

very rapid flight of the bird northward; the grain, I presume, being picked up either in the southern or midland States of the American Union. They are a very powerful bird on the wing. Rising at first slowly from the water, they fly rather low for a time, but soon ascend, and, forming a hollow wedge or V, with an old gander at the apex, continue for long distances before again alighting. About the last of October they are generally all gone, but I have heard of stragglers being seen even in mid-winter.

BIRDS OF THE LOWER URUGUAY.

BY WALTER B. BARROWS.

(Concluded from p. 278.)

184. *Charadrius virginicus* *Borkh.* CHORLO (PLOVER).—Seen only in the neighborhood of Bahia Blanca and the Sierra de la Ventana from February 8 to March 19. During most of this time it was abundant in flocks of twenty to two hundred individuals, and for the first week or two all the larger flocks were moving pretty uniformly in a south or southwesterly direction; a fact which I could account for only by supposing that the plains of Patagonia must offer some strong attraction in the way of food at this season.

185. *Eudromias modesta* (*Licht.*). CHORLITO (LITTLE PLOVER).—Taken but twice at Concepcion, viz., April 29, and May 6, 1880; while a few specimens, either of this or the following species, were observed on the pampas during March and April, 1881.

186. *Ægialitis falklandica* (*Lath.*).—One specimen, Concepcion, April 30, 1880, and the doubtful observations mentioned under the preceding species.

187. *Ægialitis collaris* (*Vieill.*). CHORLITO (LITTLE PLOVER).—Rather abundant at Concepcion in March and August, in small flocks all over the open country. Probably a few winter there.

188. **Himantopus nigricollis** *Vieill.* ZANCUDO (LONG-LEGS).—Abundant at Concepcion only from March until August, though a few linger later. At Azul, January 31, 1881, it was quite plenty in small flocks, and at Puan, March 28, 1881, a pair or two were seen. Where it breeds I do not know.

189. **Gallinago paraguaiæ** (*Vieill.*). BECASINO (SNIPE?).—Extremely plenty at Concepcion during cold weather; less so in summer, but many remain to breed. A set of three eggs was taken September 16, 1880, and two eggs from another nest on October 12. Both nests were slight hollows in the ground, with a few bits of straw and grass for lining. The eggs are as much like those of *G. wilsoni* as are the birds themselves; that is to say, very similar indeed. During the winter the Snipe collected in some of the marshes to the number of thousands, and often twenty or thirty would rise at the report of the gun and circle about in a loose flock before settling again. They were abundant at Carhué early in April.

190. **Rhynchæa semicollaris** (*Vieill.*).—This peculiar bird, combining characters of both Snipe and Rail, is an abundant resident at Concepcion where it breeds.

On September 18, 1880, I found two sets of two eggs each, laid without any attempt at a nest on the bare ground close to the edge of a marsh. The eggs, which were much incubated, were of nearly the same size at both ends and resembled quite closely, both in shape and coloration, the eggs of our common Night-hawk (*Chordiles virginianus*), the ground color being almost obscured by a profusion of heavy dots and blotches of dark brown and black. The sitting birds flew directly from the eggs without any attempt to lead away from them. I usually found these birds abundant in the same meadows with the Snipe, often flushing both at the same time.

191. **Tringa fuscicollis** *Vieill.* MBATITUÍ (Indian name).—In small squads or large flocks at the same times and places as the following species.

192. **Tringa maculata** (*Vieill.*) MBATITÚ (Indian name).—Common in flocks at Concepcion through the larger part of the year, only absenting itself from the middle of November to the middle of January, and even then a few may usually be found. They are almost always in company with the preceding species, often forming flocks of several hundred individuals. Where

they go in the summer I do not know, but they were abundant at Carhué and neighboring places in March and April.

193. **Totanus melanoleucus** (*Gm.*). CHORLO (PLOVER).—Occurs sparingly at Concepcion every month in the year, but in increased numbers during August, September, October and November.

Birds taken during August and September were for the most part in worn plumage and quite thin; those taken at other times seemed to be in much better condition; but I never found any which showed evidence of any nearness to the breeding season. I believe that part of these are birds bred in North America, and the rest are natives of the southern pampas of Patagonia. They were abundant at Azul, January 25 to 31; at Bahía Blanca one was seen on February 8; I heard them at Puan March 28, and they were numerous at Carhué the first week in April.

194. **Totanus flavipes** (*Gm.*).—Usually noted with the preceding, but none were seen at Concepcion during May, June, and July, 1880. At Azul they were quite plenty January 28, 1881.

195. **Rhyacophilus solitarius** (*Wils.*).—In parties of two to six at Concepcion during August, September, and October. First seen there August 20, 1880. I saw a few between Buenos Aires and Azul on January 25, 1881.

196. **Actiturus bartramius** (*Wils.*).—A common bird everywhere from November to April. Especially abundant about the vast swarms of 'locusts' which were sweeping the country in 1879 and 1880. During December, 1880, I frequently saw thousands of the birds in the compass of a very few acres. They were all in rather poor plumage, but many of them quite fat. In habits they were precisely like the same birds here, except that I several times saw single birds balancing themselves for a few seconds on the tops of bushes, which I do not remember noting before. That this species regularly ranges from the United States to the pampas I no longer have any doubt. The same may be said of the last three species mentioned and the one following, with this single difference, that while I am pretty well satisfied that some individuals of *Totanus melanoleucus* breed on the pampas or in Patagonia, I found no evidence that any of the other species mentioned do so. They seem to be simply visitors from the northern hemisphere, spending the time between breeding

seasons in a country which affords them a congenial climate and an abundance of food. For a discussion of this matter from a sportsman's point of view the reader is referred to an article by W. Hapgood in 'Forest and Stream,' Vol. XVII, Oct. 20, 1881.

197. **Numenius borealis** (*Forst.*). — First seen at Concepcion, September 9, 1880, in large flocks. After the middle of October none were seen there, but after leaving Azul for Bahia Blanca it was seen almost daily on the pampas in company with the Golden Plover and Bartram's Sandpiper until late in February. After March 1 none were met with.

198. **Sterna superciliaris** *Vieill.* — A single female was taken at Concepcion, October 14, 1880.

199. **Sterna magnirostris** (*Licht.*). GAVIOTITA (LITTLE GULL). — A pair seen, and female taken, at Concepcion, September 9, 1880. They were following up a small sandy stream hunting like Kingfishers.

200. **Larus dominicanus** (?) *Licht.* GAVIOTA GRANDE (BIG GULL). — A Gull about the size of our Herring Gull (*L. argentatus*) was abundant on the pampas during February 1881, and probably it was the same species which frequented the salt 'lagunas' at Puan and Carhué during March and April. As no specimens were secured I refer it to *dominicanus* with some hesitation.

201. **Larus cirrhocephalus** *Vieill.* GAVIOTA (GULL). — Apparently resident at Buenos Aires, but only common at Concepcion in winter. During May, June, and July, however, it was common in immense flocks, wheeling about the *saladeros*, or slaughter houses, alighting anywhere to pick up food, and usually gathering in great companies at midday to sit preening their feathers and gossiping for an hour or two in the sun on some grassy spot well back from the river.

NOTE.—No attempt is made to enumerate here the various species of Gulls, Petrels, Shearwaters, etc., which abound in the winter months at the mouth of the river, but which I had no opportunity of collecting or studying.

202. **Æchmophorus major** (*Bodd.*). — Not uncommon at Concepcion during cool weather, both on the river and on smaller streams. My dates range from March 25 to September 26. One, which I shot on June 29, had only long, fine, water-grass in the stomach, not even the smell of fish.

A few birds of this species were seen in the salt lakelet of Puan March 27, 1881. In many places they are much hunted for the skins, which form quite an article of commerce at Buenos Aires.

203. *Podiceps rollandi* ♀. *et G.*—First met with on the Napostá Chico, Feb. 23, 1881. This is a small stream rising in the Sierra de la Ventana and vanishing in the sand after a course of fifteen or twenty miles. It contains but one species of fish, a small 'chub,' which is also abundant in most of the ponds of the country. Many of the pools of this stream have a depth of twenty to thirty feet, and, lying between perpendicular banks of twice that height, were not easily accessible. Here several of these beautiful Grebes swam in perfect safety; and we met with them again in similar places on the Pigué and Sauce Chico. A few were seen at Carhué in April.

204. *Rhynchotus rufescens* (*Temm.*). PERDIZ GRANDE (BIG PARTRIDGE).—Also called *Martinete*, as is also the crested Tinamou (*Calodromas elegans*), which is found further south. The present species is a rather common resident at Concepcion, where it breeds. It frequents long grass and dense growths of creeping vines and brambles, but avoids equally the open grazing grounds and the wooded stretches. It runs with surprising speed, and is very difficult to flush without a dog, but once started flies straight and strong. But, as has been repeatedly noticed by Hudson and others, its second flight is much feebler, and if forced to rise for the third time it soon drops and can then be easily caught by a dog. Its ordinary call consists of four or five mellow notes closely resembling the call of the Baltimore Oriole, and for months I failed to attribute it to its true source. The eggs, four in number, are always laid on the ground in a rude nest of grasses, etc. They are about the size of a hen's egg, of a beautiful, purplish-chocolate color, and with a polish not met with outside this family.

It would be difficult to find an egg which could compare in beauty with those laid by this bird. The species was more or less plenty at all points on the pampas. Its flesh is not particularly good, but is a vast improvement on the dry, tasteless flesh of the following species, which, nevertheless, is highly prized because it is white!

205. *Nothura maculosa* (*Temm.*). PERDIZ (PARTRIDGE).—This tail-less little bird, hardly bigger than *Ortyx virginianus*,

is an abundant resident all over the Argentine Republic. The only wonder is that it continues to be so abundant, for it is easily snared in many ways, and is hunted in every possible manner, while, according to the best evidence at hand, it rarely lays more than four eggs in one nest, and only raises one brood in the season. This is emphatically a bird of the fields and pastures, and usually avoids the long grass and the weedy low grounds. It prefers to run rather than fly, but is a strong bird on the wing, and practically tireless.

The eggs are miniatures of those of the preceding species, and are laid in make-shift nests on the ground from October to December. Near Bahia Blanca I found a nest containing fresh eggs on the 10th of February, but this must have been an unusual case, and probably due to accident.

206. *Calodromas elegans* (*d'Orb. et Is. Geoffr.*). MARTINETE. (A term applied in Spain to a Heron or its plume. Here it undoubtedly refers to the long feathers of the crest.)—Unlike the species just described, this one is always found in small parties, and usually running in single file. In the neighborhood of Bahia Blanca it was not uncommon, but it was not elsewhere met with, being confined pretty rigidly to the shrubby country bordering the pampas on the south and west. The eggs are polished, but of a greenish tint, and are said to be commonly five or six in number. The flesh is fairly palatable.

207. *Rhea americana* *Lath.* AVESTRUZ (OSTRICH).—Abundant only where protected, then multiplying rapidly. About Concepcion it is semi-domesticated, but of little importance, as its feathers are fit only for dusters or rugs, and the best grades bring only about two dollars per pound.

At Concepcion a well-feathered old male will yield about two and one-half pounds of feathers if killed for them alone.

At Puan, where the Indians live mostly on mare's meat and Rheas, I was told that a first class Ostrich yielded from three to four pounds of feathers of the average value of ninety cents per pound. During our stay at this wind-swept and desolate place about two hundred Indians united in a two-day's Ostrich-hunt, resulting in the capture of about sixty birds of all sizes from the full grown adult down to two-month 'chicks.' They begin by beating over a large tract of the plain and then closing in around the game started. Stout greyhounds are used to good purpose,

usually pulling down the swiftest birds within two miles at farthest. The Indians use the *bolas* with much skill, the one used for Ostriches consisting of two half-pound leaden balls connected by eight feet of twisted rawhide twine. Whirling this about the head and 'letting fly' at the running bird they often entangle his legs at a distance of thirty to fifty yards, and I was *told* that it was frequently done at one hundred.

Single hunters stalk Ostriches sometimes in the following way: Getting to windward of the bird the latter soon scents him and lies down, only sticking up his head above the grass. The hunter may then creep directly up within shot if the grass be long enough to shelter him, and the bird is shot through neck or head before he rises. So many stories have been told of the breeding habits of these birds that I could probably add nothing of value myself, so I append the following, which was told me by a young man who was born and brought up among Ostriches. When an Ostrich has built a nest and laid the full number of eggs, she is naturally anxious to be able to find the nest again after having wandered away to any distance. This she manages by simply laying eggs at intervals of half-a-mile or so over the adjacent country, placing each egg with its smaller end pointing directly toward the nest!

Before closing this paper I wish to return my grateful acknowledgements to Mr. J. A. Allen and to Dr. Hermann Burmeister of Buenos Aires, for the determination of most of the species herein described, and for much invaluable assistance of every kind. My thanks are also due to Mr. Geo. N. Lawrence for similar services. I take this opportunity also of returning thanks to Dr. P. G. Lorentz of Concepcion for indispensable aid in the collection of notes and specimens from the pampas, and to Professors Seekamp, Alió, and Dr. Quesada, of the Colégio Nacional at Concepcion, for many specimens and much information on the species of that region.

MIDDLETOWN, CONN.,

MAY, 1884.