PINE GROSBEAK.

†CORYTHUS ENUCLEATOR, *Linn.*

PLATE CXCIX.—MALE, FEMALE, AND YOUNG.

In WILSON's time, this beautiful bird was rare in Pennsylvania; but since then it has occasionally been seen in considerable numbers, and in the winter of 1836, my young friend J. TRUDEAU, M. D., procured several in the vicinity of Philadelphia. That season also they were abundant in the States of New York and Massachusetts. Some have been procured near the mouth of the Big Guyandotte on the Ohio; and Mr. NUTTALL has observed it on the lower parts of the Missouri. I have ascertained it to be a constant resident in the State of Maine, and have met with it on several islands in the Bay of Fundy, as well as in Newfoundland and Labrador. Dr. RICHARDSON mentions it as having been observed by the Expedition in the 50th parallel, and as a constant resident at Hudson's Bay. It is indeed the hardiest bird of its tribe yet discovered in North America, where even the Rose-breasted Grosbeak, though found during summer in Newfoundland and Labrador, removes in autumn to countries farther south than the Texas, where as late as the middle of May I saw many in their richest plumage.

The Pine Grosbeak is a charming songster. Well do I remember how delighted I felt, while lying on the moss-clad rocks of Newfoundland, near St. George's Bay, I listened to its continuous lay, so late as the middle of August, particularly about sunset. I was reminded of the pleasure I had formerly enjoyed on the banks of the clear Mohawk, under nearly similar circumstances, when lending an attentive ear to the mellow notes of another Grosbeak. But, reader, at Newfoundland I was still farther removed from my beloved family; the scenery around was thrice wilder and more magnificent. The stupendous dark granite rocks, fronting the north, as if bidding defiance to the wintry tempests, brought a chillness to my heart, as I thought of the hardships endured by those intrepid travellers who, for the advancement of science, had braved the horrors of the polar winter. The glowing tints of the western sky, and the brightening stars twinkling over the waters of the great Gulf, rivetted me to the spot, and the longer I gazed, the more I wished to remain; but darkness was suddenly produced by the advance of a mass of damp fog, the bird ceased its song, and all around seemed transformed into chaos. Silently I groped my way to the beach, and soon reached the Ripley.

The young gentlemen of my party, accompanied by my son JOHN WOODHOUSE, and a Newfoundland Indian, had gone into the interior in search of Rein Deer, but returned the following afternoon, having found the flies and mosquitoes intolerable. My son brought a number of Pine Grosbeaks, of different sexes, young and adult, but all the latter in moult, and patched with dark red, ash, black and white. It was curious to see how covered with sores the legs of the old birds of both sexes were. These sores or excrescences are, I believe, produced by the resinous matter of the fir-trees on which they obtain their food. Some specimens had the hinder part of the tarsi more than double the usual size, the excrescences could not be removed by the hand, and I was surprised that the birds had not found means of ridding themselves of such an inconvenience. One of the figures in my plate represents the form of these sores.

I was assured that during mild winters, the Pine Grosbeak is found in the forests of Newfoundland in considerable numbers, and that some remain during the most severe cold. A lady who had resided there many years, and who was fond of birds, assured me that she had kept several males in cages; that they soon became familiar, would sing during the night, and fed on all sorts of fruits and berries during the summer, and on seeds of various kinds in winter; that they were fond of bathing, but liable to cramps; and that they died of sores produced around their eyes and the base of the upper mandible. I have observed the same to happen to the Cardinal and Rose-breasted Grosbeaks.

The flight of this bird is undulating and smooth, performed in a direct line when it is migrating, at a considerable height above the forests, and in groups of from five to ten individuals. They alight frequently during the day, on such trees as are opening their buds or blossoms. At such times they are extremely gentle, and easily approached, are extremely fond of bathing, and whether on the ground or on branches, move by short leaps. I have been much surprised to see, on my having fired, those that were untouched, fly directly towards me, until within a few feet, and then slide off and alight on the lower branches of the nearest tree, where, standing as erect as little Hawks, they gazed upon me as if I were an object quite new, and of whose nature they were ignorant. They are easily caught under snow-shoes put up with a figure of four, around the wood-cutters' camps, in the State of Maine, and are said to afford good eating. Their food consists of the buds and seeds of almost all sorts of trees. Occasionally also they seize a passing insect. I once knew one of these sweet songsters, which, in the evening, as soon as the lamp was lighted in the room where its cage was hung, would instantly tune its voice anew.

My kind friend THOMAS M'CULLOCH of Pictou in Nova Scotia, has sent

me the following notice, which I trust will prove as interesting to you as it has been to me. Last winter the snow was exceedingly deep, and the storms so frequent and violent that many birds must have perished in consequence of the scarcity of food. The Pine Grosbeaks being driven from the woods, collected about the barns in great numbers, and even in the streets of Pictou they frequently alighted in search of food. A pair of these birds which had been recently taken were brought me by a friend, but they were in such a poor emaciated condition, that I almost despaired of being able to preserve them alive. Being anxious, however, to note for you the changes of their plumage, I determined to make the attempt; but notwithstanding all my care, they died a few days after they came into my possession. Shortly after, I received a male in splendid plumage, but so emaciated that he seemed little else than a mass of feathers. By more cautious feeding, however, he soon regained his flesh, and became so tame as to eat from my hand without the least appearance of fear. To reconcile him gradually to confinement, he was permitted to fly about my bedroom, and upon rising in the morning, the first thing I did was to give him a small quantity of seed. But three mornings in succession I happened to lie rather later than usual, and each morning I was aroused by the bird fluttering upon my shoulder, and calling for his usual allowance. The third morning, I allowed him to flutter about me some time before shewing any symptom of being awake, but he no sooner observed that his object was effected than he retired to the window and waited patiently until I arose. As the spring approached, he used to whistle occasionally in the morning, and his notes, like those of his relative the Rose-breasted Grosbeak, were exceedingly rich and full. About the time, however, when the species began to remove to the north, his former familiarity entirely disappeared. During the day he never rested a moment, but continued to run from one side of the window to the other, seeking a way of escape, and frequently during the night, when the moonlight would fall upon the window, I was awakened by him dashing against the glass. The desire of liberty seemed at last to absorb every other feeling, and during four days I could not detect the least diminution in the quantity of his food, while at the same time he filled the house with a piteous wailing cry, which no person could hear without feeling for the poor captive. Unable to resist his appeals, I gave him his release; but when this was attained he seemed very careless of availing himself of it. Having perched upon the top of a tree in front of the house, he arranged his feathers, and looked about him for a short time. He then alighted by the door, and I was at last obliged to drive him away, lest some accident should befall him.

"These birds are subject to a curious disease, which I have never seen in any other. Irregularly shaped whitish masses are formed upon the legs and

feet. To the eye these lumps appear not unlike pieces of lime; but when broken, the interior presents a congeries of minute cells, as regularly and beautifully formed as those of a honey-comb. Sometimes, though rarely, I have seen the whole of the legs and feet covered with this substance, and when the crust was broken, the bone was bare, and the sinews seemed almost altogether to have lost the power of moving the feet. An acquaintance of mine kept one of these birds during the summer months. It became quite tame, but at last it lost the power of its legs and died. By this person I was informed that his Grosbeak usually sang during a thunder-storm, or when rain was falling on the house."

While in the State of Maine, I observed that these birds, when travelling, fly in silence, and at a considerable height above the trees. They alight on the topmost branches, so that it is difficult to obtain them, unless one has a remarkably good gun. But, on waiting a few minutes, you see the flock, usually composed of seven or eight individuals, descend from branch to branch, and betake themselves to the ground, where they pick up gravel, hop towards the nearest pool or streamlet, and bathe by dipping their heads and scattering the water over them, until they are quite wet; after which they fly to the branches of low bushes, shake themselves with so much vigour as to produce a smart rustling sound, and arrange their plumage. They then search for food among the boughs of the taller trees.

Male, $8\frac{1}{2}$, 14. Female, $8\frac{1}{4}$, $13\frac{1}{2}$.

From Pennsylvania and New Jersey, in winter, eastward to Newfoundland. Breeds from Maine northward. Common. Migratory.

PINE GROSBEAK, *Loxia Enucleator*, Wils. Amer. Orn., vol. i. p. 80.

PYRRHULA ENUCLEATOR, Bonap. Syn., p. 119.

PYRRHULA (CORYTHUS) ENUCLEATOR, *Pine Bullfinch*, Swains. and Rich. F. Bor. Amer. vol. ii. p. 262.

PINE GROSBEAK OR BULLFINCH, Nutt. Man., vol. i. p. 535.

PINE GROSBEAK, *Pyrrhula Enucleator*, Aud. Orn. Biog., vol. iv. p. 414.

Adult Male.

Bill short, robust, bulging at the base, conical, acute; upper mandible with its dorsal outline convex, the sides convex, the edges sharp and overlapping; lower mandible with the angle short and very broad, the dorsal line ascending and slightly convex, the sides rounded, the edges inflected; the acute decurved tip of the upper mandible extending considerably beyond that of the lower; the gap-line deflected at the base.

Head rather large, ovate, flattened above; neck short; body full. Legs short, of moderate strength; tarsus short, compressed, with six anterior scutella, and two plates behind, forming a thin edge; toes short, the first

proportionally stout, the third much longer than the two lateral, which are about equal; their scutella large, their lower surface with large pads covered with prominent papillæ. Claws rather long, arched, much compressed, laterally grooved, and acute.

Plumage soft, full, rather blended, the feathers oblong. At the base of the upper mandible are strong bristly feathers directed forwards. The wings of moderate length; the primaries rounded, the second and third longest, and with the fourth and fifth having their outer webs slightly cut out. Tail rather long, emarginate, of twelve strong, broad, obliquely rounded feathers.

Bill reddish-brown. Iris hazel. Feet blackish-brown, claws black. The general colour of the plumage is bright carmine, tinged with vermilion; the feathers of the fore part of the back and the scapulars greyish-brown in the centre; the bristly feathers at the base of the bill blackish-brown; the middle of the breast, abdomen, and lower tail-coverts, light grey, the latter with a central dusky streak. Wings blackish-brown; the primaries and their coverts narrowly edged with reddish-white, the secondaries more broadly with white; the secondary coverts and first row of small coverts tipped with reddish-white, the smaller coverts edged with red.

Length to end of tail $8\frac{1}{2}$ inches, to end of wings $6\frac{1}{4}$, to end of claws $6\frac{3}{4}$; extent of wings 14; wing from flexure $4\frac{3}{4}$; tail 4; bill along the ridge $\frac{7\frac{1}{2}}{12}$, along the edge of lower mandible $\frac{7}{12}$; tarsus $\frac{9\frac{1}{2}}{12}$; first toe $\frac{4\frac{1}{2}}{12}$, its claw $\frac{5}{12}$; middle toe $\frac{8}{12}$, its claw $\frac{5}{12}$.

Female.

The female is scarcely inferior to the male in size. The bill is dusky, the feet as in the male. The upper part of the head and hind neck are yellowish-brown, each feather with a central dusky streak; the rump brownish-yellow; the rest of the upper parts light brownish-grey. Wings and tail as in the male, the white edgings and the tips tinged with grey; the cheeks and throat greyish-white or yellowish; the fore part and sides of the neck, the breast, sides, and abdomen ash-grey, as are the lower tail-coverts.

Length to end of tail $8\frac{1}{4}$ inches, to end of wings $6\frac{1}{4}$, to end of claws $6\frac{3}{4}$; extent of wings $13\frac{1}{2}$; wing from flexure $4\frac{1}{2}$; tail $3\frac{10}{12}$; tarsus $\frac{9\frac{1}{2}}{12}$; middle toe and claw $1\frac{1}{12}$.

Young fully fledged.

The young, when in full plumage, resemble the female, but are more tinged with brown.

An adult male from Boston examined. The roof of the mouth is moderately concave, its anterior horny part with five prominent ridges; the lower mandible deeply concave. Tongue $4\frac{1}{2}$ twelfths long, firm, deflected at the middle, deeper than broad, papillate at the base, with a median groove; for the distal half of its length, it is cased with a firm horny substance, and is

then of an oblong shape, when viewed from above, deeply concave, with two flattened prominences at the base, the point rounded and thin, the back or lower surface convex. This remarkable structure of the tongue appears to be intended for the purpose of enabling the bird, when it has insinuated its bill between the scales of a strobilus, to lay hold of the seed by pressing it against the roof of the mandible. In the Crossbills, the tongue is nearly of the same form, but more slender, and these birds feed in the same manner, in so far as regards the prehension of the food. In the present species, the tongue is much strengthened by the peculiar form of the basi-hyoid bone, to which there is appended as it were above a thin longitudinal crest, giving it great firmness in the perpendicular movements of the organ. The œsophagus *a b c d*, Fig. 1, is two inches 11 twelfths long, dilated on the middle of the neck so as to form a kind of elongated dimidiated crop, 4 twelfths of an inch in diameter, projecting to the right side, and with the trachea passing along that side of the vertebræ. The proventriculus *c*, is 8 twelfths long, somewhat bulbiform, with numerous oblong glandules, its greatest diameter $4\frac{1}{2}$ twelfths. A very curious peculiarity of the stomach *e*, is, that in place of

Fig. 1.

Fig. 2.

having its axis continuous with that of the œsophagus or proventriculus, it bends to the right nearly at a right angle. It is a very powerful gizzard, $8\frac{1}{2}$ twelfths long, 8 twelfths broad, with its lateral muscles $\frac{1}{4}$ inch thick, the lower very distinct, the epithelium longitudinally rugous, of a light reddish colour. The duodenum, *f*, *g*, first curves backward to the length of $1\frac{1}{4}$ inches, then folds in the usual manner, passing behind the right lobe of the liver; the intestine then passes upwards and to the left, curves along the left side, crosses to the right, forms about ten circumvolutions, and above the stomach terminates in the rectum, which is 11 twelfths long. The cœca are $1\frac{1}{4}$ twelfths in length and $\frac{1}{4}$ twelfth in diameter. The entire length of the intestine from the pylorus to the anus is $31\frac{1}{2}$ inches (in another male 31); its greatest breadth in the duodenum $2\frac{1}{2}$ twelfths, gradually contracting to $1\frac{1}{4}$ twelfths. Fig. 2, represents the convoluted appearance of the intestine. The œsophagus *a b c*; the gizzard *d*, turned forwards; the duodenum, *e f*; the rest of the intestine, *g h*; the cœca, *i*; the rectum, *i j*, which is much dilated at the end.

The trachea is 2 inches 2 twelfths long, of uniform diameter, $1\frac{1}{2}$ twelfths broad, with about 60 rings; its muscles like those of all the other species of the Passerinæ or Fringillidæ.

In a female, the œsophagus is 2 inches 10 twelfths long; the intestine 31 inches long.

In all these individuals and several others, the stomach contained a great quantity of particles of white quartz, with remains of seeds; and in the œsophagus of one was an oat seed entire.

Although this bird is in its habits very similar to the Crossbills, and feeds on the same sort of food, it differs from them in the form and extent of its crop, in having the gizzard much larger, and the intestines more than double the length, in proportion to the size of the bird.

Common Pine-finch.

1.—Male 2.—Female.

Audubon, John James. 1841. "Pine Grosbeak, *Corythus enucleator*, Linn. [Pl. 199]." *The birds of America : from drawings made in the United States and their territories* 3, 179–185. <https://doi.org/10.5962/p.319312>.

View This Item Online: <https://www.biodiversitylibrary.org/item/124835>

DOI: <https://doi.org/10.5962/p.319312>

Permalink: <https://www.biodiversitylibrary.org/partpdf/319312>

Holding Institution

Smithsonian Libraries

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: NOT_IN_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.