

an old acquaintance of mine from Maryland, seems to be extending its breeding range to this latitude. While I never saw it here, I was surprised to see a mounted specimen, a male, in the small collection of the keeper at the rifle range, just without the city limits. Upon inquiry he stated to me, that he had seen three or four of these birds near the range during the summer of 1904, of which he shot and mounted the one in question. In the summer of 1906 he saw about ten of them frequenting the same place. It is to be hoped that they return in greater numbers and stay.

UNPUBLISHED LETTERS OF JOHN JAMES AUDUBON
AND SPENCER F. BAIRD.

BY RUTHVEN DEANE.¹

II.

BAIRD TO AUDUBON.

Carlisle, June 20th, 1840.

Dear Sir

I was not less surprised than delighted at receiving your kind answer to my letter, for I felt like one who has done an act for which he does not know whether he is to be praised or blamed. I am very glad to hear that you purpose publishing a work on the Quadrupeds of our country, which no one is more capable of doing than yourself. Dr. Godman's work though very good as far as it goes yet is inferior in respect to minute and accurate distinction of species, as well as in being complete. May I take the liberty of asking the plan of your work, the size, expense &c. If you could

¹ Since the publication of the first series of these letters (Auk, Vol. XXIII, No. 2, April, 1906) I have received a number of additional ones. For the privilege of making copies and publishing them I am under many obligations to Miss M. E. Audubon.

give me some general idea of the manner in which I am to assist you & of what particular Genera & Species you wish information or specimens, I will do every thing in my power; for although of course more difficult to find than birds, yet I hope that by increased exertion to make up the difference. What do you think of the Zoological report¹ presented to the N. York Assembly last winter by Dr. DeKay? He created a great confusion in my brain respecting classification, which had already become quite muddled by reading the work of Mr. Swainson on "Birds" in Lardner's Cab. Cyclop. Can you tell me what bird his "*Corvus Cacolotl*"² is? I have seen some numbers of your work now publishing, and admire them very much. I have no doubt that it will do more to spread a love for Natural history, than any work ever published. For my part I read the description of birds and the episodes in your "*Ornithological Biography*" with the same motive of pleasure as I used to read a favorite novel.

We have a bird in our collection which differs essentially from the other species of its genus. It is a thrush and I send you quasi description below. I will send you this bird as well as the others spoken of by Philadelphia. I may have an opportunity of sending it there in a week or ten days. You will find them in the hands of Mr. J. Dickinson Sergeant, Chestnut St. two doors above the Mint. Thrush. *Turdus*.

Bill stout, tail broad and even. Secondary quills and tail feathers mucronate, the former very much so: Third quill longest, exceeding the Second by $\frac{1\frac{1}{2}}{12}$ Whole upper parts dusky olive, head only a shade darker, a dark spot before the eye; a line from base of upper mandible over the eye, and eyelids yellowish. Throat, neck and breast tinged with pale yellowish brown; and marked with decided and rather large brown spots. Sides dark yellowish brown, rest of lower parts white, quills and tail brown the edges

¹ Assembly Document No. 50. Jan. 24, 1840. "Communication from the Governor, transmitting several reports relative to the Geological Survey of the State."

Includes Letter from J. E. DeKay, of the Zoölogical Department, dated May 7, 1839, with "Catalogue of the Animals belonging to the State of New York, as far as they have been figured and described, January 1, 1839" (pp. 7-14) and "Report of J. E. DeKay, of the Zoological Department" (pp. 15-36).

² *Corvus cacolotl* Wagler (Isis, 1831, 527), is a synonym of *Corvus sinuatus* Wagler, (Isis, 1829, 748), the Mexican Raven (*Corvus corax sinuatus*) of the A. O. U. Check-List.

tinged with dark yellowish brown. Length to end of tail 7 inches. Wing from flexure $3\frac{9\frac{1}{2}}{12}$. Tail $2\frac{1}{4}$. Bill along ridge $\frac{5\frac{1}{2}}{12}$. Edge of lower mandible $\frac{7\frac{1}{2}}{12}$. Tarsus 1. Middle toe and claw $\frac{10}{12}$. Hind do $\frac{6\frac{1}{2}}{12}$. The only bird with which it can be compared is the Hermit Thrush, but from which it differs very materially. The bill is considerably stouter. It has no brownish red at all about it & its wings and tail are much darker; and though the spots on the breast are not so numerous, yet there is more of the pale yellowish brown on this, than on the neck & breast of the Hermit Thrush.

Believe me sir

Your Obt. Servant

Spencer F. Baird.

John J. Audubon. F. R. S. &c.

[Superscription] John J. Audubon. F. R. S.

86 White St.

New York.

BAIRD TO AUDUBON.

Carlisle, January 30th, 1841

Dear Sir

I sit down to write, as I dare say you yourself have, before now, surrounded by "Birds, Beasts &c." I have been pulling them from every corner of the house for the purpose of showing them to some friends who called to see them. They now amount to such a number that I find myself unable to keep them together in one room. I was very agreeably surprised this afternoon, on comparing the skin of a *Fuligula Marila*¹ shot in the Potomac, with that of a supposed one obtained near Carlisle, to find that the latter was the *Fuligula Rufitorques*.² Not having compared the *Rufitorques* with the description in the "Biography" and not attending to the difference in the Specula and bills, I had labelled it "*Fuligula Marila*" Young Male. I omitted to state that the little flycatcher I sent you in the summer had been obtained by Dr. Leib of Phila. but

¹ *Aythya marila nearctica.*

² *Aythya collaris.*

sometime after I had obtained my specimen. I hope that you will let me know all about those specimens I sent, Flycatcher, Thrush, Warbler, & Shrew. Is the specific Character of *Sciurus Capistratus*,¹ Viz. ears and nose white, as given in Bachman's monograph, essential. I got a specimen a few weeks ago, Length to end of tail vertebrae 24 inches. Tail vertebrae, 11 inches. Weight 2 lbs. 5 oz. Female. Above grizzled yellowish Gray & Black, beneath ferruginous, as also are the ears & feet & tail beneath. Tail annulate with black. Nose brown. Bones light reddish. I do not know what to refer it to except to *S. Capistratus*.

When I was in Philadelphia in the summer I saw some flycatchers which Townsend and others called Traill's Flycatcher, being the same as those we have as "*Muscicapa Pusilla*." My Idea is certainly that they are the latter, having compared them very carefully with the descriptions, when fresh. I will send you one to see, in order that you may decide. Are you acquainted with any work on Comparative Anatomy of Birds & Quadrupeds. I have been using the article on Birds in Rees's Cyclopedia,² but not being able to make head or tail out of the description of the muscles &c, I threw it aside & wrote one myself. I however want to know such of the names, of muscles, as I cannot find from Bell, or McCartney. In what way do you keep Quadrupeds mounted? or merely in the skins: & also what length of time does it occupy you to skin & sew up a duck, or warbler? You see I am very inquisitive. Don't you think that you will come our way soon. I hope that we may see you before long. I have a great deal of advice to ask, & articles to show, also doubts to settle. I will send you those birds you wished by the first opportunity and believe me to be most sincerely

Your Obedient Servant

Spencer F. Baird.

[Superscription] John J. Audubon Esq.

No. 86 White St.

New York.

¹ *Sciurus niger*.

² Published in 45 vols., 1802-20.

BAIRD TO AUDUBON.

Carlisle, Feb. 8th, 1842.

My dear Mr. Audubon.

After a trial of two weeks I begin to find that I am getting over the shock caused by the sudden transition from the bustle of Broadway to the lifelessness of Carlisle, and hope that by the application of the proper means I may in time perfectly recover. Philadelphia seemed dull but Carlisle was death itself. My visit now however seems but as a dream, and I have settled down into my old regular monotonous life as if I never had been absent a day. When I arrived my friends had a great many questions to ask of course, but almost the first ones on every lip were about Mr. Audubon,—how he looked? What was his age, whether the idea they had formed of him from his writings was correct, many queries also were respecting Mrs. A. and her sons; and all said that they would ever be grateful to them for their kindness, to one away from home. When I arrived in Philadelphia some unexpected intelligence caused me to come almost immediately on, instead of spending a week as anticipated. I however saw almost all of my acquaintances, having by dint of hard exercise managed to traverse almost the whole of the City without however having procured anything in the “Quadrupedologius” line. I had not been long in Carlisle before shouldering my gun I marched out to the creek and succeeded in compassing the death of a poor Golden eye, who unaware of its dangerous proximity to a second “Long Tom”¹ came flying calmly up stream, when “bang” went the gun, “splash” went the duck and “plunge” went my favorite black Newfoundland. Between the three I had the duck in my hand in five or ten minutes but as whisslers are never very good and not at all eatable now, I gave it to a companion who seemed to think he would like to try the

¹ Audubon's favorite gun, which had very long barrels. He always called it “Long Tom” and carried it on many of his expeditions. It is still in possession of the family, but the barrels were cut off to more modern proportions by those who used it after his death. It was not unusual for sportsmen of earlier days to give nicknames to their guns. I have shot with an old duck hunter whose old fashioned arm was familiarly known all over the country as “Old Betsie.” There was a flint lock pistol, called “Long Tom,” such as were used by the highwaymen in England in the early part of the 18th century. (R. D.).

experiment for himself. The weather has been very warm for the last ten days and I am in expectation every day of seeing the robins, blue birds, & other early spring visitors. I was out in the country last Friday, and almost every step I took "off" a turtle tumbled from a log, or a frog jumped into the water, while I was almost eaten up by the gnats. The blue wing teal passed me but not withstanding all my efforts, obstinately refused to give my dog a chance of showing his skill in bringing birds out of water. However I know where they stay & will try & kill them before long.

For want of other objects I have commenced to draw the sternal and shoulder apparatus of our birds, a pretty large collection of which I have been making for a year past. As soon as I can do them pretty well I will send you on a specimen. I find that in many cases I can distinguish species of the same genus from each other, and always genera. I have no doubt that some doubtful or difficult species may be identified by the differences in the shape of the Sternum, & Clavicle. Have you heard from Mr. Lyon of Bedford yet about the money he owes you? I was asking about him the other day, of an acquaintance of his, who told me that he was as good as gold in all his debts, & expressed some surprise at his not having paid, as he generally is very punctual. Last week I walked up to Pinegrove an iron works about sixteen miles in the mountains where resides the Mr. Ege¹ I have so often spoken about as the mighty Nimrod of our county. On my arrival I found a fine wild cat hanging in the stable which had been killed a few days before. On returning the next day I took the cat with me slung across my shoulders, and on reaching home after measuring & weighing it skinned it. I am in hopes of getting some more from there, as they promised to catch all they could for me. It was considered a pretty large one though some considerably larger had been killed. It is twice the size of the one I killed myself a year ago. Shall I send them on now or wait for some more to add to them. The ears were very much tufted, the tufts being an inch long. I gathered much respecting the habits of this animal which I will send you hereafter. The skin is as large as those you showed me in the box under your drawingtable, but it is somewhat stretched.

¹ Peter Ege, at that time proprietor of the Iron Works at Pinegrove, Pa., and a local hunter of renown.

I do not believe that those were larger than this of mine, and a cat of 36 inches may be considered very large. The dimensions were as follows: To root of tail $27\frac{1}{2}$ inchs. To end of tail verteb. 33. Fore to hind foot, both extended 50 inchs. Height of ear externaly 3 inchs. Laterally $2\frac{1}{2}$ Tufts 1. Circumference of body $13\frac{1}{4}$. The animal was exceedingly thin yet weighed $16\frac{1}{2}$ lbs. Had it been fat it would have drawn 20 or more. It was also a male.

Have you received anything new lately, from Smith or any body else. Please let me know the dimensions & weight of your wild cat, and what you have figured since I left New York. The measurements of the cats taken by me are much fuller than I have given here I merely wished to give you some idea of its size. Please give my respects to Mrs. A., your children & such of my acquaintances as you may chance to see, and believe me.

Your affectionate Pupil

Spencer F. Baird.

P.S. I forgot to say that I had a fine steak of the wild cat broiled and it tasted like a tender piece of fresh pork. I will certainly eat the whole of the next one obtained. I intend to taste all the Quadrupeds inhabiting this part of the country.

S. F. B.

[Superscription] John James Audubon Esq.

No. 86 White St.

New York

N. Y.

AUDUBON TO BAIRD.

New York, Feby. 10, 1842.

My dear young Friend.

It is about half an hour since I had the real pleasure of receiving your letter of the 8th inst. and my earnest thanks to you for it and its contents; to all of which I will try to answer at your request.

That Beautiful Carlisle, its surrounding hills bordering its valleys, all within the bosom of quiet nature should appear to you as a small affair when compared to our largest city in the Union, is not at all remarkable, but let me ask you the following questions. Did you

meet all your dear Parents and Friends quite well? Did they not receive you with the kindest of welcomes? Were not their *hearts* and feelings towards you the same as ever? Surely all this was fact, and being so, would you not after all prefer *Little Carlisle*¹ than *Great New York* with all its humbug, rascality, and immorality? Surely or do I mistake your nature sadly, you do! It is now a good long time since I was young, and resided near Norristown in Pennsylvania. It was then and is now a very indifferent place as compared with New York; but still my heart and mind oftentimes dwell in the pleasure that I felt there, and it always reminds me that within a few miles of that village, my Mother did live, and it was there also that my good fortune led me to know and to marry the excellent Wife I have yet, at whose hands yourself have tried to be rendered comfortable. Say what you will, "there is nothing like home." But to change the subject, I trust that in good faith you have not spoken of us to your good family in higher terms than we deserve. We have liked you because we have seen that you deserved to be liked, and I hope with the truest sincerity that we will be enabled always to like you equally. Few men were more disappointed at not hearing sooner from you than your Friend, Doctr. Goldsmith,² and good Major LeConte,³ all of us, in fact, have wondered oftentimes what could have become of you, but now that I know of your being safely ensconced at "Dear Sweet Home," I will let the news fly downward. I wish I could be with you, if only for one week, for I then imagine that between your friends of the mountains, yourself, and myself, we could Tree a "Catamount" and soon untree him. The tugging part of that far-famed animal, I would cheerfully give up to your youthful shoulders, but not so with the figuring of it, yet for a while. Is there such a Beast in existence? Do let me know as soon as you can. I am heartily glad that you have procured a wild cat from the mountainous part of Pennsylvania, and that you have preserved its skin, which I beg of you to forward as soon as you please, along with whatever other quadrupeds you may have in hand, that we may say more on those Beasts of the Central

¹ In 1842 the population of Carlisle was about 4400.

² Dr. Middleton Goldsmith, born 1818, died Nov. 26, 1887.

³ John Eatton LeConte, born 1784, died 1860. A naturalist who in early life served in the corps of army topographical engineers with the rank of major. He was father of John L. LeConte of Philadelphia, the distinguished entomologist.

States, than has ever been, before told. Do send me all you know of the habits, habitats, etc. of said Wild Cats, and any other animals. The tufts of the ears of your specimen must surely prove to be an exception to the Rule, as mine, which is a very fine one, had these ornaments only half the length of those of the one you have procured. The measurements of mine are as follows: from nose to end of scull following the facial curvatures of the head, six inches, Ditto, to end of ear, 8 inches. Ditto to root of tail 30 inches. tail (vertebrae) 5 inches. Ditto to end of hairs $5\frac{1}{2}$ inches. Fore foot stretching leg and nose, 7 inches, hind foot do., leg and tip of tail $7\frac{1}{2}$ inches. Hind feet webbed within $\frac{5}{8}$ inch of the claws; Tufts on the ear $\frac{1}{2}$ inch long, breadth of ear $1\frac{5}{8}$ inch, anterior height of ear $1\frac{3}{4}$; length of neck, 4 inches. Weight 17 lbs. avoidupois. VERY FAT. From root to root of ears taken laterally 3 inches; from tip to tip of ears, laterally, $7\frac{1}{4}$ inches, breadth of head at anterior part of ears, 4 in. "The spot" on the posterior part of the ears is not "a spot," but represents a (undecipherable) portion of almost $\frac{1}{8}$ of a globe. You cannot draw any one subject without improving. All I have to recommend to you is to work slowly, and *constantly*, that is, whenever you can! Since you left us, I have drawn, or, perhaps, finished, the wild cat, the Canada Lynx, two *Arvicola Hispidus*,¹ two *Sorex Parvus*² (a very rare species hitherto unknown in the state of New York) one short eared cat squirrel, (it may prove a different species from the one with tufted ears) and a white hare, *Lepus Americanus*. I have now in hand, alive, one fine *Mustella Erminea*,³ two *Arvicola pennsylvanica*⁴ and two *Hispidae*. Mr. Smith writes to me from Houston (Texas) that he has two fine Peccaries, two Lynx, two Cat Squirrels, two Bats etc. etc. etc. But I will let you know when I see these things. I have heard from Quebec from a Mr. Martin⁵ who is a great collector there, that he has "Black Hares,"

¹ *Sigmodon hispidus* Say & Ord.

² *Blarina parva* (Say).

³ *Putorius cicognanii* Bonap.

⁴ *Microtus pennsylvanicus* (Ord).

⁵ John Martin, Jr., a chronometer and watchmaker, also a naturalist, who lived in the lower town of Quebec. Sir James M. LeMoine writes me that when Audubon visited Quebec in 1842, Martin invited the naturalist to stop under his roof during his stay in the city, and when he took his departure presented him with a copy of his 'Birds of America.'

Marmots, Squirrels, Bats, and a hundred other things, which he will send me in the spring.

Look out for Martens, and try to find me some yourself! I am glad that you find wild cat meat pretty good, as it corroborates the sayings of many others, who pronounce it equal to young veal.

Let me say to you ("en passant") that your handwriting is considerably improved, and depend upon it that your attention to *Drawing* will soon enable you as of "copperplate." Go ahead!

I now wish you earnestly to offer our joint respects, regards, and best wishes to all your family and friends, and to believe me always,

Yours, most truly,

John J. Audubon.

86 White Street.

P. S.

Thank you for what you say of the Bedford gentleman. When I write next, I will mention him at greater length. I wish you could let me know whether we could procure first rate peach trees from your vicinity, and how much 50 of them would cost. I should like to have them assorted, soft, and clings yellow, or red, or blood-red. We wish to plant these as early in March as possible, if young trees, two years old could be had, we might, perhaps, have fruit on some of them during the next summer? Try what you can do for your New York friend.

[On the outside of the letter is the following:] I will make up a box for you in a few days, and send it to you through Mr. Chevalier.

BAIRD TO AUDUBON.

Carlisle, March 4th, 1842.

My dear Mr. Audubon

"The winter is over and gone, and the voice of the Turtle is heard in the land" So king Solomon said some thousand years ago and so says your humble servant now. Spring has opened in earnest, the Robins, Blue Birds, Blackbirds, are all here in great numbers. Wild Geese were heard "Honking" for the first time this afternoon, and the Golden crested Kinglet has begun to come into the gardens. Mallards, Green winged Teal, Baldpates, abound in our streams and in short every thing proclaims the arrival of the most welcome season of the year. In illustration of

all this I send you a paper, containing an article bearing on the subject written by a young cousin of mine, W. M. Penrose, one whose greatest ambition is to write as well as Mr. Audubon. I have delayed answering your letter, in order to make inquiries about the Peach trees. I am sorry to find that our Nursery men have none now good for anything, having sent almost their whole stock to Philadelphia last season to supply the demand in the Jerseys. They console me however by saying that they will have plenty next year.

Before I proceed further let me tell you of two ideas I have in my head, being expeditions in search of Quadrupeds and Birds. One is to the eastern shore of Maryland. I have some relations there who want me to come to see them very much. As my mother is about to visit Washington shortly, passing of course through Baltimore I have some notion of letting her take my baggage to the latter place and set out for it on foot. It is seventy-five or eighty miles from here, and I can walk there in two or three days, and by taking the steamboat, I shall be landed within a few miles of my destination, which is Read's Creek a branch of Chester river. Squirrels are very abundant, particularly the stump eared cat, and if I go I shall be able to procure plenty. My going however is uncertain, depending on several contingencies. The second "Idea" is of a trip to Maine in July with a friend of mine in college who lives there and who insists on my accompanying him home. He lives in New Gloucester and is forty or fifty miles only from the White Mountains of New Hampshire, where he has a sister living within a few miles of the celebrated "Notch." He gives the most glowing description of the abundance of birds and beasts around him, and promises me that I shall have the assistance of every person within thirty miles circuit. Another inducement in his eyes at least, is that I shall be Bridesmaid or something of that sort to a sister of his, who is to be married then, and that in virtue of my office, I shall kiss all the girls in the room, all insured to be pretty too. But I know that you will give me credit for saying that I would rather get a new rare Quadruped or Bird than kiss all the pretty girls in creation. Miss— not excepted. I should like to go very much, but I do not know if I shall be able. The recent pecuniary difficulties in Pennsylvania have affected our family as well as thousands of others whose wealth consists in stocks of different kinds.

No one knows what is to come but if my mother can spare me fifty dollars, which will be about the expense of the trip, I shall go, and return in a few months heavily laden with the spoils of science.

During a visit made some time ago to Pinegrove, an iron establishment of Mr. Ege's I obtained some interesting information of habits of our Wild Cat. Mr. Ege has been a hunter from his earliest youth to the present advanced age of between sixty and seventy, and now though not as active as he was once wont to be, yet he will have to be a pretty hard rider who will take the brush from him. Of his daring feats of horsemanship many feats are remembered and related by the companions of his adventures. Seven miles from Carlisle in the gap of the South Mountain is a heap of loose stones about two hundred feet from top to bottom, formed by the debris of the rocks above. Once after having pursued a deer for a whole day the animal ran to the foot of this place, and dashing up the hill was immediately followed by Mr. Ege. The deer having reached the top descended half way, ran along the hill for forty or fifty yards, and reascended to the summit, still pursued however by the gallant equestrian. The stones which were mostly loose rattled down from beneath the horses feet, a single slip would have been almost certain death yet he rode over the place as easy and unconcerned as if he had been on a smooth turnpike.

The wild cat is becoming more numerous every year; few are caught by the hounds, and still fewer are caught in traps or shot, so that in time they will become almost the only animal of the chase, except foxes, the deer having become very scarce from several causes. One of these is the severe winter of 1839 when the snow having a depth of fifteen or twenty inches with a hard crust, the deer as soon as driven into anything faster than a walk, broke through and were held as in a trap; thus allowing men with snow shoes on, to walk up and kill them with clubs. One monster murdered twenty in a day! The wild cats also aid in the work of destruction, killing great numbers every year, by dropping on them from a tree, or spring from the ground, when in the act of drinking or feeding. One which I killed a year ago had its stomach filled with deers hair. A man some years ago had been out hunting deer, and towards noon stopped near a piece of rich Bottom, in order to eat his dinner. Presently he heard a great crackling in the thicket not far from him and looking towards the place saw a

deer coming to him behaving in a very singular manner. To seize his rifle and kill the deer was but the work of a moment, when walking up to the animal he was surprised to see an immense wild cat clinging to its neck with his teeth buried in the flesh. The cat on seeing the man let go his hold and walked round the deer loth apparently to leave it, and, remained long enough to allow the hunter to load his rifle and stretch him dead also. They are hunted on horse back with a large pack of hounds at Pinegrove. They will tree after running a few miles when it is generally easy enough to get them. Although many stories are related of their ferocity, they are a cowardly animal. Some one of the hunters climbs the tree and with a stick forces the animal to leap from the limb on which it may be recumbent, when its career is soon ended by the hounds, which stand open mouthed under the tree. They have been known to jump from a height of forty and fifty feet uninjured. When they do not tree they make for their holes in the rocks, which should they reach, they are safe. The one obtained this winter was caught within ten feet of its hole. It had its claws nearly worn to stumps from having lived among the stones. Some years ago a large cat was killed and thrown into the crotch of a pretty tall tree. Some weeks after, another cat was trailed to, and killed from the same tree, on looking at the first cat, it was found nearly eaten up, evidently by the second individual, as none but an animal of that species could have reached it. The following are the Measurements of those obtained a year ago and last winter. No. 1 is the male one shot Nov. 30. 1840. No. 2 brought from Pinegrove Jan. 1842. Measurements in inches.

No. 1 was *very* fat, a coat of it every part of the skin. weight 12½ lbs. No. 2 was *very* thin exceeding by weight 16½. So much for the measurements. If you wish the descriptions, from the fresh

	1.	2.		1.	2.
To end of tail (verteb.)	29½	33	From end of fore leg to end of hind leg both extended.	42	58
Tail (verteb.)	5½	5½	extent of ears across crown, tips of hair not included.	8½	8½
Extent of fore leg.	29½	33	Circumference of the chest part of body (middle).	17	13½
Extent of hind leg.	28½	33½	From one fore foot to the other across the shoulders.	30½	38½
Height of ear anteriorly	2½	3	Circumference of neck close to head.	8	8½
Height of ear inside (laterally)	12½	13½	Circumference of head before ears.	10	
Circumference behind fore leg.	14	13½	Circumference of wrist.	3½	
Head from nose to occiput.	5½	6½			
Elbow joint to claws of fore leg.	9	10½			
From Heel to claws of hind leg.	6½	6½			
Tibia.		9			
Carpus to claws.		4½			
Longest whisker.		4			
Weight.	12½	16½			

specimens, please let me know. I will send the animals on in a few days & will advise Mr. Chevalier thereof by letter. So much for "Wild Cats."

I had quite an adventure the other day. A countryman came in and told me that he had nearly fallen into a deep hole on the top of a hill on his farm, and asked me to come out and see it. I did so and having procured lanterns, we went to the place. We descended the hole in a nearly perpendicular, but zig-zag direction for about twenty-five feet, when we found ourselves at the bottom, on a ridge separating two large and deep chambers of the cave. These we explored and on the bottom of one of them, found the nearly perfect skeleton of what had been an immense bear. The skeleton was in pretty good preservation, but must have been there a long while. The skull was deficient in all the incisors, one upper canine and several molars. A few carpal, metacarpal, tarsal, and metatarsal, with all the phalanges but one, were wanting. Also one or two of the vertebra and the whole tail. On putting it together I find that the vertebral column consisting of 26 vertebra, together with the head and pelvis attached measures $4\frac{1}{2}$ feet. It must have been at *least* five feet long and three feet high, perhaps more, as no account is taken of the tail. Will probably go down again, to find if possible the missing parts. I am much obliged to you for what you say about sending me a box of bird skins. If you have an old skin of the fox squirrel in feruginous pelage, which you do not want please send it. I will get some skins of our cat squirrel soon as they come out of their winter quarters, so as to be shot. Tell the Major that I caught a small beetle some weeks ago and have him duly stuck in the box. I have not seen any since but hope to do so when I shall catch them with all zeal. Tell him I shall not let him give up his promised visit next summer. Any items from time to time respecting animals figured, obtained or heard of will be thankfully received, as the newspaper folks say. Please give my best respects to your kind family, Dr. Goldsmith, the Major, and any others you see of my acquaintance, and Believe me.

Yours very affectionately

Spencer F. Baird

[Superscription] John James Audubon Esq.

86 White St.

New York.

BAIRD TO AUDUBON.

Carlisle, May 3d, 1842.

My dear Mr. Audubon

I have been in some doubt as to where this letter should be addressed, since "86 White St."¹ will not reach you, and you must by this time be snugly fixed I hope in your beautiful place up the River. Do not laugh therefore if I prefix "Formerly" to the old superscription. We have had nothing new or interesting in any department here lately, nothing having been plenty yet except ducks. Of these last I have killed a great many; as many as eight, ten, or twelve in a day, which you know are pretty large numbers for such a locality. I have not been out yet without killing at least two or three. Mallards, Black ducks, Baldpates, Summer ducks, Sprig tail, Golden eyes, Gooseanders and Black heads were the most abundant. The other species which occurred are Shovelers a few, Ring neck two or three flocks, South southerly one, Buffel heads a number, Hooded Mergansers, eight or ten pair, Green wing teal forty or fifty, and Blue wing Do. one flock of more than forty, and several stragglers. No Ruddy ducks have yet made their appearance as last spring. Of these which I have shot, I prepared the heads of forty or fifty for myself & Dr. Morton,² and stuffed but two or three. I have drawn the Sternums with the accompanying apparatus, viz. Scapula & Clavicle, of a good many birds, especially the water birds. It is my intention to prepare three of all our birds. I have drawn the skulls of several of our birds, five or six ducks, Loon etc. Also some Quadrupeds as Florida *Neotoma*, Chickaree squirrel, common Rabbit, Mink and Muskrat. I think them to be the best studies in drawing I could have.

Quadrupeds are very scarce now, from what cause I know not, I have not seen more than two or three bats, and very few glirine animals. I have been able to procure only a few *Arvicola* as yet,

¹ Where Audubon and his family resided, after returning from his last visit to England, in the autumn of 1839, until his removal to "Minniesland" in the spring of 1842.

² Dr. Samuel George Morton, a once prominent physician and President of the Philadelphia Academy of Sciences, born Jan. 26, 1799, died May 15, 1851.

but I hope to get more soon. I have made arrangements with several men & boys in various parts of the country, fifteen twenty or thirty miles off in several directions, to secure a number of squirrels, weasels, and anything else. I have heard a good deal of a fox entirely black, on our mountains, and have been promised one before the summer is over. I do not know whether I shall be able to go to Maine & New Hampshire in the summer, if I can afford it I shall go, if not I must stay at home and get what I can here. I suppose that the First Number of the "Quadrupeds of North America" is out by this time, I hope that it will be hailed by a large list of Subscribers, and will do what I can for this desirable end. Please let me know in what order the animals will appear, and what ones are in the No; also any other news in the zoological line.

Vegetation is wonderly advanced with us, and if no frost or other casualty interferes, the abundance of fruit and everything else will be unparalleled. All the fruit trees are loaded, and the young peaches, cherries, & even apples and pears are well formed. Wheat and rye are in the finest condition, the lettuce is in full head. By the by while I think of it, what do *you* think of several swan having been killed, so far [in] the interior of this state as Chamberburg.¹ There is less water there than here, and a flock of fourteen kept about the town for several days. A good many Wild Geese have also been killed all over our county, in the various streams about. I must stop now or my letter will be too late for the mail. Give my best respects to your kind family and any of our mutual acquaintances, and Believe me

Your Affectionate Pupil

Spencer F. Baird.

P. S. You ask me if I have heard from Dr. Bachman.² I have not, but nothing would give me greater pleasure than receiving a letter from him, excepting one from yourself.

[Superscription] John J. Audubon Esq.
 formerly, "86 White St."
 New York.

N. Y.

¹ Capital of Franklin County, 157 miles west of Philadelphia.

² Rev. John Bachman, D. D., born in Rhinebeck, N. Y., Feb. 4, 1790, died in Charleston, S. C., Feb. 24, 1874.

BAIRD TO AUDUBON.

Washington August 4th. 1842.

My dear Mr. Audubon

I received your letter yesterday and I take this opportunity to return you my thanks for the very flattering letter of recommendation enclosed in it. I have put it in the hands of my uncle who will use it in some way to my advantage. I called on Mr. Cushing¹ at the Capitol yesterday morning and asked him about the Presidents letter. He seemed much surprised to hear that you had not received it yet, said that it had been written a week ago, and assured me that he would attend to it without delay. The weather has been delightfully cool and pleasant here since last Sunday, the only drawback being the great quantity of dust. Have you ever seen the Red variety of the Northern Gray Squirrel. My brother tells me that during a residence of a year at a school in Cecil Co. Maryland he frequently saw & shot a so called "Fox squirrel," entirely different from the one of that name in Carlisle Pa. a specimen of which you have. The Gray Cat squirrel is quite common here, and the difference between it and this last was very obvious. It consisted in invariably smaller size, habits, and a different Physiognomy. The color varied from a slight tint to a deep fox red. The school he was at lay about six miles from Port Deposit on the Susquehanna. Please tell Major or John LeConte to write to me if you see them and Believe me

Yours Sincerely

Spencer F. Baird

¹ Caleb Cushing, statesman, born Jan. 17, 1800; died Jan. 2, 1879.