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The piece marked d becomes relatively larger as the bird matures, while the piece e seems to vary both in form and length in the various specimens before me. We likewise notice that the forms assumed by the anterior extremities of the pieces f and g must vary with the differences already referred to, that take place in a, d, and e.

In the drawings here presented, which are such correct representations of the objects they depict, no doubt the reader will discover other interesting differences than those I have given above.

#### ANALECTA ORNITHOLOGICA.

#### Fifth Series.

#### BY LEONHARD STEJNEGER.

XXV. WHY Chordeiles virginianus AND NOT Ch. popetue?

In order to answer this question I will first have to quote the description of the author who first established the binominal *Caprimulgus virginianus*. Gmelin gives the following account of the species (S. N., I, 1788, p. 1028):

"Virginianus. 3. C. fuscus, transversim griseo-fusco et hinc inde cinereovarius, subtus ex rubescente albus transversim striatus, menti macula trigona alba, area oculorum et cervice aurantiis maculis varia.

Caprimulgus minor americanus. Syst. nat. XII. 1. p. 346. 1. **B**. Kalm it. 3. p. 93.

Caprimulgus virginianus. Briss. av. 2. p. 477. n. 3.

Whip-poor-will. Catesb. Car. 3. t. 16. Edw. av. 2. t. 63. Buff. hist. nat. des ois. 6. p. 534.

Longwinged Goatsucker. Arct. Zool. 2. p. 436. n. 337. t. 18.

Virginia Goatsucker. Lath. Syn. II. 2. p. 595. n. 6... Genae ex cinereo fuscae; remiges atrae, 5 primae circa medium, rectrices extimae prope apicem macula alba

notatae; pedes incarnati."

This description, considered alone, will be seen to fit the Nighthawk (Ridgw., Nomencl., No. 357) very well. Particu-

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larly decisive is the reference to the white wing- and tail-spots. It will also be remarked that bristles at the mouth are not mentioned at all. So far it is all right, and as this description is the basis of the oldest binominal, I think we might content ourselves with this result. It has been urged, however, that the references belong to the Whip-poor-will (R., No. 354), that Gmelin's species is a composite one, and, therefore, untenable. Let us then examine a little closer into the references given.

We will commence with the third of Gmelin's enumeration, "Whip-poor-will, *Catesb. Car.* 3. t. 16," because it is the oldest and the one which has caused the whole trouble.

Plate 16 of the Appendix of Catesby's 'Natural History of Carolina, Florida and the Bahama Islands' represents a Goatsucker which he calls 'Caprimulgus minor Americanus.' The figure is one of the poorer pictures of that celebrated work, but may be said to represent the Nighthawk, on account of the white wing-spot, which is very recognizable. Above and below the bill are some long and fantastically arranged bristles, which has led to the belief that the Antrostomus vociferus was meant, the more so since Catesby in the text calls the bird 'Whip-poor-will.' The latter mistake is very excusable, for I have been told that the people in the localities in which both species occur generally confound them, and believe that the Nighthawk utters the sound which has given 'Whip-poor-will' its name. Concerning the bristles, we are justified in presuming that they are due to an intended improvement on the part of the artist. Catesby may have seen specimens of the A. vociferus with the strong bristles, and, confounding the two species, introduced the bristles into his drawing thinking that they were accidentally absent from the specimen he figured, for, inasmuch as the plate is inscribed "M. Catesby ad viv. delin.," it is not at all probable that the white wing-spot is a freak of his fancy. There is another point of importance in that drawing, namely, the length of the pointed wings, which reach considerably beyond the end of the tail, proportions particularly characteristic of the Nighthawk. We are, therefore, justified in saying that the figure in question is a rather poor representation of the so-called 'Nighthawk.'

The next reference in time is Edwards's Plate 63. That this figure represents the Nighthawk is beyond doubt, it being a very good picture of that bird. It may be remarked that he also calls

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the bird "Caprimulgus minor *Americanus*. Whip-poor-will," thus proving that the identical inscription on Catesby's plate is no objection to our identification made above.

Then follows Linnæus's "Caprimulgus europæus  $\beta$ ." This is originally (1758) based solely upon Catesby's and Edwards's figures; in the 12th edition he added the quotation of Kalm's 'Iter.' His reasons for making 'Caprimulgus minor americanus' a variety of the European Goatsucker he expresses in the following words: "Varietatem  $\beta$ . judico ex *macula alba alarum & rectricum*, ut in mare avis europæ." Gmelin's citation of Linnæus's S. N., 12th edition, therefore, clearly belongs to the Nighthawk.

Brisson's "*Caprimulgus virginianus*," which is next in order, is based exclusively upon the two figures of Catesby and Edwards. With his usual acuteness, however, he at once saw that the picture made by the latter was the more accurate one of the two, and consequently he based his description mainly upon that, as he expressly remarks about the former, "une figure pas assez exacte," while of the latter he says, "une figure exacte." His description, therefore, unquestionably belongs to the Nighthawk, notwithstanding the fact that Catesby's drawing induced him to mention the long bristles.

Buffon's account (l. c.) is based upon the above-mentioned authors, and belongs where they belong. Moreover, he mentions especially "les cinq premières [pennes des ailes] marquées d'une tache blanche vers le milieu," and remarks: "M. Linnæus en fait une variété dans l'espèce Européenne; mais *il en diffère par la longueur de ses ailes.*"

"The longwinged Goatsucker" of Pennant (Arct. Zool. II, p. 436, No. 337) which has "primaries black, marked near the middle with a white bar," and of which the "wings, when closed, extend beyond the end of the tail," is easily identified by these characters alone as the Nighthawk. The accompanying figure does not belong there, and has evidently been, by some mistake, wrongfully inscribed.

The first one, since Catesby and Edwards, who seems to have had specimens before him, was Latham, referring, as he does, to the British Museum and the Leverian Museum. He describes his birds thus (l.c.):

"6. VIRGINIA G[oatsucker]... dull brown, transversely variega-[fuscus, transversim]

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ted and blended with rufous brown, with here and there a mixture griseo-fusco et hinc inde

of ash-colour and a little portion of gray on the wings: above the eyes cinereo-varius area oculorum

on each side, and behind the neck, a few orange spots: under the eyes et cervice aurantiis maculis varia; genae ex

cinereous brown: on the chin a white triangular spot... beneath cinereo fuscae; menti macula trigona alba subtus reddish white, crossed with dusky streaks: quills dusky; the five first ex rubescente albus transversim striatus; remiges atrae, 5 primae marked about the middle with a spot of white, occupying both webs, circa medium

except on the first, in which it is seen only on the inner: tail not unlike the quills; the two outer feathers marked with a spot of white near the rectrices extimae prope apicem macula alba notatae:

end: legs fiesh-colour."

pedes incarnati.]

This description allows of only one interpretation: it refers *solely* to the Nighthawk. From this Gmelin got his diagnosis and description, as the interlineation of his Latin translation in the text above conclusively proves, and we may add that his account of the habits, etc., is likewise only a translation of that given by Latham. Gmelin's name, consequently, is based exclusively upon specimens of the Nighthawk.

It may now be regarded as fairly proven that *Caprimulgus* virginianus Gmel. (1788) is the earliest and most correct name of the bird subsequently (1807) called C. popetue by Vieillot. I have enlarged considerably upon this question, not because I "take a special delight in bringing forward" these changes (cf. Ibis, 1884, p. 453), but because I want these deplorable changes of our ornithological nomenclature stopped; because I do not want to draw straws as to what name I am going to apply to the birds I treat of; because I find the 'Auctorum plurimorum' principle utterly unreliable, as is well shown by the present example. Besides, I thought it useful to have the question indicated in the heading of the present article settled beyond even a shadow of doubt. That this is necessary will be understood from a cursory summary of the changes the systematic name of the Nighthawk has suffered under the hands of our most prominent ornithologists. It was called virginianus by Swainson and Richardson, Nutall, and Audubon; Bonaparte turned from popetue to virginianus; Baird, Ridgway,

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Allen, and others have applied *popetue* consistently. Coues in the first editions of his 'Key' and the 'Check-list,' as also in the 'Birds of the North West,' uses *virginianus*, but in the second editions of the two former he adopted *popetue*.

The North American species and races should stand thus:

- R. 357. Chordeiles virginianus (Gm.) Sw.\* NIGHTHAWK.
   357a. Chordeiles virginianus henryi (Cass.) Coues.
   WESTERN NIGHTHAWK.
  - 357b. Chordeiles virginianus minor (Cab.) Coues. CUBAN NIGHTHAWK.

# XXVI. ON THE GENERIC NAMES OF THE PHALAROPES.

The genus *Phalaropus* was originally established by Brisson, and made by him to contain both the narrow billed species and the broad billed one. Like all of the earlier writers he omitted to indicate a type, simply for the reason that the usefulness or the necessity of such a thing was not understood at that time. In many cases it may be possible to say with some degree of probability which species the author would have given as type in the modern sense, if it had been the custom of his age to indicate it, but the confused nomenclature resulting from such proceedings is the best proof of the insufficiency of the method, and a clear rule to the effect that the first author dividing the genus has the power of designating the type of the restricted parts of it, has been found to be satisfactory in every respect.

Turning now to the particular case, intimated above, we find that Vieillot, and not Cuvier, as generally supposed, was the first to subdivide Brisson's genus *Phalaropus*. In his 'Analyse d'une nouvelle Ornithologie élémentaire' (Paris, 1816), Vieillot undertook the division in the following terms (p. 62):

"245. CRYMOPHILE, Crymophilus. Tringa, Linn. Gm. Phalaropus, Lath.

Bec un peu trigone a la base, sillonné en dessus, droit, à la point dilatée, arrondie et fléchie....

Esp. Phalarope à festons dentelés, Buff.

246. PHALAROPE, *Phalaropus*, Briss. Lath. *Tringa*, Lin. Gm. Bec droit, arrondi, grêle, pointu, un peu incliné vers le bout... *Esp.* Phalarope cendré, Buff."

\* Chordeiles virginianus SWAINS. Faun. Bor. Am. II, p. 496 (1831).

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It was not before the following year (1817) that Cuvier subdivided the same genus in a similar manner, retaining, however, the name *Phalaropus* for the group already named *Crymophilus* by Vieillot, and giving the name *Lobipes* to the latter's *Phalaropus*.

The North American species should stand thus :

- R. 563. Crymophilus\* fulicarius (Linn.). RED PHAL-AROPE.
  - 564. Phalaropus lobatus (*Linn.*). Northern Phal-AROPE.
  - 565. Phalaropus tricolor (Vieill.). Wilson's Phal-AROPE.

### XXVII. Scops PREOCCUPIED!

The following note has for its object to call attention to the fact that the generic term *Scops*, frequently applied to the Little Screech Owl and its allies, is preoccupied in ornithology.

In 1760 Brisson named the African Umbrette *Scopus*, a name which Brünnich, the well-known author of 'Ornithologia borealis,' twelve years afterwards emended into *Scops*. In 1772 he published a small octavo volume, called 'Zoologiæ Fundamenta,'† a kind of Synopsis of the Animal Kingdom, consisting of synoptical tables in the Latin and Danish languages, particularly prepared as a manual to be used by the students at his lectures. All the genera of birds known and recognized at that time are incorporated and characterized; a few new ones are established and some old ones renamed. To this book we owe the first recognition of the Great Auk as a separate genus, and the name it properly should bear, viz., *Plautus*. On p. 74 we find the Umbrette characterized as *Scops*, and that it is not a misprint or *lapsus calami* is evident from the same spelling of the word occurring on p. 70.

The first synonym of *Scops* Savigny is *Ephialtes* Keys. and Blas. (1840), which, however, is also preoccupied, having been employed by Schrank in 1802 for a hymenopterous insect.

<sup>\*</sup>  $\kappa \rho \nu \mu \dot{o} s = ice, \quad \phi_i \lambda \dot{\epsilon} \omega = I \text{ love.}$ 

<sup>†</sup> M. Th. Brünnichii | Zoologiæ | fundamenta | Prælectionibus Academicis | Accomodata. | —Grunde | i | Dyrelæren. | —Hafniæ et Lipsiæ MDCCLXXII. | Apud Frider. Christ. Pelt. | — Litteris Godichianis. (1 vol. oct. 254 pp. Birds from p. 50 to p. 93.)

Next comes *Megascops* of Kaup, concerning the type of which authors seem to be at variance. The case, however, is plain enough. In 'Isis' for 1848, p. 769, Kaup enumerates five species under the subgenus *Megascops*, the first one being 'Sc. *indica* Gmel.,' while Sc. asio is only mentioned as No. 4. But on p. 765, where he mentions the term for the first time, he writes "*Megascops* (*Scops asio*, etc.)," by the species in parenthesis explaining the subgeneric appellation, which may therefore safely be said to have *asio* for type. Besides, the two species mentioned are undoubtedly congeneric, so that the name is applicable whichever may be regarded as the type.

The North-American species will stand thus:

R. 402. —Megascops\* asio (Linn.).
402a.—Megascops asio floridanus (Ridgw.).
402b.—Megascops asio maccalli (Cass.).
402c.—Megascops asio maxwelliæ (Ridgw.).
402d.—Megascops asio kennicotti (Elliot).
—Megascops asio bendirei (Brewst.).
403. —Megascops trichopsis (Wagl.).
404. —Megascops flammeolus (Licht.).

## XXVIII. ON GYRFALCONS.

In Scandinavia only two Gyrfalcons are known to occur, the common so-called 'Brown Gyrfalcon,' or the typical Falco gyrfalco, and the form with whitish black-streaked head, usually attributed to Iceland and South Greenland (cf. Collett, N. Mag. Natur. XXVI, 1881, p. 329). Both of these were known to Linnæus, who described the former as F. gyrfalco, the latter as F. rusticolus. The first of these names is not any longer a matter of dispute. The latter ought not be, for his diagnosis: "Falco cera palpebris pedibusque luteis, corpore cinereo alboque undulato, collari albo. Habitat in Svecia" is clear enough, and better than his diagnosis of F. gyrfalco. He seems not, however, to have recognized the white Gyrfalcon, which was well known to Brünnich. The latter describes, under the specific name of *islandus*, three different birds, which he considers "sine dubio varietates quas soli Daniæ Regi vendere

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<sup>\*</sup> Deriv. Gr.  $\mu \epsilon \gamma \hat{\alpha} s = \text{great}; \sigma \kappa \hat{\omega} \psi = a \text{ kind of Owl.}$ 

tenentur Islandi." The two first, his No. 7 and No. 8, are evidently only stages of the White Gyrfalcon; No. 9 is an equally undoubted description of the bird which we think Linnæus called rusticolus. It will thus be seen that Brünnich's species F. islandus is a compound one, embracing both the white and the dark species of Greenland and Iceland. The author who next treated of these birds from autopsy was Otto Fabricius, who in his celebrated 'Fauna Groenlandica,' published in 1780, applied the name Falco islandus to the white species-"Falco albus maculis cordatis nigricantibus, rectricibus albis nigrofasciatis"---to which he expressly refers Brünnich's No. 8 as the young, and No. 7 as the old, while No. 9, the dark one, he without hesitation quotes as a synonym of his F. rusticolus. Fabricus, therefore, restricted the name islandus to the white species. To us who accept Brünnich's names the species must stand as

#### Falco islandus Brünnich as restricted by Fabricius,

while English authors-starting from the 12th edition-will have to call it

### Falco islandus Fabricius, 1780.

It is a matter of regret that Gmelin when editing the Systema Naturalis eight years later overlooked Fabricius's\* 'Fauna Groenlandica,' thus committing the blunder of applying Brünnich's *islandus* to No. 9, the dark one, while he treated No. 7 and No. 8, respectively, as var.  $\beta$  *albus* and var.  $\gamma$  *maculatus*, names occurring four pages earlier than his *Falco candicans* and *F. candicans*  $\beta$  *islandicus*, which this arch-compiler named from Brisson, not for a moment suspecting that he on an earlier page had given them other names! It would have been of very little consequence what Gmelin did if later authors had not perpetuated his blunder, though we may add at once that not all have done so. It is, perhaps, not possible to get up a *plurimorum auctorum* list, but the White Gyrfalcon (*Falco candicans* plur. auct.) may still be quoted as *Falco islandus* 

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<sup>&</sup>lt;sup>†</sup> Seebohm, in his Hist. Brit. B. Eggs, quotes 'Faber' instead of Fabricius. Faber and Fabricius were two different persons!

Brünnich, 1764, or Fabricius, 1780 (nec Gmelin, 1788, nec auct. plur.), Latham, 1787 and 1790, Bechstein, Meyer\* and Wolf, Temminck, Audubon, Swainson and Richardson, Gould, Holböll, etc. The reinstatement of the proper name may cause some inconvenience in the beginning, and somebody may ask: Must we always be correct? I will answer that we must be correct in this case as in others (cf. Sylvia salicaria, Sylvia rufa, Sterna hirundo, and Stercorarius parasiticus), and that the correct name in time will be as well understood as Pendulinus (intellige Xanthornus), Scops giu, Otus accipitrinus, Lanius auriculatus or pomeranus, or, as I should say, Euneoctonus senator, Accentor collaris, Phylloscopus, collybita, Anthus trivialis, Gallinago cælestis, Tringa striata, Totanus canescens, Ardea ralloides, Bulweria colombina (intellige B. bulwerii), Diomedea albatrus (intellige D. brachvura plur. auct.), Balearica chrysopelargus, Ædicnemus illyricus, etc., etc. There are two principles by which the question of the names can be settled, the principle of priority or the auctorum-plurimorum-principle. As to these I will make Howard Saunder's words mine, only substituting the name Falco islandus for that of Lanius pomeranus: "The earliest unimpeachable description of the White Falcon is that of Falco islandus, Brünnich or Fabricius; and by the existing rules we must accept it, and get used to it as soon as possible. Those who refuse to do this, and adopt names merely because they have been sanctioned by the number or the authoritative weight of employers, will certainly go further and probably fare worse." I will add, however, that the principle of priority must be carried out regardless of consequences and not in the usual slipshod manner, or else it is worse than the antagonistic system; it must also be carried out without delay, that "we may get used to the new names as soon as possible," or else these changes will go on slowly but in all future. So much for those who profess to believe that I "take a special delight in bringing forward wholesale changes of familiar names."

Having examined the large material (about 75 specimens) of

<sup>\*</sup> Meyer seems to have been the first one to suspect the true relationship between gyrfalco and islandus, for in his "Vög. Liv- und Esthl." (1815) p. 20, he says: "In den Taschenbuch der deutschen Vögelkunde habe ich Falco Gyrfalco als eine Abart des F. islandus aufgeführt, allein ich bin doch jetzt geneigt, ihn eher für eine eigene Art zu halten."

Gyrfalcons in the U. S. National Museum, in company with Mr. R. Ridgway, we came to the following conclusions:

1. There are two distinct species of Gyrfalcons, the 'white,' and the 'brown.'

2. The latter is divisible into three geographical races, the typical (Scandinavian) form, the Iceland-Greenland form, and the Labrador form.

3. We are, at present, unable to appreciate the distinction of the so-called *F. holboelli* and *F. sacer* Forst.

I therefore propose that the North American forms be recognized as

R. 412. Falco islandus Brünn. WHITE GYRFALCON. 412a. Falco rusticolus Linn. GRAY GYRFALCON.

412*a*. Faico fusicious *Linn*. GRAY GYRFALCON.

4126. Falco rusticolus gyrfalco (Linn.). Gyrfalcon.

412c. Falco rusticolus obsoletus (Gm.). Labrador Gyrfalcon.

The following synonyms of No. 412 and 412 a may be found useful by those wishing to go further into details:

412. Falco islandus Brünn. WHITE GYRFALCON.

- 1764.—Falco islandus BRÜNNICH, Orn. Bor. p. 2, ns. 7 & 8.— FABRICIUS, Fauna Groenl. p. 58 (1780).— LATHAM, Synops. Suppl. I, p. 282, (1787).—BECHSTEIN, Orn. Taschenb. p. 40 (1803).
- 1783.—Falco gyrfalco BODDAERT, Tabl. Pl-Enl. p. 26)(nec LINN.).
- 1786.—Falco rusticolus MOHR, Islandsk Naturh. p. 19 (part.).
- 1788.—Falco islandus, B albus GMELIN, Syst. Nat. I, p. 271.
- 1788.—Falco islandus y maculatus GMELIN, Syst. Nat. I, p. 271.

1788.—Falco candicans GMELIN, Syst. Nat. I, p. 275.

- 1790.—Falco islandicus LATHAM, Ind. Orn. I, p. 32.— МЕҮ. & WOLF, Tasch. V. Deutschl. I, p. 65 (1810). ТЕММ., Man. d'Orn. 2 ed. p. 17 (1820).— Sw. & RICH. Fauna Bor. Am. II, p. 27 (1831).—AUDUB. B. Am. (pl. ccclxvi)(1836).—GOULD, B. of Eur. I (pl. 19) (1837).— AUDUB. B. Am. 8vo ed. I, p. 81 (1839).— HOLBOELL, Faun. Grönl. (p. 18) (1854).
- 1806.—*Falco groenlandicus* TURTON, Gen. Syst. Nat. I (р. 147) (nec DAUDIN, 1800).—HANCOCK, Ann. N. H. II, p. 249 (1839).
- 1854.—Falco islandicus candicans HolBoell, Zeitschr. Ges. Naturw. III (p. 426).
- 1860.—Falco gyrfalco var. candicans SCHRENCK, Reis. Amurl. I, p. 228.
- 1874.—*Hierofalco holboelli* SHARPE, Cat. B. Brit. Mus. I, pl xiii, righthand figure.

x885.]

412 a. Falco rusticolus Linn. GRAY GYRFALCON.

- 1758.—Falco rusticolus LINN. S. N. 10 ed. I, p. 88.—Id., S. N. 12 ed. p. 125 (1766).—FABRICIUS, Fauna Groenl. p. 55 (1780).—Mohr, Islandsk Naturh. p. 19 (part.) (1786).— GMELIN, Syst. Nat. I, p. 268 (1788).— LATHAM, Ind. Orn. I, p. 28 (1790).
- 1764.—Falco islandus Brünnich, Orn. Bor. p. 2, No. 9.—GMELIN, Syst. Nat. I, p. 271.
- 1776.— Falco islandus fuscus Müller, Prod. Zool. Dan. (p. 73 and pag. viii, fide Fabr.).
- 1780.—Falco fuscus FABRICIUS, Fauna Groenl. p 56.
- 1783.—Falco gyrfalco BODDAERT, Tabl. Pl. Enl. p. 13 (nec LINN.).
- 1788.—Falco candicans **B** islandicus GMELIN, Syst. Nat. I, p. 275.
- 1800.—Falco islandicus DAUDIN, Tr. d'Orn. II, p. 100 (nec LATHAM).
- 1800.—*Falco groenlandicus* DAUDIN, Tr. d'Orn. II, p. 107 (Dec HANC.).— BREHM, Isis, 1826, p. 990.
- 1854.—Falco arcticus Holboell, Zeitschr. Ges. Naturw. III (p. 426) (nec. F. communis µ arcticus GMEL. 1788).
- 1862.-Falco gyrfalco groenlandicus SCHLEGEL, Mus. P. B. Falc. p. 13.
- 1862.-Falco gyrfalco islandicus SCHLEGEL, Mus. P. B. Falc. p. 14.
- 1873.-Falco holboelli SHARPE, P. Z. S. 1873, p. 415.
- 1883.— { Falco gyrfalco candicans Falco candicans gyrfalco } SEEBOHM, Brit. B. Eggs, I, p. 16.
- 1884.-Hierofalco islandus a holboelli GURNEY, Diurn. B. Prey. p. 111.

SMITHSONIAN INSTITUTION,

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# SUPPLEMENTARY NOTES ON THE ORNITHOLOGY OF CHESTER COUNTY, SOUTH CAROLINA.

BY LEVERETT M. LOOMIS.

THE writer, in continuing his notes on the birds of Chester County, South Carolina, would express his great indebtedness to the late Dr. T. M. Brewer, not only for the careful revision of his former work, but for many very valuable suggestions in his studies of the ornithology of this region.

Since the publication of the 'Partial List,' \* thirty-eight species and two subspecies have been added to those already

<sup>\*</sup> Bull. Nutt. Ornith. Club, Vol. IV, No. 4, pp. 209-218, Oct. 1879.