented; and as this difference is not effected by a change in the colouring of the feather, but by the accession of a new one, the evidence is the more conclusive. One of these birds possessed the strongly-barred tail on one side, while on the other it had a new feather, bearing all the characteristics of mature age in being more square at the end and in being wholly black with a white tip.

I cannot close this account without offering my sincere thanks to Mr. John Taylor for the assistance which he has rendered me in the investigation of this tribe of birds, by the loan of specimens in the most interesting stages of plumage.

Habitat Northern Mexico.

sm



TROGON MEXICANUS; (*Swains.*)
Mexican Trogon.

TROGON MEXICANUS, Swains.

Mexican Trogon.

(Young male, and female.)

In Mare Juniore *rectrices nigro alboque fasciatæ, præsertim ad pogonia externa; alarum maculæ subbrunnescentes; remiges externè albo fimbriatæ.*

Fœm. *Vertice, dorso, gutture, pectoreque brunneis in olivaceum supernè in rufum infernè vergentibus; torque pectorali obsoletâ, cinereâ; ventris parte anticâ brunnescenti-cinereâ, posticâ crissoque coccineis; alis nigris brunneo parcè maculatis; remigibus externè albo fimbriatis; rectricibus duabus intermediis castaneis nigro apiculatis, duabus proximis utrinque nigris, reliquis albo nigroque fasciatis.*

Rostrum in fœminâ flavum brunneo nebulosum.

In the *Male*, the middle age may be distinguished from the adult by the grey freckles on the wings being rather stronger and more inclined to brown on the secondaries; by the extreme outer edge of the primaries being white; and by the tail being regularly barred with black and white, which character is most conspicuous on the outer edges.

Female. The top of the head, throat, chest, and back dark brown, inclining to olive on the upper surface and to rufous on the chest; across the chest an obscure band of light grey; the upper part of the belly brownish grey, the lower part and vent scarlet; wings black, slightly freckled with brown on the outer edges of the secondaries and shoulders; the outer edges of the primaries fringed with white; two middle tail-feathers chestnut brown tipped with black, the two next on each side wholly black; the remainder strongly barred with black and white for nearly their whole length; bill yellow clouded with brown.

Trogon Mexicanus. Swains., Phil. Mag. June 1827, and Zool. Ill., 2nd Ser., pl. 82. young male, pl. 107. female.

In the description which accompanies the preceding Plate I have stated my reasons for considering that and the present bird as constituting one and the same species. In the Plate accompanying this description I have given in illustration of this opinion a figure of a male bird killed in a youthful state; when, as may be readily perceived, it had nearly accomplished the change in the plumage of the body, while one single feather alone has appeared in the tail: this new feather possesses all the marks of maturity, and may be easily distinguished from the rest by its being entirely free from the bars of black and white. The specimen from which this drawing has been taken is in the possession of John Taylor, Esq., who received it with several others from Mexico.

The *Trogon Mexicanus* was, I believe, first described by Mr. Swainson in the Philosophical Transactions for June 1827; since that period he has figured the young male and the female in the Second Series of his Zoological Illustrations (pls. 82 and 107). While travelling on the Continent I collected several specimens of this bird, and ascertained, by means of the labels attached, that it is identical with the *Trogon gloucians* of Professor Lichtenstein. I believe that the name of *Mexicanus* claims priority; and if so, *gloucians* must of course give place to it: but on this point I cannot speak with certainty.



TROGON ATRICOLLIS, (Vieill.)
Black-throated Trogon.

TROGON ATRICOLLIS, Vieill.

Black-throated Trogon.

SPECIFIC CHARACTER.

Mas. *Trog. vertice, dorso, pectoreque viridibus; alis in medio nigris cinereo maculatis; remigibus nigris pogoniis externis albo fimbriatis; auribus guttureque nigris, hoc posticè albo obsoletè cincto; pectore ventreque aurantiaco; rectricibus duabus intermediis subcupreo-viridibus nigro apiculatis, duabus proximis utrinque nigris pogoniis externis viridi fimbriatis, cæteris prope rhachin nigris pogoniis albo nigroque fasciatis et ad apicem albis.*

Fœm. *Capite, dorso, gutture, rectricibusque sex intermediis brunneis, his nigro apiculatis; remigibus cæteris obsoletius fasciatis; ventre minus aurantiaco.*

Rostrum flavum olivaceo nebulosum.

Male. Beak yellow clouded with olive; throat and ear-coverts black; chest, top of the head, and the whole of the upper surface green; the two middle feathers of the tail are green with slight bronzy reflexions, the two next on each side are black, with their extreme outer edges of the same colour as the two middle ones, the tips of the whole six being black; the three outer ones on each side are regularly barred with black and white on their outer edges and slightly so on their inner ones, while their centres are black and their tips white; centre of the wings beautifully freckled with grey on a black ground; primaries black, with their extreme outer edges white; under surface fine orange, separated from the black of the throat by an obscure half band of white; feet brown.

Female. Head, throat, upper surface, and six middle tail-feathers brown, the latter slightly tipped with black; the remaining tail-feathers as in the male, but not so regularly barred; the centre of the wings freckled with brown on a black ground; the primaries black margined on the outer edges with white; under surface orange, but less pure than in the male.

Total length about 9 or 10 inches; *wing*, $4\frac{1}{2}$; *tail*, 6.

Male. *Yellow-bellied Green Cuckoo.* Edw., vol. 7. pl. 331. p. 256.

Courucou aranga. LeVaill., Hist. Nat. des Couroucous, pl. 7. le mâle adult, pl. 8. la jeune, et pl. 15. le mâle bicoloré.

Courucou aranga. Vieill., 2nd edit. du Nouv. Dict. d'Hist. Nat., tom. 8. p. 318.

Female. *Courucou à queue rousse.* Buff., vol. vi. p. 293. Pl. Enl. 736.

Trogon rufus. Lath., Ind. Orn., 1. 209. Gm. Linn. 1. 404.

Rufous Curucui. Lath., Gen. Hist., 2nd edit., vol. 3. p. 309. pl. 49.

FIGURES of both sexes of this species have graced the pages of many ornithological publications, in almost every one of which it has been subjected to a different name. The female, from the dullness of her colouring when compared with her gaily-attired mate, has, in most instances, been characterized as a distinct species; and had not the illustrations of this bird been tolerably good, it would have been unsafe to have quoted so many synonyms as are recorded above.

I am induced to believe that the *Yellow-bellied Green Cuckoo* of Edwards is identical with the male, while the female is represented by Buffon in his *Planches Enluminées* under the title of *Courucou à queue rousse*; it is also the *Rufous Curucui* of Dr. Latham.

In the splendid work of LeVaillant will be found figures of both the sexes under the name of *Courucou aranga*, which name has been followed by Vieillot, who has figured the male in the second edition of his *Nouveau Dictionnaire d'Histoire Naturelle*, under the scientific name of *Trogon atricollis*. Although this latter name has not, perhaps, a strict claim to priority, yet in a case like the present, where the female has been described as a distinct bird from the male, and as it appears doubtful whether the latter is identical with the old *Trogon viridis*, I have thought it best to follow Vieillot in giving to this species the specific title which he has applied to it.

Habitat, Guiana, Cayenne, and the banks of the Amazon.

The Plate represents both the male and female.



TROGON ELEGANS.
Graceful Trogon.

TROGON ELEGANS.

Graceful Trogon.

SPECIFIC CHARACTER.

Mas. *Trog. facie, capite anticè, auribus, guttureque nigris; pectore, cervice, dorso, tectricibusque caudæ superioribus viridibus; torque pectorali albâ; ventre tectricibusque caudæ inferioribus coccineis; alis brunnescenti-nigris, in medio cinereis albo transversim flexuosè lineatis; remigum pogoniis externis albo fimbriatis; rectricibus duabus intermediis proximarumque duarum utrinque pogoniis externis cupreo-viridibus, harum pogoniis internis nigris, omnibus ad apicem latè nigris; reliquis ad basin nigris, ad apicem albis, in medio præsertim pogonii externis albo nigroque fasciatis.*

Fœm. *Auribus in medio lineâque oculum albis; torque pectorali subobsoletâ; suprâ et ad pectus cinereo-brunneus olivaceo tinctus; alis in medio cinereis maculis saturatoribus notatis; remigibus brunneis; ventre anticè brunnescenti-griseo in coccineum posticè transeunte; rectricibus duabus intermediis sordidè castaneis, apicibus nigris, duabus proximis utrinque nigris, reliquis ad basin nigris, ad apicem albis, in medio albis nigro sparsim maculatis.*

Rostrum flavum: tarsi brunnei.

Male. Face, fore part of the head, ear-coverts, and throat black; chest, back of the neck, back, and upper tail-coverts green; a white crescent separates the green of the chest from the breast, which together with the belly and under tail-coverts is scarlet; wings brownish black, the primaries having their outer edges fringed with white; secondaries and centre of the wings grey, strongly marked with zigzag transverse lines of black; two middle tail-feathers green with bronzy reflections on their outer webs, only the inner webs black; all six are largely tipped with black; the remaining six black at the base and white at the tip, the middle portions of these latter feathers barred with black and white, which is most strongly depicted on their outer edges; feet brown; bill fine gamboge yellow.

Female. Bill yellow; centre of the ear-coverts and a small rim round the eye white; the whole of the upper surface and chest greyish brown with a tinge of olive; primaries brown, their outer edges fringed with white; centre of the wings and secondaries grey, faintly speckled with spots of a darker colour; a faint pectoral band of white separates the feathers of the chest from those of the breast, which is light brownish; grey on the upper part, gradually passing into the scarlet of the hinder part and under tail-coverts; two centre tail-feathers dull chestnut brown tipped with black, two next on each side black, the remainder are black at the base and white at the tip, the middle portion being white, irregularly blotted with black.

Total length about 12 inches; *wing*, $5\frac{1}{2}$ to $5\frac{3}{4}$; *tail*, $7\frac{1}{4}$.

Trogon elegans. Gould, Proceedings of Zool. Soc., Part II. p. 26.

THE beautiful bird here figured under the specific title of *elegans* is a native of Guatemala, a country rich beyond measure in zoological stores, and of the numberless productions of which a large proportion are yet to be characterized by the scientific.

The Graceful Trogon was received from Paris, to which city it was sent from Guatemala in company with several other species, as the *Trog. resplendens*, &c.

In point of affinity it is most nearly allied to the bird we have called *ambiguus*, the chief point of difference being in the decided barring of the outer tail-feathers, and in the stronger marking on the wings.

The lengthened tails of many of the Mexican Trogons seems a feature which distinguishes them from all the other Trogons of the new continent; but in this particular the *Trog. elegans* is especially conspicuous, possessing as it does a more lengthened tail than any other of the smaller species of this genus.

The female is readily distinguished from the male by her more obscure and less gaudy colouring, a description of which is given above.

The Plate represents a male and female.



TROGON MALABARICUS.
Malabar Trogon.

TROGON MALABARICUS.

Malabar Trogon.

SPECIFIC CHARACTER.

Mas. *Trog. capite, gutture, pectoreque fuliginoso-nigris, hoc torque lato albo; ventre coccineo; dorso tectricibusque caudæ superioribus sordidè arenaceo-brunneis; scapularibus tectricibusque alæ majoribus nigris albo flexuosim strigatis; remigibus nigris, pogoniis externis albo fimbriatis; rectricibus duabus intermediis subcastaneis nigro apiculatis, proximis duabus utrinque nigris prope rhachidem brunneis, reliquis ad basin nigris ad apicem albis.*

Fœm. *Capite, dorso, gutture, pectoreque sordidè brunneis; ventre luteo; pectore haud torquato; scapularibus nigro brunneoque strigatis.*

Rostrum nigrum; mandibularum basis regioque ophthalmica nuda cœruleæ.

The male has the whole of the head and throat and chest sooty black; a crescent of white separates the black of the chest from the breast, which, with the whole of the under surface, is scarlet; the back and upper surface brownish yellow; the middle of the wings black, with fine transverse lines of white; primaries black, with their extreme outer edges white; the two middle tail-feathers chestnut brown; the two next black, with a streak of chestnut down the sides of the shafts; the three outer ones on each side black at their base, with white tips; naked space round the eyes deep blue, gradually uniting with black on the bill; legs and feet lead colour.

The female has the crown of the head, chest, and all the upper surface brown, inclining to grey on the chest; breast and under surface yellowish brown; wings black, their centres having fine transverse lines of brown; the tail-feathers nearly resembling those of the male, but much duller in hue; naked space round the eyes blueish lead colour; feet and legs dark brown.

Total length, 11 to 11½ inches; *wing*, 5 inches; *tail*, 6½ to 7.

Trogon Malabaricus. Gould, Proceedings of Zool. Soc., Part II. p. 26.

I AM unwilling in most instances to bestow as a specific title upon any bird the name of the country of which it is an inhabitant; in the present instance, however, I have been induced to depart from this rule, from the circumstance of the present species being, as I believe, extremely local in its habitat. The Trogons in general do not appear to be a migratory tribe; it is therefore probable that that portion of the eastern continent alone which includes Malabar is the only country in which this fine species is to be seen in a state of nature. I am the more strengthened in this opinion as I have never observed it in collections brought from the adjacent islands.

In point of affinity it is somewhat allied to the *Trogon Temminckii*, while its inferior size, lengthened form, and more elegant contour, together with the total absence of the red ear-coverts and nuchal band, at once distinguish it from that species.

Capt. Walter Smee informs me that it is a solitary species, inhabiting the jungles which run parallel to the coast; and that it is generally seen in pairs in the most dense parts of the forest, sitting motionless on the dead branch of some elevated tree, until passing insects arouse it to exertion. Being partly nocturnal in its habits, it becomes animated on the approach of evening, when it glides after its prey (in the pursuit of which it displays the greatest activity and adroitness) with meteor-like swiftness, returning again to some dead branch, much after the manner of the Flycatchers.

Habitat, Malabar.

The Plate represents a male and female.



TROGON RESPLENDENS.
Resplendent Trogon.

From the collection of the British Museum.

Painted by J. G. Keay.

TROGON RESPLENDENS.

Resplendent Trogon.

SPECIFIC CHARACTER.

Trog. cristatus; *tectricibus caudæ superioribus longissimis tripedalibus*; *suprà et ad guttur pectusque splendide aureo-viridis*; *ventre crissoque coccineis*; *rectricibus sex intermediis nigris, reliquis albis ad basin tantummodo nigris*.

Fœm. vel Junior. *Capite, gutture, pectoreque obscure viridibus*; *dorso viridi*; *ventre cinerascenti-brunneo*; *crisso coccineo*; *capite subcristato*; *tectricibus caudæ superioribus brevibus*; *rectricibus externis albis nigro fasciatis*.

Rostrum flavum, in junioribus? nigrum; *tarsi brunnei*.

Beak gamboge yellow; head covered with long filamentous plumes forming a rounded crest; from the shoulders spring a number of lance-shaped feathers, which hang gracefully over the wings; from the rump are thrown off several pairs of narrow flowing plumes, the longest of which in fine adults measure from three feet to three feet four inches; the others gradually diminishing in length towards the rump, where they again assume the form of the feathers of the back; these plumes, together with the whole of the upper surface, throat, and chest, are of a most resplendent golden green; the breast, belly, and vent are of a rich crimson scarlet; the middle feathers of the tail black; the six outer ones white for nearly their whole length, their bases being black; feet brown.

Total length, from the bill to the end of the tail, 12 to 14 inches; *wing*, 8 to 9; *tail*, 8 to 9; *tarsi*, 1; length of longest plume about 3 feet.

The female or young of the year have only rudiments of the long plumes, seldom reaching more than an inch beyond the tip of the tail; the feathers of the crest are more rounded and not filamentous; the feathers of the shoulders but slightly lanceolate; the outer tail-feathers white barred with black, the centre ones black; the whole of the chest, throat, and head obscure green, the remainder of the upper surface bright green; the breast and belly greyish brown; vent fine scarlet; bill black.

Trogon resplendens. Gould, Proceedings of Zool. Soc., Part III.

——— *pavoninus*. Temm., Pl. Col. 372.

It is scarcely possible for the imagination to conceive anything more rich and gorgeous than the golden-green colour which adorns the principal part of the plumage of this splendid bird; or more elegant and graceful than the flowing plumes which sweep pendent from the lower part of the back, forming a long train of metallic brilliancy. Nature appears to have ordained that birds possessing unusual brilliancy of plumage should be inhabitants of retired and obscure situations; and in strict conformity with this law the Resplendent Trogon, by far the most beautiful of its tribe, is only to be found in the dense and gloomy forests of the southern states of Mexico, remote from the haunts of civilized man; which may, perhaps, account for its being so little known to Europeans until within the last few years, for although the long plumes were used to adorn the head-dresses of the ancient Mexicans, and at a later period were transmitted by the Spaniards from time to time to Europe, yet it is only very recently that we have become acquainted with the entire bird. I believe the first perfect example was received by the late Right Hon. George Canning: after that statesman's decease it passed into the hands of Mr. Leadbeater. The representation of this bird in the "Planches Coloriées" of M. Temminck is undoubtedly the first that was published; but the author has evidently confounded it with a nearly allied species discovered in Brazil, and figured in the "Avium Species Novæ," &c., of Dr. Spix.

I feel assured that all those who have noticed it under the name of *pavoninus* will, upon comparing it with the original bird described by Dr. Spix, fully agree with me in considering it as specifically distinct. I am induced to believe that the plumes of the species so named never extend more than a few inches beyond the tail, that it is devoid of crest, that the whole of the tail-feathers are black, and that its size is much inferior to that of *Trog. resplendens*.

Although the extreme brilliancy of the colours of this bird renders it impossible to give more than a faint idea of the beauty of the original, yet I trust that the accompanying Plate will not be devoid of interest, since it contains a figure of either the female or young male which has not before been delineated. Scarce as this bird has hitherto been, there are now few collections of any extent which do not contain examples.

Habitat Guatemala in Mexico, where it is called *Quesal*.

The Plate represents an adult male and a female or young male of the natural size.



TROGON ERYTHROCEPHALUS.
Red-headed Trogon.

TROGON ERYTHROCEPHALUS.

Red-headed Trogon.

Mas. *Trog. capite guttureque sordidè sanguineis, hoc posticè strigâ albâ obsoletâ cincto; pectore ventreque coccineis; dorso, tectricibusque caudæ superioribus arenaceo-castaneis; scapularibus alæque tectricibus majoribus nigro alboque flexuosim strigatis; remigibus nigris, pogoniis externis albo fimbriatis; reatricibus duabus intermediis castaneis ad apicem nigris, duabus proximis utrinque nigris, reliquis nigris albo latè apiculatis.*

Juv. vel Fœm. *Capite guttureque arenaceo-brunneis; torque albo magis quam in mare conspicuo; scapularibus nigro brunneoque strigatis.*

Rostrum brunneum; mandibularum basis regioque ophthalmica nuda coccineæ.

Male. The head, throat, and chest dull red; a narrow band of white separates the chest from the breast, which with the whole of the under parts are scarlet; back and upper tail-coverts sandy brown; centre of the wings striated with fine wavy lines of black and white; primaries black, with the exception of the outer edge of each quill, which is white; two middle tail-feathers chestnut brown tipped with black, the next two on each side wholly black, the rest black at their base only with the remaining portion white; naked space round the eyes red; bill black.

Young or Female? Similarly clothed to the male, except that the whole head and chest are sandy brown and the linear markings on the centre of the wing are brown on a black ground instead of white, which is characteristic of the male only.

Total length, 12 to 13 inches; *wing*, 5; *tail*, $6\frac{1}{2}$ to 7.

Trogon erythrocephalus. Gould, Proceedings of Zool. Soc., Part II. p. 25.

Trogon fasciatus. Lath. Gen. Hist., 2nd Edit., vol. 3. pl. 50. p. 212.

THIS fine species appears to enjoy a range of habitat extending from Rangoon to the rich valley of Nepaul, from which latter country we have seen a single specimen. In Rangoon it is a bird of common occurrence. Like the rest of its genus, it gives a preference to the thickest jungles; hence in that luxuriant country it finds a retreat at once congenial with its habits and mode of life. It is a species of extreme rarity in our collections, doubtless owing to the little intercourse we have hitherto had with the interesting country of which it is a native, and from the probability of its being entirely confined to the continent. My own specimens, two or three which were killed and brought to this country by Major Godfrey, and one sent from Nepaul by B. H. Hodgson, Esq., are all the examples of this bird that I have seen.

I am induced to believe that the bird figured in Dr. Latham's General History (quoted above) under the title of *Trogon fasciatus* is identical with the present, notwithstanding that the weight recorded by him, one ounce and a half, and some difference in the colouring would seem to contradict such an opinion. One thing is certain, it cannot be referred to the original *fasciatus* described and figured in the Indian Zoology of Forster and Pennant, a species about which there is considerable confusion.

If we may judge from analogy, the upper bird in the accompanying Plate represents a young male, and not, as I at first supposed, a female; if this be the case, the female is at present unknown.

Habitat, Rangoon, Nepaul, &c.



TROGON AMBIGUUS.
Doubtful Trogon.

Drawn from Nature & on Stone by J. & E. Gould.

Printed by G. Hallenbeck.

TROGON AMBIGUUS.

Doubtful Trogon.

SPECIFIC CHARACTER.

Trog. facie, capite, guttureque nigris; pectore, cervice, dorso, tectricibusque caudæ superioribus viridibus; alis brunnescenti-nigris, in medio cinereis lineis gracilibus flexuosis nigris transversim notatis; remigibus externè albo fimbriatis; rectricibus duabus intermediis proximarumque duarum pogoniis externis cupreo-viridibus, harum pogoniis internis omniumque apicibus nigris, reliquis ad basin nigris, ad apicem albis, in medio albis maculis parvis numerosis sparsis nigris.

Rostrum flavum: tarsi brunnei.

Bill bright yellow; face, top of the head, and throat black; chest, back of the neck, back, and upper tail-coverts green; wings brownish black, the primaries having their outer edges fringed with white; secondaries and centres grey, finely marked with zigzag transverse lines of black; two middle tail-feathers green with bronzy reflections; the two next green with bronzy reflections on their outer edges only; the inner webs black; the three outer ones on each side black at their base and white at the tip, the middle portion being minutely dotted with black on a white ground; feet brown.

Total length about 12 inches; *wing*, $5\frac{1}{4}$ to $5\frac{1}{2}$; *tail*, $7\frac{1}{4}$.

Trogon ambiguus. Gould, Proceedings of Zool. Soc., Part III.

THOSE who have had opportunities for studying nature are well aware how slight occasionally are the shades of difference between closely-allied species: it might be objected that these differences may be merely casual, or those of variety only; but when we find that they constantly obtain in two birds brought from two very distinct countries, and that by attending to their markings we should be able to assign to each its peculiar locality, the objection falls to the ground: it is true that the same species may differ in the intensity of its colouring, from the influence of temperature, air, and food, but it will seldom be found to vary in the character of its permanent markings.

It is upon these views that I have ventured to separate this bird from the *Trogon elegans*, to which it so closely assimilates that it requires an experienced eye to note the points of difference; these points consist in the obscure and pale, but finely-dotted appearance of the outer tail-feathers of *Trog. ambiguus*, in opposition to the strong and well-defined black bars on the same part in *Trog. elegans*; while at the same time the centre of the wing is much more finely and minutely barred in the former than in the latter. Had I seen only a single individual of each of these birds, I might have been in doubt on the subject; but my comparisons having been made upon individuals of all ages, I feel but little hesitation in assigning to the present bird, at least provisionally, the rank of a distinct species.

The localities in which these two birds appear to be indigenous are distinctly separated from each other; all the examples I have seen of *Trogon ambiguus* having been exclusively received from the northern states of Mexico, while the *Trogon elegans* is strictly limited to the southern.

The Plate represents an adult male.



TROGON REINWARDTII; (Temm.)
Reinwardt's Trogon.

TROGON REINWARDTII, Temm.

Reinwardt's Trogon.

SPECIFIC CHARACTER.

Trog. capite, dorso, tectricibusque caudæ superioribus saturatè viridibus; alis in medio scapularibusque flavo transversim lineatis; remigibus nigris, pogoniis externis albis; gutture flavo; auribus, colli lateribus, pectoreque olivaceo-brunneis; ventre flavo ad latera aurantiaco; rectricibus cærulescenti-atris iridescentibus, tribus externis utrinque apicem versus albis.

Rostrum aurantiaco-rubrum; regio ophthalmica nuda cærulea; tarsi flavi.

Bill bright reddish orange; top of the head, back, and upper tail-coverts dark green; six middle tail-feathers bluish black with green reflexions; the bases of the three outer feathers on each side the same colour as the middle ones, the remaining portions being white; centre of the wings and shoulders green, transversely rayed with fine lines of yellow; primaries black, with the exception of the outermost web, which is white; throat yellow; ear-coverts, sides of the neck, and chest olive brown; belly and under surface yellow, becoming rich orange on the sides; tarsi yellow; bare skin round the eye blue.

Total length from $12\frac{1}{2}$ to $13\frac{1}{2}$ inches; tail, $7\frac{1}{2}$; wing, $5\frac{1}{2}$.

Trogon Reinwardtii. Temm., Pl. Col. 124.

FROM the circumstance of the present bird and the *Trogon narina* of Southern Africa being the only species yet discovered in the Old World possessing a green plumage, it would appear that they approximate more nearly to the American Trogons, in which this feature is so conspicuous, than do any of their congeners, though at the same time they possess characters which readily distinguish them, viz. the absence of serratures along the edges of the bill and of bars on the tail.

The native habitat of this species are Java and Sumatra, where it was discovered by Professor Reinwardt, that truly worthy and justly celebrated naturalist, whose exertions have added so much to the stores of science, and after whom it has been named.

The *Trogon Reinwardtii* offers a singularity to our notice in the great similitude of the plumage of the sexes, the female possessing the same characteristic markings as the male, from whom she differs only in having the colours more obscure, and by the rich orange of the throat and flanks giving place to a pale yellow.

I am highly indebted to my valued friend M. Temminck for an example of the young of this species, a figure of which is given in the accompanying Plate; and which, as illustrating the change which the present species undergoes from youth to maturity, will not be uninteresting to the ornithologist. It will be seen that although in this immature state, it exhibits a similarity to the adult, particularly in the colours of the back and tail, a circumstance which rarely occurs in the family, as in all the Trogons where the plumage of the female differs much from that of the male, the young birds generally resemble the former; while, as in the present case, where the sexes are nearly alike, the young partake of the adult colouring, differing only in the markings of the wings and the rufous brown tint of the breast.

That the *Trogon Reinwardtii* should rarely occur in collections is a fact which may probably be accounted for by the circumstance of its appearing to be very local in its habitat. The vast collections brought to this country by Sir T. Stamford Raffles and Dr. Horsfield did not contain an example.

The Plate represents an adult male and a young bird of the natural size.



TROGON ORESKIOS, (Tenn.)
Mountain Trogon.

TROGON ORESKIOS, Temm.

Mountain Trogon.

SPECIFIC CHARACTER.

Mas. *Trog. capite, gutture, pectoreque lutescentibus; dorso tectricibus caudæ superioribus, rectricibus duabus intermediis saturatè rufis; alis nigris in medio transversim albo pluri-fasciatis, remigibus externè albo fimbriatis; rectricibus tribus externis utrinque ad basin nigris, ad apicem albis, duabus proximis nigris; ventre aurantiaco in medio, et ad crissum flavo; femoribus nigris.*

Fœm. *Capite, pectore, dorsoque sordidè brunneis, uropygio rectricibusque duabus intermediis minùs sordidis; alarum fasciis albis; ventre flavo ad latera subaurantiaco.*

Rostrum ad apicem nigrum, in flavum basin versus transiens.

Male. The top of the head, throat, and chest greenish yellow; back, coverts of the tail, and two middle tail-feathers rich maroon heightened on the rump; wings black, with their middles transversely rayed with strong bars of white; outer edge of the primaries white; three outer tail-feathers black at their base and white at their tips, the two next on each side black; breast and flanks rich orange; middle of the belly and vent yellow; thighs black; legs and feet flesh colour; bill black at the tip, gradually passing into yellow at the base.

Female. Head, chest, and all the upper surface dull brown, becoming more rich on the rump and two middle tail-feathers; the remainder of the tail as in the male; the transverse marks on the centre of the wings brown instead of white; whole of the under surface yellow, inclining to orange on the flanks.

Total length, 10 to 10 $\frac{3}{4}$ inches; *wing*, 4 $\frac{3}{4}$; *tail*, 6 $\frac{1}{2}$.

Trogon Oreskios. Temm., Pl. Col. 121.

NEARLY all that is here said respecting this species is gleaned from the "Planches Coloriées des Oiseaux" of M. Temminck, who states that science is indebted to the research of MM. Diard and Reinwardt for the first knowledge of its existence. It appears to have been unknown to Sir Stamford Raffles and Dr. Horsfield, as it is not enumerated in their Catalogue of the Birds of Java, a country in which, and probably Sumatra, says M. Temminck, it is to be found. According to M. Kuhl, it subsists on insects, and inhabits woods and mountains.

As far as my own experience goes, I have never seen it in collections from the countries above mentioned, while on the other hand I possess several individuals from Rangoon, where it appears to be a species of common occurrence. It may be readily distinguished from all the other members of its family by the chaste and less gaudy style of colouring which its plumage exhibits.

Habitat, Java.

The Plate represents an adult male and female.



TROGON TEMMINCKII.
Temminck's Trogon.

TROGON TEMMINCKII.

Temminck's Trogon.

SPECIFIC CHARACTER.

Mas. *Trog. vertice, gutture, pectoreque nigris, hoc posticè torque albo; abdomine, strigâ inductâ nuchamque cingente coccineis; dorso tectricibusque caudæ superioribus flavescendo-brunneis; alis nigris striis transversis albis vix numerosis ornatis; rectricibus duabus intermediis castaneis ad apicem nigris, duabus proximis utrinque nigris, reliquis ad basin nigris apicem versus latè albis.*

Fœm. *Magis obscura; capite guttureque saturatè grisescendo-brunneis; pectore arenaceo-brunneo; alarum strigis brunneis; torque pectorali cinguloque nuchali nullis.*

Rostrum ad apicem tantum saturatè cœruleum, ad basin (sicut et regio ophthalmica nuda) pallidiùs.

Male. Top of the head, throat, and chest black; a crescent-shaped band of white separates the chest from the breast, which, with the abdomen and vent, is scarlet, and from which extends a narrow band of the same colour round the nape of the neck; back and upper tail-coverts yellowish brown; wings black, transversely rayed with fine lines of white rather thinly disposed; two middle tail-feathers chestnut brown tipped with black, the two next on each side wholly black, the remainder black at the base and largely tipped with white; naked skin round the eyes fine blue, which extends over nearly the whole of the bill, becoming darker at the tip; feet brown.

Female. Differs from the male in being destitute of the nuchal and pectoral bands, in the head and throat being dark brown inclining to grey instead of being wholly black, in the breast being sandy brown, and in the markings of the wings being brown instead of white; in the remainder of the plumage she resembles the male, except that the colours are more obscure.

Total length, about 12 inches; *wing*, $6\frac{1}{2}$; *tail*, $6\frac{1}{2}$.

Trogon Temminckii. Gould, Proceedings of Zool. Soc., Part III.

——— *fasciatus.* Temm., Pl. Col., 321.

AFTER a careful examination I have been induced to differ from the opinion of my friend M. Temminck, who considers the present bird as identical with a species originally described by Forster and Pennant under the name of *Trogon fasciatus*: the confusion appears to have been heightened by Dr. Latham, who in the second edition of his "General History of Birds" has illustrated the original description of Forster and Pennant by a drawing of a bird nearly allied to, if not identical with, my *Trog. erythrocephalus*.

Having examined the drawing in the British Museum, which formed the subject of the original *fasciatus*, I have no hesitation in stating it to be quite distinct from the present species, which consequently demands for itself a peculiar specific title; and as it was first figured in that magnificent work the "Planches Coloriées des Oiseaux" of M. Temminck, I have thought it due to the author to name it after him, although in so doing I am departing from the rule I generally observe in nomenclature: at the same time I may mention that the difficulty which attends the finding an appropriate specific title for a bird by which it may be distinguished from all its congeners is very great; for it is scarcely safe to name it after the colour or character of the markings, as in most groups, and especially in the present one, so great a similarity exists that it is almost impossible to find a term sufficiently significant: the crescent-shaped band on the chest, the transverse markings of the wings, the barred, or plain tail, are all characters which belong to the family; and if any peculiar feature exists, it is scarcely if ever confined to single species, but is generally the characteristic of a division or minor group of the family; for instance, before the discovery of the *Trog. Diardii* we knew of no other species than the present possessing the nuchal band which characterizes both of them; and it is obvious that it would have been unsafe to take a specific title from this character in the first bird, as it would have been equally applicable to both, although in other respects they are quite different.

I believe that this bird is not a native of Ceylon, but that Sumatra, Java, and probably Borneo, form its exclusive habitat.

The Plate represents a male and female.



