

THE TYPE LOCALITY OF THE VERDIN

By JOSEPH GRINNELL

The Verdin, as a species, was named first by the Swedish ornithologist, Prof. Carl Sundevall (Öfv. K. Vet.-Akad. Förh., 7, May 8, 1850, footnote, pp. 129-130). He called it *Ægithalus flaviceps*, and the basis of his description, written entirely in Latin, was stated to be a bird from either Sitka or California, collected by Dr. R. F. Sahlberg. Of course "Sitka" was out of the question, on distributional grounds; the remaining type locality, "California", though vague at best, in its early application, brought the case into the scope of the chore I had set for myself in recent years, that of trying to run down the type localities of all the birds ever named from California.

Having gone through the literature accessible to me I got no better clue to a more satisfactory designation of type locality than the suggestive statement of Walter E. Bryant (Zoe, 1, 1890, p. 150) that Sundevall described his bird "from Mexico." I now place considerable significance on this latterly supposed "mistake" of Bryant's; for he was associated at the California Academy of Sciences with an alert group of entomologists (Dr. H. H. Behr, for example) who doubtless knew a lot about the itineraries of the early insect-collectors on the Pacific coast. At any rate, Bryant proves to have been right in refusing to use the name *flaviceps* for the birds he had before him from southern California. His real slip was in selecting an untenable name for the race represented by them.

Running across Gyldenstolpe's paper on "Types of Birds in the Royal Natural History Museum in Stockholm" (Arkiv för Zoologi, 19, 1926, 116 pp.) and finding no mention of the Verdin, though others of Sundevall's types are dealt with therein, I decided to write to Count Nils Gyldenstolpe, himself; and this was most fortunate, as I might have anticipated. For here was an active explorer in the very field of enquiry in which I was essaying to penetrate. My enquiries brought the following information.

Count Gyldenstolpe wrote me under date May 22, 1930, in essence as follows: "The type specimen of Sundevall's *Ægithalus flaviceps* is not in our collections [at Stockholm]. It is, however, probably in the Zoological Museum in Helsingfors, Finland, and I am going to write to one of my friends there asking him for further information. According to Sundevall's original description it was collected by Dr. R. F. Sahlberg. Sundevall had numerous specimens of birds sent to him for examination and determination that had been collected by [or that came through] Sahlberg in California, Sitka and central Asia, some of which are still in our collections, apparently acquired either by exchange or purchase. It therefore seems highly possible that the type was returned to Sahlberg and it may have been handed over by him to the Helsingfors Museum. . . ."

Under date December 2, 1930, Count Gyldenstolpe wrote me further: "Yesterday I at last received a letter from Dr. I. Välikangas of the Zoological Museum in Helsingfors In the collections there, according to Dr. Välikangas, there are only two specimens of *Auriparus flaviceps*, one of which may be the type. The label of this latter specimen is, however, almost worthless; besides the name and the Museum number there is something written which has been impossible to read, and he has not succeeded in finding the number in their old catalogs. . . . A near relative of Dr. Sahlberg—his great grandson, Professor Saalas—has published in Finnish a work about Dr. Sahlberg's travels. He has told Dr. Välikangas that

Dr. Sahlberg himself never visited California. He [the latter], however, sent his taxidermist there, but this man died there almost at once. Sahlberg is said to have received some material from California through a Russian taxidermist, Vosnesenski. . . ."

The second specimen of Verdin in the Helsingfors Museum, as further stated in Count Gyldenstolpe's second letter, was presented to that Museum in September, 1861, by one Lindholm, captain of a merchant ship. The bird had been taken at "Port Escondido", Gulf of California, and was one of a small number of birds which had been "determined by John Xantus." Of course this bird is out of the running for typeship, because of its arrival many years after the date of Sundevall's description; but I wonder if it and the accompanying birds were not actually collected as well as named by Xantus, who was so actively at work in Lower California off and on from 1858 to 1861, inclusive.

Acting upon Count Gyldenstolpe's suggestion, I then wrote direct to Dr. Välikangas, of Helsingfors, from whom I received a most painstaking letter, dated March 13, 1931. Even though this letter repeats some of the information already received through Count Gyldenstolpe I now quote the whole gist of it, inasmuch as certain additional angles of the case are brought in.

". . . Prof. R. F. Sahlberg made his South and North American voyage in 1839-43. He did not visit California himself, but stayed at Sitka. But a Russian preparator, Vosnoisensky (from the Russian Academy of Sciences) was in California where [?] he soon died. His collections were (at least partly) given to Sahlberg. The incomplete notes on the etiquette [label] suggest that the bird now in question [the supposed type of Sundevall's *Æ. flaviceps*] belonged to Vosnoisensky's materials from California and not to Sahlberg's materials from Sitka. . . . We have not been able to find the specimen [listed] in the small and defective parts of our catalogues of that early period. The Museum and the whole National University was earlier located in the former capital, Åbo, but was burnt down in this town's fire in 1829. After that the University was removed to Helsingfors where little by little the Zoological Museum was restored again. Prof. Sahlberg's grandson, the present professor in agricultural and forest zoology in Helsingfors, U. Saalas, who has published his grandfather's books of travel, has informed [me] that among the American notes nothing about this specimen has been found. On the contrary [on the other hand], the note Nr. 11 on the etiquette seems to be written by [that is, is in the handwriting of] Sahlberg, and the very etiquette shows a clear likeness with [to] many of Sahlberg's etiquettes [labels on specimens] from his American journey."

"We think it is very possible", Dr. Välikangas goes on to say, "that the specimen in question is Sundevall's type specimen, but until further at least, it [this] cannot be proved positively. I will, however, send you the specimen for examination. It is followed [accompanied] by two etiquettes. The bigger one has no particular importance; it is only written on it that the bird was stuffed in 1882 after having been earlier kept as a skin. The smaller etiquette has also some unreadable passages. If you have at your disposal there some chemical or other stuff to make the etiquette clearer, you can do as you like . . ."

A little later the precious specimen reached Berkeley safely, and the degree of my elation, and the corresponding degree of my feeling of gratitude toward Dr. Välikangas for forwarding it, can be imagined. For now I could myself make direct comparisons of this supposed type with the original description and with

series of Verdins from different parts of the general range of the species. Meanwhile evidence, of further historical bearing, from published sources, came to my attention, and before giving my findings in regard to the specimen itself I will present these.

It happens that there has just appeared in American print some information concerning Vosnesensky which is of great importance in the present connection. This is contained in a book under the authorship of Professor E. O. Essig, of the University of California, entitled "A History of Entomology" (Macmillan, 1931, 1029 pp., 263 figs. in text). I select certain facts and quotations from this account (pp. 777-789) as follows:

Ilya Gavrilovich Vosnesensky (1816-1871) was a "naturalist and conservator of the Zoological Museum of the Academy of Natural Sciences, St. Petersburg." He was remarkably gifted as an all-round field-collector, not only of insects but of vertebrate animals, plants, minerals and ethnological materials. In 1839, he was sent out to collect for the Academy in the Far Eastern Russian possessions, and was occupied thus for some ten years. In 1840 and 1841 his headquarters were at Fort Ross (Sonoma County, California), but he did not explore any part of the territory now comprised in the State of California south of San Francisco. He had left Russia for northwest America in August, 1839, on the steamer *Nicholas I*, stopped a while at Rio de Janeiro and at Valparaiso, and reached Sitka, May 1, 1840. His fellow-passengers included "Salbers [= Sahlberg], a physician, and Zigneus, a priest." From Sitka (or "New Archangel") he "reached the coast of New Albion, the Ross Colony, July 20th," 1840, returning to Sitka, October 4, 1841, when the Russian settlement in California was abandoned. "In the same year [translated from statement made by Vosnesensky himself a few years later], November 23rd, I started on a sea voyage to Lower California where I visited the vicinities of Loreto, Escondido Harbor, and Carmen Island, and returned to New Archangel March 19th, 1842."

It is further said of Vosnesensky that "he taught many persons living in those countries [that he visited] the art of the preparation and preservation of the specimens and they, according to his instruction, still are collecting various natural objects for the Academy." Also: "The variety of his collections and their abundance made, and still makes, it possible for the Museum of Zoology to exchange its duplicates with foreign museums, thus, in spite of its scanty means, always enriching its collections with new specimens." Again: "To his indefatigable work the Museum is indebted for the excellent condition of the most valuable specimens of birds and animals, which were not damaged or injured by moths in spite of the meagre means of their preservation." Vosnesensky did not, it is thus seen, die in California, but returned, though in poor health, to St. Petersburg in 1849, where he held important positions in the Museum until his death there, in 1871.

All of the above facts and many more, dug up by Professor Essig, are cited by him from Russian literature. It would appear that Vosnesensky may have been the collector of numbers of birds, besides the Verdin, from Lower California. If personally taken by him, these birds came from within a very limited radius on the Gulf coast at latitude 26°; Carmen Island and Port Escondido are close to Loreto. As far as I know, this source of Lower California materials, thus sixteen years prior to Xantus's first visit, has not heretofore been alluded to in American literature. One cannot help but wonder as to what other important early records there may be in Old-World literature; for of course "California" up to the 40's was primarily Lower California when not the whole Pacific Coast south of "Oregon".

Further published testimony is forthcoming, significant because contemporary, under the authorship of the celebrated entomologist, Mannerheim (Beitrag zur Kaefer-Fauna der Aleutischen Inseln, der Insel Sitkha und Neu-Californiens, Bull. Naturforsch. Gesell. Moscau [*sic*], Band 16, 1843, p. 7 [of reprint or separate in possession of Dr. E. C. Van Dyke of the University of California who called my attention to it and who kindly loaned it to me]). Carl Gustav von Mannerheim (1804-1854), who for a time was governor of Finland, described (*vide* Essig, *loc. cit.*, p. 698) "a great number of beetles from Siberia, Alaska, and California, particularly many of those collected by J. F. Eschscholtz, . . . I. G. Vosnesensky, . . . Fred Sahlberg (Alaska)" and others. Mannerheim states in the paper cited that Ferdinand Sahlberg, doctor of Medicine, accompanied an official of the Russian-American Company to Sitka in 1839, going *via* Brazil and Chili; himself stayed a whole year at Sitka, collecting beetles; had at the outset as a fellow traveler, "Wosnesensky"; and the latter sent in collections from Sitka and California. There is no indication that Sahlberg collected anything in "California", only that Vosnesensky did.

Van Rossem (Trans. San Diego Soc. Nat. Hist., 6, 1930, p. 200) has "designated" Fort Yuma as the type locality for *Auriparus flaviceps*. While restriction from a vaguely indicated or general type region, as in the present case, is quite desirable, such restriction must have regard for not only facts but for probabilities; a locality not likely visited by the collector of the type is not properly to be chosen. In the present case, irrespective of other historical evidence, it is hardly probable that Sahlberg or any other European collector could have visited *Fort Yuma* prior to 1850. Indeed, it was not until 1850, with the beginning of immigrant traffic from the East by the Gila River route, that Fort Yuma was established (see Ives' Report upon the Colorado River of the West, 1861, p. 20). Visitation of California, and of the Pacific coast region of North America generally, was at sea-ports. No sea-port north of Lower California would have yielded a Verdin in the 40's without an exceedingly forbidding trip into the interior.

Now as to the specimen that all the evidence indicates to be the type: It is mounted (usual passerine perching posture) on a natural twig, a glass eye in right side of head, none in opposite eye-socket; the toes of left foot are broken; extreme tips of closed mandibles are blunted by breakage; the plumage on the throat and left side of face is rough, some of the feathers reversed; plumage somewhat worn in appearance, like that of recently collected birds taken in late winter or spring; plumage in general obviously sooted, due to long exposure to smoky air in the museum, this doubtless having darkened and dulled the original tones of color; marked fading not in evidence, at least as not compensated for by the sooting, save for a faint tendency to brown on wings and tail.

Of the two labels one, the larger, attached by thread to the perch, is the one referred to by Dr. Välikangas as stating only that the bird was, in 1882, mounted from a skin. The other, obviously much the older, label is small, only about 25 by 11 millimeters, on thin paper, threaded securely to the right tarsus. This label bears writing in ink on both sides, but not all clearly legible. On one side is: *Ægithalus* | (*Regulus*) | *flaviceps*" and another word not made out; and on the other: "N° 11 | (Un° 470)" and vestiges of what might have been a sex-mark and other matter. This label is fragile, and I did not consider it safe to try to restore the writing as suggested by Dr. Välikangas; for it might have gone all to pieces.

Comparing this bird with Sundevall's original description, word for word, I find agreement in all respects save measurements. Sundevall's measurements are: Long. 100 mm. Ala 50; t. 15; c. 46. R. a. fr. 9; altit. 4. The corresponding measurements I get from the mounted bird as follows: Total length, 96; wing, left 50.7, right 50.9; tarsus, right 14.8; tail (from median base of central pair of rectrices), 44.4; bill from base at forehead, 7.9 (but extreme tip gone); depth of bill at base, 4. The slight discrepancies here apparent are not significant, for three reasons: (1) Sundevall was, it is fairly evident, content with round numbers; (2) two persons' methods of placing dividers might easily differ; (3) in mounting the bird from a skin changes were likely made in some of the dimensions.

As for coloration, Sundevall's terms (in Latin) apply to the Verdin as a *species*, and, it must be said, about as well to any one of its races as to another. There is nothing definitely to tie to, for subspecific assignment. But his measurements, in the light of the above comments, fall nearest the average of Lower Californian birds. The bird now supposed to be the type (evidently a male) as to color, save for the adventitious darkening of the plumage and a certain brown tone of wings and tail, belongs unquestionably to the Lower Californian race (*lamprocephalus* of Oberholser); it shows the deeper and more extensive yellow of the head and chest.

Since, as we have now seen, the type locality of Sundevall's species *flaviceps*, and hence of the subspecies it represents, *flaviceps flaviceps*, is narrowed down to the vicinity of Loreto, latitude 26°, Lower California, the subspecific name *ignatius*, of Huey (Trans. San Diego Soc. Nat. Hist., 6, 1930, pp. 211-212), based upon a specimen from San Ignacio, latitude 27° 17', must necessarily fall as a synonym of *flaviceps*. As to the propriety of distinguishing the birds of the "San Ignacio district" from those of the Cape district proper (south of Magdalena Bay) I am dubious, despite the many rather exaggerative terms employed by Huey—"beyond doubt . . . well worthy"; "decidedly darker"; "stand out boldly"; "striking difference"; "very much darker" (!). The fact is that a series of birds now before me from the vicinity of San Ignacio are only slightly and inconstantly different in either dimensions or color tone from Cape birds.

The Cape district birds, along with the birds included by Huey under his name "*ignatius*", have currently until Huey's naming all been covered by Oberholser's name *lamprocephalus* (type from Cape San Lucas). Certainly the main characters of *lamprocephalus* as defined by Oberholser (Auk, 14, 1897, p. 392) are common to the Verdins of the peninsula continuously from the Cape north to about latitude 30°. A slight tendency toward northward darkening, reaching its extreme at about 30°, is discernible; but to name separately the extremes in this gradient does not seem to me helpful. Furthermore, an awkwardness in applying names would be encountered, since now the type locality of *flaviceps* (= "*lamprocephalus*") is found to lie between the extremes of range.

I am thus led to go back to W. E. Bryant's solution of the case. Since the name *flaviceps*, just as he decided, was applied to a Mexican bird (that is, as the evidence now indicates, one from Lower California), and since, as shown by van Rossem (*op. cit.*, p. 201) and verified by me, Lawrence's name *ornatus* must be used for the recognizable race ranging from southern Texas to eastern Arizona, the race that Bryant characterized, from southeastern California and western Arizona (range in detail as given by van Rossem, *loc. cit.*, p. 200, under *flaviceps*) is left without a name. This I now supply as follows:

Auriparus flaviceps acaciarium, new name [acaciarium = of the thorn-bushes, that is, cat-claws].

Type.—Male; no. 38962, Mus. Vert. Zool.; Palm Springs, Riverside County, California; January 2, 1904; collected by J. Grinnell (orig. no. 5616).

Subspecific characters.—Similar to *Auriparus flaviceps flaviceps* (Sundevall), but with yellow of fore parts somewhat less intense and extensive; body color averaging a trifle browner, especially on dorsum; tail and wing, more notably the former, averaging a little longer; bill apparently averaging smaller. Similar to *A. f. ornatus* (Lawrence), but paler and a little smaller.

Specimens of this race, apparently upon the authority of Dr. Oberholser, have been recorded from the Colorado Desert under the name *lamprocephalus* (Coale, Auk, 31, 1914, p. 543; *id.*, 32, 1915, p. 106). Bryant (*Zoe*, 1, 1890, pp. 149-150) based his characterization of "*ornatus*" apparently upon specimens from "Los Angeles and San Diego counties" [not probably as now delimited], but including also his Lower Californian birds, and he distinguished them from Texan birds to which he restricted the name *flaviceps* on the grounds that Texan and Mexican birds must be alike, that Sundevall's type was "Mexican", and that Lawrence's name *ornatus* based on Texan birds must therefore be of "identical" application. Bryant apparently thought that he could transfer the name *ornatus* and use it appropriately for the western race.

In summary, the various lines of evidence set forth in this article tend to establish upon a basis of strong probability if not absolute finality the following things: That the type locality of *Auriparus flaviceps flaviceps* (Sundevall) is the vicinity or Loreto, latitude 26°, Lower California; that the type specimen was collected by I. G. Vosnesensky during his stay there between November 23, 1841, and March 19, 1842; that this type specimen passed into the hands of R. F. Sahlberg, at that time collecting beetles and other natural history materials at Sitka; that it later went into the Museum of the University of Helsingfors, where it still remains; that it was loaned to Carl Sundevall, of Stockholm, prior to May, 1850, and made the basis of the latter's published description of his new species.

Museum of Vertebrate Zoology, University of California, Berkeley, May 3, 1931.