DESCRIPTIONS OF SEVEN SUPPOSED NEW NORTH AMERICAN BIRDS.*

BY WILLIAM BREWSTER.

Megascops asio aikeni,† new subspecies. Aiken's Screech Owl.

SUBSPEC. CHAR. — Of about the size of *M. bendirei*, with the ground color more ashy; the dark markings coarser, and more numerous and conspicuous, than in any other North American member of the genus.

Female ad. (No. 7503, collection of William Brewster, El Paso County, Colorado, May 29, 1872; C. E. Aiken). - Ground color of both upper and lower parts plain ash-gray; the legs, flanks, under tail-coverts, crown, and back and sides of neck, white, mixed with gray on the crown and faintly tinged with dull vinaceous on the scapulars and back; outer edges of outer scapulars and wing-coverts pure white, the former narrowly tipped and margined with black; the usual light spots and bars on primaries and secondaries whiter than in most members of the genus but not as conspicuous as in M. maxwelliæ; tail obscurely banded with ashy or rusty white; feathers of the face with numerous fine bars of reddish brown; lores and superciliary region soiled white, the shafts and tips of most of the feathers black or dark brown; wing-coverts, scapulars, top of head, hind neck, back, breast, sides, and abdomen with broad, coarse, mesial streaks and stripes of dull black, these very conspicuous everywhere but most so on the top of head, wing-coverts, and breast; legs, flanks, and under tail-coverts with obscure transverse spots and bars of reddish brown; remainder of under parts with fine, but very regular and distinct, blackish bars which form lateral offshoots of the mesial streaks; under wing-coverts tawny with obscure brownish mottling. Wing 6.56; tail, 3.80; tarsus, 1.37; bill from nostril, .47 inch.

The specimen just described bears a somewhat close general resemblance to my type of *M. aspersus* (from Mexico), but is considerably larger and lacks the rusty chestnut of the throat and neck and the conspicuous bearding of the auriculars and superciliary tufts. The under parts, also, are ashier, and the markings generally finer although much coarser than in any of the more northern forms. Indeed in the dark ground color of the under parts and the excessively coarse, abundant streaking both above and beneath the bird differs so widely from all of the latter, that I am quite at a

^{*}An author's Edition of 100 copies of this paper was published Feb. 17, 1891.—ED. †Named for Mr. Charles E. Aiken of Colorado Springs, Colorado.

loss to suggest its probably nearest affine among them. I had the skin of Mr. Aiken who, if I remember aright, asserted that it was a fair representative of the form which inhabits cottonwood timber along streams in the plains region about Colorado Springs, maxwelliæ, of which he showed me several typical specimens, being confined to the neighboring mountains. According to Capt. Bendire, however, the latter form has been found breeding in cottonwoods on the Platte River within six miles of Denver (Auk, VI, October, 1889, p. 298).

Megascops asio macfarlanei,* new subspecies. MacFarlane's Screech Owl.

SUBSPEC. CHAR.— Of the size of *M. kennicotti*, but with the color and markings of *M. bendirei*.

Female ad. (No. 6456, collection of William Brewster, Fort Walla Walla, Washington, October 22, 1881; Capt. Charles E. Bendire, U. S. A.).— Ground color above brownish ash tinged with vinaceous, darkest on the head and back, palest on the wings, with confused, often nearly obsolete, transverse bars and longitudinal shaft stripes of dull black, broadest and most numerous on the crown; outer edges of scapulars and alula-coverts. cream color, the former tipped and narrowly margined with black; secondaries and inner webs of primaries crossed by six or seven bars of pale reddish brown or rusty white; outer webs of primaries with broad, quadrate spots of brownish white; tail regularly but faintly barred with light reddish brown; feathers of the sides of head and neck thickly but finely mottled with dusky on a lighter ground; lores nearly pure white, but the shafts and tips of the feathers dusky or brownish; a somewhat broken, facial circle of black and chestnut spots and blotches; beneath ashy white, lightest on the abdomen, with numerous, fine, regular, transverse bars of black and coarse shaft-stripes of the same color, many of these bars and stripes bordered with pale rusty, the only immaculate space being the middle of the abdomen, which is creamy white; lining of wings and concealed silky plumage of sides under the wings pale ochraceous; some of the under wing-coverts barred with brown; feathering of legs dull rusty chestnut, faintly barred with reddish brown. Wing, 7.23; tail, 3.85; tarsus, 1.67; length of bill from nostril, .57 inch.

Male ad. (No. 6457, collection of William Brewster, Fort Walla Walla, Washington, November 20, 1881; Capt. Charles E. Bendire, U. S. A.).—Similar to the female, but smaller, the dark markings coarser and better defined. Wing, 6.96; tail, 3.80; tarsus, 1.50; length of bill from nostril, .53 inch.

^{*}Named, at Capt. Bendire's request, for Mr. Robert MacFarlane who, as is well known, was a personal friend of Robert Kennicott and an enterprising and accomplished field ornithologist.

Z.

Habitat. — Fort Walla Walla, Washington; Hellgate, Montana; and probably the entire intermediate region, and northward into the interior of British Columbia.

Megascops asio saturatus, new subspecies. Puget Sound Screech Owl..

SUBSPEC. CHAR.—Similar to *M. a. kennicotti* but smaller, the general coloring darker and less tawny, the face and under parts with much more white. *Dichromatic*.

Gray phase. Female ad. (No. 25,846, collection of William Brewster. Victoria, British Columbia, February 18, 1889; from E. H. Forbush.). -Upper parts nearly uniform dark slate-gray with the slightest possible reddish tinge, the plumage everywhere so thickly streaked, barred, and vermiculated with dull black as to obscure the ground color, the markings, particularly the shaft stripes, coarsest and most regular on the crown and nape but nowhere sufficiently contrasted with the general coloring to be at all conspicuous: ear-tufts, nape, and sides of neck with concealed pale rusty or fulvous white disposed in irregular stripes or blotches on both webs of the feathers; a broad, dull black bar on each side of the head extending from the base of the ear-tufts over the tips of the auriculars nearly to the throat; outer webs of outer scapulars and some of the outer wing-coverts fulvous white, the former tipped and narrowly edged with black; secondaries and inner webs of primaries crossed by six or seven bars of gravish ash tinged slightly with fulvous, these bars so pale and indistinct on the primaries as to be nearly obsolete; outer webs of primaries with quadrate spots of dull rusty white with dark brown centres; tail with faint and irregular transverse bars of ashy white tinged with rusty; anterior half of orbital region plain clove-brown; superciliary line and lores white, the feathers dusky or blackish towards their tips; remainder of facial disc ashy white with numerous fine, transverse markings of clovebrown; under parts clear ashy white, tinged with rusty on the jugulum, flanks, and legs, very faintly with fulvous on the breast, the plumage everywhere, including the abdomen and under tail-coverts, with coarse, sharply defined, longitudinal stripes and fine, wavy, transverse bars of black, the former very broad and conspicuous on the breast; under wingcoverts fulvous, thickly but obscurely barred with clove-brown; feathering of legs mottled and barred with reddish brown. Wing, 6.87; tail, 3.65; tarsus, 1.50; length of bill from nostril, .52 inch.

Ferruginous phase. Male ad. (No. 25,845, collection of William Brewster, Victoria, British Columbia, November 24, 1888; E. H. Forbush).— Markings closely similar to those of the bird just described but with the ground color of the entire upper parts tinged with tawny or rusty cinnamon, bringing out the black streaks and bars in sharper relief; cheeks, jugulum, breast and sides with more rusty than in the semale, but the ground color of the superciliary region, lores, chin and entire abdomen,

essentially pure white. Wing, 6.70; tail, 3.65; tarsus, 1.50; length of bill from nostril, 47 inch.

Habitat.—Shores and islands of Puget Sound, and southward, along or near the coast, to Salem, Oregon.

In a paper published * about nine years ago I referred some large Screech Owls taken at Fort Walla Walla by Capt. Bendire to Megascops kennicotti, assuming that they represented a hitherto unrecognized gray phase of the latter. At the time this seemed to be a reasonable hypothesis, for my material showed that the grav and brown forms were connected by intermediates, and indicated that neither style of coloration was peculiar to any particular portion of the general region which my specimens represented. Since then, however, I have become convinced, by examination of a large number of skins from various localities in Oregon, Washington and British Columbia, that the gray bird found at Fort Walla Walla and elsewhere in the dry, elevated region east of the Cascade Mountains is really a distinct subspecies. It will be remembered that among my chief reasons for originally thinking it merely a gray phase of kennicotti were the facts that a specimen in the National Museum collection labelled as collected in Idaho, by Dr. Whitehead, was nearly as brown as the type of kennicotti, while I had what seemed to be the gray bird from Portland, Oregon. I am now assured by Capt. Bendire, however, that the label of the supposed Idaho specimen is not to be crusted and that the bird was undoubtedly taken near the mouth of the Columbia River where Dr. Whitehead was for some time stationed. Moreover the form of Megascops found on and near the coast of Oregon, is shown by examination of more material to be much smaller and, as a rule, differently colored from that occurring east of the Cascade Mountains. Furthermore, I now have the gray phase of the coast form and it proves to be very unlike the Walla Walla birds. Hence my original reference of the latter to kennicotti cannot be longer sustained.

As will appear from the diagnosis and description, *M. macfarlanei* resembles *M. bendirei* very closely in general color and markings. Indeed the only constant difference is that of size, but this is so marked that there is no difficulty whatever in separating specimens which come from well within the respective habitats of

^{*} Bull. Nutt. Orn. Club, VII, Jan. 1882, pp. 27-33.

the two forms. It is to be expected, of course, that the birds will prove to intergrade at points where they approach one another, a probability already indicated by a specimen (No. 16,027) in the National Museum from Fort Crook, northern California, which is about intermediate in size, between the types of bendirei and macfarlanei. I am informed by Capt. Bendire that there is quite as appreciable a difference in size between the eggs of these Owls as between the skins, the average measurements of twenty-six eggs of M. bendirei in his (the National Museum) collection being 35 × 30 mm. with extremes of 36 × 32 mm. and 32 × 28 mm., against the average 37.5 × 32 mm., and extremes of 39 × 33.5 and 35 × 31.5 mm., of twenty-seven eggs of M. macfarlanei.

M. saturatus is dichromatic. In its gray phase, which is represented by two specimens (including the type) before me it is strikingly different from any other form of the genus which I have examined. At first sight the upper parts appear to be nearly uniform dark slaty brown with the faintest possible tinge of reddish and some dull black shaft stripes on the feathers of the top of head and hind neck besides a little half concealed rusty fulvous on the ear-tufts and nape; but closer inspection reveals innumerable black or blackish markings very generally distributed but so confused and crowded and so slightly contrasted against the dark background as to be nowhere conspicuous. The ground color of the under parts is essentially ashy white with a little rusty on the jugulum and a slight tinge of fulvous on the breast and sides.

In the red phase the upper parts are much as in *kennicotti*, but the tawny or rusty is less pronounced and the general coloring deeper and duller, while the wings and tail are more ashy. The best distinction, however, consists in the much greater amount of white on the face and under parts, especially on the superciliary region, lores, chin, and abdomen, which are nearly or quite free from any tawny tinge. All the specimens from Victoria are considerably smaller than the type of *kennicotti*, but one from New Westminister is larger although in other respects it is typical saturatus.

It is possible, of course, that the type* of kennicotti is aber-

^{*1} have seen no Alaskan specimens except this type, and am not aware that any exist in collections.

rant in respect to the characteristics just named, but as the Song Sparrow found at Sitka represents a distinct subspecies from that which occurs about the lower portions of Puget Sound there seems to be a strong probability that the equally plastic and still more sedentary Screech Owls of these regions possess quite as constant differences. There is, indeed, an apparent and very interesting analogy, in respect to relative size, coloring and habitat, between Megascops kennicotti et saturatus and Melospiza rufina et guttata, while to some extent, but less closely, Megascops macfarlanei corresponds with Melospiza montana, and Megascops bendirei with Melospiza samuelis.

Contopus richardsonii peninsulæ, new subspecies. Large-

SUBSPEC. CHAR.—Much smaller than *C. richardsonii* but with the bill actually, as well as relatively, longer and broader, the color of the upper parts slightly grayer, the yellowish of the throat and abdomen clearer or less brownish and more extended, the pectoral band narrower and grayer, the light edging of the inner secondaries and greater wing-coverts broader and whiter.

Male ad. (No. 16,790, collection of William Brewster, Sierra de la Laguna, Lower California, May 9, 1887; M. Abbott Frazar).—Above, with the sides of the head, neck, and breast, dull grayish brown faintly tinged with olive; wings and tail clove-brown, with the inner secondaries broadly edged and tipped with ashy white, the greater and middle wing-coverts with brownish white; feathers of the crown with dark (clove-brown) centres; median under parts pale straw-yellow, almost primrose-yellow on the abdomen, the breast crossed by a narrow band of brownish gray, the sides also grayish. Wing, 3.30; tail, 2.38; tarsus, .52; bill, length from nostril, .42; width at nostril, .31 inch.

Female ad. (No. 16,777, collection of William Brewster, Triumfo, Lower California, June 13, 1887; M. Abbott Frazar).—Similar to the female above described, but smaller, the yellow of the under parts paler. Wing, 3.00; tail, 2.29; tarsus, .50; bill, length from nostril, .42; width at nostril, .30 inch.

Habitat.—Sierra de la Laguna, Lower California.

In the coloring of the under parts this form resembles *C. virens*, the yellowish of the throat and abdomen being of about the same shade and fully as extended as in that species. The breast and sides, however, are less olivaceous and more as in *richardsonii*, but grayer, with the pectoral band almost invariably narrower. The

1

coloring of the upper parts is essentially similar to that of richardsonii, but perhaps a trifle paler. The wings and tail are much shorter or about as in virens. The bill averages considerably larger (both longer and broader) than in either virens or richard-C. richardsonii is subject to a good deal of geographical variation in respect to size, the birds in my series from the Sierra Nevada and Rocky Mountain regions being much larger than those from the coast of California and the Sierra Madre of Mexico. The wings and tail of the latter average scarcely, if at all, longer than in C. peninsulæ, but their bills are rather smaller than those of the Rocky Mountain and Sierra Nevada birds, instead of being much larger, as is the case with peninsulæ. It must be admitted that none of the differences just enumerated are perfectly constant, but with birds of the same sex and age they serve to distinguish fully ninety-five per cent of the large series (over one hundred specimens) collected in Lower California by Mr. Frazar.

Ammodramus henslowii occidentalis, new subspecies. Western Henslow's Sparrow.

SUBSPEC. CHAR.—Similar to A. henslowii but the general coloring paler above and whiter beneath, the back and scapulars with broader black streaking and much less chestnut, the wings and tail grayer.

--- Adult. (No. 25,959, collection of William Brewster, Moody County, Dakota, June 16, 1882; F. T. Jencks).—Top of head and nape pale grayish olive; forehead and crown with a broad stripe of black spots on each side; and neck more finely and sparsely spotted; wing-coverts, scapulars, and feathers of the back with coarse, central streaks of dull black bordered outwardly with a little pale chestnut, this shading quickly into grayish white which forms a broad margin on all these feathers; wing-coverts, quills, and tail-feathers faded brown, edged rather broadly with brownish white and tinged with chestnut on the inner secondaries and towards the bases of the rectrices; upper tail-coverts pale chestnut with narrow shaft streaks of dark brown; under parts dull white with fine black spots and streaks on the breast and sides and broader ones on the flanks, which are slightly tinged with reddish brown; sides of head buffy white with a little yellow above the eye and two narrow, black, mandibular stripes, and one postocular, on each side, besides an obscure black crescent or spot behind the auriculars; shoulders tinged with greenish yellow, and bend of wing yellowish white.

Wing, 2.18; tail, 1.95; tarsus, .69; bill, length from nostril, .31; depth at nostril, .32 inch.

Habitat. — Dakota, — and probably other regions along the eastern border of the Great Plains.

Two other specimens in my collection, taken in the same locality at nearly the same date, are similar in every respect save that one has a trifle more chestnut on the back although much less of this than have any of the large number of Eastern birds before me. Several examples from Illinois are a shade paler than those from the Atlantic States, but I refer them all, without hesitation, to henslowii. Massachusetts specimens are nearly as white beneath as occidentalis, but their upper parts are marked and col ored like those of the birds that breed near Washington, D. C., which probably most nearly represent true henslowii.

Pipilo maculatus magnirostris, new subspecies. Moun-

Subspec. Char.—Similar to *P. m. megalonyx*, but with the bill much larger, the rufous of the under parts paler, the upper parts browner and tinged with olive. Female very decidedly lighter than the male.

Male ad. (No. 16,070, collection of William Brewster, Sierra de la Laguna, Lower California, May 21, 1887; M. Abbott Frazar). Upper parts generally, with the head and neck all around to the upper part of the breast, dull black, the back and rump mixed with brownish olive, the wing quills dark olive brown; white markings of the back, scapulars, wing-coverts, wings, and tail, about as in typical megalonyx; middle of breast and belly white; sides rusty ochraceous; flanks and under tail-coverts brownish buff. Wing, 3.37; tail, 3.85; tarsus, 1.08; length of bill from nostril, .42; depth of bill at nostril, .40 inch.

Female ad. (No. 16,081, collection of William Brewster, Sierra de la Laguna, Lower California, May 21, 1887; M. Abbott Frazar).—Similar to the male just described but with the black everywhere replaced by grayish brown, tinged with olive on the back, darkest on the upper part of the breast; feathers of the crown streaked centrally with orange rufous. Wing, 3.28; tail, 3.71; tarsus, 1.07; length of bill from nostril, .41; depth of bill at nostril, .39 inch.

Habitat.—Cape St. Lucas Region of Lower California.

The proper assignment of the Towhees of the *P. maculatus* group taken by Mr. Frazar in Lower California is a matter of some difficulty. With respect to the white spotting of the scapulars, wings, and tail, they agree very well with *megalonyx*. But the rufous of the flanks, sides, etc., is quite as pale or ochraceous

7

as in arcticus. The female is very like that of the form last mentioned, instead of being nearly as dark as the male, as is the case with the female of *megalonyx*. Only two of my seventeen males have the back black, the feathers of this part in all the others being more or less broadly edged with brownish or olivaceous. Both males and females have the bill uniformly much larger and stouter than in any of my specimens of the allied forms from the United States. Some of the peculiarities just mentioned, including the heavy bill, can be very closely matched in a series of breeding specimens from the mountains of Chihuahua, Mexico, but none of the latter are as pale on the flanks and sides. Mr. Ridgway, who has examined these Chihuahuan birds, pronounces them to be intermediate between megalonyx and maculatus. The Lower California examples might be similarly disposed of, but in view of their isolated habitat and the fact that they exhibit a combination of characters unlike that of any form hitherto recognized and fairly constant, I have thought them entitled to subspecific separation.

The orange rufous streaking on the crown of the female above described is found on several other birds (all females) in my series and on one or two constitutes a conspicuous and rather ornamental marking. As it is wholly lacking on many Lower California birds it cannot be taken as a diagnostic character, although I find no trace of it in any of the other forms of the maculatus group.

Vireo solitarius lucasanus, new subspecies. St. Lucas Solitary Vireo.

Subspec. Char.—Smaller than V. s. cassinii, but with the bill (actually, as well as relatively) longer and stouter, the sides and flanks much yellower. Young in autumn without brownish beneath, and closely resembling the young of solitarius.

Male ad. (No. 15,504, collection of William Brewster, San José del Rancho, Lower California, July 15, 1887; M. Abbott Frazar). Top and sides of head and middle of the back dusky ashy; remainder of the upper parts, including the outer edges of the wing- and tail-feathers, dull olive green; secondaries and greater and middle wing-coverts tipped with brownish white; all the wing quills edged internally with the same; inner webs of the outer tail-feathers narrowly edged with white; under tail-coverts nearly white; bend of wing brownish white; flanks and sides

canary-yellow, slightly tinged with greenish olive on the sides of the breast and abdomen; lores dusky; a broad line from the nostril to and around the eye creamy white.

Wing, * 2.73; tail, * 2.04; bill, depth at nostril, .18; length from nostril, .33 inch.

Female ad. (No. 15,510, collection of William Brewster, San José del Rancho, Lower California, July 5, 1887; M. Abbott Frazar).—Closely similar to the male above described, but slightly smaller. Wing, 2.70; tail, 2.04; bill, depth at nostril, .18; length from nostril, .33 inch.

Young male in autumn. (No. 15,521, collection of William Brewster, Triumfo, Lower California, Dec. 23, 1887; M. Abbott Frazar).—Top and sides of head dull ashy with perhaps a tinge of olive; remainder of upper parts bright olive green, pure on the rump and upper tail-coverts, somewhat mixed with ashy on the nape and back; under parts white, the throat clear, the middle of the abdomen tinged faintly with creamy buff, the anal region, under wing- and tail-coverts pale yellow, the flanks and sides canary-yellow as in the adult but with more greenish olive on the sides of the breast and abdomen; all the wing quills except the outer primary conspicuously tipped with brownish white and edged outwardly with greenish olive, inwardly with white; greater and middle wing-coverts broadly edged with yellowish, forming two conspicuous wing-bands; the outer pair of tail-feathers narrowly bordered around the edges of both webs, as well as at the tip, with white, the other tail-feathers similarly, but still more narrowly, margined on the inner webs, the outer webs being greenish olive; bend of wing brownish white; lores dusky; a broad white line from the nostril to and around the eye as in the adult. Wing 2.70; tail, 2.15; bill, depth at nostril, .18; length from nostril, .29 inch.

This Vireo although averaging considerably smaller than V. s. cassinii has a bill as large and stout as in V. s. alticola. In the coloring of the upper parts all my spring and summer specimens agree closely with cassinii but there is a decided and very constant difference in the color of the flanks and sides, these having quite as much yellow as, but much less greenish than, V. solitarius. In autumnal plumage the Lower California bird approaches autumnal specimens of solitarius very closely, having the upper parts quite as bright olive green, the wing-bands as yellow, and the head nearly as clear ashy. There is also fully as much yellow on the sides, but much less greenish. These characteristics, with the almost total lack of brownish beneath, distinguish it readily from young cassinii.

^{*}The wings and tail of this specimen are considerably worn.

1

Sitta carolinensis lagunæ, new subspecies. St. Lucas

Subspec. Char.—Similar to Sitta carolinensis aculeata, but with the wings and tail shorter, the black on the tips of the outer tail-feathers more restricted.

Types.— Male ad. (No. 14,691, collection of William Brewster, Sierra de la Laguna, Lower California, May 5, 1887; M. Abbott Frazar).— Wing, 3.41; tail, 1.97; tarsus, .72; bill from nostril, .59 inch.

Female ad. (No. 14,705, collection of William Brewster, Sierra de la Laguna, Lower California, May 7, 1887; M. Abbott Frazar). — Wing, 3,20; tail, 1.73; tarsus, .67; bill from nostril, .53 inch.

The differences just mentioned, though slight, are remarkably constant in the large series of specimens before me. Specimens of S. c. aculeata from various localities in the Rocky Mountain region, California, and as far south along the Sierra Madre Mountains of Mexico as Chihuahua, present very little variation in size. The Lower California birds have the wings decidedly, the tail slightly, shorter than in aculeata but the bill is fully as long and slender. The difference in the tail marking is a curious one. The white spots on the outer three rectrices are not more extensive than in S. c. aculeata but they are nearer the tips of the feathers, thus narrowing the blackish apical band to from one half to three quarters the width that it is in aculeata. The third feather has at most only a trace of dusky on the tip, and in a few birds none whatever. Several specimens in the Lower California series have the wing-quills and all the tail-feathers, except the middle pair, light reddish brown at their tips.

NOTES ON BACHMAN'S WARBLER (HELMIN-THOPHILA BACHMANI).

BY WILLIAM BREWSTER.

One of several attractive possibilities discussed by Mr. Chapman, Dr. Allen, and myself before starting on the trip described elsewhere in this number of 'The Auk'* was the meeting with