tion of Audubon Societies for preparation of the colored plates of the Passenger Pigeon and Mourning Dove. It is to be hoped that renewed effort for another year may result in what may be generally considered an adequate search of the continent for *Ectopistes migratorius*.

CLARK UNIVERSITY, WORCESTER, MASS.

A DESCRIPTION OF THE WILD PIGEONS WHICH VISIT THE SOUTHERN ENGLISH COLONIES IN NORTH AMERICA, DURING CERTAIN YEARS, IN INCREDIBLE MULTITUDES.

BY PEHR KALM.¹

Translated by S. M. Gronberger.

IN North America there is a species of wild Pigeons which, coming from the upper part of the country, visits Pennsylvania and others of the Southern English settlements during some years, and in marvelous multitudes.

They have, however, already been described and exceedingly well illustrated in lively colors by the two great ornithologists and matchless masters of bird-drawing, Catesby and Edwards; but as I have had occasion to notice with regard to the description proper and especially as regards the living habits of these Pigeons various things which these gentlemen have either left entirely unmentioned, or which at their places of residence they have not been able properly to ascertain, it is my desire to deliver a short account of this subject before the Royal Academy of Sciences, using the notes from my American Diary.

The *names* given by ornithologists to these Pigeons are as follows:

¹ Translated from Kongl. Vetenskaps-Akademiens Handlingar, för ar 1759, Vol. XX, Stockholm, 1759.

See also explanatory comment by Dr. Theodore Gill respecting this account of the Passenger Pigeon by Kalm, under 'General Notes' (*postea* p. 110).— EDD.

Columba (macroura) cauda cuneiformi longa, pectore purpurascente. Linn. Syst. X, T. I, p. 164.

Columba macroura. The long-tailed Dove. Edwards' History of Birds, T. I, p. 15, t. 15.

Palumbus migratorius. The Pigeon of Passage. Catesby's Nat. Hist. of Carolina, Vol. I, p. 23, t. 23.

Dufvor, Villa Dufvor [Pigeons, Wild Pigeons], so called by the Swedes in New Sweden.

Pigeons, Wild Pigeons, by the English in North America.

Tourtes, by the French in Canada.

Although these Pigeons have been splendidly illustrated by the above mentioned gentlemen, they have not been able to reproduce their beautiful colors in true accordance with nature, in one respect, at least: the color indicated on either side of the neck should extend much higher up.

Before going further, I shall here give a sufficiently adequate description, first of the male and then of the female, because they are in several respects of a different coloration: in doing this I am using only Latin terms, as these are better understood by ornithologists.

MAS.

- Rostrum pro Avis magnitudine tenue, nigrum, aliquantulum aduncum; maxilla superior extra inferiorem prominens, eamque excipiens. Longitudo rostri nudi 5 lin. Geom. Sveth.
- Nares semitectae tuberculo oblongo, subcorneo, impressioni digitorum cedenti.

Oculorum Iris coccinea.

Lingua integra, acuta.

- Caput totum cinereum in caerulescens vergens; frons tamen sordidius, gula vero vividius cinerea. Collum superne cinereum splendens. Ad latera colli, & exinde versus nucham, coloris est cupri splendidissimi in purpureum vergentis, qui in ipsa nucha aliquantulum in viridem mutatur pro diversa versus lucem versura.
- Dorsi regio interscapularis cinerascens in pallide fuscum vergens; dorsum inferius dilute glaucum.
- Remiges primariae 10, quarum secunda ceteris longior, tum prima, tertia; ceterae ordine breviores. Remiges omnes nigræ quidem, sed diverso modo; nam prima & secunda totæ nigræ; 3-8 nigræ, sed margine exteriore rufescentes, apice albo albescentes; 7, 8, 9, 10 etiam versus interiorem partem albescentes. Remiges secundariæ nigræ, apice albescentes. Tectrices remigum primariarum nigræ, secundariarum proximæ cinereo-glaucæ, remotiores dilute fuscæ maculis quibusdam nigris. Tectrices inferiores alarum dilutissimæ cinereæ.

Cauda complicata longitudine corporis, angusta, Rectricibus 12 diversæ longitudinis; Rectrices duæ supremæ reliquas tegentes nigræ, ceterisque longiores; quæ his subjacent omnes versus

apicem quoad tertiam partem albæ, reliqua vero earum pars albescenti-cinerea in cæruleum vergens.

In cauda expansa duæ illæ nigræ longissimæ pennæ medium occupant, seu sunt 6, 6; his proximæ sunt 5, 5; prioribus 6 lin. G. breviores, quarum dimidia pars versus apicem alba, reliqua vero albescenticinerea in cæruleum vergens una cum macula nigra interioris partis in ipsis limitibus inter album & cæruleum, & sub hæ alia macula obsoleta rufa. Pennæ 4, 4; 3, 3; 2, 2, superne quoad tertiam partem versus apicem albæ, tantillum cinerei interspersi; versus basin magis cinereæ; inferne in medio inferioris partis macula nigra, & versus apicem macula rufo-fusca seu ferruginea. Pennarum 1, 1, pars exterior alba, interior vero versus basin alba, in medio macula nigra, sub hac macula rufa, versus apicem hæ cinereæ sunt. Ceterum Rectrices 1, 1, fere $\frac{2}{3}$ breviores quam 6, 6; intermediarum vero longitudo proportionata. Uropygium cinereum: tectrices caudæ superiores cinereæ; inferiores vero seu sub cauda albissimæ.

Pectus rufum, qui color versus inferiorem partem dilutior evadit. Venter albus.

Femora sordide alba. Tibiae nudæ, rubentes, Digiti omnes, tres antici, & unicus posticus, rubentes; ungues nigri.

Fœmina:

Vol. XXVIII 1911

Rostrum, Nares, Oculi, Lingua ut in Mare.

Caput superne & ad latera, collumque superne cinereum, splendens. Ad latera colli idem color cupri splendidissimus ac in Mare.

Dorsum ut in Mare.

Remiges primariæ 10, quarum ordine tertia omnium longissima; deinde quod ad longitudinem ordine succedunt quarta, prima, secunda, & sic deinceps. Color remigum primariarum & secundariarum tectriciumque idem ac in Mare.

Cauda fere ut in Mare. Uropygium tectricesque caudæ itidem.

Sub rostro alba. Pectus dilute fuscum. Venter sordide albus.

Femora, Tibiae, Pedes, Digitiqu eut in Mare. Ungues nigri, apice albo.

The size of these Pigeons is about that of a Ringdove.

Their long tail distinguishes them from other Pigeons.

The splendid color which the male and the female have on the sides of the neck and even a little beyond it, is also peculiar, in that the feathers in that region are as if covered with a finely resplendent copper [color], with a purple tint, which back of the neck shifts more into green, particularly with reference to its position toward the light. Rarely is this color more finely reproduced than in this bird. Mr. Catesby calls it a golden color, but it can hardly be termed that.

In the copy of Mr. Catesby's work which I have seen, both the head and the back are of a darker color, and the breast is also of a redder color than the bird actually has. This I could very well see when I laid a recently killed male beside Mr. Catesby's figure, as it is the male which is reproduced in his work. Mr. Edward [sic] has entirely omitted the above mentioned copper color both in his description and his figure. It may be that some of the young ones do not have it; but it was found on all those which I have handled, and which were killed in the spring.¹

Quite a number of these Pigeons may be seen every summer in the woods of Pennsylvania and New Jersey and the adjoining provinces, in which region they live and nest; and it is very seldom that a greater number of them are not observed there in the spring, during the months of February and March, than in the other seasons of the year. But there are certain years when they come to Pennsylvania and the Southern English Provinces in such indescribable multitudes as literally to appall the people. I did not, however, have the opportunity of witnessing such personally (although the spring of the year 1749, when I was there, was considered as one of those in which a greater number of these Pigeons appeared than had been the case for some years previously: yet it was not one of the particular or more unusual ones); but all persons who had observed these happenings and lived long enough to remember several of them recited several incidents connected therewith. Some had even made short notes of various details. of which I will cite the following:

In the spring of 1740, on the 11th, 12th, 15th, 16th, 17th, 18th and 22nd of March (old style), but more especially on the 11th, there came from the north an incredible multitude of these Pigeons to Pennsylvania and New Jersey. Their number, while in flight, extended 3 or 4 English miles in length, and more than one such mile in breadth, and they flew so closely together that the sky and the sun were obscured by them, the daylight becoming sensibly diminished by their shadow.

¹Edwards' figure represents a distinct species of another genus, namely the Columba (= Zenaidura) macroura.

The big as well as the little trees in the woods, sometimes covering a distance of 7 English miles, became so filled with them that hardly a twig or a branch could be seen which they did not cover; on the thicker branches they had piled themselves up on one another's backs, quite about a yard high.

When they alighted on the trees their weight was so heavy that not only big limbs and branches of the size of a man's thigh were broken straight off, but less firmly rooted trees broke down completely under the load.

The ground below the trees where they had spent the night was entirely covered with their dung, which lay in great heaps.

As soon as they had devoured the acorns and other seeds which served them as food and which generally lasted only for a day, they moved away to another place.

The Swedes and others not only killed a great number with shotguns, but they also slew a great quantity with sticks, without any particular difficulty: especially at night they could have dispatched as many as their strength would have enabled them to accomplish, as the Pigeons then made such a noise in the trees that they could not hear whether anything dangerous to them was going on, or whether there were people about. Several of the old men assured me that in the darkness they did not dare to walk beneath the trees where the Pigeons were, because all through the night, owing to their numbers and corresponding weight, one thick and heavy branch after another broke asunder and fell down, and this could easily have injured a human being that had ventured below.

About a week or a little later subsequent to the disappearance of this enormous multitude of Pigeons from Pennsylvania and New Jersey, a sea-captain by the name of Amies, who had just arrived at Philadelphia, and after him several other sea-faring men, stated that they had found localities out at sea where the water, to an extent of over 3 French miles, was entirely covered by dead Pigeons of this species. It was conjectured that the Pigeons, whether owing to a storm, mist, or snowfall, had been carried away to the sea, and then on account of the darkness of the following night or from fatigue, had alighted on the water and in that place and manner met their fate. It is said that from that date no such tre-

[Auk Jan.

mendous numbers of this species of Pigeon have been seen in Pennsylvania.

In the beginning of the month of February, about the year 1729, according to the stories told by older men, an equally countless multitude of these Pigeons as the one just mentioned, if not a still larger number, arrived in Pennsylvania and New Jersey. Even extremely aged men stated that on 3, 4, 5 or several more occasions in their lifetime they had seen such overwhelming multitudes in these places; and even the parents of these people had in their turn told them that the same phenomenon had occurred several times during their own lives; so that 11, 12, or sometimes more years elapse between each such unusual visit of Pigeons.

From Lawson's *History of Carolina*, p. 141, I see that in the winter of 1707, which was the severest known in Carolina since it was settled by Europeans, an equally awe-inspiring number of these Pigeons had made an appearance in Carolina and the other Southern English Settlements, driven thither by causes which I will now mention.

The learned and observant Doctor Colden told me that during his stay in North America, where he had been since the year 1710, at his country place Coldingham, situated between New York and Albany, he had on two distinct occasions, although at an interval of several years, witnessed the arrival of these Pigeons in such great and unusual numbers that during 2 or 3 hours, while they flew by his house, the sky was obscured by them, and that they presented the appearance of a thick cloud.

All the old people were of the opinion that the months of February and March is the single season of the year when the Pigeons swoop down upon Pennsylvania and the adjacent English Provinces in such marvelous quantities; at other seasons of the year they are not to be seen in any great numbers.

The cause of their migrations from the upper part of the country in such great quantities at this season is twofold: first, when there is a failure of the crop of acorns and other fruit in the places where they otherwise generally spend the winter, thus rendering their supply of food insufficient to last until the ensuing summer; and second, and chiefly, when an unusually severe winter with abundant and long remaining snow happens to occur in their customary winter haunts, thus covering the ground and making it impossible for them to secure the acorns, beech-nuts and other fruit and seeds on which they otherwise feed at this season: in such cases they are forced to leave these localities and seek their food down along the sea coast where the winters, owing to the sea air, are always milder, and the ground more and earlier free from snow. Experience has shown that both of these circumstances have caused their migrations to take place in such great multitudes.

A peculiar fact and one which older persons have unanimously maintained to be true, is that on all occasions which they could remember, when the Pigeons appeared in such great numbers, there had always been during the preceding autumn, in Pennsylvania and adjacent localities, an abundant crop of acorns and other arboreal seeds, excelling that of several previous years; but during their stay the Pigeons had so carefully searched and ransacked all possible nooks and corners that after their departure it was almost impossible to find a single acorn in the woods.

Several extremely aged men also declared that during their childhood there were, in summertime, many more of the Pigeons in New Sweden than there are now; the cause of this is that the country is at present much more populous and cultivated and the woods more cleared off, and as a result the Pigeons have either been killed off or scared away.

As nearly all the inhabitants of Pennsylvania and the English settlements in the South did not quite know whence these numberless swarms of Pigeons came from, they entreated me to ascertain, during my journeys in the interior of the country, where so many were to be found in summertime, what their food and other economic requirements were at that time of the year, and so on. During my journey to and within Canada I found the desired occasion of learning all of this, which I will now briefly relate.

When toward the end of June, 1749 (new style), I had left the English Colonies, and set out for Canada through the wilderness which separates the English and French Colonies from each other, and which to a great extent consists of thick and lofty forests, I had an opportunity of seeing these Pigeons in countless numbers. Their young had at this time left their nests, and their great numbers darkened the sky when they occasionally arose *en masse*

from the trees into the air. In some places the trees were full The Frenchmen whom we met in this place had of their nests. shot a great number of them, and of this they gave us a goodly share. These Pigeons kept up a noisy murmuring and cooing sound all night, during which time the trees were full of them, and it was difficult to obtain peaceful sleep on account of their continuous noise. In this wilderness we could hear in the night time, during the calmest weather, big trees collapsing in the forests, which during the silence of the night caused tremendous reports: this might in all probability be ascribed to the Pigeons, which according to their custom had loaded a tree down with their numbers to such an extent that it broke down: although other causes might also be found, whereof more is mentioned in the third volume of my American Journey. The additional observations which I had occasion to make as to their economy and manner of life, during my stay in North America, both in Canada, the wilderness of the English Colonies, and in the land of the savages, are as follows:

The birds spend the entire summer in Canada, and particularly do they nest in the vast wild forests and wastes which abound there, where no men are to be found and where seldom any human being ventures. When in summer a person travels through these forests he might easily become terrified by the enormous number of these birds, which in some places almost entirely cover the branches of the trees and, when taking wing, obscure the sky. These Pigeons have, however, their distinct boundaries, outside of which they do not often venture; as for example, somewhat south of Bay St. Paul, which is 20 French miles north of Quebec, not very many of them nest in the woods; and the cause of this is said to be that the oak and the beech tree, which supply them with their principal food, are here arrested in their growth, and grow no further north.

In forests where there are human settlements or where the country is inhabited, only a few are to be seen; and as the land is being gradually cultivated by man, the Pigeons move further away into the wilderness. It is maintained that the cause of this is, partly, that their nests and young are disturbed by boys, partly their own sense of a lack of safety, and finally that during a great part of the year their food is shared by the swine.

They build their nests in high trees, pine trees as well deciduous ones; often as many as 40 or 50 nests are to be found in the same tree.

Some maintain that they raise two broods of young every summer.

In places where they nest in abundance the ground is often covered with their droppings to a thickness of one or two feet.

While these birds are hatching their young, or while the latter are not yet able to fly, the savages or Indians in North America are in the habit of never shooting or killing them, nor of allowing others to do so, pretending that it would be a great pity on their young, which would in that case have to starve to death. Some of the Frenchmen told me that they had set out with the intention of shooting some of them at that season of the year, but that the savages had at first with kindness endeavored to dissuade them from such a purpose, and later added threats to their entreaties when the latter were of no avail.

In Canada it is almost everywhere the custom for young farmhands and boys to investigate where the Pigeons have their nests, and as soon as the young are able to fly they are taken from the nest and brought to the farm, where they are afterward kept in suitable quarters and industriously fed, whereupon they are killed and eaten. To make doubly sure that they do not escape, one of their wings is generally cut short so that even in case they do get out, they cannot fly away. Such nestlings have a good appetite, thrive comfortably, become quite tame and within a short time, if well taken care of, accumulate so much fat that they afford a most palatable dish.

For *food* these Pigeons select the following fruits, which I will name in the order that they mature:

Seeds of the *Red-flowered Maple* [Acer]; these mature in Pennsylvania at the end of May, but somewhat later further North.

Seeds of the American Elm [Ulmus americana]; these mature in Pennsylvania in the beginning or middle of June, but further north somewhat later. When on our journey through the wilds between Albany and Canada we cut up some of the Pigeons which the French had shot and given us, their crops were generally found to be full of elm-seeds.

Jan.

Mulberries. These ripen in Pennsylvania in the beginning of June (new style), and are relished by these Pigeons almost above everything else. During my stay in the last mentioned locality. in 1750. I noticed that as soon as the mulberries became ripe the pigeons put in their appearance in great numbers. Wherever a Mulberry tree grew wild it was at this time generally full of Pigeons which devoured the berries. They often caused me much vexation because if I had located a Mulberry tree in the woods with the intention of securing seeds when the berries became ripe and it should happen that I did not watch out for the proper time, the Pigeons had generally, in the meanwhile, been so industrious in their picking that on my arrival scarcely a single berry was left. If some of them were shot the others generally flew away a little distance, but returned within a few minutes to the same Mulberry tree; so that a person who owned such trees found no difficulty to obtain daily a sufficient quantity of choice meat as long as the mulberries lasted.

They consume all kinds of grain, with the single exception of corn, which is left untouched by them, although it has other enemies. I noticed that they were particularly fond of the following kinds of grain:

They ate *Rye*, although not with particular avidity, but rather as if in the absence of something else more palatable. Some persons assured me that they had seen with their own eyes how these Pigeons, during summer time, when they had come to a ripe wheat field, alighted on the fences, vomited up the Rye on which they had previously feasted, and then swooped down upon the wheat field, where they gorged their crops with wheat, as being more appetizing.

Wheat is one of their most coveted foods, which may be seen from what has already been stated, as well as from many another experience. As soon as the wheat fields become ripe they swoop down on them in enormous numbers and take considerable toll of them. When the wheat is stacked up in the field they also visit it and devour all too much of it, if they should happen to be in the least hungry. In the fall, when the wheat is recently sown, they alight in full force in the fields and not only pick up the grains which are more or less in broad daylight, but also poke up

those which the plough has not sunk sufficiently deep. In order to prevent such a damage boys as well as others are seen at this season of the year running around armed with guns and other "contraptions," to kill or scare them away. On such occasions, however, they are not in general particularly timid, especially the young ones, so that when a few of them have been shot at a stack, the others oftentimes fly away only a short distance to another stack, and hence the gunner, albeit he has made some lucky shots, generally becomes exhausted before the birds become scared. In Pennsylvania this species of grain, as well as the Rye, commonly ripens about midsummer (old style), and sometimes earlier; but further North it ripens later.

Buckwheat they are also very fond of, and levy considerable tribute on it. The Buckwheat matures in Pennsylvania in the middle of September, old style.

The berries of the *Tupelo or Sour-gum tree* (Nyssa), they also consume with great avidity. In Pennsylvania these ripen in September. This tree does not grow in Canada.

Acorns.— Most forests in North America consist of oak, of which arboreal genus there are several species; of these the greater part have nearly every year a great number of acorns which in the autumn fall off in such quantities that quite often the ground below the oaks is covered by them one hand high and sometimes more. These serve as food for several kinds of animals and birds, as for instance Squirrels of several species, Forest Mice, Wild Pigeons, &c., in addition to which, in places inhabited by Europeans, they serve as the staple food of hogs during the greater part of the year. During certain years the numberless swarms of Wild Pigeons already described come to Pennsylvania and the other English Provinces, in search of these acorns. In Pennsylvania and other localities in North America the acorns mature in September and the following months.

They are also very fond of *Beech-nuts*. There is a great abundance of beech-trees in Canada, but further south they grow somewhat more sparsely. In Canada the nuts become ripe in the middle of September. These, together with acorns, constitute the principal food of the Pigeons during the entire latter part of the fall and throughout the winter. In addition to the kinds already enumerated they also consume various other seeds and berries of trees and plants which grow in this country.

The trees above referred to, the seeds and berries of which the Pigeons are so fond of, grow in the forests of North America nearly everywhere in great abundance. In a good many places, especially further inland, oaks, elms, beeches and the red-flowered Maple constitute almost alone, with the addition of the Walnut tree, the entire forest tract. Thus it will be seen how the all-wise CREATOR, even in the case of these birds, has so wisely adapted the size of the food supply to the number of mouths to be fed.

I have also observed that the Pigeons have a special fondness for the kind of soil which is much mixed with common salt [alkaline deposits]; this soil serves them as food, as a spice to blend with the food, or for its medical properties,- I do not know which. At the Salt springs of Onondago [sic], in the tribe of the Iroquois Indians, where the soil is so strongly mixed with salt that the ground during a severe drought becomes entirely covered with it and as white as frost, making it impossible for plants to grow, I noticed with astonishment, in the month of August, 1750, how covetous the Pigeons were of this kind of soil. The Savages in Onondago had built their huts on the sides of this salt field, and here they had erected sloping nets with a cord attachment leading to the huts where they were sitting: when the Pigeons arrived in swarms to eat of this salty soil, the Savages pulled the cords, enclosing them in the net, and thus at once secured the entire flock. At certain times, when they came in such numbers that the ground could hardly be seen for them, the Savages found it more advisable to use a gun, as by a single discharge of birdshot they could sometimes kill as many as 50 or more; and this proved a splendid source of food supply.

These Wild Pigeons fly in the same manner as other Pigeons; and as soon as they have alighted in a tree or other place they have a habit of making a clapping sound with their wings which, according to some, is a signal for all the others to alight. At times and when they have had sufficient food, they are quite timid, especially the old birds. Therefore, when one wishes to shoot them it is best to walk to and fro among them, on the ground, as if one did not see them: then they are not so timid, nor do they take wing so soon.

In the vast forests of Canada they remain to the end of August or beginning of September (new style); i. e., until the grain has been stored for the winter. A great number, however, remain until late in the autumn, when the first snow begins to fall, which finally drives them all away. As their food mostly consists of acorns, beech nuts and the seeds and fruits of other trees which become hidden under the snow, they are obliged to leave these places and betake themselves further South, where the ground is bare all winter. Not one of them remains in Canada throughout the winter: but they generally spend this season in the vast forests of the *Illinois*, who live at about the same latitude as Pennsylvania and Virginia. They do not willingly migrate toward the Seaboard, where the country has been extensively cultivated by the English, and the forests are much cut down; partly because they cannot there secure a sufficient food supply, and partly to avoid running the risk of getting killed by the number of people and gunners in that section. They prefer the vast and dense forests in the interior of the country where there are no human habitations for many miles around. But, should it happen during a certain year that there is a failure of the crop of acorns or other food suitable for them, or an unusually severe winter with great snow fall sets in, which to some extent covers the ground, then they are forced to leave their usual winter quarters and seek their way to the English settlements down the sea-board. It is on these occasions that they swarm into Pennsylvania in such enormous numbers; but as soon as the weather changes a little and becomes milder, they again retire further inland. Here they remain until the last snow disappears in the spring.

As the snow gradually melts away in the spring the Pigeons migrate further and further North, and when northern Canada is free from snow, which generally occurs toward the end of April or the beginning of May, the Pigeons arrive in their old haunts and commence their mating, nesting, hatching of eggs and the rearing of their young, etc.

The French in Canada, who annually catch a number of young Pigeons alive which they thereafter rear at their homes, have taken much pains to tame these birds, although with but little success. It is very easy, when they are kept in suitable quarters to make them so tame as to feed from one's hands, in the manner of any other domesticated Pigeon; but as soon as they are let out into the open hardly a few days pass before they fly away to the woods, nevermore to return. It was, however, emphatically asserted, that some had succeeded in taming them to the same extent as the domesticated Pigeons.

As they fly in great flocks and keep close together, whether on the wing, on the ground or in the trees, so poor a marksman as to fail to make a hit is difficult to find. Several persons told me that a man who lived at Schenectady, between Albany and Col. Johnson's farm, had killed 150 of these birds with two discharges of birdshot, and in Canada there is said to have been several cases where 130 had been killed in a single shot.

Their flesh is a delight to the epicure, and especially is the meat of the young Pigeons scarcely second in delicacy to that of any other bird.

The great French Admiral Marquis de la Galissoniere, who in deep knowledge of various sciences, but especially in natural history and its advancement, has had or has very few equals, and who at the time of my arrival in Canada occupied the office of Governor-General of that country, told me that he had once brought with him several of these Pigeons from Canada to France, and that he had allowed them to escape in the French forests. At this time he had again collected a great number of live birds which in the fall of 1749 he brought with him to France, enclosed in large cages, in order to set them free in the woods, upon his safe arrival there, with the intention of introducing this handsome as well as useful American bird into Europe.

In addition to the authors referred to above, the following learned men have also mentioned something in their writings concerning these Pigeons, namely: P. de Charlevoix, *Histoire de la Nouvelle France*, T. V, pp. 251–252; Salmon's *Modern History*, Vol. III, p. 440; Williams' *Key into the Language of America*, p. 91. Others whom I have not had the opportunity of seeing may also have mentioned something concerning this subject, but they have at least related nothing of any particular value.